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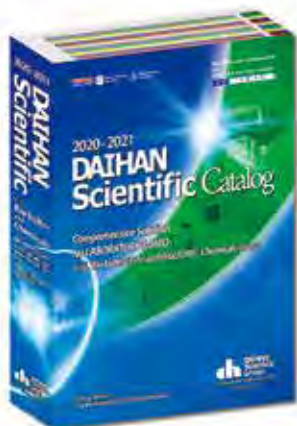
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# 2022 DAIHAN® Laboratory & Medical Instruments “Overview”

## Balance



Analytical



Electronic Toploading



General Purpose Scale

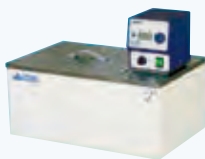


Moisture Analyzer



Basic Bath, 100°C~250°C

## Bath



Circulation Water Bath



Cold Trap



Extraction Water Bath



Shaking Water Bath



Viscosity Bath

## Bath Circulator



External / Internal  
Refrigerated / Heating

## Blender



Sample Mixer

## Centrifuge



Micro Centrifuge



Refrigerated  
Micro Centrifuge



Table Top Centrifuge

## Chiller/Cooling Circulator



Refrigerated / Heating

## Desiccator Cabinet



Desiccator Cabinet

## Dryer



39 places Labware Dryer

## Drying Chamber



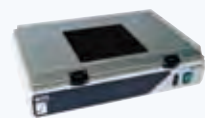
Drying Chamber

## Electrophoresis



Gel Documentation  
System

## Electrophoresis



UV Transilluminator

## Evaporator



Rotary Vacuum  
Evaporator

## Freeze Dry System



Freeze Dryer 3 & 6Lit/day

## Fume Hood & Clean Bench



Clean Bench-Ductless



Fume Hood-Ducted

<Continued on next page>

**Furnace**



Muffle Furnace,  
1000°C~1650°C

**Furniture**



Assembly-type  
Laboratory Furniture



Filtered Reagent  
Cabinet, PP/PVC

**Glove Box**



PMMA Glove Box



PMMA Vacuum  
Glove Box

**Heating Block /  
Dry Bath Incubator**



Heating Block



Heating & Cooling Block

**Heating / Cooling  
Circulator**

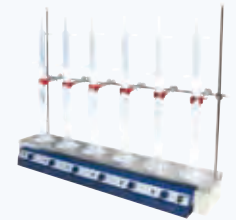


External Circulator

**Heating Mantle**



Heating Mantle



Multi Heating Mantle

**Homogenizer**



Analog & Digital

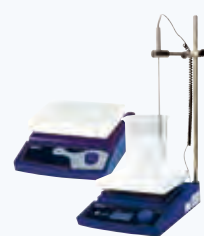
**Hotplate**



550°C High-Temp.  
HiLight Hotplate



500°C High-Temp.  
Hotplate



380°C Hotplate

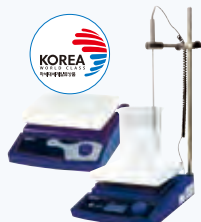


350°C Large Hotplate

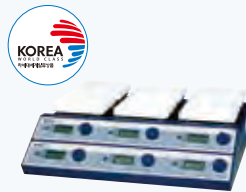
**Hotplate Stirrer**



500°C High-Temp.  
Hotplate Stirrer



380°C Hotplate Stirrer  
Analog & Digital



Multi Hotplate Stirrer  
3- / 6-places

**Ice Maker**



Ice Maker

**Incubator**



CO<sub>2</sub> Incubator

**Incubator**



General Mini Low Temp /  
Shaking, 20L



General Purpose  
Forced- / Gravity-air



General Purpose  
Multi, 4-room



Humidity / Temp.  
Chamber



Low Temp (B.O.D)  
Incubator

<Continued on next page>

# 2022 DAIHAN® Laboratory & Medical Instruments “Overview”

## Incubator



Plant Growth Chamber



Shaking Incubator  
Front Door-type



Shaking Incubator  
Top Door-type



Shaking Multi-Stack  
Incubator

## Magnifier



Light Magnifier  
Fluorescent / LED

## Measuring



Anemometer / Air Flow



Gas Detector / Monitor



Salinity Meter



Sound Level (Noise)  
Meter



Tachometer

## Measuring



Thermo-Hygrometer,  
WBGT Monitor



Thermometer,  
Infra-Red



Thermometer,  
K-type / NTC-type / Pt100

## Melting Point Analyzer



Melting Point Analyzer

## Mill



Ball Mill

## Mill



Cutting Mill & Pin Mill

## Oven



General Oven  
Forced- / Gravity-air



High Clean Air Oven



Industrial Forced-air  
Oven



Vacuum Oven

## Pump



Vacuum Pump

## Reaction System



Reaction System for Lab & Pilot Plant  
Glass Vessel 0.1~100Lit.

## Refrigerator & ULT.Freezer



Freezer : -95℃~-65℃, -85℃~-65℃, -45℃~-15℃  
Refrigerator : 0℃~10℃, 2℃~10℃

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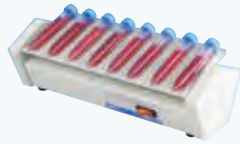


**Safety Cabinet**



Cabinets for Flammable, Steel

**Shaker**



Mixer / Rocker



Mixer / Tube Rotor

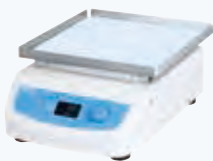


Mixer / Vortex

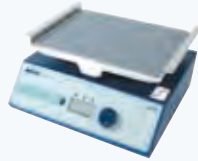


Orbital Mixer for Microplates

**Shaker**



Orbital/Reciprocating-Shaker



Rocker



Rotator



Sieve Shaker

**Sterilizer**



Autoclave, 25 & 40Lit Bench-top Front Door

**Sterilizer**



Autoclave, 47~100Lit Toploading / Vertical



Autoclave, 90Lit Front Door

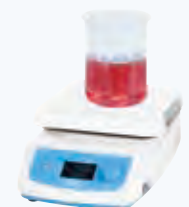


Dry Heat Sterilizer

**Stirrer, Magnetic**



Magnetic, Digital Mini & Midi



Magnetic, High-Performance

**Stirrer, Magnetic**



Magnetic, Multi-point

**Stirrer, Overhead**



Overhead, Hi-speed ~3000rpm



Overhead, Hi-torque ~200,000mPas



Overhead, Hi-torque Ultra ~350,000mPas

**Ultrasonic Cleaner**



Ultrasonic Cleaner

**Viscosity**



Rotary Viscometer

**Washer**



Glass / Labware Washer

**Water Purification**



Basic Water Still



Classic Water Still



UP&RO Filtration System

※ The Details ; Please See the “Sterilizers” Section, Page 219~222

<b>Autoclaves</b> , Bench-top Front Door .....	P. 219
, Front Door .....	P. 222
, Top-loading / Vertical .....	P. 220~221
, Accessories <b>New</b> .....	P. 221



Programmable Bench-top Front Door, 25 - 40 Lit  
“MaXterile™ BT”



Top-loading / Vertical, 47·60·80·100 Lit  
“MaXterile™”



Front Door, 90Lit  
“MaXterile™ FL90”

DAIHAN Scientific

# Balances

**Balances - Analytical** ..... P. 12~13  
 - Electronic Toploading ..... P. 14~16  
 - General purpose ..... P. 17~19  
 - Pocket ..... P. 11

**Moisture Analyzer** ..... P. 20

**Test Weights *New*** ..... P. 21~22

**Accessories *New*** ..... P. 22~25

“Auto Int-CAL”



**Analytical Balance**  
“WBA-220A”  
[d] 0.1mg, max.220g



**Electronic Lab Balance**  
“Bal-D210S”  
[d] 1mg, max.210g



**Moisture Analyzer**  
“WBA-110M”  
[d] 1mg, max.110g

DAIHAN® [d] 0.05 & 0.2g, max.300 & 1,000g Pocket Balance “Bap”, 9×14×h2.4cm, 400g  
 With Counting Pcs · %, Function and Leather Case, Pocket-size Body, 포켓 바란스



**1-Year Warranty**  
9×14×h2.4cm

- CE Certified
- 1-Year Warranty
- LCD-Display
- \* Ergonomic Design for Intuitive User Interface
- \* Pcs. Counting & Weighing Mode
- \* Ambient Temperature 5°C~35°C
- \* Included Battery(AAA 1.5V×3Ea)
- \* Numeric Linearity Calibration

Specifications & Ordering information

<L1>

Spec.	Model	“Bap300”	“Bap1.0k”
Weighing Range. g		max.300g	max.1,000g
Weighing Plate. mm		68×85 mm	
Read-Out [d] & Reproducibility. g		0.05 g & 0.05 g	0.2 g & 0.2 g
Material		Body : ABS, Platform : Stainless-steel	
Dimension & Weight		90×140×h24 mm, and 0.4 kg	
Packing & Gross Weight		95×160×h35 mm, and 0.5 kg	
Power Supply		AAA Battery(DC 1.5V)	
Cat. No.		DH.Bal3011	DH.Bal3012
Price, Each. ₩			

DAIHAN® [d] 0.1mg, max.220g Calibration Certificated Standard Analytical Balance,  $\phi$  80 · 90mm Weighing Plate  
**A. Ext-CAL "WBA-220"**, **B. Auto Int-CAL "WBA-220A"**, with Glass Draft Shield, Backlit LCD, Counting Function, Various Weight Mode  
 "Ext-CAL 외부 보정형" & "Int-CAL 자동 보정형" 표준 분석/화학 천평, 계수계 겸용, 작업보호커버 포함

"Ext-CAL"  
 [d] 0.1mg, max.220g



Includes 200g  
 Calibration Weight

2-Year Warranty

**A. Ext-CAL "WBA-220"**  
 with Calibration Certificate

"Auto Int-CAL"  
 [d] 0.1mg, max.220g



2-Year Warranty

**B. Int-CAL "WBA-220A"**  
 with Calibration Certificate

- CE Certified
- PL (Product Liability) Insurance
- 2-Years Warranty
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Supplied with : -  $\phi$  80/90mm Weighing Plate and Glass Draft Shield  
 - AC 230V Adapter for DC Power 15V / 500mA(WBA-220A)  
 - 200g Calibration Weight (Ext-CAL Model, WBA-220)

- \* Various Weight Mode (g/ct%/GN/dwt/etc)
- \* Numeric Linearity Calibration
- \* Appearance Parameters
- \* Built in Under Hook
- \* Weighing Response Time Adjustable
- \* Built in RS232C for Printer
- \* Electro Magnetic Base

Specifications & Ordering information

<L1>

Spec.	Model	A. "WBA-220" Ext-CAL	B. "WBA-220A" Auto Int-CAL
Read-Out [d]. mg		0.1 mg	
Weighing Range. g		max.220 g	
Weighing Plate. mm		$\phi$ 80 mm	$\phi$ 90 mm
Reproducibility. mg		0.2 mg	
Linearity. mg		0.3 mg	0.2 mg
Ambient Temperature		5.0°C ~ 35°C	
Stabilization Time		≤ 3 Seconds (Typical at Fast)	
Weight Mode		g / ct	g / ct / % / GN / dwt / etc.
Counting Mode		Counting & Weighing Mode Available	
Calibration		External Calibration, Included 200g Calibration Weight	Internal Calibration, AUTO
Display		Digital LCD with Back-Light Function	
Dimension & Net Weight		190 × 240 × h265mm / 6.3 kg	223 × 345 × h331mm / 5.7 kg
Packing Size & Gross Weight		290 × 420 × h490mm / 8.3 kg	390 × 510 × h520mm / 10.1 kg
Electrical Reqts.		AC 220V, 50 / 60Hz	DC 15V, with AC 230V Adapter, 50/60Hz
Cat. No.		DH.WBA0220	DH.WBA0220A
Price, Each. ₩			

Optional Thermal Printer

\* Model Name Required for Printer Installation

- |             |   | Ea. Price, ₩ |
|-------------|---|--------------|
| SL.WBA.100P | (1) Thermal Printer, Paper Roll, "WBA-100"<br>Included Cable Module, 1 × Paper Roll             |              |
| DH.WBA0084  | Thermal Paper Package, 5 × Paper Roll, for "WBA-100"  |              |
| SL.WBA.420P | (2) Thermal Printer, Label Paper Roll, "WBA-420"<br>Included Cable Module, 1 × Label Paper Roll |              |
| DH.WBA0771  | Thermal Label Paper Package, 5 × Label Paper Roll, for "WBA-420"                                |              |



(1) RS-232C Thermal Printer,  
 "WBA-100"



(2) RS-232C Thermal Label Printer,  
 "WBA-420"

DAIHAN® [d] 1mg, max.320g & 620g Calibration Certificated Hi-Precision Lab Balance,  $\phi 90 \cdot 110 \cdot 128$ mm Weighing Plate  
Ext-CAL "WBA-320 & 620", Auto Int-CAL "WBA-620A", with Glass Draft Shield, Super Size Backlit LCD, Counting Function, Various Weight Mode  
"Ext-CAL 외부 보정형" & "Int-CAL 자동 보정형" 다기능 랩 바란스, g · 계수 · % 측정, 작업보호커버 포함

"Ext-CAL"

[d] 1mg, max.320g / 620g

CE



Calibration Certificate

Includes 200g  
Calibration Weight

2-Year Warranty

A. Ext-CAL "WBA-320" & B. "WBA-620"  
with Calibration Certificate

- CE Certified
- PL(Product Liability) Insurance
- 2-Years Warranty
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Supplied with : - Glass Draft Shield
- 200g or 500g Calibration Weight (WBA-320 : 200g, WBA-620 : 500g)
- AC Adapter for DC Power 12V/500mA(WBA-320), 15V/300mA(WBA-620-620A)

- \* Various Weight Mode (g/ct/GN/dwt/etc.) and Percent(%) Weighing Mode
- \* Numeric Linearity Calibration
- \* Time & Date Setting for Recording Data
- \* Available Rechargeable Battery(WBA-320, 6V/1.2A, Excluded)
- \* Four Level Anti-shock Adjustable Function
- \* Weighing Response Time Adjustable
- \* Stabilization Time(Typical at Fast)  $\leq 3$  Seconds
- \* Default and Auto Lock Present Working Mode
- \* Built in RS232C & USB port for Printer
- \* For Both AC and DC
- \* Electro Magnetic Base
- \* Display Present Temperature
- \* Built in Under Hook

## Specifications &amp; Ordering information

&lt;L1&gt;

Spec.	Model	A. "WBA-320" Ext-CAL, 320g	B. "WBA-620" Ext-CAL, 620g	C. "WBA-620A" Auto Int-CAL, 620g
Read-Out [d]. g		0.001 g		
Weighing Range. g		max.320g	max.620g	
Weighing Plate. mm		$\phi 90$ mm	$\phi 128$ mm	$\phi 110$ mm
Reproducibility. g		0.001g	0.002g	
Linearity. g		0.002g	0.003g	
Ambient Temp.		5.0°C~35°C		
Weight Mode		% Mode and g/ct/GN/dwt/etc.		
Counting Mode		Counting & Weighing Mode Available		
Calibration		External Calibration		Internal Calibration
		Included 200g Calibration Weight	Included 500g Calibration Weight	AUTO
Display		Digital Super Size LCD with Back-Light Function		
Dimension & Net Weight		223 × 345 × h331mm 3.6kg	223 × 345 × h331mm 5.7kg	
Packing Size & Gross Weight		290 × 385 × h365mm 5.1kg	390 × 510 × h520mm 10.1kg	
Electrical Reqts.		DC 12V, with AC 230V Adapter, 50/60Hz	DC 15V, with AC 230V Adapter, 50/60Hz	
Cat. No.		DH.WBA0320	DH.WBA0620	DH.WBA0620A
Price, Each. ₩				

"Auto Int-CAL"

[d] 1mg, max.620g

CE



Calibration Certificate

2-Year Warranty

C. Int-CAL "WBA-620A"  
with Calibration Certificate

## Optional Thermal Printer

\* The Balance Model must be Specified for Programming the Printer Module.

- |  | Ea. Price, ₩ |
|--|--------------|
| SL.WBA.100P (1) Thermal Printer, Paper Roll, "WBA-100"<br>Included Cable Module, 1× Paper Roll             |              |
| DH.WBA0084 Thermal Paper Package, 5× Paper Roll, for "WBA-100"   |              |
| SL.WBA.420P (2) Thermal Printer, Label Paper Roll, "WBA-420"<br>Included Cable Module, 1× Label Paper Roll |              |
| DH.WBA0771 Thermal Label Paper Package, 5× Label Paper Roll, for "WBA-420"                                 |              |

(1) RS-232C Thermal Printer,  
"WBA-100"(2) RS-232C Thermal Label Printer,  
"WBA-420"

**DAIHAN® [d] 1 & 10mg, max.210 & 2,100g High-Precision Lab Balance "Bal-D", RS-232C**

With Counting Function, Various Weight Mode, DC Adaptor, Basic- & Shield-type, 정밀 랩 바란스, 계수계 겸용



(1) Basic-type

1-Year Warranty



- Made in Korea
- CE Certified
- 1-Year Warranty
- Digital Large LCD Display and Ergonomic Design

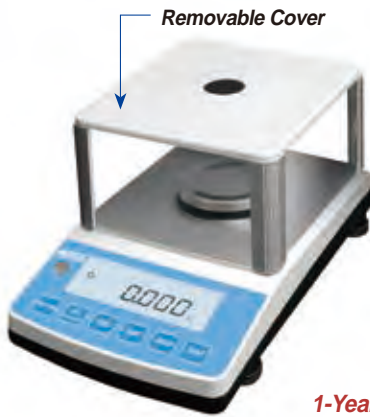
- \* Pcs. Counting & Weighing Mode
- \* Easy Operation Weighing Mode : Gram, Metric, and Carat
- \* Material : Stainless-steel Weighing Plate and ABS Resin Body
- \* Stabilization Time : 3sec
- \* Permissible Ambient Temp. 5℃~35℃
- \* RS-232C Interface and Level-Gauge integrated
- \* Rechargeable Battery integrated, and with AC 230V Adaptor for DC Power 12V/300mA

**(1) Basic-type Precision Balance**

**Specifications & Ordering Information**

<L1>

Spec.	Model	Bal-D210	Bal-D2100
<b>Weighing Range. g</b>		<b>max.210g</b>	<b>max.2100g</b>
<b>Read-Out [d]. g</b>		0.001g	0.01g
<b>Reproducibility. g</b>		0.001g	0.01g
<b>Linearity. g</b>		0.001g	0.01g
<b>Weighing Mode</b>		g, PCS, %	
<b>Display</b>		Digital LCD with Back-Light Function(110×h35mm)	
<b>Weighing Plate. mm</b>		129×119mm	
<b>Dimension &amp; Weight</b>		170×250×h65mm, 1.4kg	
<b>Packing &amp; Gross Weight</b>		210×315×h115mm, 1.6kg	
<b>Power Supply</b>		Adaptor DC 12V/300mA, 220V/60Hz	
<b>Cat. No.</b>		<b>DH.Bal8051</b>	<b>DH.Bal8056</b>
<b>Price, Each. ₩</b>			



(2) Glass Shield-type

1-Year Warranty



**(2) Glass Draft Shield-type Precision Balance**

- \* With Removable Powder Coated steel Cover
- \* Draft Shield Size : 156×162×h120mm
- \* Removable Cover with Holes(30mm) for Open

**Specifications & Ordering Information**

Spec.	Model	Bal-D210S	Bal-D2100S
<b>Weighing Range. g</b>		<b>max.210g</b>	<b>max.2100g</b>
<b>Read-Out [d]. g</b>		0.001g	0.01g
<b>Reproducibility. g</b>		0.001g	0.01g
<b>Linearity. g</b>		0.001g	0.01g
<b>Weighing Mode</b>		g, PCS, %	
<b>Display</b>		Digital LCD with Back-Light Function(110×h35mm)	
<b>Weighing Plate. mm</b>		φ 80mm	
<b>Dimension &amp; Weight</b>		170×250×h185mm, 1.7kg	
<b>Packing &amp; Gross Weight</b>		210×315×h115mm, 2.5kg	
<b>Power Supply</b>		Adaptor DC 12V/300mA, 220V/60Hz	
<b>Cat. No.</b>		<b>DH.Bal8061</b>	<b>DH.Bal8066</b>
<b>Price, Each. ₩</b>			



(3) RS-232C Thermal Printer, "WBA-100"



(4) RS-232C Thermal Label Printer, "WBA-420"

**Optional Thermal Printer**

\* The Balance Model must be Specified for Programming the Printer Module.

		Ea. Price, ₩
<b>SL.WBA.100P</b>	(3) Thermal Printer, Paper Roll, "WBA-100" Included Cable Module, 1×Paper Roll	
<b>DH.WBA0084</b>	Thermal Paper Package, 5×Paper Roll, for "WBA-100"	
<b>SL.WBA.420P</b>	(4) Thermal Printer, Label Paper Roll, "WBA-420" Included Cable Module, 1×Label Paper Roll	
<b>DH.WBA0771</b>	Thermal Label Paper Package, 5×Label Paper Roll, for "WBA-420"	

DAIHAN® [d] 0.01g, max.3,200 & 6,200g Calibration Certificated Hi-Standard Lab Balance "WBA-3200 & 6200", 168×168mm Plate With Super Size Back Light LCD, Counting Function, Ext-CAL, 2kg Cali. Weight, Various Weight Mode, with Certi. & Traceability 표준 다용도 랩 바란스, g / 계수 / % 측정, Ext-CAL(표준분동 포함), 4각 플레이트

CE



Calibration Certificate

2-Year Warranty



Includes 2kg(1kg×2Ea) Calibration Weight (Only "WBA-3200" model)

A. Hi-Standard Lab Balance, "WBA-3200"



(1) Glass Draft Shield (Optional)



(2) RS-232C Thermal Printer, "WBA-100"



(3) RS-232C Thermal Label Printer, "WBA-420"

- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Available Counting & Weighing Mode
- Various Weight Mode (g/ct/GN/dwt/etc.) and Percent(%) Weighing Mode
- External Calibration
- Numeric Linearity Calibration
- For Both AC and DC
- Includes AC 230V Adapter for DC Power 12V/500mA
- Available Rechargeable Battery (6V/1.2A, Excluded)
- Four Level Anti-shock Adjustable Function
- Time & Date Setting for Recording Data
- Weighing Response Time Adjustable
- Super Size Back Light LCD
- \* Ambient Temperature 5.0 ~ 35℃
- \* Stabilization Time(Typically Fast) ≤ 8 Seconds
- \* Default and Auto Lock Present Working Mode
- \* Display Present Temperature
- \* Included 2kg(1kg×2Ea.) Calibration Weight (only WBA-3200)
- \* Built in RS232C & USB port for Printer
- \* Built in Under Hook
- \* Electro Magnetic Base
- \* Glass Draft Shield(Optional)

## Specifications &amp; Ordering information

&lt;L1&gt;

Spec.	Model	A. "WBA-3200"	B. "WBA-6200"
Read-Out [d]. g		0.01 g	
Weighing Range. g		max.3,200 g	max.6,200 g
Weighing Plate. mm		168×168 mm	
Reproducibility. g		0.01 g	0.02 g
Linearity. g		0.02 g	0.03 g
Ambient Temperature		5.0℃~35℃	
Stabilization Time		≤ 3 Seconds (Typically Fast)	
Weight Mode		% Mode and g-/ct-/GN-/dwt-/etc.	
Counting Mode		Counting & Weighing Mode Available	
Calibration		External Calibration, Included 2×1kg Calibration Weight	External Calibration, Excluded Calibration Weight
Display		Digital Super Size LCD with Back-Light Function	
Dimension & Net Weight		195×295×h90mm / 2.6kg	
Packing Size & Gross Weight		243×377×h163mm / 3.2kg	
Electrical Reqts.		DC 12V, with AC 230V Adapter, 50/60Hz	
Cat. No.		DH.WBA3200	DH.WBA6200
Price, Each. ₩			

## Optional Glass Draft Shield

\* Target Model Required for Shielding Installation

DH.WBA0003 (1) Glass Draft Shield, 3 Slide Doors(Left, Right, Top),  
175×195×h230 mm

Ea. Price, ₩

## Optional Thermal Printer

\* Model Name Required for Printer Installation

SL.WBA.100P (2) Thermal Printer, Paper Roll, "WBA-100"  
Included Cable Module, 1×Paper Roll

DH.WBA0084 Thermal Paper Package, 5×Paper Roll, for "WBA-100"

SL.WBA.420P (3) Thermal Printer, Label Paper Roll, "WBA-420"  
Included Cable Module, 1×Label Paper Roll

DH.WBA0771 Thermal Label Paper Package, 5×Label Paper Roll, for "WBA-420"

Ea. Price, ₩

**DAIHAN® [d] 0.01 & 0.1g, max.210g~6,100g Multi-use Balance “Ba-series”, DC & AC Adapter**

With g · Metric · Pcs · % · Carat · CHK · Bargraph · Density Test-Function, 다용도 바란스, 무게 · 계수 · 퍼센트 · 캐럿 · 비교계량 · 비중측정 & 동물계량 기능

■ **Made in Korea** ■ **CE Certified** ■ **1-Year Warranty** ■ **Digital Large LCD Display and Ergonomic Design**

\* Metric Function : Animal Weighing, Bar-Graph Display, Comparison Weighing CHK, Counting 10~100 Pcs., Density Determination, Percent % and Sub-Scale Dual Display

\* 5 × Touch Key : 1/2D\*, MODE, ZERO, TARE, ENTER, and PRINT

\* 3sec. Stabilization Time, and Permissible Ambient Temp. 5°C~35°C

\* Rechargeable Battery integrated, and with AC 230V Adapter for DC Power 12V/300mA

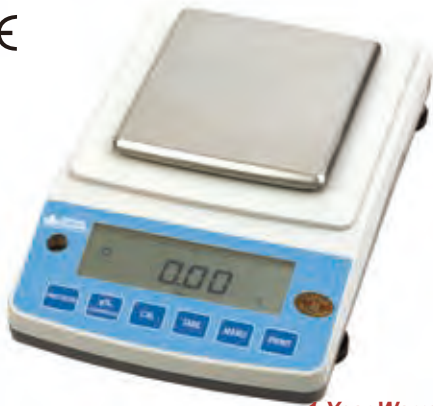
\* Easy Operation Weighing Mode : Gram, Metric, and Carat

\* Material : Stainless-steel Weighing Plate and ABS Resin Body

\* RS-232C Interface and Level-Gauge integrated

**(1) [d] 0.01g, max.210g · 310g · 610g Models, Multi-use Balance**

CE



1-Year Warranty

**Specifications & Ordering information**

<L1>

Spec.	Model	“Ba210”	“Ba310”	“Ba610”
Weighing Range max.		210 g	310 g	610 g
Read-Out [d] & Reproducibility. g		0.01 g		
Linearity. g		0.01 g		
Weighing Mode		Gram, Metric, Carat		
Weighing Plate. mm		120 × 130 mm Stainless-steel		
Color		Light Grey-color		Silver-color
Dimension & Weight		170 × 250 × h65 mm, and 0.8 kg		
Packing & Gross Weight		210 × 315 × h115 mm, and 1.7 kg		
DC Power & AC Adapter		with Rechargeable Battery & AC 220V Adapter		
Cat. No.		DH.Bal8011	DH.Bal8012	DH.Bal8013
Price, Each. ₩				

**(2) [d] 0.1g, max.2100g · 3100g · 6,100g Models, Multi-use Balance**

CE



1-Year Warranty

**Specifications & Ordering information**

Spec.	Model	“Ba2.1k”	“Ba3.1k”	“Ba6.1k”
Weighing Range max.		2,100 g	3,100 g	6,100 g
Read-Out [d] & Reproducibility. g		0.1 g		
Linearity. g		0.1 g		
Weighing Mode		Gram, Metric, Carat		
Weighing Plate. mm		160 × 170 mm Stainless-steel		
Color		Light Grey-color		Silver-color
Dimension & Weight		170 × 250 × h65 mm, and 1.0 kg		
Packing & Gross Weight		210 × 315 × h115 mm / 1.9 kg		
DC Power & AC Adapter		with Rechargeable Battery & AC 220V Adapter		
Cat. No.		DH.Bal8015	DH.Bal8016	DH.Bal8017
Price, Each. ₩				

**Optional Thermal Printer**

※ The Balance Model must be Specified for Programming the Printer Module.

		Ea. Price, ₩
SL.WBA.100P	(3) Thermal Printer, Paper Roll, “WBA-100” Included Cable Module, 1 × Paper Roll	
DH.WBA0084	Thermal Paper Package, 5 × Paper Roll, for “WBA-100”	
SL.WBA.420P	(4) Thermal Printer, Label Paper Roll, “WBA-420” Included Cable Module, 1 × Label Paper Roll	
DH.WBA0771	Thermal Label Paper Package, 5 × Label Paper Roll, for “WBA-420”	



(3) RS-232C Thermal Printer  
“WBA-100”



(4) RS-232C Thermal Label Printer  
“WBA-420”



Articles

Cat. No

Description

## DAIHAN® [d] 0.1 &amp; 1g, max.610 &amp; 6,100g Compact Economy Scale "Bas", 17.5×24×h6cm

Good for Saving Money, with Pcs. Counting, Back Light LCD, Battery, without Adapter, 경제형 컴팩트 스케일/저울, 계수 기능

CE



1-Year Warranty

## ■ CE Certified

- \* Ergonomic Design for Intuitive User Interface
- \* Pcs. Counting & Weighing Mode
- \* Ambient Temperature 5°C ~35°C

## ■ 1-Year Warranty

- \* Digital LCD with Backlight
- \* External Calibration
- \* Numeric Linearity Calibration

## Specifications &amp; Ordering information

&lt;L1&gt;

Spec.	Model	"Bas610"	"Bas6.1k"
Weighing Range. g		max.610 g	max.6100 g
Weighing Plate. mm		155×155 mm	
Read-Out [d] & Reproducibility. g		0.1 g & 0.1 g	1 g & 1 g
Material		Body : ABS, Platform : Stainless-steel	
Dimension & Weight		175×240×h60 mm, and 0.6 kg	
Packing & Gross Weight		280×180×h80 mm, and 0.8 kg	
Power Supply		DC 9V/300mA / AA×2Ea.	
Cat. No.		DH.Bal8021	DH.Bal8022
Price, Each. ₩			

## DAIHAN® [d] 0.1 &amp; 1g, max.310 &amp; 610 &amp; 6,100g Basic Scale "Bap", 17×25×h6.5cm

With 10~100Pcs. Counting · Bargraph · LCD Display, with DC &amp; AC Adapter, 기본형 스케일/저울 계수기능

## ■ Made in Korea

## ■ CE Certified

- \* Digital Large LCD Display and Ergonomic Design
- \* 10~100 Pcs. Counting and Bar-graph Display Function
- \* Material : Stainless-steel Weighing Plate and ABS Resin Body
- \* AA Battery and AC 230V Adapter for DC Power 12V/300mA

## ■ 1-Year Warranty

## ■ External Calibration

- \* Easy Operation, Sturdy and Balancing with Level Gauge
- \* 4×Touch Key : MODE, ZERO, TARE, and ENTER
- \* Fast Stabilization Time - 3 Seconds
- \* Permissible Ambient Temp. 5°C ~35°C

## (1) [d] 0.1g, max.310g/610g Models, Basic Balance

CE



1-Year Warranty

## Specifications &amp; Ordering information

&lt;L1&gt;

Spec.	Model	"Bap310"	"Bap610"
Weighing Range. g		max.310 g	max.610 g
Read-Out [d] & Reproducibility. g		0.1 g & 0.1 g	
Linearity. g		0.1 g	
Weighing Mode		Gram	
Weighing Plate. mm		120×130 mm Stainless-steel	
Color Light		Grey-color	Silver-color
Dimension & Weight		170×250×h65 mm, and 0.8 kg	
Packing & Gross Weight		210×315×h115 mm, and 1.7 kg	
DC Power & AC Adapter		with Rechargeable Battery & AC 220V Adapter	
Cat. No.		DH.Bal8025	DH.Bal8026
Price, Each. ₩			

## (2) [d] 1g, max.6100g Models, Basic Balance

CE



1-Year Warranty

## Specifications &amp; Ordering information

Spec.	Model	"Ba6.1kS"
Weighing Range. g		max.6100 g
Read-Out [d] & Reproducibility. g		1 g & 1 g
Linearity. g		1 g
Weighing Mode		Gram
Weighing Plate. mm		160×170 mm Stainless-steel
Color Light		Silver-color
Dimension & Weight		170×250×h65 mm, and 1.0 kg
Packing & Gross Weight		210×315×h115 mm, and 1.9 kg
DC Power & AC Adapter		with Rechargeable Battery & AC 220V Adapter
Cat. No.		DH.Bal8031
Price, Each. ₩		

[d] 2 & 10g, max.10 & 30kg Waterproof Economy Scale "T-28K", Digital LCD, IP×2

With Rechargeable Battery, Tray, Back Light & LCD Display, DC Adapter, Pcs. Counting, 방수 경제형 스케일/저울



230×240×h170mm  
1-Year Warranty

- Made in Korea
- Digital LCD Display
- \* Included Rechargeable Battery (5,000mAh)
- \* Waterproofing (Protection Against Falling Water)
- \* Body & Platform ; Made of ABS
- CE Certified
- Pcs. Counting
- \* AC 220V Adapter for DC Power 12V / 1.5A
- \* Smart Auto-off 10min
- 1-Year Warranty

Specifications & Ordering information

<L1>

Spec.	Model	"T-2810K"	"T-2830K"
Weighing Range. g		max.10kg	max.30kg
Read-Out [d]. g		2g	10g
Reproducibility. g		2g	10g
Display		g, kg, PCS ; LCD, 5 Digit (100×h40mm), Back Light On/Off	
Platform Size. mm		230×190 mm, ABS	
Dimension & Weight		230×240×h170mm, 2.7kg	
Packing & Gross Weight		350×260×h265mm, 3.6kg	
Electrical Requirements		Adaptor DC 12V/1.5A, 220V/60Hz	
Cat. No.		DH.Bal3026	DH.Bal3027
Price, Each. ₩			

DAIHAN® [d] 0.1 & 0.5g, max.32 & 60kg Precision High Capacity Digital Bench Scale "Bah32P" & "Bah60P"

With Pcs. · % · Alarm · Print & Check Function and Rechargeable Battery/Back Light & LCD Display, DC & AC Adapter

정밀 대용량 다기능 스케일/저울, Pcs. 계수 · % · 경보음 · 인쇄 및 체크 기능, 재충전 배터리/백라이트 내장



320×340×h125mm  
1-Year Warranty

(1) [d] 0.1, max. 32kg, Bench Scale, "Bah32P"

- CE Certified
- 1-Year Warranty
- Digital : 3×6 digits LCD display, 20mm Digits, and Sturdy/Ergonomic Design
- 7× Touch Key for "Bah32P" : UNIT, PRINT, FUNC., %, LIMIT, TARE, and ZERO
- 6× Touch Key for "Bah60P Series" : UNIT, M+, G/N, TARE, ZERO and ON/OFF
- Easy Operation & Multi-Function : Alarm, Check, Counting Pcs., Percent %,
- \* Integrated Rechargeable Battery(100Hr-Run) and Back Light
- \* Very Fast Stabilization Time : 2 seconds
- \* Permissible Ambient Temp. - 10℃ +40℃
- \* Material : Stainless-steel Platform and ABS Resin Body
- \* External Calibration
- \* with AC 220V Adapter for DC Power 9V / 850mA

Specifications & Ordering information

<L1>

Spec.	Model	(1) "Bah32P"	(2) "Bah60P"
Weighing Range		max.32kg	max.60kg
Read-Out [d]. g		0.1g	0.5g
Reproducibility. g		0.1g	0.5g
Weighing Plate. mm		225×300mm	355×320mm
Dimension & Weight		320×340×h125mm, 3.8kg	355×320×h130mm, 6.3kg
Packing & Gross Weight		370×440×h210mm, 4.6kg	500×450×h230mm, 7.3kg
DC Power & AC Adapter		with Rechargeable Battery & AC 220V Adapter	
Cat. No.		DH.Bal8035	DH.Bal8036
Price, Each. ₩			



355×320×h130mm  
1-Year Warranty

(2) [d] 0.5, max. 60kg, Bench Scale, "Bah60P"

Articles

Cat. No

Description

## DAIHAN® [d] 0.5 &amp; 1g, max.15 &amp; 30kg Basic High Capacity Bench Scale "Bah15L" &amp; "Bah30L"

With Pcs. · % · Alarm · Print &amp; Check Function and Rechargeable Battery/Back Light &amp; LCD Display, DC &amp; AC Adapter, 32 × 34 × h12.5cm

기본형 대용량 다기능 스케일/저울, Pcs. 계수 · % · 경보음 · 인쇄 및 체크 기능, 재충전 배터리/백라이트 내장

CE



32 × 34 × h12.5cm

1-Year Warranty

- CE Certified    ■ 1-Year Warranty
- Digital : 3×6 digits LCD Display, 20mm Digits, and Sturdy/Ergonomic Design
- 7× Touch Key : UNIT, PRINT, FUNC., %, LIMIT, TARE, and ZERO
- Easy Operation & Multi-Function : Alarm, Check, Counting Pcs., Percent %, and Print. "RS-232C"-Option

- \* Integrated Rechargeable Battery(100Hr-Run) and Back Light
- \* Very Fast Stabilization Time : 2 seconds      \* Permissible Ambient Temp. -10℃ +40℃
- \* Material : Stainless-steel Platform and ABS Resin Body      \* External Calibration
- \* with AC 220V Adapter for DC Power 9V / 850mA

## Specifications &amp; Ordering information

&lt;L1&gt;

Spec.	Model	"Bah15L"	"Bah30L"
Weighing Range. g		max.15kg	max.30kg
Read-Out [d]. g		0.5 g	1 g
Reproducibility. g		0.5 g	1 g
Weighing Plate. mm		225 × 300 mm	
Dimension & Weight		320 × 340 × h125 mm, 3.8 kg	
Packing & Gross Weight		370 × 440 × h210 mm, 4.6 kg	
DC Power & AC Adapter		with Rechargeable Battery & AC 220V Adapter	
Cat. No.		DH.Bal8041	DH.Bal8042
Price, Each. ₩			

## DAIHAN® [d] 5 &amp; 10g, max.60 &amp; 150kg High Capacity Multi-func. Platform Scale "Bab60" &amp; "Bab150", 42.5 × 67.5 × h75.5cm

With Pcs. · Alarm · Back Light · Rechargeable Battery &amp; AC Adapter, 대용량 다기능 스케일/저울

CE



42.5 × 67.5 × h75.5cm

1-Year Warranty

- CE Certified    ■ 1-Year Warranty
- Digital : 6 Digits, LCD Display, 24mm Digits
- Sturdy Ergonomic Design
- Easy Operation and Multi Function : Pcs. Count, Weighing Alarm, Weight Storage/Plus/Call, and Auto-TARE

- \* Integrated Rechargeable Battery & Back Light
- \* Very Fast Stabilization Time : 1 sec.
- \* Permissible Ambient Temp. -10℃ +40℃
- \* Automatic External Calibration
- \* Material : Stainless-steel Platform, ABS Resin Indicator
- \* with AC 220V Adapter for DC Power 9V/800mA

## Specifications &amp; Ordering information

&lt;L1&gt;

Spec.	Model	"Bab60"	"Bab150"
Weighing Range		max.60kg	max.150kg
Read-Out [d]. g		5 g	10 g
Reproducibility. g		5 g	10 g
Weighing Plate. mm		420 × 520 mm	
Dimension & Weight		425 × 675 × h755 mm, 14 kg	
Packing & Gross Weight		580 × 710 × h820 mm, 15.9 kg	
DC Power & AC Adapter		with Rechargeable Battery & AC 220V Adapter	
Cat. No.		DH.Bal8045	DH.Bal8046
Price, Each. ₩			

DAIHAN® [d] 1mg, max.110g High-performance Moisture Analyzer "WBA-110M", 0.00~ 100.00 %, 40℃~199℃  
 With 100g Cali. Weight, Back Light LCD, Counting Func., 3 × displays of %(g) · °C · Time, & Ext-CAL Program, **초정밀/다용도 수분측정기**

CE [d] 1mg, max.110g



Includes 100g Calibration Weight

2-Year Warranty



(1) 10 Sample Plate (Included)



(2) RS-232C Thermal Printer, "WBA-100"



(3) RS-232C Thermal Label Printer, "WBA-420"

- CE Certified
- The Percentage of moisture Content
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Included 100g Calibration Weight
- Halogen Light Heating
- Temperature and Time can be Set
- The Percentage of Dry Residual
- Display after Drying : Moisture(%) - Moisture Content from Wet Weight  
Dry Content(%) - Dry Weight from Wet Weight  
ATRO(%) - 100 ~ 999%
- PL(Product Liability) Insurance
- Store Historical Setting
- Stainless-steel Chamber
- External Calibration
- Back Light LCD

\* Digital Function, and AC 220V, 50/60Hz Operated

\* Ambient Temperature 5.0℃~35℃

\* Default and Auto Lock Present Working Mode

\* Built in RS232C for Printer (SL.WBA.100P, SL.WBA.420P)

\* Loadcell Sensor

\* Included 10 Sample Plate

Specifications & Ordering information

<L1>

Spec.	Model	"WBA-110M"
Read-Out [d]. g		1 mg
Weighing Range. g		max.110 g
Weighing Plate. mm		φ 90 mm
Reproducibility. g		2 mg
Ambient Temperature		5.0℃~35℃
Heat Source / Temp. Sensor		Halogen Lamp / PT100 Sensor
Temp. Range / Resolution		40℃~199℃ / 1℃
Moisture Range / Read ability		0.00 ~ 100% / 0.01%
Dry Residual		Range : 0.00 ~ 100.00%, Readability : 0.01%
ATRO		100 ~ 999%, 0 ~ 999%
Timer / Auto-stop		1 ~ 99min(Resolution : 1sec.) / Auto-stop 0.1~9.9% within 1min.
Number of Storage		15
Calibration		External Calibration, Included 100g Calibration Weight
Display		Digital LCD with Back-Light Function
Power Consumption		400 W
Dimension & Net Weight		180×200×h380 mm / 5.8 kg
Packing Size & Gross Weight		290×305×h440 mm / 6.4 kg
Power Supply & Cord Plug		AC 220V, 50 / 60Hz
Cat. No.		DH.WBA110M
Price, Each. ₩		

Optional Sample Plate

DH.WBA0005 (1) Sample Plate, φ 90 mm × h4mm

Pk. Price, ₩
10ea

Optional Thermal Printer

※ The Balance Model must be Specified for Programming the Printer Module.

SL.WBA.100P (2) Thermal Printer, Paper Roll, "WBA-100"  
 Included Cable Module, 1×Paper Roll

DH.WBA0084 Thermal Paper Package, 5×Paper Roll, for "WBA-100"

SL.WBA.420P (3) Thermal Printer, Label Paper Roll, "WBA-420"  
 Included Cable Module, 1×Label Paper Roll

DH.WBA0771 Thermal Label Paper Package, 5×Label Paper Roll, for "WBA-420"

Ea. Price, ₩

**Innotem® “F1”- & “M1”-Class Certificated Standard Weight, Set & Individual, “OIML”-class, International Accurate Class NEW**  
 With Verification Certificate, Polished Stainless-steel, <China-made / Korean-certification> **보증서부 “OIML” 표준분동세트 & 개별분동**

■ “OIML R111-2004” [Fr : Organisation Internationale de Metrologie Legale : International Organization of Legal Metrology] Offers the appropriate Test Weight Package : Consisting of the Weight, Box and INNOTEM Certificate.

\* F1-Class Weight : Test Weights for Analytical Balance & Precision Balance Verification (Class I / II ≤ 100,000e)

\* M1-Class Weight : Test Weights for Industrial and Commercial Scale Verification (ClassIII ≤ 10,000e)

✱ Calibration Certificate ;  
⇒ See the Next Page!

**(1) “F1”- & “M1”- Class OIML R111-2004 Standard Weight-Set**  
 With Verification Certificate, Aluminum Case, Tweezer, Cotton cloth, Brush, 분동세트

<L1>



Weight Set	Pcs.	F1 Set with V. Certi		M1 Set with V. Certi	
		Cat. No.	Set. Price, ₩	Cat. No.	Set. Price, ₩
① 1mg ~ 500mg	12 Pcs	I7.WeI7051		I7.WeI7151	
② 1mg ~ 100g	21 Pcs	I7.WeI7052		I7.WeI7152	
③ 1mg ~ 500g	24 Pcs	I7.WeI7054		I7.WeI7154	
④ 1mg ~ 1kg	25 Pcs	I7.WeI7055		I7.WeI7155	
⑤ 1mg ~ 2kg	27 Pcs	I7.WeI7056		I7.WeI7156	
⑥ 1mg ~ 5kg	28 Pcs	I7.WeI7057		I7.WeI7157	
⑦ 1mg ~ 10kg	29 Pcs	I7.WeI7058		I7.WeI7158	
⑧ 1mg ~ 20kg	30 Pcs	I7.WeI7059		I7.WeI7159	
⑨ 1 kg ~ 5kg	4 Pcs	I7.WeI7060		I7.WeI7160	

Individual weights per Set	1	2	2	5	10	20	20	50	100	200	200	500	1	2	2	5	10	20	
Weight Set	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	g	g	g	g	g	g	g
1 mg - 500 mg	Total weight 1.11g ①																		
1 mg - 100 g	211.11g ②																		
1 mg - 500 g	1,111.11g ③																		
1 mg - 1 kg	2,111.11g ④																		
1 mg - 2 kg	6,111.11g ⑤																		
1 mg - 5 kg	11,111.11g ⑥																		
1 mg - 10 kg	21,111.11g ⑦																		
1 mg - 20 kg	41,111.11g ⑧																		
1 k g - 5 kg	10,000g ⑨																		

**(2) “F1”- & “M1”- Class OIML R111-2004 Standard Individual Weight in a Case**  
 With Verification Certificate. & Plastic Case, But 10 & 20kg in Aluminum Case, 개별분동



Weight Type	“F1” Individual Weight with Certi				“M1” Individual Weight with Certi			
	Cat. No.	Weight	± Tol mg	Ea. Price, ₩	Cat. No.	Weight	± Tol mg	Ea. Price, ₩
(a) Milligram	I7.WeI7001	1mg	±0.020 mg		I7.WeI7101	1mg	± 0.20 mg	
	I7.WeI7002	2mg	±0.020 mg		I7.WeI7102	2mg	± 0.20 mg	
	I7.WeI7003	5mg	±0.020 mg		I7.WeI7103	5mg	± 0.20 mg	
	I7.WeI7004	10mg	±0.025 mg		I7.WeI7104	10mg	± 0.25 mg	
	I7.WeI7005	20mg	±0.03 mg		I7.WeI7105	20mg	± 0.3 mg	
	I7.WeI7006	50mg	±0.04 mg		I7.WeI7106	50mg	± 0.4 mg	
	I7.WeI7007	100mg	±0.05 mg		I7.WeI7107	100mg	± 0.5 mg	
	I7.WeI7008	200mg	±0.06 mg		I7.WeI7108	200mg	± 0.6 mg	
	I7.WeI7009	500mg	±0.08 mg		I7.WeI7109	500mg	± 0.8 mg	
(b) Gram	I7.WeI7011	1g	±0.10 mg		I7.WeI7111	1g	± 1.0 mg	
	I7.WeI7012	2g	±0.12 mg		I7.WeI7112	2g	± 1.2 mg	
	I7.WeI7013	5g	±0.16 mg		I7.WeI7113	5g	± 1.6 mg	
	I7.WeI7014	10g	±0.20 mg		I7.WeI7114	10g	± 2.0 mg	
	I7.WeI7015	20g	±0.25 mg		I7.WeI7115	20g	± 2.5 mg	
	I7.WeI7016	50g	±0.3 mg		I7.WeI7116	50g	± 3.0 mg	
	I7.WeI7017	100g	±0.5 mg		I7.WeI7117	100g	± 5.0 mg	
	I7.WeI7018	200g	±1.0 mg		I7.WeI7118	200g	± 10 mg	
	I7.WeI7019	500g	±2.5 mg		I7.WeI7119	500g	± 25 mg	
(c) Kilogram	I7.WeI7021	1kg	±5.0 mg		I7.WeI7121	1kg	± 50 mg	
	I7.WeI7022	2kg	± 10 mg		I7.WeI7122	2kg	± 100 mg	
	I7.WeI7023	5kg	± 25 mg		I7.WeI7123	5kg	± 250 mg	
	I7.WeI7024	10kg	± 50 mg		I7.WeI7124	10kg	± 500 mg	
	I7.WeI7025	20kg	± 100 mg		I7.WeI7125	20kg	± 1000 mg	
(d) Rectangle	I7.WeI7033	5kg	± 25 mg		I7.WeI7133	5kg	± 250 mg	
	I7.WeI7034	10kg	± 50 mg		I7.WeI7134	10kg	± 500 mg	
	I7.WeI7035	20kg	± 100 mg		I7.WeI7135	20kg	± 1000 mg	

Innotem® Calibration Certificate for "F1- & M1- Class" Weights, 분동 교정 **NEW**



■ "OIML R111-2004" [Fr : Organisation Internationale de Metrologie Legale : International Organization of Legal Metrology] Offers the appropriate Test Weight Package : Consisting of the Weight, Box and INNOTEM Certificate.

■ Available Calibration Certificate Service for all Brand Weights

■ "KOLAS" Calibration Certificate of Traceability

\* Accredited by KOLAS (Korea Laboratory Accreditation Scheme = Korea Calibration Service)

\* KOLAS which Signed the ILAC-MRA (International Laboratory Accreditation Cooperation - Mutual Recognition Arrangement)

\* Significant Instability or other Adverse Factor can affect the Validity of the Calibration (Overload, Temperature, Humidity etc.)

<L1>

Weight Range	F1 Weight Calibration Certificate		M1 Weight Calibration Certificate	
	Cat. No.	Price, ₩	Cat. No.	Price, ₩
1mg ~ 500g	I7.We17501		I7.We17551	
1kg ~ 5kg	I7.We17502		I7.We17552	
10kg ~ 20kg	I7.We17503		I7.We17553	

\* Weight-Set & Other Weights are available upon Customer's Request.

, Accessories



Glass Weighing Bottle, with Ground Glass Stopper, Short- & Tall-form, 7~65ml

Excellent Chemical · Mechanical Resistance, Boro-glass 3.3, 글라스 다용도 평량병

(1) Short form, 22~55ml

<L1>

	Ea. W	Pk. Price, ₩
GL.264.202.01 22ml, φ40×h30mm		10ea
GL.264.202.03 37ml, φ50×h35mm		10ea
GL.264.202.04 55ml, φ50×h50mm		10ea

(2) Tall form, 7~65ml

	Ea. W	Pk. Price, ₩
GL.264.202.06 7ml, φ20×h40mm		10ea
GL.264.202.07 17ml, φ25×h50mm		10ea
GL.264.202.08 28ml, φ30×h60mm		10ea
GL.264.202.09 65ml, φ40×h80mm		10ea



Kartell® PP Universal Use Weighing Bottle, Transparent, 20~360ml

Excellent Chemical Resistance, Autoclavable, 0°C ~ 125/140°C, <Italy-made>, PP 다용도 평량병

\* PP(Polypropylene)

\* Good Chemical & Temp-Resistance

\* Multi-use : Weighing, Sampling and Storage.

(1) Short form, 20~50ml

<L1>

	Ea. Price, ₩	Pk. Price, ₩
KA.342 20ml, φ40×h30mm		10ea
KA.345 30ml, φ50×h30mm		10ea
KA.346 50ml, φ60×h34mm		10ea

(2) Tall form, 23~360ml

	Ea. Price, ₩	Pk. Price, ₩
KA.340 23ml, φ30×h50mm		10ea
KA.343 60ml, φ40×h70mm		10ea
KA.347 190ml, φ60×h90mm		10ea
KA.348 360ml, φ70×h120mm		10ea



Micro

Wheaton® 0.5 & 2.2ml Reusable Aluminum Micro-weighing Dish, with Smooth-surface

Ideal for Analytical Balance, φ11 & 20mm, <USA-made>, 알루미늄 미량 디쉬

<L1>

	dh	pk. Price, ₩	Cs.	Price, ₩
WH.370790 Weighing Dish, 0.5ml, φ11×h6mm, 0.15 g/pcs		10ea	1000ea	
WH.370792 , 2.2ml, φ20×h8mm, 0.45 g/pcs		10ea	1000ea	



(1) φ75 & 102mm Reusable Al. Dish

φ75~102mm Reusable Aluminum Dish, for Sampling & Weighing, 30~45ml

알루미늄 샘플 / 평량 디쉬, 재사용 가능

\* Good for General Weighing, Testing and Moisture Drying Application for Moisture Analyzer

(1) φ75 & 102mm Reusable Aluminum Dish **NEW**

<L3>

■ Made in Korea

	Pk.	Price, ₩
DH.Dis8005 Al. Sample Dish, 30ml, φ75×h8mm, 4.5g	100ea	
DH.Dis8007 , 45ml, φ102×h8mm, 3.7g	50ea	



(2) φ90mm Reusable Al. Dish

(2) φ90mm Reusable Aluminum Dish

<L1>

■ Supplied by Kern® in Germany

	Pk.	Price, ₩
KE.MLB.A01 Al. Sample Dish, 40ml, φ90×h7mm, 3.7g, 80/pk	80ea	

Articles

Cat. No

Description



### SciLab® Disposable Aluminum Weighing Dish, Stackable, General- · Attached Handle- · Smooth Wall-type Ideal for Weighing, Storage, Sampling and Drying, No Coating and Oil Free, 알루미늄 샘플/평량 디쉬 **NEW**

\* Ideal for Weighing, Storage, Sampling and Drying

\* with Flat Bottom

&lt;L3&gt;

#### (1) Aluminum Weighing Dish, General-type

SL.Dis8030 Weighing Dish, Aluminum, General-type,  $\phi 51 \times h12.7\text{mm}$ , 20ml, 1g  
 SL.Dis8031 ,  $\phi 70 \times h30.0\text{mm}$ , 70ml, 1.5g  
 SL.Dis8032 ,  $\phi 71 \times h17.4\text{mm}$ , 75ml, 2g  
 SL.Dis8034 ,  $\phi 127 \times h28.6\text{mm}$ , 200ml, 4g

Pk.	Price, W
100ea	
100ea	
100ea	
50ea	

#### (2) Aluminum Weighing Dish, Attached Handle-type

SL.Dis8040 Weighing Dish, Aluminum, Attached Handle-type,  $\phi 30 \times h10.0\text{mm}$ , 8ml, 0.3g  
 SL.Dis8042 ,  $\phi 50 \times h12.7\text{mm}$ , 20ml, 1g  
 SL.Dis8043 ,  $\phi 60 \times h16.0\text{mm}$ , 40ml, 1.5g  
 SL.Dis8044 ,  $\phi 76 \times h16.0\text{mm}$ , 80ml, 2g

Pk.	Price, W
100ea	
100ea	
100ea	
100ea	

#### (3) Aluminum Weighing Dish, Smooth Wall-type

SL.Dis8051 Weighing Dish, Aluminum, Smooth Wall-type,  $\phi 100 \times h13\text{mm}$ , 5g

Pk.	Price, W
100ea	



### Low-Nitrogen Weighing Paper, 평량지/유산지

■ Made in Korea

\* Perfect Surface Treatment : Powder Samples were not Asked

&lt;L1&gt;

\* Ideal for Chemical, Medical, Laboratory

\* NO Dust / Absorptiveness

DH.WEP0011 Weighing Paper, 60×60mm  
 DH.WEP001 , 80×80mm  
 DH.WEP002 , 100×100mm  
 DH.WEP0021 , 120×120mm  
 DH.WEP003 , 150×150mm

Pk.	Price, W
500sheet	
500sheet	
500sheet	
500sheet	
500sheet	



(1) Square-type

### PS Anti-Static Weighing Dish, Disposable, 9~355ml

With Smooth Surface,  $-10^{\circ}\text{C} + 70/80^{\circ}\text{C}$ , <Canada-made>, PS 일회용 플라스틱 평량디쉬, 정전기방지용

\* Use : Sampling for Liquid and Solid and Powder, Easily Transformed into Funnel-form

\* Material : Polystyrene(PS), Disposable \* Anti-static : Suitable for Clean Room Dish in Electronic / Semiconductor Field

&lt;L1&gt;

#### (1) Square-type ; Accurate Pour-Outs With Minimum Sample Loss

SP.D250.1 Dish, Square type, 10ml, 40×40×h8mm  
 SP.D250.2 , 100ml, 78×78×h25mm  
 SP.D250.3 , 330ml, 127×127×h25mm

Pk.	Price,W	Cs.	Price, W
500ea		8pk	
500ea			
500ea			

#### (2) Boat-type, Pour Dish ; for Static-affected Materials, Easy to Spout

SP.D251.1 Dish, Boat type, 12ml, 50×37×h8mm  
 SP.D251.2 , 140ml, 128×76×h25mm  
 SP.D251.3 , 270ml, 180×117×h25mm

Pk.	Price,W	Cs.	Price, W
250ea		8pk	
250ea			
250ea			

#### (3) Hexagonal-type ; Greater Balance Protection and Safety

SP.D252.1 Dish, Hexagonal type, 9ml, Top i.d. 35mm, Base i.d.25mm  
 SP.D252.2 , 58ml, Top i.d. 70mm, Base i.d.47mm  
 SP.D252.3 , 203ml, Top i.d.115mm, Base i.d.85mm  
 SP.D252.4 , 355ml, Top i.d.130mm, Base i.d.95mm

Pk.	Price,W	Cs.	Price, W
500ea		8pk	
500ea			
500ea			
500ea			



(2) Boat-type



(3) Hexagonal-type



(1) Square-type Black

(2) Diamond-form Black

### PS Black Weighing Dish, Square-type & Diamond-form, Ideal for White Sample With Smooth Surface, $-10^{\circ}\text{C} + 70/80^{\circ}\text{C}$ , 검정 4각 & 다이아몬드형 웨이딩디쉬

#### (1) Square-type, 10 · 100 · 300ml, 4각형 **NEW**

SL.Dis3021 Dish, Square-type, Black, 43×43×h8mm, 10ml  
 SL.Dis3022 , 89×89×h25mm, 100ml  
 SL.Dis3023 , 140×140×h25mm, 300ml

Pk.	Price, W
250ea	
250ea	
250ea	

#### (2) Kartell® Diamond-form, <Italy-made>, 5 · 30 · 100ml, 다이아몬드형

KA.11100.09 Dish, Diamond-type, Black, 55×31×h5mm, 5ml  
 KA.11101.09 , 85×56×h15mm, 30ml  
 KA.11102.09 , 135×96×h19mm, 100ml

Pk.	Price,W	Cs.	Price, W
250ea		4pk	
250ea		2pk	
250ea			

Articles

Cat. No

Description



**Lab Bristle Brush, For Cleaning Balance, Wood Handle with Metal Ferrule, 랩 브러쉬**

<B3>

**S24.178.2** Brush, Bristle  $\phi$  19×L52mm, overall 28cm  
**S24.178.3** , Bristle  $\phi$  24×L56mm, overall 30cm

Ea.	Price, ₩



1740

(1) & (2) Weighing Forceps, Stainless-steel

**Weighing Forceps, High Grade Stainless-steel, with Plastic Tip L100mm**

Ideal for Handling Precision Weight, Non-Magnetic, Finished Surface, 웨이징 포셉/핀셋, 비자성/비부식

■ 특급 스텐(18/10 크롬·니켈) 제품 ; 비자성, 비부식, 내산성 / 내약품성 / 내열성-우수

■ High Grade Stainless-steel of 18/10 Cr-Ni; Non-magnetic, Rust-free, Excellent Resistance of Acid / Chemicals / Heat

**(1) Bochem® Forceps**

■ Supplied by Bochem® in Germany

<L1>

Ea. Price, ₩

**(2) Forceps**

**SL.For7089** Forceps, L100mm

Ea. Price, ₩

**BC.1740** Forceps, L100mm



**Micro Spoon-Spatula, High Grade Stainless-steel, L150~200mm**

With Bowl 3×5~5×9, Non-magnetic, 마이크로 스패츨러-스푼, 비자성/비부식

<L1>

\* 18/10 Stainless-steel; Non-magnetic, Rust-free, Anti-Acid / Chemicals / Heat

**SL.Spa7011** Micro Spoon-Spatula, L150, Bowl-3×5, Blade-5×50, Stem- $\phi$ 2.5 mm  
**SL.Spa7012** , L150, -5×7, -5×50, - $\phi$ 2.5 mm  
**SL.Spa7013** , L180, -5×9, -5×50, - $\phi$ 2.5 mm  
**SL.Spa7014** , L200, -5×9, -5×50, - $\phi$ 2.5 mm

Ea.	Price, ₩



Spoon-Spatula, L150~230mm

**Hammacher® Premium Spoon-Spatula, Rustproof Stainless-steel, L150~230mm**

With 1-side Blade, Finished Polish, <Germany-made>, 프리미엄 스푼-스패츨러, 독일제, 비부식

<L1>

\* 18/8 Stainless-steel; Rust-proof, Anti-Acid / Chemicals / Heat

**HA.HSN133.15** Spoon-Spatula, L150, Blade - 10×50, Spoon - 17×38, Stem- $\phi$ 3mm  
**HA.HSN134.18** , L180, - 10×55, - 17×38, - $\phi$ 3mm  
**HA.HSN135.21** , L210, - 10×60, - 17×38, - $\phi$ 3mm  
**HA.HSN136.23** , L230, - 10×60, - 17×38, - $\phi$ 4mm

Ea.	Price, ₩



(1)

**Micro Half-round Scoop & Spatula, High Grade Stainless-steel, L130~210mm**

Non-magnetic, High Polished, 미니 스텐 스푼-스패츨러, 비자성/비부식

\* 18/10 Stainless-steel; Non-magnetic, Rust-free, Anti-Acid / Chemicals / Heat

<L1>

**(1) Slender Stem-type**

**SL.Sco7001** Scoop-Spatula, Stainless-steel, L130, Blade-9×40, Stem- $\phi$ 3.7mm  
**SL.Sco7002** , L150, -9×45, - $\phi$ 3.3mm  
**SL.Sco7003** , L185, -9×50, - $\phi$ 3.3mm  
**SL.Sco7004** , L210, -9×50, - $\phi$ 3.3mm

Ea.	Price, ₩



(2)

**(2) Bochem® Thin-wide Stem-type**

\* Supplied by Bochem® in Germany

**BC.3360** Mini Lab-Spoon, Stainless-steel, L170, Bowl-10×40, Stem thick-1mm

Ea.	Price, ₩



(1) Stainless-steel

**Premium Vibro-Scoop, High Grade Stainless-steel · PTFE-Coated, with Adjusting Knob, L190 & 220mm**  
 Ideal for Handling High Value Materials, with Plastic-handle, 프리미엄 진동 스푼

\* Ideal for Use with Balance or Handling High Value Materials

\* Adjustable Sample Offering with the Adjusting Knob

**(1) Bochem® Stainless-steel Vibro-Spatula, with Plastic-handle, L190mm**

\* Supplied by Bochem® in Germany

\* 18/10 Stainless-steel; Non-magnetic, Rust-free, Anti-Acid / Chemicals / Heat

<L1>

**BC.3540** Vibro Scoop, Stainless-steel, L190, Blade-12×50mm

Ea.	Price, ₩



(2) PTFE-coated

**(2) Hammacher® PTFE-Coated Vibro-Spatula, with Plastic-handle, L220mm**

\* Made in Germany

\* Teflon-PTFE : Anti-Acid · Alkally · Chemicals · Corrosion, MP 260°C

**HA.HSN462.22** PTFE-coated Vibro Scoop, L220, Blade-7×80mm

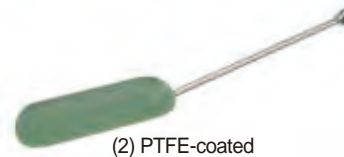
Ea.	Price, ₩



Articles	Cat. No	Description
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(1) Stainless-steel



(2) PTFE-coated

**Bochem® Weighing Scoop, High Grade Stainless-steel · PTFE-Coated, L200~250mm**  
Non-magnetic/Rust-free, 웨칭 스퀴프, 비자성/비부식 ■ Supplied by Bochem® in Germany

**(1) High Grade Stainless-steel Weighing Scoop, L200~250mm**

&lt;L1&gt;

\* 18/10 Stainless-steel; Non-magnetic, Rust-free, Anti-Acid / Chemicals / Heat

**BC.3600** Weighing-Scoop, SS, L 200, Head-31 × 70 , Stem-φ 5 mm, 30g  
**BC.3602** , L 235, -31 × 105, -φ 5 mm, 35g  
**BC.3603** , L 250, -31 × 120, -φ 5 mm, 40g

Ea.	Price, ₩

**(2) PTFE-Coated Weighing Scoop, L235mm**

\* Teflon-PTFE : Anti-Acid · Alkally · Chemicals · Corrosion, MP 260 °C

**BC.8265** PTFE-coat. Weighing-Scoop, L235, Head-31 × 105, stem-φ 5 mm, 39g

Ea.	Price, ₩

**Weighing Scoop, High Grade Stainless-steel, with or without Handling Stem, L70~250mm**  
Non-magnetic/Rust-free, 경제형 웨칭 스퀴프, 비자성/비부식

\* 18/10 Stainless-steel; Non-magnetic, Rust-free, Anti-Acid / Chemicals / Heat

&lt;L1&gt;

**(1) Bowl/Dish-only, without Handling Stem, L70~120mm**

Ea.	Price, ₩

**SL.Sco7031** Weighing Scoop, Dish, SS, Dish-32 × 70mm , 13g  
**SL.Sco7032** , Dish-32 × 90mm , 18g  
**SL.Sco7033** , Dish-32 × 105mm, 23g  
**SL.Sco7034** , Dish-32 × 120mm, 26g

**(2) with Handling Stem, L200~250mm**

Ea.	Price, ₩

**SL.Sco7036** Weighing Scoop, Handled, SS, Bowl-31 × 70 , Overall-L200mm, 29g  
**SL.Sco7037** , Bowl-31 × 90 , -L220mm, 33g  
**SL.Sco7038** , Bowl-31 × 105, -L235mm, 45g  
**SL.Sco7039** , Bowl-31 × 120, -L250mm, 48g



(1) Bowl/Dish only



(2) with Handling Stem



12810

Aluminium Weighing Scoop,  
φ 32 × L70 ~ 120mm

**Bochem® Aluminium Weighing Scoop, Light-Weight, φ 32 × L70 ~ L120mm**

알루미늄 웨칭 스퀴프, 경량 ■ Supplied by Bochem® in Germany

&lt;L1&gt;

**BC.12810** Alu. Scoop, φ 32 × L 70mm  
**BC.12811** , φ 32 × L 90mm

Ea. Price, ₩

**BC.12812** Alu. Scoop, φ 32 × L105mm  
**BC.12813** , φ 32 × L120mm

Ea. Price, ₩

**Weighing Spoon Set, 2Pcs, Large (15ml × 165mm) + Small (5ml × 135mm)**

Lightweight Stainless-steel 410, Rustless, 스텐 평량 스푼세트(대+소)

&lt;L2&gt;

**SL.Spo7101** Weighing Spoon Set, Stainless-steel #410, 15ml/5ml, L165mm / L135mm

Set.	Price, ₩
2ea	



Set/2Pcs

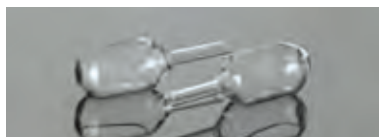
**Glass Weighing Scoop, 3 · 6 · 10ml, Easy to Use, Boro-glass 3.3, Glass 평량 스퀴프**

\* with open Tubular Arm for the Filling of Powder into Narrow Mouth Bottles / Vessels  
 \* with Flat Bottom for Safety Location

&lt;L1&gt;

**SL.Sco1011** Weighing Scoop, Glass, 3ml , L(approx)-65mm  
**SL.Sco1012** , 6ml , -80mm  
**SL.Sco1013** , 10ml, -95mm

Ea.	Price, ₩	Pk.	Price, ₩
		10ea	
		10ea	
		10ea	



**VITLAB® PP Colored Measuring Scoop, Flat-top, Autoclavable, 2~1,000ml**

For Liquid/Powder/Solid, 0°C~125/140°C Stable, &lt;Germany-made&gt;, PP 칼라 계량 스퀴프, 액체/고체겸용

\* With Precision Formed Suitable Filling Edge and Comfortable, Stable Handle.

\* 121 °C Autoclavable PP(Polypropylene), Good Chemical &amp; Temp-Resistance

\* Multi-Use : Free-Standing and Flat-Top Construction for Liquids/Powders/Solids Also suitable as Weighing Scoops.

\* Easily Readable Volume Quantities on the Upper Side of the Handle.

&lt;L1&gt;

**(1) White 2~1,000ml**

**VI.391.94** 2ml , L60mm  
**VI.392.94** 5ml , L82mm  
**VI.393.94** 10ml , L100mm  
**VI.394.94** 25ml , L135mm  
**VI.395.94** 50ml , L160mm  
**VI.396.94** 100ml , L200mm  
**VI.397.94** 250ml , L260mm  
**VI.398.94** 500ml , L315mm  
**VI.399.94** 1,000ml, L385mm

Ea. ₩	Cs. Price, ₩
	12ea
	12ea
	12ea
	12ea
	12ea
	12ea
	6ea
	6ea
	6ea

**(2) Colored 100ml**

\* L200mm

**VI.3969.43** 100ml, Gray  
**VI.3969.52** , Green  
**VI.3969.40** , Red  
**VI.3969.46** , Yellow

Ea. ₩	Cs. Price, ₩
	12ea
	12ea
	12ea
	12ea



(1) White PP 2~1000ml



(2) Colored PP 100ml

# Baths & Bath Circulators

<b>Baths</b> , Basic-type, 100 °C & 250 °C .....	P. 27~28
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, Cold Trap Baths .....	P. 30
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, Magnetic Stirring Baths .....	P. 32
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, Viscosity Bath .....	P. 34
<b>Bath Circulators</b> , External/Internal, High-Temp, 250 °C .....	P. 35
, Refrigerated/Heating .....	P. 36~37
<b>Accessories</b> , Circulation Hose & Transfer Fluid <b>New</b> .....	P. 38



**Basic-type Bath**  
"WB" 6 · 11 · 22 Lit, 100 °C



**Circulation Water Bath**  
"WCB" 6 · 11 · 22 Lit, 100 °C



**Shaking Water Bath**  
"MaXturdy™" 18 · 30 · 45 Lit, 100 °C



**External / Internal  
Refrigerated / Heating Bath Circulator**  
"MaXircu™ CL" 8 · 12 · 22 · 30 Lit, -35 ~ +150 °C

DAIHAN® Digital General Purpose Water Bath “WB”, Digital Fuzzy Control System, 6·11·22 Lit, up to 100 °C, ±0.1 °C With Stainless-steel Flat Lid, Back Light LCD, with Certi. & Traceability, 정밀 범용 항온수조, 디지털 퍼지 제어 시스템, 스텐리스 스틸 리드 포함



up to 100 °C



2-Year Warranty

- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function

- \* User's Self-Compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0 °C).
- \* 304 Stainless-steel Bath & Lid for Superior Durability & High Thermal Efficiency/Constant.
- \* Digital Timer Function(99hr 59min) : 'Delay Time' and 'Operation Time' can be Controlled.
- \* Storage Function for the Set Values of Temperature and Timer.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled).

Specifications & Ordering information

<L1>

Spec.	Model	“WB-6” Max. Capa. 6Lit	“WB-11” Max. Capa. 11Lit	“WB-22” Max. Capa. 22Lit
Capacity		6 Lit	11 Lit	22 Lit
Temp. Range & Accuracy		Room Temp. 5 °C~100 °C, ±0.1 °C		
Temp. Resolution		0.1 °C-Display, 0.1 °C-Control		
Temp. Uniformity & Probe		±1.0 °C, PT100		
Heating Power		800 W	1 kW	2 kW
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Fuzzy Controller with Jog - Shuttle Switch (Turn + Push)		
Safety Circuit		Over-Temp. / -Current protection, Sensor Error Detection		
Material		Stainless-steel (# 304)-Internal, Powder Coated steel-External		
Lid		included Stainless-steel Flat Lid, Optional Dome Lid		
Drain Valve		None		Mounted(φ9.5-11mm)
Dimension (w×d×h)	Effective Space	300×155×h110mm	302×240×h110mm	500×295×h110mm
	Internal	300×155×h150mm	302×240×h150mm	500×295×h150mm
	External	325×180×h260mm	325×265×h260mm	535×330×h260mm
Packing Size (mm) and Gross Weight (kg)		350×210×h310mm, 8kg	350×300×h310mm, 10kg	570×360×h310mm, 14kg
Electrical Reqtts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	230V	DH.WB000106	DH.WB000111	DH.WB000122
	120V	DH.WB000206	DH.WB000211	DH.WB000222
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.



(1) Flat Lid, Stainless-steel (Included)



(2) Dome Lid, Stainless-steel



(3) “BFC106” Lid with Concentric Ring Cover Sets for 6Lit



(4) “BFC111” Lid with Concentric Ring Cover Sets for 11Lit



(5) “BFC122” Lid with Concentric Ring Cover Sets for 22Lit Bath



(6) “BTH106” Tube Rack, 36Hole for 6Lit Bath

Optional Lid and Tube Rack, Stainless-steel

- DH.WB010206 (2) Dome Lid, for 6 Lit, 324×176×h100mm, “BD206”
- DH.WB010211 , for 11 Lit, 324×263×h100mm, “BD211”
- DH.WB010222 , for 22 Lit, 533×328×h100mm, “BD222”
- DH.WB030106 (3) Lid with 2× Concentric Ring Cover Sets, for 6 Lit, Stainless-steel, 330×182×h20mm, “BFC106”
- DH.WB030111 (4) Lid with 2× Concentric Ring Cover Sets, for 11 Lit, Stainless-steel, 329×269×h20mm, “BFC111”
- DH.WB030122 (5) Lid with 6× Concentric Ring Cover Sets, for 22 Lit, Stainless-steel, 539×334×h20mm, “BFC122”
- DH.WB020106 (6) Tube Rack, for 6 Lit, 36Hole×φ17mm, “BTH106”, Stainless-steel, 220×125×h78.5mm
- DH.WB020206 Tube Rack, for 6 Lit, 15Hole×φ32mm, “BTH206”, Stainless-steel, 220×125×h78.5mm
- DH.WB020111 Tube Rack, for 11 Lit, 63Hole×φ17mm, “BTH111”, Stainless-steel, 220×205×h78.5mm
- DH.WB020211 Tube Rack, for 11 Lit, 25Hole×φ32mm, “BTH211”, Stainless-steel, 220×205×h78.5mm

Ea. Price, ₩

Water Bath with Validation (IQ, OQ) Service

- DH.WB040106 Validation Service(IQ, OQ), with “WB-6” , “BV106”
- DH.WB040111 , with “WB-11” , “BV111”
- DH.WB040122 , with “WB-22” , “BV122”

Ea. Price, ₩

DAIHAN® Digital High Temp Oil Bath “WHB”, Digital Fuzzy Control System, 6· 11· 22 Lit, up to 250°C, ± 1.5°C  
 With Stainless-steel Flat Lid, Back Light LCD, with Certi. & Traceability, 정밀 고온 오일 베스, 디지털 퍼지 제어 시스템, 스텐리스 스틸 리드 포함



2-Year Warranty  
 up to 250°C



Digital Fuzzy  
 Controller

Back Light LCD

Patented Jog-Shuttle  
 Control System



Flat Lid, Stainless-steel  
 (Included)

- Made in Korea
- CE Certified
- PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy.
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function.

- \* Rustless 304 Stainless-steel Bath having 1.2mm & Ceramic Fiber Insulator of 50mm Thickness.
- \* User's Self-Compensation Function to Control Difference between Real Temp. and Indicated Temp.
- \* Storage Function for the Set Values of Temperature & Timer.
- \* Alarm & Digital Timer : 'Delay Time' and 'Operation Time' can be Controlled.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled).

Specifications & Ordering information

<L1>

Spec.	Model	“WHB-6” Max. Capa. 6Lit	“WHB-11” Max. Capa. 11Lit	“WHB-22” Max. Capa. 22Lit
Capacity		6 Lit	11 Lit	22 Lit
Temp. Range & Accuracy		Room Temp. 5°C to 250°C, ±1.5°C		
Temp. Uniformity & Probe		±3.0°C, PT100		
Heating Power		1.5 kW	2.0 kW	2.5 kW
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)		
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection		
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, 50 mm Thickness Ceramic Fiber-Insulation		
Lid		Stainless-steel Flat Lid Included		
Drain Valve		Mounted		
Dimension (w×d×h)	Effective Space	270×180×h110 mm	300×250×h110 mm	400×300×h140 mm
	Mounted	270×180×h150 mm	300×250×h150 mm	400×300×h180 mm
	External	425×305×h340 mm	425×375×h340 mm	525×425×h370 mm
Packing Size (mm) & Gross Weight		470×400×h500 mm, 23 kg	600×490×h500 mm, 25 kg	600×490×h500 mm, 39 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or 230V, 50 / 60Hz		
Cat. No.	230V	DH.WHB00106	DH.WHB00111	DH.WHB00122
	120V	DH.WHB00206	DH.WHB00211	DH.WHB00222
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

High-Temp. Oil Bath with Validation (IQ, OQ) Service

- DH.WHB40106 Validation Service(IQ, OQ), with “WHB-6”, “HBV106”
- DH.WHB40111 , with “WHB-11”, “HBV111”
- DH.WHB40122 , with “WHB-22”, “HBV122”

Ea. Price, ₩

※ See page 32 for the Heating Transfer Fluids ;

- ▶ SYN THERM 22L® -5°C +320°C Heating Transfer Fluids
- ▶ Therminol D12® -85°C +230°C Cooling/Heating Transfer Fluids

Articles

Cat. No

Description

**DAIHAN® Internal Digital Precise Circulation Water Bath “WCB”, 6 · 11 · 22 Lit, with Certi. & Traceability**  
 With Stainless-steel Flat Lid, Powerful Circulation Pump, up to 100°C, ±0.1°C, 5 Lit/min, 정밀 항온 순환 수조



2-Year Warranty



Flat Lid, Stainless-steel (Included)

- Made in Korea
- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System

- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function

- \* Ideal for Biotechnology, Clinical, Environmental, Medical, Petroleum, Food Industry, Pharmaceutical and Industrial Applications. \* Alarm function : Error Status and Timer-end
- \* Warning and Automatic Stop Function in case of Liquid Shortage.
- \* Powerful Circulation Pump Assures Temp. Uniformity : Internal and External Circulation.
- \* Connection with Evaporators and Viscometers is applicable.

Specifications & Ordering information

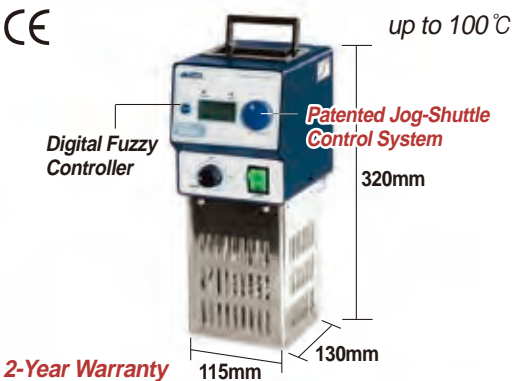
<L1>

Spec.	Model	“WCB-6” Max. Capa. 6Lit	“WCB-11” Max. Capa. 11Lit	“WCB-22” Max. Capa. 22Lit
Capacity		6 Lit	11 Lit	22 Lit
Temp. Range & Accuracy		Room Temp. 5°C~100°C, ±0.1°C		
Temp. Resolution		0.1°C-Display, 0.1°C-Control		
Temp. Uniformity & Probe		±0.2°C, PT100		
Heating Power		800 W	1 kW	2 kW
Pump		5 Lit / min (Internal / External)		
Circulation Nozzle		id.7× od.11 mm (id.9/od.12mm silicone tube connected for inner circulation)		
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Controller & Display		Digital Fuzzy Controller with Back Light Digital LCD		
Safety Circuit		Over-Temp./-Current protection, Sensor Error & Low Level Detection		
Material		Stainless-steel (# 304)-Internal, Powder Coated steel-External		
Drain Valve		None		Mounted(φ9.5~11mm)
Dimension (w×d×h)	Effective Space	120×155×h150 mm	170×240×h150 mm	372×295×h150 mm
	Internal	300×155×h150 mm	302×240×h150 mm	500×295×h150 mm
	External	330×185×h385 mm	335×275×h385 mm	540×335×h410 mm
Packing Size (mm) and Gross Weight (kg)		350×210×h410mm, 11kg	360×300×h420mm, 13kg	580×380×h470mm, 18kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	230V	DH.WCB00106	DH.WCB00111	DH.WCB00122
	120V	DH.WCB00206	DH.WCB00211	DH.WCB00222
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

**DAIHAN® Digital Precise Circulation Immersion Pump Head “WCB-H”, 11 & 22 Lit, up to 100°C**  
 With Digital Fuzzy Control System, Certi. & Traceability, Power Circulation Pump, 5 Lit/min, 정밀 항온 순환기



2-Year Warranty

- Made in Korea
- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System

- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function

- \* Ideal for Biotechnology, Clinical, Environmental, Medical, Petroleum, Food Industry, Pharmaceutical and Industrial Applications. \* Alarm function : Error Status and Timer-end
- \* Powerful Circulation Pump Assures Temp. Uniformity : Internal and External Circulation.

Specifications & Ordering information

<L1>

Spec.	Model	“WCB-11H” Max. Capa. 11Lit	“WCB-22H” Max. Capa. 22Lit
Temp. Range & Sensor		Room Temp. 5°C~100°C, PT100	
Heating Power & Pump		1 kW, 5 Lit/min	2 kW, 5 Lit/min
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end	
Controller & Display		Digital Fuzzy Controller with Back Light Digital LCD	
Safety Circuit		Over-Temp./-Current protector, Sensor Error & Low Level Detection	
Dimension		130×165×h320mm	
Packing Size (mm) and Gross Weight (kg)		400×280×h200mm, 8kg	400×280×h200mm, 10kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V	DH.WCB10011	DH.WCB10022
	120V	DH.WCB20011	DH.WCB20022
Price, Each. ₩			



Side



Rear

**DAIHAN® Digital Precision Cold Trap Bath “WCT”, -40°C & -80°C, 10 Lit, with Certi. & Traceability**  
 With 2 Glass Cold Trap, Digital PID Control System, Back-Light LCD, CFC-free Refrigeration System, 초저온 동결 트랩



2-Year Warranty

Patented Jog-Shuttle Control System

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Digital PID Controller
- CFC-free (R-404A) Refrigeration System
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function

- \* Ideal for exceptional Cooling System like Collecting Evaporation Vapor or Hazardous Vapor from Vacuum Line.
- \* Durable Stainless-steel Bath and Powder Coated steel
- \* Digital Timer Function : 'Delay Time' and 'Operation Time' : Can be Controlled.
- \* User's Self-Compensation Function to Control Difference between Real Temperature and Indicated Temperature.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

**Specifications & Ordering information**

<L1>

Spec.	Model	“WCT-40” Max. Temp. -40°C	“WCT-80” Max. Temp. -80°C
Temperature Range		-40°C ~ -20°C	-80°C ~ -65°C
Bath Volume		10 Lit	
Bath Volume & Cold Trap Type		Stainless-steel 304, 2 Glass Trap	
Refrigerator		1/2 HP	1 HP
Power Consumption		900 W	1.8 kW
Refrigerator & Refrigerant		R-404A	HFC
Display		Digital LCD with Back-Light Function	
Controller		PID Controller with Jog-Shuttle Switch (Turn+Push)	
Drain Valve		Mounted	
Safety Circuit		Over Current protection, Sensor Error Detection, Leakage Breaker	
Material		Stainless-steel (#304)-Internal, Powder Coated steel, 1.2t, Doublepaint & Baked-External, 20mm Thickness Polyurethane-Insulation	
Dimension (w×d×h)		220×220×h210mm-Internal, 377×453×h705mm-External	
Cold Trap Inlet Valve Size		od. 10 mm	
Packing Dimension (mm) and Gross Weight (kg)		560×500×h1,010, 67kg	680×640×h1,130, 90kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or 230V, 50 / 60Hz	
Cat. No.	230V	DH.WCT00140	DH.WCT00180
	120V	DH.WCT00240	DH.WCT00280
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

**Spare Glass Cold Trap**

Ea. Price, ₩

DH.WCT11000	(1) 1×Glass Cold Trap, φ106×h249mm, “CTG1000”, DURAN® Borosilicate Glass α 3.3, Safety-Pressure, Resistant 1.5bar at 250°C, for “WCT”	
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※ DAIHAN Recommendation  
 : Combination of the Cold Trap Bath(WCT) with the Vacuum Oven and Vacuum Pump.



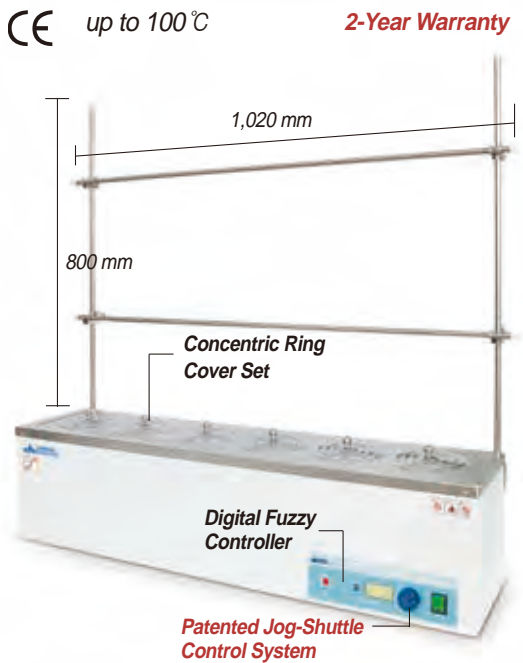
(1) Glass Cold Trap “CTG1000”

**DAIHAN® Extraction Water Bath "WEB", Multi-purpose, 4 · 6 · 8 Place, with Certi. & Traceability**  
 With Concentric Ring Cover Sets & Holding Frame, Digital Fuzzy Control, Back Light LCD, up to 100°C, ±0.2°C  
 다용도 추출용 항온수조, 4 · 6 · 8 구, 컨센트릭 링 커버 세트 & 홀딩 프레임 포함



**2-Year Warranty**

**4-Place Extraction Water Bath "WEB-4"**



**2-Year Warranty**

**6-Place Extraction Water Bath "WEB-6"**



(1) Lid with Concentric Ring Cover Set (Included)

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Gentle Extraction, Soxhlet Extraction and Determination of COD
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Concentric Ring Cover Sets make Effective Steaming Work
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function

- \* 4 · 6 · 8 Extraction Place are available.
- \* Included Concentric Ring Cover Set & Holding Frame
- \* User's Self-compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0°C).
- \* High Quality 304 Stainless-steel Bath and Holding Frame for Superior Durability.
- \* Storage Function for the Set Values of Temperature and Timer.
- \* Alarm Function : Error Status and Timer-end.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled).

**Specifications & Ordering information**

<L1>

Spec.	Model	"WEB-4" 4 Place	"WEB-6" 6 Place	"WEB-8" 8 Place
Temp. Range & Accuracy		Room Temp. 5 °C to 100 °C, ±0.2°C		
Temp. Uniformity & Sensor		±1.0°C, PT100		
No. of Extraction Holes		4 Place	6 Place	8(4×2) Place
Heating Power		1.4 kW	1.8 kW	1.4 kW×2
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)		
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Leakage Breaker		
Material		Stainless-steel (# 304)-Internal, Powder Coated steel-External, Stainless-steel Holding Frame		
Flask Capacity		250 ~ 500ml Flask		
Lid		Concentric Ring Cover Set Included		
Top Opening Dia.		φ36 · φ65 · φ96 · φ110mm		
Bath Depth		122mm		
Drain Valve		Mounted		
Dimension (w×d×h)	Internal	610×160×h160mm	910×140×h160mm	610×290×h160mm
	External	680×245×h275mm	975×245×h275mm	720×375×h275mm
Packing Size (mm) and Gross Weight (kg)		1,100×350×h400, 18 kg	1,250×350×h400, 25 kg	900×450×h400, 34 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or 230V, 50 / 60Hz		

Cat. No.	230V	DH.WEB01004	DH.WEB01006	DH.WEB01008
	120V		DH.WEB02004	DH.WEB02006
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

**Spare Lid with Concentric Ring Cover Set and Holding Frame Set**

- DH.WEB11000 (1) Lid with Concentric Ring Cover Set, "EBC100", for all "WEB" models
- DH.WEB21004 Holding Frame Set, "EBF100", for "WEB-4", 2ea×800mm Pole & 2ea×700mm Pole
- DH.WEB21006 Holding Frame Set, "EBF200", for "WEB-6", 2ea×800mm Pole & 2ea×1,020mm Pole
- DH.WEB21008 Holding Frame Set, "EBF300", for "WEB-8", 4ea×800mm Pole & 4ea×740mm Pole

Ea.	Price, ₩

SciLab® Integrated Thermostatic Magnetic Stirring Bath, up to 200°C, 0~2,000rpm, 4 & 6.5Lit  
 With PID Controller, Digital Display, Stainless-steel Heater, can be used for Oil-/Water-Bath, 다목적 자력교반 항온 수조



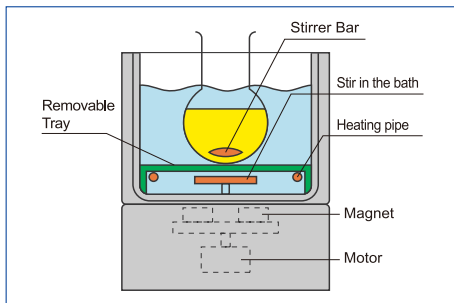
up to 200°C

- Adopt ANSI 304 Stainless-steel Heater which can be used for Oil and Water Bath.
- Powerful Magnetic Stirring of High Performance Direct Current Brushless.
- Dual Sensor, Temperature can be converted and Displayed in Flume and Reaction Vessel.
- \* Strong Magnetic Stirring makes the Stirrings in the Flume Rotate Synchronistically to ensure the even and Precision of High Viscosity Solution Temperature.
- \* The Performance of High Performance Direct Current Brushless Machine is Stable and can be used Continuously.

Specifications & Ordering information

<L1>

Spec.	Model	"MbWCL-3" Max. 3L Flask Input	"MbWCL-5" Max. 5L Flask Input
Bath Volume & Size		4 Lit, φ220×depth 110mm	6.5 Lit, φ254×depth 130mm
Temp. Range & Stability, Digital		Room Temp. 5°C~200°C, ±1°C : 1	
Speed, Knob Setting		0~2000 rpm	
Max. Flask Input		3,000ml	5,000ml
Heater, ANSI 204 Stainless-steel		500W	1,050W
Temp. Controller & Display		PID Controller, Digital Display	
Dimension		260×280×h230 mm	260×280×h260mm
Electrical Reqts.		220V, 50/60Hz	
Cat. No.		SL.MbWCL3	SL.MbWCL5
Price, Each. ₩			



Drawing of Magnetic Stirring Bath

\* **Included Retractable Multi-Ring Opening Lid** : This Lid can Adjust Caliber to Match the External Diameter of the Reaction Vessel and Round Flask, Decrease Volatilization of the Refrigerant and Heat Exchange with the Outside Environment, Realize Stable Low-Temperature Environment.



Therminol D12® -85°C +230°C Best COOL-/HEAT-ing Transfer Fluid, Synthetic Hydrocarbon Mixture  
 For Low/High-Temp Baths, Clearly Harmless Liquid, Low Odor FDA Grade, 4/18/200Lit, 냉매/열매 겸용 합성 탄화수소혼합물(액체)



(1) 4Lit

(2) 18Lit

- Supplied by "Eastman" USA
- Clear, Water white Liquid / Non-Toxic / Low-Smell, FDA-Grade.
- The Best Circulation Properties / Thermal Stability.
- The Lowest Viscosity, cP ▶ (1) -50°C : 12cP, (2) 100°C : 0.46cP, (3) 200°C : 0.19cP, (4) 230°C : 0.16cP
- \* Specific Gravity : 0.759 at 25°C
- \* Autoignition Temp : 247°C
- \* Flash point : 62°C
- \* Freezing Point : -94°C
- \* Boiling Point(90%) : 204°C
- \* Do not use for Silicone Tube
- \* Package : (1) 4Lit and (2) 18Lit PE Square Bottle / Subdivision, Original-200Lit Steel Drum / 155kg

<L1>

SL.CirD12.1	(1) "Therminol D12" Cool/Heat Transfer Fluid, -85°C +230°C, 4 Lit	4ℓ .dh pk	₩
		4Lit	
SL.CirD12.2	(2) "Therminol D12" Cool/Heat Transfer Fluid, -85°C +230°C, 18 Lit	18ℓ .dh pk	₩
		18Lit	
SL.CirD12	"Therminol D12" Cool/Heat Transfer Fluid, -85°C +230°C, 200 Lit/Drum	Drum Price, ₩	
		200Lit	



Heating Transfer Fluid, 20Lit

SYN THERM 22L® -5°C +320°C Heating Transfer Fluid, Synthetic Alkylbenzene Derivative  
 For Low- & High-Temp Circulation, 알킬벤젠계 합성열매 NEW

- \* Hazards Identification of MSDS(Material Safety Data Sheet) :
  - H315 Causes Skin Irritation
  - H319 Causes Serious Eye Irritation
  - H335 May Cause Respiratory Irritation
  - H336 May Cause Drowsiness or Dizziness
- \* Kinematic Viscosity & Density :
  - (1) at 0°C : 22.7cSt, 0.885kg/ℓ
  - (2) at 40°C : 21.80cSt, 0.859kg/ℓ
  - (3) at 80°C : 6.09cSt, 0.834kg/ℓ
  - (4) at 140°C : 6.09cSt, 0.795kg/ℓ
  - (5) at 200°C : 1.10cSt, 0.756kg/ℓ
  - (6) at 260°C : 0.74cSt, 0.718kg/ℓ

<L1>

SL.CirD12.1	SYN THERM 22L® Heating Transfer Fluid -5°C +320°C, 20Lit	Pk.	Price, ₩
		20Lit	



DAIHAN® Digital Precise Shaking Water Bath “MaXturdy™”, Reciprocating Motion, 18 · 30 · 45 Lit  
 With Universal Spring Rack, Digital Fuzzy Control, up to 2 Lit Flask, 20~250 rpm, up to 100℃, ±0.1℃, with Certi. & Traceability  
 정밀 진탕 항온수조, 왕복 진탕 운동, 디지털 피드백 제어, 고성능 шей킹 엔진 탑재



- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
  - Digital Fuzzy Controller Provides Precise Temperature Control
  - Digital Feedback Controller Provides Precise Speed Control
  - Hi-Performance Shaking Engine ensures Best Smoothly Shaking Motion and Minimum Noise and Vibration
  - Easy to Disassemble Spring Rack for Cleaning
  - Patented Shaking Mechanism : Minimum Noise and Vibration
  - Patented Jog-Dial Control System and Digital LCD with Back-Light
- \* Ideal for Direct Immersion of Samples or Shaking in the Field of Biotechnology and Laboratories.  
 \* Hybridization Applications, Cell Cultures, Cell Aeration, Increasing Solubility Rates, Molecular Biology Assays, Bacterial Cultures  
 \* Stainless-steel Bath for Superior Durability & High Thermal Efficiency  
 \* Universal Stainless-steel Spring Rack Included : for various kind of Flasks and Tubes (up to 2 l)  
 \* User's Self-Compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0℃)  
 \* Over Temp., Over Current Protection and Sensor Error Detection  
 \* Digital Timer Function : 'Delay Time' and 'Operation Time' : Can be Controlled

Specifications & Ordering information

<L1>

Spec.	Model	“MaXturdy™ 18” Max. Capa. 18Lit	“MaXturdy™ 30” Max. Capa. 30Lit	“MaXturdy™ 45” Max. Capa. 45Lit
Capacity		18 Lit	30 Lit	45 Lit
Max.Q'ty of Erlenmeyer Flask		250ml×6ea, 500ml×4ea, 1000ml×1ea	250ml×10ea, 500ml×8ea, 1000ml×3ea	250ml×18ea, 500ml×15ea, 1000ml×8ea
Temp. Range & Accuracy		Room Temp. 5℃ to 100℃, ±0.1℃		
Temp. Resolution		0.1℃-Display, 0.1℃-Control		
Temp. Uniformity & Probe		±0.5℃, PT100		
Heating Power		1.4 kW	1.8 kW	2.4 kW
Shaking Speed & Resolution		20 ~ 250 rpm, 1rpm-Display/1rpm-Control		
Shaking Stroke (mm)		15, 20, 30 Available (20 as factory Default)		
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller Digital		Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)		
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection		
Rack		Included Stainless-steel Spring Rack : Universal-type		
Drain Valve		Mounted		
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External		
Dimension (w×d×h)	Internal (mm)	300×300×h200	500×300×h200	600×380×h200
	External (mm)	563×353×h340	763×353×h340	863×433×h340
Packing Size (mm) & Gross Weight (kg)		620×420×h450, 24 kg	820×420×h450, 26 kg	920×500×h450, 32 kg
Electric Reqts.		1 Phase, AC 120V, 60 Hz or 230V, 50 / 60Hz		
Cat. No.	230V	DH.WSB03018	DH.WSB03030	DH.WSB03045
	120V	DH.WSB03218	DH.WSB03230	DH.WSB03245
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Spare Universal Spring Rack

DH.WSB55018 (1) Spring Rack, for 18 Lit, 245×270×h110mm, “SBR518”  
 DH.WSB55030 , for 30 Lit, 445×270×h110mm, “SBR530”  
 DH.WSB55045 , for 45 Lit, 545×350×h110mm, “SBR545”

Ea.	Price, ₩

Optional Stainless-steel Dome Lid

DH.WSB02018 (2) Dome Lid, for 18 Lit, 363×353×h69mm, “SBD018”  
 DH.WSB02030 , for 30 Lit, 563×353×h69mm, “SBD030”  
 DH.WSB02045 , for 45 Lit, 663×433×h69mm, “SBD045”

Ea.	Price, ₩

Shaking Water Bath with Validation (IQ, OQ) Service

DH.WSB31018 Validation Service(IQ, OQ), with “MaXturdy 18”, “SBV018”  
 DH.WSB31030 , with “MaXturdy 30”, “SBV030”  
 DH.WSB31045 , with “MaXturdy 45”, “SBV045”

Ea.	Price, ₩

DAIHAN® Digital Precise Viscosity Bath “WVB”, for 5 Viscometers, Max. 30Lit/min, up to 100°C, ±0.1°C  
 Stainless-steel with 5 Holes for Viscometer Holders, Available Reverse & Routine-type Viscometer, Transparent Window  
 투시형 정밀 점도 항온수조, 5×점도계 사용가능, 디지털 퍼지 제어 시스템, 5-구 스테인리스 스틸 리드포함



2-Year Warranty

Max. 30Lit/min Viscosity Bath “WVB-30”,  
 included Flat Lid for Viscometer Holder  
 (Viscometer Holder ; Option)

- Made in Korea    ■ CE Certified    ■ PL (Product Liability) Insurance
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
  - Used for Precise Measurement with Capillary Viscometers
  - Digital Fuzzy Control System Implementing Superior Temperature Accuracy
  - Powerful Circulation Pump ensures Highest Uniformity of Temperature
  - Viscometer Holder : Available Reverse & Routine-type Viscometer
  - Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function.
- \* Stainless-steel(#304) made inner bath
  - \* Stainless-steel Lid Contains Five Holes for Insertion of Viscometer Holders
  - \* User's Self-compensation Function to Control Difference between Real Temperature and Indicated Temperature
  - \* Storage Function for the Set Values of Temperature and Time
  - \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
  - \* Included Flat Lid for Viscometer(without Viscometer Holder)
  - \* Over Temp., Over Current Protection and Sensor Error Detection
  - \* Digital Timer Function : 'Delay Time' and 'Operation Time' : Can be Controlled

Specifications & Ordering information

<L1>

Spec.	Model	“WVB-30” Max. Flow 30Lit/min
Range & Accuracy		Room Temp. 5°C to 100°C, ±0.1°C
Temp. Resolution		0.1°C-Display, 0.1°C-Control
Temp. Uniformity & Probe		±0.2°C , PT100
Heating Power		2 kW
Pump		Magnetic Drive, Max. Flow 30 Lit/min
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end
Display		Digital LCD with Back-Light Function
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection
Lid		Included 5 Holes Stainless-steel Lid for Viscometer Holder
Drain Valve		Mounted
Viewing Window Size(mm)		230×180
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, Vacuum Sealed and Tempered Safety Pair Glasses-Window
Dimension (w×d×h)	Effective Space (mm)	330×300×h260mm
	Internal (mm)	350×300×h300mm
	External (mm)	585×375×h420mm
Packing Size (mm) & Gross Weight (kg)		640×450×h500mm, 24kg
Electric Reqts.		1 Phase, AC 120V, 60Hz or 230V, 50 / 60Hz
Cat. No.	230V	DH.WVB01030
	120V	DH.WVB02030
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.

※ 운임 착불



Fig1. Flat Lid with 5 Viscometer Holders



(1) Viscometer Holder “WVB02010” (Optional)

Spare Stainless-steel Flat Lid for Viscometer Holder

DH.WVB11030 Flat Lid, for 30 Lit, w380×d330, 5×φ50mm Holes, “VBF030” Ea. Price, ₩

Optional Viscometer Holder

DH.WVB02010 (1) Viscometer Holder, “WVB02010” for SI Analytics® Ostwald, Ubbelohde	Ea. Price, ₩
DH.WVB02011 Viscometer Holder, “WVB02011” for SI Analytics® Cannon-Fenske, Witeg® Ubbelohde, Cannon-Fenske	
DH.WVB02012 Viscometer Holder, “WVB02012” for Thread-type Ubbelohde	

Viscosity Bath Validation (IQ, OQ) Service

DH.WVB31030 Validation Service(IQ, OQ), with “WVB-30”, “VVB030” Ea. Price, ₩

DAIHAN® External/Internal Precise High-temp Bath Circulator “MaXircu™ CH”, up to 250°C, ±0.1°C, 8 · 12 · 22 · 30 Lit With Stainless-steel Flat Lid, Digital Fuzzy Control System, Certi. & Traceability, Flow 16 Lit/min, Lift 2.8m  
 Ideal for Heating Line of Facility, External Circulating Connect - od.12.5 & id.10.5mm, 정밀 고온 배스겸용 고온 써클레이터

CE up to 250°C



2-Year Warranty



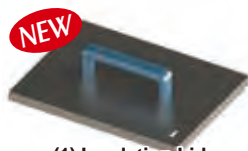
External Circulation Nozzle



Flat Lid, Included



Fig. Multi-use High Temp. Bath Circulator with Modular Reactor System



(1) Insulation Lid (Optional)

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance.
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.
- Advanced Heating System Ensures Temperature Performance.
- Patented Jog-Dial Control System and Capacitive Touch Button.
- \* Digital Fuzzy Control System Implementing Superior Temperature Accuracy.
- \* Innovated Powerful Circulation Pump ensures Temp. Uniformity : Internal and External Circulation (Max Flow Rate : 16 Lit/min).
- \* Controlled 5 Steps Circulation speed(Flow Rate).
- \* 304 Stainless-steel Bath and Lid for Superior Durability and High Thermal Efficiency.
- \* Compensation Function to Control Difference between Real Temp. and Indicated Temp.
- \* Digital Timer Function : 'Delay Time' and 'Operation Time' can be Controlled.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled).

Specifications & Ordering information

<L1>

Spec.	Model	MaXircu™ CH-8	MaXircu™ CH-12	MaXircu™ CH-22	MaXircu™ CH-30
		Max. Capa. 8 Lit	Max. Capa. 12 Lit	Max. Capa. 22 Lit	Max. Capa. 30 Lit
Bath Volume		8 Lit	12 Lit	22 Lit	30 Lit
Pump		Max Flow Rate : 16 Lit/min, (Controlled 5 Steps Flow Rate Speed), Max Pressure : 5 psi, Max Lift : 2.8m			
Temp. Range & Accuracy		Room Temp 5°C~250°C, ±0.1°C			
Temp. Resolution		0.1°C-Display, 0.5°C-Control			
Temp. Uniformity & Probe		±0.2°C, PT100			
Heating Power		1.0 kW	1.5 kW	2.2 kW	2.5 kW
Heat-up Time		50 min. to 100°C			
External Circulation Nozzle		id.10.5 / od.12.5 mm			
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end			
Display		Digital LCD with Back-Light Function			
Controller		Digital Fuzzy Controller with Jog - Dial Knob (Turn+Push)			
Safety Circuit		Over-Temp./-Current protection, Sensor Error & Low Level Detection			
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, 50mm Thickness Ceramic Fiber-Insulation			
Lid & Drain Valve		included Stainless-steel Flat Lid, Ball Valve, Optional Dome Lid,			
Dimension (w × d × h)	Effective Space	180×130×h155	250×130×h155	340×250×h155	340×250×h200
	Mounted	180×320×h155	250×320×h155	340×440×h155	340×440×h200
	External	303×443×h569	373×443×h569	463×563×h569	463×563×h614
Packing Size (mm) & Gross Weight(kg)	400×470×h630 19 kg	400×470×h630 21 kg	490×600×h680 23 kg	490×600×h680 37 kg	
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz			
Cat. No.	230V	DH.WCH00408	DH.WCH00412	DH.WCH00422	DH.WCH00430
	120V	DH.WCH00508	DH.WCH00512	DH.WCH00522	DH.WCH00530
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

(1) Optional Microporous Ceramic Insulation Lid **NEW**  
 T15mm(10mm Microporous Ceramic + 5mm Ceramic Paper)

DH.WCH.L008 Insulation Lid, for CH-8 , 288 × 158 × T15mm  
 DH.WCH.L012 for CH-12, 358 × 158 × T15mm  
 DH.WCH.L022 for CH-22, CH-30, 448 × 316 × T15mm

Ea. Price, ₩

- ※ See page 38 for the Cooling/Heating Transfer Fluids & Circulation Hoses ;
- ▶ Therminol D12® - 85°C + 230°C Cooling/Heating Transfer Fluids
- ▶ SYN THERM 22L® - 5°C + 320°C Heating Transfer Fluids
- ▶ Insulated External Circulating Tubings

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

DAIHAN® -25°C +150°C External/Internal Digital Precise Refrigerated/Heating Bath Circulator "MaXircu™ CR", ±0.2°C  
 With Flat Lid, Digital Fuzzy Control, CFC-free Refrigeration, Certi. & Traceability, 8 · 12 · 22 · 30 Lit, Flow 25Lit/min, Lift 4m  
 Ideal for Cooling/Heating Line of Facility, External Circulating Connect - od.12 & id.10mm, 정밀 냉동/가열 배스 겸용 써클레이터

CE -25°C +150°C



2-Year Warranty

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.
  - Advanced Refrigerating System Ensures Temperature Performance.
  - Digital Fuzzy Control System Implementing Superior Temperature Accuracy.
  - Patented Jog-Dial Control System and Capacitive Touch Button
- \* Innovated Powerful Circulation Pump ensures Temp. Uniformity : Internal and External Circulation (Max Flow Rate : 25 Lit/min).  
 \* RS232C Interface for Remote Monitoring and Controlling with PC.    \* All models Built in Caster.  
 \* More Faster Cool-down Time    \* Urethane Foam Insulation    \* Proper Liquid Level Line in Bath  
 \* User's Self-compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0°C).  
 \* Warning and Auto-Stop Function in case of Liquid Shortage.  
 \* Auto-controlled Refrigeration System for Compressor Protection and Power Saving.  
 \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled).

Specifications & Ordering information

<L1>

Spec.	Model	MaXircu™ CR-8 Max. Capa. 8 Lit	MaXircu™ CR-12 Max. Capa. 12 Lit	MaXircu™ CR-22 Max. Capa. 22 Lit	MaXircu™ CR-30 Max. Capa. 30 Lit
Temp. Range & Accuracy		-25°C+150°C, ±0.1°C			
Temp. Resolution		0.1°C-Display, 0.1°C-Control			
Temp. Uniformity & Probe		±0.2°C at -10°C, PT100			
Pump		Max Flow Rate : 25Lit/min(Controlled 5 Steps Flow Rate Speed), Max Pressure : 7.5 psi, Max Lift : 4m			
Bath Volume		8 Lit	12 Lit	22 Lit	30 Lit
Heating & Refrigerator		1 kW, 1/3HP	1.5 kW, 1/3HP	2 kW, 1/2HP	2.2 kW, 3/4HP
Cooling Capacity	at +20°C	300 W	380 W	680 W	850 W
	at 0°C	200 W	250 W	500 W	620 W
	at -20°C	110 W	130 W	300 W	400 W
Refrigerant		CFC -Free(R-404A) Refrigeration System			
Total Power Consumption		1.6 kW	2 kW	2.7 kW	3 kW
Compressor Control		Intelligent Control of Refrigerator for preventing Compressor Overload			
External Circulation Nozzle		id.10.5 / od.12.5mm(For Inner Circulat. : to Connect directly the in-/outlet Nozzles)			
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end			
Display		Digital LCD with Back-Light Function			
Controller		Digital Fuzzy Controller with Jog-Dial Knob (Turn+Push)			
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Leakage Breaker			
Material		Stainless-steel (#304)-Internal, Powder Coated steel-External, 40mm Thickness Urethane Foaming - Insulation			
Lid & Drain Valve		included Stainless-steel Flat Lid, Ball Valve, Optional Dome Lid,			
Dimension (w×d×h)	Effective Space (mm)	175×153×150	230×181×150	290×220×200	330×290×200
	Internal (mm)	175×320×150	230×350×150	290×390×200	330×460×200
	External (mm)	330×474×752	400×523×807	483×563×850	494×633×906
Packing Size (mm)		420×560×925	530×630×985	615×670×1025	630×740×1075
& Gross Weight (kg)		45 kg	54 kg	63 kg	70 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz			
Cat. No.	230V	DH.WCR00408	DH.WCR00412	DH.WCR00422	DH.WCR00430
	120V	DH.WCR00508	DH.WCR00512	DH.WCR00522	DH.WCR00530
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

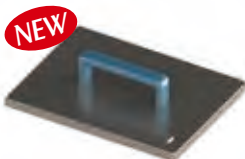
※ See page 38 for the Cooling/Heating Transfer Fluids & Circulation Hoses ;

▶ Therminol D12® -85°C +230°C Cooling/Heating Transfer Fluids

▶ SYN THERM 22L® -5°C +320°C Heating Transfer Fluids

▶ Insulated External Circulating Tubings

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution



(1) Insulation Lid (Optional)

Refrigerated Circulator with Validation (IQ, OQ) Service

Cat. No.	Description	Ea. Price, ₩
DH.WCR30308	Validation Service(IQ, OQ), with "MaXircu CR-8", "CRBV208"	
DH.WCR30312	, with "MaXircu CR-12", "CRBV212"	
DH.WCR30322	, with "MaXircu CR-22", "CRBV222"	
DH.WCR30330	, with "MaXircu CR-30", "CRBV230"	

(1) Optional Microporous Ceramic Insulation Lid **NEW**  
 T15mm(10mm Microporous Ceramic + 5mm Ceramic Paper)

Cat. No.	Description	Ea. Price, ₩
DH.WCR.L008	Insulation Lid, for CR-8 , 240×178×T15mm	
DH.WCR.L012	for CR-12, 316×206×T15mm	
DH.WCR.L022	for CR-22, 396×245×T15mm	
DH.WCR.L030	for CR-30, 436×316×T15mm	

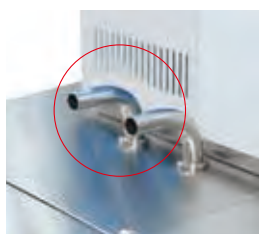
Articles	Cat. No	Description
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**DAIHAN® -35°C +150°C External/Internal Digital Precise Refrigerated/Heating Bath Circulator "MaXircu™ CL", ±0.2°C**  
 With Flat Lid, Digital Fuzzy Control, CFC-free, Certi. & Traceability, Capa. 8 · 12 · 22 · 30 Lit, Flow 25Lit/min, Lift 4m  
 Ideal for Cooling/Heating Line of Facility, External Circulating Connect - od.12 & id.10mm, 정밀 냉동/가열 배스 겸용 써클레이터

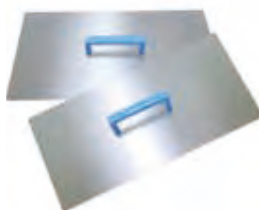
CE -35°C +150°C



2-Year Warranty



External Circulation Nozzle



Flat Lid, Stainless-steel (Included)

- Made in Korea    ■ CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Advanced Refrigeration System Ensures Temperature Performance
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Patented Jog-Dial Control System and Capacitive Touch Button

- \* Innovated Powerful Circulation Pump ensures Temp. Uniformity  
: Internal and External Circulation (Max Flow Rate : 25 Lit/min).
- \* RS232C Interface for Remote Monitoring and Controlling with PC
- \* All models Built in Caster
- \* More Faster Cool-down Time    \* Urethane Foam Insulation    \* Proper Liquid Level Line in Bath
- \* Connection with Evaporator or Viscometer is applicable
- \* User's Self-compensation Function to Control Difference between Real Temperature and Indicated Temperature (±10.0°C).
- \* Warning and Auto-Stop Function in case of Liquid Shortage.
- \* Auto-controlled Refrigeration System for Compressor Protection and Power Saving.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)

### Specifications & Ordering information

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Spec.	Model	MaXircu™ CL-8	MaXircu™ CL-12	MaXircu™ CL-22	MaXircu™ CL-30
		Max. Capa. 8 Lit	Max. Capa. 12 Lit	Max. Capa. 22 Lit	Max. Capa. 30 Lit
Temp. Range & Accuracy		-35°C+150°C, ±0.1°C			
Temp. Resolution		0.1°C-Display, 0.1°C-Control			
Temp. Uniformity & Probe		±0.2°C at -20°C, PT100			
Pump		Max Flow Rate : 25Lit/min(Controlled 5 Steps Flow Rate Speed), Max Pressure : 7.5 psi, Max Lift : 4m			
Bath Volume		8 Lit	12 Lit	22 Lit	30 Lit
Heating & Refrigerator		1 kW, 1/2HP	1.5 kW, 1/2HP	2 kW, 7/8HP	2.2 kW, 1HP
Cooling Capacity	at +20°C	500 W	530 W	860 W	1030 W
	at 0°C	340 W	370 W	620 W	760 W
	at -20°C	200 W	210 W	400 W	500 W
Refrigerant		CFC -Free(R-404A) Refrigeration System			
Total Power Consumption		1.7 kW	2.2 kW	3 kW	3.3 kW
Compressor Control		Intelligent Control of Refrigerator for preventing Compressor Overload			
External Circulation Nozzle		id.10.5 / od.12.5mm(For Inner Circulat. : to Connect directly the in-/outlet Nozzles)			
Timer & Alarm		99hr 59min (Delay & Continuous run), Error status & Timer-end			
Display		Digital LCD with Back-Light Function			
Controller		Digital Fuzzy Controller with Jog-Dial Knob (Turn+Push)			
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Leakage Breaker			
Material		Stainless-steel (# 304)-Internal, Powder Coated steel-External, 40 mm Thickness Urethane Foaming - Insulation			
Lid & Drain Valve		included Stainless-steel Flat Lid, Ball Valve, Optional Dome Lid			
Dimension (w×d×h)	Effective Space (mm)	175×153×150	230×181×150	290×220×200	330×290×200
	Internal (mm)	175×320×150	230×350×150	290×390×200	330×460×200
	External (mm)	400×523×807	400×523×807	483×563×850	494×633×906
Packing Size (mm) & Gross Weight (kg)		530×630×985	530×630×985	615×670×1025	630×740×1075
		50 kg	55 kg	65 kg	78 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz			
Cat. No.	230V	DH.WCL00408	DH.WCL00412	DH.WCL00422	DH.WCL00430
	120V	DH.WCL00508	DH.WCL00512	DH.WCL00522	DH.WCL00530
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

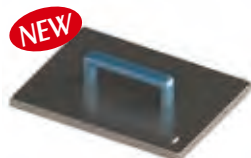
※ See page 38 for the Cooling/Heating Transfer Fluids & Circulation Hoses ;

▶ Therminol D12® -85°C +230°C Cooling/Heating Transfer Fluids

▶ SYN THERM 22L® -5°C +320°C Heating Transfer Fluids

▶ Insulated External Circulating Tubings

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution



(1) Insulation Lid (Optional)

### Refrigerated Circulator with Validation (IQ, OQ) Service

DH.WCL30308 Validation Service(IQ, OQ), with "MaXircu CL-8", "CLBV208"  
 DH.WCL30312 , with "MaXircu CL-12", "CLBV212"  
 DH.WCL30322 , with "MaXircu CL-22", "CLBV222"  
 DH.WCL30330 , with "MaXircu CL-30", "CLBV230"

### (1) Optional Microporous Ceramic Insulation Lid NEW T15mm(10mm Microporous Ceramic + 5mm Ceramic Paper)

DH.WCR.L008 Insulation Lid, for CL-8 , 240×178×T15mm  
 DH.WCR.L012 for CL-12, 316×206×T15mm  
 DH.WCR.L022 for CL-22, 396×245×T15mm  
 DH.WCR.L030 for CL-30, 436×316×T15mm

Ea. Price, ₩

Ea. Price, ₩



**Insulated Silicone & Teflon PFA Circulation Hose, Id  $\phi$  10~19mm, L1/1.5m**

\*  $\phi$  37mm Black NBR Foam Insulated Silicone or PFA-Hose \* SL.Tub4031 & SL.Tub4032 : PFA Hose  
 \* Silicone Vacu-Hose : id 10 $\times$ od 13mm, id 15 $\times$ od 20mm, id 18 $\times$ od 24mm, 220 $^{\circ}$ C  
 \* PFA Hose : id 10 $\times$ od 12mm / PTFE Hose : id 15 $\times$ od 16mm, id 19 $\times$ od 21mm, -100 $^{\circ}$ C+260 $^{\circ}$ C

**(1) Insulated Silicone Hose, 220 $^{\circ}$ C**

SL.Tub	Description	Length	dh Pk. Price, ₩
SL.Tub4021	Sili-hose, id 10mm, L1m	1m	
SL.Tub4022	, L1.5m	1.5m	
SL.Tub4023	, id 15mm, L1m	1m	
SL.Tub4024	, L1.5m	1.5m	
SL.Tub4025	, id 18mm, L1m	1m	
SL.Tub4026	, L1.5m	1.5m	

**(2) Insulated PFA Hose, 260 $^{\circ}$ C**

SL.Tub	Description	Length	dh Pk. Price, ₩
SL.Tub4031	PFA-hose, id 10mm, L1m	1m	
SL.Tub4032	, L1.5m	1.5m	
SL.Tub4033	PTFE-hose, id 15mm, L1m	1m	
SL.Tub4034	, L1.5m	1.5m	
SL.Tub4035	, id 19mm, L1m	1m	
SL.Tub4036	, L1.5m	1.5m	

**(3) Best Insulated & Flexible Stainless-steel Circulation Hose, Id  $\phi$  17mm, L1m, 360 $^{\circ}$ C**

SL.Tub7021 Flexible Stainless-steel Circulation Hose, id 17 $\times$ od 60mm, L1m

Ea. Price, ₩

**Therminol D12<sup>®</sup> -85 $^{\circ}$ C +230 $^{\circ}$ C Best COOL-/HEAT-ing Transfer Fluid, Synthetic Hydrocarbon Mixture**  
 For Low/High-Temp Baths, Clearly Harmless Liquid, Low Odor FDA Grade, 4/18/200Lit, 냉매/열매 겸용 합성 탄화수소혼합물(액체)



(1) 4Lit

(2) 18Lit

■ Supplied by "Eastman" USA ■ Clear, Water white Liquid / Non-Toxic / Low-Smell, FDA-Grade.  
 ■ The Best Circulation Properties / Thermal Stability.

■ The Lowest Viscosity, cP ▶ (1) -50 $^{\circ}$ C : 12cP, (2) 100 $^{\circ}$ C : 0.46cP, (3) 200 $^{\circ}$ C : 0.19cP, (4) 230 $^{\circ}$ C : 0.16cP

\* Specific Gravity : 0.759 at 25 $^{\circ}$ C \* Autoignition Temp : 247 $^{\circ}$ C \* Flash point : 62 $^{\circ}$ C  
 \* Freezing Point : -94 $^{\circ}$ C \* Boiling Point(90%) : 204 $^{\circ}$ C \* Do not use for Silicone Tube  
 \* Package : (1) 4Lit and (2) 18Lit PE Square Bottle / Subdivision, Original-200Lit Steel Drum / 155kg

SL.CirD12.1 (1) "Therminol D12" Cool/Heat Transfer Fluid, -85 $^{\circ}$ C+230 $^{\circ}$ C, 4 Lit

4 $\ell$ .dh pk ₩

4Lit

SL.CirD12.2 (2) "Therminol D12" Cool/Heat Transfer Fluid, -85 $^{\circ}$ C+230 $^{\circ}$ C, 18 Lit

18 $\ell$ .dh pk ₩

18Lit

※ 운임 착불

Drum Price, ₩

SL.CirD12 "Therminol D12" Cool/Heat Transfer Fluid, -85 $^{\circ}$ C+230 $^{\circ}$ C, 200 Lit/Drum

200Lit



Heating Transfer Fluid, 20Lit

**SYN THERM 22L<sup>®</sup> -5 $^{\circ}$ C +320 $^{\circ}$ C Heating Transfer Fluid, Synthetic Alkylbenzene Derivative**  
 For Low- & High-Temp Circulation, 알킬벤젠계 합성열매 NEW

\* Hazards Identification of MSDS(Material Safety Data Sheet) :

- H315 Causes Skin Irritation
- H319 Causes Serious Eye Irritation
- H335 May Cause Respiratory Irritation
- H336 May Cause Drowsiness or Dizziness

\* Kinematic Viscosity & Density :

- (1) at 0 $^{\circ}$ C : 22.7cSt, 0.885kg/ $\ell$
- (2) at 40 $^{\circ}$ C : 21.80cSt, 0.859kg/ $\ell$
- (3) at 80 $^{\circ}$ C : 6.09cSt, 0.834kg/ $\ell$
- (4) at 140 $^{\circ}$ C : 6.09cSt, 0.795kg/ $\ell$
- (5) at 200 $^{\circ}$ C : 1.10cSt, 0.756kg/ $\ell$
- (6) at 260 $^{\circ}$ C : 0.74cSt, 0.718kg/ $\ell$

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Pk. Price, ₩

SL.CirD12.1 SYN THERM 22L<sup>®</sup> Heating Transfer Fluid -5 $^{\circ}$ C+320 $^{\circ}$ C, 20Lit

20Lit

**DAIHAN® Sample Mixer "Ble-400", Lab Stomacher, Digital Controller, Low Noise, for 330 ~ 1,620ml Bags NEW**  
 Max 400ml Blending Capacity, Adjustable Pedal Distance, 10 Level Speed Adjustment, 무균 시료 분쇄기, 미생물 실험 전처리

NEW  
CE

2-Year Warranty



Pedal Distance Adjust Gauge



- Made in Korea
  - CE Certified
  - PL(Product Liability) Insurance
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
  - Food Microbiology, Veterinary, Clinical, Pharmaceutical, Molecular Extraction, Toxin Research, Environmental Analyses
  - 10 Level Motor Speed Adjusting Function
  - Low Noise by Innovative Rail System
  - Ergonomic Door Lever : Easy to Open & Close
  - Power Stomaching Mechanism
- \* Diversified Choices of Bags : 330 ~ 1,620ml Bags(Max 400ml Blending Capacity)  
 \* For Blending and Filtering Solid Samples for Microbiological Analysis.  
 \* Pedal Distance Adjust Function Ensure Quick and Precise Sterile Blending of Samples  
 \* Multifunction Digital Control Display for Monitoring Operating Condition, Speed, Time

**Specifications & Ordering Information**

<L1>

Spec.	Model	"Ble-400"
Capacity		330ml ~ 1620ml Bag
Blending Capacity		Max. 400ml
Speed		1~10 Level (1~8 strokes/sec)
Pedal Distance Adjustment		0 ~ 45mm
Display & Controller		Digital LCD with Back Light / Digital Controller
Timer, Alarm		Timer: Continuous & 0~99min 59sec, Alarm: Error status & Timer-end
Motor, Transmission		100W, 1/10 Ratio
Door		Viewing Window Type
Material		Pedal : Stainless-steel(SS304), External : Powder Coated Steel, Window : Acrylic
Dimensions(w×d×h mm) & Weight		250×474×h264mm, 18kg
Packing Size(w×d×h mm)		380×580×h470mm
Gross Weight		19kg
Power Consumption		160W
Power Supply		AC 100V~220V, 50/60Hz
Cat. No.	220V	DH.Ble0400
Price, Each. ₩		

**Sterile Sample Bags for Sample Mixer**



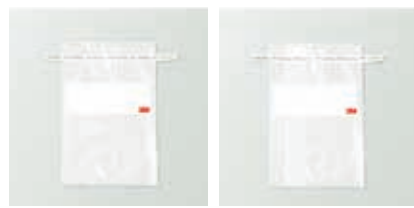
(1) Plain type  
190×300mm

(2) Filter type  
190×300mm



(3) Filter & Wire type  
190×300mm

(4) Wire type  
190×300mm



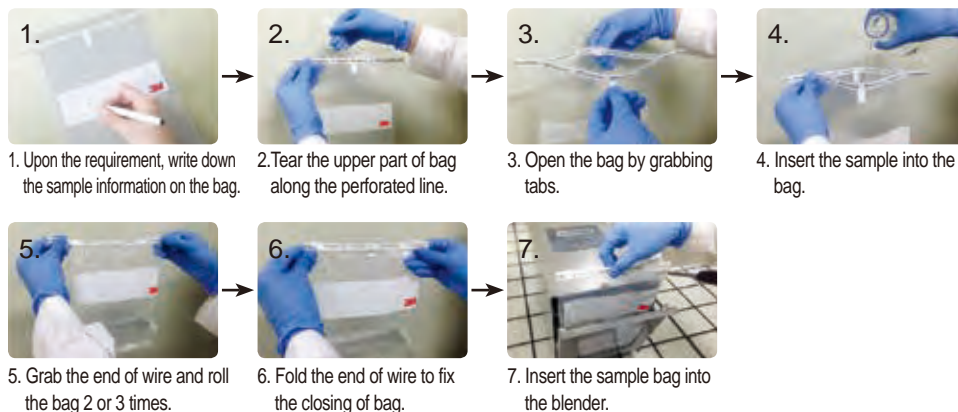
(5) Wire type  
150×230mm

(6) Filter & Wire type  
150×230mm

Model	1930	1930F	1930FW	1930W	1523W	1523FW
Volume	Up to 1,620ml				Up to 710ml	
Sterilization	Gamma Sterilization					
Sampling	Multi Use					
Filter	Type	None	Lateral	Lateral	None	Lateral
	Porosity	5~150um				
	Material	None	Non-woven	Non-woven	None	Non-woven
Bag	Size	190×300mm			150×230mm	
	Material	PE	PE+Nylon	PE+Nylon	PE	PE+Nylon

		Pk.	Price, ₩	Cs.	Price, ₩
3M.06.1930	(1) Sterile Bag, 190×300mm, 1620ml, Plain type	50ea		10pk	
3M.06.1930F	(2) , Filter type	50ea		10pk	
3M.06.1930FW	(3) , Filter & Wire type			250ea	
3M.06.1930W	(4) , Wire type			500ea	
3M.06.1523W	(5) , 150×230mm, 710ml, Wire type			500ea	
3M.06.1523FW	(6) , Filter & Wire type			250ea	

**How to use Sample Bag**



<b>0.2~2.0ml Micro, 6-Place</b> .....	P.41
<b>, 12-Place</b> .....	P.42~43
<b>, 24-Place Hi-Speed <i>New</i></b> .....	P.44
<b>, 24-Place Hi-Speed, -20 °C Refrigerated <i>New</i></b> .....	P.44
<b>1.5~50ml Table-top, Classic</b> .....	P.45
<b>, Microprocessor</b> .....	P.46



**Micro Centrifuge, 6-&12-Places**

“CF-5” & “CF-10”  
Max. 13500rpm



**Hi-Speed Refrigerated  
Micro Centrifuge, 24-Places**

“Cef-M24R”  
-20°C, Max.15000rpm



**Table-top Classic Centrifuge**

“Cef-50.6”  
6 / 12 / 24 × (1.5~50)ml, 6000rpm



**Table-top Microprocessor Centrifuge**

“Cef-D50.6”  
6 × 1.5~50ml, 4000rpm



**DAIHAN® Hi-Quality Mini-microcentrifuge Set "MaXpin C-6mt"**, Max. 5,500 rpm, Rapidly Stop Spin-motion for Safety With Circular Fixed-Angle Rotor for 6×0.2/0.5/1.5/2.0ml Tubes and Strip Rotor for 2×0.2ml PCR 8-tubes Strips/16×0.2ml PCR Tubes  
 미니-마이크로 원심분리기 세트, 신속한 회전동작 정지, 앵글-/스트립-로터 포함, 0.2/0.5ml 튜브 어댑터 포함



"MaXpin C-6mt" for 6 Tubes of 0.2 ~ 2.0ml with Circular Fixed Angle Rotor

2-Year Warranty

- **PL (Product Liability) Insurance**
- **Rapidly Stop Spin-motion for user safety**
- \* with Certificate & Traceability
- \* Complete Set with two Rotors :
  - **Circular Fixed-Angle Rotor** for 6×0.5-/1.5-/2.0-ml Tubes (6×0.2-/0.5-ml tube Adapters included)
  - **Fixed Strip Rotor** for 2×0.2ml PCR 8-tubes Strips or 16ea of individual 0.2ml PCR Tubes
- \* Smooth Opening of the Lid by Simply Pressing
- \* Rubberized Base
- \* Lid-Activated On/Off Safety Switch : Close the Clear Lid to Start and Open to Stop

Specifications & Ordering information

<L1>

Spec.	Model	"MaXpin C-6mt", Rapidly Stop Spin-motion for safety
RPM & Max. RCF		Max. 5,500 rpm, 1,775×g
Max. Capacity		6×0.5-/1.5-/2.0-ml tubes, 2×0.2ml PCR 8-tube Strip or 16×0.2ml PCR 8 Tubes
Rotor (included)	Angle Rotor	6 Holes Circular Fixed-Angle Rotor for 0.5-/1.5-/2.0-ml Tubes
	Strip Rotor	16 Holes Strip Rotor for 0.2ml PCR 8-tube Strip or individual Tubes
Adapter		Included 6×0.2-/ 0.5-ml Tube Adapter
Material		Lid-PC, Body-ABS, Rotor-ABS
Dimension (w×d×h)		Unit : 144×192 ×h108 mm, 1.1kg, Packing : 175×255×h215 mm, 1.6 kg
Power Consumption		8 W
Electric Reqts.		1 Phase, AC 100 ~ 240V, 50/60Hz
Cat. No.	230V	DH.WCF00006
	120V	DH.WCF00026
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.

**DAIHAN® High Performance Mini-microcentrifuge Set "CF-5"**, Max. 5,500 rpm, **Medicaluse** With Circular Fixed-Angle Rotor for 6×0.2/0.5/1.5/2.0ml Tubes and Strip Rotor for 2×0.2ml PCR 8-tubes Strips/16×0.2ml PCR Tubes  
 미니-마이크로 원심분리기 세트, 앵글-/스트립-로터 포함, 0.2/0.5ml 튜브 어댑터 포함



Medicaluse



Circular Fixed-Angle Rotor for 6×0.2-2.0ml Tubes

2-Year Warranty

"CF-5" for 6 Tubes of 0.2 ~ 2.0ml with Circular Fixed Angle Rotor

- **CE Certified**
- **PL (Product Liability) Insurance**
- \* with Certificate & Traceability
- \* Complete Set with Circular Fixed-Angle Rotor and Fixed Strip Rotor
- \* Supplied with two Rotors :
  - **Circular Fixed-Angle Rotor** for 6×0.5-/1.5-/2.0-ml Tubes (6×0.2-/0.5-ml tube Adapters included)
  - **Strip Rotor** for 2×0.2ml PCR 8-tubes Strips or 16ea of individual 0.2ml PCR Tubes
- \* Smooth Opening of the Lid by Simply Pressing
- \* Operation Display LED Lamp
- \* Lid-Activated On/Off Safety Switch : Close the Clear Lid to Start and Open to Stop

Specifications & Ordering information

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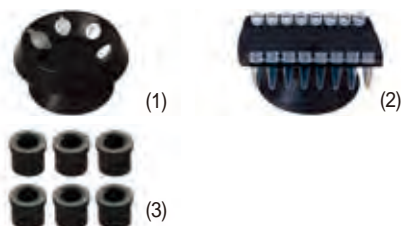
Spec.	Model	"CF-5"
RPM & Max. RCF		Max. 5,500 rpm, 1,775×g
Max. Capacity		6×0.5-/1.5-/2.0-ml tubes, 2×0.2ml PCR 8-tube Strip or 16×0.2ml PCR 8 Tubes
Rotor (included)	Angle Rotor	6 Holes Circular Fixed-Angle Rotor for 0.5-/1.5-/2.0-ml Tubes
	Strip Rotor	16 Holes Strip Rotor for 0.2ml PCR 8-tube Strip or individual Tubes
Adapter		Included 6×0.2-/ 0.5-ml Tube Adapter
Material		Lid-PC, Body-ABS, Rotor-ABS
Dimension (w×d×h)		Unit : 178×150 ×h109 mm, Packing : 200×180×h175 mm, 2 kg
Power Consumption		8 W
Electric Reqts.		1 Phase, AC 100~240V, 50/60Hz
Cat. No.	230V	DH.WCF00005
	120V	DH.WCF00025
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.

Fixed Rotor & Adapter for Spare, 0.2- / 0.5-ml Tube Adapter-set, 스페어 로터/튜브 어댑터

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Ea. Price, ₩



- DH.WCF00105 (1) Circular Fixed Angle Rotor, for "MaXpin C-6mt", "CF-5" for 6×0.2-/0.5-/1.5-/2.0-ml Tubes
- DH.WCF00205 (2) Fixed Strip Rotor, for "MaXpin C-6mt", "CF-5" for 2×0.2ml PCR8-tube Strips or 16×0.2ml PCR Tubes
- DH.WCF00201 (3) 0.2ml Tube Adapter-sets, 6ea Adapter/1set, for Circular Fixed Angle Rotor, for "MaXpin C-6mt", "CF-5"
- DH.WCF00301 (3) 0.5ml Tube Adapter-sets, 6ea Adapter/1set, for Circular Fixed Angle Rotor, for "MaXpin C-6mt", "CF-5"

**DAIHAN® High Performance Pro-microcentrifuge Set "CF-10", Max. 13,500rpm, *Medicaluse***

With MC Nylon Fixed Angle Rotor for 12 × 0.2-/0.5-/1.5-/2.0-ml Tubes, Compact, Quiet, Safety Electronic Lid Lock System

프로-마이크로 원심분리기, 전자식 안전 도어 잠금 시스템, 앵글 로터 포함, 0.2/0.5ml 튜브 어댑터 포함



Max. 13,500 rpm

*Medicaluse*



2-Year Warranty



(1) MC Nylon Fixed Angle Rotor for 12 × 0.2-/0.5-/1.5-/2.0-ml (Included)



(2) Tube Adapters for 12 × 0.2/0.5ml Tube (Included)

- CE Certified    ■ PL(Product Liability) Insurance
- Unbelievably Quiet Operation - Brushless DC motor
- High Performance - Digital Feedback Speed Control, Max. 13,500rpm, 12,225×g
- Useful Exclusive Spin Down Function
- Included MC Nylon Fixed Angle Rotor for 1.5-/2.0-ml × 12 Tubes and 12 × 0.2-/0.5-ml PCR Tube Adapters
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function

■ PL(Product Liability) Insurance

- \* Plasmid, DNA and RNA work, protein work, and miniprep kit, Cell Culture, cell harvesting, subcellular separations, and many other applications.
- \* Unnecessary Rotor Lid for Running and Reducing Noise (≤57dB at Max. RPM).
- \* Realize Extremely Compact Design with Exceptionally Small Footprint.
- \* Acceleration and Braking Times are Lower than 15 sec (at Max. Speed).
- \* Storage Function for the Set Values : RPM & Time.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be disabled).
- \* Safety System for Motor Error.
- \* **Safety Electronic Lid Lock System** : Opening Lid is not applicable during running.
- \* Simple Operation for Repetitive use of 'Spin Down' Function.

Specifications & Ordering information

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Spec.	Model	"CF-10"
RCF		1,000~13,500 RPM , 12,225×g
Max. Capacity		0.2-/0.5-/1.5-/2.0-ml × 12 Tubes
Rotor		MC Nylon Fixed Angle Rotor for 0.2-/0.5-/1.5-/2.0-ml × 12 Tubes
Drive System		Brushless DC motor, Direct drive
Noise Level		≤ 57 dB
Acceleration & Braking Time		≤ 15 sec (at Max. speed)
Cooling Device		Air Cooling System
Timer & Alarm		99hr 59min (Continuous run), Error status & Timer-end
Display		Digital LCD with Back-Light Function
Controller		Digital Feedback Control with Jog-Shuttle Switch (Turn+Push)
Safety Circuit		Motor Error Detector, Electronic Safety Lid Lock System
Material		Lid-PC, Body-ABS, Rotor-PE
Dimension & Weight		170×226×h183 mm, 2.3 kg
Packing Size & Gross Weight		290×240×h220 mm, 5 kg
Power Consumption		90W
Electric Reqts.		1 Phase, AC 120V, 50/60Hz or AC 230V, 50 / 60Hz
Cat. No.	230V	DH.WCF00010
	120V	DH.WCF00011
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.

Spare Rotor & Adapter Set

- DH.WCF00100 (1) MC Nylon Fixed Angle Rotor, "CFAR1512", for "CF-10", 12 × 0.2-/0.5-/1.5-/2.0-ml Tubes
- DH.WCF00200 (2) 0.2ml Tube Adapter-sets, "CFTA1", 12ea Adapter/1set, for Fixed Angle Rotor
- DH.WCF00300 (2) 0.5ml Tube Adapter-sets, "CFTA2", 12ea Adapter/1set, for Fixed Angle Rotor

Ea. Price, ₩

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**DAIHAN® Premium Pro-microcentrifuge Set “MaXpin C-12mt”, Max. 13,500rpm, 12,225 × g**  
 With **Aluminum Die Casting Lid** & Electronic Lid Lock System, Autoclavable PP Fixed Angle Rotor for 12 × 0.2-/0.5-/1.5-/2.0-ml Tubes  
 프로-마이크로 원심분리기, 전자식 안전 도어 잠금 시스템, 앵글 로터 포함, 0.2/0.5ml 튜브 어댑터 포함

Max. 13,500 rpm



**2-Year Warranty**

“MaXpin C-12mt” for 12 Tubes of 0.2 ~ 2.0ml with PP Fixed Angle Rotor

- **PL (Product Liability) Insurance**
- **Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function**
- **Supplied in Complete Set : PP Fixed Angle Rotor for 1.5-/2.0-ml × 12 Tubes and PCR Tube Adapters (12 × 0.2ml & 12 × 0.5ml)**
- **Unbelievably Quiet Operation due to Optimized Air Flow Design (Noise Level ≤ 57db)**
- \* Brushless DC Motor Provides Maintenance Free Operation.
- \* Perfectly Constructed Frame Structure. Strong Layered Aluminum Die Casting Lid with Auto Lock Mechanism Assuring a Safe and Secure Lock.
- \* High Performance - Digital Feedback Speed Control, Max. 13,500rpm, 12,225 × g
- \* Useful Exclusive Spin Down Function
- \* Easy to Use Compact Design Allows for Fast Centrifugation \* Sleek, Space Saving Footprint
- \* Intuitive Controls and Easy to Read Display Simplifies Operation.
- \* Ideal for Fast Isolating and Pelleting of DNA, RNA, Proteins, and Cell Viruses
- \* Max. 13,500 rpm with 12 Position, Autoclavable PP Fixed Angle Micro-Rotor
- \* Large Backlit LCD-screen for Settings and Parameters
- \* The System Displays Errors, Excess Speed, and Open Lid.
- \* Load Imbalance Detection.
- \* Strong Steel Layered Door with Safety, Auto-Lock Function
- \* Automatic Door Release \* Easy to Close Lid
- \* Biocontainment Rotor Lid Ensuring Securely Contained Samples
- \* Soft Brake Function to Protect Delicate Samples
- \* PP Inner Lid for Maximize Safety (Optional)

**Specifications & Ordering information**

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\*Aluminum Die Casting Lid

(1) PP Fixed Angle Rotor (Included)

Perfectly Constructed Frame Structure, Strong Layered Lid

Spec.	Model	“MaXpin C-12mt” Aluminum Die Casting Lid & Electronic Lid Lock System
RCF		1,000~13,500 RPM , 12,225×g
Max. Capacity		0.2-/0.5-/1.5-/2.0-ml × 12 Tubes
Rotor (included)		PP Fixed Angle Rotor for 0.2-/0.5-/1.5-/2.0-ml × 12 Tubes
Adapter (included)		12×0.2ml & 12×0.5ml PCR Tubes
Drive System		Brushless DC motor, Direct drive, Vibration Insulated, Counterclockwise Rotating
Noise Level		≤ 57 dB
Acceleration & Braking Time		≤ 12 sec (at Max. speed)
Cooling Device		Air Cooling System
Timer & Alarm		99hr 59min (Continuous run), Error status & Timer-end
Display		Large Digital LCD with Back-Light Function
Controller		Digital Feedback Control with Jog-Shuttle Switch (Turn+Push)
Safety Circuit		Motor Error Detector, Electronic Safety Lid Lock System
Material		Lid-Aluminum Die Casting, Body-ABS, Rotor-PE
Dimension & Weight		187×253×h155 mm, 3.8 kg
Packing Size & Gross Weight		230×290×h245 mm, 4.3 kg
Power Consumption		90W
Electric Reqts.		1 Phase, AC 120V, 50/60Hz or AC 230V, 50/60Hz

Cat. No.	230V	<b>DH.WCF01350</b>
	120V	<b>DH.WCF01351</b>
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.



(2) Tube Adapter(Included)  
12 × 0.2/0.5ml Tube Adapter

**Spare Rotor & Adapter Set**

- DH.WCF11350 (1) PP Fixed Angle Rotor, Autoclavable, for “MaXpin C-12mt”, 12 × 0.2-/0.5-/1.5-/2.0-ml Tubes
- DH.WCF00200 (2) 0.2ml Tube Adapter-sets, 12ea Adapter/1set, for Fixed Angle Rotor, “CFTA1”
- DH.WCF00300 (2) 0.5ml Tube Adapter-sets, 12ea Adapter/1set, for Fixed Angle Rotor, “CFTA2”

<b>Ea. Price, ₩</b>

DAIHAN® 24-Places Hi-Speed Micro Centrifuge I. "Cef-M24" & II. -20°C Refrigerated "Cef-M24R", Max. 15,000rpm **NEW**  
 With Aluminum Fixed-Angle Rotor for 0.2 · 0.5 · 1.5 · 2.0ml Tubes, Fast Cooling, 21,380 × g, 고속 마이크로 원심분리기, 일반형 & 냉각형

**NEW** CE

Max. 15,000 rpm



2-Year Warranty

I. "Cef-M24", Normal-type

**NEW** CE

Max. 15,000 rpm



2-Year Warranty

II. "Cef-M24R", Refrigerated-type



(1) Fixed Angle Rotor "AS 24-2";  
 24 × 0.2 · 0.5 · 1.5 · 2.0ml Tubes  
 (Included)

Optional Rotors & Adapters



(2) Fixed Angle Rotor "AS 36-05";  
 36 × 0.2 · 0.5ml Tubes



(3) Fixed Angle Rotor "AS 4-PCR8";  
 4 × PCR8/0.2ml Tubes



(4) Fixed Angle Rotor "AS 12-V5";  
 12 × 5ml Tubes  
 (Eppendorf)



(5) Fixed Angle Rotor "AS 18-5";  
 18 × 5ml Tubes  
 (Round-Bottom)



① & ② 0.2ml/0.5ml × 24  
 Tube Adapters



③ 0.2ml × 36  
 Tube Adapters

■ CE Certified

- 바이오 세이프 로터/샘플 오버플로우 방지기능으로 원심분리기 작동 중 돌발적인 누출에 의한 미생물 오염 방지.
- \* Patented Multi-Flow Air Cooling Design Ensures Fast Cooling of the Rotor and Low Energy Consumption.
- \* Bio-safe Rotor/Anti-sample Overflow Prevents Accidental Leakage during Centrifugal Process allowing Risk-free Microbial Contamination.
- \* High Strength Aluminum Alloy Rotor can be Fully Autoclaved for Unlimited Service Life.
- \* Ergonomic Electronic Lock Design, the Centrifuge Lid can be Closed with Single Finger Touch.
- \* Each and Every Rotor is Hermetically Sealed by Three Rubber Seals.
- \* Rotors are Seated on a Tapered Shaft, Concentric and Self-aligning, Perfect to Achieve Running Stability at High Speeds.
- \* Rotor Imbalance Detection Alarm Function.
- \* Rotation Speed/RCF Switchover, Inching Operation, Running Process Indicator, Sound Alert.
- \* Up to 9 Program Storage Capacity According to Experimental Needs.

▶ II. Refrigerated-type "Cef-M24R" : Powerful Cooling System for Precise Temp Control

- Pre-cooling Program ensures Optimal Protection of the Sample before Warming
- Guaranteed 2°C Cooling within only 7 minutes of both Chamber and Samples even at max Speed.
- Lid Lock Facility allows for Internal Temp Maintenance even after Centrifugation.
- CFC-free Refrigerant, Low Carbon, and Environmental Protection.
- An External Condensation Tank Prevents Water Accumulation within the Centrifuge Chamber.

Specifications & Ordering information

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Spec.	Model	I. "Cef-M24" 24places, Normal-type	II. "Cef-M24R" 24places, Refrigerated-type
Speed Range		200~15,000rpm ±20rpm	
RCF		21,380×g	
Temp Range		-	-20°C+40°C
Rotor Capacity		Standard : 0.2 · 0.5 · 1.5 · 2.0ml × 24 Tubes Optional : 0.5ml × 36 Tubes, 5ml × 18 Tubes, 5ml × 12 Culture Tubes, PCR(8) × 4 Tubes	
Run Time		30sec~99min / Continuous	
Motor		Brushless DC Motor	
Noise Level		≤ 64dB	≤ 56dB
Safety Devices		Dual Door Interlock, Over-speed Detection, Over-temp Detection, Automatic Internal Diagnosis	
Acceleration & Breaking Time		≤ 25sec (at Max. speed)	
Dimension & Weight		280×364×h266mm, 12kg	332×553×h283mm, 30kg
Power Consumption		200W	500W
Electric Reqts.		AC220V-240V, 50Hz/60Hz, 5A	
Cat. No.		DH.CefM0024	DH.CefM0024R
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

Spare Rotor and Tube Adapters

Ea. Price, ₩

DH.Rot8001 (1) Aluminum Fixed Angle Rotor, "AS 24-2", 24 × 0.2 · 0.5 · 1.5 · 2.0ml Tubes

Optional Rotor and Tube Adapters

Ea. Price, ₩

DH.Rot8002 (2) Aluminum Fixed Angle Rotor, "AS 36-05", 36 × 0.2 · 0.5ml Tubes  
 DH.Rot8003 (3) "AS 4-PCR8", 4 × PCR8/0.2ml Tubes  
 DH.Rot8004 (4) "AS 12-V5", 12 × 5ml Tubes(Eppendorf)  
 DH.Rot8005 (5) "AS 18-5", 18 × 5ml Tubes(Round-Bottom)

Pk. Price, ₩

DH.Ada3001 ① 0.2ml Tube Adapter-set, "A02P2", 24 Adapters/set, for Rotor "AS24-2"

24ea

DH.Ada3002 ② 0.5ml Tube Adapter-set, "A05P2", 24 Adapters/set, for Rotor "AS24-2"

24ea

DH.Ada3003 ③ 0.2ml Tube Adapter-set, "A02P05", 36 Adapters/set, for Rotor "AS36-05"

36ea

**DAIHAN® 1.5~50ml Popular Classic Centrifuge "Cef", 3000 · 3400 · 6000rpm, Medicaluse**

With 6- & 8-Hole, or 12- & 24-Hole(in 50ml Model) Fixed Angle Rotor, Safety Balance, 1.5~50ml 튜브용 경제형 원심분리기

Max. 3,000 rpm

Medicaluse



2-Year Warranty

I. "Cef-6" for 6 Tubes of 1.5-15ml, with 6 Holes Fixed Angle Rotor, 3000rpm

Max. 6,000 rpm

NEW



2-Year Warranty

II. "Cef-8" for 8 Tubes of 1.5-15ml, with 8 Hole Fixed Angle Rotor, 6000rpm

Max. 3,400 rpm

Medicaluse

NEW



2-Year Warranty

III. "Cef-50.6" for 6 Tubes of 50ml, with 6 Hole Fixed Angle Rotor, 4000rpm

- DAIHAN Designed
- Speed is Linear and Stables
- Interchangeable Rotor
- with 6- & 8-Holes or 12- & 24-Holes Fixed Angle Rotor for 1.5ml~50ml Tubes ; On Adapters Adjustable 1.5/2ml, 5~7ml, 10~15ml, and 50ml

- \* The Design is up-to-date, Beautiful Outlook and Durable
- \* Stepless Controller : Speed and Operating Time
- \* with Safety Switch when Centrifuge Lid Opened the Motor can be Stop
- \* Auto-balancing System
- \* ABS Outer Shell can Resist Collision.

Specifications & Ordering information

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Spec.	Model	Medicaluse	II. 15ml "Cef-8" NEW	III. 50ml "Cef-50.6" NEW
		I. 15ml "Cef-6" 6 Holes - 1.5-15ml	8 Holes - 1.5-15ml	6 Holes - 50ml or 12/24 Holes - 1.5-15ml
Fixed Angle Rotor&Capa.	Included	6Hole ; (1.5-15)ml Tubes	8Hole ; (1.5-15)ml Tubes	(1) 6Hole ; 50ml Tubes
	Option			(2) 12Hole ; (1.5-15)ml Tubes (3) 24Hole ; (1.5-15)ml Tubes
Useful Tube size & Acceptance		6 Tubes ; 10-15ml, 1.5-7ml on Adapters	8 Tubes ; 10-15ml, 1.5-7ml on Adapters	(1) 6 Tubes ; 50ml When option Rotor ; (2) 12 Tubes ; 10-15ml (3) 24 Tubes ; 10-15ml 1.5-7ml on Adapters
Adapter and Size	Included	② 6ea×10-15ml Tubes Size ; id17.5×L95mm	② 8ea×10-15ml Tubes Size ; id17.5×L95mm	① 6ea×50ml Tubes Size ; id30.7×L104mm
	Option	③ 6ea×5-7ml Tubes Size ; id13.5×L69mm ④ 6ea×1.5/2ml Tubes Size ; id11×L42mm	③ 8ea×5-7ml Tubes Size ; id13.5×L69mm ④ 8ea×1.5/2ml Tubes Size ; id11×L42mm	② 12/24ea×10-15ml Tubes Size ; id17.5×L95mm ③ 12/24ea×5-7ml Tubes Size ; id13.5×L69mm ④ 12/24ea×1.5/2ml Tubes Size ; id11×L42mm
Speed Range (rpm)		300~3000rpm at 60Hz (300~2500rpm at 50Hz)	200~6000rpm	200~3400rpm
R.C.F		1,066×g	4,265×g	1,667×g
Display		None	Digital LED Display	
Timer		0~30min Analog Timer	0~30min Digital Timer	
Motor		Brushless Induction Motor	Brushless DC Motor	
Safety Brake		None	Automatic Brake System	
Dimension & Weight		280×280×h255mm, Net. 3.5kg, Gross. 4kg	280×280×h265mm, Net. 4.8kg, Gross. 5.8kg	300×300×h315mm, Net. 5.4kg, Gross. 6.4kg
Electric Reqts		AC 230V, 50/60Hz or AC 120V, 60Hz		
Cat. No.	230V	DH.Cef0006	DH.Cef0008	DH.Cef0010
	120V	DH.Cef0106	DH.Cef0108	DH.Cef0110
Price, Each. ₩				

Spare Rotor and Tube Adapter

Ea. Price, ₩

- DH.CefR5006 (1) 50ml 6Holes Angle Rotor "R5006" with 6ea×50ml Tube Adapter PP "TA50", idφ30.7×L104mm, for "Cef-50.6"
- DH.CefA050 ① 50ml Tube Adapter PP "TA50", idφ30.7×L104mm, Fit to Rotor "R5006", for Centrifuge "Cef-50.6"
- DH.CefA015 ② 10-15ml Tube Adapter PP "TA15", idφ17.5×L98mm, for Centrifuge "Cef-6" & "Cef-8", and Rotor "R1512" & "R1524"

Optional Rotor and Tube Adapter

Ea. Price, ₩

- DH.CefR1512 (2) 10-15ml 12Holes Angle Rotor "R1512", with 12ea×10/15ml Tube Adapter "TA15", idφ17.5×L98mm, for Centrifuge "Cef-50.6"
- DH.CefR1524 (3) 10-15ml 24Holes Angle Rotor "R1524", with 24ea×10/15ml Tube Adapter "TA15", idφ17.5×L98mm, for Centrifuge "Cef-50.6"
- DH.CefA007 ③ 5-7ml Tube Adapter PP "TA7", idφ13.5×L69mm, Fit to "TA15", Tube Adapter, for Centrifuge "Cef-6", "Cef-8", "Cef-50.6"
- DH.CefA002 ④ 1.5/2ml Tube Adapter PP "TA2", idφ11×L42mm, Fit to "TA15", "TA1503" Tube Adapter, for Centrifuge "Cef-6", "Cef-8", "Cef-50.6"



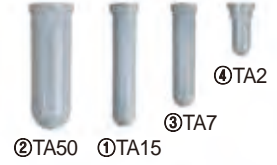
(1) Fixed Angle Rotor ; 50ml 6Hole, "R5006"



(2) Fixed Angle Rotor ; 10-15ml 12Hole, "R1512"



(3) Fixed Angle Rotor ; 10-15ml 24Hole, "R1524"



Tube Adapters

**DAIHAN® 1.5~50ml Microprocessor Centrifuge "Cef-D50.6", Safety Interlock, Max. 4000rpm *Medicaluse***  
 With 6-Holes or 12- & 24-Holes Fixed Angle Rotor, Digital Model, 1.5~50ml 튜브용 디지털 원심분리기

Max. 4,000 rpm

*Medicaluse*



2-Year Warranty

- **DAIHAN Designed** ■ **Durable and Maintenance Free - Brushless DC Motor**
- **Ideal for Biology, Medicine, Pharmacology, Laboratory, etc. Various Application**
- **with 6-Holes or 12- & 24-Holes Fixed Angle Rotor for 1.5ml~50ml Tubes ; On Adapters Adjustable 1.5/2ml, 5~7ml, 10~15ml, and 50ml**
- **Automatic Quick Self-Cooling by Fan** ■ **Interchangeable Rotor**
- \* Compact Design with Automatic Door Release. \* Easy to Use Controls and Display
- \* Self-diagnostic Function : Lid Opening, Unbalance, Over-Heat/ Current/ Voltage/ Speed
- \* Auto-balancing System for Extend Motor Life and Reduce Noise
- \* Program Memory Function : 9Set. \* Precision Digital Timer, Set to 10Sec. / Max 30 Min
- \* Pushing the Function Key for Short Runs \* Rapid Deceleration due to Automatic Brake System

Specifications & Ordering information

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Spec.	Model	"Cef-D50.6"	
		6 Holes - 50ml or 12/24 Holes - 1.5~50ml	
Fixed Angle Rotor & Capa.	Included	(1) 6Hole ; 50ml Tubes	
	Option	(2) 12Hole ; (1.5~15)ml Tubes, (3) 24Hole ; (1.5~15)ml Tubes	
Swing Rotor & Capa.	Option	(4) SR1550 ; ⑤ 4×1Hole - 50ml, ⑥ 4×3Hole - 10~15ml, ⑦ 4×4Hole : 5~7ml, ⑧+④ 4×3Hole : 1.5/2.0ml	
		(1) 6 Tubes ; 50ml	
Useful Tube size & Acceptance	Option	When Option Fixed Angle Rotor	When Option Swing Rotor ; (4) SR1550
		(2) 12 Tubes ; 1.5~15ml (3) 24 Tubes ; 1.5~15ml	⑤ 4 Tubes : 50ml, ⑥ 12 Tubes : 10~15ml ⑦ 16 Tubes : 5~7ml ⑧+④ 12 Tubes : 1.5/2.0ml
Adapter and Size	Included	① 6ea×50ml Tubes, Size ; id30.7×L104mm	
	Option	When Option Fixed Angle Rotor	When Option Swing Rotor ;
Speed Range (rpm) & RCF	Motor	600~4000rpm & 2,325×g (Swing Rotor ; 2,683×g)	
		Brushless DC Motor	
Timer		0~30min	
Dimension & Weight		390×505×290mm, 19.8kg, Gross. 21.8kg	
Electric Reqt.s.		AC 230V, 50/60Hz or AC 120V, 60Hz	
Cat. No.	230V	DH.CefD0030	
	120V	DH.CefD0130	
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.



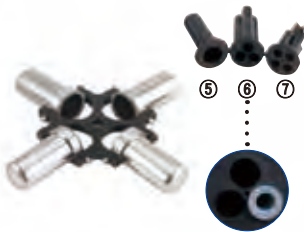
(1) Fixed Angle Rotor ; 50ml 6Holes, "R5006" (Included)



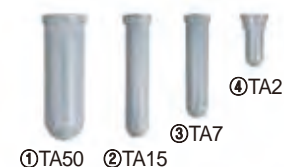
(2) Fixed Angle Rotor ; 10~15ml 12Holes, "R1512" (Optional)



(3) Fixed Angle Rotor ; 10~15ml 24Holes, "R1524" (Optional)



(4) Swing Rotor ; 4×50ml, 12×1.5/2ml & 10~15ml, 16×5~7ml "SR1550" (Optional) Included ⑤, ⑥, ⑦ / Option ④



Optional Tube Adapters

Spare Rotor and Tube Adapter

Ea. Price, ₩

- DH.CefR5006 (1) 50ml 6Holes Angle Rotor "R5006" with 6ea×50ml Tube Adapter PP "TA50", idφ30.7×L104mm, for "Cef-D50.6"
- DH.CefA050 ① 50ml Tube Adapter PP "TA50", idφ30.7×L104mm, Fit to Rotor "R5006", for Centrifuge "Cef-D50.6"
- DH.CefA015 ② 10~15ml Tube Adapter PP "TA15", idφ17.5×L98mm, for Rotor "R1512" & "R1524"

Optional Rotor and Tube Adapter

Ea. Price, ₩

- DH.CefR1512 (2) 10~15ml 12Holes Angle Rotor "R1512", with 12ea×10/15ml Tube Adapter "TA15", idφ17.5×L98mm, for Centrifuge "Cef-D50.6"
- DH.CefR1524 (3) 10~15ml 24Holes Angle Rotor "R1524", with 24ea×10/15ml Tube Adapter "TA15", idφ17.5×L98mm, for Centrifuge "Cef-D50.6"
- DH.CefSR1550 (4) Swing Rotor "SR1550", with Tube Adapter PP 1Hole×4ea×50ml "TA5001", 3Hole×4ea×1.5/2ml & 10~15ml "TA1503" and 4Hole×4ea×5~7ml "TA704", for Centrifuge "Cef-D50.6"
- DH.CefA007 ③ 5~7ml Tube Adapter PP "TA7", idφ13.5×L69mm, Fit to "TA15", Tube Adapter, for Centrifuge "Cef-D50.6"
- DH.CefA002 ④ 1.5/2ml Tube Adapter PP "TA2", idφ11×L42mm, Fit to "TA15", "TA1503" Tube Adapter, for Centrifuge "Cef-D50.6"
- DH.CefA5001 ⑤ 50ml Tube Adapter PP "TA5001", Fit to Rotor "SR1550", for Centrifuge "Cef-D50.6"
- DH.CefA1503 ⑥ 10~15ml 3Hole Tube Adapter PP "TA1503", Fit to Rotor "SR1550", for Centrifuge "Cef-D50.6"
- DH.CefA704 ⑦ 5~7ml 4Hole Tube Adapter PP "TA704", Fit to Rotor "SR1550", for Centrifuge "Cef-D50.6"

**DAIHAN® -20°C +40°C Chiller “MaXircu™ Chi”**, Heavy-duty Refrigerated External Circulator, Fill-9 · 27 · 55 Lit  
 Ideal for Evaporator/Reactor &c. Cooling Line, Lift 8 · 27m, Cooling Capa 0.87 · 1.3 · 3.0 kW, 다용도 냉각 써클레이터/질러



**2-Year Warranty**

Max. Filling Volume 27Lit, “MaXircu™ Chi-30”



Assembly-type Safety Connection Ports/Pipe for Fluid In/Out-let ; ISO RC 1/2" Thread, Located On Rear-Upper Panel

- Made in Korea
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Wide-range Reaction System and Evaporator. ■ Max. Lift 8 · 27m
- Assembly-type Safety Connection Ports/Pipe for Fluid In/Out-let : ISO RC 1/2" Thread, Stainless-steel.
- Digital PID Control System Implementing Superior Temperature Accuracy.
- Embedded External Nozzle Part for the Prevention of Nozzle Damaged.
- Stainless-steel Internal Bath for Prevention of Corrosion.
- \* Wide-range Filling Volume 9Lit · 27Lit · 55Lit
- \* Effective Cooling Capacity
- \* Useful for 1~50Lit Various Reactors and Evaporators. \* Emergency Stop Button for safety.
- \* High Quality Circulation Pump : 20-/30-Lit/min Max Flow Rate and 1.0-/3.3-bar Max. Pressure.
- \* Built in Pump Pressure Gauge and Compressor Pressure Gauge.

Specifications & Ordering information

<L1>

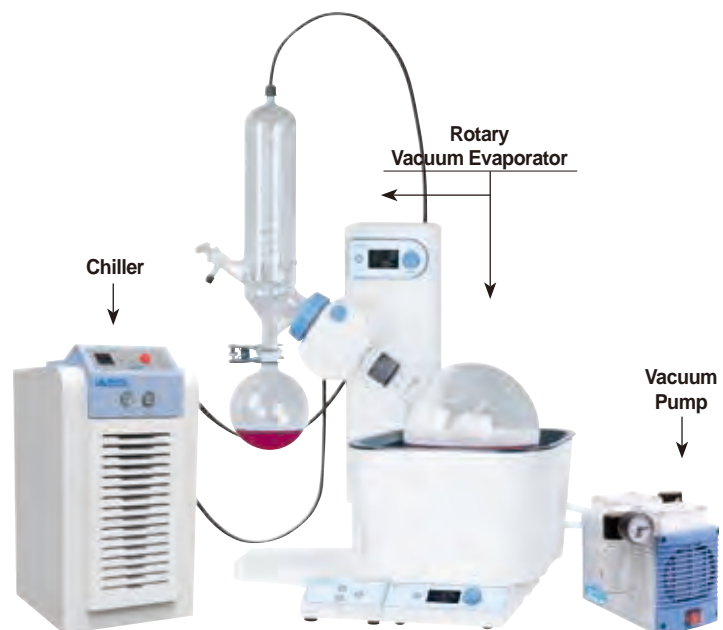
Spec.	Model	“MaXircu™ Chi-20” Filling Volume Max. Capa. 17Lit	“MaXircu™ Chi-30” Filling Volume Max. Capa. 29Lit	“MaXircu™ Chi-50” Filling Volume Max. Capa. 47Lit
Temp. Range & Stability		-20°C+40°C-Range, ±0.2°C(at 15°C)-Stability		
Cool-Fluid. Filling Volume		9 Lit max	27 Lit max	55 Lit max
Useful for 1~50Lit Evaporators, etc.		for 1~20Lit Evaporator	for 10~30Lit Evaporator	for 20~50Lit Evaporator
Refrigerator Capacity(HP)		1/2 HP	1 HP	2 HP
Lid & Top Opening Dia.		φ100 mm		
Fluid In/Out-let Connector		ISO RC 1/2" (English System AG 1/2") Thread, Stainless-steel		
Pump Power, Lift Height, m	Max. Flow Rate	20 Lit/min	30 Lit/min	
	Max. Pressure & Lift	1.0 bar Max. Lift : 8m	3.3 bar Max. Lift : 27m	
Cooling Capacity	at +20°C	1.7 kW	2.8 kW	6.5 kW
	at 0°C	0.87 kW	1.3 kW	3.0 kW
	at -20°C	0.32 kW	0.45 kW	1.2 kW
External Dimension		450×650×h900 mm	580×800×h1260 mm	670×900×h1450 mm
Material		Internal : Stainless-steel, External : Powder Coated steel		
Electrical Reqts.		1 Phase 230V, 50 / 60 Hz		3Phase 380V
Cat. No.	60Hz	DH.Chi0020	DH.Chi0030	DH.Chi0050
	50Hz	DH.Chi0025	DH.Chi0035	DH.Chi0055
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

- ※ See page 38 for the Cooling/Heating Transfer Fluids & Circulation Hoses ;
- ▶ Therminol D12® -85°C +230°C Cooling/Heating Transfer Fluids
- ▶ SYN THERM 22L® -5°C +320°C Heating Transfer Fluids
- ▶ Insulated External Circulating Tubings

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution



▶ Figure : One of the Applications in the Large Volume Evaporator Line.

# Desiccator Cabinets

<b>Desiccators, Auto-Dry</b> .....	P. 50~51
, Gas Exchangeable .....	P. 49
, General Purpose .....	P. 49
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, Vacuum .....	P. 51
, Accessories, Silica-Gel <b>New</b> .....	P. 51



**General Purpose Desiccator**  
"DeLL", 33Lit



**Gas Exchangeable Desiccator**  
"DeBG1K", 207Lit



**Auto-Dry Desiccator**  
"DeADLH", 33Lit



**Auto-Dry Desiccator**  
"DeADAWS", 604Lit



**UV Protection Auto-Dry Desiccator**  
"DeADLL.UV", 33Lit



**Vacuum Desiccator**  
"DeVL", 12Lit



Articles

Cat. No

Description

2-Year Warranty



(1) Short-model

(2) Tall-model

Upgrade ; With Digital Thermo-Hygrometer



(3) With Digital Thermo-Hygrometer



(4) With Urea Tray ; for Desiccant

**DAIHAN® 33Lit General Purpose PMMA Desiccator, Short- & Tall-form** Upgrade  
 With Digital Thermo-Hygrometer · ABS Frame · Shelf · Desiccant Tray, 범용 PMMA 데시케이터

- Made in Korea
- Excellent Viewing & Air Tight Structure ; Heavy-duty ABS(Acrylonitrile Butadiene Styrene Resin) Frame, 3mm Clear PMMA(Polymethyl Methacrylate Resin) Body Panel & 5mm Shelf, and Rubber Sealing Door.
- \* Adjustable Shelf Quantity & Height / Distance.
- \* 2kg Shelf Load.      \* 30mm Shelf Moving Interval.
- \* Including 1 Urea Tray 190×273mm for Silica-gel / Desiccant.

(1) 33Lit Short-model "DeLL", 1-PMMA Shelf, with Digi. Thermo-Hygrometer

※ 운임 착불 <L2>

**DH.DeLL**      General Desiccator, Short-model, 33Lit, "DeLL"  
 Outer : 450×330×h350mm, Inner : 400×305×h270mm

Ea.	Price, ₩

(2) 33Lit Tall-model "DeLH", 3-PMMA Shelf, with Digi. Thermo-Hygrometer

**DH.DeLH**      General Desiccator, Tall-model, 33Lit, "DeLH"  
 Outer : 330×330×h480mm, Inner : 270×305×h400mm

Ea.	Price, ₩

**DH.DeSH003**      Spare, PMMA Shelf, for Short-model, 397×302×thick 5mm, Load 2kg  
**DH.DeSH002**      , for Tall-model , 267×302×thick 4mm, Load 2kg  
**DH.DeDHY**      , (3) Digital Thermo-Hygrometer, DC, 1~99℃, 11%~99%RH  
**DH.DeSH006**      , (4) Urea Tray for Desiccant 273×190mm

2-Year Warranty



(1) Bench-model

(2) Floor-model

With Digital Thermo-Hygrometer & Gas Valve

**DAIHAN® 164 · 207 · 320 · 640 · 604Lit Gas Exchangeable PMMA Desiccator, 1 & 4 Room**  
 With Digital Thermo-Hygrometer · Gas Valve · Stainless-steel Shelf, 가스치환 데시케이터

- Made in Korea
- Excellent Viewing & Air Tight Structure ; Heavy-duty Aluminium Frame, 5mm Clear PMMA(Polymethyl Methacrylate Resin) Body Panel, Stainless-steel Shelf, Caster, and Rubber Sealing Door.
- \* Ideal for Sample Storage / precise Instrument / Semiconductive Articles / Low Humidity, Characterization Test, etc.
- \* 20kg Shelf Load.      \* 50mm Shelf Moving Interval.
- \* Adjustable Shelf Quantity & Height / Distance.
- \* With Gas Valve / Gas Exchange / Stainless-steel Shelf / 1 Urea Tray 345×440mm for Desiccant / 1Digital Thermo-Hygrometer(But 4ea in 604Lit 4Room)

(1) 164Lit Bench Model "DeBG2", 1Room - 1Door, 2Shelf, 2Gas Valve

※ 운임 착불 <L2>

**DH.DeBG2**      164Lit Desiccator, Gas-Ex. "DeBG2", 1Room, 2Shelf  
 Outer : 574×535×h765mm, Inner : 490×460×h730mm  
 Including 2 Shelf, 1 Silica gel Tray, and 2 Gas Valve

Ea.	Price, ₩

(2) 207Lit Floor Model "DeBG1K", 1Room - 2Door, 4Shelf, 2Gas Valve, Caster

**DH.DeBG1K**      207Lit Desiccator, Gas-Ex. "DeBG1K", 1Room - 2Door, 4Shelf  
 Outer : 574×535×h1070mm, Inner : 490×460×h920mm  
 Including 4 Shelf, 1 Silica gel Tray, and 2 Gas Valve

Ea.	Price, ₩

(3) 320Lit Model "DeSS", 1Room - 2Door, 4Shelf, 2Gas Valve, Caster

**DH.DeSS**      320Lit Desiccator, Gas-Ex. "DeSS", 1Room - 2Door  
 Outer : 574×535×h1770mm, Inner : 490×460×h1420mm  
 Including 4 Shelf, 1 Silica gel Tray, and 2 Gas Valve

Ea.	Price, ₩

(4) 640Lit Model "DeWS", 1Room - 4Door, 8Shelf, 2Gas Valve, Caster

**DH.DeWS**      640Lit Desiccator, Gas-Ex. "DeWS", 1Room - 4Door  
 Outer : 1164×535×h1770mm, Inner : 980×460×h1420mm  
 Including 8 Shelf, 2 Silica gel Tray, and 2 Gas Valve

Ea.	Price, ₩

(5) 604Lit Model "DeW4S", 4Room - 4Door, 8Shelf, 8Gas Valve, Caster

**DH.DeW4S**      604Lit Desiccator, Gas-Ex. "DeW4S", 4Room - 4Door  
 Outer : 1164×535×h1770mm, Inner : 490×460×h670mm, 4Room  
 Including 8 Shelf, 4 Silica gel Tray, and 8 Gas Valve

Ea.	Price, ₩

2-Year Warranty



(3) 320Lit  
1Room-2Door

(4) 640Lit 1Room-4Door  
(5) 604Lit 4Room-4Door

With Digital Thermo-Hygrometer & Gas Valve



(6) With Digital Thermo-Hygrometer



(7) With Urea Tray ; for Desiccant

Spare Accessory

**DH.DeSH001**      Spare, Stainless-steel Shelf, 20kg Load, 490×460mm  
**DH.DeDHY**      , (6) Digital Thermo-Hygrometer, DC, 1~99℃, 11%~99%RH  
**DH.DeSH005**      , (7) Urea Tray for Desiccant 440×345mm

Ea.	Price, ₩

**2-Year Warranty**



(1) Short Auto-Dry



(2) Tall Auto-Dry



(3) With Dehumidifier Unit



(4) With Digital Thermo-Hygrometer

## DAIHAN® 33Lit Auto-Dry PMMA Desiccator, Short- & Tall-form, Dehumidifier ~25%RH With ABS Frame · Digital Thermo-Hygrometer, 자동 습도 조절 데시케이터

- **Made in Korea**
- **Excellent Viewing & Air Tight Structure ; Heavy-duty ABS(Acrylonitrile Butadiene Styrene Resin) Frame, 3mm Clear PMMA(Polymethyl Methacrylate Resin) Body Panel & 5mm Shelf, and Rubber Sealing Door.**
- \* Adjustable Shelf Quantity & Height / Distance.
- \* 2kg Shelf Load. \* 30mm Shelf Moving Interval.
- \* Built-In Analog Dehumidifier Unit ; Repeated Regeneration of Solid Silica Gel Improves Dehumidification Capacity.
- \* Power Supply : 220V, 50/60Hz, 3Watts.

※ **운임 착불 <L2>**

### (1) 33Lit Auto-Dry Short-model "DeADLL", 1-PMMA Shelf

**DH.DeADLL** Auto-Dry Desiccator, Short-model, 33Lit, "DeADLL"  
Outer : 450×330×h350mm, Inner : 400×305×h270mm

Ea.	Price, ₩

### (2) 33Lit Auto-Dry Tall-model "DeADLH", 3-PMMA Shelf

**DH.DeADLH** Auto-Dry Desiccator, Tall-model, 33Lit, "DeADLH"  
Outer : 330×330×h480mm, Inner : 270×305×h400mm

Ea.	Price, ₩

**DH.DeSH003** Spare, PMMA Shelf, for Short-model, 2kg Load, 397×302×thick 5mm  
**DH.DeSH002** , for Tall-model , 2kg Load, 267×302×thick 4mm

**DH.DeHY** , (3) Analog Dehumidifier Unit ; ~25%RH ; User Installable!  
**DH.DeDHY** , (4) Digital Thermo-Hygrometer, DC, 1~99℃, 11%~99%RH

**2-Year Warranty**



(2) 320Lit  
1Room-2Door



(3) 604Lit  
1Room-4Door

**Analog Control, Digital Display**



With Analog Controlled Dehumidification Unit



(7) With Digital Thermo-Hygrometer

## DAIHAN® 207 · 320 · 604Lit Auto-Dry PMMA Desiccator, Analog or Digital-Control, 15~60%RH With Dehumidifier · Digital °C · %RH Meter · Al-Frame · 1Room, 자동 제습 데시케이터

- **Made in Korea**
- **Excellent Auto-Dry / Viewing / Air Tight Structure ; Built-In Dehumidifier 15%~60%RH in Digital Control, Heavy-duty Aluminium Frame, 5mm Clear PMMA Body Panel, Stainless-steel Shelf 20kg Load, Caster, and Rubber Sealing Door.**
- \* Analog or Digital Controlled Dehumidifier Unit ; Repeated Regeneration of Solid Silica Gel Improves Dehumidification Capacity. \* Included 1-Dehumidifier.
- \* Ideal for Sample Storage / precise Instrument / Semiconductive Articles / Low Humidity, Characterization Test, etc.
- \* 20kg Shelf Load. \* Including 4 Stainless-steel Shelf.
- \* Adjustable Shelf Quantity & Height / Distance.
- \* Display : Digital Thermo-Hygrometer ; 1~99℃, 11%~99%RH
- \* Power Supply : 220V, 50/60Hz

### 1) 3 Step(12~60%RH) Analog Controlled, 207 · 320 · 604 Lit

\* 3 Step Analog Control : 1 Step. 12~20%RH, 2 Step. 20~40%RH, 3 Step. 40~60%RH

※ **운임 착불 <L2>**

**DH.DeADABG1K** (1) 207Lit Analog Auto-Dry Desiccator "DeADABG1K"  
1Room - 1Door, 4Shelf  
Outer : 574×535×h1070mm, Inner : 490×460×h920mm

Ea.	Price, ₩

**DH.DeADASS** (2) 320Lit Analog Auto-Dry Desiccator "DeADASS"  
1Room - 2Door, 4Shelf  
Outer : 574×535×h1770mm, Inner : 490×460×h1420mm

**DH.DeADAWS** (3) 604Lit Analog Auto-Dry Desiccator "DeADAWS"  
1Room - 4Door, 8Shelf  
Outer : 1154×535×h1770mm, Inner : 980×460×h1420mm

### 2) 15~60%RH Digital Hygro-Controlled, 207 · 320 · 604 Lit

**DH.DeADDBG1K** (4) 207Lit Digi. Auto-Dry Desiccator "DeADDBG1K"  
1Room - 1Door, 4Shelf  
Outer : 574×535×h1070mm, Inner : 490×460×h920mm

Ea.	Price, ₩

**DH.DeADDSS** (5) 320Lit Digi. Auto-Dry Desiccator "DeADDSS"  
1Room - 2Door, 4Shelf  
Outer : 574×535×h1770mm, Inner : 490×460×h1420m

**DH.DeADDWS** (6) 604Lit Digi. Auto-Dry Desiccator "DeADDWS"  
1Room - 4Door, 8Shelf  
Outer : 1154×535×h1770mm, Inner : 980×460×h1420mm

**DH.DeSH001** Spare, Stainless-steel Shelf, 20kg Load, 490×460mm  
**DH.DeDHY** , (7) Digital Thermo-Hygrometer, DC, 1~99℃, 11%~99%RH  
for (1) "DeADABG1K", (2) "DeADASS", (3) "DeADAWS"

**2-Year Warranty**



(6) 604 Lit, 1Room-4Door

**Fully Digital Control**



With Digital Controlled Dehumidification Unit



With Digital Thermo Hygrometer

Articles	Cat. No	Description
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**2-Year Warranty**



(1) Short Auto-Dry



(2) Tall Auto-Dry

**DAIHAN® 33Lit UV Protected Auto-Dry PMMA Desiccator, Short- & Tall-model, ~25%RH**  
 With Dehumidifier · Digital Thermo-Hygrometer · ABS Frame, UV차단 자동 습도 조절 데시케이터

- Made in Korea    ■ Made of Transparent Amber PMMA Panel ; 520nm (or Less) UV Protection.
- Good Viewing / Excellent Auto-Dry / Air Tight Structure ; Heavy-duty ABS Frame, 3mm Transparent Amber PMMA Body Panel & 5mm Shelf, ~25% Dehumidifier Unit, and Rubber Sealing Door.
- \* Analog Controlled Dehumidifier Unit ; Repeated Regeneration of Solid Silica Gel Improves Dehumidification Capacity.
- \* Adjustable Shelf Quantity & Height / Distance.    \* 2kg Shelf Load.
- \* Power Supply : 220V, 50/60Hz, 3Watts.

※ 운임 착불 <L2>

**(1) 33Lit Short-model "DeADLL.UV", UV Protect Auto-Dry, 1-PMMA Shelf**

**DH.DeADLL.UV** UV Protect Auto-Dry Desiccator "DeADLL.UV", Short-model, 33Lit  
 Outer : 450×330×h350mm, Inner : 400×305×h270mm

Ea.	Price, ₩

**(2) 33Lit Tall-model "DeADLH.UV", UV Protect Auto-Dry, 3-PMMA Shelf**

**DH.DeADLH.UV** UV Protect Auto-Dry Desiccator "DeADLH.UV", Tall-model, 33Lit  
 Outer : 330×330×h480mm, Inner : 270×305×h400mm

Ea.	Price, ₩

**DH.DeSH003** Spare, PMMA Shelf, for Short-model, 2kg Load, 397×302×thick 5mm  
**DH.DeSH002** , for Tall-model , 2kg Load, 267×302×thick 4mm

**DH.DeDeY** , (3) Analog Dehumidifier Unit ; ~25%RH  
**DH.DeDHY** , (4) Digital Thermo-Hygrometer, DC, 1~99℃, 11%~99%RH



(3) With Dehumidifier Unit



(4) With Digital Thermo-Hygrometer

**2-Year Warranty**



(1) 7Lit



(2) 9.2Lit

1) Upper Door Model

**DAIHAN® 7~48Lit Vacuum PMMA Desiccator, Clear, with Press-Gauge Upgrade**  
 With Digital Thermo-Hygrometer, Approx - 1 Torr / 133Pa, 진공 데시케이터

- Made in Korea    ■ Permissible Degree of Vacuum ; Approx -1 Torr / 133Pa
- With 20 ~ 30mm Clear PMMA Panel, 2 Vacuum Valve, 1 Vacuum Gauge, Silicon & Rubber Sealing Door, Shelf, and 1 Desiccant Tray(270×144×h16mm for 7 / 9.2 / 12 Lit)
- \* Two Vacuum Valve φ8mm    \* 1 Pressure Dial Gauge ; 0Bar ~ 1Bar±1.5%

※ 운임 착불 <L2>

**1) 7 & 9.2Lit Upper Door, Short-form, 20mm PMMA Panel**

**DH.DeVS** (1) 7Lit Vacu. Desiccator "DeVS", 1Shelf, 1Tray  
 Outer : 300×300×h170mm, Inner : 260×260×h100mm

Ea.	Price, ₩

**DH.DeVM** (2) 9.2Lit Vacu. Desiccator "DeVM", 1Shelf, 1Tray  
 Outer : 260×260×h360mm, Inner : 210×210×h210mm

**2) 12 · 30 · 48Lit Front Door, Tall-form, 20~30mm PMMA Panel**

**DH.DeVL** (3) 12Lit Vacu. Desiccator "DeVL", 20mm Panel, 2Shelf, 1Tray  
 Outer : 310×225×h430mm, Inner : 260×180×h260mm

Ea.	Price, ₩

**DH.DeVLH** (4) 30Lit Vacu. Desiccator "DeVLH", 25mm Panel, 4Shelf, 1Tray(190×273×h18mm)  
 Outer : 320×335×h600mm, Inner : 260×280×h410mm

**DH.DeVW** (5) 48Lit Vacu. Desiccator "DeVW", 30mm Panel, 3Shelf, 1Tray(313×230×h20mm)  
 Outer : 470×365×h600mm, Inner : 400×300×h400mm



(3) 12Lit



(4) 30Lit

2) Front Door Model



(5) 48Lit

2) Front Door Model



Option : Gas Flowmeter



Spare Digital Thermo-Hygrometer

**Optional Gas Flowmeter, for Gas-Ex. Desiccator, 10ℓ/min**

**DH.DeFL** Gas Flowmeter, with Bracket & 2 Fitting for φ6mm Tube, 70×L170mm

Ea.	Price, ₩

**Spare Digital Thermo-Hygrometer**

**DH.DeDHY** Built in Digital Thermo-Hygrometer, DC, 1~99℃, 11~99%RH

Ea.	Price, ₩

**Desiccant Silica-gel, Indicating-type Blue & Non-Indicating-type White, 실리카겔 건조제**

**(1) Indicating-type, Blue**

- \* When Absorption of Moisture the Color Changing Blue → White
- \* Reusable : Revivified to Blue By the Drying of the White Silicagel

**DJ.7510.1405** Silica Gel, Blue, CP, 5~10mesh, 500g/PP Bottle  
**DJ.7510.1400** , 1kg/PP Bottle

Pk.	Price, ₩	Cs.	Price, ₩
500g		20pk	
1kg		10pk	

**(2) Non-Indicating-type, White**

**S19.320** Silica Gel, Non-woven Fabric, 70×85mm, 20g  
**DJ.7513.1405** , White, CP, 5~10mesh, 500g/PE Bottle New

Pk.	Price, ₩	Cs.	Price, ₩
10ea		100pk	
500g			



(1) Indicating-type, Blue



(2) Non-Indicating-type, White

DAIHAN® 105 & 155 Lit Multi-purpose Drying Chamber, I.Gravity-air "DryG" & II.Forced-air "DryF", 50°C~90°C, ±1.0°C **NEW**  
 With Digital PID Control, FND-display, Viewing Window, and 2 Stainless steel Wire Shelves, 자연대류식 & 강제순환식 다용도 드라이링 챔버



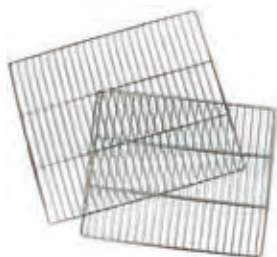
2-Year Warranty

I. 105Lit. Gravity-Air type



2-Year Warranty

II. 155Lit. Forced-Air Type, with Casters



Stainless-steel Wire Shelf (Included)

- Made in Korea
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Optimized Air Flow by Forced-air & Gravity-air Convection Mechanism
- \* Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
- \* Digital PID Control System Implementing Superior Temperature Accuracy
- \* Seven-segment FND-display
- \* Compact Design
- \* Ambient to Max 90°C Temp Range, Accuracy of ± 1.0°C
- \* Corrosion Resistant 304 Stainless-steel Chamber and Shelves
- \* Perfect Heat Insulation made by Heat-Resistant Rubber Packing and Air Flow Layer
- \* Over Temp & Over Current Protection and Sensor Error Detection
- \* 2 Stainless-steel Shelves are Included

Specifications & Ordering information

<L1>

Spec.	Model	I. Gravity-Air type		II. Forced-Air type	
		(1) DryG-105	(2) DryG-155	(3) DryF-105	(4) DryF-155
Air Flow Fan		None		Yes	
Capacity		105 Lit	155 Lit	105 Lit	155 Lit
Temp	Range & Sensor	50°C~90°C, PT100 Sensor			
	Accu. & Unifom.	Accuracy ±1.0°C at 90°C, Uniformity ±1.5°C at 90°C			
Heater Power		1,100 W	1,200 W	1,150 W	1,300 W
Heat-up Time		30min up to 90°C			
Timer & Alarm		99hr 59min (with Delay / Continuous Run.), Error Status & Timer-end			
Display		Seven segments FND			
Controller		Digital PID Controller			
Resolution		Control : ±1.0°C, Display : ±1.0°C			
Shelf (Included)		2 Stainless-steel Wire Shelf			
Load per Shelf		16 kg			
Movable Caster		none	4ea	none	4ea
Permitted Total Load		32 kg (16 kg×2 Shelves)			
Ventilation		1 of Ventilation Hole (id. φ 40mm) with Stainless Steel Cap			
Safety Circuit		Over Temp, and Over Current Protector, Sensor Error Detector			
Material	Internal	Stainless-steel (#304)			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Dimension (w×d×h)	Interior (mm)	485×410×535	550×470×600	485×410×535	550×470×600
	Exterior (mm)	653×739×783	718×804×848	653×739×783	718×804×848
Net Weight		60 kg	71 kg	62 kg	74 kg
Packing Size (w×d×h)(mm)		753×818×934	818×878×995	753×818×934	818×878×995
Gross Weight		75 kg	89 kg	77 kg	92 kg
Power Consumption		1.1 Kw	1.2 Kw	1.2 Kw	1.3 Kw
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz			
Cat. No.	230V	DH.DryG0105	DH.DryG0155	DH.DryF0105	DH.DryF0155
	120V	DH.DryG1105	DH.DryG1155	DH.DryF1105	DH.DryF1155
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Spare Stainless-steel Wire Shelves

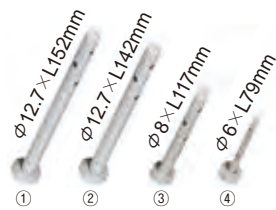
DH.WOF11105 Wire Shelf, for 105 Lit, "OFS105", w455×d375mm  
 DH.WOF11155 , for 155 Lit, "OFS155", w520×d449mm

Ea.	Price, ₩

**DAIHAN® 39 places Labware Dryer "DryL-39"**, with Heating Blower & Air Filter, 220V, 1.5kW, Max 50°C & 75°C **NEW**  
 Ideal for Glassware · Plasticware · Small Articles, Timer Set 1~60min, Continuous 8 hours, 실험기구 건열풍 건조기



**2-Year Warranty**



Assorted Drying Pegs (Included)

- **Made in Korea**      ■ **PL(Product Liability) Insurance**
- **with Rating 1 MERV Fabric Pre-Filter : 3-10µm less than 20%**
- \* 1 Pre-Filter Installed, 2 spare Pre-Filters Included
- \* High Efficiency & Long Life!
- \* Made of Galvanized Steel with Powder Coating ; All Body
- \* Free-Standing ; Space Saving Design.
- \* a Peg has Several Blown Air Holes.
- \* Blown-over Tray on the Underside of Dryer.

**Specifications & Ordering Information**

<L1>

Spec.	Model	"DryL-39"
Operation mode & Filtered Heating Air Temp		Glass Mode : for Glassware Drying, max. 75°C ±5°C Plastic Mode : for Plasticware Drying, max. 50°C ±5°C Ambientmode : Ambient Temp
Timer		Countdown Timer Interval Setting : 1~60min Useful Drying Time : 15~20min Continuous Run
39 Drying Pegs		① 7 Pegs - φ12.7×L152mm ② 6 Pegs - φ12.7×L142mm ③ 13 Pegs - φ8×L117mm ④ 13 Pegs - φ6×L79mm Stainless-steel
Safety		Over Heat Protection
Ambient Temp & Humidity		5°C~45°C, up to 90% RH
Dimension & Weight		w550×d350×h515mm, 17kg
Heater power		1,500W
Power Consumption		Max. 1,600W
Electric Reqts		230V, 50/60Hz
Cat. No.		<b>DH.Dry8013</b>
Price, Each. ₩		

※ 운임 착불

<b>Gel Documentation Systems, Portable</b> .....	P. 55
<b>, Unified</b> .....	P. 56
<b>UV Transilluminators</b> .....	P. 57
<b>Accessories, UV-intensity Meter</b> .....	P. 57
<b>, UV-indicator</b> .....	P. 57

**Gel Documentation System**

Portable Gel Documentation System  
"WGD-20"  
1.45M Pixel CCD Camera

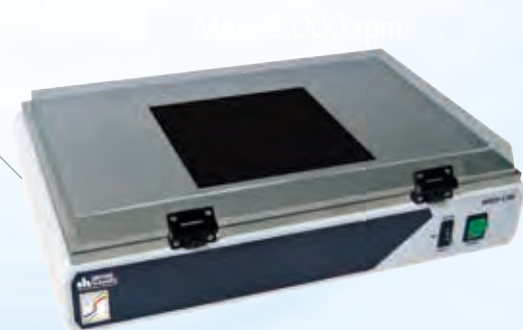


**Gel Imaging System**

Built-in Transilluminator  
"MaXidoc™ G2"  
1.45M Pixel CCD

**UV Transilluminator**

Standard Case-type  
"WUV-L50"



Max. 3,000 mm

**DAIHAN® Portable Gel Documentation System “WGD-20”, 1.45M Pixel CCD Camera, with Certi. & Traceability**  
 With Digital CCD Camera & Optical Lens, Portable Darkroom Hood, Capture Software, USB Interface  
 젤이미지 분석 시스템, 고성능/최저가, 디지털 CCD 카메라(145만 화소) 장착



- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- The Most Cost-Effective System
- High Precise and Large Caliber Optical Lens with Zoom, Focus and Iris Control are Used

- \* DNA, RNA gel Imaging Capture and Analysis
- \* Digital CCD Camera (Resolution 1.45 Million pixel) with Portable Darkroom is Offered
- \* 1360 × 1024, 10-bit CCD, Available for 8-bit Gray Level Image Capturing
- \* Power Consumption : Supplied USB(USB 3.0)
- \* Very Compact Portable Darkroom System Enables the Existing Transilluminators in the Lab to be used together with this system. High Flexibility in use is Offered
- \* USB 3.0 Interface is available, through which Real-Time Images are transferred directly to PC
- \* Software : Easy and Fast Capture of Gel Image
- \* TotalLab™ Software : Fully Automatic, Single Button Press Complete Image Analysis in Interesting Area(Optional)

**2-Year Warranty**

**Portable Gel Documentation System “WGD-20”**

※ Computer System Requirements

- Intel Chipset, USB 2.0 Support Mainboard
- Over Pentium 4 Processor
- Over 256MB Main Memory
- Over 60MB Space of HDD for Installation and Running
- Window XP, Vista & 7, 8, 10



**MaXidoc™ Imaging Capture S/W**

: Included S/W, Real-Time Image Viewing/Capture, Manipulate and Save Images



(1) UV Transilluminator(Optional)

**Specifications & Ordering information**

<L1>

Spec.		Model	“WGD-20”	“WGD-20S” Included DNA Analysis S/W
CCD Module	CCD & Pixel Size		1/2" CCD, 4.65 × 4.65 um	
	Max. Resolution		1,360 × 1,024	
	Lens Mount & Optical Size		C mount, 7.6 × 6.2 mm	
	Connect to PC & Power		USB 3.0, Supplied USB	
Zoom Lens	Iris & Focal Length		F1.0 - Close, 8~48mm	
	Ambient Temp.		-10°C to +50°C	
Overall	Dimension & Weight		300 × 260 × h470 mm, 9 kg	
	Software Capability		Windows XP, Vista & 7, 8, 10	
Included Standard S/W			Included MaXidoc™ Gel Imaging Capture Software	
Included DNA Analysis S/W			none	TotalLab™ CLIQS
Packing Size & Weight			400 × 350 × h510 mm, 18 kg	
Cat. No.			DH.WGD00020	DH.WGD00024
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

**Optional Transilluminator & S/W**

- |   |                            |
|---|----------------------------|
| <p><b>DH.WUV00020</b> (1) Transilluminator, “WUV-L20”, 20×20cm Filter<br/>312nm, 15W UV Lamp × 6ea</p> <p><b>DH.WUV00050</b> (1) Transilluminator, “WUV-L50”, 20×20cm Filter<br/>365nm + 312nm, 15W UV Lamp × 6ea</p> <p><b>DH.WUV00120</b> (1) Transilluminator, “WUV-M20”, 20×20cm Filter<br/>312nm, 8W UV Lamp × 6ea</p> <p><b>DH.WGD00100</b> (2) DNA/Protein Analysis S/W, <b>TotalLab™ CLIQS</b></p> <p><b>DH.WGD00121</b> (3) <b>CLIQS 1D Pro</b></p> <p><b>DH.WGD00200</b> LapTop Computer, <b>WGD-Laptop</b>, for WGD Gel Doc.System</p> | <p><b>Ea. Price, ₩</b></p> |
|---|----------------------------|

**DNA Analysis S/W**

(2) TotalLab™ CLIQS

- Automatic and Manual Lane Detection, Background Subtraction
- Fully Automatic Band Detection, Molecular Size / pI Calibration
- Quantity Calibration, Normalization

(3) CLIQS 1D Pro (additional function)

- Match Band Data Patterns across Large Groups of Lanes
- Choice of Algorithms to Generate Dendrograms : NeighborJoining, UPGMA, Complete Linkage, Single Linkage, Ward Library, Queries Function



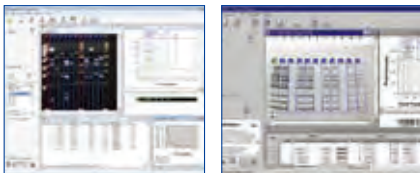
One Stop Analysis

DAIHAN® Gel Imaging System “MaXidoc™ G2”, 1.45M Pixel, 4.65 μm, F1.0, 8~48mm Manual Zoom  
 With Capture Software, High-quality CCD Camera & Optical Lens, Auto Control System, USB Connection, Certi. & Traceability  
 이미지 분석 시스템, 자외선 발산기 일체형, 디지털 CCD 카메라(145만 화소) 장착



2-Year Warranty

“MaXidoc™ G2” Gel Imaging System, Built-in Transilluminator



MaXidoc™ Imaging Capture S/W

: Included S/W, Real-Time Image Viewing/Capture, Manipulate and Save Images



- Sturdy Camera Bracket
- F1.0, 8~48mm Manual Len
- Enterfilter

- Made in Korea
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.
- Complete System with 1.45M Pixel Digital CCD Camera, Safety Darkroom Hood and Built-in Transilluminator(UV Type or LED Type)
- High-quality F1.0 Optical Lens with 8~48mm Manual Zoom, Focus and Iris Control is Used.
- Included MaXidoc™ Gel Imaging Capture Software.

- \* Ideal for Various Applications of DNA, RNA Protein Gel Imaging Capture and Analysis.
- \* Unified Darkroom System with Built-in Sliding Transilluminator offers very safety and convenience in use
- \* Built-in Single Wave Transilluminator(UV Type) : 312nm, 6×8W UV Lamps and ETI White LED×3Ea
- \* Built-in Single Wave Transilluminator(LED Type) : 470nm, Blue LED×324Ea, 35W
- \* 1360×1024 CCD Resolution \* Can be Used with Tablet PC(Optional)
- \* USB 2.0 Interface is Available through Which Real-time Images are Transferred Directly to PC

Specifications & Ordering information

<L1>

Spec.	Model	“MaXidoc™ G2”	
Transilluminator Type		Standard UV Type	Blue LED Type
Camera Resolution		1.45 Mega Pixel CCD	
Pixel Size		4.65 μm	
Lens		F1.0 Fixed, 8~48mm Manual Zoom	
Transilluminator		312nm, 6×8W UV Lamps, Filter Size : 210×260mm	470nm, Blue LED×324Ea, Filter Size : 210×260mm
Software		Included MaXidoc™ Gel Imaging Capture Software	
White Light		3×LED Lamps	
PC Interface(OS)		Window7 or Window10 64bit	
Camera Interface		USB 2.0	
Dimension & Weight		360×380×h700 mm, 24kg	
Packing Size (mm) & Gross Weight (kg)		430×490×h830 mm, 28kg	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz	
Cat. No.	230V	DH.WGD00300	DH.WGD00310
	120V	DH.WGD00301	DH.WGD00311
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

Optional Software/Transilluminator/White Light Table

DH.WGD00100	(1) DNA/Protein Analysis S/W, TotalLab™ CLIQS
DH.WGD00121	(2) , CLIQS 1D Pro
DH.WUV01110	UV Lamp, 365nm, 8W
DH.WUV02110	, 312nm, 8W

Ea. Price, ₩

DNA Analysis S/W

(1) TotalLab™ CLIQS

- Automatic and Manual Lane Detection, Background Subtraction
- Fully Automatic Band Detection, Molecular Size / pI Calibration
- Quantity Calibration, Normalization

(2) CLIQS 1D Pro (additional function)

- Match Band Data Patterns across Large Groups of Lanes
- Choice of Algorithms to Generate Dendrograms : NeighborJoining, UPGMA, Complete Linkage, Single Linkage, Ward Library, Queries Function

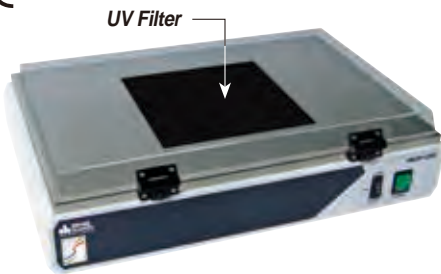


One Stop Analysis



DAIHAN® UV Transilluminator "WUV", Standard- & Compact Case-type, 48W/90W  
 With Hinged UV-Blocking Safety Cover, Robust, Versatile, 312 · 365 · 312 + 365 nm, with Certi. & Traceability  
 자외선 발산기, 기본형 핵산(DNA, RNA), 스탠다드-컴팩트-케이스 타입

CE



2-Year Warranty

(1) Standard Case "WUV-L" Model

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Low Cost, Robust, Versatile, Affordable & Gentle Excitation
- Hinged UV-Blocking Safety Cover Protects User from UV Radiation
- Stainless-steel Frame and Robust Steel Housing

- \* Ideal for Standard Gel Documentation and Preparative Work, especially for Detection of very small amount of DNA & RNA Stained by EtBr
- \* Long-Life Electronic (Low Heat, no Flickering)    \* High (100%) / Low (75%) Intensity Switch

Specifications & Ordering information

<L1>

Spec.	Model	(1) Standard Case-type			(2) Compact Case-type	
		"WUV-L10" Single 365 nm	"WUV-L20" Single 312 nm	"WUV-L50" Dual 365+312 nm	"WUV-M10" Single 365 nm	"WUV-M20" Single 312 nm
Filter Size		200 × 200 mm				
Wave Length		Single 365 nm	Single 312 nm	Dual 365+312 nm	Single 365 nm	Single 312 nm
UV Lamps		15W × 6ea (90W)			8W × 6ea (48W)	
Power Consumption		95 W			52 W	
Dimension		495 × 330 × h95 mm			350 × 275 × h95 mm	
Weight		10 kg			8 kg	
Packing Size (mm) & Gross Weight (kg)		520 × 380 × h220 mm, 12 kg			380 × 320 × h220 mm, 10 kg	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz				

Cat. No.	230V	DH.WUV00010	DH.WUV00020	DH.WUV00050	DH.WUV00110	DH.WUV00120
	120V	DH.WUV02010	DH.WUV02020	DH.WUV02050	DH.WUV02010	DH.WUV02020
Price, Each. ₩						

\* Other Specifications are available upon Customer's Request.

CE



2-Year Warranty

(2) Compact Case "WUV-M" Model

Spare UV Lamp

- DH.WUV01010 UV Lamp, 365nm, 15W, for "WUV-L10/L50", "UVL365"
- DH.WUV01020 , 312nm, 15W, for "WUV-L20/L50", "UVL312"
- DH.WUV01110 , 365nm, 8W, for "WUV-M10", "UVM365"
- DH.WUV02110 , 312nm, 8W, for "WUV-M20", "UVM312"

Ea. Price, ₩



Custom® Digital UV-intensity Meter, 1999~19,990 μW/cm²  
 With UV Sensor, 70 × 25 × h131mm, 335g, 디지털 자외선 강도계

- \* Range : 1,999~19,990 μW/cm²    \* Accuracy : ±(4%rdg+2 dgt)
- \* Wavelength Sensitivity Characteristics : 290-390 nm    \* Sampling : 2.5time/sec
- \* Size : Body 70 × 25 × 131mm, Sensor 46 × 27 × 168mm, Cord Length 700mm
- \* Measurement of UVA, UVB is Possible
- \* Separated Sensor enables you to Measure from Further.

<L2>

SL.Met3972 "UV340" Meter, Digital, UV-intensity

Ea. Price, ₩



Jayu® UV-indicator Dot Label, φ 18mm, 자외선 감시 라벨

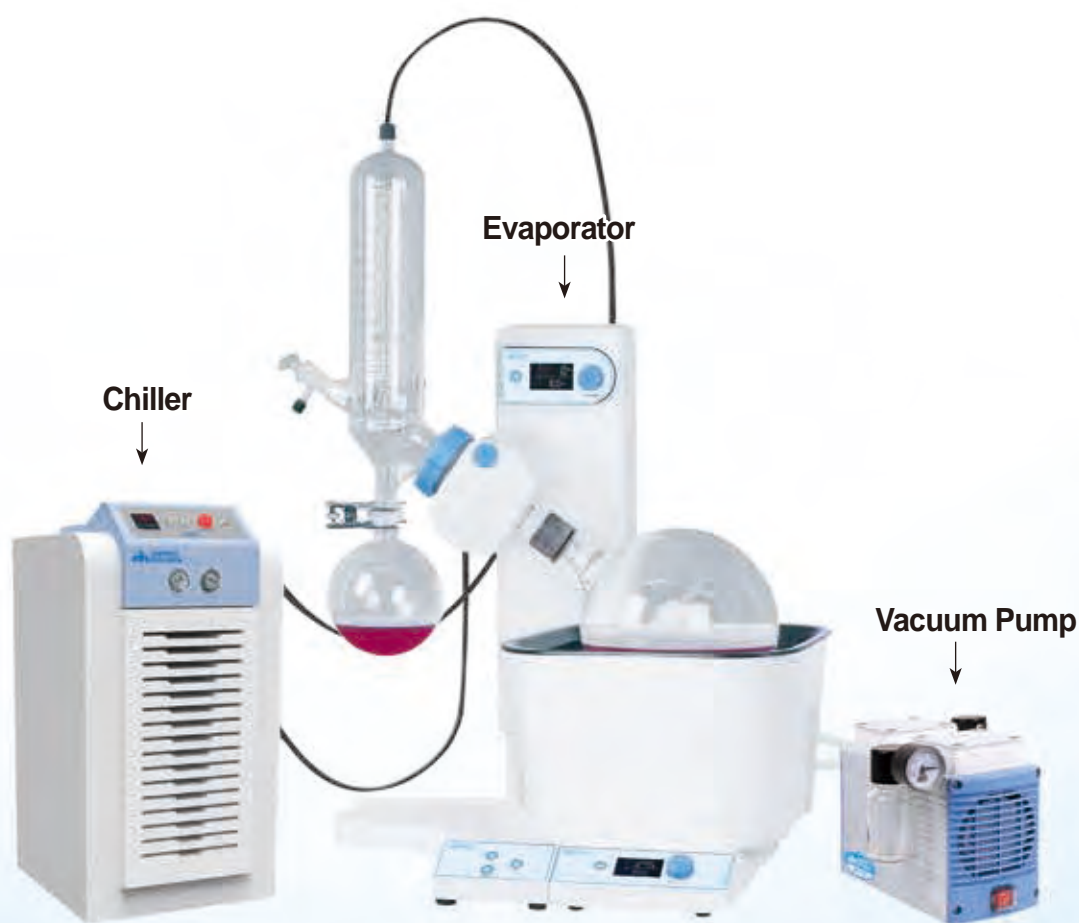
- \* Original Color → Discoloration : UV-L / Clear(White) → Reddish Brown, UV-M / Clear(White) → Pink,  
 UV-H / Clear(White) → Orange, UV-S / Clear(White) → Red
- \* Labels Change Color by UV and keep Remaining Once Discolored.
- \* The Back has Special Adhesives so that it can Stick Easily.    \* Quantity : 1pack (100sheet)

<L2>

- SL.Lab9043 "UV.S" Label UV-indicator Dot, for UV-lamp
- SL.Lab9044 "UV.L" , Solar

Pk.	Price, ₩
100ea	
100ea	

<b>Coolers, Circulator Cooler “Chiller”</b> .....	P. 65
, Refrigerated / Heating Bath Circulators	··· P. 36~37, 66
<b>Rotary Vacuum Evaporators, 0.1~5 Lit</b> .....	P. 59~61
, 0.5~2 Lit	····· P. 62
, 5 · 10 · 20 Lit	····· P. 63
, 50 Lit	····· P. 64
<b>Vacuum Aspirators</b> .....	P. 66
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► Installation Figure : 5Lit Evaporator with Chiller & Vacuum Pump

# Premium EVAPORATOR Wide-range Capacity "Eva-05"

## DAIHAN® Premium Rotary Vacuum Evaporator For 0.1~5Lit Evaporating Flasks

Programmable  
Electric  
Automatic Lifting

Up to 195mm,  
Digital Display Height

Adjustable  
Immersion Angle  
&  
Automatic  
Reverse Rotation

### 1,600cm<sup>2</sup> Vertical High Cooling Capacity

- 1,600cm<sup>2</sup> Cooling Surface Condenser.
- Superior Evaporation Capacity : Max. 23ml/min(Water)

### 10-Step Adjustable Wide Immersion Angle

Adjustable 10-Step Wide Immersion Angle 1° ~ 50°



### Automatic Reverse Rotation

- Rotated Direction of Evaporating Flask Can be Reversed (Clockwise or Counter-Clockwise)
- Programmable Rotation Cycle Time for User Convenience



### Interchangeable Detachable Heating Bath

- Separable Bath Structure from Digital Controller for User Safety and Convenience



Possible to Use a Heating Bath by Itself!

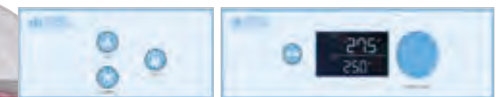
### Programmable Electric Automatic Lifting



- Adjustable Electric Automatic Lifting : Up to 195mm to Accommodate Changing Flask
- Programmable Prefer Height
- Digital Display the Height for User Convenience
- Automatic Raising when Power Error for Sample Protection

### Individual Digital Control

- Evaporator and Heating Bath have the Individual Digital Control System for User Convenience.
- Heating Bath can be used in Other Applications Widely.



### 0.1~5.0 Lit Wide Range Capacity

- Designed for Using 0.1~5Lit Evaporating Flasks Up to 200 °C
- 2.5Lit Oil Bath(Included) : for 0.1~2Lit Flasks
- 5.5Lit Oil Bath(Optional) : for 2~5Lit Flasks



up to 2Lit



up to 5Lit

DAIHAN® 0.1~5Lit Premium Rotary Vacuum Evaporator “Eva-05”, Vertical-type, 195mm Auto Lifting With 2.5Lit Heating Bath(Option 5.5Lit Bath), Up to 200°C, Cooling Surface 1,600cm², 10-Step Immersion Angle 1°~50° and Automatic Reverse Rotation Function ; Clockwise or Counter Clockwise, 10~300rpm, 프리미엄 회전 진공 농축기



2-Year Warranty

Premium Rotary Evaporator, with 2.5Lit Oil Bath(Included), for 0.1~2Lit Evaporating Flask

Rotary Evaporator is for Research Facilities of Biotechnological, Chemical, Cosmetic, Medical Industries, Pharmaceutical, and Universities. For Crystallization, Distillation, Powder Drying, Product Concentration, and Separation of one or more Solvents.

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- Patented Jog Dial & Touch Button Control System
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Designed for Using 0.1~5Lit Evaporating Flasks, up to 200°C
  - 2.5Lit Oil Bath(Included) : for 0.1~2Lit Evaporating Flasks.
  - 5.5Lit Oil Bath(Optional) : for 2~5Lit Evaporating Flasks.
- Automatic Reverse Rotation Function : Clockwise or Counter Clockwise
- Adjustable Wide Immersion Angle : 10 Steps, 1° ~ 50°
- No Grease is needed for the Flask Connection of Vapor Duct due to Teflon & Viton O-ring Gasket.

- \* Evaporator and Heating Bath have the individual Digital Control System.
- \* Separable Bath Structure from Digital Controller for User Safety and Convenience
- \* Embedded Heating Elements for Bath
- \* High Cooling Surface Condenser : 1,600cm², Max. 23mL/min
- \* Adjustable Electric Automatic Lifting : Up to 195mm to Accommodate Changing Flask
  - Programmable Prefer Height
  - Digital Display the Height for User Convenience
  - Automatic Raising when Power Error for Sample Protection
- \* Rotary Evaporators can be Set with Circulation Aspirator Pump (P.66)



2-Year Warranty

Optional Oil Bath 5.5Lit

Premium Rotary Evaporator, with 5.5Lit Oil Bath(Optional), for 2~5Lit Evaporating Flask

Specifications & Ordering information

<L1>

Spec.	Model	“Eva-05” 0.1~5Lit Flask
Condenser Type		Vertical-type
Flask	Evaporating	0.1~5Lit, Included 1Lit Evaporating Flask
	Receiving	0.1~3Lit, Included 1Lit Receiving Flask
Controller & Display		PID Controller, Digital Display
Rotation Speed		10~300rpm
Evaporating Capability		Max. 23mL/min
Cooling Surface		1,600cm²
Heating Bath Capacity & Temp. Range	Standard (Included)	2.5Lit Oil Bath, Up to 200°C, for 0.1~2Lit Evaporating Flasks External(215×205×h179mm), Internal(197×187×h117mm)
	Optional	5.5Lit Oil Bath, Up to 200°C, for Max 5Lit Evaporating Flasks External(324×269×h209mm), Internal(305×250×h118mm)
Lifting Type		Adjustable Automatic Electric Lifting : up to 195mm Programmable Prefer Height and Digital Display Height
Immersion Angle		Adjustable 10-step Angle 1° ~ 50°
Vacuum Seal		Double Sealing Rings made of Teflon + Viton Material
Power Consumption		Rotation Motor(100W), Heating Bath : Included 2.5Lit Bath(1,200W/220V, 1,100W/110V), Optional 5.5Lit Bath(1,500W/220V, 1,100W/110V)
Material	Housing	Aluminum Die Casting
	Heating Bath	External(PBT), Internal(Ceramic-coated SS304)
Dimension & Net Weight		510×438×h519(Max. 714)mm, 16kg
Electrical Reqts.		AC220V, 50/60Hz or AC110V, 60Hz
Cat. No.	230V	DH.Eva0005
	120V	DH.Eva0005.1
Price, Set. ₩		

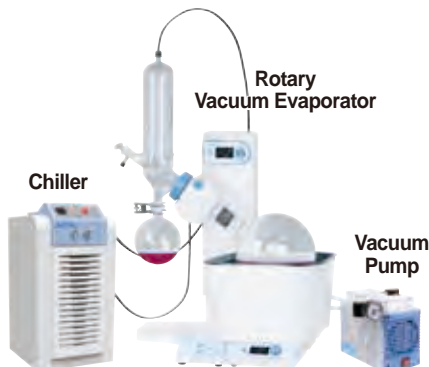
※ 운임 착불

Optional Heating Bath

Ea. Price, ₩

DH.Bat005.1 Oil Bath Only, without Digital Controller, 5.5Lit, Up to 200°C, External(324×269×h209mm, PBT), Internal(305×250×h118mm, Ceramic-coated SS304)

▶ Optional Vacuum Pumps for Evaporators : See the “Pumps” Section

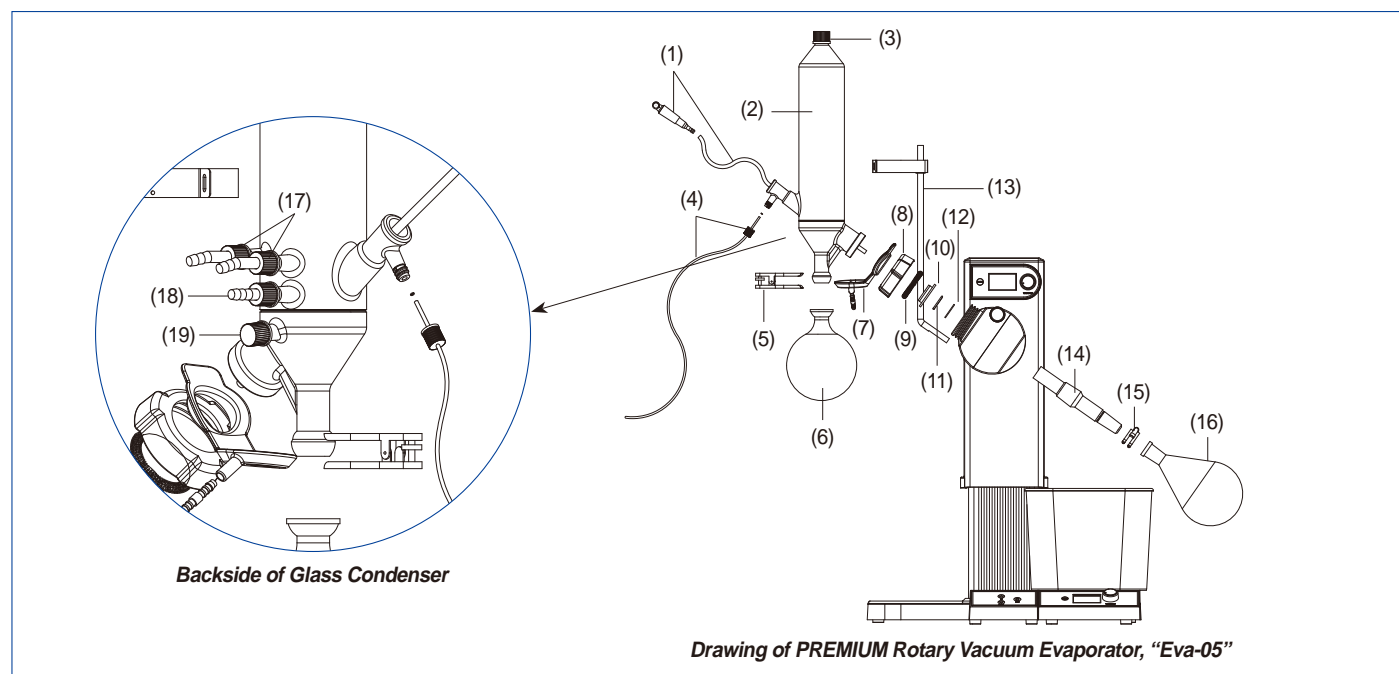


▶ Figure : One of Rotary Vacuum Evaporator Systematization

<Continued On Next Page>

<Continued From...DAIHAN® 0.1~5Lit Premium Rotary Vacuum Evaporator>

### The Detail of Spare Parts for 0.1~5Lit Premium Rotary Vacuum Evaporator "Eva-05"



#### Ordering Information

<L6>

Seq. No.	Cat. No.	Description	Ea.	Price, ₩
(1)	DH.EvaA10050	Glass Feeding Valve Stopcock, ₩19/38, with od. $\phi 7 \times L350$ mm PTFE Tube		
(2)	DH.Con2059	<b>Glass Condenser</b> , $\phi 85 \times 471$ mm, with (3) PBT GL25 Cap & (4) PP GL10 Opentop Cap and PTFE Tube		
(3)	DU.2924013	Spare PBT Closetop Cap, GL25, Red, for Closure		
(4)	DH.EvaA30010	Spare PP Opentop Cap, GL10, Hole $\phi 3.2$ mm, with od. $\phi 3 \times L400$ mm PTFE Tube		
(5)	SL.CI7454	Stainless-steel Ball Joint Clamp, w/Screw, ₩35		
(6)	SL.Fla2081	DURAN glass Receiving Flask, 250ml, ₩35/20(Optional)		
	SL.Fla2082	DURAN glass Receiving Flask, 500ml, ₩35/20(Optional)		
	SL.Fla2083	DURAN glass Receiving Flask, 1,000ml, ₩35/20(Included)		
	SL.Fla2084	DURAN glass Receiving Flask, 2,000ml, ₩35/20(Optional)		
(7)	DH.EvaA30020	Condensate Silicone Trap for Glass Condenser		
(8)	DH.EvaA30030	Condenser Locknut, PBT, Hole $\phi 51$ mm		
(9)	DH.EvaA30040	Circlip Spring Ring, Stainless-steel 304, od. $\phi 7.8$ mm( $\phi 1.0$ mm thickness)		
(10)	DH.EvaA30050	Vacuum Seal, Rubber & PTFE, od. $\phi 50$ mm, id. $\phi 25.4$ mm		
(11)	DH.EvaA30060	Viton O-ring, Black, id. $\phi 26.5$ mm		
(12)	DH.EvaA30070	Teflon O-ring, White, id. $\phi 26.5$ mm		
(13)	DH.EvaA30080	Fixing Stand Rod for Glass Condenser, Stainless-steel 304		
(14)	DH.EvaA10024	<b>Glass Vapor Duct</b> , ₩24/40, L185mm		
	DH.EvaA10029	<b>Glass Vapor Duct</b> , ₩29/32, L185mm		
(15)	WI.0140024	Suferfix Screwcap-type Joint Clamp, ₩24, Gray		
	WI.0140029	Suferfix Screwcap-type Joint Clamp, ₩29, Blue		
(16)	SL.Fla2061	DURAN glass Evaporating Flask, 100ml, ₩24/40(Optional)		
	SL.Fla2063	DURAN glass Evaporating Flask, 250ml, ₩24/40(Optional)		
	SL.Fla2065	DURAN glass Evaporating Flask, 500ml, ₩24/40(Optional)		
	SL.Fla2067	DURAN glass Evaporating Flask, 1,000ml, ₩24/40(Included)		
	SL.Fla2069	DURAN glass Evaporating Flask, 2,000ml, ₩24/40(Optional)		
	SL.Fla2070	DURAN glass Evaporating Flask, 3,000ml, ₩24/40(Optional)		
	SL.Fla2186	DURAN glass Evaporating Flask, 5,000ml, ₩24/40(Optional)		
(17)	SM.28623060	Red PBT Screwcapped PP & PTFE Hose Connector Kit, Bent, GL14		
(18)	SM.28623000	Red PBT Screwcapped PP & PTFE Hose Connector Kit, Straight, GL14		
(19)	DU.2924008	PBT Closetop Cap, GL14, Red, for Closure		

DAIHAN® 0.5~2Lit Digital Rotary Evaporator “WEV-1001V” & “WEV-1001L”, Vertical & Diagonal-type  
 With 6.5 Lit Digital Bath 100°C, PID Control & Lifting Table, 10~180rpm, Cooling Surface 1,300 cm<sup>2</sup>, Certi. & Traceability, 회전식 증발 농축기



2-Year Warranty

(1) Vertical-type “WEV-1001V”



2-Year Warranty

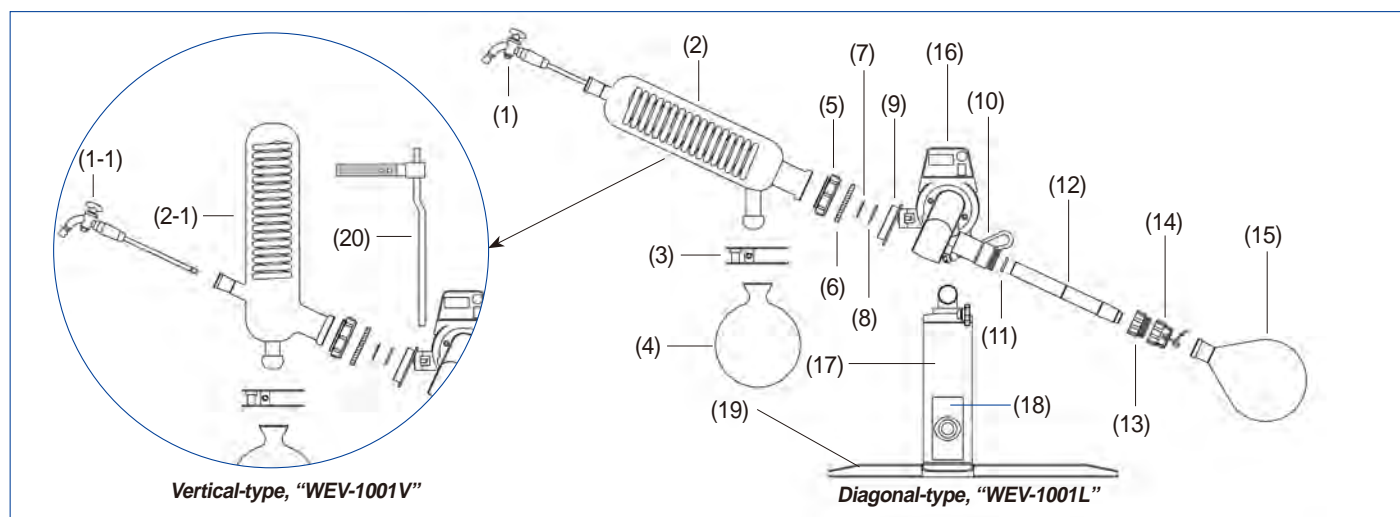
(2) Diagonal-type “WEV-1001L”

- Cooling Surface 1,300cm<sup>2</sup>
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Distilling (Mixed) Solvent, Condensation Solution and Suspension, Concentrating Liquid, Re-crystallization Dry Powder and Granulate, Synthesizing Chemical, Soxhlet Extraction, etc.
- Included Two Evaporating Flasks : 1×0.5Lit & 1×1Lit
- The Temperature adopts PID Control, which ensures accurate Temperature Control.
- Speed Display, Operate Visually and easily
- \* Digital Speed Display, Digital Temp. Display on Water Bath.
- \* Double Sealing with PTFE and Vinton Materials to ensure High Vacuum Degree.
- \* The Air Extraction Nozzle of Condenser is set down, and it is Safer after Connection with Vacuum Pipe
- \* Building Block Design is Easily to be Extended.
- \* Easy Operation of Lifting, Move up and Down Smoothly and Easy to Lock.
- \* Dedicated Electric Machinery, Worm and Gear Drive Steadily.
- \* The Separation of Bath and the Mainframe makes Configure Flexible.
- \* These Rotary Evaporators could Set with Circulation Aspirator Pump (P.66)

Specifications & Ordering information

<L1>

Spec.	Model	(1) “WEV-1001V” Vertical-type	(2) “WEV-1001L” Diagonal-type
Condenser Type		Vertical-type	Diagonal-type
Bottle Capacity	Evaporating	Included 2 × Evaporating Flasks : 1 × 0.5Lit & 1 × 1Lit, Available 100-/250-ml, 2Lit Evaporating Flask(Optional)	
	Receiving	Included 1Lit Flask 1ea	
Rotary Speed		10~180 rpm	
Evaporating Capability		20ml/min	
Cooling Surface		1,300 cm <sup>2</sup>	
Achievable Vacuum		399.9Pa(below 3mmHg)	
Bath Capacity		6.5 Lit / φ254 × 130 mm	
Temp. Range		0°C~100°C	
Functional of Lifting Table		Weight Balancing Gliding Elevating & Manual Lifting	
Elevating Stroke		100~250 mm	
Vacuum Sealing		Double Sealing Rings made of Teflon + Vinton Materials	
Power Consumption		Motor : 25 W, Heater : 1.05kW	
Controller & Display		PID Controller, Digital display	
Dimension & Net Weight		560 × 320 × h660mm / 9.5 kg	750 × 320 × h540mm / 9.5 kg
Electrical Reqts.		AC220V, 50/60Hz or AC110V, 60Hz	
Cat. No.		DH.WEV01001V	DH.WEV01001L
Price, Each. ₩			



※ NOTE! ▶ Optional Vacuum Pumps for Evaporators : See the “Pumps” Section.  
 ▶ For the Information of Spare Parts : Visit [www.DAIHAN-Sci.com](http://www.DAIHAN-Sci.com) Shopping Mall or Contact Us Directly.

DAIHAN® 5 · 10 · 20 Lit Digital Rotary Evaporator “WEV-1005” · “WEV-1010” · “WEV-1020”, Large Capacity  
With Digital Controlled Stainless-steel Bath 99℃, Electric Lift Bath, Vertical-type, 20~130 rpm, 대용량 회전식 증발 농축기



(1) “WEV-1005” 5Lit

2-Year Warranty

- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Distilling (Mixed) Solvent, Condensation Solution and Suspension, Concentrating Liquid, Re-crystallization Dry Powder and Granulate, Synthesizing Chemical, Soxhlet Extraction, etc.
- Teflon (PTFE) and Fluorine Rubber Dual Rotating Seal, Patented Technology to ensure High Vacuum.
- A Vacuum Switching Valve : without Affecting the System Vacuum, Distillation of the Situation and the Solution can be Continuously Collected.
- Electric Lift - Stainless-steel Water Bath, Easy to Use.
- Cooling Surface : “WEV-1005” total 2,700cm<sup>2</sup>  
“WEV-1010” total 6,500cm<sup>2</sup>  
“WEV-1020” total 11,500cm<sup>2</sup>

\* Accurate and Reliable Temp. Control due to the Introduction of Advanced Frequency Control System

\* PTFE Discharge Valve, Corrosion Resistance, Pollution-free.

\* Rotary Evaporators can be Set with Circulation Aspirator Pump (P.66)

### Specifications & Ordering information

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Spec.	Model	(1) “WEV-1005” Evaporating Flask 5Lit	(2) “WEV-1010” Evaporating Flask 10Lit	(3) “WEV-1020” Evaporating Flask 20Lit
Evaporating Flask		5 Lit, Flange Opening $\phi$ 50 mm	10 Lit, Flange Opening $\phi$ 95 mm	20 Lit, Flange Opening $\phi$ 125 mm
Receiving Flask		3 Lit	5 Lit	10 Lit
Condenser		Water Refrigerating	Standing, Main & Auxiliary Cooling and Highly Efficient 3 Circulating Cold Trap	
Temp. Range		0℃ ~ 99℃		
Rotary Speed		20 ~ 140 rpm	20 ~ 130 rpm	
Evaporating Capability		Water : 2 Lit/h, Alcohol : 4 Lit/h	Water : 3.2 Lit/h, Alcohol : 6.5 Lit/h	Water : 5 Lit/h, Alcohol : 11 Lit/h
Cooling Surface		Condenser 2,700 cm <sup>2</sup>	Main Condenser 4,500 cm <sup>2</sup> Auxiliary Condenser 2,000 cm <sup>2</sup>	Main Condenser 8,000 cm <sup>2</sup> Auxiliary Condenser 3,500 cm <sup>2</sup>
Achievable Vacuum		399.9Pa(below 3mmHg)		
Functional of Lifting Table		Electric		
Elevating Stroke		0 ~ 150 mm	0 ~ 160 mm	0 ~ 190 mm
Vacuum Sealing		PTFE and Fluorine Rubber Dual Rotating Seal		
Motor		250 W, Phase DC Induction Motor		
Heating Boiler		Stainless-steel Water Bath		
Display		Digital display		
Power Consumption		2.3 kW	1Phase 220V, 3.8kW or 3Phase 380V, 6.3kW	
Dimension (mm)		835 × 400 × h1090	990 × 550 × h1655	1195 × 635 × h2070
Electrical Reqts.		1Phase 220V, 50/60Hz	1Phase 220V, 50/60Hz or 3Phase 380V, 50Hz	
Cat. No.	230V	DH.WEV01005	DH.WEV01010	DH.WEV01020
	3Phase	-	DH.WEV01011	DH.WEV01021
Price, Each. ₩				

※ 운임 착불



(2) “WEV-1010” 10Lit & (3) “WEV-1020” 20Lit

2-Year Warranty

※ NOTE! ▶ Optional Vacuum Pumps for Evaporators : See the “Pumps” Section.

▶ For the Information of Spare Parts : Visit [www.DAIHAN-Sci.com](http://www.DAIHAN-Sci.com) Shopping Mall or Contact Us Directly.

**DAIHAN® 50 Lit Digital Rotary Evaporator “WEV-1050”, Large Capacity, Vertical Type, with Electric & Manual Lift Bath**  
 With Digital Controlled Stainless-steel Bath 99°C, 20~110 rpm, 19 Lit/h, Cooling Surface 14,500 cm<sup>2</sup>, 대용량 회전식 증발 농축기



2-Year Warranty

- **Cooling Surface : 14,500cm<sup>2</sup>**
- **with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System**
- **Ideal for Distilling (Mixed) Solvent, Condensation Solution and Suspension, Concentrating Liquid, Re-crystallization Dry Powder and Granulate, Synthesizing Chemical, Soxhlet Extraction, etc.**
- **Large Capacity & Diameter Rotary Evaporator Flask - 50Lit**
- **Teflon (PTFE) and Fluorine Rubber Dual Rotating Seal, Patented Technology to Ensure High Vacuum.**
- **Stainless-steel Water Bath - Electric & Manual Lift, Easy to Use**
- \* The Introduction of Foreign Advanced Frequency Control System, Temperature Control System, \* Accurate and Reliable.
- \* A Vacuum Switching Valve, without Affecting the System Vacuum Distillation of the Situation and the \* Solution can be Continuously Collected.
- \* Water Bath Electric Lift and Manual Lift Support, Easy to Use.
- \* PTFE Discharge Valve, Corrosion Resistance, Pollution-free.
- \* This Rotary Evaporator could Set with Circulation Aspirator Pump (P.66)

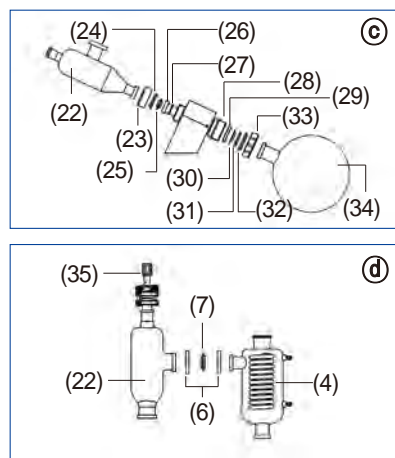
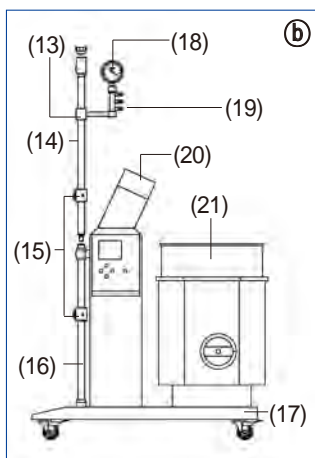
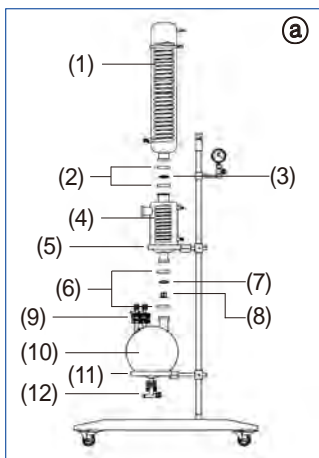
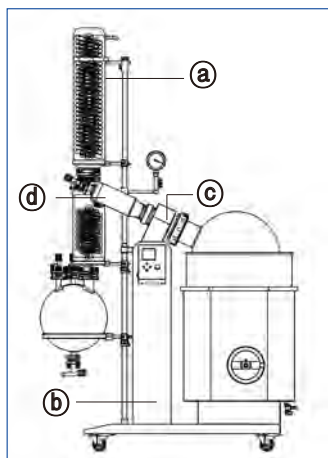
Specifications & Ordering information

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Spec.	Model	“WEV-1050”
Evaporating Flask		50 Lit, Flange Opening φ 125 mm
Receiving Flask		20 Lit
Condenser		Standing, Main & Auxiliary Cooling and Highly Efficient 3 Circulating Cold Trap
Temp. Range & Rotary Speed		0°C~99°C, 20~110 rpm
Evaporating Capability		Water : 9 Lit/h, Alcohol : 19 Lit/h
Cooling Surface		Main Condenser 9,500 cm <sup>2</sup> Auxiliary Condenser 5,000 cm <sup>2</sup>
Achievable Vacuum		399.9Pa(below 3mmHg)
Functional of Lifting Table & Stroke		Electric & Manual, 0~180 mm
Vacuum Sealing		PTFE and Fluorine Rubber Dual Rotating Seal
Motor		250 W, Phase DC Induction Motor
Heating Boiler		Stainless-steel Water Bath
Display		Digital display
Dimension (mm)		1345 × 770 × h2140
Electrical Reqts.		6.3 kW, 3Phase 380V, 50Hz
Cat. No.		DH.WEV01050
Price, Each. ₩		

※ 운임 착불

The Details of Spare Parts for 50 Lit Digital Rotary Evaporator “WEV-1050”



※ **NOTE!** ▶ **Optional Vacuum Pumps for Evaporators : See the “Pumps” Section.**  
 ▶ **For the Information of Spare Parts : Visit [www.DAIHAN-Sci.com](http://www.DAIHAN-Sci.com) Shopping Mall or Contact Us Directly.**



DAIHAN® -20°C +40°C Chiller "MaXircu™ Chi", Heavy-duty Refrigerated External Circulator, Fill-9 · 27 · 55 Lit  
Ideal for Evaporator/Reactor &c. Cooling Line, Lift 8 · 27m, Cooling Capa 0.87 · 1.3 · 3.0 kW, 다용도 냉각 써클레이터/질러

-20°C +40°C



2-Year Warranty

Max. Filling Volume 27Lit, "MaXircu™ Chi-30"



Assembly-type Safety Connection Ports/Pipe  
for Fluid In/Out-let ;  
ISO RC 1/2" Thread, Located On Rear-Upper Panel

- Made in Korea
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate,
- Delivery-information, and Traceable Data Base System
- Ideal for Wide-range Reaction System and Evaporator. ■ Max. Lift 8 · 27m
- Assembly-type Safety Connection Ports/Pipe for Fluid In/Out-let : ISO RC 1/2" Thread, Stainless-steel.
- Digital PID Control System Implementing Superior Temperature Accuracy.
- Embedded External Nozzle Part for the Prevention of Nozzle Damaged.
- Stainless-steel Internal Bath for Prevention of Corrosion.
- \* Wide-range Filling Volume 9Lit · 27Lit · 55Lit
- \* Effective Cooling Capacity
- \* Useful for 1~50Lit Various Reactors and Evaporators. \* Emergency Stop Button for safety.
- \* High Quality Circulation Pump : 20-/30-Lit/min Max Flow Rate and 1.0-/3.3-bar Max. Pressure.
- \* Built in Pump Pressure Gauge and Compressor Pressure Gauge.

## Specifications &amp; Ordering information

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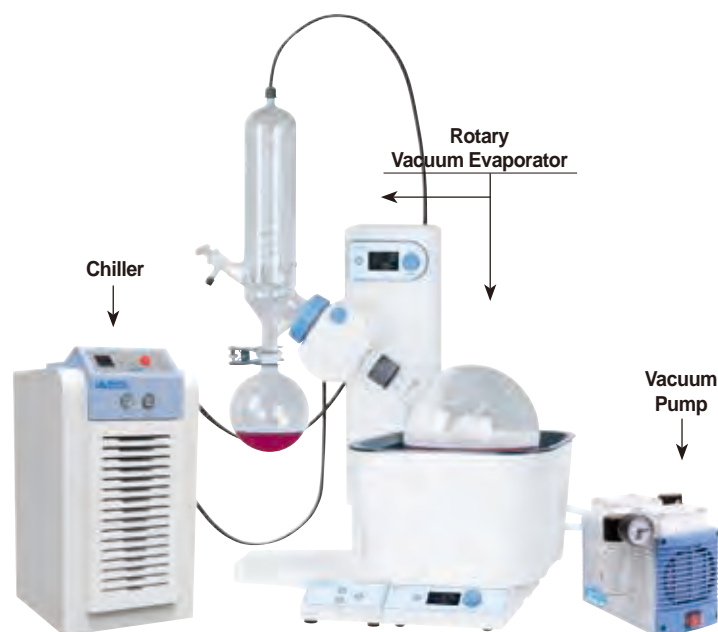
Spec.	Model	"MaXircu™ Chi-20" Filling Volume Max. Capa. 17Lit	"MaXircu™ Chi-30" Filling Volume Max. Capa. 29Lit	"MaXircu™ Chi-50" Filling Volume Max. Capa. 47Lit
Temp. Range & Stability		-20°C+40°C-Range, ±0.2°C(at 15°C)-Stability		
Cool-Fluid. Filling Volume		9 Lit max	27 Lit max	55 Lit max
Useful for 1~50Lit Evaporators, etc.		for 1~20Lit Evaporator	for 10~30Lit Evaporator	for 20~50Lit Evaporator
Refrigerator Capacity(HP)		1/2 HP	1 HP	2 HP
Lid & Top Opening Dia.		φ100 mm		
Fluid In/Out-let Connector		ISO RC 1/2" (English System AG 1/2") Thread, Stainless-steel		
Pump Power, Lift Height, m	Max. Flow Rate	20 Lit/min	30 Lit/min	
	Max. Pressure & Lift	1.0 bar Max. Lift : 8m	3.3 bar Max. Lift : 27m	
Cooling Capacity	at +20°C	1.7 kW	2.8 kW	6.5 kW
	at 0°C	0.87 kW	1.3 kW	3.0 kW
	at -20°C	0.32 kW	0.45 kW	1.2 kW
External Dimension		450×650×h900 mm	580×800×h1260 mm	670×900×h1450 mm
Material		Internal : Stainless-steel, External : Powder Coated steel		
Electrical Reqts.		1 Phase 230V, 50 / 60 Hz		3Phase 380V
Cat. No.	60Hz	DH.Chi0020	DH.Chi0030	DH.Chi0050
	50Hz	DH.Chi0025	DH.Chi0035	DH.Chi0055
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

- ※ See page 38 for the Cooling/Heating Transfer Fluids & Circulation Hoses ;
- ▶ Therminol D12® -85°C +230°C Cooling/Heating Transfer Fluids
- ▶ SYN THERM 22L® -5°C +320°C Heating Transfer Fluids
- ▶ Insulated External Circulating Tubings

※ Note : Cooling Transfer Fluid Should be  
an Antifreezing Solution



▶ Figure : One of the Applications in the Large Volume Evaporator Line.

DAIHAN® -35°C + 150°C Digital Precise Refrigerated/Heating Bath Circulator “MaXircu™ CL”, ±0.2°C  
 With Flat Lid, Digital Fuzzy Control, CFC-free, Certi. & Traceability, 8 · 12 · 22 · 30 Lit, Flow 25Lit/min, Lift 4m  
 Ideal for Cooling/Heating Line of Facility, External/Internal Circulating Connect - od.12 & id.10mm, 정밀 냉동/가열 배스 겸용 써클레이터

- Made in Korea
- CE Certified
- PL(Product Liability) Insurance

CE -35°C + 150°C



2-Year Warranty

※ See page 38 for the Cooling/Heating Transfer Fluids & Circulation Hoses ;

▶ Therminol D12® -85°C + 230°C Cooling/Heating Transfer Fluids

▶ SYN THERM 22L® -5°C + 320°C Heating Transfer Fluid

▶ Insulated External Circulating Tubings

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

※ See the “Bath Circulators” Section for the Details

Specifications & Ordering information

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Spec.	Model	MaXircu™ CL-8	MaXircu™ CL-12	MaXircu™ CL-22	MaXircu™ CL-30
		Max. Capa. 8 Lit	Max. Capa. 12 Lit	Max. Capa. 22 Lit	Max. Capa. 30 Lit
Temp. Range & Accuracy	-35°C+150°C, ±0.1°C				
Temp. Resolution	0.1°C -Display, 0.1°C -Control				
Temp. Uniformity & Probe	±0.2°C at -20°C, PT100				
Pump	Max Flow Rate : 25Lit/min(Controlled 5 Steps Flow Rate Speed), Max Pressure : 7.5 psi, Max Lift : 4m				
Bath Volume	8 Lit	12 Lit	22 Lit	30 Lit	
Heating Power	1 kW	1.5 kW	2 kW	2.2 kW	
Refrigerator	1/2HP	1/2HP	7/8HP	1HP	
Cooling Capacity	at +20°C	500 W	530 W	860 W	1030 W
	at 0°C	340 W	370 W	620 W	760 W
	at -20°C	200 W	210 W	400 W	500 W
Refrigerant	CFC -Free(R-404A) Refrigeration System				
Total Power Consumption	1.7 kW	2.2 kW	3 kW	3.3 kW	
Compressor Control	Intelligent Control of Refrigerator for preventing Compressor Overload				
External Circulation Nozzle	id.10.5 / od.12.5mm(For Inner Circulat. : to Connect directly the in-/outlet Nozzles)				
Timer & Alarm	99hr 59min (Delay & Continuous run), Error status & Timer-end				
Display	Digital LCD with Back-Light Function				
Controller	Digital Fuzzy Controller with Jog-Dial Knob (Turn+Push)				
Safety Circuit	Over-Temp./-Current protection, Sensor Error Detection, Leakage Breaker				
Material	Stainless-steel (#304)-Internal, Powder Coated steel-External, 40 mm Thickness Urethane Foaming - Insulation				
Lid & Drain Valve	included Stainless-steel Flat Lid, Ball Valve, Optional Dome Lid				
Dimension (w×d×h)	Effective Space (mm)	175×153×150	230×181×150	290×220×200	330×290×200
	Internal (mm)	175×320×150	230×350×150	290×390×200	330×460×200
	External (mm)	400×523×807	400×523×807	483×563×850	494×633×906
Packing Size (mm) & Gross Weight (kg)		530×630×985	530×630×985	615×670×1025	630×740×1075
		50 kg	55 kg	65 kg	78 kg
Electrical Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz				
Cat. No.	230V	DH.WCL00408	DH.WCL00412	DH.WCL00422	DH.WCL00430
	120V	DH.WCL00508	DH.WCL00512	DH.WCL00522	DH.WCL00530
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

DAIHAN® 0.098MPa/20mbar Multiuse Water Jet Vacuum Pump/Aspirator “WEV”  
 Ideal for Evaporator 1~50 Lit, with Multi-Taps & Safety Valve, Bath 15 & 57 Lit, 다용도 아스피레이터, 워터젯 진공펌프

- Resist Corrosion by Acid, Alkali and Solvents.
- Cyclically use Water
- Good for Evaporation, Distillation, Drying, Sublimation, Filtration &c.
- Fluorine Rubber Sealing
- Need to Replace the Water in the Flume Regularly

\* Can be used alone or in Parallel - WEV-003S(2 Tap & 2-Display), WEV-0095(5 Tap)  
 \* Stainless-steel(#304) Body, Copper Ejector, Tee Junction, PP Back Valve, SS Impeller(WEV-0095)

<L1>



2-Year Warranty

(1) “WEV-003S” ideal for 1-5Lit Evaporator

2-Year Warranty

(2) “WEV-0095” ideal for 5-50Lit Evaporator

Spec.	Model	(1) “WEV-003S”	(2) “WEV-0095”
		Ideal for 1~5Lit Evaporator	Ideal for 5~50Lit Evaporator
Max. Vacuum Degree	0.098 Mpa (20mbar)		
Pump Power & Water Bath Volume	180W & 15Lit		550W & 57Lit
Flow Rate	80 Lit/min		100 Lit/min
Taps & Air Sucking Amount	2 Tap, 10 Lit/min (1 Tap)		5 Tap, 10 Lit/min (1 Tap)
External Circulation Nozzle	id. 5/od. 10mm (id. 8/od.11 mm Silicone tube Connected for Circulation)		
Safety Function	Safety Check Valve		
Drain Pipe	id. 15mm		id. 24.3mm
Material of Water Tank / Body	PP / PP		PE / Stainless-steel(#304)
Dimension & Net Weight	385 × 280 × h420 mm / 11 kg		450 × 350 × h820 mm / 36 kg
Electric Reqts.	230V, 50/60Hz		
Cat. No.	DH.WEV0003S		DH.WEV0095
Price, Each. ₩			

# DAIHAN Scientific

## Freeze Dry System “UniFreez™ FD”

### Lab Scale Bench-top Freeze Dryer

Patented Jog-Dial & Touch-Button Control

Compact-size  
Lab Scale Bench-top Type

Fastest Freezing Time

#### Ergonomic & Compact Body

Lab Scale, Bench-top Type Model  
Compact size for all laboratory table  
Ergonomic Design

Company	DAIHAN	Competitor
Chamber Capacity	8 Lit	8 Lit
External Dimension (mm)	w400×d530×h415	w500×d646×h976

#### Various Accessories

Used with 12-port Manifold or Various Dry Chambers, Various Size Flasks, Flask Top, Vacuum Valve, Vacuum Pumps, Table Cart etc.



12-port T-type Manifold



Various Dry Chambers

#### Intuitive User Interface

- Patented Jog-Dial Controller(Turn and Push)
- Capacitive Touch Button for user convenience
- Precise control by microprocessor
- Digital Back-Light LCD



#### Fastest Freezing System

DAIHAN Freezing System realizes Quick Freezing and Quick Defrosting Function

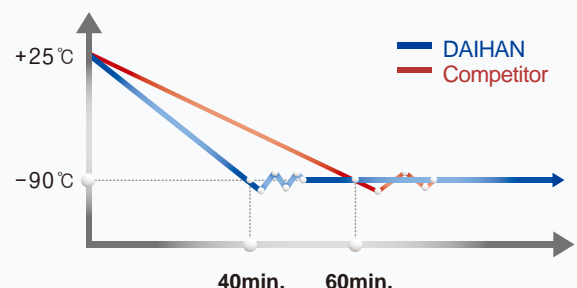


Freezing System

#### Others

- High Sublimation Rate : 3 & 6 Lit / day
- Manual Defrost Function : Hot Gas Defrost Function for quick next cycle turn-around
- Automatic or Manual Process Control
- Control Temp, Vacuum and Timer at Automatic Mode
- LED Indication Light On in case of suitable Temp and Vacuum
- Can be Used with Various Accessories

#### Freezing speed comparison with Competing Product



**DAIHAN® 3 & 6Lit/day Freeze Dry System “UniFreez™ FD”**, Lab Scale Benchtop-type, Automatic & Manual Process, -90°C  
 Various Optional Acc.; T-type Manifold, Round · Square · Stoppering-Acrylic Dry Chamber & Stainless steel Dry Chamber  
 실험실용 동결 건조기, 콤팩트 바디 사이즈, 터치식 컨트롤러



**I. 3Lit/day Freeze Dryer “FD-8”**  
 ※ The Figure; Installation of Optional 12-port T-type Manifold and 12 Vacuum Handle Valve



**II. 6Lit/day Freeze Dryer “FD-16”**  
 ※ The Figure; Installation of Optional Large Volume Square-type Acrylic Dry Chamber



(1) 12-port T-type Manifold with 12 Silicon Stoppers



(2)-a⑥ 8-port Round-type Acrylic Dry Chamber (2)-c④ 3-stage SS Shelf

- **Made in Korea**
- **Patented Jog-Dial & Touch Button Control System**
- **with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System**
- **PL(Product Liability) Insurance**
- **Ideal for a Wide Range of Applications Including Pharmaceutical, Biological, Food Industry, Petrochemical and Semiconductor Industry, etc.**
- **Various Optional Accessories;**
  - (1) T-type Manifold with 12-port
  - (2) Round-type Acrylic Dry Chamber with 8-port
  - (3) Large Volume Square-type Acrylic Dry Chamber
  - (4) Heated Stoppering Acrylic Dry Chamber
  - (5) Stainless-steel Dry Chamber with 12-port
- \* Ergonomic Design and Compact Body Size
- \* Allows Automatic or Manual Process Control
- \* Rapid Integrated Hot Gas Defrost Function for Quick Next Cycle Turn-around
- \* LCD Indicates Temp and Vacuum
- \* LED Indication Light On in Case of Suitable Temp and Vacuum
- \* Can be Controlled Temp and Timer at Automatic Mode
- \* Homogeneous Temp Distribution across all Shelves in Dry Chamber

**Specifications & Ordering information**

<L1>

Spec.	Model	I. “UniFreez™ FD-8”	II. “UniFreez™ FD-16” <b>NEW</b>
Sublimation Rate(Lit / day)		3Lit / day	6Lit / day
Chamber & Max Condenser Capa.		Chamber : 8 Lit, Condenser : 10 Lit	Chamber : 16 Lit, Condenser : 20 Lit
Set Temp Range		-90°C ~ -60°C	
Compressor & Defrost-type		1/2 HP, Manual	3/4 HP, Manual
Display		Digital LCD with Back-Light Function	
Material		Stainless-steel 304	
Dimension(w×d×h) & Weight		Exterior : 460×620×h520 mm, Condenser : φ300×h150 mm, Net Weight : 55 kg	Exterior : 520×680×h600 mm, Condenser : φ300×h300 mm, Net Weight : 60 kg
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.Frd00208	DH.Frd00216
	120V	DH.Frd00108	DH.Frd00116
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

**Optional Manifold & Dry Chamber**

**(1) 12-port T-type Manifold**

- DH.Frd01041 12-port T-type Manifold with 12 Silicon Stoppers, for Connecting 3/4" Vacuum Handle Valve, for “UniFreez™ FD-8” model
- DH.Frd01042 12-port T-type Manifold with 12 Silicon Stoppers, for Connecting 3/4" Vacuum Handle Valve, for “UniFreez™ FD-16” model

Ea.	Price, ₩

**(2) 8-port Round-type Acrylic Dry Chamber & 3-stage Shelf**

- DH.Frd01051 a 8-port Round-type Acrylic Dry Chamber with 8 Silicon Stoppers, for Connecting 3/4" Vacuum Handle Valve, Chamber Size : Int. φ284×h390mm, Ext. φ300×h463mm, Shelf Size : φ259×11mm, Total h225mm, for “UniFreez™ FD-8” model
- DH.Frd01052 b 8-port Round-type Acrylic Dry Chamber with 8 Silicon Stoppers, for Connecting 3/4" Vacuum Handle Valve, Chamber Size : Int. φ334×h390mm, Ext. φ350×h453mm, Shelf Size : φ310×11mm, Total h225mm, for “UniFreez™ FD-16” model
- DH.Frd01061 c 3-stage Stainless-steel(SS) Shelf φ260×11mm, Total h225mm, for “UniFreez™ FD-8”
- DH.Frd01062 d 3-stage Stainless-steel(SS) Shelf φ310×11mm, Total h225mm, for “UniFreez™ FD-16” model

Ea.	Price, ₩

<Continued On Next Page>

<Continued From...DAIHAN® Freeze Dry System Lab Scale Benchtop-type "UniFreez™ FD">

<L1>

**NEW**



(3) Large Volume Square-type Acrylic Dry Chamber With 5-stage SS Shelf

**(3) Large Volume Square-type Acrylic Dry Chamber with 5-stage Shelf **NEW****

- DH.Frd02100** Large Volume Square-type Acrylic Dry Chamber, with 5-stage SS shelf, Chamber Size : Int. 380×415×h400, Ext. 440×475×h465mm, Shelf Size : 380×380×h25mm, for "UniFreez™ FD-8" model
- DH.Frd02101** Large Volume Square-type Acrylic Dry Chamber, with 5-stage SS shelf, Chamber Size : Int. 435×485×h420mm, Ext. 495×540×h475mm, Shelf Size : 450×450×h25mm, for "UniFreez™ FD-16" model

Ea. Price, ₩

**NEW**



(4) Heated Stoppering Acrylic Dry Chamber with 2-stage SS Shelf

**(4) Heated Stoppering Acrylic Dry Chamber, with Height Adjustable 2-stage Shelf **NEW** and Analog Temp Controller Package-set**

- DH.Frd07001** Heated Stoppering Acrylic Dry Chamber, with Height Adjustable 2-stage Shelf, Chamber Size : Int. φ284×h320mm, Ext. φ300×h523mm, Shelf Size : φ255×13mm, Total h278mm, for "UniFreez™ FD-8" model
- DH.Frd07002** Heated Stoppering Acrylic Dry Chamber, with Height Adjustable 2-stage Shelf, Chamber Size : Int. φ334×h320mm, Ext. φ350×h523mm, Shelf Size : φ305×13mm, Total h278mm, for "UniFreez™ FD-16" model
- DH.Frd09001** ⊙ Analog Temp. Controller for Heated Stoppering Acrylic Dry Chamber, 230V, Temp. Range 0℃~40℃

Ea. Price, ₩

**NEW**



(5) 12-port SS Dry Chamber

**(5) 12-port Stainless-steel Dry Chamber & 3-stage Shelf **NEW****

- DH.Frd08001** 12-port Stainless-steel Dry Chamber, for "UniFreez™ FD-8" model, Chamber Size : Int. φ296×h350mm, Ext. φ320×h370mm Shelf Size : φ259×11mm, Total h278mm
- DH.Frd08002** 12-port Stainless-steel Dry Chamber, for "UniFreez™ FD-16" model, Chamber Size : Int. φ346×h350mm, Ext. φ370×h370mm Shelf Size : φ310×11mm, Total h278mm
- DH.Frd01061** ⊙ 3-stage Stainless-steel(SS) Shelf φ260×11mm, Total h225mm, for "UniFreez™ FD-8" model
- DH.Frd01062** ⊙ 3-stage Stainless-steel(SS) Shelf φ310×11mm, Total h225mm, for "UniFreez™ FD-16" model

Ea. Price, ₩

**Optional Vacuum Handle Valve & Tube Adapter for Connecting Flask**

- DH.Frd03010** (6) 3/4" Vacuum Handle Valve, Neoprene Rubber & PP, for Connecting Flask
- DH.GL28091** (7) 3/4" Glass Tube Adapter, φ19/1.8t×L80mm for Connecting Middle & Large-size Flask Top
- DH.GL28092** (8) 3/4" Curved Glass Tube Adapter, φ19/1.8t×L80mm, for Connecting Middle & Large-size Flask Top
- DH.Frd04010** (9) 3/4" PP Tube Adapter, φ19/1.8t×L80mm, for Connecting Small-size Flask Top

Ea. Price, ₩

**Optional DURAN® Borosilicate α 3.3 Glass Flask & Silicone Flask Top**

- DH.Frd05010** (10) Silicone Flask Top, 3/4" Small-size Flask Top, for 40-/80-ml Flask
- DH.Frd05020** , 3/4" Middle-size Flask Top, for 200-/300-ml Flask
- DH.Frd05030** , 3/4" Large-size Flask Top, for 500-/700-/1000-ml Flask
- DH.GL12041** (11) Glass Flask, DURAN® Glass α 3.3, 40ml, φ40/2.3t×h80mm
- DH.GL12042** , 80ml, φ40/2.3t×h120mm
- DH.GL12043** , 200ml, φ65/2.2t×h100mm
- DH.GL12044** , 300ml, φ65/2.2t×h140mm
- DH.GL12045** , 500ml, φ90/2.5t×h125mm
- DH.GL12046** , 700ml, φ90/2.5t×h165mm
- DH.GL12047** , 1000ml, φ90/2.5t×h225mm

Ea. Price, ₩

**Optional Vacuum Pump & 2-stage Table Cart for Vacuum Pump**

- V3.VOP100.FRD** (12) Vacuum Pump, "VOP-100", 120(100)Lit./min, NW25, 220V
- V3.VOP150.FRD** , "VOP-150", 180(150)Lit./min, NW25, 220V
- DH.Frd06025** NW25 Vacuum Pump Connection-set, Tube · O-ring · Clamp
- DH.Frd06016** NW16 Vacuum Pump Connection-set, Tube · O-ring · Clamp · Adapter
- DH.Ca1002** (13) 2-stage Table Cart for Freeze Dryer & Vacuum Pump, with Stop-on Casters and Vacuum Pump Oil Tray, w504×d604×h780mm

Ea. Price, ₩



(6) Vacuum Handle Valve



(7) Tube Adapter for Connecting Flask Top



(10) Silicone Flask Top



(11) Glass Flask



(12) Vacuum Pump



(13) 2-stage Table Cart

# Fume Hoods

**Ductless - Clean Bench, Laminar Flow** ..... P.71  
**Ducted - Premium Phenol Work Top Fume Hoods** ..... P.72  
- PP Fume Hoods ..... P.73  
- PP & PVC Wet Scrubber Fume Hoods ..... P.74



**Ductless Clean Bench, Laminar Flow**  
"MaXtream™ V12"



**Ducted Premium Fume Hood**  
"HD-1500G"



**Ducted PP Fume Hood**  
"HD-1500"



**Ducted PP & PVC Wet Scrubber Fume Hood**  
"HD-1500S"

Articles	Cat. No	Description
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**DAIHAN® Vertical Clean Bench / Filtered PCR Cabinet “MaXtream™ V”, Class 100 HEPA filter**

With 8 Steps Air Velocity Control, Touch-type Controller, Dual UV Lamp and Florescent Lamp, Air and Gas Cock, Built-in Electrical Outlet  
 크린벤치 & PCR 케비닛, 수직 기류형, 터치식 컨트롤러, 8단계 풍속 조절, UV 프로텍션 시스템



CE

2-Year Warranty

- Made in Korea
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Class 100 HEPA Filter of efficiency up to 99.97% & 0.3 micron size
- Mesh Guard for HEPA Filter Protection
- Easy to Exchange HEPA Filter
- 8 Steps Air Velocity Control
- Safety UV Protection System :
  - UV Lamp is only activated once safety Glass Door is Completely closed
- High performance of Touch Controller-Easy to use
- Microprocessor Digital Controller and Back Light LCD
- UV and Fluorescent Lamp, External Gas Connection Valve, Internal Electrical outlet
- \* High-Quality Back-Light LCD
- \* 99hr 59min Timer
- \* Silence and Vibration-Free Blower
- \* Tempered Safety Glass Sliding Door for Protection from Against UV
- \* Optimized Air Flow System for Uniform Air Flow/Velocity
- \* Corrosion Resistant 304 Stainless-steel Working table
- \* Air Flow-type : Vertical Air Flow-type

**Specifications & Ordering information**

<L1>

Spec.	Model	“MaXtream™ V12”	“MaXtream™ V15”	“MaXtream™ V18”
		Length. 1200	Length. 1500	Length. 1800
Air Flow-type		Vertical Air Flow-type		
Dimension (w×d×h)(mm)	Interior	1,200×660×610	1,500×660×610	1,800×660×610
	Exterior	1,280×735×1,895	1,580×735×1,895	1,880×735×1,895
Air Volume		1,350m <sup>2</sup> /h	1,700m <sup>2</sup> /h	2,020m <sup>2</sup> /h
Air Flow Velocity		8 Steps, 0.3~0.6m/s		
HEPA Filter		Class 100, 0.3μm Particle Removal 99.97%		
Prefilter		3~30μm Particle Removal		
Display		Back Light LCD		
Controller		Microprocessor Digital Controller with Touch UI		
Lamp		1×UV 20W, 1×FL 36W	1×UV 30W, 1×FL 55W	
Noise Level		Under 65dBA		
Door Type		Tempered Safety Glass Sliding Door		
Utility Device		1×Air Cock, 1×Gas Cock, 2×220V Outlet		
Material		Internal : Stainless-steel(# 304), External : Powder Coated steel		
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz		
Cat. No.	230V	DH.WLCV1200	DH.WLCV1500	DH.WLCV1800
	120V	DH.WLCV1201	DH.WLCV1501	DH.WLCV1801
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

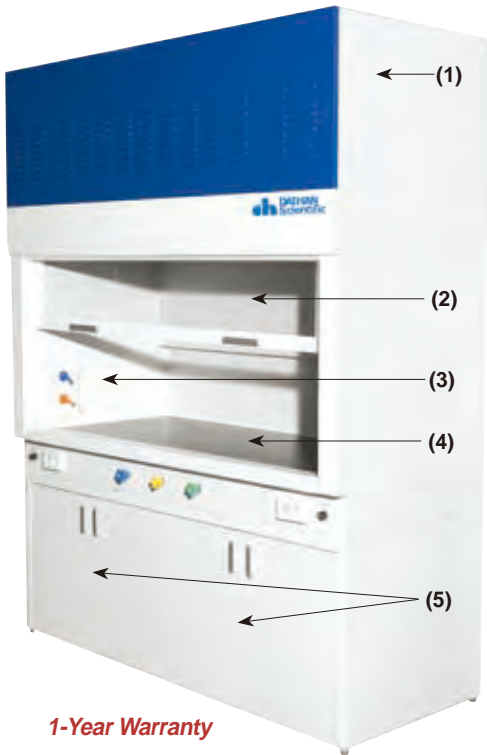


Vertical Air Flow of “MaXtream™ V” model



High-performance Digital Touch-type Controller, Easy to Use

DAIHAN® Premium Ducted Fume Hood, (A) Bypass or (B) Air Curtain-Type, 1,200 · 1,500 · 1,800 · 2,400 mm  
 With Phenol Work Top, Phenol Plate Interior, Air · Gas · Water-Cock, Cup Sink, Drain, and Explosion Proof Lamp  
 닥트형 흡후드, Phenol 재질의 작업대, 우수한 내습/내구성, 일반 배기형 or 에어커튼형의 선택성



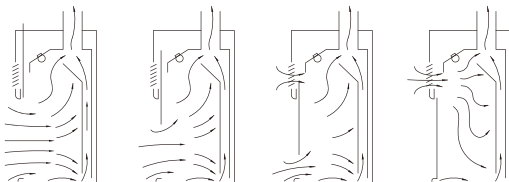
- Made in Korea
- Durable, Hazardous Chemical Gas Remove.
- Slide Type Sash Door with Tempered Safety Glass.
- Sash-type Tempered Safety Glass Window.
- \* General Chemical Gas Hood with High Thermal, Chemical Resistance, Various Material for User selection.
- \* With Air-/Gas-/Water-Cock, Cup Sink, Drain, Explosion Proof Lamp, Receptacle, Multi-purpose Cabinet.
- \* By Pass Air Flow-type : After the Suction Forcing the Indoor Air to Discharge the Gas to the Outside
- \* Air Curtain Air Flow-type : The Outdoor Air Sucked Form the Air Curtain to the Front Chamber, and the Exhaust Gas Back to Suction the Air
- \* Discharging the Polluted Air and Toxic Gas Generated during the Experiment in a Laboratory to the Outside through the Duct Structure
- \* Process Pipe & Duct Silicone Sealing to Completely Block the Gas Leakage to the Outside
- \* The Mechanical Design is Manufactured with Superior Workability

Specification

Models & Air Flow-type	(A) By-Pass Air Flow-type			
	"HD-1200G"	"HD-1500G"	"HD-1800G"	"HD-2400G"
	(B) Air Curtain Air Flow-type			
	"HD-C1200G"	"HD-C1500G"	"HD-C1800G"	"HD-C2400G"
Duct Size	φ 200mm		φ 250mm	
Material*	(1) External : Powder Coated Steel, (3) Internal : Phenol Plate, (4) Work Top : Phenol Plate			
Sash Frame & Window	PVC Sheet Frame, (2) Tempered Safety Glass Sash Window			
Cabinet	(5) Built in Multi-purpose Cabinet			
Lamp	LED Lamp(1ea × 20 W)			
Cock	1ea × Air-/Gas-/Water-Cock			
Receptacle	2ea 220V Concoent or 2ea 110V Concoent			
Dimension (w × d × h) (mm)	1200 × 800 × 2350	1500 × 800 × 2350	1800 × 800 × 2350	2400 × 800 × 2350
Power Supply *	1 Phase, AC 220V / 60Hz			

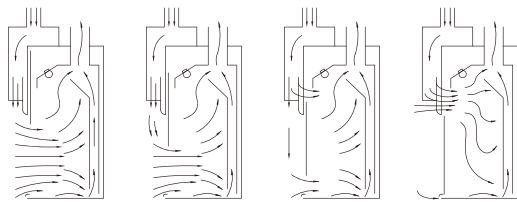
\* Other Specifications(50Hz) are available upon Customer's Request.

Diagram of Air Flow Depending on the Safety Window Opening



Opening → Closing

(A) By-Pass Air Flow-type



Opening → Closing

(B) Air Curtain Air Flow-type

Welcome! Custom-Made Fume Hood!!

We can Offer DAIHAN Custom Fume Hood, for which you can Specify the Specification

Selectable Material of Custom-Made Fume Hood

	Material			
	Steel	Stainless	P.P	
Exterior	Steel	Stainless	P.P	
Interior	Penol	Stainless	P.E	
Work Top	Penol	Stainless	P.E	Granite

Ordering Information

(A) By-Pass Air Flow-type Ducted Fume Hood

- |             |   |              |
|-------------|---|--------------|
| DH.WHD02312 | Fume Hood, 230V, 1200 × 800 × h2350mm, "HD-1200G" | Ea. Price, ₩ |
| DH.WHD02315 | , 1500 × 800 × h2350mm, "HD-1500G"                |              |
| DH.WHD02318 | , 1800 × 800 × h2350mm, "HD-1800G"                |              |
| DH.WHD02324 | , 2400 × 800 × h2350mm, "HD-2400G"                |              |
| DH.WHD01312 | Fume Hood, 120V, 1200 × 800 × h2350mm, "HD-1200G" | Ea. Price, ₩ |
| DH.WHD01315 | , 1500 × 800 × h2350mm, "HD-1500G"                |              |
| DH.WHD01318 | , 1800 × 800 × h2350mm, "HD-1800G"                |              |
| DH.WHD01324 | , 2400 × 800 × h2350mm, "HD-2400G"                |              |

(B) Air Curtain Air Flow-type Ducted Fume Hood

- |             |  |              |
|-------------|--|--------------|
| DH.WHD02412 | Fume Hood, 230V, 1200 × 800 × h2350mm, "HD-C1200G" | Ea. Price, ₩ |
| DH.WHD02415 | , 1500 × 800 × h2350mm, "HD-C1500G"                |              |
| DH.WHD02418 | , 1800 × 800 × h2350mm, "HD-C1800G"                |              |
| DH.WHD02424 | , 2400 × 800 × h2350mm, "HD-C2400G"                |              |
| DH.WHD01412 | Fume Hood, 120V, 1200 × 800 × h2350mm, "HD-C1200G" | Ea. Price, ₩ |
| DH.WHD01415 | , 1500 × 800 × h2350mm, "HD-C1500G"                |              |
| DH.WHD01418 | , 1800 × 800 × h2350mm, "HD-C1800G"                |              |
| DH.WHD01424 | , 2400 × 800 × h2350mm, "HD-C2400G"                |              |

Optional Blower

- |             |                               |              |
|-------------|-------------------------------|--------------|
| DH.WHD10020 | Integrated Blower, "HDBL0020" | Ea. Price, ₩ |
| DH.WHD10021 | External Blower, "HDBL0021"   |              |

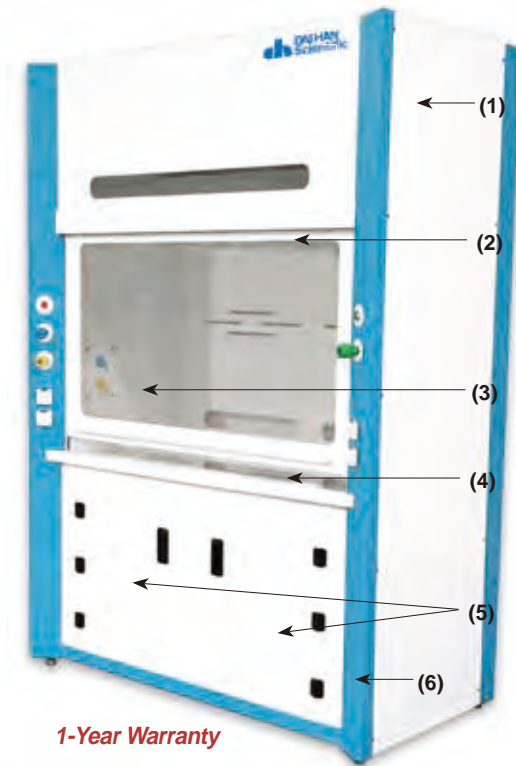
- \* Custom-Made Fume Hood : Wide Variety of Material for User Selection.
- \* Note! Freight and Installation Charges Separately.



**DAIHAN® Ducted PP Fume Hood for Acid/Chemical Resistance, 1,200 · 1,500 · 1,800 · 2,400 mm**

(A) Bypass or (B) Air Curtain-Type, with Air · Gas · Water-Cock, Cup Sink, Drain, and Explosion Proof Lamp

내산 · 내약품용 닥트형 PP 흡후드, PP 재질의 외부/내부/작업대, 일반 배기형 or 에어커튼형의 선택성



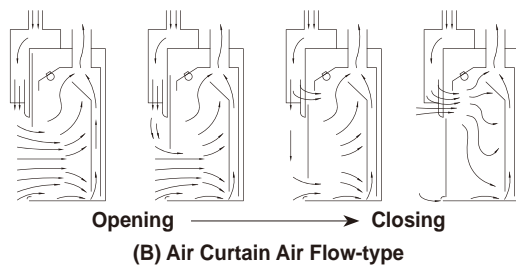
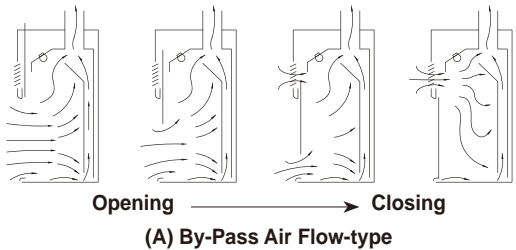
- Made in Korea    ■ Durable, Hazardous Chemical Gas Remove.
- PP(Polypropylene) Material for Excellent Resistance to Acid · Alkali · Chemicals · High Temp.
- \* With Air-/Gas-/Water-Cock, Cup Sink, Drain, Explosion Proof Lamp, Receptacle, and Multi-purpose Cabinet.
- \* **By Pass Air Flow-type** : After the Suction Forcing the Indoor Air to Discharge the Gas to the Outside
- \* **Air Curtain Air Flow-type** : The Outdoor Air Sucked Form the Air Curtain to the Front Chamber, and the Exhaust Gas Back to Suction the Air
- \* Discharging the Polluted Air and Toxic Gas Generated during the Experiment in a Laboratory to the Outside through the Duct Structure
- \* Process Pipe & Duct Silicone Sealing to Completely Block the Gas Leakage to the Outside
- \* The Mechanical Design is Manufactured with Superior Workability

**Specification**

Models & Air Flow-type	(A) By-Pass Air Flow-type			
	"HD-1200"	"HD-1500"	"HD-1800"	"HD-2400"
	(B) Air Curtain Air Flow-type			
	"HD-C1200"	"HD-C1500"	"HD-C1800"	"HD-C2400"
Duct Size	φ 200mm		φ 250mm	
Material*	(1) External · (3) Internal · (4) Work Top : PP (6) Column · (2) Sash Frame & Window : PVC			
Cabinet	(5) Built-in Multi-purpose PP Cabinet			
Lamp	LED Lamp(1ea × 20 W)			
Cock	1ea × Air-/Gas-/Water-Cock			
Receptacle	4ea 220V Concent or 4ea 110V Concent			
Dimension (w × d × h) (mm)	1200 × 800 × 2200	1500 × 800 × 2200	1800 × 800 × 2200	2400 × 800 × 2200
Power Supply *	1 Phase, AC 220V / 60Hz			

\* Other Specifications(50Hz) are available upon Customer' s Request.

**Diagram of Air Flow Depending on the Safety Window Opening**



**Ordering Information**

**(A) By-Pass Air Flow-type Ducted PP Fume Hood**

- DH.WHD02112 Fume Hood, **230V**, 1200 × 800 × h2200mm, "HD-1200"
- DH.WHD02115 , 1500 × 800 × h2200mm, "HD-1500"
- DH.WHD02118 , 1800 × 800 × h2200mm, "HD-1800"
- DH.WHD02124 , 2400 × 800 × h2200mm, "HD-2400"
- DH.WHD01112 Fume Hood, **120V**, 1200 × 800 × h2200mm, "HD-1200"
- DH.WHD01115 , 1500 × 800 × h2200mm, "HD-1500"
- DH.WHD01118 , 1800 × 800 × h2200mm, "HD-1800"
- DH.WHD01124 , 2400 × 800 × h2200mm, "HD-2400"

**(B) Air Curtain Air Flow-type Ducted PP Fume Hood**

- DH.WHD02212 Fume Hood, **230V**, 1200 × 800 × h2200mm, "HD-C1200"
- DH.WHD02215 , 1500 × 800 × h2200mm, "HD-C1500"
- DH.WHD02218 , 1800 × 800 × h2200mm, "HD-C1800"
- DH.WHD02224 , 2400 × 800 × h2200mm, "HD-C2400"
- DH.WHD01212 Fume Hood, **120V**, 1200 × 800 × h2200mm, "HD-C1200"
- DH.WHD01215 , 1500 × 800 × h2200mm, "HD-C1500"
- DH.WHD01218 , 1800 × 800 × h2200mm, "HD-C1800"
- DH.WHD01224 , 2400 × 800 × h2200mm, "HD-C2400"

<L4>
Ea. Price, ₩

Ea. Price, ₩

**Welcome! Custom-Made Fume Hood!!**

We can Offer DAIHAN Custom Fume Hood, for which you can Specify the Specification

**Selectable Material of Custom-Made Fume Hood**

	Material			
	PVC	P.P	ABS	
Exterior	PVC	P.P	ABS	
Interior	PVC	P.P	P.E	ABS
Work Top	PVC	P.P	P.E	ABS

**Optional Blower**

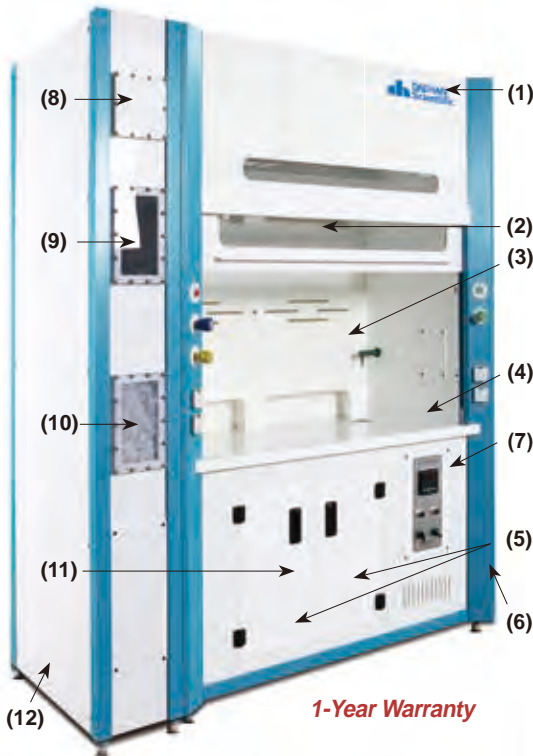
- DH.WHD10010 Integrated Blower, "HDBL0010"
- DH.WHD10011 External Blower, "HDBL0011"

Ea. Price, ₩

- ※ Custom-Made Fume Hood : Wide Variety of Material for User Selection.
- ※ Note! Freight and Installation Charges Separately.

**DAIHAN® Ducted PP & PVC Wet Scrubber Fume Hood for Acid/Chemical Resistance, 1,500 · 1,800 · 2,100 · 2,400 mm**

(A) Bypass or (B) Air Curtain-Type, Circulation Pump, PP Pall Ring Filter, Demister, Air · Gas · Water-Cock, Cup Sink, and Drain  
 내산/내약품용 닥트형 PP & PVC 스크리버 흡후드, PP 재질의 외부/내부/작업대, PVC 재질의 스크리버, 내화학성, 대기오염방지형



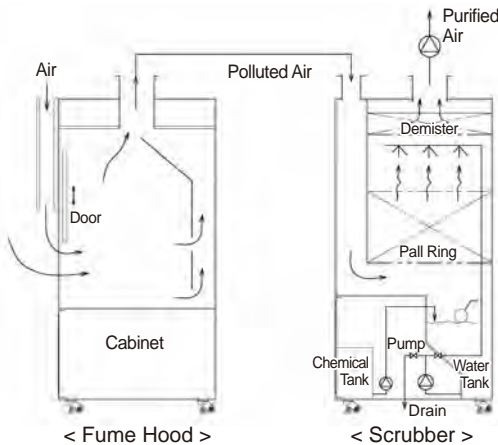
- Made in Korea ■ Durable, Hazardous Chemical Gas Remove.
- PP(Polypropylene) Material for Excellent Resistance to Acid · Alkali · Chemicals · High Temp.
- \* with Air-/Gas-/Water-Cock, Cup Sink, Drain, Explosion Proof Lamp, Receptacle, Multi-purpose Cabinet.
- \* Built-in Wet Scrubber : with Circulation Pump, Water Level Gauge, Water Storage Tank, PP Pall-ring Filter, Demister, Water Spray Nozzle, pH Indicator/Control Panel
- \* By Pass Air Flow-type : After the Suction Forcing the Indoor Air to Discharge the Gas to the Outside
- \* Air Curtain Air Flow-type : The Outdoor Air Sucked Form the Air Curtain to the Front Chamber, and the Exhaust Gas Back to Suction the Air
- \* Moving the Experiment Polluted Air and Toxic Gases Generated in the Laboratory of the Scrubber through Duct Structure, and only the Purified Air Discharged to the Atmosphere after the Contaminants have been Removed
- \* An Acidified Water drained to Neutralize \* Required Equipment for Air Pollution Prevention
- \* Through a pH Meter Display can Check the Current pH Level of the Water Storage Tank
- \* Process Pipe & Duct Silicone Sealing to Completely Block the Gas Leakage to the Outside
- \* The Mechanical Design is Manufactured with Superior Workability

**Specification**

Models & Air Flow-type	(A) By-Pass Air Flow-type			
	"HD-1500S"	"HD-1800S"	"HD-2100S"	"HD-2400S"
Duct Size	(B) Air Curtain Air Flow-type			
	"HD-C1500S"	"HD-C1800S"	"HD-C2100S"	"HD-C2400S"
Duct Size	φ 200mm		φ 250mm	
Material*	(1) External · (3) Internal · (4) Work Top · (7) pH Indicator/Control Panel · (8) Demister · (10) Pall Ring : PP, (2) Sash Frame & Window · (6) Column · (9) Window · (12) Wet Scrubber : PVC			
Cabinet	(5) Built-in Multi-purpose PP Cabinet			
Lamp	Explosion Proof Lamp(1ea × 20 W)			
Cock	1ea × Air-/Gas-/Water-Cock			
Receptacle	4ea 220V Concent or 4ea 110V Concent			
Circulation Pump	(11) Built in Magnetic Pump, 1 Phase, AC 220V, 1/3HP			
Water Level Gauge	Clear PVC			
Filter	(10) PP Pall Ring			
Demister	(8) PP Made (Mesh-type)			
Water Spray Nozzle	6mm PVC Nozzle			
Water Drain Line	PVC Pipe			
Dimension (w × d × h) (mm)	1500 × 800 × 2200	1800 × 800 × 2200	2100 × 800 × 2200	2400 × 800 × 2200
Power Supply *	1 Phase, AC 220V / 60Hz			

\* Other Specifications(50Hz) are available upon Customer's Request.

**Diagram of Air Flow Depending on the Safety Window Opening**



(B) Air Curtain Type  
 Ducted PP & PVC Wet Scrubber Hood - Air Flow

**Welcome! Custom-Made Fume Hood!!**

We can Offer DAIHAN Custom Fume Hood, for which you can Specify the Specification

**Selectable Material of Custom-Made Fume Hood**

	Material			
Exterior	PVC	P.P	ABS	
Interior	PVC	P.P	P.E	ABS
Work Top	PVC	P.P	P.E	ABS

**Ordering Information**

**(A) By-Pass Air Flow-type, PP Wet Scrubber Fume Hood**

- DH.WHD02515 Fume Hood, 230V, 1500 × 800 × h2200mm, "HD-1500S"
- DH.WHD02518 , 1800 × 800 × h2200mm, "HD-1800S"
- DH.WHD02521 , 2100 × 800 × h2200mm, "HD-2100S"
- DH.WHD02524 , 2400 × 800 × h2200mm, "HD-2400S"

**(B) Air Curtain Air Flow-type, PP Wet Scrubber Fume Hood**

- DH.WHD02615 Fume Hood, 230V, 1500 × 800 × h2200mm, "HD-C1500S"
- DH.WHD02618 , 1800 × 800 × h2200mm, "HD-C1800S"
- DH.WHD02621 , 2100 × 800 × h2200mm, "HD-C2100S"
- DH.WHD02624 , 2400 × 800 × h2200mm, "HD-C2400S"

**Optional Blower**

- DH.WHD10011 External Blower, "HDBL0011"

※ Custom-Made Fume Hood : Wide Variety of Material for User Selection.  
 ※ Note! Freight and Installation Charges Separately.

<L4>	
Ea.	Price, ₩

DAIHAN Scientific

# Furnaces

<b>Furnaces, Muffle, 1000 °C</b> .....	P. 76
<b>, Muffle, 1200 °C</b> .....	P. 77
<b>, Muffle, High Temperature, 1450 °C</b> .....	P. 78
<b>, Muffle, High Temperature, 1650 °C</b> .....	P. 79
<b>, Tube, 1000 °C</b> .....	P. 80



**1000 °C Muffle Furnace, "FX-14"**



**1200 °C Muffle Furnace, "FHX-63"**



**1650 °C High-Temp Muffle Furnace,  
 "FSK-2"**



**1000 °C Tube Furnace,  
 "FT-860"**

DAIHAN® 1,000°C Programmable Digital Muffle Furnace "FX", Exposed Heating Elements-type  
 With Digital PID Control, Short Heat-up Time, Ceramic Fiber, 4-Side Heating, with Ceramic Fiber Plate, 3~63 Lit  
 디지털 전기로, 디지털 PID 컨트롤 시스템, 4면 가열 방식, 히터 노출형



2-Year Warranty



Jog-Shuttle with Push Button

3~27Lit Model

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function
- Digital PID Programmable Controller : 4 Patterns with 10 Segments

- \* Designed for Ash-Determinations, Enameling, Fusions, Precipitate Drying
- \* User's Self-Compensation Function for Temperature ( $\pm 50^\circ\text{C}$ )    \* Resolution :  $1^\circ\text{C}$ , 1min
- \* Safety Switch for Door Opening    \* Ceramic Fiber exposed Heating Wire, 4-Side Heating

Specifications & Ordering information

<L1>

Spec.	Model	"FX-03"	"FX-05"	"FX-12"	"FX-14"	"FX-27"	"FX-63"	
		Max.Capa. 3 Lit	Max.Capa. 4.5 Lit	Max.Capa. 12 Lit	Max.Capa. 14 Lit	Max.Capa. 27 Lit	Max.Capa. 63 Lit	
Temp. Range	300°C ~ 1000°C							
Capacity		3 Lit	4.5 Lit	12 Lit	14 Lit	27 Lit.	63 Lit	
Heater	Kanthal A1, Expose Wire Heating Elements, 4-Side Heating							
Thermocouple	K-type Thermocouple							
Heating Power		1.4 kW	1.7 kW	3.3 kW	4.0 kW	4.6 kW	9 kW	
Required time to be reached 800°C		16 min		20 min		23 min		
Timer & Alarm	99hr 59min (Continuous run), Error status & Timer-end							
Display	Digital LCD with Back-Light Function							
Controller	Digital PID Controller with Jog-Dial Switch (Turn+Push)							
Program Function	4 Patterns with 10 Segments							
Safety Circuit	Over-Temp./-Current protection, Sensor Error Detection Safety Switch for Door Opening							
Material	Ceramic Fiber with Heating Wire-Internal, Powder Coated steel-External Ceramic Fiber-Insulation							
Dimension (w×d×h)	Internal (cm)	13×25×9	15×30×10	20×30×20	25×35×16	30×30×30	40×40×40	
	External (cm)	41×48×53	44×53×55	50×55×66	55×59×62	60×59×76	100×75×95	
Packing Size(w×d×h) (cm)		63×54×77	68×57×78	70×63×89	74×68×85	74×73×99	116×90×110	
Gross Weight		47 kg	54 kg	59 kg	73 kg	83 kg	225 kg	
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase				
Cat. No.	230V	DH.WF21.03	DH.WF21.05	DH.WF21.12	DH.WF21.14	DH.WF21.27	DH.WF21.63	
	120V	DH.WF20.03	DH.WF20.05	DH.WF20.12	DH.WF20.14	DH.WF20.27	-	
	3Phase	-	-	DH.WF23.12	DH.WF23.14	DH.WF23.27	DH.WF23.63	
Price, Each. ₩								

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Spare Ceramic Fiber Plate

- DH.WF211.03 (1) Ceramic Fiber Plate, 120×215mm, "FS1103" for 3Lit
- DH.WF211.05 , 140×265mm, "FS1105" for 4.5Lit
- DH.WF211.12 , 190×265mm, "FS1112" for 12Lit
- DH.WF211.14 , 240×310mm, "FS1114" for 14Lit
- DH.WF211.27 , 265×290mm, "FS1127" for 27Lit
- DH.WF211.63 , 400×400mm, "FS1163" for 63Lit

Ea. Price, ₩

Optional Glove

- SL.Glo6431 (2) Glove, Heat Resistant, 500°C, 1Pair, L450 mm
- SL.Glo6432 , L350 mm
- K9.26592 (3) , 800°C, 1Pair, L330 mm

Ea. Price, ₩



Inner Chamber of Exposed Heating Elements-type



(1) Ceramic Fiber Plate (Included)



(2) Heat-resistant Glove (500°C)



(3) Heat-resistant Glove (800°C)

DAIHAN® 1,200°C Programmable Digital Muffle Furnace "FHX", Exposed Heating Elements-type  
 With Digital PID Control, Short Heat-up Time, Ceramic Fiber, 4-Side Heating, with Ceramic Fiber Plate, 3~63 Lit  
 디지털 전기로, 디지털 PID 컨트롤 시스템, 4면 가열 방식, 히터 노출형



2-Year Warranty



Jog-Shuttle with Push Button

3~27Lit Model

- Made in Korea    ■ CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Jog-Dial Control System and Digital LCD with Back-Light Function
- Digital PID Programmable Controller : 4 Patterns with 10 Segments

- \* Digital Jog-Dial Control System
- \* Ceramic Fiber Exposed Heating Wire, 4-Side Heating
- \* User's Self-Compensation Function for Temperature (±50°C)
- \* Included Ceramic Fiber Plate
- \* Safety Switch for Door Opening
- \* Resolution : 1°C, 1min

Specifications & Ordering information

<L1>

Spec.	Model	"FHX-03"	"FHX-05"	"FHX-12"	"FHX-14"	"FHX-27"	"FHX-63"
		Max.Capa. 3 Lit	Max.Capa. 4.5 Lit	Max.Capa. 12 Lit	Max.Capa. 14 Lit	Max.Capa. 27 Lit	Max.Capa. 63 Lit
Temp. Range		300°C ~ 1200°C					
Capacity		3 Lit	4.5 Lit	12 Lit	14 Lit	27 Lit	63 Lit
Heater		Kanthal A1, Expose Wire Heating Elements, 4-Side Heating					
Thermocouple		K-type Thermocouple					
Heating Power		1.4 kW	1.7 kW	3.3 kW	4.0 kW	4.6 kW	9 kW
Required time to be reached 800°C		16 min		20 min		23 min	
Timer & Alarm		99hr 59min (Continuous run), Error status & Timer-end					
Display		Digital LCD with Back-Light Function					
Controller		Digital PID Controller with Jog-Dial Switch (Turn+Push)					
Program Function		4 Patterns with 10 Segments					
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection Safety Switch for Door Opening					
Material		Ceramic Fiber with Heating Wire-Internal, Powder Coated steel-External Ceramic Fiber-Insulation					
Dimension (w×d×h)	Internal (cm)	13×25×9	15×30×10	20×30×20	25×35×16	30×30×30	40×40×40
	External (cm)	41×48×53	44×53×55	50×55×66	55×59×62	60×59×76	100×75×95
Packing Size(w×d×h)(cm)		63×54×77	68×57×78	70×63×89	74×68×85	74×73×99	116×90×110
Gross Weight		47 kg	54 kg	59 kg	73 kg	83 kg	225 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase			
Cat. No.	230V	DH.WFH22.03	DH.WFH22.05	DH.WFH22.12	DH.WFH22.14	DH.WFH22.27	DH.WFH22.63
	120V	DH.WFH20.03	DH.WFH20.05	DH.WFH20.12	DH.WFH20.14	DH.WFH20.27	-
	3Phase	-	-	DH.WFH23.12	DH.WFH23.14	DH.WFH23.27	DH.WFH23.63
Price, Each. ₩							

\* Other Specifications are available upon Customer's Request.

※ 운임 착불



2-Year Warranty



63Lit Model

Spare Ceramic Fiber Plate

- DH.WF211.03 (1) Ceramic Fiber Plate, 120×215mm, "FS1103" for 3Lit
- DH.WF211.05 , 140×265mm, "FS1105" for 4.5Lit
- DH.WF211.12 , 190×265mm, "FS1112" for 12Lit
- DH.WF211.14 , 240×310mm, "FS1114" for 14Lit
- DH.WF211.27 , 265×290mm, "FS1127" for 27Lit
- DH.WF211.63 , 400×400mm, "FS1163" for 63Lit

Ea. Price, ₩

Optional Glove

- SL.Glo6431 (2) Glove, Heat Resistant, 500°C, 1Pair, L450 mm
- SL.Glo6432 , L350 mm
- K9.26592 (3) , 800°C, 1Pair, L330 mm

Ea. Price, ₩



Inner Chamber of Exposed Heating Elements-type



(1) Ceramic Fiber Plate (Included)



(2) Heat-resistant Glove (500°C)



(3) Heat-resistant Glove (800°C)

“WiseTherm® FSC” 1,450°C Programmable High-Temp Muffle Furnace, Exposed Heating Elements-type  
 With SIC Heater, Digital PID Control, Short Heat-up Time, 2-Side Heating, without Ceramic Fiber Plate, 1.9~22 Lit  
 고온 디지털 전기로, 디지털 PID 컨트롤 시스템, 2면 가열 방식

2-Year Warranty



1.9Lit Model

2-Year Warranty



4.5~22Lit Model

- Made in Korea ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Digital PID Programmable Controller : 2 Patterns with 10 Segments
- Digital LCD Display ■ High Quality Insulation : Ceramic Fiber Board
- SIC(Silicon Carbide) Heater

- \* Safety Door Lock System
- \* Ceramic Fiber Exposed Heating Wire, 2-Side Heating
- \* Excluding Ceramic Fiber Plate
- \* Safety Switch for Door Opening

Specifications & Ordering information

<L1>

Spec.	Model	WiseTherm® FSC-2	WiseTherm® FSC-5	WiseTherm® FSC-11	WiseTherm® FSC-22
		Max. Capa. 1.9Lit	Max. Capa. 4.5Lit	Max. Capa. 11Lit	Max. Capa. 22Lit
Temp. Range	500 °C ~ 1,450 °C				
Capacity	1.9 Lit	4.5 Lit	11 Lit	22 Lit	
Heater	SIC Heater, 2-Side Heating				
Thermocouple	R-type Thermocouple				
Heating Power	3.5 kW	3.3 kW	7.7 kW	9.6 kW	
Required time to be reached 800 °C	30 min				
Timer & Alarm	99hr 59min or Continuous run				
Display	Digital LCD Display				
Controller	Digital PID Controller, UP35A, SCR Power Controller with Push Button				
Program Function	2 Patterns with 10 Segments				
Safety Circuit	Over-Temp./-Current protection, Sensor Error Detection, Safety Switch for Door Opening		Over-Temp./-Current protection, Sensor Error Detection		
	Ceramic Fiber board with SIC Heater-Internal, Powder Coated steel-External, Ceramic Fiber-Insulation				
Dimension (w×d×h)	Internal (mm)	120×130×120	150×200×150	200×270×200	250×350×250
	External (mm)	440×482×700	820×555×655	870×625×715	920×705×785
Packing Size(w×d×h) (cm)	680×540×940		1350×600×890	1400×770×950	1450×900×1100
Gross Weight	57 kg		70 kg	102 kg	132 kg
Electrical Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz, without Cord and Plug				
Cat. No.	230V	DH.FSC02002	DH.FSC02005	DH.FSC02011	DH.FSC02022
	120V	DH.FSC01002	DH.FSC01005	DH.FSC01011	DH.FSC01022
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Optional Ceramic Fiber Plate

- DH.FSC2002 (1) Ceramic Fiber Plate, w110×d120mm, for 1.9Lit
- DH.FSC2005 , w140×d180mm, for 4.5Lit
- DH.FSC2011 , w190×d250mm, for 11Lit
- DH.FSC2022 , w240×d330mm, for 22Lit

Ea. Price, ₩

Optional Glove

- SL.Glo6431 (2) Glove, Heat Resistant, 500 °C, 1Pair, L450 mm
- SL.Glo6432 , L350 mm
- K9.26592 (3) , 800 °C, 1Pair, L330 mm

Ea. Price, ₩



Inner Chamber of Exposed Heating Elements-type



(1) Ceramic Fiber Plate



(2) Heat-resistant Glove (500 °C)



(3) Heat-resistant Glove (800 °C)

Articles

Cat. No

Description

**“WiseTherm® FSK” 1,650°C Programmable High-Temp Muffle Furnace, Exposed Heating Elements-type**  
 With MoSi2 Heater, Digital PID Control, Short Heat-up Time, 2-Side Heating, without Ceramic Fiber Plate, 1.9~11 Lit  
 고온 디지털 전기로, 디지털 PID 컨트롤 시스템, 2면 가열 방식

2-Year Warranty



1.9Lit Model

- Made in Korea    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Digital PID Programmable Controller : 2 Patterns with 10 Segments
- Digital LCD Display    ■ High Quality Insulation : Ceramic Fiber Board

- \* Safety Door Lock System
- \* Excluding Ceramic Fiber Plate
- \* Ceramic Fiber Exposed Heating Wire, 2-Side Heating
- \* Safety Switch for Door Opening

Specifications & Ordering information

<L1>

Spec.	Model	WiseTherm® FSK-2	WiseTherm® FSK-5	WiseTherm® FSK-11
		Max. Capa. 1.9 Lit	Max. Capa. 4.5 Lit	Max. Capa. 11 Lit
Temp. Range		600°C ~ 1,650°C		
Capacity		1.9 Lit	4.5 Lit	11 Lit
Heater		MoSi2 Heater, 2-Side Heating		
Thermocouple		B-type Thermocouple		
Heating Power		1.3 kW	3.0 kW	5.2 kW
Required time to be reached 800°C		40 min		
Timer & Alarm		99hr 59min or Continuous run		
Display		Digital LCD Display		
Controller		Digital PID Controller, UP35A, SCR Power Controller with Push Button		
Program Function		2 Patterns with 10 Segments		
Safety Circuit		Over-Temp./-Current protection, Sensor Error Detection, Safety Switch for Door Opening	Over-Temp./-Current protection, Sensor Error Detection	
Material		Ceramic Fiber board with MOSi2 Heater-Internal, Powder Coated steel-External, Ceramic Fiber-Insulation		
Dimension (w × d × h)	Internal (mm)	120 × 130 × 120	150 × 200 × 150	200 × 270 × 200
	External (mm)	440 × 482 × 700	900 × 600 × 695	980 × 670 × 765
Packing Size (w × d × h) (cm)		680 × 540 × 940	1430 × 640 × 930	1510 × 810 × 1000
Gross Weight		72 kg	150 kg	186 kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz, without Cord and Plug		
Cat. No.	230V	DH.FSK02002	DH.FSK02005	DH.FSK02011
	120V	DH.FSK01002	DH.FSK01005	DH.FSK01011
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Optional Ceramic Fiber Plate

- DH.FSK2002 (1) Ceramic Fiber Plate, w110 × d120mm, for 1.9Lit
- DH.FSK2005 , w140 × d180mm, for 4.5Lit
- DH.FSK2011 , w190 × d250mm, for 11Lit

Ea. Price, ₩

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Optional Glove

- SL.Glo6431 (2) Glove, Heat Resistant, 500°C, 1Pair, L450 mm
- SL.Glo6432 , L350 mm
- K9.26592 (3) , 800°C, 1Pair, L330 mm

Ea. Price, ₩

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Inner Chamber of Exposed Heating Elements-type



(1) Ceramic Fiber Plate



(2) Heat-resistant Glove (500°C)

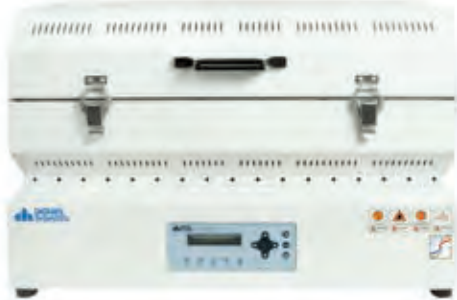


(3) Heat-resistant Glove (800°C)

**DAIHAN® Programmable Tube Furnaces “FT-series”, Embedded Heating Elements-type, 1,000°C**  
 With Digital PID Programmable Control, 1- or 3-Heating Zone,  $\phi 3 \sim \phi 14$ cm Tubes, 1,000°C 프로그램식 튜브 전기로

2-Year Warranty

- Made in Korea ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- \* Digital PID Programmable Controller : 3 Patterns with 16 Segments
- \* Designed for Ash-Determinations, Horizontal Application, Protective Gas Atmosphere
- \* Available Order Various Size Tubes, Without Working Tube
- \* Programmable Timer : 99hr 59min
- \* Resolution : 1°C, 1min



(1) 1 Heating Zone Model



(1) Side Figure of 1 Heating Zone Model



(a) Heat-resistant Glove (500°C)



(b) Heat-resistant Glove (800°C)

Specifications & Ordering information

<L1>

Model	“FT-series” 1- or 3-Heating Zone						
Temp. Range & Heater	300°C ~ 1,000°C, Kantal A1, Embedded Wire Heating Elements						
Thermocouple & Display	K-type Thermocouple, LED						
Safety Circuit	Over-Temp./-Current protection, Sensor Error Detection						
Material	Ceramic Fiber with Heating Wire-Internal, Powder Coated steel-External						
(1) 1 Heating Zone Model	“FT-830”	“FT-860”	“FT-1230”	“FT-1260”	“FT-1630”	“FT-1660”	
Heating Zone	1 × Heating Zone						
	$\phi 8 \times L30$	$\phi 8 \times L60$	$\phi 12 \times L30$	$\phi 12 \times L60$	$\phi 16 \times L30$	$\phi 16 \times L60$	
Available Tube Size(cm)	$\phi 3 \sim \phi 6$ cm		$\phi 7 \sim \phi 10$ cm		$\phi 10 \sim \phi 14$ cm		
Heating Power	1.8 kW	3.2 kW	2.2 kW	4.5 kW	3.2 kW	6.2 kW	
Heat-up Time(to 800°C)	17 min	20 min	18 min	22 min	20 min	25 min	
Dimension (w × d × h cm)	40 × 28 × 44	70 × 28 × 44	40 × 34 × 50	70 × 34 × 50	40 × 40 × 56	70 × 40 × 56	
Controller	1 × Programmable PID Controller : 3 Patterns 16 Segments						
Cat. No.	230V	DH.WFT12.0830	DH.WFT12.0860	DH.WFT12.1230	DH.WFT12.1260	DH.WFT12.1630	DH.WFT12.1660
	120V	DH.WFT11.0830	DH.WFT11.0860	DH.WFT11.1230	DH.WFT11.1260	DH.WFT11.1630	DH.WFT11.1660
Price, Each. ₩							
(2) 3 Heating Zone Model	“FT-3860”		“FT-31260”		“FT-31660”		
Heating Zone	3 × Heating Zone						
	$\phi 8 \times (3 \times L20$ cm)		$\phi 12 \times (3 \times L20$ cm)		$\phi 16 \times (3 \times L20$ cm)		
Available Tube Size(cm)	$\phi 3 \sim \phi 6$ cm		$\phi 7 \sim \phi 10$ cm		$\phi 10 \sim \phi 14$ cm		
Heating Power	3.3 kW		4.8 kW		6.6 kW		
Heat-up Time(to 800°C)	20 min		22 min		25 min		
Dimension (w × d × h cm)	70 × 28 × h44 cm		70 × 34 × h50 cm		70 × 40 × h56 cm		
Controller	Independent 3x Programmable PID Controller : 3 Patterns 16 Segments						
Cat. No.	230V	DH.WFT12.860.3		DH.WFT12.1260.3		DH.WFT12.1660.3	
	120V	DH.WFT11.860.3		DH.WFT11.1260.3		DH.WFT11.1660.3	
Price, Each. ₩							

\* Other Specifications are available upon Customer's Request.  
 \* Tubes Size & Other Specifications are available upon Customer's Request

※ 운임 착불

Optional Glove

- SL.Glo6431 (a) Glove, Heat Resistant, 500°C, 1Pair, L450 mm
- SL.Glo6432 , L350 mm
- K9.26592 (b) , 800°C, 1Pair, L330 mm

Ea. Price, ₩

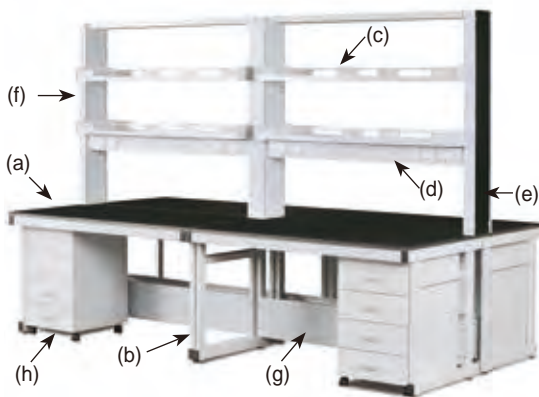


## DAIHAN<sup>®</sup> Laboratory Assembly Furniture, High Quality Steel-Frame & Side Panel · Phenol Work Top · Stainless-steel Bolted Joint With Transfer Cabinet, Utility Box, 실험실용 조립식 실험대, 고품질 스틸 프레임, 내열성/내충격성/내화학성 페놀 상판, 볼트식 결합

- **Made in Korea**      ■ **Easy to Assemble with Stainless-steel(SS 304) Bolts and Stable**
- **Phenol Work Top : Good for Heat-/Shock-Resistant, Excellent Chemical-Resistant(Acetic Acid, Alcohol, Hydrochloric Acid, Sulfuric Acid, Organic Chemicals, Base, Biological Stains, Salt, Solvent, etc.)**
- **High Quality Steel-Frame(60×40 & 50×30mm), Side-/Back-Steel Panel(t1.6mm)**
- **The Work Top are made of Melamine, Granite, Phenol(Color Choices Available : Black or Gray)**
- **You can Choose the Materials of the Work Top according to Usage and Change the Height of Table.**

### Features of Work Top Materials

- \* Phenol(Phenolic Laminate) : Excellent for Heat-/ Chemical-/ Shock-Resistance, Strong Plate Consist of Melamine-resin and Phenolic-resin, Surface Strengthening through Chemical and Chemical Treatment, Good for All Purpose Laboratory.
- \* Melamine : Good for Chemical and Heat-Resistance. The Surface is Resistant against Scratches and Abrasion. Suitable for Analytical Laboratory.
- \* Granite : Excellent for Heat and Shock-Resistance. Suitable for Special Laboratory like Instrumental Analysis Laboratory.



### Structures and Features of Assembly Furniture

- \* (a) Phenol Work Top : Good for Heat-/Shock-Resistant Phenolic Laminate(t20mm), Excellent Chemical-Resistant (Acetic Acid, Alcohol, Hydrochloric Acid, Sulfuric Acid, Organic Chemicals, Base, Biological Stains, Salt, Solvent, etc.), Color Choices Available : Black or Gray
- \* (b) Frame : The Most Stable Steel Under Construction, Suitable for Long-term Loading of Heavy Analysis Equipment, High Quality Steel, 60×40mm & 50×30mm
- \* (c) Shelves : Shelf Fall Prevention Design, Movable Up and Down, Aluminum Frame, PVC Shelf Plate(t8mm), Epoxy Powder Coating Steel Shelf Supporter(t1.6mm)
- \* (d) Utility Box : Electrical safety design, Attachment Emergency Breaker and Switch Box for Each Line, Steel Plate(t1.6mm), Cover type Power Outlet(220V)
- \* (e) Reagent Structure : Al Frame & Steel Plate(1.6mm), Columns bend(Edge Rounding) to Secure LAN Line, Electricity, Gas, Water etc., Maintenance and Safety Enhancement
- \* (f) Reagent Front / Rear Frame : Anodizing and Electro-deposition Treatment on Environmentally Friendly Aluminum Surface to Enhance Strength, Abrasion-Resistance, Corrosion-Resistance and Electrical insulation
- \* (g) Modular System Back Panel
  - Easily Removable and Easy to Follow and Check (Scalability)
  - Eco-friendly Epoxy Powder Coating to Prevent Scratches and Corrosion
  - Using Steel Plate t1.6mm
- \* (h) Transfer Cabinet : Particle Board Plate(t15/18mm) / Al-handle / Brake Caster / 450×500×h700mm, Basic 4-stage(2-/3-stage possible)
- \* Attach Inner Support : Use of Steel Pipe for Loaded Area and Flexural Reinforcement
- \* Sink Tables : We can Offer DAIHAN Custom Sink Table, for which you can Specify the Specification

### ※ Sequence of Assemble the Table



Package : Total 4 Box including Transfer Cabinet (Work Top / Frame / Panel / Transfer Cabinet)



1. Connect the Work Top Frame and Right Leg Frame with SS Bolts using a Screwdriver



2. Connect the Work Top Frame and Left Leg Frame with SS Bolts using a Screwdriver



3. Connect the Bottom Panel and the Left Leg Frame with SS Bolts using a Screwdriver



4. Connect the Bottom Panel and the Right Leg Frame with SS Bolts using a Screwdriver



5. Place the Work Top on the Completed Lower Frame



6. Finished Assembly



7. Place the Complete Assembly Transfer Cabinet in the desired location

**DAIHAN® Laboratory Assembly Center Table, High Quality Steel-Frame & -Side Panel · Phenol Work Top · Stainless-steel Bolted Joint With Transfer Cabinet, Utility Box, 실험실용 조립식 중앙 실험대, 고품질 스틸 프레임, 내열성/내충격성/내화학성 페놀 상판, 볼트식 결합**

- Made in Korea
- Easy to Assemble with Stainless-steel(SS 304) Bolts and Stable
- Phenol Work Top : Good for Heat-/Shock-Resistant, Excellent Chemical-Resistant(Acetic Acid, Alcohol, Hydrochloric Acid, Sulfuric Acid, Organic Chemicals, Base, Biological Stains, Salt, Solvent, etc.)
- High Quality Steel-Frame(60×40 & 50×30mm), Side-/Back-Steel Panel(t1.6mm)
- \* The Most Stable Steel Under Construction, Suitable for Long-term Loading of Heavy Analysis Equipment (60×40 & 50×30mm)
- \* Chemical-resistance Phenolic Laminate Work Top, t20mm (Color Choices Available : Black or Gray)
- \* Could be Change the Work Top, Height of Table on User Applications. Please Call to specify the Work Top.

**(1) Assembly Basic Center Table, with Transfer Cabinet, Steel-Frame/-Side Panel & Phenol Work Top**

- \* Work Top : Phenol Plate, t20mm
- \* Back Panel : Steel Plate, t1.6mm
- \* Frame : Steel, 60×40 & 50×30mm



WFE301 Series, w2400mm



- DH.WFE3011 Center Table, 1500×1500×h800mm, with Cabinet(2ea)
- DH.WFE3012 , 1800×1500×h800mm, with Cabinet(2ea)
- DH.WFE3013 , 2100×1500×h800mm, with Cabinet(4ea)
- DH.WFE3014 , 2400×1500×h800mm, with Cabinet(4ea)
- DH.WFE3015 , 3000×1500×h800mm, with Cabinet(4ea)
- DH.WFE3016 , 3600×1500×h800mm, with Cabinet(4ea)

- \* Assembly Details : See Page 81
- \* **Note! Freight and Installation Charges Separately.**

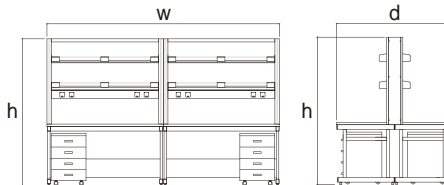
<L4>	
Ea.	Price, ₩

**(2) Assembly Shelf-type Center Table, with Transfer Cabinet/Shelves, Steel-Frame/-Side Panel & Phenol Work Top**

- \* Work Top : Phenol Plate, t20mm
- \* Back Panel : Steel Plate, t1.6mm
- \* Frame : Steel, 60×40 & 50×30mm
- \* Size : d1500×h800/1900mm



WFE302 Series, w2400mm



- DH.WFE3021 Center Table, w1500×h800/1900mm, with Cabinet(2ea) / Shelves
- DH.WFE3022 , w1800×h800/1900mm, with Cabinet(2ea) / Shelves
- DH.WFE3023 , w2100×h800/1900mm, with Cabinet(4ea) / Shelves
- DH.WFE3024 , w2400×h800/1900mm, with Cabinet(4ea) / Shelves
- DH.WFE3025 , w3000×h800/1900mm, with Cabinet(4ea) / Shelves
- DH.WFE3026 , w3600×h800/1900mm, with Cabinet(4ea) / Shelves

- \* Assembly Details : See Page 81
- \* **Note! Freight and Installation Charges Separately.**

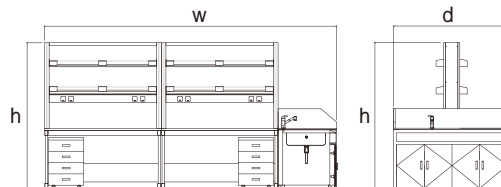
Ea.	Price, ₩

**(3) Assembly Comprehensive Center Table, with Cabinet/Sink Table/Shelves, Steel-Frame/-Side Panel & Phenol Work Top**

- \* Work Top : Phenol Plate, t20mm
- \* Sink Top : Phenol Plate, t20mm
- \* Back Panel : Steel Plate, t1.6mm
- \* Water Guard : 3-sided Tempered Glass
- \* Frame : Steel, 60×40 & 50×30mm
- \* with Cabinet(4ea) / Shelves / Sink Table
- \* Size : d1500×h800/1900mm
- \* Sink Bowl : PP(Polypropylene)



WFE303 Series, w3150mm



- DH.WFE3031 Center Table, w2250×h1900mm, with Shelves / Sink Table
- DH.WFE3032 , w2550×h1900mm, with Shelves / Sink Table
- DH.WFE3033 , w2850×h1900mm, with Shelves / Sink Table
- DH.WFE3034 , w3150×h1900mm, with Shelves / Sink Table
- DH.WFE3035 , w3750×h1900mm, with Shelves / Sink Table
- DH.WFE3036 , w4350×h1900mm, with Shelves / Sink Table

- \* Assembly Details : See Page 81
- \* **Note! Freight and Installation Charges Separately.**

Ea.	Price, ₩

Articles	Cat. No	Description
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**DAIHAN® Laboratory Assembly Side Table, High Quality Steel-Frame & -Side Panel · Phenol Work Top · Stainless-steel Bolted Joint With Transfer Cabinet, Utility Box, 실험실용 조립식 벽면 실험대, 고품질 스틸 프레임, 내열성/내충격성/내화학성 페놀 상판, 볼트식 결합**

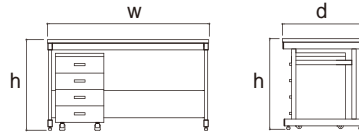
- **Made in Korea**     ■ **Easy to Assemble with Stainless-steel(SS 304) Bolts and Stable**
- **Phenol Work Top : Good for Heat-/Shock-Resistant, Excellent Chemical-Resistant(Acetic Acid, Alcohol, Hydrochloric Acid, Sulfuric Acid, Organic Chemicals, Base, Biological Stains, Salt, Solvent, etc.)**     ■ **High Quality Steel-Frame, Side-/Back-Steel Panel(t1.6mm)**
- \* The Most Stable Steel Under Construction, Suitable for Long-term Loading of Heavy Analysis Equipment (60×40mm & 50×30mm)
- \* Chemical-Resistance Phenolic Laminate Work Top, t20mm (Black or Gray)     \* Could be Change the Work Top, Height of Table on User Applications.

**(1) Assembly Basic Side Table, with Transfer Cabinet, Steel-Frame/-Side Panel & Phenol Work Top**

- \* Work Top : Phenol Plate, t20mm     \* Back Panel : Steel Plate, t1.6mm     \* Frame : Steel, 60×40 & 50×30mm



WFE401 Series, w1800mm



- DH.WFE4011 Side Table, 1200×750×h800mm, with Cabinet(1ea)
- DH.WFE4012 , 1500×750×h800mm, with Cabinet(1ea)
- DH.WFE4013 , 1800×750×h800mm, with Cabinet(1ea)
- DH.WFE4014 , 2100×750×h800mm, with Cabinet(2ea)
- DH.WFE4015 , 2400×750×h800mm, with Cabinet(2ea)

- ※ Assembly Details : See Page 81
- ※ **Note! Freight and Installation Charges Separately.**

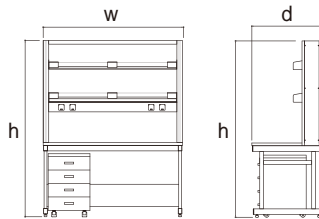
<L4>	
Ea.	Price, ₩

**(2) Assembly Shelf-type Side Table, with Transfer Cabinet/Shelves, Steel-Frame/-Side Panel & Phenol Work Top**

- \* Work Top : Phenol Plate, t20mm     \* Back Panel : Steel Plate, t1.6mm     \* Shelves : PVC Shelf Plate(t8mm) & Steel / Aluminum Shelf Supporter(t1.6mm)



WFE402 Series, w1800mm

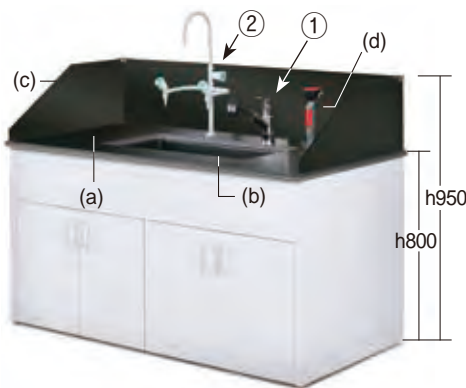


- DH.WFE4021 Side Table, 1200×750×h800/1900mm, with Cabinet / Shelves
- DH.WFE4022 , 1500×750×h800/1900mm, with Cabinet / Shelves
- DH.WFE4023 , 1800×750×h800/1900mm, with Cabinet / Shelves
- DH.WFE4024 , 2100×750×h800/1900mm, with Cabinet / Shelves
- DH.WFE4025 , 2400×750×h800/1900mm, with Cabinet / Shelves

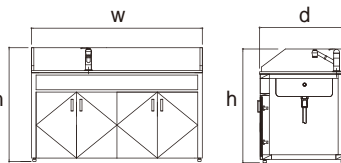
- ※ Assembly Details : See Page 81
- ※ **Note! Freight and Installation Charges Separately.**

Ea.	Price, ₩

**DAIHAN® Laboratory Sink Table, High Quality Steel-Frame/-Side Panel, Phenol Sink Top, PP Sink Bowl, Glass Water Guard With ① Cold & Hot Water Mixed Faucet, 실험실용 싱크대, 3면 강화유리, 재질 변경 가능**



- \* ② 3-mouth Chemical Faucet Available(Optional)
- \* Sink Top : Chemical-resistance Phenolic Laminate t20mm     \* Sink Bowl : PP(Selectable Material)
- \* Water Guard : Composed of 3-sided Tempered Glass t8mm(Selectable Material)



**Selectable Material of Custom-Made Sink Table <L4>**

	Material			
(a) Sink Top	Phenol	P.P	PVC	SS
(b) Sink Bowl	-	P.P	PVC	SS
(c) Water Guard	Glass	P.C	PVC	PVC

- DH.WFE4031 Sink Table, Laboratory, 900×750×h800 / 950mm
- DH.WFE4032 , 1200×750×h800 / 950mm
- DH.WFE4033 , 1500×750×h800 / 950mm
- DH.WFE4034 , 1800×750×h800 / 950mm

Ea.	Price, ₩

**Welcome! Custom-Made Sink Table!!**

We can Offer DAIHAN Custom Sink Table, for which you can Specify the Specification

**Optional Eye-washer**

- DH.WFE4040 (d) Option ; Eye-washer, Single Nozzle, Table Mounted, L1.4m
- ※ **Note! Freight and Installation Charges Separately.**

Ea.	Price, ₩

**DAIHAN® PP/PVC Filtered Reagent Storage Cabinet, Ductless, Air Circulation System, 240 · 470 · 660-Lit. NEW**

Ideal for Storage of Acid · Chemical · VOCs, With Hybrid Composite Filter · All PP Chamber & Clear PVC Window

PP/PVC 내산성 밀폐형 시약장, 에어필터링 순환식, 휘발성 유기화합물 · 산 · 염기성 및 유해시약 보관용, 무덕트



I. "RSC240" & II. "RSC470"  
1-Room Models



III. "RSC660"  
2-Room Model



Fig1. Circulation Air Flow of 2-Room Model

- **Made in Korea**
- **Fully Enclosed Self-Circulating System ;**
  - Prevents Exposure of the Air Inside the Cabinet to the Room.
  - Reagent Fumes are Filtered through 4-Layer Hybrid Composite Filter (VOCs, Acids, Bases, HEPA) and Circulated Inside.
- **Durable PP Chamber is Resistant to most Corrosive Chemicals.**
  - \* Height Adjustable PP Sliding Drawer Shelf & PP Tray for Spill Storage
  - \* Perforated Drawer Shelf Available (Optional)
  - \* Easy to Observe Inside with PVC Window.
  - \* High Efficiency Low Noise Turbo Fan with Overheat Protection System
  - \* Display Temp, Humidity, VOCs Concentration
  - \* Alarm Function when VOCs, Temp and Humidity are above the Set Value
  - \* Fan Speed can be Set from 1 to 5 Steps to Increase Filter Life and Minimize Energy Consumption.
  - \* Additional Sensors Available for External Monitoring (Optional ; Request when Ordering Cabinets.)
  - \* Provides Key Lock for Security.
  - \* Front Opening for Convenient Filter Management
  - \* Completed Hazardous Gas Removal Capability & Door Durability Test

**Specifications & Ordering information**

<L1>

Spec.	Model	I. "RSC240" 1-Room	II. "RSC470" 1-Room	III. "RSC660" 2-Room ; 660Lit	
				Left (260Lit)	Right (400Lit)
Capacity		240Lit	470Lit	660Lit	
Door		1 Door	1 Door	2 Doors	
Material	External	White PP(Polypropylene) 8T, Front Panel : Gray PVC 10T			
	Internal	White PP(Polypropylene) 8T			
	Door	White PP(Polypropylene) 8T, Window : Clear PVC 5T			
	Drawer	White PP(Polypropylene) 8T			
Dimension (w×d×h, mm)	Internal	685×480×730	685×480×1,450	369×500×1,450	527×525×1,450
	External	700×600×1,000	700×600×2,000	1,000×600×2,000	
Shelf	Type	Sliding Drawer		Fixed Shelves	Sliding Drawer
	Size(mm)	525×395×h80		369×500	527×525×h80
	Included	2	4	3	4
	Max	4	8	3	8
	Max Load	30kg / Shelf		35kg / Shelf	30kg / Shelf
Circulation Fan		Air Flow : 3.48m <sup>2</sup> /min, Glass Fiber Reinforced Plastic, Power Consumption : 21W			
Controller & Display		7" Full Touch Screen TFT LCD			
Filter	Type	4-Layer Hybrid Composite Filter(VOCs, Acid, Base, HEPA) ※ VOCs(Volatile Organic Compounds)			
	Size(mm)	500×300×h100		700×300×h100	
Net Weight		65kg	95kg	135kg	
Electrical Reqts.		230V 50/60Hz			
Cat. No.		DH.RSC240	DH.RSC470	DH.RSC660	
Price, Ea. ₩					

\* Other Specifications are available upon Customer's Request.

**Spare Drawer Shelf & Tray, Filter**

Ea. Price, ₩



- DH.RSC.D50 (1) PP Drawer Shelf, w525×d395, for 240Lit & 470Lit
- DH.RSC.D70 , w527×d525, for 660Lit
- DH.RSC.D50R (2) PP Drawer Rail, for 240Lit & 470Lit
- DH.RSC.D70R , for 660Lit
- DH.RSC.T50 (3) PP Tray for Spill Storage, w685×d480, for 240Lit & 470Lit
- DH.RSC.T70 , w527×d525, for 660Lit
- DH.RSC.CF50 (4) Composite Hybrid Filter, w500×d300×h100, for 240Lit & 470Lit
- DH.RSC.CF70 , w700×d300×h100, for 660Lit

**Optional Drawer**

Ea. Price, ₩

- DH.RSC.D50P (5) PP Perforated Drawer Shelf, w525×d395, for 240Lit & 470Lit
- DH.RSC.D70P , w527×d525, for 660Lit

Articles	Cat. No	Description
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**DAIHAN® 10mm PMMA Glove Box Complete Set, with Natural Rubber Glove and Transfer Chamber** NEW  
 With Internal Outlet, Foot S/W for Internal Pressure Regulation, Vacuum Pressure 1 Torr, for 1 Operator, 표준형 글러브박스, 1인용

NEW

**1-Year Warranty**



A & B. 150Lit & 179Lit



(1) Natural Rubber Gloves(Included)

- **Made in Korea**    ■ **Compact, Portable, Lightweight and Self-contained**
- **Ergonomic Design to Fit the Average Person**
- **For Isolating Sensitive Research Studies from a Hostile Exterior Environment**
- **The Front Slopes Viewing Panel Minimizes Glare**
- \* Light Weight and Easy to move from Lab to Lab
- \* Excellent Viewing & Air Tight Structure
- \* Vacuum Gauge on Transfer Chamber
- \* Main Chamber Foot Switch for Control Internal Pressure, Humidity and Oxygen

**Specifications & Ordering information**

<L2>

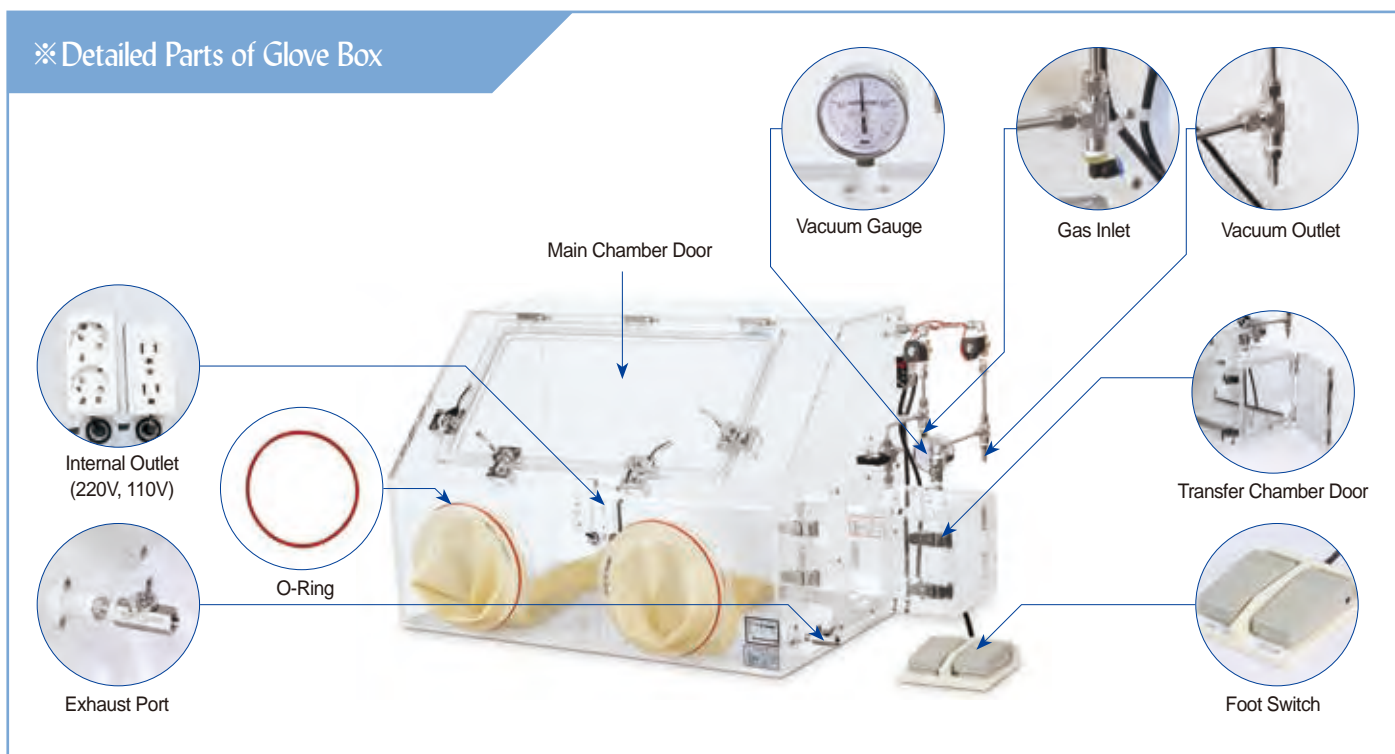
Spec.		Model	A. GloB.600P 150 Lit	B. GloB.800P 179 Lit
<b>Main Chamber (w × d × h)</b>	Outer D.		760×450×550mm	800×500×550mm
	Inner D.		740×430×530mm	780×480×530mm
	Thickness		10mm	
<b>Transfer Chamber (w × d × h)</b>	Outer D.		290×180×180mm	
	Inner D.		250×140×140mm	
	Thickness		20mm	
<b>Material</b>			PMMA(Polymethyl Methacrylate Resin)	
<b>Vacuum Gauge</b>			-1 to 1 Bar	
<b>Vacuum Pressure</b>			Main Chamber : 1Torr, Pass Box : 1Torr	
<b>Vacuum Outlet</b>			O.D. φ9mm	
<b>Gas Inlet</b>			One touch Fitting, 1Ea.(I.D. φ6mm)	
<b>Electric Outlet</b>			2×220V and 2×110V	
<b>Gloves</b>			Natural Rubber Gloves, L640mm, 0.4mm thick	
<b>Glove Port</b>			2 Ports, 8"(φ203mm)	
<b>Weight</b>			32 kg	35 kg
<b>Cat. No.</b>			<b>DH.GloB600P</b>	<b>DH.GloB800P</b>
<b>Price, Each. ₩</b>				

**Spare Gloves**

**SL.Glo6623** (1) Natural Rubber Glove, 8"(φ200mm), L780mm, 0.6mm thick

**Pair Price, ₩**

**※ Detailed Parts of Glove Box**



**DAIHAN® Premium 15mm PMMA Heavy Duty Glove Box Complete Set, with Natural Rubber Glove and Transfer Chamber** NEW  
 With Internal Outlet, Foot S/W for Internal Pressure Regulation, Vacuum Pressure 1 Torr, for 1 & 2 Operators, **프리미엄 안전 글러브박스, 1 & 2인용**



A. 182L, for 1 Operator



B. 416L, for 2 Operators



(1) Natural Rubber Gloves(Included)

※ Detailed parts of Glove Box  
 ⇒ See the Previous Page.

1-Year Warranty

- Made in Korea
- Compact, Portable, Lightweight and Self-contained
- Ergonomic Design to Fit the Average Person
- For Isolating Sensitive Research Studies from a Hostile Exterior Environment
- The Front Slopes Viewing Panel Minimizes Glare

- \* Light Weight and Easy to move from Lab to Lab
- \* Excellent Viewing & Air Tight Structure
- \* Vacuum Gauge on Transfer Chamber
- \* Main Chamber Foot Switch for Control Internal Pressure, Humidity and Oxygen

Specifications & Ordering information

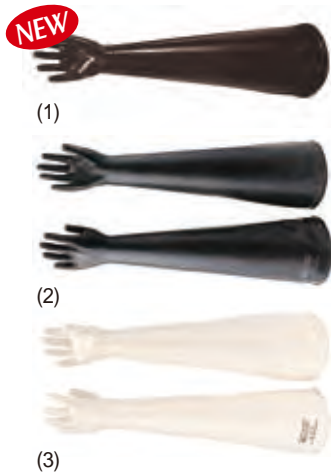
<L2>

Spec.	Model	1 Operator type	2 Operators type
		A. GloB.G01 182 Lit	B. GloB.G01.2 416 Lit
Main Chamber (w×d×h)	Outer D.	800×500×550mm	1530×530×630mm
	Inner D.	770×470×530mm	1500×500×600mm
	Thickness	15mm	
Transfer Chamber (w×d×h)	Outer D.	390×250×250mm	
	Inner D.	350×210×185mm	
	Thickness	20mm	
Material	PMMA(Polyethyl Methacrylate Resin)		
Vacuum Gauge	-1 to 1 Bar		
Vacuum Pressure	Main Chamber : 1Torr, Pass Box : 1Torr		
Vacuum Outlet	O.D. ϕ9mm		
Gas Inlet	One touch Fitting, 1Ea.(I.D. ϕ6mm)		
Electric Outlet	2×220V and 2×110V		
Gloves	Natural Rubber Gloves, L640mm, 0.4mm thick		
Glove Port	2 Ports, 8"(ϕ203mm)	4 Ports, 8"(ϕ203mm)	
Weight	51 kg	86 kg	
Cat. No.	DH.GloBG01	DH.GloBG012	
Price, Each. ₩			

Spare Gloves

SL.Glo6623 (1) Natural Rubber Glove, 8"(ϕ200mm), L780mm, 0.6mm thick

Pair Price, ₩



**Glove For Glove Box, 3 Different Materials - Neoprene · Butyl · Hypalonized Polyethylene** NEW  
 ϕ 203 × L800mm, Thickness 0.4~0.8mm, **글러브박스용 글러브**

- Neoprene 글러브는 방진 · 방균용으로 무균 박스나 드라이 박스에서의 사용에 적합
- Butyl/Hypalon 글러브는 반발력이 매우 작고, 부드럽고 유연, 가스불투과성 · 액체불투과성이 뛰어남

- SL.Glo6632 **Neoprene Glove, Thickness 0.8mm, Black**  
 \* Dustproof, Anti Fungus, Suitable for Sterile Box or Dry Box  
 \* Milled Neoprene Gloves for Increased Sensitivity
- SL.Glo6633 **Butyl Glove, Thickness 0.6mm, Black**  
 \* Made of 2 Layer Materials - Chloroprene/Butyl  
 \* The Highest Permeation Resistance to Vapors and Gases.  
 \* Exceptional Resistance to a Broad Range of Toxic Chemicals
- SL.Glo6634 **Hypalonized Polyethylene Glove, Thickness 0.4mm, White**  
 \* Resist Ozone and Oxidizing Chemicals  
 \* Superior Chemical and U.V. Resistance.

<L2>

Pair Price, ₩

Pair	Price, ₩



**Natural Rubber Gloves for Glove Box, for Port ϕ 130~200mm, Length 630~780mm**  
 Powdered, Thickness 0.4 & 0.6mm, **천연 고무 글러브박스용 장갑**

<L2>

- SL.Glo6621 Gloves For Glove Box, Thickness 0.4mm, ϕ 130×L630mm
- SL.Glo6622 , Thickness 0.6mm, ϕ 150×L700mm New
- SL.Glo6623 , ϕ 200×L780mm New

Pair Price, ₩

Pair	Price, ₩

**DAIHAN® Premium 40mm PMMA Vacuum Glove Box Complete Set, with Natural Rubber Glove and Transfer Chamber** NEW  
 With Internal Outlet, Foot S/W for Internal Pressure Regulation, Vacuum Pressure 10 Torr, for 1 Operator, 프리미엄 진공 글러브박스, 1인용



212L Vacuum Glove Box Complete Set



(1) Natural Rubber Gloves(Included)

- Made in Korea
- Ergonomic Design to Fit the Average Person
- Compact, Portable, Lightweight and Self-contained
- For Isolating Sensitive Research Studies from a Hostile Exterior Environment
- The Front Slopes Viewing Panel Minimizes Glare

- \* Light Weight and Easy to move from Lab to Lab
- \* Excellent Viewing & Air Tight Structure
- \* Vacuum Gauge on Main Chamber and Transfer Chamber
- \* Foot S/W for Internal Pressure Regulation
- \* The Main Chamber Foot Switch can be Used to Effectively Control Internal Humidity and Oxygen

**Specifications & Ordering information** <L2>

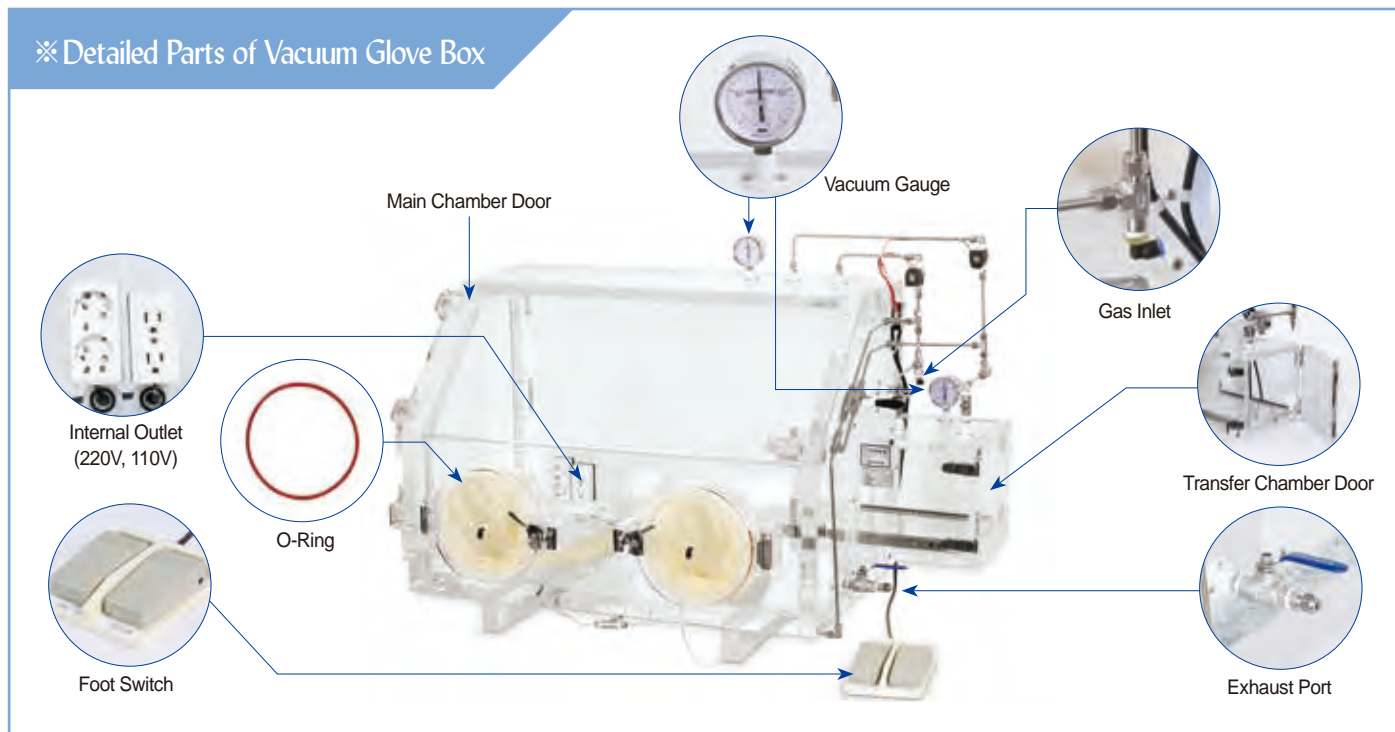
Spec.		Model	GloB.INVGA01 212 Lit
Main Chamber (w×d×h)	Outer D.		1,000×580×700mm
	Inner D.		840×500×550mm
	Thickness		40mm
Transfer Chamber (w×d×h)	Outer D.		390×250×250mm
	Inner D.		350×210×185mm
	Thickness		20mm
Material			PMMA(Polymethyl Methacrylate Resin)
Vacuum Gauge			-1 to 1 Bar
Vacuum Pressure			Main Chamber : 10Torr, Pass Box : 1Torr
Vacuum Outlet			O.D. ϕ9mm
Gas Inlet			One touch Fitting, 1Ea.(I.D. ϕ6mm)
Electric Outlet			2×220V and 2×110V
Gloves			Natural Rubber Gloves, L640mm, 0.4mm thick
Glove Port			2Ports, 8"(ϕ203mm)
Weight			137 kg
Cat. No.			<b>DH.GloBINVGA01</b>
Price, Each. ₩			

**Spare Gloves**

**SL.Glo6623** (1) High Grade Natural Rubber Glove, 8"(ϕ200mm), L780mm, 0.6mm thick

Pair Price, ₩

※ Detailed Parts of Vacuum Glove Box



**DAIHAN® High-performance Compact-size Heating Block/Dry Bath Incubator "MaXtable™ H20", up to 150°C, ±0.1°C**  
 With Large LCD Display, Fuzzy Control, Molded Heater, Modular Anodized Aluminum Blocks, Touch-button Controller

히팅 블록, 디지털 퍼지 컨트롤 시스템, 터치버튼식 조절기, 일체형 주물 히터, 블록 교체 가능, 블록 추출용 공구 포함



Block "BLC548",  
48 holes

~150°C



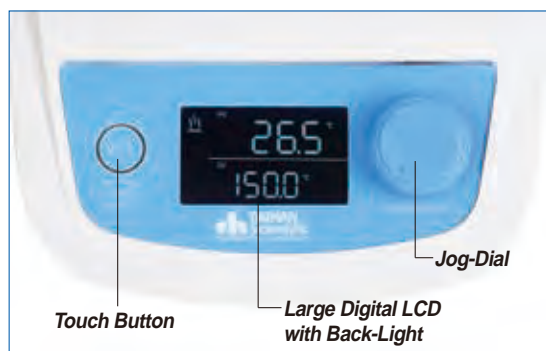
2-Year Warranty

Block Removal Tool

Heating Block/Dry Bath "MaXtable™ H20-set"

- CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Designed for Multi-functional Dry Block Heater    ■ Ergonomic Design
- Patented Jog-Dial and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate. with Large Back-Light LCD
- With a Screw-type Block Removal Tool ; Convenient Handling

- \* High-performance Molded Heater ensures Best Temperature Accuracy.
- \* Internal Bath Material(PPS) ensures Best Heat Insulation    \* Rapid heat up time.
- \* Ideal for Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures
- \* Precise Temperature Control : ±0.1°C at 37°C, ±0.2°C at 90°C, ±0.4°C at 135°C
- \* User Self-Compensation Function to offset between Actual and Displayed Temperature. (± 10.0°C)
- \* Digital Timer Included : up to 99hr 59min (Operation Time + Delay Time)
- \* Storage Function of Temperature and Timer setting values
- \* Convenient integral timer for time-sensitive incubations
- \* Alarm Function : Error Status and Timer-end    \* Easy to Read, Wide LCD Screen
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)
- \* Easily calibrated for accurate temperature control and display



Controller of "MaXtable™ H20"



Included Block (3) "BLC 548" 48holes for 1.5/2ml & Removal Tool

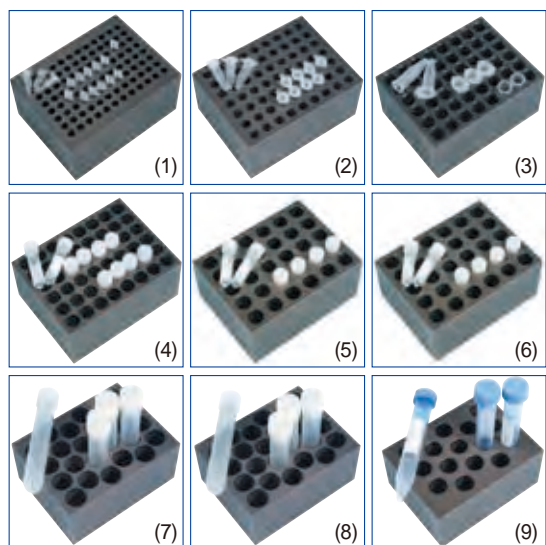
## Specifications & Ordering information

<L1>

Spec.	Model	"MaXtable™ H20" (Only Unit)	"MaXtable™ H20-set" (included Standard Block)
Controller		Single Digital Fuzzy Controller	
Useful Block		Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block		None(Only Heating Block Unit)	48 holes×for 1.5/ 2ml Centri. Tube
Heater		Molded Heater(300W)	
Dimension		Unit : 178×226×h138mm, Block : 90×120×h60mm	
Temp. Range, & Accuracy		Ambient 5°C~150°C, ±0.1°C at 37°C, ±0.2°C at 90°C, ±0.4°C at 135°C	
Heat-Up Speed & Sensor		Approx. 5°C/min, PT100	
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm		99hr 59min, Alarm (Error Status and Timer - end)	
Display		Digital LCD with Back-Light Function	
Material		Unit : PPS & BAS(HF380), Block : Anodized Aluminum	
Included Standard Acce.		Block Extraction Tool	
Packing Size & Gross Weight		230×290×h245mm, 2.2kg	230×355×h245mm, 3.5kg
Power Consumption		300 W	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V	DH.WHB02000	DH.WHB02100
	120V	DH.WHB02001	DH.WHB02101
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

## Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)



- DH.WHB510596 (1) for 0.2ml PCR Tube, (φ6×h16mm)×96 holes, "BLC596"
- DH.WHB510570 (2) for 0.5ml Centri. Tube, (φ7.7×h29.5mm)×63 holes, "BLC570"
- DH.WHB511548 (3) for 1.5/2ml Centri. Tube, (φ11×h35mm)×48 holes, "BLC548" (\* included in the "H20-Set")
- DH.WHB521248 (4) for φ 12mm Test Tube, (φ 12×h35mm)×48 holes, "BLT248"
- DH.WHB521335 (5) for φ 13mm Test Tube, (φ 13×h47mm)×30 holes, "BLT335"
- DH.WHB521535 (6) for φ 15mm Test Tube, (φ 15×h47mm)×30 holes, "BLT535"
- DH.WHB521628 (7) for φ 16.5mm Test Tube, (φ 16.5×h47mm)×24 holes, "BLT628"
- DH.WHB521828 (8) for φ 18mm Test Tube, (φ 18×h47mm)×24 holes, "BLT828"
- DH.WHB531515 (9) for 15ml Conical Tube, (φ 16×h47mm)×15 holes, "BLC515"
- DH.WHB535008 (10) for 50ml Conical Tube, (φ 28.7×h47mm)×8 holes, "BLC008"
- DH.WHB500102 (11) Spare ; Block Removal Tool, Easy Handling

Ea. Price, ₩





**DAIHAN® High-performance Heating Block/Dry Bath Incubator-Heating & Cooling "HB-R48"**  
 With Digital PID Control, Acrylic Lid, Precise Temperature Control, Modular Anodized Aluminum Block,  $-5^{\circ}\text{C} + 95^{\circ}\text{C}$ ,  $\pm 0.1^{\circ}\text{C}$   
 Peltier Cooling System, Digital Timer, Interchangeable Blocks, **히팅 / 쿨링 블록, 블록 교체 가능, 아크릴 리드 / 블럭용 집게 포함**



$-5^{\circ}\text{C} + 95^{\circ}\text{C}$

Block "BLC548",  
48 holes



Patented Jog-Shuttle  
Control System

Block Cover

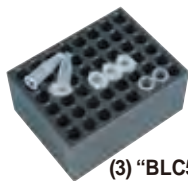


Tongs "BLE101"

2-Year Warranty

"HB-R48-Set"

with Block "BLC548" for 1.5/2ml Centrifuge Tube  $\times$  48 holes



(3) "BLC548"



(11) "BLE101"

Included Anodized Aluminum Block & Tongs

- CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Designed for Multi-Function : Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures.
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function

- \* User Self-Compensation Function to offset between Actual and Displayed Temperature. ( $\pm 10.0^{\circ}\text{C}$ )
- \* Storage Function of Temperature and Timer setting values
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

### Specifications & Ordering information

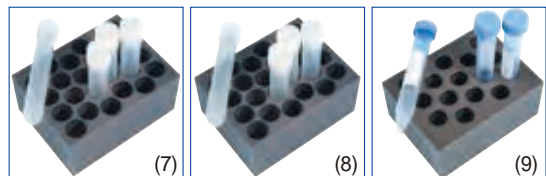
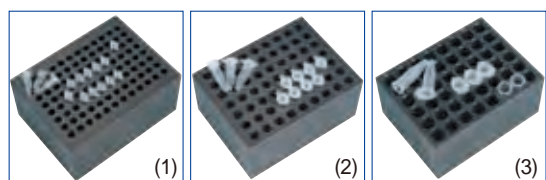
<L1>

Spec.	Model	"HB-R48" (Only Unit)	"HB-R48-set" (included Standard Block)
Controller		Digital Fuzzy Controller	
Useful Block		Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block		None(Only Heating Block Unit)	48 holes×for 1.5/2ml Centri. Tube
Dimension : Unit & Block		185×230×h220mm, and 90×120×h60mm	
Cooling		Two Peltier Modules	
Cool-Down Speed		2.3°C/min. between 95°C to 25°C, 0.5°C/min. between 25°C to -5°C	
Heater and Sensor		300W (Molded Heater), PT100	
Temp. Range, & Accuracy		$-5^{\circ}\text{C}$ to $95^{\circ}\text{C}$ , and $\pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ , $\pm 0.2^{\circ}\text{C}$ at $90^{\circ}\text{C}$	
Heat-Up Speed		Approx. 5°C/min	
Safety Device		Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm		99hr 59min, Alarm (Error Status and Timer - end)	
Display		Digital LCD with Back-Light Function	
Material	Internal & External	Stainless steel (#304), and Powder Coated steel	
	Block	Anodized Aluminum	
Included Standard Acce.		Block Tongs "BLE101" and Block Cover	
Packing Size, Gross Weight		350×220×h310mm, 9 kg	
Power Consumption		450 W	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	

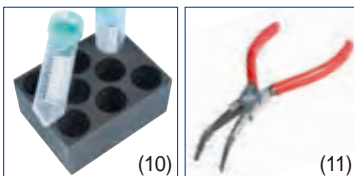
Cat. No.	230V	DH.WHB00248	DH.WHB00249
	120V	DH.WHB02248	DH.WHB02249
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

### Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)



- DH.WHB510596 (1) for 0.2ml PCR Tube, ( $\phi 6 \times h16\text{mm}$ )  $\times$  96 holes, "BLC596"
- DH.WHB510570 (2) for 0.5ml Centri. Tube, ( $\phi 7.7 \times h29.5\text{mm}$ )  $\times$  63 holes, "BLC570"
- DH.WHB511548 (3) for 1.5/2ml Centri. Tube, ( $\phi 11 \times h35\text{mm}$ )  $\times$  48 holes, "BLC548"  
 (\* included in the "HB-R48-Set")
- DH.WHB521248 (4) for  $\phi 12\text{mm}$  Test Tube, ( $\phi 12 \times h35\text{mm}$ )  $\times$  48 holes, "BLT248"
- DH.WHB521335 (5) for  $\phi 13\text{mm}$  Test Tube, ( $\phi 13 \times h47\text{mm}$ )  $\times$  30 holes, "BLT335"
- DH.WHB521535 (6) for  $\phi 15\text{mm}$  Test Tube, ( $\phi 15 \times h47\text{mm}$ )  $\times$  30 holes, "BLT535"
- DH.WHB521628 (7) for  $\phi 16.5\text{mm}$  Test Tube, ( $\phi 16.5 \times h47\text{mm}$ )  $\times$  24 holes, "BLT628"
- DH.WHB521828 (8) for  $\phi 18\text{mm}$  Test Tube, ( $\phi 18 \times h47\text{mm}$ )  $\times$  24 holes, "BLT828"
- DH.WHB531515 (9) for 15ml Conical Tube, ( $\phi 16 \times h47\text{mm}$ )  $\times$  15 holes, "BLC515"
- DH.WHB535008 (10) for 50ml Conical Tube, ( $\phi 28.7 \times h47\text{mm}$ )  $\times$  8 holes, "BLC008"
- DH.WHB500101 (11) Spare ; Block Extraction Tongs, "BLE101"



Ea. Price, ₩

**DAIHAN® External/Internal High Temp Bath Circulator 250°C & Refrigerated/Heating Bath Circulator - 35°C + 150°C**  
 정밀 고온 배스겸용 써클레이터와 냉동/가열 배스 겸용 써클레이터

CE up to 250°C



2-Year Warranty

External/Internal High Temp Bath Circulator

CE -35(-25)°C + 150°C



2-Year Warranty

External/Internal Refrigerated/Heating Bath Circulator

※ See the "Bath Circulators" Section for the Details.

250°C External/Internal High-temp Bath Circulator, 8 · 12 · 22 · 30 Lit .....	P. 35
-25°C + 150°C External/Internal Refrigerated/Heating Bath Circulator, 8 · 12 · 22 · 30 Lit .....	P. 36
-35°C + 150°C External/Internal Refrigerated/Heating Bath Circulator, 8 · 12 · 22 · 30 Lit .....	P. 37

**Therminol D12® -85°C + 230°C Best COOL-/HEAT-ing Transfer Fluid, Synthetic Hydrocarbon Mixture**  
 For Low/High-Temp Baths, Clearly Harmless Liquid, Low Odor FDA Grade, 4/18/200Lit, 냉매/열매 겸용 합성 탄화수소혼합물(액체)



(1) 4Lit

(2) 18Lit

- Supplied by "Eastman" USA      ■ Clear, Water white Liquid / Non-Toxic / Low-Smell, FDA-Grade.
- The Best Circulation Properties / Thermal Stability.
- The Lowest Viscosity, cP ▶ (1) -50°C : 12cP, (2) 100°C : 0.46cP, (3) 200°C : 0.19cP, (4) 230°C : 0.16cP
- \* Specific Gravity : 0.759 at 25°C      \* Autoignition Temp : 247°C      \* Flash point : 62°C
- \* Freezing Point : -94°C      \* Boiling Point(90%) : 204°C      \* Do not use for Silicone Tube
- \* Package : (1) 4Lit and (2) 18Lit PE Square Bottle / Subdivision, Original-200Lit Steel Drum / 155kg

<L1>

**SL.CirD12.1** (1) "Therminol D12" Cool/Heat Transfer Fluid, -85°C + 230°C, 4 Lit

4ℓ .dh pk ₩

4Lit

**SL.CirD12.2** (2) "Therminol D12" Cool/Heat Transfer Fluid, -85°C + 230°C, 18 Lit

18ℓ .dh pk ₩

18Lit

**SL.CirD12** "Therminol D12" Cool/Heat Transfer Fluid, -85°C + 230°C, 200 Lit/Drum

※ 운임 착불

Drum Price, ₩

200Lit



Heating Transfer Fluid, 20Lit

**SYN THERM 22L® -5°C + 320°C Heating Transfer Fluid, Synthetic Alkylbenzene Derivative**  
 For Low- & High-Temp Circulation, 알킬벤젠계 합성열매 NEW

- \* Hazards Identification of MSDS(Material Safety Data Sheet) :
  - H315 Causes Skin Irritation
  - H319 Causes Serious Eye Irritation
  - H335 May Cause Respiratory Irritation
  - H336 May Cause Drowsiness or Dizziness
- \* Kinematic Viscosity & Density :
 

(1) at 0°C : 22.7cSt, 0.885kg/ℓ	(2) at 40°C : 21.80cSt, 0.859kg/ℓ
(3) at 80°C : 6.09cSt, 0.834kg/ℓ	(4) at 140°C : 6.09cSt, 0.795kg/ℓ
(5) at 200°C : 1.10cSt, 0.756kg/ℓ	(6) at 260°C : 0.74cSt, 0.718kg/ℓ

<L1>

**SL.CirD12.1** SYN THERM 22L® Heating Transfer Fluid -5°C + 320°C, 20Lit

Pk. Price, ₩

20Lit

**DAIHAN® -30°C +200°C Precise Refrigerated Heating External Circulator "MaXircu™ WHR", Fill-10 · 18 · 25 Lit**  
 Ideal for Evaporator/Reactor &c. Heating & Cooling Line, with Pre-Cooling Sys, Used with External Direct Contact K-type Temp. Probe(Optional)  
 With High Quality Magnetic Pump, Flow 20 · 40 · 60 Lit/min, Lift 38m, ±0.2°C, 정밀 고온/냉동 겸용 외부 써큘레이터



-30°C ~ +200°C Refrigerated / Heating External Circulator, "MaXircu™ WHR-50"



"MaXircu™ WHR" in the Reactor System.

※ Note : Cooling Transfer Fluid Should be an Antifreezing Solution

- Made in Korea
- PL(Product Liability) Insurance
- Max. Lift : 38m
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Patented Jog-Dial Control System and Digital LCD with Back-Light Function.
- \* Innovated Powerful Circulation Pump ensures Temp. Uniformity : Internal and External Circulation (Max Flow Rate : 20 · 40 · 60 Lit/min)
- \* Assembly-type Safety Connection Ports/Pipe (for Fluid In/Out-let : ISO RC 1" Screw Stainless-steel.)
- \* With High Quality Shock-proof Caster for Convenient and Safe Moving.
- \* Embedded External Nozzle Part for the Prevention of Nozzle Damaged.
- \* Stainless-steel Internal Bath for Prevention of Corrosion.
- \* Independently 3-systems : Refrigerating System, Heating System, Pre-Cooling System.
- \* Urethane Foam Insulation
- \* Warning and Auto-Stop Function in case of Liquid Shortage.
- \* More Faster Cool-down and Heat-up Time
- \* Connection with Evaporator or Viscometer is applicable.



Connection Ports

### Specifications & Ordering information

<L1>

Spec.	Model	"MaXircu™ WHR-20" Useful for 5~20Lit Reactor	"MaXircu™ WHR-50" Useful for 20~50Lit Reactor	"MaXircu™ WHR-100" Useful for 50~100Lit Reactor
Temp. Range & Stability		-30°C+200°C-Range, ±0.2°C(at 15°C)-Stability		
Heat-Fluid Filling Volume		10 Lit max	18 Lit max	25 Lit max
Useful for 5~100Lit Reactors		for 5~20Lit Reactor	for 20~50Lit Reactor	for 50~100Lit Reactor
Refrigerator Capacity		4.5 kW	7.5 kW	18 kW
Heater		2.5 kW	6.0 kW	12 kW
Lid & Top Opening Dia.		φ80 mm		
Fluid In/Out-let Connector		ISO RC 1" (English System AG 1") Thread, Stainless-steel		
Pump Power, Max. Flow Rate		20 Lit/min	40 Lit/min	60 Lit/min
Lift Height, m	Max. Pressure & Lift	Max Pressure : 4 bar, Max. Lift : 38m		
Cooling Capacity	at +15°C	8.1 kW	13.1 kW	22.7 kW
	at 0°C	4.3 kW	7.3 kW	12.6 kW
	at -25°C	1.4 kW	3.1 kW	5.45 kW
External Dimension		600×850×h1200mm	650×900×h1350mm	750×900×h1450mm
Optional External Temp. Sensor K-type Probe		Can be used with External Direct Contact K-type Temp. Probe. (Optional)		
Material		Internal : Stainless-steel, External : Powder Coated steel		
Electrical Reqts.		3Phase 380V		

Cat. No.	60Hz	DH.WHR0020	DH.WHR0050	DH.WHR0100
	50Hz	DH.WHR0025	DH.WHR0055	DH.WHR0150
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

### Insulated Silicone & Teflon PFA Circulation Hose, Id φ 10~19mm, L1/1.5m

- \* φ 37mm Black NBR Foam Insulated Silicone or PFA-Hose
- \* SL.Tub4031 & SL.Tub4032 : PFA Hose
- \* Silicone Vacu-Hose : id 10×od 13mm, id 15×od 20mm, id 18×od 24mm, 220°C
- \* PFA Hose : id 10×od 12mm / PTFE Hose : id 15×od 16mm, id 19×od 21mm, -100°C+260°C

#### (1) Insulated Silicone Hose, 220°C

<L1>

SL.Tub	Material	Length	dh Pk. Price, ₩
SL.Tub4021	Sili-hose, id 10mm, L1m	1m	
SL.Tub4022	, L1.5m	1.5m	
SL.Tub4023	, id 15mm, L1m	1m	
SL.Tub4024	, L1.5m	1.5m	
SL.Tub4025	, id 18mm, L1m	1m	
SL.Tub4026	, L1.5m	1.5m	

#### (2) Insulated PFA Hose, 260°C

SL.Tub	Material	Length	dh Pk. Price, ₩
SL.Tub4031	PFA-hose, id 10mm, L1m	1m	
SL.Tub4032	, L1.5m	1.5m	
SL.Tub4033	PTFE-hose, id 15mm, L1m	1m	
SL.Tub4034	, L1.5m	1.5m	
SL.Tub4035	, id 19mm, L1m	1m	
SL.Tub4036	, L1.5m	1.5m	

#### (3) Best Insulated & Flexible Stainless-steel Circulation Hose, Id φ 17mm, L1m, 360°C

SL.Tub	Material	Ea. Price, ₩
SL.Tub7021	Flexible Stainless-steel Circulation Hose, id 17×od 60mm, L1m	

※ See the Preceding Page for Cooling / Heating Transfer Fluid

# Heating Mantles

<b>For Beakers</b> - Basic-type .....	P. 94
- Fabric Housing .....	P. 95
- Remote Control .....	P. 95
- Stirring-type .....	P. 94
<b>For Flasks</b> - Basic-type .....	P. 96
- Fabric Housing .....	P. 98
- Remote Control .....	P. 97~98
- Stirring-type .....	P. 96
<b>For Reaction Vessels</b> - Basic-type .....	P. 99
- Fabric Housing .....	P. 101
- Remote Control .....	P. 100~101
- Stirring-type .....	P. 99
<b>For Soxhlet/Extraction</b> .....	P. 102
<b>Heating Tape and Custom Made</b> .....	P. 103
<b>Heating Product Controller</b> .....	P. 104



**Beaker Basic-type**  
"WHM12146"



**Beaker Stirring-type**  
"WHM121606"



**Flask Basic-type**  
"WHM12014"



**Flask Stirring-type**  
"WHM12034"



**Flask High Temp-type**  
"WHM12094"



**Reaction Flask**  
"WHM8224"



**Fabric Housing**  
"WHM12114"



**Fabric Housing**  
"WHM121303"



**Reaction Vessel**  
"WHM8153"



**Reaction Vessel**  
"WHM8180"



**Analog 6 places Heating Mantle**  
"WHM12293"

**Analog Compact Controller**  
"WHM-C10A"



**Digital Feedback Controller**  
"WHM-C10D"

DAIHAN® Aluminum-case Beaker Heating Mantle, (1) Basic & (2) Stirring-type, 450°C, 100~5,000ml  
 With Built-in Temp Controller, with/without Mag-stir Speed Control, with Certi. & Traceability  
 비커용 히팅맨틀, 온도 조절기 내장, “기본형” 및 “자석교반형”, Ni-Cr열선 내장

- Made in Korea
- Ideal for All type Beakers
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Built-in Temp-Controller. Nickel-Chrome Heating Element “Coil-type” : Acid Resistant & Long Life Time.



(1) Basic-type Beaker Mantle with Controller

(1) Basic-type Beaker Mantle, Built-in Temp. Controller

\* With a Device\* for Holding a Optional Stainless-steel Rod  $\phi$  12.7mm for Article Support.

<L1>

Beakers, ml Dia. $\phi$ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi \times h$ (mm)	with 230V	with 120V	
100ml, $\phi$ 50-52	80 W	40 mm	$\phi$ 150 $\times$ h105	DH.WHM12141	DH.WHM12151	
250ml, $\phi$ 68-70	140 W	65 mm	$\phi$ 150 $\times$ h140	DH.WHM12142	DH.WHM12152	
400ml, $\phi$ 79-81	240 W	70 mm	$\phi$ 150 $\times$ h140	DH.WHM12143	DH.WHM12153	
600ml, $\phi$ 88-90	240 W	75 mm	$\phi$ 150 $\times$ h140	DH.WHM12144	DH.WHM12154	
800ml, $\phi$ 98-100	300 W	90 mm	$\phi$ 200 $\times$ h165	DH.WHM12145	DH.WHM12155	
1,000ml, $\phi$ 105-108	350 W	90 mm	$\phi$ 200 $\times$ h165	DH.WHM12146	DH.WHM12156	
2,000ml, $\phi$ 130-132	450 W	125 mm	$\phi$ 200 $\times$ h195	DH.WHM12147	DH.WHM12157	
3,000ml, $\phi$ 151-153	550 W	160 mm	$\phi$ 270 $\times$ h235	DH.WHM12148	DH.WHM12158	
4,000ml, $\phi$ 160-162	700 W	160 mm	$\phi$ 270 $\times$ h235	DH.WHM121481	DH.WHM121581	
5,000ml, $\phi$ 169-171	800 W	160 mm	$\phi$ 270 $\times$ h235	DH.WHM12149	DH.WHM12159	



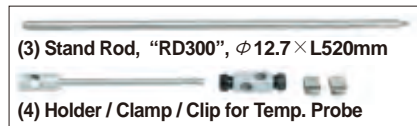
(2) Stirring-type Beaker Mantle with a Stir-Bar

(2) Stirring-type Beaker Mantle, Built-in 50~1200rpm Mag-stir Speed & Temp. Controller

\* With a Device\* for Holding a Optional Stainless-steel Rod  $\phi$  12.7mm for Article Support.

\* With 1ea  $\times$  PTFE Octagonal Magnetic Stirrer Bar, L38mm

Beakers, ml Dia. $\phi$ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi \times h$ (mm)	with 230V	with 120V	
100ml, $\phi$ 50-52	80 W	45 mm	$\phi$ 150 $\times$ h140	DH.WHM121601	DH.WHM121611	
250ml, $\phi$ 68-70	140 W	70 mm	$\phi$ 150 $\times$ h160	DH.WHM121602	DH.WHM121612	
400ml, $\phi$ 79-81	240 W	70 mm	$\phi$ 150 $\times$ h160	DH.WHM121603	DH.WHM121613	
600ml, $\phi$ 88-90	240 W	72 mm	$\phi$ 150 $\times$ h160	DH.WHM121605	DH.WHM121615	
1,000ml, $\phi$ 105-108	350 W	105 mm	$\phi$ 200 $\times$ h195	DH.WHM121606	DH.WHM121616	
2,000ml, $\phi$ 130-132	450 W	140 mm	$\phi$ 200 $\times$ h255	DH.WHM121607	DH.WHM121617	
3,000ml, $\phi$ 151-153	550 W	140 mm	$\phi$ 270 $\times$ h235	DH.WHM121608	DH.WHM121618	
4,000ml, $\phi$ 160-162	700 W	170 mm	$\phi$ 325 $\times$ h270	DH.WHM121609	DH.WHM121619	
5,000ml, $\phi$ 169-171	800 W	170 mm	$\phi$ 325 $\times$ h270	DH.WHM121610	DH.WHM121620	



Optional Stainless-steel Rod, Holder & Clamp

DH.WHP503037 (3) Stand Rod,  $\phi$  12.7  $\times$  L520mm, “RD300”, for Heating Mantles

DH.WHP503012 (4) Holder / Clamp / Clip, “CL220”, for Temp. Sensor

Ea. Price, ₩

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**DAIHAN® Aluminum-case Beaker Heating Mantles "WHM", 450°C, 100 ~ 10,000ml**

For Beaker, with Nickel Chrome Heating Element, K-type Thermo-sensor Integrated, Option-Controller, with Certi. & Traceability

비커용 히팅맨틀, K-type 온도센서, 자력교반기와 사용 가능, 조절기 별도

- Made in Korea
- Ideal for Use with Magnetic Stirrer
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Built-in Temp-Controller. Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.
- Optional Remote Thermo Controllers are available (Analog : WHM-C10A, Digital : WHM-C10D)

<L1>



Beakers, ml Dia. φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside φ × h(mm)	with 230V	with 120V	
100ml, φ 50-52	80 W	50 mm	φ 150 × h75	DH.WHM12170	DH.WHM12180	
250ml, φ 68-70	140 W	50 mm	φ 150 × h75	DH.WHM12171	DH.WHM12181	
400ml, φ 79-81	240 W	85 mm	φ 150 × h110	DH.WHM12172	DH.WHM12182	
400ml, φ 76-78	240 W	85 mm	φ 150 × h110	DH.WHM121721	DH.WHM121821	
600ml, φ 88-90	240 W	85 mm	φ 150 × h110	DH.WHM12173	DH.WHM12183	
800ml, φ 98-100	300 W	90 mm	φ 150 × h110	DH.WHM12174	DH.WHM12184	
1,000ml, φ 105-108	350 W	115 mm	φ 200 × h140	DH.WHM12175	DH.WHM12185	
2,000ml, φ 130-132	450 W	140 mm	φ 200 × h165	DH.WHM12176	DH.WHM12186	
3,000ml, φ 151-153	550 W	175 mm	φ 270 × h200	DH.WHM12177	DH.WHM12187	
4,000ml, φ 160-162	700 W	175 mm	φ 270 × h200	DH.WHM12178	DH.WHM12188	
5,000ml, φ 169-171	800 W	175 mm	φ 270 × h200	DH.WHM12179	DH.WHM12189	
10Lit, φ 216-219	1400 W	245 mm	φ 325 × h270	DH.WHM121791	DH.WHM121891	



**Optional Remote Controller**

- (a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW
- (b) Digital Remote Controller, Ambient 5°C~700°C, ±1°C Uniformity at Set Temp.

Cat. No	Ea. Price, ₩	
	with 230V	with 120V
DH.WHM13500	DH.WHM23500	
DH.WHM12500	DH.WHM22500	

(3) Stand Rod, "RD300", φ 12.7 × L520mm

(4) Holder / Clamp / Clip for Temp. Probe

**Optional Temp. Probe & Stand Rod, Holder, Clamp for Digital Temp. Remote Controller**

- DH.WHP503040 Direct Contact Temp. Probe, K-type, "SS300", L250 × φ 4.8 mm
- DH.WHP503050 "SS400", L380 × φ 4.8 mm
- DH.WHP503041 "SS310", Teflon Coated, L250 × φ 5 mm
- DH.WHP503051 "SS410", Teflon Coated, L380 × φ 5 mm
- DH.WHP503037 (3) Stand Rod, φ 12.7 × L520mm, "RD300", for Heating Mantles
- DH.WHP503012 (4) Holder / Clamp / Clip, "CL220", for Temp. Sensor

Ea. Price, ₩

**DAIHAN® Fabric-Housed Heating Beaker Mantles "WHM", 450°C, 50 ~ 5,000ml, with Certi. & Traceability**

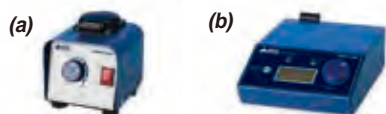
For Beaker Self-Standing, with Nickel Chrome Heating Element, Option-Controller, 직물케이스 히팅맨틀, 비커용, Ni-Cr열선 내장, 조절기 별도

- Made in Korea
- Ideal for All type Round Flask and Use with Magnetic Stirrer
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.

<L1>



Beakers, ml Dia. φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside φ × h(mm)	with 230V	with 120V	
50ml, φ 41 ~ 43	80 W	40mm	φ 100 × h60	DH.WHM12190	DH.WHM12200	
100ml, φ 50-52	80 W	50mm	φ 110 × h70	DH.WHM12191	DH.WHM12201	
250ml, φ 68-70	140 W	60mm	φ 130 × h80	DH.WHM12192	DH.WHM12202	
400ml, φ 79-81	240 W	80mm	φ 140 × h100	DH.WHM12193	DH.WHM12203	
400ml, φ 76-78	240 W	80mm	φ 140 × h100	DH.WHM121931	DH.WHM122031	
600ml, φ 88-90	240 W	95mm	φ 150 × h115	DH.WHM12194	DH.WHM12204	
800ml, φ 98-100	300 W	95mm	φ 160 × h115	DH.WHM12195	DH.WHM12205	
1,000ml, φ 105-108	350 W	110mm	φ 170 × h130	DH.WHM12196	DH.WHM12206	
2,000ml, φ 130-132	450 W	150mm	φ 200 × h170	DH.WHM12197	DH.WHM12207	
3,000ml, φ 151-153	550 W	170mm	φ 210 × h190	DH.WHM12198	DH.WHM12208	
4,000ml, φ 160-162	700 W	180mm	φ 220 × h220	DH.WHM121981	DH.WHM122081	
5,000ml, φ 169-171	800 W	200mm	φ 230 × h220	DH.WHM12199	DH.WHM12209	



**Optional Remote Controller**

- (a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW
- (b) Digital Remote Controller, Ambient 5°C~700°C, ±1°C Uniformity at Set Temp.

Cat. No	Ea. Price, ₩	
	with 230V	with 120V
DH.WHM13500	DH.WHM23500	
DH.WHM12500	DH.WHM22500	

**DAIHAN® Aluminium-case Flask Heating Mantle, (1) Basic & (2) Stirring-type, 450°C, 50~20,000ml**  
 With Built-in Temp Controller, with/without Mag-stir Speed Control, with Certi. & Traceability  
 라운드플라스크용 히팅맨틀, 온도 조절기 내장, “기본형” 및 “자석교반형”, Ni-Cr열선 내장

- Made in Korea
- Ideal for All type Round Flask
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Built-in Temp-Controller. Nickel-Chrome Heating Element “Coil-type” : Acid Resistant & Long Life Time.
- With Powder-coated Steel-case : 10-/20-Lit

~450°C

2-Year Warranty



(1) Basic-type Flask Mantle with Controller

### (1) Basic-type Flask Mantle, Built-in Temp. Controller

\* Heating Mantles for 50ml~6,000ml Flask are with a Device\* for Holding a Optional Stainless-steel Rod  $\phi$  12.7 mm for Article Support.

&lt;L1&gt;

Flasks, ml Dia. $\phi$ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi \times h$ (mm)	with 230V	with 120V	
50ml, $\phi$ 49 ~ 52	80 W	40 mm	$\phi$ 150 $\times$ h140	DH.WHM12010	DH.WHM12020	
100ml, $\phi$ 63 ~ 66	80 W	40 mm	$\phi$ 150 $\times$ h140	DH.WHM12011	DH.WHM12021	
250ml, $\phi$ 83 ~ 86	140 W	65 mm	$\phi$ 150 $\times$ h140	DH.WHM12012	DH.WHM12022	
500ml, $\phi$ 102 ~ 105	240 W	65 mm	$\phi$ 200 $\times$ h165	DH.WHM12013	DH.WHM12023	
1,000ml, $\phi$ 130 ~ 133	350 W	75 mm	$\phi$ 200 $\times$ h165	DH.WHM12014	DH.WHM12024	
2,000ml, $\phi$ 165 ~ 169	450 W	100 mm	$\phi$ 270 $\times$ h200	DH.WHM12015	DH.WHM12025	
3,000ml, $\phi$ 184 ~ 187	550 W	105 mm	$\phi$ 270 $\times$ h200	DH.WHM12016	DH.WHM12026	
4,000ml, $\phi$ 206 ~ 208	750 W	140 mm	$\phi$ 325 $\times$ h226	DH.WHM8037	DH.WHM8037.1	
5,000ml, $\phi$ 221 ~ 224	800 W	131 mm	$\phi$ 325 $\times$ h226	DH.WHM12017	DH.WHM12027	
6,000ml, $\phi$ 234 ~ 237	800 W	131 mm	$\phi$ 325 $\times$ h226	DH.WHM12018	DH.WHM12028	
10Lit, $\phi$ 278 ~ 282	1,400 W	150 mm	$\phi$ 390 $\times$ h240	DH.WHM12019	DH.WHM12029	
20Lit, $\phi$ 344 ~ 348	2,000 W	200 mm	$\phi$ 470 $\times$ h260	DH.WHM12070	DH.WHM12071	

50~1200rpm  
~450°C

2-Year Warranty



(2) Stirring-type Flask Mantle with a Stir-Bar

### (2) Stirring-type Flask Mantle, Built-in 50~1200rpm Mag-stir Speed & Temp. Controller

\* Heating Mantles for 50ml~6,000ml Flask are with a Device\* for Holding a Optional Stainless-steel Rod  $\phi$  12.7 mm for Article Support.

\* 10-/20-Lit models Square-type Outside Shape.

\* With 1ea  $\times$  PTFE Oval-type Magnetic Stirrer Bar, L25mm.

Flasks, ml Dia. $\phi$ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi \times h$ (mm)	with 230V	with 120V	
50ml, $\phi$ 49 ~ 52	80 W	40 mm	$\phi$ 150 $\times$ h140	DH.WHM12030	DH.WHM12040	
100ml, $\phi$ 63 ~ 66	80 W	40 mm	$\phi$ 150 $\times$ h140	DH.WHM12031	DH.WHM12041	
250ml, $\phi$ 83 ~ 86	140 W	50 mm	$\phi$ 150 $\times$ h140	DH.WHM12032	DH.WHM12042	
500ml, $\phi$ 102 ~ 105	240 W	65 mm	$\phi$ 200 $\times$ h165	DH.WHM12033	DH.WHM12043	
1,000ml, $\phi$ 130 ~ 133	350 W	75 mm	$\phi$ 200 $\times$ h165	DH.WHM12034	DH.WHM12044	
2,000ml, $\phi$ 165 ~ 169	450 W	100 mm	$\phi$ 270 $\times$ h200	DH.WHM12035	DH.WHM12045	
3,000ml, $\phi$ 184 ~ 187	550 W	105 mm	$\phi$ 270 $\times$ h200	DH.WHM12036	DH.WHM12046	
4,000ml, $\phi$ 206 ~ 208	750 W	135 mm	$\phi$ 325 $\times$ h226	DH.WHM8057	DH.WHM8057.1	
5,000ml, $\phi$ 221 ~ 224	800 W	131 mm	$\phi$ 325 $\times$ h226	DH.WHM12037	DH.WHM12047	
6,000ml, $\phi$ 234 ~ 237	800 W	131 mm	$\phi$ 325 $\times$ h226	DH.WHM12038	DH.WHM12048	
10Lit, $\phi$ 278 ~ 282	1,500 W	210 mm	440 $\times$ 510 $\times$ h310	DH.WHM8060	DH.WHM8060.1	
20Lit, $\phi$ 344 ~ 348	2,000 W	230 mm	440 $\times$ 550 $\times$ h330	DH.WHM8061	DH.WHM8061.1	

#### Optional Stainless-steel Rod, Holder & Clamp

Ea. Price, ₩

- DH.WHP503037 (3) Stand Rod,  $\phi$  12.7  $\times$  L520mm, “RD300”, for Heating Mantles  
 DH.WHP503012 (4) Holder / Clamp / Clip, “CL220”, for Temp. Sensor

(3) Stand Rod, “RD300”,  $\phi$  12.7  $\times$  L520mm

(4) Holder / Clamp / Clip for Temp. Probe



**DAIHAN® Remotecontrolled Flask Heating Mantle, (1) 450°C Basic & (2) 650°C High Temp-type, 50ml~100Lit**  
 For Spherical Flask, with Nickel Chrome Heating Element, K-type Thermo-Sensor Integrated, with Certi. & Traceability, Option-Controller  
 라운드플라스크용 히팅맨틀, K-type 온도센서, Ni-Cr열선 내장, 자력교반기와 사용가능, 조절기 별도

- Made in Korea
- Ideal for All type Round Flask and Use with Magnetic Stirrer
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Optional Remote Thermo Controller, K-type Thermo-Sensor, and Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.
- Heating Mantles for 50ml~6,000ml Flask are with a Device\* for Holding a Optional Stainless-steel Rod  $\phi$ 12.7mm for Article Support.



(1) 450°C Basic-type



(2) 650°C High Temp-type



(3) Stand Rod, "RD300",  $\phi$  12.7×L520mm

(4) Holder / Clamp / Clip for Temp. Probe

**(1) 450°C Basic-type, 50ml~100Lit**

① with Aluminum-case, 50~6000ml    ② with Powder-coated Steel-case, 10~100Lit

<L1>

Flasks, ml Dia. $\phi$ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi \times h$ (mm)	with 230V	with 120V	
50ml, $\phi$ 49 ~ 52	80 W	48 mm	$\phi$ 150×h75	DH.WHM12050	DH.WHM12060	
100ml, $\phi$ 63 ~ 66	80 W	50 mm	$\phi$ 150×h75	DH.WHM12051	DH.WHM12061	
250ml, $\phi$ 83 ~ 86	140 W	50 mm	$\phi$ 150×h75	DH.WHM12052	DH.WHM12062	
500ml, $\phi$ 102 ~ 105	240 W	85 mm	$\phi$ 200×h90	DH.WHM12053	DH.WHM12063	
1,000ml, $\phi$ 130 ~ 133	350 W	85 mm	$\phi$ 200×h140	DH.WHM12054	DH.WHM12064	
2,000ml, $\phi$ 165 ~ 169	450 W	110 mm	$\phi$ 270×h135	DH.WHM12055	DH.WHM12065	
3,000ml, $\phi$ 184 ~ 187	550 W	110 mm	$\phi$ 270×h135	DH.WHM12056	DH.WHM12066	
4,000ml, $\phi$ 206 ~ 208	750 W	135 mm	$\phi$ 325×h180	DH.WHM8078	DH.WHM8078.1	
5,000ml, $\phi$ 221 ~ 224	800 W	140 mm	$\phi$ 325×h165	DH.WHM12057	DH.WHM12067	
6,000ml, $\phi$ 234 ~ 237	800 W	140 mm	$\phi$ 325×h165	DH.WHM12058	DH.WHM12068	
10Lit, $\phi$ 278 ~ 282	1,400 W	160 mm	$\phi$ 390×h240	DH.WHM12073	DH.WHM12083	
20Lit, $\phi$ 344 ~ 348	2,000 W	200 mm	$\phi$ 460×h280	DH.WHM12074	DH.WHM12084	
50Lit, $\phi$ 489 ~ 494	4,000 W	282 mm	$\phi$ 680×h360	DH.WHM12075	DH.WHM12085	
100Lit, $\phi$ 609 ~ 614	6,000 W	370 mm	$\phi$ 740×h450	DH.WHM8084	DH.WHM8084.1	

**(2) 650°C High Temp-type, 100ml~10Lit**

① with Aluminum-case, 100~6000ml    ② with Powder-coated Steel-case, 10Lit

Flasks, ml Dia. $\phi$ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi \times h$ (mm)	with 230V	with 120V	
100ml, $\phi$ 63 ~ 66	120 W	50 mm	$\phi$ 150×h75	DH.WHM12091	DH.WHM12101	
250ml, $\phi$ 83 ~ 86	200 W	50 mm	$\phi$ 150×h75	DH.WHM12092	DH.WHM12102	
500ml, $\phi$ 102 ~ 105	350 W	70 mm	$\phi$ 200×h80	DH.WHM12093	DH.WHM12103	
1,000ml, $\phi$ 130 ~ 133	450 W	85 mm	$\phi$ 200×h140	DH.WHM12094	DH.WHM12104	
2,000ml, $\phi$ 165 ~ 169	600 W	110 mm	$\phi$ 270×h135	DH.WHM12095	DH.WHM12105	
3,000ml, $\phi$ 184 ~ 187	700 W	110 mm	$\phi$ 270×h135	DH.WHM12096	DH.WHM12106	
4,000ml, $\phi$ 206 ~ 208	850 W	125 mm	$\phi$ 325×h180	DH.WHM8097	DH.WHM8097.1	
5,000ml, $\phi$ 221 ~ 224	1,200 W	140 mm	$\phi$ 325×h165	DH.WHM12097	DH.WHM12107	
6,000ml, $\phi$ 234 ~ 237	1,200 W	140 mm	$\phi$ 325×h165	DH.WHM12098	DH.WHM12108	
10Lit, $\phi$ 278 ~ 282	2,000 W	160 mm	$\phi$ 400×h260	DH.WHM8100	DH.WHM8100.1	

**Optional Remote Controller**

- (a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW
- (b) Digital Remote Controller, Ambient 5°C~700°C,  $\pm$ 1°C Uniformity at Set Temp.

Cat. No	Ea. Price, ₩	
	with 230V	with 120V
DH.WHM13500	DH.WHM23500	
DH.WHM12500	DH.WHM22500	

**Optional Temp. Probe & Stand Rod, Holder, Clamp for Digital Temp. Remote Controller**

- DH.WHP503040 Direct Contact Temp. Probe, K-type, "SS300", L250× $\phi$ 4.8 mm
- DH.WHP503050 "SS400", L380× $\phi$ 4.8 mm
- DH.WHP503041 "SS310", Teflon Coated, L250× $\phi$ 5 mm
- DH.WHP503051 "SS410", Teflon Coated, L380× $\phi$ 5 mm
- DH.WHP503037 (3) Stand Rod,  $\phi$  12.7×L520mm, "RD300", for Heating Mantles
- DH.WHP503012 (4) Holder / Clamp / Clip, "CL220", for Temp. Sensor

Ea. Price, ₩

## DAIHAN® Fabric-Housed Heating Mantle, (1) Self Standing-base & (2) Top Cover, 450°C, 50ml~100Lit

For Spherical Flask, with Nickel Chrome Heating Element, Option-Controller, with Certi. & Traceability

직물케이스 히팅맨틀, Ni-Cr열선 내장, 자력교반기와 사용가능, 조절기 별도

- Made in Korea
- Ideal for All type Round Flask and Use with Magnetic Stirrer
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.

~450°C

2-Year Warranty



(1) Self Standing-base

### (1) Self Standing-base Mantle

<L1>

Flasks, ml Dia. φ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside φ × h(mm)	with 230V	with 120V	
50ml, φ 49 ~ 52	80 W	30 mm	φ 80 × h55	DH.WHM12110	DH.WHM12120	
100/125ml, φ 63 ~ 66	80 W	40 mm	φ 100 × h65	DH.WHM12111	DH.WHM12121	
250ml, φ 83 ~ 86	140 W	50 mm	φ 125 × h75	DH.WHM12112	DH.WHM12122	
500ml, φ 102 ~ 105	240 W	60 mm	φ 155 × h85	DH.WHM12113	DH.WHM12123	
1,000ml, φ 130 ~ 133	350 W	75 mm	φ 191 × h100	DH.WHM12114	DH.WHM12124	
2,000ml, φ 165 ~ 169	450 W	95 mm	φ 226 × h120	DH.WHM12115	DH.WHM12125	
3,000ml, φ 184 ~ 187	550 W	105 mm	φ 255 × h130	DH.WHM12116	DH.WHM12126	
4,000ml, φ 206 ~ 208	750 W	120 mm	φ 310 × h160	DH.WHM8108	DH.WHM8108.1	
5,000ml, φ 221 ~ 224	800 W	130 mm	φ 293 × h155	DH.WHM12117	DH.WHM12127	
6,000ml, φ 234 ~ 237	800 W	135 mm	φ 310 × h160	DH.WHM12118	DH.WHM12128	
10Lit, φ 278 ~ 282	1400 W	160 mm	φ 365 × h185	DH.WHM12119	DH.WHM12129	

~450°C

2-Year Warranty



(2) Top Cover

(1) Self Standing base

<Ex.>(2) Top Cover with (1) Self Standing-base

### (2) Top Cover only

Flasks, ml Dia. φ mm	Mantle		Catalog No.		Ea. Price, ₩
	Watts (W)	Outside φ (mm)	with 230V	with 120V	
250ml, φ 83 ~ 86	100 W	φ 136	DH.WHM121301	DH.WHM121311	
500ml, φ 102 ~ 105	140 W	φ 155	DH.WHM121302	DH.WHM121312	
1,000ml, φ 130 ~ 133	240 W	φ 183	DH.WHM121303	DH.WHM121313	
2,000ml, φ 165 ~ 169	350 W	φ 220	DH.WHM121304	DH.WHM121314	
3,000ml, φ 184 ~ 187	400 W	φ 236	DH.WHM121305	DH.WHM121315	
4,000ml, φ 206 ~ 208	490 W	φ 260	DH.WHM8117	DH.WHM8117.1	
5,000ml, φ 221 ~ 224	550 W	φ 275	DH.WHM121306	DH.WHM121316	
10Lit, φ 278 ~ 282	700 W	φ 332	DH.WHM121307	DH.WHM121317	
20Lit, φ 344 ~ 348	1600 W	φ 400	DH.WHM121308	DH.WHM121318	
50Lit, φ 489 ~ 494	2,000 W	φ 550	DH.WHM8121	DH.WHM8121.1	
100Lit, φ 609 ~ 614	2,000 W	φ 665	DH.WHM8122	DH.WHM8122.1	



### Optional Remote Controller

- (a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW  
 (b) Digital Remote Controller, Ambient 5°C~700°C, ±1°C Uniformity at Set Temp.

Cat. No.	Ea. Price, ₩	
	with 230V	with 120V
DH.WHM13500	DH.WHM23500	
DH.WHM12500	DH.WHM22500	

## DAIHAN® Fabric-Housed Pear-shape Flask Heating Mantles "WHM", 450°C, 10 ~ 250ml, with Certi. & Traceability

With Nickel Chrome Heating Element, Option-Controller, 마이크로 히팅맨틀, Pear-shape 플라스크용, Ni-Cr열선 내장

~450°C

2-Year Warranty



(a)

(b)



- Made in Korea
- Ideal for Pear-shape Flask
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.

<L1>

Flasks, ml Dia. φ mm	Mantle				Catalog No.	Ea. Price, ₩
	Voltage (V)	Watts (W)	Inside Depth	Outside φ × h(mm)	with 120V	
10ml, φ 30~33	30V	20W	35 mm	φ 45 × h40	DH.WHM12271	
25ml, φ 40~43	60V	20W	40 mm	φ 60 × h50	DH.WHM12272	
50ml, φ 50~53	90V	80W	50 mm	φ 70 × h60	DH.WHM12273	
100ml, φ 59~62	110V	80W	55 mm	φ 90 × h70	DH.WHM12274	
250ml, φ 80~83	110V	140W	65 mm	φ 120 × h80	DH.WHM12275	

### Optional Voltage Controller Accessory

- H12.DC.004 (a) Down Trans (220 V → 110 V), 1 KVA  
 H12.ELDS5004 (b) Controller Voltage 220V 0.5kVA

Ea. Price, ₩

**DAIHAN® Reaction Vessel Heating Mantle, (1) Basic & (2) Stirring-type, 450°C, 100ml~100Lit**  
 With Built-in Temp Controller, with/without Mag-stir Speed Control, with Certi. & Traceability  
 반응조용 히팅맨틀, 온도 조절기 내장, “기본형” 및 “자석교반형”, Ni-Cr열선 내장

- Made in Korea
- Powder-coated Steel Housing
- Ideal for All type Reaction Vessel
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Built-in Temp-Controller. Nickel-Chrome Heating Element “Coil-type” : Acid Resistant & Long Life Time.
- Heating Mantles for 50ml~6,000ml Flask are with a Device\* for Holding a Optional Stainless-steel Rod φ12.7mm for Article Support.

~450°C



(1) Basic-type Reaction Vessel Mantle with Temp. Controller

**(1) Basic-type Reaction Vessel Mantle, Built-in Temp. Controller**

① with Aluminum-case, 100~500ml    ② with Powder-coated Steel-case, 1000ml~100Lit

<L1>

Vessels, ml Dia. φ × h(cm)	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside φ × h(cm)	with 230V	with 120V	
100ml, φ7×h9	80 W	6.5 cm	φ 15.0×h14.0	DH.WHM8130	DH.WHM8130.1	
250ml, φ7×h13	140 W	9.0 cm	φ 15.0×h16.5	DH.WHM8131	DH.WHM8131.1	
500ml, φ11×h12	350 W	9.0 cm	φ 20.0×h16.5	DH.WHM12146	DH.WHM12156	
1,000ml, φ11×h20	350 W	16.0 cm	φ 20.0×h26.0	DH.WHM8133	DH.WHM8133.1	
2,000ml, φ13×h24	450 W	18.5 cm	φ 20.0×h26.0	DH.WHM8134	DH.WHM8134.1	
2,000ml, φ14×h27	550 W	24.5 cm	φ 20.0×h30.0	DH.WHM8135	DH.WHM8135.1	
3,000ml, φ13×h32	550 W	24.5 cm	φ 20.0×h32.0	DH.WHM8136	DH.WHM8136.1	
4,000ml, φ20×h29	800 W	23.5 cm	φ 32.5×h30.0	DH.WHM8138	DH.WHM8138.1	
5,000ml, φ20×h29	800 W	23.5 cm	φ 32.5×h30.0			
6,000ml, φ21.5×h32	800 W	23.5 cm	φ 32.5×h30.0	DH.WHM8139	DH.WHM8139.1	
10Lit, φ21.5×h45	1,400 W	35.0 cm	φ 35.0×h40.0	DH.WHM8140	DH.WHM8140.1	
10Lit, φ24×h41	1,400 W	33.0 cm	φ 35.0×h36.0	DH.WHM8141	DH.WHM8141.1	
20Lit, φ25×h47	2,000 W	40.0 cm	φ 35.0×h45.0	DH.WHM8142	DH.WHM8142.1	
20Lit, φ27×h45	2,000 W	35.0 cm	φ 40.0×h40.0	DH.WHM8143	DH.WHM8143.1	
20Lit, φ29×h42	2,000 W	35.0 cm	φ 40.0×h40.0	DH.WHM8144	DH.WHM8144.1	
50Lit, φ31.5×h81	4,000 W	67.0 cm	φ 44.0×h75.0	DH.WHM8145	DH.WHM8145.1	
100Lit, φ41.5×h91	6,000 W	75.0 cm	φ 55.0×h83.0	DH.WHM8146	DH.WHM8146.1	

~450°C



(2) Stirring-type Reaction Vessel Mantle with Temp.-/Stirring-Controller and 1 × Mag Stir bar

**(2) Stirring-type Reaction Vessel Mantle, Built-in 50~1200rpm Mag-stir Speed & Temp. Controller**

\* With 1ea × PTFE Oval-type Magnetic Stirrer Bar, L25mm.

\* 10-/20-Lit models Square-type Outside Shape.

① with Aluminum-case, 100~500ml    ② with Powder-coated Steel-case, 1000ml~20Lit

Vessels, ml Dia. φ × h(cm)	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside φ × h(cm)	with 230V	with 120V	
100ml, φ7×h9	80 W	7.0 cm	φ 15.0×h16.5	DH.WHM8150	DH.WHM8150.1	
250ml, φ7×h13	140 W	9.0 cm	φ 15.0×h18.5	DH.WHM8151	DH.WHM8151.1	
500ml, φ11×h12	240 W	9.5 cm	φ 20.0×h19.0	DH.WHM8152	DH.WHM8152.1	
1,000ml, φ11×h20	350 W	16.5 cm	φ 20.0×h26.0	DH.WHM8153	DH.WHM8153.1	
2,000ml, φ13×h24	450 W	16.5 cm	φ 20.0×h26.0	DH.WHM8154	DH.WHM8154.1	
2,000ml, φ14×h27	550 W	22.5 cm	φ 20.0×h30.0	DH.WHM8155	DH.WHM8155.1	
3,000ml, φ13×h32	550 W	22.5 cm	φ 20.0×h32.0	DH.WHM8156	DH.WHM8156.1	
4,000ml, φ20×h29	800 W	23.5 cm	φ 32.5×h30.0	DH.WHM8158	DH.WHM8158.1	
5,000ml, φ20×h29	800 W	23.5 cm	φ 32.5×h30.0			
6,000ml, φ21.5×h32	800 W	23.5 cm	φ 32.5×h30.0	DH.WHM8159	DH.WHM8159.1	
10Lit, φ21.5×h45	1400 W	40.0 cm	35×46×h48	DH.WHM8160	DH.WHM8160.1	
10Lit, φ24×h41	1400 W	37.0 cm	35×46×h39.5	DH.WHM8161	DH.WHM8161.1	
20Lit, φ25×h47	2000 W	48.5 cm	35×46×h56.5	DH.WHM8162	DH.WHM8162.1	

(3) Stand Rod, “RD300”, φ 12.7×L520mm

(4) Holder / Clamp / Clip for Temp. Probe

**Optional Stainless-steel Rod, Holder & Clamp**

DH.WHP503037 (3) Stand Rod, φ 12.7×L520mm, “RD300”, for Heating Mantles

DH.WHP503012 (4) Holder / Clamp / Clip, “CL220”, for Temp. Sensor

Ea. Price, ₩

**DAIHAN® Remotecontrolled Reaction Vessel Heating Mantle, (1) Plain Bottom & (2) Bottom Outlet-type, 450°C, 100ml~100Lit**  
 With Nickel Chrome Heating Element, K-type Thermo-Sensor Integrated, with Certi. & Traceability, Option-Controller  
**반응조용 히팅맨틀, K-type 온도센서, Ni-Cr열선 내장, 자력교반기와 사용가능, 조절기 별도**

- Made in Korea    ■ Powder-coated Steel Housing.
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Optional Remote Thermo Controller, K-type Thermo-Sensor, and Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.
- Heating Mantles for 50ml~6,000ml Flask are with a Device\* for Holding a Optional Stainless-steel Rod  $\phi$  12.7 mm for Article Support.

~450°C

2-Year Warranty



(1) Plain Bottom-type Remotecontrolled Reaction Vessel Heating Mantle

### (1) Plain Bottom-type

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Vessels, ml Dia. $\phi$ × H(cm)	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi$ × h(cm)	with 230V	with 120V	
100ml, $\phi$ 7 × h9	80 W	6.5cm	$\phi$ 15.0 × h11.0	DH.WHM8170	DH.WHM8170.1	
250ml, $\phi$ 7 × h13	140 W	10.5cm	$\phi$ 15.0 × h14.0	DH.WHM8171	DH.WHM8171.1	
500ml, $\phi$ 11 × h12	240 W	9.0cm	$\phi$ 20.0 × h13.5	DH.WHM8172	DH.WHM8172.1	
1,000ml, $\phi$ 11 × h20	350 W	14.0cm	$\phi$ 20.0 × h16.5	DH.WHM8173	DH.WHM8173.1	
2,000ml, $\phi$ 13 × h24	450 W	16.5cm	$\phi$ 20.0 × h19.0	DH.WHM8174	DH.WHM8174.1	
2,000ml, $\phi$ 14 × h27	550 W	20.5cm	$\phi$ 20.0 × h22.0	DH.WHM8175	DH.WHM8175.1	
3,000ml, $\phi$ 13 × h32	550 W	26.5cm	$\phi$ 20.0 × h29.0	DH.WHM8176	DH.WHM8176.1	
4,000ml, $\phi$ 20 × h29	800 W	21.0cm	$\phi$ 27.0 × h22.5	DH.WHM8178	DH.WHM8178.1	
5,000ml, $\phi$ 20 × h29	800 W	21.0cm	$\phi$ 27.0 × h22.5			
6,000ml, $\phi$ 21.5 × h32	800 W	24.5cm	$\phi$ 32.5 × h23.5	DH.WHM8179	DH.WHM8179.1	
10Lit, $\phi$ 21.5 × h45	1400 W	32.0cm	$\phi$ 32.5 × h35.0	DH.WHM8180	DH.WHM8180.1	
10Lit, $\phi$ 24 × h41	1400 W	32.0cm	$\phi$ 32.5 × h35.0	DH.WHM8181	DH.WHM8181.1	
20Lit, $\phi$ 25 × h47	2000 W	40.0cm	$\phi$ 40.0 × h45.0	DH.WHM8182	DH.WHM8182.1	
20Lit, $\phi$ 27 × h45	2000 W	35.0cm	$\phi$ 40.0 × h40.0	DH.WHM8183	DH.WHM8183.1	
20Lit, $\phi$ 29 × h42	2000 W	35.0cm	$\phi$ 40.0 × h40.0	DH.WHM8184	DH.WHM8184.1	
50Lit, $\phi$ 31.5 × h81	4000 W	70.0cm	$\phi$ 44.0 × h75.0	DH.WHM8185	DH.WHM8185.1	
100Lit, $\phi$ 41.5 × h91	6000 W	75.5cm	$\phi$ 55.0 × h83.0	DH.WHM8186	DH.WHM8186.1	

~450°C

2-Year Warranty



(2) Bottom Outlet-type Remotecontrolled Reaction Vessel Heating Mantle

### (2) Bottom Outlet-type / with Bottom Drain Valve PTFE

\* Bottom Outlet Hole Size : L7.2 × W4.0cm(500~2,000ml) or L12.0 × W7.0cm(3,000ml~100Lit)

Vessels, ml Dia. $\phi$ × H(cm)	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi$ × h(cm)	with 230V	with 120V	
500ml, $\phi$ 11 × h12	240 W	8.5cm	$\phi$ 20.0 × h11.0	DH.WHM8190	DH.WHM8190.1	
1,000ml, $\phi$ 11 × h20	350 W	14.0cm	$\phi$ 20.0 × h16.5	DH.WHM8191	DH.WHM8191.1	
2,000ml, $\phi$ 13 × h24	450 W	16.5cm	$\phi$ 20.0 × h19.0	DH.WHM8192	DH.WHM8192.1	
2,000ml, $\phi$ 14 × h27	550 W	16.5cm	$\phi$ 20.0 × h22.0	DH.WHM8193	DH.WHM8193.1	
3,000ml, $\phi$ 13 × h32	550 W	26.5cm	$\phi$ 20.0 × h29.0	DH.WHM8194	DH.WHM8194.1	
4,000ml, $\phi$ 20 × h29	800 W	21.0cm	$\phi$ 27.0 × h22.5	DH.WHM8196	DH.WHM8196.1	
5,000ml, $\phi$ 20 × h29	800 W	21.0cm	$\phi$ 27.0 × h22.5			
6,000ml, $\phi$ 21.5 × h32	800 W	24.5cm	$\phi$ 32.5 × h23.5	DH.WHM8197	DH.WHM8197.1	
10Lit, $\phi$ 21.5 × h45	1400 W	31.0cm	$\phi$ 32.5 × h35.0	DH.WHM8198	DH.WHM8198.1	
10Lit, $\phi$ 24 × h41	1400 W	31.0cm	$\phi$ 32.5 × h35.0	DH.WHM8199	DH.WHM8199.1	
20Lit, $\phi$ 25 × h47	2000 W	41.0cm	$\phi$ 40.0 × h45.0	DH.WHM8200	DH.WHM8200.1	
20Lit, $\phi$ 27 × h45	2000 W	35.0cm	$\phi$ 40.0 × h40.0	DH.WHM8201	DH.WHM8201.1	
20Lit, $\phi$ 29 × h42	2000 W	35.0cm	$\phi$ 40.0 × h40.0	DH.WHM8202	DH.WHM8202.1	
50Lit, $\phi$ 31.5 × h81	4000 W	70.0cm	$\phi$ 44.0 × h75.0	DH.WHM8203	DH.WHM8203.1	
100Lit, $\phi$ 41.5 × h91	6000 W	78.0cm	$\phi$ 55.0 × h83.0	DH.WHM8204	DH.WHM8204.1	

### Optional Remote Controller

Cat. No		Ea. Price, ₩
with 230V	with 120V	
DH.WHM13500	DH.WHM23500	
DH.WHM12500	DH.WHM22500	

- (a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW  
 (b) Digital Remote Controller, Ambient 5°C~700°C,  
 ±1°C Uniformity at Set Temp.

### Optional Temp. Probe & Stand Rod, Holder, Clamp for Digital Temp. Remote Controller

- DH.WHP503040 Direct Contact Temp. Probe, K-type, "SS300", L250 ×  $\phi$  4.8 mm  
 DH.WHP503050 "SS400", L380 ×  $\phi$  4.8 mm  
 DH.WHP503041 "SS310", Teflon Coated, L250 ×  $\phi$  5 mm  
 DH.WHP503051 "SS410", Teflon Coated, L380 ×  $\phi$  5 mm  
 DH.WHP503037 (3) Stand Rod,  $\phi$  12.7 × L520mm, "RD300", for Heating Mantles  
 DH.WHP503012 (4) Holder / Clamp / Clip, "CL220", for Temp. Sensor



(b) <Ex.> Heating Mantle Set with Temp. Probe and the Digital Feedback Temp. Controller "WHM - C10D"

(3) Stand Rod, "RD300",  $\phi$  12.7 × L520mm

(4) Holder / Clamp / Clip for Temp. Probe

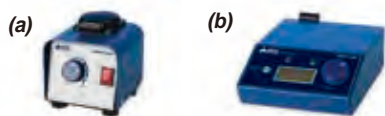
**DAIHAN® Remotecontrolled Reaction Flask Heating Mantle, Bottom Outlet-type, 450°C, 2,000ml~50Lit**  
 With Nickel Chrome Heating Element, K-type Thermo-sensor Integrated, with Certi. & Traceability, Option-Controller  
 반응조용 히팅맨틀, 반응조 라운드 플라스크용, K-type 온도센서, Ni-Cr열선 내장, 조절기 별도



- Made in Korea
- Ideal for All type Reaction Flasks
- Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.
- With a Device\* for Holding a Optional Stainless-steel Rod  $\phi$  12.7 mm for Article Support.
- Optional Remote Thermo Controller, K-type Thermo-Sensor

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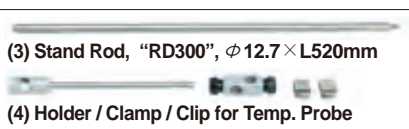
Flasks, ml Dia. $\phi$ mm	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi \times h$ (mm)	with 230V	with 120V	
2,000ml, $\phi$ 165 ~ 169	550 W	110 mm	$\phi$ 270 $\times$ h160	DH.WHM8222	DH.WHM8222.1	
3,000ml, $\phi$ 184 ~ 186	550 W	130 mm	$\phi$ 270 $\times$ h160	DH.WHM8232	DH.WHM8232.1	
5,000ml, $\phi$ 224 ~ 226	800 W	135 mm	$\phi$ 325 $\times$ h180	DH.WHM8233	DH.WHM8233.1	
10Lit, $\phi$ 278 ~ 282	1400 W	200 mm	$\phi$ 400 $\times$ h250	DH.WHM8226	DH.WHM8226.1	
20Lit, $\phi$ 348 ~ 352	2000 W	230 mm	$\phi$ 440 $\times$ h290	DH.WHM8227	DH.WHM8227.1	
50Lit, $\phi$ 480 ~ 484	4000 W	300 mm	$\phi$ 625 $\times$ h360	DH.WHM8228	DH.WHM8228.1	



**Optional Remote Controller**

- (a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW
- (b) Digital Remote Controller, Ambient 5°C~700°C,  $\pm$  1°C Uniformity at Set Temp.

Cat. No		Ea. Price, ₩
with 230V	with 120V	
DH.WHM13500	DH.WHM23500	
DH.WHM12500	DH.WHM22500	



**Optional Temp. Probe & Stand Rod, Holder, Clamp for Digital Temp. Remote Controller**

- DH.WHP503040 Direct Contact Temp. Probe, K-type, "SS300", L250  $\times$   $\phi$  4.8 mm
- DH.WHP503050 "SS400", L380  $\times$   $\phi$  4.8 mm
- DH.WHP503041 "SS310", Teflon Coated, L250  $\times$   $\phi$  5 mm
- DH.WHP503051 "SS410", Teflon Coated, L380  $\times$   $\phi$  5 mm
- DH.WHP503037 (3) Stand Rod,  $\phi$  12.7  $\times$  L520mm, "RD300", for Heating Mantles
- DH.WHP503012 (4) Holder / Clamp / Clip, "CL220", for Temp. Sensor

Ea. Price, ₩

**DAIHAN® Fabric-Housed Reaction Vessel Heating Mantles "WHM", 450°C, 500ml~7Lit**

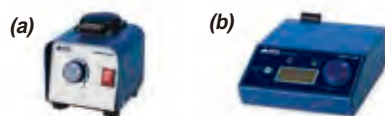
For Reaction Vessel, Cylindrical-type, with Nickel Chrome Heating Element, Option-Controller, with Certi. & Traceability  
 반응조용 직물 케이스 히팅맨틀, 조절기 별도, 자석교반기 사용 가능

- Made in Korea
- Ideal for All type Round Flask and Use with Magnetic Stirrer
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Nickel-Chrome Heating Element "Coil-type" : Acid Resistant & Long Life Time.

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Vessels, ml Dia. $\phi \times h$ (mm)	Mantle			Catalog No.		Ea. Price, ₩
	Watts (W)	Inside Depth	Outside $\phi \times h$ (mm)	with 230V	with 120V	
500ml, $\phi$ 110 $\times$ h100	240W	75 mm	$\phi$ 160 $\times$ h100	DH.WHM12251	DH.WHM12261	
1,000ml, $\phi$ 110 $\times$ h150	350W	115 mm	$\phi$ 160 $\times$ h140	DH.WHM12252	DH.WHM12262	
2,000ml, $\phi$ 130 $\times$ h190	450W	145 mm	$\phi$ 185 $\times$ h165	DH.WHM12253	DH.WHM12263	
3,000ml, $\phi$ 130 $\times$ h280	550W	210 mm	$\phi$ 185 $\times$ h235	DH.WHM12254	DH.WHM12264	
4,000ml, $\phi$ 160 $\times$ h260	700W	210 mm	$\phi$ 220 $\times$ h235	DH.WHM12255	DH.WHM12265	
5,000ml, $\phi$ 160 $\times$ h290	800W	210 mm	$\phi$ 220 $\times$ h235	DH.WHM12256	DH.WHM12266	
6,000ml, $\phi$ 215 $\times$ h240	800W	210 mm	$\phi$ 290 $\times$ h235	DH.WHM12257	DH.WHM12267	
7,000ml, $\phi$ 215 $\times$ h250	850W	210 mm	$\phi$ 290 $\times$ h235	DH.WHM12258	DH.WHM12268	



**Optional Remote Controller**

- (a) Analog Remote Controller, 5~100% of Rated Voltage, Up to 1.2kW
- (b) Digital Remote Controller, Ambient 5°C~700°C,  $\pm$  1°C Uniformity at Set Temp.

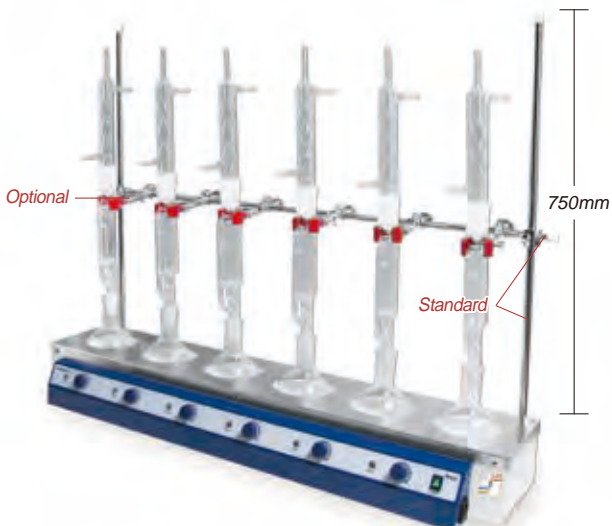
Cat. No		Ea. Price, ₩
with 230V	with 120V	
DH.WHM13500	DH.WHM23500	
DH.WHM12500	DH.WHM22500	

**DAIHAN® Analog Aluminum-case Multi Heating Mantle, with 3 & 6 Places, 450°C, with Certi. & Traceability**  
 With Glassware Supporting Rod & Clamp, Ideal for Extraction · Reflux · Distillation Applications, Lower Profile, 250~1,000ml  
 3 & 6구 멀티 히팅맨틀, 추출/증류용에 적합, 조절기 내장

- Made in Korea
- Ideal for DURAN / Kimax / Pyrex & Iwaki-brand Round Flasks
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Repetitive Extraction (Kjeldahl, Soxhlet and other Extraction Procedure), Reflux and Distillation Laboratory Applications
- Analog Controller Built-in System      ■ Rods and Clamps for Rods Connection
- Highly-processed Aluminum Case      ■ Nickel Chrome Heating Element - Coil Type
- without Clamp & Clamp Holder for Glassware ; Order Separately

~450°C

2-Year Warranty



(1) Analog 6 places Heating Mantle (WHM12293)

## Premium Analog Multi Heating Mantle

Highly-processed Aluminum Case  
 Nickel Chrome Heating Element



(2) Analog 3 places Heating Mantle (WHM12391)

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Working Places	Catalog No.		Flask			Watts(W)	Inside Depth (mm)	Dimension w×d×h (mm)	Ea. Price, ₩
	with 230V	with 120V	Capa. (ml)	Dia. Max. ϕ (mm)	Bottom Style				
6 places	DH.WHM12291	DH.WHM12292	250/300	83 ~ 86	Flat	840	50	800×240×110	
6 places	DH.WHM12293	DH.WHM12294	250/300	83 ~ 86	Round	840	50	800×240×110	
6 places	DH.WHM12295	DH.WHM12296	500	102 ~ 105	Round	1440	65	950×270×130	
3 places	DH.WHM12391	DH.WHM12392	500	102 ~ 105	Round	720	65	550×270×130	
3 places	DH.WHM12393	DH.WHM12394	1,000	130 ~ 133	Round	1050	75	690×340×170	

### Spare Support Rod & Clamp Set

- DH.WHM30500 Support Rod & Clamp Set, "MHR01", for 3Places 500ml, 2×750-/1×500-mm Rod and 2×Clamp for Rod
- DH.WHM31000 , "MHR02", for 3Places 1000ml, 2×750-/1×600-mm Rod and 2×Clamp for Rod
- DH.WHM60250 , "MHR03", for 6Places 250-/300-ml, 2×750-/1×900-mm Rod and 2×Clamp for Rod
- DH.WHM60500 , "MHR04", for 6Places 500ml, 2×750-/1×940-mm Rod and 2×Clamp for Rod

Ea. Price, ₩

Articles	Cat. No	Description
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**DAIHAN® Heating Tape, Standard-type, 250°C, 13 & 25mm**

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Heating Tape  
250°C



**Heating Tapes**

\* For Glass Tubes Metal Pipet

Catalog No.	13mm Width × Length(m)	Watts & Volt	Ea. Price, ₩
DH.WHM12311	13mm × 0.6m	200W, 230V	
DH.WHM12312	× 1.0m	200W, 230V	
DH.WHM12313	× 1.5m	250W, 230V	
DH.WHM12314	× 2.0m	300W, 230V	
DH.WHM12315	× 2.5m	350W, 230V	
DH.WHM12316	× 3.0m	400W, 230V	
Catalog No.	25mm Width × Length(m)	Watts & Volt	Ea. Price, ₩
DH.WHM12321	25mm × 0.6m	200W, 230V	
DH.WHM12322	× 1.0m	200W, 230V	
DH.WHM12323	× 1.5m	250W, 230V	
DH.WHM12324	× 2.0m	300W, 230V	
DH.WHM12325	× 2.5m	350W, 230V	
DH.WHM12326	× 3.0m	400W, 230V	
DH.WHM12327	× 4.0m	550W, 230V	
DH.WHM12328	× 6.0m	700W, 230V	

**DAIHAN® Custom-Made Heating Mantle & Insulation, Up to 450°C ~650°C**

Ideal for Bottom Valved Vessels or General-use, 고객 주문 사양 히팅맨틀 및 단열/보온재

We can Offer DAIHAN Custom Heating Mantles, for which you can Specify the Outside Diameter of the Vessel, Length of Mantle, Voltage, Number of Circuits and Length of Each Heating Zone, Ambient Temperature, Unusual Ambient Conditions, Size & Location of Holes for View Ports, and Tubulations.

Please Submit a Sketch for Complicated Applications and Contact our International Sales Team or our Distributor in your Country.

- Provides Uniform Heating and Insulation for Scrubbing and Fractionating Columns.
- Closes with a Zipper, with Eyelets and laces or Hooks and laces.
- Internal Operating Temperature is up to 450°C or 650°C

**Examples for Customized Heating Mantle**



Welcome! Custom-Made Heating Mantle!!

## DAIHAN® Analog Compact Temp Controller "WHM-C10A", up to 1.2kW, for All-Purpose Heating Instruments With Solid State, Proportional Voltage Power Control (5~100%), **아날로그 온도 조절기**

■ Made in Korea ■ with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System



2-Year Warranty

Analog Compact Temp. Controller "WHM-C10A"



<Ex.>  
Heating Mantle Set with  
the Analog Compact Temp.  
Controller "WHM-C10A"

- PL (Product Liability) Insurance
- Small Footprint, Compact Analog Temperature Controller
- Precise Manual Control of Heating Mantles, Tapes, Cords and Other Resistive Loads up to 1.2 kW

- \* Safe and Durable Design
- \* Solid state, Proportional Voltage Power Control (5~100% or Rated Voltage)

### Specifications & Ordering information

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Spec.	Model	"WHM-C10A"
Control Range & Capacity		5~100% of Rated Voltage, Up to 1.2 kW
Dimension & Weight		95×98×h106mm, 1kg
Packing Size & Gross Weight		190×160×h130mm, 2kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz
Cat. No.	230V	DH.WHM13500
	120V	DH.WHM23500
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.

## DAIHAN® Digital Feedback Temp Controller "WHM-C10D", up to 700°C, ±0.1°C, with Back-Light LCD For All-purpose Heating Instruments, Available K-type External Direct Contact Thermocouple(Optional), **디지털 온도 조절기**

■ Made in Korea ■ with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System



2-Year Warranty

Mode Button    Back Light LCD    Turn+Push Jog-Shuttle

Digital Feedback Temp. Controller "WHM-C10D"

- PL (Product Liability) Insurance
- User's Self-compensation Function to Control Difference between Real Temp. and Indicated Temp. (±50°C)
- Patented Jog-Shuttle Control System

- \* Digital Feedback Control by High-Performance Microprocessor
- \* Digital LCD with Back-Light Function    \* Small Footprint and User-Friendly Design.
- \* Storage function, Timer, Alarm & Locking Mode
- \* Heating Instruments can be controlled up to 2kW.
- \* Accurate Temp. Control of the Liquid in the Vessel using Optional Direct K-type Sensor

### Specifications & Ordering information

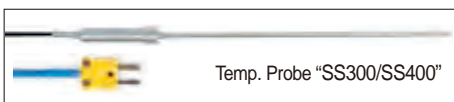
<L1>

Spec.	Model	"WHM-C10D"
Temp. Range & Accuracy		Ambient 5°C~700°C, ±1°C at Set Temperature
Temp. Resolution		1°C-Display, 1°C-Control
Timer & Alarm		99hr 59min (Continuous run), Error status & Timer-end
Display		Digital LCD with Back Light Function (Temp., Timer)
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)
Control Capacity		up to 2kW for 230V, 1.5kW for 120V
Dimension & Weight		145×185×h68mm, 2.8kg
Packing Size & Gross Weight		280×250×h110mm, 4kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230 V, 50 / 60 Hz
Cat. No.	230V	DH.WHM12500
	120V	DH.WHM22500
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.

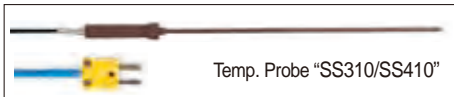


<Ex.>  
Heating Mantle Set  
with Temp. Probe and  
the Digital Feedback Temp.  
Controller "WHM-C10D"



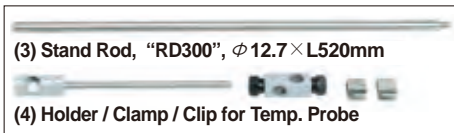
Temp. Probe "SS300/SS400"

(1) External/Direct Contact Temp. Probe



Temp. Probe "SS310/SS410"

(2) External/Direct Contact Temp. Probe, Teflon Coated



(3) Stand Rod, "RD300", φ12.7×L520mm

(4) Holder / Clamp / Clip for Temp. Probe

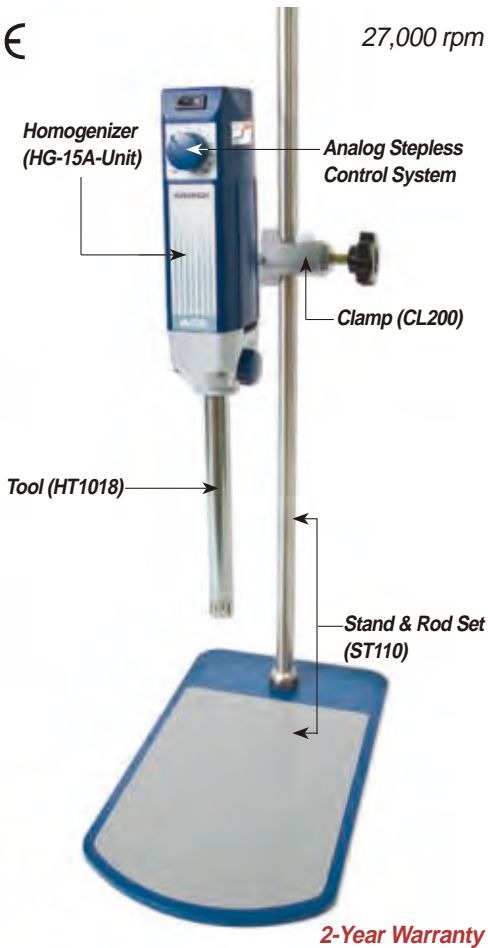
### Optional Temp. Probe & Stand Rod, Holder, Clamp

- DH.WHP503040 (1) Direct Contact Temp. Probe, K-type, "SS300", L250×φ4.8 mm
- DH.WHP503050 (1) Direct Contact Temp. Probe, K-type, "SS400", L380×φ4.8 mm
- DH.WHP503041 (2) Direct Contact Temp. Probe, K-type, "SS310", Teflon Coated, L250×φ5 mm
- DH.WHP503051 (2) Direct Contact Temp. Probe, K-type, "SS410", Teflon Coated, L380×φ5 mm
- DH.WHP503037 (3) Stand Rod, φ12.7×L520mm, "RD300", for Heating Mantles
- DH.WHP503012 (4) Holder / Clamp / Clip, "CL220", for Temp. Sensor

Ea. Price, ₩



**DAIHAN® Homogenizer with Direct Controller "HG-15A", up to 27,000 rpm, 1~2,500ml**  
 With Analog Stepless Control System, High Efficiency Dispersing Tools, High-Speed · High-Quality · Low Noise  
 균질기 / 호모게나이저, 아날로그 컨트롤러 내장, 초고속/저소음 모터



2-Year Warranty

A. Homogenizer Package-set "HG-15A-Set-A"



- Made in Korea
- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Useful for All Dispersing and Homogenizing Applications
- Over Heat Protection

- \* Designed for Liquid and Tissue Samples
- \* Useful for All Dispersing and Homogenizing Applications
- \* High Speed / High Quality / Low Noise : Max. 27,000 RPM (without load)
- \* Speed & Power Control Optimized for a Sample
- \* High Efficiency Dispersing Tool made of Stainless-steel and PTFE

Specifications & Ordering information

<L1>

Spec.	Model	A. "HG-15A-Set-A" with HT1018	B. "HG-15A-Set-B" with HT1025	C. "HG-15A" (Unit Only)
Speed Range & Adjustment		Max. 27,000 rpm (without load), Stepless		
Working Range		1 ~ 2,500ml		
Motor Rating (Input / Output)		Input : 300W, Output : 160W		
Controller		Analog Phase Controller		
Standard Component Acc.		"HT1018" Dispersing Tool, "CL200" Clamp, "ST110" Stand	"HT1025" Dispersing Tool, "CL200" Clamp, "ST110" Stand	Unit Only
Safety Device		Over Heat Protector		
Usable Dispersing Tool		φ 8mm Stator "HT1008", φ 10mm Stator "HT1010", φ 18mm Stator "HT1018", φ 25mm Stator "HT1025"		
Material		Aluminum Die-casting and ABS-Unit, Stainless-steel ( # 304)-Tool		
Permissible Temp. & Moisture		Ambient 5℃~50℃, 85%		
Extension Arm Size		φ 12.7 × L250mm		
Dimension & Weight		60 × 75 × h215mm, 2.5kg		
Packing Size & Gross Weight		320 × 300 × h190mm, 5kg		
Power Consumption		160W		
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	230V	DH.WHG02016	DH.WHG02017	DH.WHG02015
	120V	DH.WHG01016	DH.WHG01017	DH.WHG01015
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

Spare Dispersing Tool & Clamp & Plate Stand

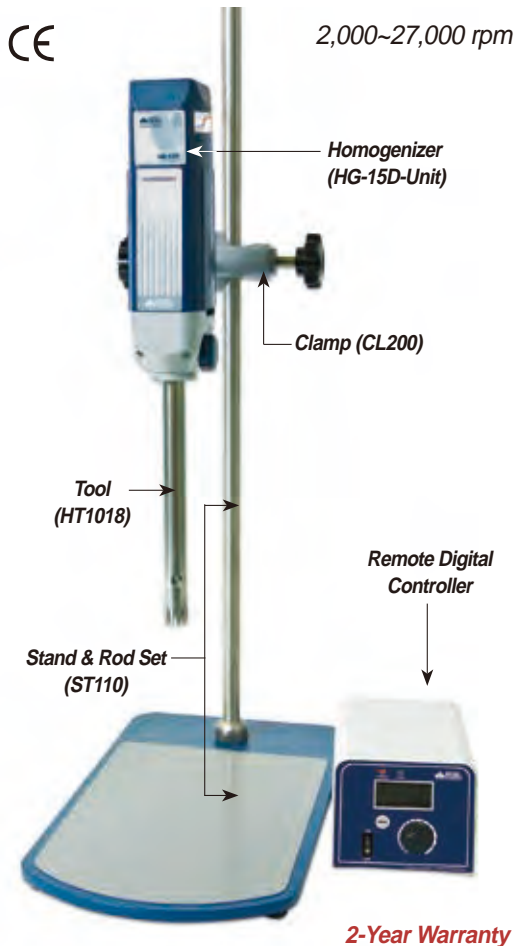
		Ea. Price, ₩
DH.WHG02108	(1) Dispersing Tool, "HT1008", Rotor φ 6, Stator φ 8mm, 1~50ml	
DH.WHG02110	(2) Dispersing Tool, "HT1010", Rotor φ 7.96, Stator φ 10mm, 1~100ml	
DH.WHG02118	(3) Dispersing Tool, "HT1018", Rotor φ 12.8, Stator φ 18mm, 10~1000ml	
DH.WHG02125	(4) Dispersing Tool, "HT1025", Rotor φ 20, Stator φ 25mm, 50~2500ml	
SL.Cla8011	Clamp, "CL200", for Stirrer or Homogenizer, Cast Aluminum, Grip Capacity φ 23mm for Stand/Rod	
DH.WOS501510	Standard Plate Stand, "ST110", for Stirrer or Homogenizer, φ 16 × h800 mm Rod, w20 × d35 cm Plate, with Silicone Pad	
DH.WOS501515	Wide Plate Stand, "ST120", for Stirrer or Homogenizer, φ 23 × h1000 mm Rod, w30 × d40 cm Plate, with Silicone Pad	

\* See page 107 for the Specifications of Dispersing Tools and Accessories.

## DAIHAN® Homogenizer with Remote Digital Controller "HG-15D", 2,000~27,000rpm

With Microprocessor Control, High-Efficiency Dispersing Tools, Back Light LCD, 1~2,500ml

디지털 균질기 / 호모게나이저, 분리형 리모트 컨트롤러, 초고속/저소음 모터



A. Homogenizer with Remote Digital Controller "HG-15D-Set-A"

- Made in Korea
- CE Certified
- PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System

■ Patented Jog-Shuttle Control System

- \* Useful for All Dispersing and Homogenizing Applications
- \* Designed for Liquid and Tissue Samples
- \* High Speed / High Quality / Low Noise : Max. 27,000 RPM (without load)
- \* Remote Digital controller : Fully Digital controlled by using Microprocessor
- \* Speed & Power Control optimized for a Sample
- \* LCD of Speed(RPM) and Power Bar Graph
- \* High Efficiency Dispersing Tool made of Stainless-steel and PTFE

### Specifications & Ordering information

<L1>

Spec.	Model	A. "HG-15D-Set-A" with HT1018	B. "HG-15D-Set-B" with HT1025	C. "HG-15D" (Unit Only)
Speed Range & Resolution		2,000 ~ 27,000rpm (without load), 10 rpm-Control		
Working Range		1 ~ 2,500ml		
Motor Rating (Input / Output)		Input : 300W, Output : 160W		
Timer & Alarm		10sec ~ 15min, Timer-end Alarm		
Display		Digital LCD with Back-Light Function		
Controller		Digital Feedback Controller (Remote Type)		
Standard Component Acc.		"HT1018" Dispersing Tool, "CL200" Clamp, "ST110" Stand	"HT1025" Dispersing Tool, "CL200" Clamp, "ST110" Stand	Unit Only
Safety Device		Over Load & Over Heat Protector		
Usable Dispersing Tool		φ 8mm Stator "HT1008", φ 10mm Stator "HT1010", φ 18mm Stator "HT1018", φ 25mm Stator "HT1025"		
Material		Aluminum Die-casting and ABS-Unit, Stainless-steel (# 304)-Tool		
Permissible Temp. & Moisture		Ambient 5°C ~ 50°C, 85%		
Extension Arm Size		φ 12.7 × L250mm		
Dimension & Weight		60 × 75 × h215mm, 2.5kg		
Packing Size & Gross Weight		580 × 340 × h230mm, 6kg		
Power Consumption		160W		
Electrical Reqt.s.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		

Cat. No.	230V	DH.WHG02019	DH.WHG02020	DH.WHG02018
	120V		DH.WHG01019	DH.WHG01020
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

### Spare Dispersing Tool & Clamp & Plate Stand

		Ea. Price, ₩
DH.WHG02108	(1) Dispersing Tool, "HT1008", Rotor φ 6, Stator φ 8mm, 1~50ml	
DH.WHG02110	(2) Dispersing Tool, "HT1010", Rotor φ 7.96, Stator φ 10mm, 1~100ml	
DH.WHG02118	(3) Dispersing Tool, "HT1018", Rotor φ 12.8, Stator φ 18mm, 10~1000ml	
DH.WHG02125	(4) Dispersing Tool, "HT1025", Rotor φ 20, Stator φ 25mm, 50~2500ml	
SL.Cla8011	Clamp, "CL200", for Stirrer or Homogenizer, Cast Aluminum, Grip Capacity φ 23mm for Stand/Rod	
DH.WOS501510	Standard Plate Stand, "ST110", for Stirrer or Homogenizer, φ 16 × h800 mm Rod, w20 × d35 cm Plate, with Silicone Pad	
DH.WOS501515	Wide Plate Stand, "ST120", for Stirrer or Homogenizer, φ 23 × h1000 mm Rod, w30 × d40 cm Plate, with Silicone Pad	

※ See page 107 for the Specifications of Dispersing Tools and Accessories.



## Articles

## Cat. No

## Description

1~50ml

1~100ml



① Dispersing Tool "HT1008"

② Dispersing Tool "HT1010"

10~1,000ml

50~2,500ml



③ Dispersing Tool "HT1018"

④ Dispersing Tool "HT1025"



⑤ High Quality Clamp (CL200)



⑥ Standard Plate Stand (ST110) ⑦ Wide Plate Stand (ST120)

## Homogenizer Accessory, Dispersing Tool & Plate Stand

### (1) Dispersing Tool

- Accurate Stator & Rotor made of Stainless-steel
- High Efficiency Dispersing Tool made of Stainless-steel and PTFE
- Low Cost & High Efficiency

<L1>

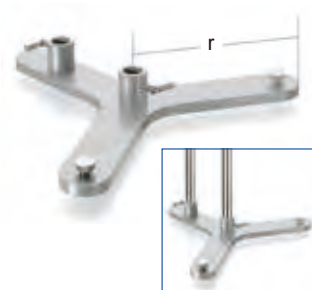
Model	① "HT1008"	② "HT1010"	③ "HT1018"	④ "HT1025"
Working Range	1 ~ 50ml	1 ~ 100ml	10 ~ 1,000ml	50 ~ 2,500ml
Stator Diameter	φ 8 mm	φ 10 mm	φ 18 mm	φ 25 mm
Rotor Diameter	φ 6 mm	φ 7.96 mm	φ 12.8mm	φ 20 mm
Gap between Rotor & Stator	0.25 mm	0.2 mm	0.25 mm	0.35 mm
Allowable Max. Speed	27,000 rpm		20,000 rpm	15,000 rpm
Immersion Depth Min.	35 mm		60 mm	
Immersion Depth Max	70 mm		130 mm	
Shaft Length	138 mm		225 mm	
Bearing Material	PTFE			
Suitable for Solvent	Yes			
Max. Temperature	180 °C			
Sterilization Method	All Methods			
Suspensions & Emulsions	Suspension : 10 ~ 50 $\mu$ m, Emulsion : 1 ~ 10 $\mu$ m			
Cat. No.	DH.WHG02108	DH.WHG02110	DH.WHG02118	DH.WHG02125
Price, Each. ₩				

\* Test Condition : 1.8 liters of water in the 2 liters capacity beaker.

### (2) Clamp & Plate Stand

- SL.Cla8011 ⑤ Clamp, "CL200", for Stirrer or Homogenizer, L135mm, Cast Aluminum, Grip Capacity φ 23mm for Stand/Rod
- DH.WOS501510 ⑥ Standard Plate Stand, "ST110", for Stirrer or Homogenizer, φ 16×h800mm Rod, w20×d35cm Plate, with Silicone Pad
- DH.WOS501515 ⑦ Wide Plate Stand, "ST120", for Stirrer or Homogenizer, φ 23×h1,000mm Rod, w30×d40cm Plate, with Silicone Pad

Ea. Price, ₩



Steel Retort Base Duo Stand, for 2 × Plain Rods of up to φ 16mm, without Rods With Nonskid Feet equipped, 2 × Level Screw Nut, and Base Thick-8mm, <Germany-made>

Retort Stand Base only, acceptable 2 Plain Rod (below φ 16mm)

<L1>

- US.2040 Stand, "US2040", r =150 mm  
 US.2041 "US2041", r =185 mm

Ea. Price, ₩

### Optional Stainless-steel Rod

- DH.WOS502001 Stainless-steel Rod, "RD501", φ 16×h800mm, Non-screw  
 DH.WOS502002 "RD502", φ 16×h1,000mm, Non-screw  
 DH.WOS502003 "RD503", φ 16×h1,200mm, Non-screw

Ea. Price, ₩

## DAIHAN® High-Quality Stainless-steel (#304) Rod, for Plate Stand, φ 16/23 mm

### (1) Plain-type φ 16mm Rod, without Screw

<L1>

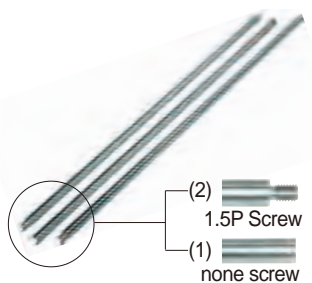
- DH.WOS502001 Stainless-steel Rod, "RD501", φ 16×h800mm, Non-screw  
 DH.WOS502002 "RD502", φ 16×h1,000mm, Non-screw  
 DH.WOS502003 "RD503", φ 16×h1,200mm, Non-screw  
 DH.WOS502031 "RD531", φ 23×h800mm, Non-screw  
 DH.WOS502033 "RD533", φ 23×h1,200mm, Non-screw

Ea. Price, ₩

### (2) 1.5P Screw-type φ 16 & 23mm Rod

- DH.WOS502011 Stainless-steel Rod, "RD511", φ 16×h800mm, 1.5P Screw  
 DH.WOS502012 "RD512", φ 16×h1,000mm, 1.5P Screw  
 DH.WOS502013 "RD513", φ 16×h1,200mm, 1.5P Screw  
 DH.WOS502021 "RD521", φ 23×h800mm, 1.5P Screw  
 DH.WOS502022 "RD522", φ 23×h1,000mm, 1.5P Screw  
 DH.WOS502023 "RD523", φ 23×h1,200mm, 1.5P Screw

Ea. Price, ₩



Stainless-steel Rod With or Without 1.5P Screw

## DAIHAN® Homogenizing Stirrer "HS-30E", for Tissue Grinder, 200~5,000rpm Analog Phase Control, without Tissue Grinder, with Certi. & Traceability, 호모게나이저 스테러



2-Year Warranty

- Made in Korea
- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for usage with Tissue Grinders

- \* Designed for most Laboratory Applications such as Homogenizing or Mixing
- \* Compact Unit with Solid State Speed Control



Homogenizing Stirrer Package-Set "HS-30E"

### Specifications & Ordering information

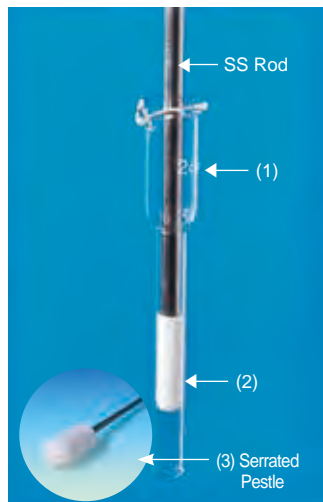
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Spec.	Model	"HS-30E"
Speed Range & Max. Torque		200 ~ 5,000 rpm, 85 Ncm
Stirring Capacity		Max. 10 Lit
Motor Rating		Input : 83 W, Output : 75W, 1/10 HP
Safety Device		Over Heat Protector
Controller		Analog Phase Controller
Dimension & Weight		90×145×h180mm, 3.5kg
Packing Size & Gross Weight		320×300×h190mm, 5kg
Power Consumption		75W
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz
Cat. No.	230V	DH.WOS01010
	120V	DH.WOS02010
Price, Each. ₩		
Component of Package-set		included "CL200" Clamp and "ST110" Stand-set(Rod, Plate)
Cat. No.	230V	DH.WOS01011
	120V	DH.WOS02011
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.

**※ Note! The Package does not include a Tissue Grinder**

## Cowie® Tissue Grinder, with PTFE Pestle Head · Borosilicate Glass Mortar · SS Pestle Rod, 2~50ml Good Chemical/Heat Resistance, Standard- & Serrated-type PTFE Head Pestles, <UK-made>, 티슈 그라인더



■ Supplied by Cowie® in U.K

- \* Use for the Controlled Reduction of Particle Size and Homogenisation for a Variety of Substances, especially Biological Material.
- \* The pestle head is pure PTFE and pestle rod Stainless-steel,  $\phi$ 6.5mm
- \* SS Pestle Rod is Perfect for Motor Drive
- \* Pestle Length : 230~270mm
- \* The Mortar is precision borosilicate glass.

### (1) Glass Mortar, Borosilicate, 2~50ml

CW.011.102	Mortar, 2ml, $\phi$ 8×L120mm
CW.011.105	, 5ml, $\phi$ 12×L135mm
CW.011.110	, 10ml, $\phi$ 15×L150mm
CW.011.115	, 15ml, $\phi$ 19×L155mm
CW.011.130	, 30ml, $\phi$ 25×L175mm
CW.011.150	, 50ml, $\phi$ 32×L195mm

### (2) Standard-type Pestles

CW.011.202	Pestle, S/T, for 2ml
CW.011.205	, for 5ml
CW.011.210	, for 10ml
CW.011.215	, for 15ml
CW.011.230	, for 30ml
CW.011.250	, for 50ml

### (3) Serrated-type Pestles

CW.011.302	Pestle, Ser., for 2ml
CW.011.305	, for 5ml
CW.011.310	, for 10ml
CW.011.315	, for 15ml
CW.011.330	, for 30ml
CW.011.350	, for 50ml

<L1>

Ea. Price, ₩

Ea. Price, ₩

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Ea. Price, ₩

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DAIHAN Scientific

**Hotplates & Hotplate Stirrers**

**Hotplates**, 380°C, Analog & Digital ..... P. 112  
 , 500°C, Solid Ceramic Glass Plate ..... P. 111  
 , 550°C, Hi-Light **New** ..... P. 110  
 , Large Plate, 350°C ..... P. 113

**Hotplate Stirrers**, 380°C, Analog & Digital ..... P. 115  
 , 500°C, Solid Ceramic Glass Plate ..... P. 114  
 , Systematic Multi-plate, 350°C ..... P. 116



**380°C Digital Precise Hotplate**  
"MSH-20D" Package Set



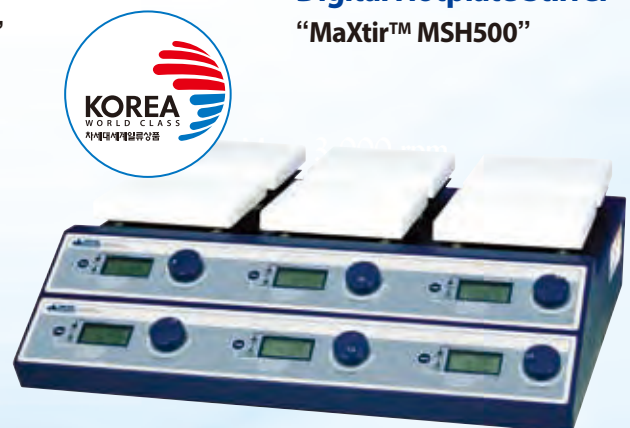
**550°C Hi-Light Hotplate**  
"HP-D165"



**500°C Hi-temp. Digital Hotplate Stirrer**  
"MaXtir™ MSH500"



**350°C Large Plate Digital Hotplate**  
"HPLP-C-P"



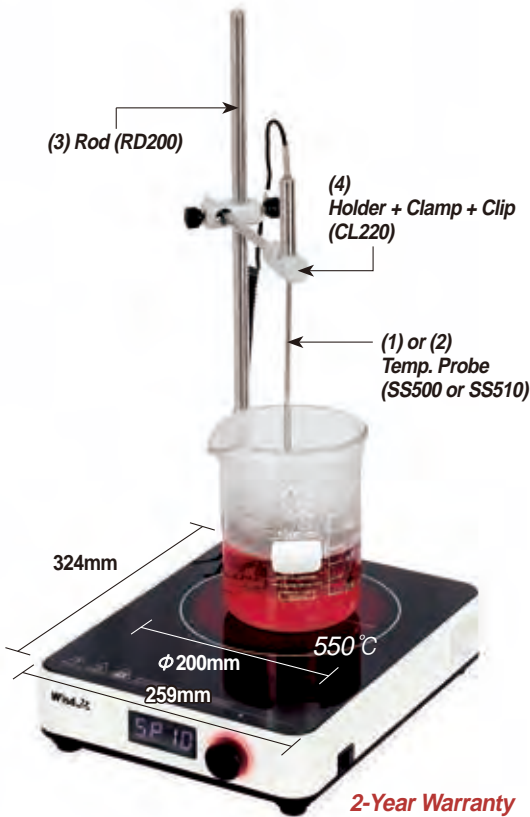
**Systematic Multi-Hotplate Stirrer**  
"SMHS-6"

**Wisdom 550°C High-temp Hi-Light Hotplate, "HP-D165" & "HP-D200", Schott NEXTREMA® Ceramic Glass Plate NEW**  
 With  $\phi$  165 &  $\phi$  200mm Heating Zone, Digital Control, 2× Heating Control Mode, 다용도 하이라이트 고온가열판



**2-Year Warranty**

**I. "HP-D165"  $\phi$  165mm Heating Zone**  
 ※Holding Stand Acceptable!



**2-Year Warranty**

**II. "HP-D200"  $\phi$  200mm Heating Zone**  
 ※ The Figure; Installation of Optional Rod, Holder, and Temp Probe

- Made in Korea
- CE Certified
- PL (Product Liability) Insurance
- Hi-Light Heating Element & Schott NEXTREMA® Ceramic Glass Plate.
- 2× Heating Control Mode : Max 550°C Heating Control
  - Standard Mode : 10-steps Heating Mode without Optional External Temp. Probe.
  - Precise Control Mode : 5°C Control Resolution with Optional External Temp. Probe.
- Patented Jog Dial Control System
- with Certificate & Traceability : Controlled by Serial Number, Certificat Delivery-information, and Traceable Data Base System

\* High Temperature Indication LED Lamp for Prevention of Burn.  
 \* Can be used with Optional External Temperature Probe for Precise Control Mode

### Specifications & Ordering Information

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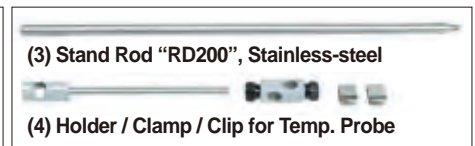
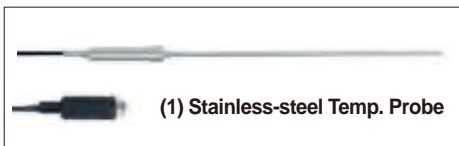
Spec.	Model	I. "HP-D165" $\phi$ 165mm Heating Zone	II. "HP-D200" $\phi$ 200mm Heating Zone
Capacity		Max. 10Lit.	
Temp. Range & Accuracy		100°C~550°C & $\pm$ 1.5°C at 330°C	
Plate Size & Heating Zone		224×289mm, $\phi$ 165mm	259×324mm, $\phi$ 200mm
Heater & Heating Power		Hi-Light Heating Element	
		1,100W	1,800W
Timer & Alarm		99hr 59min (with Continuous Run), Error	
Controller & Display		Digital Controller & LED Display	
2× Heating Control Mode		* Standard Mode : 10-Steps Heating Control Mode without Optional External Temp. Probe	
		* Precise Control Mode : 100°C~500°C Temperature Range Control (5°C Control Resolution) with Optional External Temp. Probe	
Material		* Plate : Schott NEXTREMA® Ceramic Glass Plate. * Housing : PBT & PC	
Dimension(w×d×h) & Weight		232×311×h64mm, 2.13kg	267×346×h64mm, 2.56kg
Electrical Reqts.		1Phase, AC230V, 50/60Hz	
Cat. No.		DH.HtpD0165	DH.HtpD0200
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

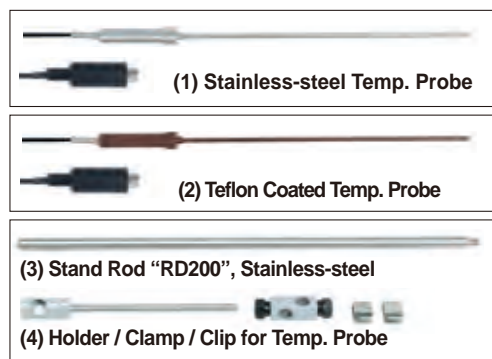
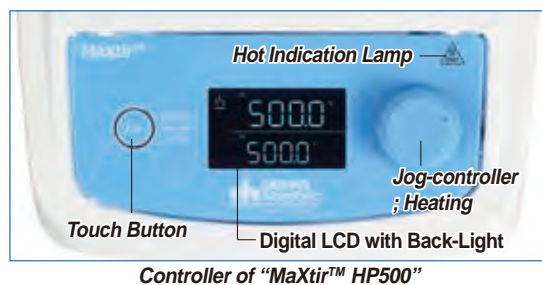
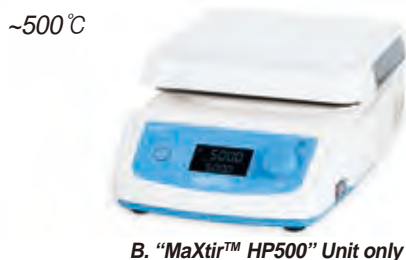
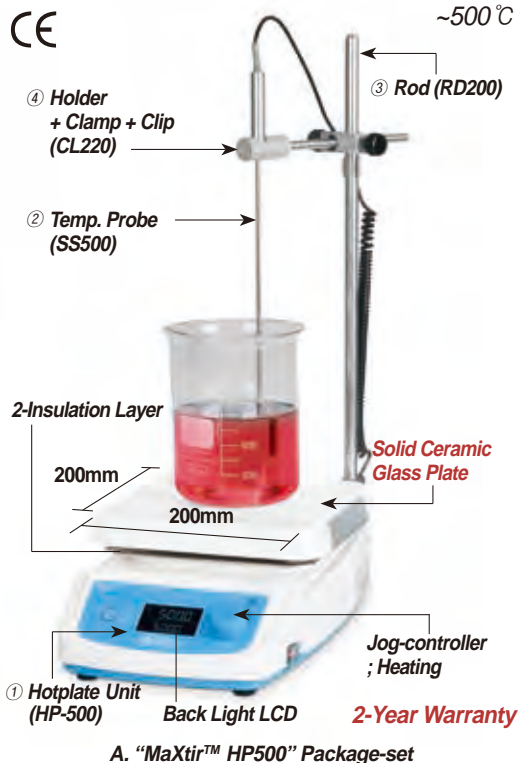
### Optional Accessories

- DH.WHP503060 (1) External / Direct Contact Temp. Probe, "SS500", Stainless-steel,  $\phi$  4×L250mm, Cable L190mm
- DH.WHP503061 (2) External / Direct Contact Temp. Probe, "SS510", Teflon Coated,  $\phi$  4×L250mm, Cable L190mm,
- DH.WHP503036 (3) Stand Rod "RD200", Stainless-steel,  $\phi$  12×L450mm, 1.5p screw
- DH.WHP503012 (4) Holder/Clamp/Clip, "CL220", for Temp. Probe

Ea. Price, ₩



DAIHAN® 500°C Premium High-Temp Hotplate “MaXtir™ HP500”, Solid Ceramic Glass Plate, 200×200mm  
 With Large LCD, Optimum Insulation Layer, Accurate Temp Control, Touch-button Controller, Hot-Top Indicator, Max. 500°C, Accu. ±0.3°C  
 고온용 디지털 가열판, PID 온도 제어, 최적의 방열구조, 내열성 / 내화학성 / 내산성 솔리드 세라믹 글라스 플레이트



- CE Certified
- PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- High-quality Solid Ceramic Glass Plate : Heat-/Chemical-/Acid-Resistance and Easy to Clean
- Optimum Insulation Fourfold Layers : BTU + Ceramic Paper + 2 SS Insulation Layer
- Maximum Temperature of 500°C
- Ergonomic Design
- Microprocessor PID control
- Patented Controller “Jog-Dial” and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate with Back-Light Function
- 2 Internal K-type Temp. Sensor Operating Independently :
  - 1 Temp. Control Sensor for Temperature Accuracy and
  - 1 Over Temp. Detection Sensor for User Safety
- Hot Top Indicator LED Lamp : Hot Surface(Over 50°C) Warning Lamp for User Safety
- \* Excellent for Sample Drying and most General Lab Heating Applications
- \* User's Self -Compensation Function : to Control Difference between Real Temp. and Indicated Temp. (±20.0°C)
- \* Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
- \* Storage Function for the set Values : Temp. and Timer
- \* Minimization of Noise and Improved the Product Life
- \* Use of the Special Advanced Insulation for the safety of the Body Temp.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)

Specifications & Ordering information

<L2>

Spec.		Model	A. “MaXtir™ HP500” (Package-set)	B. “MaXtir™ HP500” (Unit Only)
Material	Body	Powder Coated Aluminum		
	Plate	Solid Ceramic Glass Plate, 200×200mm		
Stirring Capa.		Max. 20 Lit		
Temp. Range & Accuracy		Max. 500°C, ±0.3°C at Set Temperature		
Temp. Resolution		0.1 °C-Display, 0.5 °C-Control		
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less		
Heating Power / Consumption		850W		
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Feedback Controller with Jog Dial (Turn+Push) and Touch button.		
Safety Circuit		Over Temp. Protection Hot Top Indicator LED Lamp		
Included Standard Acc.		① Unit ② Temp. Probe ③ Rod ④ Holder+Clamp	① Unit Only	
Permissible Temp. & RH %		Ambient +5 ~ 50°C, 85% RH		
Dimension & Weight		200×332×h114mm, 3.8kg		
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		
Cat. No.	230V	DH.WHP01500	DH.WHP00500	
	120V	DH.WHP01501	DH.WHP00501	
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

Component of Package-set

- \* Package-set : ① Hotplate Unit ② “SS500” PT100 External / Direct Contact Temp. Probe,
- ③ “RD200” Stainless-steel Support Rod φ12×L450mm
- ④ “CL220” Holder+Clamp+Clip for External Temp. Probe

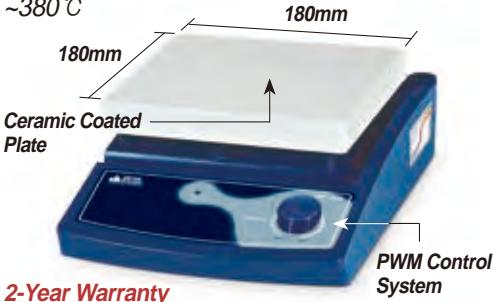
Optional External Temp Probe · Stand Rod · Holder · Clamp · Clip

- DH.WHP503060 (1) External / Direct Contact Temp. Probe, “SS500”, Stainless-steel, φ4×L250mm, Cable L190mm
- DH.WHP503061 (2) External / Direct Contact Temp. Probe, “SS510”, Teflon Coated, φ4×L250mm, Cable L190mm
- DH.WHP503036 (3) Stand Rod, “RD200”, Stainless-steel, φ12×L450mm, Screw, for “MaXtir™ HP500”
- DH.WHP503012 (4) Holder/Clamp/Clip, “CL220”, for Temp. Probe

Ea. Price, ₩

**DAIHAN® 380°C Standard Analog & Digital Hotplate “HP-A” & “HP-D”, Ceramic-Coated Plate**  
 With High Temp Uniformity, 180×180- or 260×260-mm Plate, CE Certified, with Certi. & Traceability  
 아날로그 & 디지털 정밀 가열판, 우수한 온도균일성 & 경제성, 세라믹 코팅 플레이트

180×180 Plate  
 Analog  
 ~380°C



2-Year Warranty

(I-A) Analog “HP-20A”, 180×180mm Plate-type



- CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System

- \* Excellent for Sample Drying and most General Lab Heating Applications
- \* Superior Temperature Uniformity : Less than 10% on the Plate at Ambient Temperature

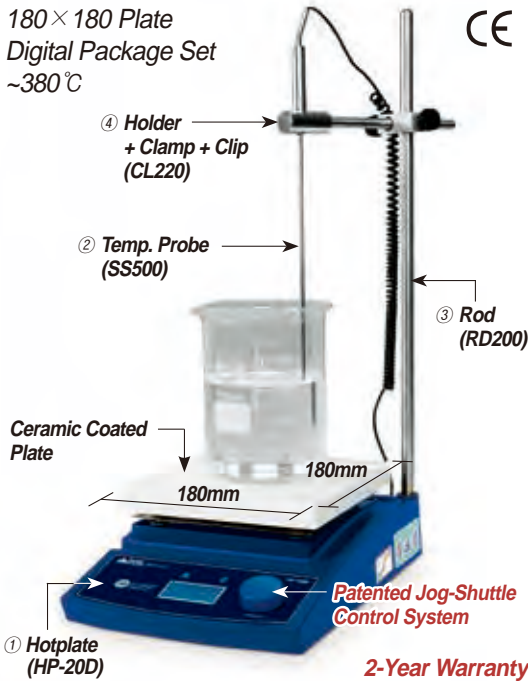
**I. Analog Control Hotplate “HP-A”**

- \* Superior Linearity for Temperature Control by Specially Designed Control Circuitry (PWM control)

**II. Digital Control Hotplate “HP-D”**

- Patented Jog-Shuttle Control System
- \* Digital Feedback Control by High-Performance Microprocessor
- \* Digital LCD Display with Back-Light Function, 0.1°C-Display, 0.5°C-Control
- \* Temperature Accuracy : ±0.3°C at Set Temp    \* Safety Circuit : Over Temp Protection
- \* Timer : 99hr 59min (with Continuous run), Error status & Timer-end Alarm
- \* Locking Mode for Experimental Safety Supported (Input to Jog Shuttle can be disabled)
- \* User's Self-Compensation : to Control Difference between Real Temp & Indicated Temp (±20.0°C)

180×180 Plate  
 Digital Package Set  
 ~380°C



(III-A) Digital “HP-20D” Package-set, 180×180mm Plate-type



**III. Digital Control Hotplate Package-set**

- \* III-A. “HP-20D” Set : Complete with ① Hotplate “HP-20D”, ② “SS500” PT100 External / Direct Contact Temp. Probe, ③ “RD200” Stainless-steel Support Rod φ12×L450mm, ④ “CL220” Holder+Clamp+Clip for External Temp. Probe
- \* III-B. “HP-30D” Set : Complete with ① Hotplate “HP-30D”, ② “SS500” PT100 External / Direct Contact Temp. Probe, ③ “RD100” Stainless-steel Support Rod φ12.7×L390mm, ④ “CL220” Holder+Clamp+Clip for External Temp. Probe

**Specifications & Ordering information**

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Spec.	Model	A. 180×180mm Plate (I-A) Analog “HP-20A” (II-A) Digital “HP-20D”	B. 260×260mm Plate (I-B) Analog “HP-30A” (II-B) Digital “HP-30D”
		Plate Size(mm)	180×180mm Plate-type
Material	Body	Powder Coated Aluminum	Powder Coated steel
	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance, Easy to Clean)	
Temp. Range & Uniformity	Max. 380°C Temp., High Uniformity : Difference 10% less		
Heating Power/Consumption	600 W	1.2 kW	
Permissible Temp. & RH %	R/T 5°C~50°C, 85% RH		
Dimension & Weight	206×307×h99mm, 2.8kg	286×387×h99mm, 3.3kg	
Packing Size & Gross Weight	400×280×h200mm, 5kg	430×320×200hmm, 5kg	
Electrical Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		

I. Analog Unit Only		(I-A) “HP-20A”	(I-B) “HP-30A”
Cat. No.	230V	DH.WHP03120	DH.WHP03121
	120V	DH.WHP02120	DH.WHP02121
Price, Each. ₩			
II. Digital Unit Only		(II-A) “HP-20D”	(II-B) “HP-30D”
Cat. No.	230V	DH.WHP03020	DH.WHP03022
	120V	DH.WHP02020	DH.WHP02022
Price, Each. ₩			

III. Digital Package-set		(III-A) “HP-20D” Set	(III-B) “HP-30D” Set
Cat. No.	230V	DH.WHP03021	DH.WHP03023
	120V	DH.WHP02021	DH.WHP02023
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

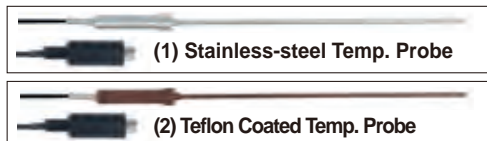


2-Year Warranty

2-Year Warranty

(I-B) Analog “HP-30A”, 260×260mm Plate

(II-B) Digital “HP-30D”, 260×260mm Plate



(1) Stainless-steel Temp. Probe

(2) Teflon Coated Temp. Probe

**Optional External Temp Probe · Stand Rod · Holder · Clamp · Clip**

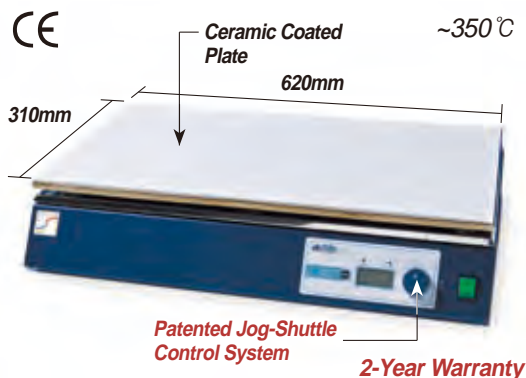
- DH.WHP503060 (1) Temp. Probe, “SS500”, “PT100”, φ4×L250mm
- DH.WHP503061 (2) Teflon Coated Temp. Probe, “SS510”, φ4×L250mm
- DH.WHP503011 Stand Rod, “RD100”, φ12.7×L390 for “HP-30A / 30D”
- DH.WHP503036 “RD200”, φ12×L450 for “HP-20A / 20D”
- DH.WHP503012 Holder / Clamp / Clip, “CL220”, for Temp. Probe

Ea. Price, ₩



Articles	Cat. No	Description
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**DAIHAN® 350°C Large Plate Digital Hotplate “HPLP”, 310×620mm Ceramic-Coated Plate, Superior Temp Uniformity**  
 Built-in Digital PID Controller or Digital Remote Controller, Back Light LCD, Certificate & Traceability  
 디지털 대형 정밀 가열판, 디지털 피드백 온도 제어, 디지털 PID 조절기 / 디지털 원격 조절기, 백색 세라믹 코팅판



**A. Large Digital Hotplate, with Built-in Digital PID Controller, Ceramic-Coated Plate-type “HPLP-C-P”**



**B. Large Digital Hotplate, Digital Remote Controller, Ceramic-Coated Plate-type “HPLP-C-R”**

- Made in Korea
  - CE Certified
  - PL (Product Liability) Insurance
  - 2-Years Warranty
  - Max Temp : 350°C
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
  - Superior Temperature Uniformity : Less than 10% on the Plate at Ambient Temperature
  - Digital PID Controller
  - Patented Jog-Shuttle Control System and Back-Light LCD
- \* Excellent for Sample Drying and most General lab Heating Applications  
 \* Large Heating Area : Ideal for TLC Plate Heating and Surface Heating in Electronic Industries  
 \* Superior Temperature Uniformity : Less than 10% on the Plate at Ambient Temperature  
 \* Ceramic Coated Plate -Chemical / Acid Prevention

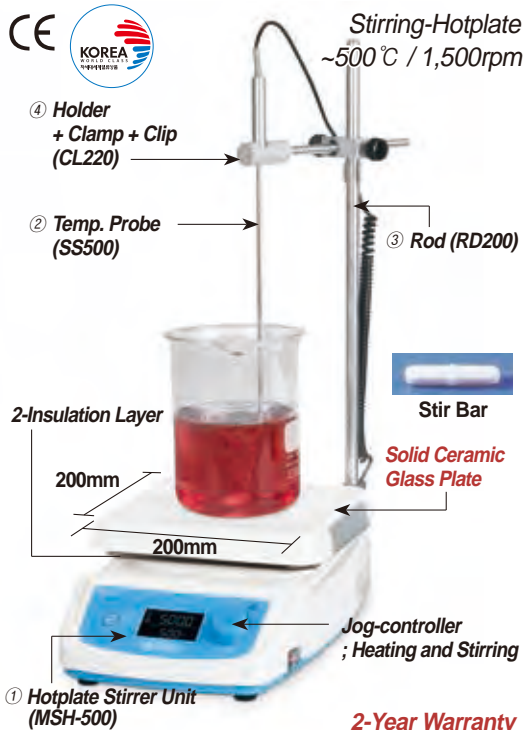
**Specifications & Ordering information**

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Spec.	Models	A. “HPLP-C-P” Built-in Controller	B. “HPLP-C-R” Remote Controller
Controller		Built-in Digital PID Controller	Digital Remote Controller
Plate Surface		Ceramic-coated	
Plate Size		310×620mm	
Temp. Range & Accuracy		Max. 350°C, ±0.3°C at Set Temperature	
Temp. Resolution		0.1 °C-Display, 0.5 °C-Control	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power/Consumption		2 kW	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Permissible Temp. & RH %		Ambient +5 ~ 50°C, 85% RH	
Dimension & Weight		670×360×h150mm, 16 kg	
Packing Size & Gross Weight		750×430×h220mm, 18 kg	
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.WHP03024	DH.WHP03025
	120V	DH.WHP02024	DH.WHP02025
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

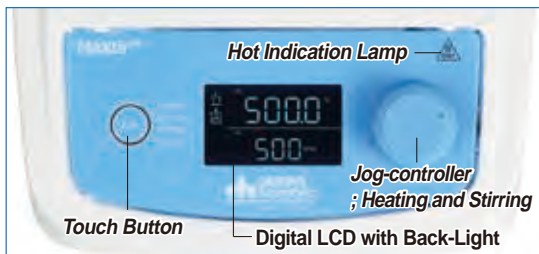
DAIHAN® 500°C Premium High-Temp Hotplate Stirrer “MaXtir™ MSH500”, Solid Ceramic Glass Plate, 200×200mm With Large LCD, Optimum Insulation Layer. Accurate Temp. Control, Touch-button Controller, Hot-Top Indicator, 80~1,500rpm 고온용 디지털 가열 자력 교반기, 최적의 방열구조, 디지털 피드백 온도 제어, 내열성·내화학성·내산성 솔리드 세라믹 글라스 플레이트



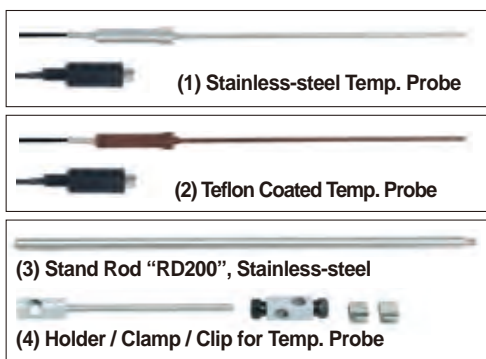
A. “MaXtir™ MSH500” Package-set



B. “MaXtir™ MSH500” Unit only



Controller of “MaXtir™ MSH500” model



- CE Certified
- PL(Product Liability) Insurance
- Ergonomic Design
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- High-quality Solid Ceramic Glass Plate : Heat-/Chemical-/Acid-Resistance and Easy to Clean
- Optimum Insulation Fourfold Layer : BTU + Ceramic Paper + 2 SS Insulation Layer
- Brushless Shade Motor & Powerful Magnet ensures Powerful Stirring and Precise Speed Control, Minimization Noise

- \* Microprocessor PID control
- \* Patented Controller “Jog-Dial” and Main Touch Button - Best Durability, Best
- \* Mobility, Best Convenient to Operate with Back-Light Function
- \* 2 Internal K-type Temp. Sensor Operating Independently :
  - 1 Temp. Control Sensor for Temperature Accuracy
  - 1 Over Temp. Detection Sensor for User Safety
- \* Hot Top Indicator LED Lamp : Hot Surface(Over 50°C) Warning Lamp for User Safety
- \* Excellent for Sample Drying and most General Lab Heating Applications
- \* User’s Self -Compensation Function : to Control Difference between Real Temp. and Indicated Temp. (±20.0°C)
- \* Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
- \* Storage Function for the set Values : Temp. and Timer
- \* Use of the Special Advanced Insulation for the safety of the Body Temp.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)

### Specifications & Ordering information

<L2>

Spec.		Model	A. “MaXtir™ MSH500” (Package-set)	B. “MaXtir™ MSH500” (Unit Only)
Material	Body	Powder Coated Aluminum		
	Plate	Solid Ceramic Glass Plate, 200×200mm		
Stirring Capa.		Max. 20 Lit		
Speed & Control Resolution		80 ~ 1,500 rpm, 5 rpm		
Temp. Range & Accuracy		Max. 500°C, ±0.3°C at Set Temperature		
Temp. Resolution		0.1°C-Display, 0.5°C-Control		
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less		
Heating Power / Consumption		850W		
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Feedback Controller with Jog Dial (Turn+Push) and Touch button.		
Stirring Bar		3cm bar-included, Usable : up to 5cm bar		
Safety Circuit		Over Temp. Protection, Hot Top Indicator LED Lamp		
included Standard Acc.		1ea Stir Bar, ②Temp. Probe ③Rod ④Holder+Clamp	1ea Stir Bar	
Permissible Temp. & RH %		Ambient 5°C~50°C, 85% RH		
Dimension & Weight		200×332×h114mm, 3.8kg		
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz, with Cord/Plug		
Cat. No.	230V	DH.WMH00500	DH.WMH01500	
	120V	DH.WMH00501	DH.WMH01501	
Price, Each. ₩				

\* Other Specifications are available upon Customer’s Request.

### Component of Package-set

- \* Package-set : ① Hotplate Stirrer Unit ② “SS500” PT100 External / Direct Contact Temp. Probe,
- ③ “RD200” Stainless-steel Support Rod  $\phi 12 \times L450$ mm
- ④ “CL220” Holder+Clamp+Clip for External Temp. Probe

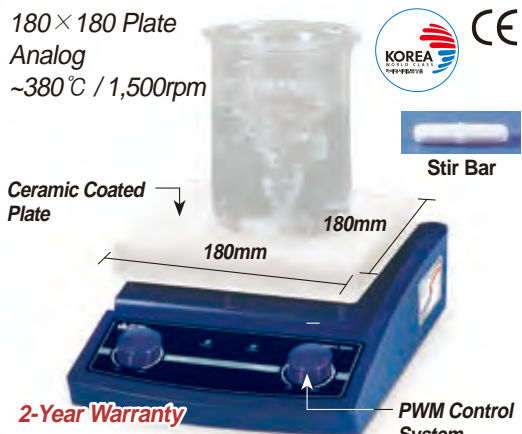
### Optional External Temp Probe · Stand Rod · Holder · Clamp · Clip

- DH.WHP503060 (1) External / Direct Contact Temp. Probe, “SS500”, Stainless-steel,  $\phi 4 \times L250$ mm, Cable L190mm
- DH.WHP503061 (2) External / Direct Contact Temp. Probe, “SS510”, Teflon Coated,  $\phi 4 \times L250$ mm, Cable L190mm,
- DH.WHP503036 (3) Stand Rod “RD200”, Stainless-steel,  $\phi 12 \times L450$ mm, 1.5p screw, for “MaXtir™ MSH500”
- DH.WHP503012 (4) Holder/Clamp/Clip, “CL220”, for Temp. Probe

Ea.	Price, ₩

DAIHAN® 380°C Standard Analog & Digital Hotplate Stirrer “MSH-A” & “MSH-D”, Ceramic-Coated Plate, 80~1,500 rpm  
 180×180mm or 260×260mm Plate, with Accurate Temp. Control, Superior Temp. Uniformity, with Certi. & Traceability  
 아날로그 & 디지털 가열 자력 교반기, 우수한 온도제어 · 온도균일성 · 세라믹 코팅 플레이트

180×180 Plate  
 Analog  
 ~380°C / 1,500rpm



2-Year Warranty

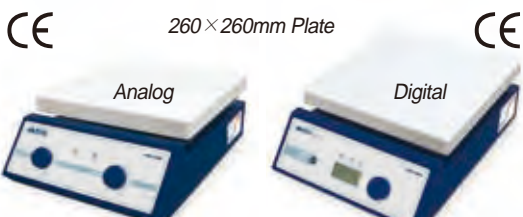
(I-A) Analog “MSH-20A”, 180×180mm Plate-type

180×180 Plate  
 Digital Package Set  
 ~380°C / 1,500rpm



2-Year Warranty

(III-A) Digital “MSH-20D” Package-set,  
 180×180mm Plate-type



2-Year Warranty

(I-B) Analog “MSH-30A”,  
 260×260mm Plate

2-Year Warranty

(II-B) Digital “MSH-30D”,  
 260×260mm Plate



- CE Certified
- PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Excellent for Sample Drying and most General Lab Heating Applications

I. Analog PWM Control System “MSH-A”

\* Superior Linearity PWM Control for Temperature & Stirring Speed

II. Digital Microprocessor Control System “MSH-D”

■ Patented Jog-Shuttle Control System

- \* Speed & Control Resolution : 80 ~ 1,500 rpm, 5 rpm
- \* Temp. Accuracy / Resolution : ±0.3°C at Set Temp. / 0.1°C-Display, 0.5°C-Control
- \* Timer & Alarm : 99hr 59min(with Continuous run), Error status & Timer-end
- \* Safety Circuit : Over Temp. Protection
- \* User's Self-Compensation : Control Difference between Real Temp. & Indicated Temp. (±20.0°C)
- \* Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor
- \* Storage Function for the set Values : Temp. and Timer
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

III. Digital Package-set ; Complete with

- \* III-A. “MSH-20D” Set : ① Hotplate Stirrer “MSH-20D”, ② “SS500” PT100 External / Direct Contact Temp. Probe, ③ “RD200” Stainless-steel Support Rod  $\phi 12 \times L450$ mm, ④ “CL220” Holder+Clamp+Clip for External Temp. Probe
- \* III-B. “MSH-30D” Set : ① Hotplate Stirrer “MSH-30D”, ② “SS500” PT100 External / Direct Contact Temp. Probe, ③ “RD100” Stainless-steel Support Rod  $\phi 12.7 \times L390$ mm, ④ “CL220” Holder+Clamp+Clip for External Temp. Probe

Specifications & Ordering information

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Spec.	Model	A. 180×180mm Plate (I-A) Analog “MSH-20A” (II-A) Digital “MSH-20D”	B. 260×260mm Plate (I-B) Analog “MSH-30A” (II-B) Digital “MSH-30D”
		Plate Size(mm)	180×180mm Plate-type
Material	Body	Powder Coated Aluminum	Powder Coated steel
	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance, Easy to Clean)	
Stirring Capa. & Motor Rating	Max. 20Lit, 10W		
Temp. Uniformity	Specially Designed Heating Module : Temp. Difference 10% less		
Heating Power/Consumption	600W	1.2kW	
Stirring Bar	3cm bar-included, Usable : up to 5cm bar		
Permissible Temp. & RH %	Ambient 5°C~50°C, 85% RH		
Dimension & Weight	206×307×h99mm, 3.3kg	286×387×h99mm, 3.5kg	
Packing Size & Gross Weight	400×280×h200mm, 5kg	430×320×h200mm, 5kg	
Electrical Reqts.	1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		

I. Analog Unit Only		(I-A) “MSH-20A”	(I-B) “MSH-30A”
Cat. No.	230V	DH.WMH03120	DH.WMH03121
	120V	DH.WMH02120	DH.WMH02121
Price, Each. ₩			
II. Digital Unit Only		(II-A) “MSH-20D”	(II-B) “MSH-30D”
Cat. No.	230V	DH.WMH03020	DH.WMH03022
	120V	DH.WMH02020	DH.WMH02022
Price, Each. ₩			
III. Digital Package-set		(III-A) “MSH-20D” Set	(III-B) “MSH-30D” Set
Cat. No.	230V	DH.WMH03021	DH.WMH03023
	120V	DH.WMH02021	DH.WMH02023
Price, Each. ₩			

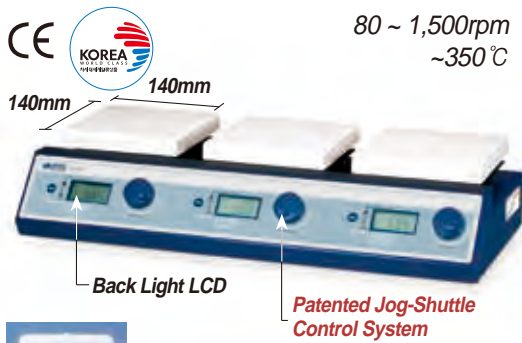
\* Other Specifications are available upon Customer's Request.

Optional External Temp Probe · Stand Rod · Holder · Clamp · Clip

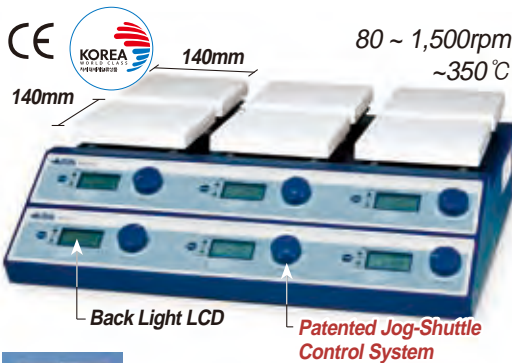
- DH.WHP503060 (1) Temp. Probe, “SS500”, “PT100”,  $\phi 4 \times L250$ mm
- DH.WHP503061 (2) Teflon Coated Temp. Probe, “SS510”,  $\phi 4 \times L250$ mm
- DH.WHP503011 Stand Rod, “RD100”,  $\phi 12.7 \times L390$  for “MSH-30A / 30D”
- DH.WHP503036 , “RD200”,  $\phi 12 \times L450$  for “MSH-20A / 20D”
- DH.WHP503012 Holder / Clamp / Clip, “CL220”, for Temp. Probe

Ea. Price, ₩

**DAIHAN® 350°C Systematic Multi-Hotplate Stirrer "SMHS", 3- or 6-Places, Ceramic-Coated Plate, 80~1,500 rpm**  
 With Digital Feedback Control, Independent Heating & Stirring Control, 멀티 가열 자력 교반기, 우수한 온도균일성, 3- or 6- 구 개별 조절 가능



**A. 3 Plate-type Multi-Hotplate Stirrer "SMHS-3"**



**B. 6(3×2) Plate-type Multi-Hotplate Stirrer "SMHS-6"**

- Made in Korea
- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Excellent for Multi-use and Wide Range Sample Testing
- Patented Jog-Shuttle Control System

- \* Digital Feedback Control by High-Performance Microprocessor
- \* Ceramic Coated Plate-Chemical/Acid Resistance
- \* Maximum Temperature of 350°C with ±0.3°C Control Accuracy
- \* Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
- \* Digital Timer Function Included : 99 hr 59 min
- \* Storage Function for the Set Values : Temperature, RPM and Timer
- \* Locking Mode for Experimental Safety Supported

### Specifications & Ordering information

<L1>

Spec.	Model	A. "SMHS-3" 3 Plates	B. "SMHS-6" 6 Plates
Plate-type		3 Plate-type	6(3×2) Plate-type
Plate Size		140×140mm	
Stirring Capa. & Motor Rating		Max. 20 Lit(H <sub>2</sub> O), 9/4W×3	Max. 20 Lit(H <sub>2</sub> O), 9/4W×6
Speed & Control Resolution		80 ~ 1,500 rpm, 5 rpm	
Temp. Range & Accuracy		Max. 350°C, ±0.3°C at Set Temp.	
Temp. Resolution		0.1°C-Display, 0.5°C-Control	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power/Consumption		400 W × 3 Plates	400 W × 6 Plates
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)	
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Ports for Stand Rod		2ea	4ea
Permissible Temp. & RH %		Room Temp. 5°C~50°C, 85% RH	
Material	Body	Powder Coated steel	
	Plate	Ceramic Coated Aluminum	
Dimension & Weight		510×240×h100mm, 10kg	510×410×h180mm, 18kg
Packing Size & Gross Weight		540×330×h170mm, 10kg	570×540×h230mm, 18kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	

Cat. No.	230V	DH.WMH03503	DH.WMH03506
	120V	DH.WMH02503	DH.WMH02506
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

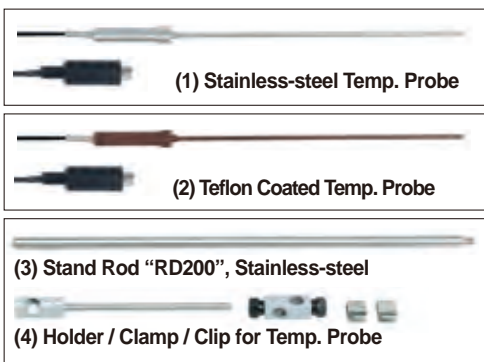
※ 3 Rear Hotplate Stirrer SMHS-6 have 3 Ports available to connect External Temp. Probe.

### Optional External Temp Probe · Stand Rod · Holder · Clamp · Clip

- DH.WHP503060 (1) External / Direct Contact Temp. Probe, "SS500", Stainless-steel, φ4×L250mm, Cable L190mm
- DH.WHP503061 (2) External / Direct Contact Temp. Probe, "SS510", Teflon Coated, φ4×L250mm, Cable L190mm,
- DH.WHP503036 (3) Stand Rod "RD200", Stainless-steel, 1.5p screw, φ12×L450mm, for "SMHS"
- DH.WHP503012 (4) Holder/Clamp/Clip, "CL220", for Temp. Probe

Ea. Price, ₩

※ 3 Rear Hotplate Stirrer SMHS-6 have 3 Ports available to connect External Temp. Probe





1-Year Warranty

Ice Maker Snow-type "IMS"



1-Year Warranty

Ice Maker Flake-type "IMF"



Granular Ice Maker "F125C"

## DAIHAN® 50 & 80kg Automatic Ice Maker, Snow-type "IMS" & Flake-type "IMF"

With Fully Automatic System, Uniform Ice, Production & Storage, 아이스메이커

- Made in Korea    ■ PL(Product Liability) Insurance    ■ No Separate Storage Bin Required.
- Full Automatic System : Continuous Ice Production
- Snow Type : Soft Particles in the Form of Rolling Carve
- Flake Type : A Uniform, Rigid Ice Particle in the Form of Screw Turbine

- \* Ice Production and Storage Function at the Same Time
- \* Useful in Medical Labs, Pharmaceutical Industry, Scientific Labs, Restaurants and Super markets in General.
- \* Creates Uniform Ice with Minimal Water.                      \* R404 Refrigerant and Ozone Friendly
- \* Safety Water Level Sensor & Ice Level Sensor
- \* Consists of Main Unit, Supply Hose, Drain Hose, Scoop, Power Cable, Operation Manual
- \* Optional Water Pump

### Specifications & Ordering information

&lt;L3&gt;

Spec.	Model	"IMS50"	"IMF80"
Ice Type		Snow-type	Flake-type
Production / Day		50 kg	80 kg
Storage Capacity		25 Lit	58 Lit
Compressor		1/2 HP, R404A	1/3 HP, R404A
Door		Front PC Door	
Safety Circuit		Power Circuit Breaker, Ice Level Sensor, Water Level Sensor	
Dimensions (w×d×h)		360×440×620mm	600×560×740mm
Weight		40 kg	61 kg
Power Consumption		650 W	800 W
Electric Reqts.		230V, 50 or 60Hz	
Cat. No.	60Hz	DH.ImS8050	DH.ImF8080
	50Hz	DH.ImS8055	DH.ImF8085
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

### Optional Accessory

DH.ImPu1001 Water Pump for "IMS" &amp; "IMF"

Ea. Price, ₩

## Icematic® 120kg Automatic Ice Maker, Granular Flake-type "F125C"

With Trouble Free Paddle System, Energy Saving and Maximum Cooling Capacity, &lt;Italy-made&gt;, 아이스메이커

- CE, GS and DVE Certification    ■ No Separate Storage Bin Required.
- Granular Ice Flakes with High Water Content.

- \* Useful in Medical Labs, Pharmaceutical Industry, Scientific Labs, Restaurants and Super markets in General.
- \* The Innovative, Trouble Free Icematic Paddle System ensures Perfect Ice Every Time.
- \* Flake Ice is Generated through a Vertical Cylinder.
- \* The System Creates Uniform Ice with Minimal Water.
- \* R134 Refrigerant and Ozone Friendly
- \* 5 LED Indicators – Power, Full Bin Situation, Low Temperature, Screw Operation, Shortage of Water.
- \* Consist of Main Unit, Water Filter & Housing Set, Ice Sampling Tool, Operation Manual.

### Specifications & Ordering information

&lt;L3&gt;

Spec.	Model	"F125C"
Ice Type		Granular Iceflake
Storage Capacity		27kg
Daily Ice Production		120kg / 24h
Water Inlet Connection		3/4" GAS (Water Supply / Drain Tube : ID ϕ20mm Flexible Hose)
Dimensions and Weight		w680×d510×h1000mm / 64kg
Single Phase Input		230V, 60Hz or 230V, 50Hz
Absorbed Power		490W
Cat. No.	60Hz	IM.F125C
	50Hz	IM.F126C
Price, Each. ₩		

※ 운임 착불

CO <sub>2</sub> .....	P. 119~120
4 °C~45 °C Mini-Low Temp .....	P. 121
General Purpose, Forced-air .....	P. 122~123, 126
, Gravity-air .....	P. 124~126
, Multi-room, Forced-air .....	P. 127
Heating Block/Dry Bath Incubators .....	P. 128~130
Humidity/Temp Test Chambers <b>New</b> .....	P. 131~133
Low Temp.(B.O.D) .....	P. 134~135
Plant Growth Chambers .....	P. 136
Shaking, Bench Top-type .....	P. 137
, Front Door-type .....	P. 138
, Mini, CO <sub>2</sub> & Low Temp .....	P. 120~121
, Multi-stack Refrigerated .....	P. 140
, Top Door-type .....	P. 139



CO<sub>2</sub> Incubator Mini



CO<sub>2</sub> Incubator



Forced- & Gravity-air Incubator



Humidity / Temp. Chamber



Low Temp.(B.O.D) Incubator



Plant Growth Chamber



Shaking Incubator

**DAIHAN® Air-jacketed CO<sub>2</sub> Incubator "ICA", 101 & 150 Lit, 0~20% CO<sub>2</sub>, Up to 50°C, ±0.1°C**  
 With Precision CO<sub>2</sub> Sensor, UV Lamp 254nm, Microprocessor PID Control, Fan Forced-Convection, 2 Shelf Included, CO<sub>2</sub> 인큐베이터



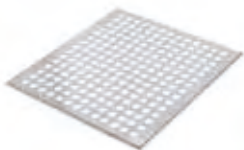
up to 50°C

2-Year Warranty

Air-jacketed CO<sub>2</sub> Incubator "ICA"



Tempered Safety Inner Glass Door & Enhanced Door Packing



(1) Perforated SS Shelf (Included)



(2) UV Lamp



(3) Regulator, Single-stage

- Made in Korea    ■ 2-Year Warranty
- Precise CO<sub>2</sub> Sensor in Stable & Durable Housing, CO<sub>2</sub> Range 0~20%
  - Dual Wavelength Detection, NDIR(Non Dispersive Infra-red) Sensor
  - Automatic Temperature Compensation and Auto Zero Calibration.

- \* Ideal for Medicine, Biochemistry and Agricultural Science Research, Industrial Production Departments of Biological Cells, Tissues, Bacterial Culture, etc.
- \* All Seamless Stainless-steel Interior for Corrosion Resistance and Decontamination
- \* Tempered Safety Inner Glass Door for easy Sample View without Door Opening
- \* Enhanced Door Packing to Keep Excellent Temp. & CO<sub>2</sub> Uniformity
- \* Air Filtration System(0.3µm HEPA Filter) Minimizes Contamination, Efficiency up to 99.97%.
- \* Microprocessor PID Control : Temp(-50°C), Timer, Alarm, Auto-tuning
- \* High-Quality LCD Display with Back-Light Function
- \* 10 Steps Programmable : Temperature Control and 999 Cycle 10 Steps.
- \* Detachable Shelf Frame : Adjustable Shelf
- \* Including Water Container, and 2 Stainless-steel Perforated Shelf
- \* Temp. & CO<sub>2</sub> Recovery Time : 10min (Door Open 30sec)
- \* Operating Temperature 18°C~32°C

Specifications & Ordering information

<L2>

Spec.	Model	"ICA-100" Max. Capa. 101Lit	"ICA-150" Max. Capa. 150Lit
Capacity		101 Lit	150 Lit
Heating Mechanism		Air-jacket	
CO <sub>2</sub> Sensor		Digital Signal Processing NDIR Sensor	
Temp Range & Accuracy		Room Temp 5°C~50°C, Accuracy ±0.1°C at 20°C~25°C	
CO <sub>2</sub> Range & Accuracy		0 ~ 20% CO <sub>2</sub> Concentration, Accuracy ± 0.1% at 5%	
Heat up Time (to 37°C)		30 min to 37°C	
CO <sub>2</sub> Concentration Time (to 37°C)		25 min to 5%	
Heating Power		300 W	570 W
CO <sub>2</sub> Outlet		1 kg/cm <sup>3</sup>	
UV Lamp		254 nm × 1ea	
Controller		Programmable Microprocessor Digital PID Controller with LCD Back Light	
Shelf (Included)		2 Stainless-steel Perforated Shelf	
Circulation		Circulation Fan with HEPA Filter(0.3µm)	
Safety		Temp & CO <sub>2</sub> Alarm, Over Temp Protector, Sensor Error Display, Leakage Breaker	
Material		Interior : Stainless-steel Polished, Exterior : Powder Coated Steel	
Door		Inner Door : Tempered Safety Glass Door, External Door : Powder Coated Steel, Magnetic Packing Door	
Dimension (w×d×h) & Weight	Interior	450×450×h500mm	495×515×h600mm
	Exterior	600×600×h600mm, 65kg	660×645×h1010mm, 77kg
	Packing	760×800×h1120mm, 80kg	730×810×h1130mm, 92kg
Power Consumption		340 W	610 W
Electric Reqts.		110V, 60Hz or 220V, 50/60Hz, 1 Phase	
Cat. No.	220V	DH.Inc8001	DH.Inc8002
	110V	DH.Inc8011	DH.Inc8012
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Spare Accessory

- DH.IncA1001 (1) Perforated Shelf, SS, for "ICA-100", w440×d400mm
- DH.IncA1002 , for "ICA-150", w485×d445mm
- DH.IncA1005 (2) UV Lamp 254 nm, φ30×205mm, for "ICA"

Ea. Price, ₩

Optional Accessory

- H11.801.10MC (3) Regulator, Single-stage, 30psi, CO<sub>2</sub>

Ea. Price, ₩

Air-jacketed CO<sub>2</sub> Incubator with Validation (IQ, OQ) Service

- DH.IncA5001 Validation Service(IQ, OQ), with "ICA-100"
- DH.IncA5002 , with "ICA-150"

Set. Price, ₩

**DAIHAN® 20Lit Mini CO<sub>2</sub> Incubator & CO<sub>2</sub> Shaking Incubator “ThermoStable™ IC-20 & ICS-20”, 4°C~45°C & 0~10% CO<sub>2</sub>**  
**Programmable PID Controlled 0.1°C & 0.1%, Compact Design for Saving Space/Money, Ideal for Cell/Tissue Culture**  
**With Cooling/Heating system of Peltier Element/Auto-Tuning/Safety Device, 저온 미니 CO<sub>2</sub> 배양기 & CO<sub>2</sub> 진탕 배양기**

20Lit 4°C~45°C  
0~10% CO<sub>2</sub>  
Cooling/Heating



2-Year Warranty

**A. 20Lit Mini CO<sub>2</sub> Incubator “ThermoStable™ IC-20”**  
Optional Regulator



+



=



A. “IC-20”  
CO<sub>2</sub> Incubator

C. “SHO-1DI”  
Orbital Shaker  
10~300rpm

B. “ICS-20”  
CO<sub>2</sub> Shaking  
Incubator Set

Figure; Assembly CO<sub>2</sub> Shaking Incubator  
You can easily connect the Incubator & Shaker

20Lit  
Orbital Shake  
10~300rpm, 8mm Str.  
4°C~45°C  
0~10% CO<sub>2</sub>  
Cooling / Heating



2-Year Warranty

**B. “ICS-20” CO<sub>2</sub> Shaking Incubator Set**



**C. “SHO-1DI” Separable Orbital Shaker**  
; It can be Used Individually and Be Accepted

**A. Standard CO<sub>2</sub> Incubator “ThermoStable™ IC-20”**

Optional CO<sub>2</sub> Regulator & CO<sub>2</sub> Aluminum Cylinder

**B. Assembly CO<sub>2</sub> Shaking Incubator Package Set “ThermoStable™ ICS-20”**

= Standard CO<sub>2</sub> Incubator “IC-20” + Orbital Shaker “SHO-1DI”

**C. Multiuse Digital Orbital Motion Shaker “SHO-1DI” : Can Be Used Individually.**

“SHO-1DI” is same with existing Orbital Shaker “SHO-1D” except Platform, and can be Accepted  
Optional Various Platforms ; See the Shaker Section

- Made in Korea    ■ PL(Product Liability) Insurance    ■ 2-Year Warranty
- Applications : Cell/Tissue Culture & Transfer, Embryo/Microorganism Culture
- NDIR CO<sub>2</sub> Sensor : Dual Wavelength Type  
Rapid Initial Response Time, not Affected by User Environment
- ABS-Resin Chamber & Housing : Light-weight/Compact Design  
Good for Money & Space Saving and Personal Use.

- \* Cooling/Heating System of PELTIER ELEMENT :  
- Cooling and Heating by using Thermoelectric Semiconductor Element  
- Minimizes Noise(<20dB) and Power Consumption
- \* Auto-Tuning : Rapid Response and High Stability According to the Thermal Properties and the Rate of Thermal Response of the Object
- \* Safety Device : Over Temperature & Over Current Protection, Sensor Error Detection
- \* 4-Connection Device to Join a Shaker “SHO-1DI” in the Bottom outside of the CO<sub>2</sub> Incubator “IC-20”

**Specifications & Ordering Information**

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Spec.	Model	A. CO <sub>2</sub> Standard Incubator “ThermoStable™ IC-20”	B. CO <sub>2</sub> Shaking Incubator Set “ThermoStable™ ICS-20”
Capacity (Lit)		20Lit Working Chamber	
Temp. Range		4°C~45°C, 0.1°C; Digital PID Control	
Accuracy		±0.2°C (No Load)	
Uniformity		±0.2°C (at 37°C)	
CO <sub>2</sub> Range & Control		0 ~ 10%, 0.1% ; NDIR CO <sub>2</sub> Sensor	
Cooling/Heating		Peltier Element Module	
Air Flow-type		Gravity Flow Circulation	
1 Shelf and 3 Location Brackets		1 Perforated ABS Shelf(w210×d230×Thick 8mm) included Adjustable Shelf Location Height of 3-Stage	
Condensate Drain		Natural Evaporation	
Incubator Material		“ABS-Resin” Chamber & Housing, Except Shaking Base	
Incubator Interior		w213×d265×h360mm Chamber Only	
Dimension Exterior		w280×d330×h510mm	w280×d330×h670mm; Including Shaking Base
<b>C. SHAKING-Base ; Connecting the Multiuse Shaking “SHO-1DI”</b>			
- Motion & Speed			- Orbital, 10 ~ 300rpm, 8mm Stroke
- Controller & Display			- Programmable Digital Feedback, LCD
- Timer & Alarm			- 99hr 59min with ∞ Run, Error Status & Time End
- Motor & Max-Load			- Brushless DC Motor, Max-Load 10kg
- Safety Circuit			- Overload Protector of Motor
- Material			- Powder Coated Steel Body
- Size & Weight			- w260×d330×h140mm, 14kg
Net Weight (kg)		10kg	10kg+14kg Shaking Base (“SHO-1DI”) = 24kg
Power Consumption		56W	56W+40W (Shaking)
Electric Reqs.		Free Voltage; 1Phase, AC90-240V, 50/60Hz	
Cat. No.	230V	DH.IncC020	DH.IncCS020
	120V	DH.IncC020.1	DH.IncCS020.1
Price, Set. ₩			

**C. SHAKING-Base ; Orbital Shaker**

Ea. Price, ₩

DH.SHO01DI Shaker “SHO-1DI”, 230V  
DH.SHO01DI.1 , 120V

※ Note! Details of Optional Various Platforms : See The “Shakers” Section

**Optional CO<sub>2</sub> Regulator**

H11.825.10MC (1) Regulator, Single-Stage, 0.6Mpa, CO<sub>2</sub>



Ea. Price, ₩

**Spare Shelf**

DH.Inc0003 Perforated Shelf, ABS, 210×230mm

Ea. Price, ₩



Articles	Cat. No	Description
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**DAIHAN® 4°C ~45°C 20 Lit Mini-Low Temperature Incubator & Shaking Incubator "ThermoStable™ IR-20 & IRS-20"**

2-Step Programmable PID Controlled 0.1°C, Compact Design for Saving Space/Money, Ideal for Culture & Storage of Microorganism/Clone With Cooling/Heating system of Peltier Element/Auto-Tuning/Safety Device, **저온 미니-배양기 & 진탕 배양기, 20Lit, 4°C ~45°C/0.1°C**



4°C ~45°C  
Cooling / Heating

- C, 2 Step
- Cool/Heat Peltier Element Module
- AUTO TUNING
- P.I.D Controller
- Safety Device

**2-Year Warranty**

**A. 20Lit Mini-Low Temp Incubator "ThermoStable™ IR-20"**

**A. Standard Incubator "ThermoStable™ IR-20"**

**B. Assembly Shaking Incubator Package Set**

"ThermoStable™ IRS-20" = "IR-20" Incubator + Orbital Shaker "SHO-1DI"

**C. Multiuse Digital Orbital Motion Shaker "SHO-1DI" : Can be Used Individually.**

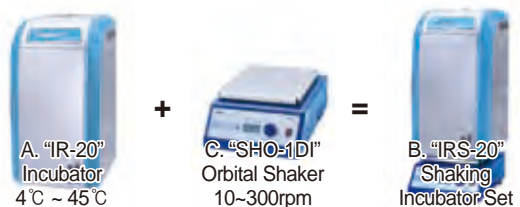
It is same with existing Orbital Shaker "SHO-1D" except Platform and The Shaker "SHO-1DI" can be Accepted Optional Various Platforms; See "Shakers" Section

- Made in Korea    ■ PL(Product Liability) Insurance    ■ 2-Year Warranty
- Applications Microorganism / Clone Culture & Storage, Reaction Experiment of Enzyme Immunity & Bacteriophage in Vitro Packaging, DNA Ligation, etc.
- 2-Step Temperature Control(PID Micro Processor) ; With 2-Step Setting Temp. Microorganism is Cultivated and Preserved by One Time(Setting time 99 hours)

- \* Cooling / Heating System of PELTIER ELEMENT ;
- Cooling and Heating by using Thermoelectric Semiconductor Element
- Minimizes Noise (<20dB) and Power Consumption
- \* Auto Tuning : Rapid Response and High Stability According to the Thermal Properties and the Rate of Thermal Response of the Object
- \* Safety Device : Over Temperature & Over Current Protection, Sensor Error Detection
- \* There are 4-Connection Device to Join a Shaker "SHO-1DI" in the Bottom outside of the Incubator "IR-20"

**Specifications & Ordering Information**

<L1>



Figure; Assembly Shaking Incubator  
You can easily connect the Incubator & Shaker

Spec.	Model	A. Standard Incubator "ThermoStable™ IR-20"	B. Shaking Incubator Set "ThermoStable™ IRS-20"
Capacity (Lit)		20Lit Working Chamber	
Temp. Range		4°C ~45°C, 0.1°C ; Digital PID Control	
Accuracy		± 0.2°C (No Load)	
Uniformity		± 0.2°C (at 37°C)	
Cooling / Heating		Peltier Element Module	
2-Step Operation		Ideal for Cultivation and Preservation	
Air Flow-type		Gravity Flow Circulation	
1 Shelf and 3 Location Brackets		1 Perforated ABS Shelf(w210×d230×Thick 8mm) included Adjustable Shelf Location Height of 3-Stage	
Condensate Drain		Natural Evaporation	
Incubator Material		"ABS-Resin" Chamber & Housing, Except Shaking Base	
Incubator Interior		w213×d265×h360mm Chamber Only	
Dimension Exterior		w280×d330×h510mm	w280×d330×h670mm; Including Shaking Base
<b>C. SHAKING-Base ; Connecting the Multiuse Shaking "SHO-1DI"</b>			
Motion&Speed		- Orbital, 10 ~ 300rpm, 15mm Stroke	- Orbital, 10 ~ 300rpm, 15mm Stroke
Controller&Display		- Programmable Digital Feedback, LCD	- Programmable Digital Feedback, LCD
Timer&Alarm		- 99hr 59min with ∞ Run, Error Status & Time End	- 99hr 59min with ∞ Run, Error Status & Time End
Motor&Max-Load		- Brushless DC Motor, Max-Load 10kg	- Brushless DC Motor, Max-Load 10kg
Safety Circuit		- Overload Protector of Motor	- Overload Protector of Motor
Material		- Powder Coated Steel Body	- Powder Coated Steel Body
Size&Weight		- w260×d330×h140mm, 14kg	- w260×d330×h140mm, 14kg
Net Weight (kg)		7kg	7kg+14kg Shaking Base ("SHO-1DI") = 21kg
Packing Size & Weight		9kg	25kg
Power Consumption		56W	56W+40W (Shaking)
Electric Reqts.		Free Voltage; 1Phase, AC90-240V, 50 / 60Hz	



20Lit  
Orbital Shake  
10~300rpm, 8mm Str.  
4°C ~45°C  
Cooling / Heating



**2-Year Warranty**

**B. "IRS-20" Low Temp. Shaking Incubator Set**



**C. "SHO-1DI" Separable Orbital Shaker**



; It can be Used Individually and Be Accepted

Cat. No.	230V	DH.IncR020	DH.IncRS020
	120V	DH.IncR020.1	DH.IncRS020.1
Price, Set. ₩			

**C. SHAKING-Base ; Orbital Shaker**

		Ea. Price, ₩
DH.SHO01DI	Shaker "SHO-1DI", 230V	
DH.SHO01DI.1	, 120V	

※ Note! Details of Optional Various Platforms : See The "Shakers" Section

**Spare Shelf**

		Ea. Price, ₩
DH.Inc0003	Perforated Shelf, ABS, 210×230mm	

**Optional Power Cord for Vehicles**

		Ea. Price, ₩
DH.Inc0004	Cigarette lighter Power Supply Cord	

DAIHAN® Forced-air Incubator “ThermoStable™ IF”, 3-Side Heating Zone, 50 · 105 · 155 Lit, **Medicaluse(230V)**  
 With 2 Wire Shelf, Digital PID Control, Jog-Dial & Push Button, Digital LCD with Backlight, Certi. & Traceability, up to 70°C, ±0.2°C  
 강제 순환식 배양기/인큐베이터, 디지털 퍼지 컨트롤, 우수한 온도균일성



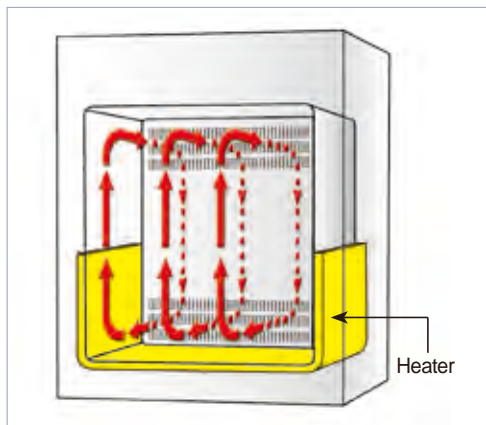
**Medicaluse**

- Made in Korea
- GD(Good Design)-mark
- UL, CUL, and CE Certified
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Jog-Dial Control System
- PL(Product Liability) Insurance
- \* Optimized Air Flow by Forced-air Mechanism
- \* 3-Side Heating Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism
- \* Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp., Germination, and so on
- \* Digital PID Control System Implementing Superior Temperature Accuracy
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)

**Specifications & Ordering information**

<L1>

Spec.	Model	ThermoStable™ IF-50	ThermoStable™ IF-105	ThermoStable™ IF-155
		Max. Capa. 50Lit	Max. Capa. 105Lit	Max. Capa. 155Lit
Capacity		50 Lit	105 Lit	155 Lit
Dimension (w×d×h)	Interior (mm)	370×350×419	485×410×533	550×475×600
	Exterior (mm)	518×637×700	635×695×841	700×760×906
Heater Power		200W	300W	400W
Temp.	Range	Room Temp. 5°C~70°C		
	Fluctuation	± 0.2°C at 37°C, ± 0.3°C at 50°C		
	Variation	± 0.5°C at 37°C, ± 0.9°C at 50°C	± 0.4°C at 37°C, ± 0.7°C at 50°C	
	Sensor	PT 100		
Control Resolution		±0.1°C		
Heat-up Time		17 min. to 37°C, 28 min. to 50°C	17 min. to 37°C, 30 min. to 50°C	
Recovery Time (Door open 30sec)		3 min. to 37°C, 4 min. to 50°C		
Controller		Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button		
RS232 Port		Available to connect with PC		
Display		Digital LCD with Back Light		
Timer		99hr 59 min (delay/continuous function)		
Storage		Temp. and Time		
Material	Internal	Stainless-steel (#304), Corrosion Resistant		
	External	Powder Coated steel		
	Inner Door	Inner Tempered Glass Door		
Shelf (Included)		2 PE-coated steel Wire Shelf Load per Shelf : 16kg		
Ventilation		1 Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm		
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector		
Alarm		Error Status and Timer-end		
Net Weight (kg)		46	66	81
Packing Size (w×d×h) (mm)		628×752×775	710×731×1,018	731×810×1,018
Shipping Weight (kg)		58	74	92
Power Consumption		216.3 W	302.9 W	438.1 W
Energy Consumption, at 37°C, at 50°C		28 Wh	43 Wh	58 Wh
		84 Wh	129 Wh	145 Wh
Electrical Reqts.		120V, 60Hz or 230V, 50/60Hz		
Cat. No.	230V	DH.WIF03050	DH.WIF03105	DH.WIF03155
	120V	DH.WIF04050	DH.WIF04105	DH.WIF04155
Price, Each. ₩				



**3-Side Heating Zone** : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism.



**WiseRemote Control Software :**

Connection of Temperature Devices with Interface RS232C to a PC

\* You can Download this Software from DAIHAN-Sci.com Shopping-mall

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

**Forced Convection Incubator with Validation (IQ, OQ) Service**

DH.WIF31050 Validation Service(IQ, OQ), with “ThermoStable IF-50”, “IFV050”  
 DH.WIF31105 , with “ThermoStable IF-105”, “IFV105”  
 DH.WIF31155 , with “ThermoStable IF-155”, “IFV155”

Ea. Price, ₩

※ Note! Spare PE-coated Steel Wire Shelf & Optional Stainless-steel Wire Shelf ⇒ See The “Incubators, General Purpose, Accessories” Section

DAIHAN® SMART Forced-air Incubator “ThermoStable™ SIF”, 50 · 105 · 155 Lit, 3-Side Heating Zone, **Medicaluse(230V)**  
 With Smart-Lab™ Controller, 4" Full Touch Screen TFT LCD Display, Fuzzy-PID Control, 2 Wire Shelf, Certi. & Traceability, up to 70°C, ±0.2°C  
 스마트 강제 순환식 배양기/인큐베이터, 우수한 온도균일성, WiRe™서비스, 4인치 풀터치스크린 조절기

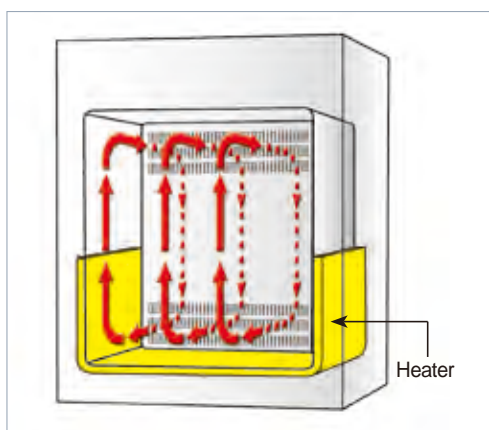


Medicaluse



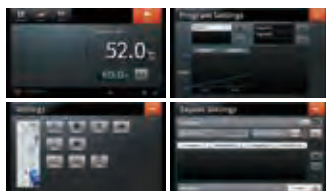
up to 70°C

2-Year Warranty



3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism.

WiRe™ App Service



It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

4" Full Touch Screen TFT LCD (Smart-Lab™ Controller)

Controlled by Mobile-Phone



- Made in Korea
- GD(Good Design)-mark
- UL, CUL, and CE Certified
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Smart-Lab™ Controller with WiRe™ App Service.
- PL(Product Liability) Insurance

- \* Self-Diagnostic Function
- \* Automatic Data Recording
- \* Variable Program Setting for Multiple Patterns with Multiple Segments
- \* The Recorded Data Could be transferred to PC by USB memory
- \* Internet Connectivity with WiFi
- \* Controller SW can be upgraded through USB port.
- \* Optimized Air Flow by Forced-air Mechanism
- \* 3-Side Heating Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism
- \* Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp, Germination, and so on

Specifications & Ordering information

<L1>

Spec.	Model	ThermoStable™ SIF-50	ThermoStable™ SIF-105	ThermoStable™ SIF-155
		Max. Capa. 50Lit	Max. Capa. 105Lit	Max. Capa. 155Lit
Capacity		50 Lit	105 Lit	155 Lit
Dimension (w×d×h)	Interior (mm)	370×350×419	485×410×533	550×475×600
	Exterior (mm)	518×637×700	635×695×841	700×760×906
Heater Power		200W	300W	400W
Temp.	Range	Room Temp. 5°C~70°C		
	Fluctuation	± 0.2°C at 37°C, ± 0.3°C at 50°C		
	Variation	± 0.5°C at 37°C, ± 0.9°C at 50°C	± 0.4°C at 37°C, ± 0.7°C at 50°C	
	Sensor	PT 100		
Control Resolution		±0.1°C		
Heat-up Time		17 min. to 37°C, 28 min. to 50°C	17 min. to 37°C, 30 min. to 50°C	
Recovery Time (Door open 30sec)		3 min. to 37°C, 4 min. to 50°C		
Controller		Smart-Lab™ Controller		
RS232		Port Available to connect with PC		
Display		4" Full Touch Screen TFT LCD		
Timer		99hr 59 min (delay/continuous function)		
Storage		Temp. and Time		
Material	Internal	Stainless-steel (#304), Corrosion Resistant		
	External	Powder Coated steel		
	Inner Door	Inner Tempered Glass Door		
Shelf (Included)		2 PE-coated steel Wire Shelf Load per Shelf : 16 kg		
Ventilation		1 Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm		
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector		
Alarm		Error Status and Timer-end		
Net Weight (kg)		46	66	81
Packing Size (w×d×h) (mm)		628×752×775	710×731×1,018	731×810×1,018
Shipping Weight (kg)		58	74	92
Power Consumption		216.3 W	302.9 W	438.1 W
Energy Consumption, at 37°C, at 50°C		28 Wh	43 Wh	58 Wh
		84 Wh	129 Wh	145 Wh
Electrical Reqts.		120V, 60Hz or 230V, 50/60Hz		
Cat. No.	230V	DH.SWIF03050	DH.SWIF03105	DH.SWIF03155
	120V	DH.SWIF04050	DH.SWIF04105	DH.SWIF04155
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

SMART Incubator with Validation (IQ, OQ) Service

- DH.SWIF31050 Validation Service(IQ, OQ), with "SIF-50", "SIFV050"
- DH.SWIF31105 , with "SIF-105", "SIFV105"
- DH.SWIF31155 , with "SIF-155", "SIFV155"

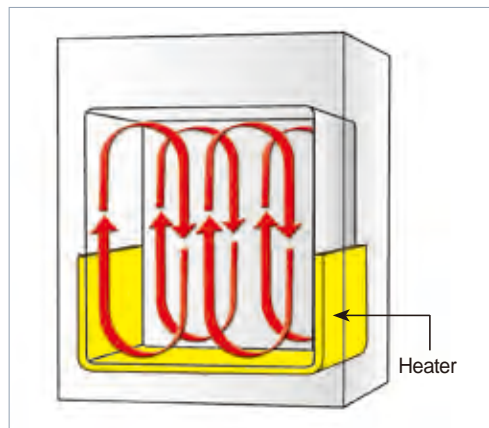
Ea. Price, ₩

※ Note! Spare PE-coated Steel Wire Shelf & Optional Stainless-steel Wire Shelf  
 ⇒ See The "Incubators, General Purpose, Accessories" Section

DAIHAN® Gravity-air Incubator “ThermoStable™ IG”, 3-Side Heating Zone, 32 · 50 · 105 · 155 Lit, **Medicaluse(230V)**  
 With 2 Wire Shelf, Digital PID Control, Jog-Dial & Push Button, Digital LCD with Backlight, Certi. & Traceability, up to 70°C, ±0.2°C  
 자연 대류식 배양기/인큐베이터, 디지털 퍼지 컨트롤, 우수한 온도 균일도와 정확도



2-Year Warranty



**3-Side Heating Zone** : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism.



**WiseRemote Control Software :**

Connection of Temperature Devices with Interface RS232C to a PC  
 \* You can Download this Software from DAIHAN-Sci.com Shopping-mall

- Made in Korea    ■ GD(Good Design)-mark    ■ UL, CUL, and CE Certified
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Jog-Dial Control System    ■ PL(Product Liability) Insurance
- \* Optimized Air Circulation by Gravity-air preventing Cross Contamination of Samples
- \* 3-Side Heating Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism
- \* Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp Germination, and so on
- \* Digital PID Control System Implementing Superior Temperature Accuracy
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)

**Specifications & Ordering information**

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Spec.		Model	ThermoStable™ IG-32 Max. Capa. 32L	ThermoStable™ IG-50 Max. Capa. 50L	ThermoStable™ IG-105 Max. Capa. 105L	ThermoStable™ IG-155 Max. Capa. 155L
Capacity			32 Lit	50 Lit	105 Lit	155 Lit
Dimension (w×d×h)	Interior (mm)		312×290×360	370×350×420	485×410×535	550×475×600
	Exterior (mm)		458×477×624	518×537×701	635×595×841	700×660×906
Heater Power			150W	200W	300W	400W
Temp.	Range	Range Room Temp. 5°C~70°C				
	Fluctuation	± 0.2°C at 37°C, ± 0.3°C at 50°C				
	Variation	± 0.6°C at 37°C, ± 1.0°C at 50°C				
	Sensor	PT 100				
Control Resolution		±0.1°C				
Heat-up Time			25 min. to 37°C, 40 min. to 50°C		30 min. to 37°C, 40 min. to 50°C	
Recovery Time (Door open 30sec)			8 min. to 37°C 12 min. to 50°C		10 min. to 37°C 15 min. to 50°C	
Controller		Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button				
RS232		Available to connect with PC				
Display		Digital LCD with Back Light				
Timer		99hr 59 min (delay/continuous function)				
Storage		Temp. and Time				
Material	Internal	Stainless-steel (#304), Corrosion Resistant				
	External	Powder Coated steel				
	Inner Door	Inner Tempered Glass Door				
Shelf (Included)		2 PE-coated Steel Wire Shelf Load per Shelf : 16 kg				
Ventilation		1 Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm				
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector				
Alarm		Error Status and Timer-end				
Net Weight (kg)			32	40	59	71
Packing Size (w×d×h) (mm)			568×592×698	628×652×775	731×710×1,018	796×775×1,083
Shipping Weight (kg)			39	53	67	78
Power Consumption			159 W	169.9 W	292.9 W	420.5 W
Energy Consumption, at 37°C			34 Wh	41 Wh	63 Wh	99 Wh
, at 50°C			81 Wh	103 Wh	152 Wh	212 Wh
Electrical Reqts.		120V, 60Hz or 230V, 50/60Hz				
Cat. No.	230V	DH.WIG03032	DH.WIG03050	DH.WIG03105	DH.WIG03155	
	120V	DH.WIG04032	DH.WIG04050	DH.WIG04105	DH.WIG04155	
Price, Each. ₩						

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

**Gravity Convection Incubator with Validation (IQ, OQ) Service**

	Ea. Price, ₩
DH.WIG31032 Validation Service(IQ, OQ), with "ThermoStable IG-32", "IGV032"	
DH.WIG31050 , with "ThermoStable IG-50", "IGV050"	
DH.WIG31105 , with "ThermoStable IG-105", "IGV105"	
DH.WIG31155 , with "ThermoStable IG-155", "IGV155"	

※ Note! Spare PE-coated Steel Wire Shelf & Optional Stainless-steel Wire Shelf  
 ⇒ See The "Incubators, General Purpose, Accessories" Section

**DAIHAN® SMART Gravity-air Incubator “ThermoStable™ SIG”, 32 · 50 · 105 · 155 Lit, *Medicaluse*(230V)**

With *Smart-Lab™* Controller, 4" Full Touch Screen TFT LCD Display, Fuzzy-PID Control, 2 Wire Shelf, Certi. & Traceability, up to 70°C, ±0.2°C  
 스마트 자연 대류식 배양기/인큐베이터, 우수한 온도 균일도와 정확도, WiRe™서비스, 4인치 풀터치스크린 조절기



*Medicaluse*



up to 70°C

**2-Year Warranty**

- Made in Korea
- GD(Good Design)-mark
- UL, CUL, and CE Certified
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- *Smart-Lab™* Controller with *WiRe™* App Service.
- PL(Product Liability) Insurance

- \* Self-Diagnostic Function
- \* Automatic Data Recording
- \* Variable Program Setting for Multiple Patterns with Multiple Segments
- \* The Recorded Data could be transferred to PC by USB memory
- \* Internet Connectivity with WiFi
- \* Controller SW can be upgraded through USB port.
- \* Optimized Air Circulation by Natural Flow preventing Cross Contamination of Samples
- \* 3-Side Heating Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism
- \* Various Application : Microorganism Culture, Animal & Plant Cell Culture, Constant Temp., Germination, and so on

**Specifications & Ordering information**

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Spec.	Model	ThermoStable™	ThermoStable™	ThermoStable™	ThermoStable™
		SIG-32	SIG-50	SIG-105	SIG-155
		Max. Capa. 32L	Max. Capa. 50L	Max. Capa. 105L	Max. Capa. 155L
<b>Capacity</b>		32 Lit	50 Lit	105 Lit	155 Lit
<b>Dimension (w×d×h)</b>	Interior (mm)	312×290×360	370×350×420	485×410×535	550×475×600
	Exterior (mm)	458×477×624	518×537×701	635×595×841	700×660×906
<b>Heater Power</b>		150W	200W	300W	400W
<b>Temp.</b>	Range	Room Temp. 5°C~70°C			
	Fluctuation	± 0.2°C at 37°C, ± 0.3°C at 50°C			
	Variation	± 0.6°C at 37°C, ± 1.0°C at 50°C			
	Sensor	PT 100			
<b>Control Resolution</b>		±0.1°C			
<b>Heat-up Time</b>		25 min. to 37°C, 40 min. to 50°C			30 min. to 37°C, 40 min. to 50°C
<b>Recovery Time (Door open 30sec)</b>		8 min. to 37°C 12 min. to 50°C		10 min. to 37°C 15 min. to 50°C	
<b>Controller</b>		Smart-Lab™ Controller			
<b>RS232</b>		Available to connect with PC			
<b>Display</b>		4" Full Touch Screen TFT LCD			
<b>Timer</b>		99hr 59 min (delay/continuous function)			
<b>Storage</b>		Temp. and Time			
<b>Material</b>	Internal	Stainless-steel (#304), Corrosion Resistant			
	External	Powder Coated steel			
	Inner Door	Inner Tempered Glass Door			
<b>Shelf (Included)</b>		2 PE-coated Steel Wire Shelf Load per Shelf : 16kg			
<b>Ventilation</b>		1 Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
<b>Safety device</b>		Over Temp. and Over Current Protector, Sensor Error Detector			
<b>Alarm</b>		Error Status and Timer-end			
<b>Net Weight (kg)</b>		32	40	59	71
<b>Packing Size (w×d×h) (mm)</b>		568×592×698	628×652×775	731×710×1,018	796×775×1,083
<b>Shipping Weight (kg)</b>		39	53	67	78
<b>Power Consumption</b>		159 W	169.9 W	292.9 W	420.5 W
<b>Energy Consumption, at 37°C, at 50°C</b>		34 Wh	41 Wh	63 Wh	99 Wh
		81 Wh	103 Wh	152 Wh	212 Wh
<b>Electrical Reqts.</b>		120V, 60Hz or 230V, 50/60Hz			
<b>Cat. No.</b>	230V	DH.SWIG03032	DH.SWIG03050	DH.SWIG03105	DH.SWIG03155
	120V	DH.SWIG04032	DH.SWIG04050	DH.SWIG04105	DH.SWIG04155
<b>Price, Each. ₩</b>					

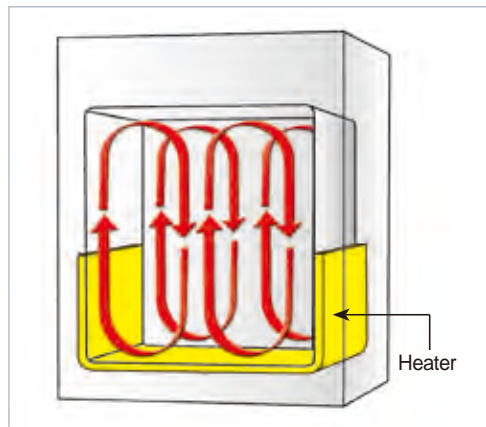
\* Other Specifications are available upon Customer's Request.

**SMART Incubator with Validation (IQ, OQ) Service**

- DH.SWIG31032 Validation Service(IQ, OQ), with "SIG-32", "SIGV032"
- DH.SWIG31050 , with "SIG-50", "SIGV050"
- DH.SWIG31105 , with "SIG-105", "SIGV105"
- DH.SWIG31155 , with "SIG-155", "SIGV155"

Ea. Price, ₩

※ Note! Spare PE-coated Steel Wire Shelf & Optional Stainless-steel Wire Shelf  
 ⇒ See The "Incubators, General Purpose, Accessories" Section



**3-Side Heating Zone** : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism.

» **WiRe™ App Service**



It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

4" Full Touch Screen TFT LCD (Smart-Lab™ Controller)

**Controlled by Mobile-Phone**





**Wire Shelf, PE-coated Steel (Included)**

**Spare PE-coated Steel Wire Shelf**

(1) for Forced-air Incubator **“ThermoStable™ IF & SIF”**

- DH.WIG11050 Wire Shelf, PE-coated Steel, with 2 Brackets, for 50 Lit, “IGS050”, w340 × d310mm
- DH.WIG11105 Wire Shelf, PE-coated Steel, with 2 Brackets, for 105 Lit, “IGS105”, w455 × d375mm
- DH.WIG11155 Wire Shelf, PE-coated Steel, with 2 Brackets, for 155 Lit, “IGS155”, w520 × d440mm

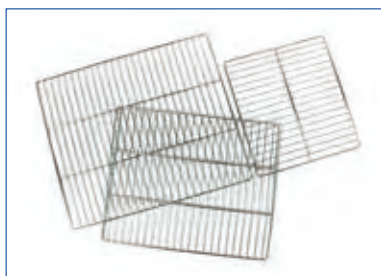
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Ea. Price, ₩

(2) for Gravity-air Incubator **“ThermoStable™ IG & SIG”**

- DH.WIG11032 Wire Shelf, PE-coated Steel, with 2 Brackets, for 32 Lit, “IGS032”, w280 × d260mm
- DH.WIG11050 Wire Shelf, PE-coated Steel, with 2 Brackets, for 50 Lit, “IGS050”, w340 × d310mm
- DH.WIG11105 Wire Shelf, PE-coated Steel, with 2 Brackets, for 105 Lit, “IGS105”, w455 × d375mm
- DH.WIG11155 Wire Shelf, PE-coated Steel, with 2 Brackets, for 155 Lit, “IGS155”, w520 × d440mm

Ea. Price, ₩



**Wire Shelf, Stainless-steel (Optional)**

**Optional Stainless-steel Wire Shelf**

(1) for Forced-air Incubator **“ThermoStable™ IF & SIF”**

- DH.WON11050 Wire Shelf, Stainless-steel, with 2 Brackets, for 50 Lit, “ONS050”, w340 × d310mm
- DH.WON11105 Wire Shelf, Stainless-steel, with 2 Brackets, for 105 Lit, “ONS105”, w455 × d375mm
- DH.WON11155 Wire Shelf, Stainless-steel, with 2 Brackets, for 155 Lit / 305Lit, “ONS155”, w520 × d440mm

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Ea. Price, ₩

(2) for Gravity-air Incubator **“ThermoStable™ IG & SIG”**

- DH.WIG12032 Wire Shelf, Stainless-steel, with 2 Brackets, for 32 Lit, “IGSN032”, w280 × d260mm
- DH.WON11050 Wire Shelf, Stainless-steel, with 2 Brackets, for 50 Lit, “ONS050”, w340 × d310mm
- DH.WON11105 Wire Shelf, Stainless-steel, with 2 Brackets, for 105 Lit, “ONS105”, w455 × d375mm
- DH.WON11155 Wire Shelf, Stainless-steel, with 2 Brackets, for 155 Lit / 305Lit, “ONS155”, w520 × d440mm

Ea. Price, ₩

**DAIHAN® Multi-Room Incubator “WIM”, Forced-air, 125 Lit × 4 Rooms, with Certi. & Traceability, up to 60/70 °C**  
 With 8 Wire Shelf, Digital Fuzzy Control, Independent Chamber Control, Max. Temp. Uniformity & Accuracy

4-룸 배양기/인큐베이터, 강제 순환식, 디지털 퍼지 제어, 개별 컨트롤러 장착



2-Year Warranty



4 × 125Lit Rooms  
Independent Fuzzy Control System  
in each Chamber

Multi-Room Incubator, Forced-air, “WIM-R4”

- Made in Korea    ■ UL, CUL, and CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Jog-Shuttle Control System

- \* Variable Application : Microorganism Culture, Cell Culture, Constant Temp. Germination
- \* Each Chamber has an Independent Controller for Different Temp and Time Control
- \* Forced-air Flow by Silent Fan Motor Implements the Highest Uniformity of Temp in Each Chamber
- \* Storage Function for Set Values of Temperature and Time
- \* Stainless-steel Chamber and PE-coated Shelves (2ea for Each Chamber) - Corrosion Resistance
- \* Inner Tempered Glass Door : to Observe the Samples without Interruption of Incubation
- \* Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

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Spec.	Model	(1) “WIM-4”	(2) “WIM-R4”	(3) “WIM-RL4” with illumination
Temp. Range		R/T 5 °C ~70 °C	0 °C to 60 °C	0 °C to 60 °C
Circulation		Forced-air(Blower FAN)		
Capacity		125 Lit × 4 Rooms		
Illumination		None	FRL 36W×2 (×4 Rooms)	
Temp.	Accuracy	±0.2 °C at 37 °C		
	Uniformity	±0.3 °C at 37 °C, ±0.7 °C at 50 °C	±0.5 °C at 37 °C	
Heat-up Time		15min. to 37 °C 30min. to 50 °C	20min. to 37 °C 30min. to 50 °C	
Recovery Time (Door open 30sec)		8min. to 37 °C 10min. to 50 °C	10min. to 50 °C 12min. to 50 °C	
Heating / Compressor		500 W × 4ea / None	650 W × 4ea / 1/4 HP ( × 4 Rooms)	
Timer & Alarm		99hr 59min. (with delay / Continuous run.), Error status & Timer-end		
Display		Digital LCD with Back-Light Function		
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn & Push)		
Inner Door		with 4ea of Inner Tempered Glass Door		
Shelf		Included 8ea of PE-coated steel Shelf (2ea × 4 Chambers)		
Permitted Total Load		Total Load 128 kg (16kg × 8 Shelves)		
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector		
Material		Internal : Stainless-steel ( # 304), External : Powder Coated steel		
Dimension (w × d × h)	Interior (mm)	500 × 500 × h500 mm ( × 4 Rooms)		
	Exterior (mm)	1,655 × 845 × h1,710 mm		
Net Weight / Gross Weight		343kg / 441kg	350kg / 450kg	
Packing Size (w × d × h) (mm)		1,900 × 1,050 × 1,950		
Power Consumption		2.6 kW	4.5 kW	4.8 kW
Power Supply*		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz	1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase	

Cat. No.	230V	DH.WIM04125	DH.WIM14125	DH.WIM24125
	120V	DH.WIM05125	DH.WIM15125	DH.WIM25125
	3Phase	-	DH.WIM16125	DH.WIM26125
Price, Each. ₩				

※ 운임 착불

Multi-Room Incubator with Validation (IQ, OQ) Service

- SL.SIM54125 Validation Service(IQ, OQ), with “WIM-4”
- SL.SIM64125 , with “WIM-R4”
- SL.SIM74125 , with “WIM-RL4”

Ea. Price, ₩

Spare PE-coated Steel Wire Shelf

- DH.WIM34125 Wire Shelf, PE-coated steel, with 2 Brackets, “IMS125”  
w470 × d480mm, for “WIM” 4-Room Incubator

Ea. Price, ₩

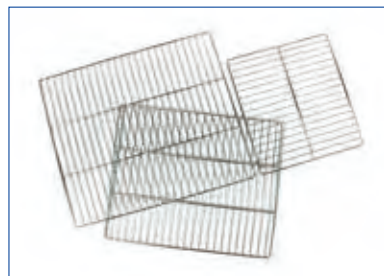
Optional Stainless-steel Wire Shelf

- DH.WIM34126 Wire Shelf, Stainless-steel, with 2 Brackets, “IMS126”,  
w470 × d480mm, for “WIM” 4-Room Incubator

Ea. Price, ₩



Wire Shelf, PE-coated steel  
(Included)



Wire Shelf, Stainless-steel  
(Optional)

**DAIHAN® High-performance Compact-size Heating Block/Dry Bath Incubator "MaXtable™ H20", up to 150°C, ±0.1°C**  
 With Large LCD Display, Fuzzy Control, Molded Heater, Modular Anodized Aluminum Blocks, Touch-button Controller

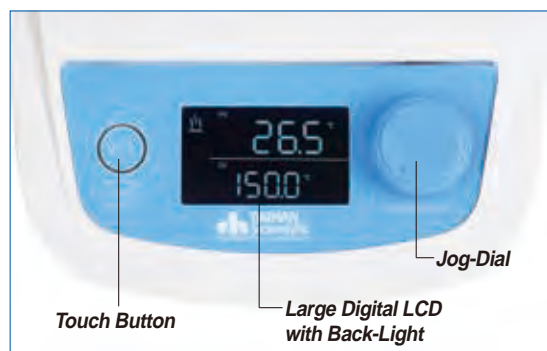
히팅 블록, 디지털 퍼지 컨트롤 시스템, 터치버튼식 조절기, 일체형 주물 히터, 블록 교체 가능, 블록 추출용 공구 포함



~150°C

- **CE Certified**    ■ **PL (Product Liability) Insurance**
  - **with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System**
  - **Designed for Multi-functional Dry Block Heater**    ■ **Ergonomic Design**
  - **Patented Jog-Dial and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate. with Large Back-Light LCD**
  - **With a Screw-type Block Removal Tool ; Convenient Handling**
- \* High-performance Molded Heater ensures Best Temperature Accuracy.
  - \* Internal Bath Material(PPS) ensures Best Heat Insulation    \* Rapid heat up time.
  - \* Ideal for Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures
  - \* Precise Temperature Control : ±0.1°C at 37°C, ±0.2°C at 90°C, ±0.4°C at 135°C
  - \* User Self-Compensation Function to offset between Actual and Displayed Temperature. (± 10.0°C)
  - \* Digital Timer Included : up to 99hr 59min (Operation Time + Delay Time)
  - \* Storage Function of Temperature and Timer setting values
  - \* Convenient integral timer for time-sensitive incubations
  - \* Alarm Function : Error Status and Timer-end    \* Easy to Read, Wide LCD Screen
  - \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)
  - \* Easily calibrated for accurate temperature control and display

Heating Block/Dry Bath "MaXtable™ H20-set"



Controller of "MaXtable™ H20"



Included Block (3) "BLC 548" 48holes for 1.5/2ml & Removal Tool

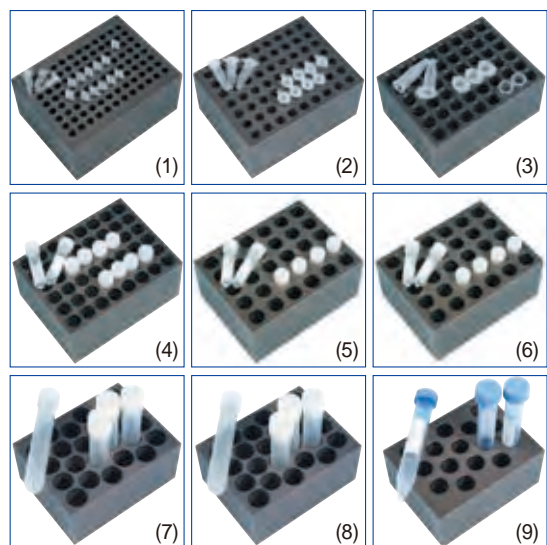
**Specifications & Ordering information**

<L1>

Spec.	Model	"MaXtable™ H20" (Only Unit)	"MaXtable™ H20-set" (included Standard Block)
Controller		Single Digital Fuzzy Controller	
Useful Block		Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block		None(Only Heating Block Unit)	48 holes×for 1.5/ 2ml Centri. Tube
Heater		Molded Heater(300W)	
Dimension		Unit : 178×226×h138mm, Block : 90×120×h60mm	
Temp. Range, & Accuracy		Ambient 5°C~150°C, ±0.1°C at 37°C, ±0.2°C at 90°C, ±0.4°C at 135°C	
Heat-Up Speed & Sensor		Approx. 5°C/min, PT100	
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm		99hr 59min, Alarm (Error Status and Timer - end)	
Display		Digital LCD with Back-Light Function	
Material		Unit : PPS & BAS(HF380), Block : Anodized Aluminum	
Included Standard Acce.		Block Extraction Tool	
Packing Size & Gross Weight		230×290×h245mm, 2.2kg	230×355×h245mm, 3.5kg
Power Consumption		300 W	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V	DH.WHB02000	DH.WHB02100
	120V	DH.WHB02001	DH.WHB02101
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

**Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)**



- DH.WHB510596 (1) for 0.2ml PCR Tube, (φ6×h16mm)×96 holes, "BLC596"
- DH.WHB510570 (2) for 0.5ml Centri. Tube, (φ7.7×h29.5mm)×63 holes, "BLC570"
- DH.WHB511548 (3) for 1.5/2ml Centri. Tube, (φ11×h35mm)×48 holes, "BLC548" (\* included in the "H20-Set")
- DH.WHB521248 (4) for φ 12mm Test Tube, (φ 12×h35mm)×48 holes, "BLT248"
- DH.WHB521335 (5) for φ 13mm Test Tube, (φ 13×h47mm)×30 holes, "BLT335"
- DH.WHB521535 (6) for φ 15mm Test Tube, (φ 15×h47mm)×30 holes, "BLT535"
- DH.WHB521628 (7) for φ 16.5mm Test Tube, (φ 16.5×h47mm)×24 holes, "BLT628"
- DH.WHB521828 (8) for φ 18mm Test Tube, (φ 18×h47mm)×24 holes, "BLT828"
- DH.WHB531515 (9) for 15ml Conical Tube, (φ 16×h47mm)×15 holes, "BLC515"
- DH.WHB535008 (10) for 50ml Conical Tube, (φ 28.7×h47mm)×8 holes, "BLC008"
- DH.WHB500102 (11) Spare ; Block Removal Tool, Easy Handling

Ea. Price, ₩





**DAIHAN® High-performance Heating Block/Dry Bath Incubator-Heating & Cooling "HB-R48"**  
 With Digital PID Control, Acrylic Lid, Precise Temperature Control, Modular Anodized Aluminum Block,  $-5^{\circ}\text{C} + 95^{\circ}\text{C}$ ,  $\pm 0.1^{\circ}\text{C}$   
 Peltier Cooling System, Digital Timer, Interchangeable Blocks, **히팅 / 쿨링 블럭, 블럭 교체 가능, 아크릴 리드 / 블럭용 집게 포함**



$-5^{\circ}\text{C} + 95^{\circ}\text{C}$

Block "BLC548",  
48 holes



Patented Jog-Shuttle  
Control System

Block Cover

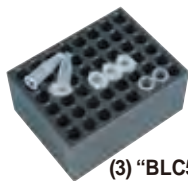


Tongs "BLE101"

2-Year Warranty

"HB-R48-Set"

with Block "BLC548" for 1.5/2ml Centrifuge Tube  $\times$  48 holes



(3) "BLC548"



(11) "BLE101"

Included Anodized Aluminum Block & Tongs

- CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Designed for Multi-Function : Enzyme Reactions, Inactivation of Sera, Incubation and Other Laboratory Procedures.
- Patented Jog-Shuttle Control System and Digital LCD with Back-Light Function

- \* User Self-Compensation Function to offset between Actual and Displayed Temperature. ( $\pm 10.0^{\circ}\text{C}$ )
- \* Storage Function of Temperature and Timer setting values
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

<L1>

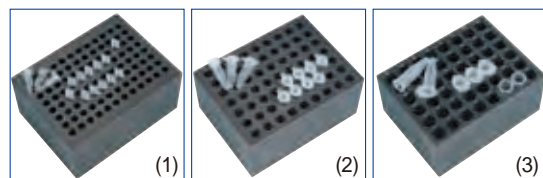
Spec.	Model	"HB-R48" (Only Unit)	"HB-R48-set" (included Standard Block)
Controller		Digital Fuzzy Controller	
Useful Block		Interchangeable Block(90×120×h60mm) for Various Tubes	
included Standard Block		None(Only Heating Block Unit)	48 holes×for 1.5/2ml Centri. Tube
Dimension : Unit & Block		185×230×h220mm, and 90×120×h60mm	
Cooling		Two Peltier Modules	
Cool-Down Speed		2.3°C/min. between 95°C to 25°C, 0.5°C/min. between 25°C to -5°C	
Heater and Sensor		300W (Molded Heater), PT100	
Temp. Range, & Accuracy		$-5^{\circ}\text{C}$ to $95^{\circ}\text{C}$ , and $\pm 0.1^{\circ}\text{C}$ at $37^{\circ}\text{C}$ , $\pm 0.2^{\circ}\text{C}$ at $90^{\circ}\text{C}$	
Heat-Up Speed		Approx. 5°C/min	
Safety Device		Over Temp. and Over Current Protector, Sensor Error Detector	
Timer with Alarm		99hr 59min, Alarm (Error Status and Timer - end)	
Display		Digital LCD with Back-Light Function	
Material	Internal & External	Stainless steel (#304), and Powder Coated steel	
	Block	Anodized Aluminum	
Included Standard Acce.		Block Tongs "BLE101" and Block Cover	
Packing Size, Gross Weight		350×220×h310mm, 9 kg	
Power Consumption		450 W	
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	

Cat. No.	230V	DH.WHB00248	DH.WHB00249
	120V	DH.WHB02248	DH.WHB02249
Price, Each. ₩			

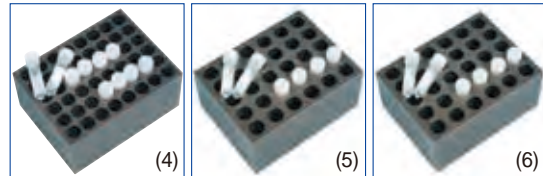
\* Other Specifications are available upon Customer's Request.

Optional Interchangeable Anodized Aluminum Block (90×120×h60mm)

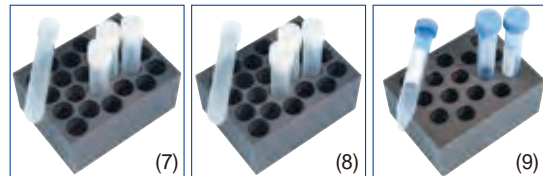
Ea. Price, ₩



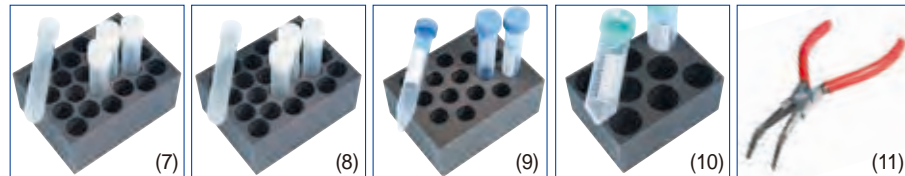
- DH.WHB510596 (1) for 0.2ml PCR Tube, ( $\phi 6 \times h16\text{mm}$ )  $\times$  96 holes, "BLC596"
- DH.WHB510570 (2) for 0.5ml Centri. Tube, ( $\phi 7.7 \times h29.5\text{mm}$ )  $\times$  63 holes, "BLC570"
- DH.WHB511548 (3) for 1.5/2ml Centri. Tube, ( $\phi 11 \times h35\text{mm}$ )  $\times$  48 holes, "BLC548"  
 (\* included in the "HB-R48-Set")



- DH.WHB521248 (4) for  $\phi 12\text{mm}$  Test Tube, ( $\phi 12 \times h35\text{mm}$ )  $\times$  48 holes, "BLT248"
- DH.WHB521335 (5) for  $\phi 13\text{mm}$  Test Tube, ( $\phi 13 \times h47\text{mm}$ )  $\times$  30 holes, "BLT335"
- DH.WHB521535 (6) for  $\phi 15\text{mm}$  Test Tube, ( $\phi 15 \times h47\text{mm}$ )  $\times$  30 holes, "BLT535"
- DH.WHB521628 (7) for  $\phi 16.5\text{mm}$  Test Tube, ( $\phi 16.5 \times h47\text{mm}$ )  $\times$  24 holes, "BLT628"
- DH.WHB521828 (8) for  $\phi 18\text{mm}$  Test Tube, ( $\phi 18 \times h47\text{mm}$ )  $\times$  24 holes, "BLT828"



- DH.WHB531515 (9) for 15ml Conical Tube, ( $\phi 16 \times h47\text{mm}$ )  $\times$  15 holes, "BLC515"
- DH.WHB535008 (10) for 50ml Conical Tube, ( $\phi 28.7 \times h47\text{mm}$ )  $\times$  8 holes, "BLC008"
- DH.WHB500101 (11) Spare ; Block Extraction Tongs, "BLE101"



**DAIHAN® General Purpose SMART Temp/Humidity Chamber “ThermoStable™ STH-E”, 155 · 305 · 420 · 800 Lit**  
 With Smart-Lab™ System, Water Tank, Touch-Screen LCD, CFC-Free, -20℃+80℃ ±0.3℃, up to 95% RH, 스마트 항온항습기



2-Year Warranty

SMART Temp./Humidity Chamber “ThermoStable™ STH-E”

» WiRe™ App Service



It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

7" Full Touch Screen TFT LCD (Smart-Lab™ Controller)

Controlled by Mobile-Phone



(1) Perforated Stainless-steel Shelf (Included)



(2) Temp. & Humidity Recorder 6 Channel 2 Pens (WTH5100) (Optional)

- Made in Korea ■ CFC Free Refrigerant (R-404A) ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Economical & Practical Type ■ CFC Free Refrigerant (R-404A)
- Smart-Lab™ Controller : Remote Controlled by Mobile-Phone with WiRe™ App Service
  - Ergonomic 7" Full Touch Screen TFT LCD
  - Internet Connectivity with WiFi
  - RS232 Interface for Remote Monitoring and Controlling with PC
  - Built in USB port for Data Download and Program Upgrade
  - Password Protected Setting
  - Variable Program Setting for Multiple Patterns with Multiple Segments
  - Self-Diagnostic Function (Push Alarm to Smart Phone) : Door Ajar and Power-/Temp.-Failure Alarm
  - Min-/Max-Temperature Memory and Automatic Data Recording
  - Interactive Temperature Graph
  - Digital Calibration (Offset Function)
- \* The Powerful and Silent Dual Fan Motor Assures Temperature Uniformity by Strong Air Circulation
- \* Over Temperature and Over Current Protection for User Safety
- \* Inner Tempered Glass Door with Silicone Packing
- \* Low Water Level Alarm Lamp
- \* Temperature & Humidity Recorder (6 Channels & 2Pens) (Optional)

Specifications & Ordering information

<L1>

Spec.	Model	ThermoStable™ STH-E155	ThermoStable™ STH-E305	ThermoStable™ STH-E420	ThermoStable™ STH-E800
		Max. Capa. 155L	Max. Capa. 305L	Max. Capa. 420L	Max. Capa. 800L
Capacity		155 Lit	305 Lit	420 Lit	800 Lit
Temp.	Range	PT100 Sensor, -20℃ + 80℃			
	Accuracy	±0.3℃			
Humidity	Range	30% ~ 95% RH			
	Accuracy	±2%			
Dimension (w×d×h)	Interior (mm)	505×505×610	620×620×800	750×660×850	1000×800×1000
	Exterior (mm)	745×920×1645	820×1290×1720	990×1075×1885	1200×1100×1920
Heater	for Temp.	1.5 kW	2.0 kW	2.2 kW	2.5 kW
	for Humi.	2.0 kW	3.0 kW	3.0 kW	3.0 kW
Compressor		7/8HP	1.5 HP	1.5 HP	3 HP
Refrigerant		CFC-Free(R-404A) Refrigeration System			
Controller & Display		Smart-Lab Controller, 7" Full Touch Screen TFT LCD			
Program Function		Multiple Programs(Patterns by multiple Segments) Supported			
Material		Internal : Stainless-steel( # 304), External : Powder Coated steel			
Shelf (included)		3ea of Perforated Stainless-steel Shelf of Adjustable Position			
Safety Device		Hi-Low Temp. Protector, Over Current & Leakage Breaker, Water Level Sensor			
Others		PL(Product Liability) Insurance			
Packing Dimension (w×d×h) (cm)		99×112×185	122×122×205	128×128×216	149×132×220
Net & Gross Weight, kg		290 kg, 355 kg	309 kg, 369 kg	378 kg, 478 kg	558 kg, 678 kg
Power Consumption		4.4 kW	5.7 kW	6.3 kW	8.2 kW
Electric Reqts.		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase			
Cat. No.	230V	DH.STHE0155	DH.STHE0305	DH.STHE0420	DH.STHE0800
	120V	DH.STHE4155	DH.STHE4305	DH.STHE4420	DH.STHE4800
	3Phase	DH.STHE5155	DH.STHE5305	DH.STHE5420	DH.STHE5800
Price, Each. ₩					

※ 운임 착불

Validation (IQ, OQ) Service Economic Temp./Humidity Chamber

	Validation Service(IQ, OQ), with “STH-E155”, “STHEV155”	Ea. Price, ₩
DH.STHE3155	Validation Service(IQ, OQ), with “STH-E155”, “STHEV155”	
DH.STHE3305	Validation Service(IQ, OQ), with “STH-E305”, “STHEV305”	
DH.STHE3420	Validation Service(IQ, OQ), with “STH-E420”, “STHEV420”	
DH.STHE3800	Validation Service(IQ, OQ), with “STH-E800”, “STHEV800”	

Spare Perforated Stainless-steel Shelf

	(1) Perforated Shelf, “THS1155”, for 155 Lit, 470×480mm	Ea. Price, ₩
DH.WTH11155	(1) Perforated Shelf, “THS1155”, for 155 Lit, 470×480mm	
DH.WTH11305	(1) Perforated Shelf, “THS1305”, for 305 Lit, 590×580mm	
DH.WTH11420	(1) Perforated Shelf, “THS1420”, for 420 Lit, 720×640mm	
DH.WTH11800	(1) Perforated Shelf, “THS1800”, for 800 Lit, 970×980mm	

Optional Temp & Humidity Recorder and Chart Paper

	(2) Temperature & Humidity Recorder, “WTH5100”	Ea. Price, ₩
DH.WTH05100	(2) Temperature & Humidity Recorder, “WTH5100”	
DH.WTH05105	Chart Paper, “WTH5105”, 33 Days	

**DAIHAN® SMART Precise Temp/Humidity Chamber “ThermoStable™ STH”, 155 · 305 · 420 · 800 Lit**  
 With Smart-Lab™, Auto Supplement Water Tank, Touch-Screen LCD, CFC-Free, -20°C to 100°C, up to 98% RH, **스마트 항온항습기**

**2-Year Warranty**



Optional  
Chart Recorder

SMART Precise Temp. / Humidity Chamber  
“ThermoStable™ STH-155”

- Made in Korea ■ CFC Free Refrigerant (R-404A) ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Smart-Lab™ Controller : Remote Controlled by Mobile-Phone with WiRe™ App Service.

- Ergonomic 7" Full Touch Screen TFT LCD
- Self-Diagnostic Function
- Push Alarm Service to Smart Phone : Power-/Temperature-/Door Open-Error Status
- Built in USB port for Data Download and Program Upgrade
- Password Protected Setting
- Digital Calibration(Offset Function)
- Program Function : Multiple Programs(Patterns by multiple Segments) Supported
- Internet Connectivity with WiFi
- Automatic Data Recording
- Interactive Temperature Graph
- Min-/Max-Temperature Memory
- \* Precise Temperature Control (-20°C to 100°C) and Humidity (30% to 98% Relative Humidity)
- \* Electronic Humidity Sensor has Excellent Response Time and Durability.
- \* Easy and Safety Door Lock
- \* Low Water Level Alarm System
- \* The Powerful and Silent Dual Fan Motor Assures Temperature Uniformity by Strong Air Circulation (2 ~ 4pcs)
- \* Large Clear Viewing Window with Membrane Heating Element (Moisture-Proof)
- \* Sliding Water Supply Tank : Auto Water Supplementing System

**Specifications & Ordering information**

<L1>

Spec.	Model	STH-155 Max. Capa. 155L	STH-305 Max. Capa. 305L	STH-420 Max. Capa. 420L	STH-800 Max. Capa. 800L
<b>Temp. Range &amp; Humidity</b>		-20°C to 100°C, 30% to 98% RH			
<b>Compressor</b>		7/8HP	1.5HP	1.5HP	3HP
<b>Power Consumption</b>		4.7 kW	5.7 kW	6.3 kW	9 kW
<b>Heater</b>	for Temp.	1.5 kW	2.0 kW	2.2 kW	2.5 kW
	for Humi.	2.0 kW	3.0 kW	3.0 kW	3.0 kW
<b>Temp. Accuracy</b>		±0.3°C			
<b>Humidity Accuracy</b>		±0.3% RH			
<b>Heat-up Time</b>		35 min (-20°C to 80°C)			
<b>Cool-down Time</b>		45 min (+20°C to -20°C)			
<b>Sensor</b>		PT100 & Capacitive Sensor			
<b>Material</b>	Internal	Stainless-steel (# 304)			
	External	Powder Coated steel			
<b>Shelf (Included)</b>		3 Perforated Stainless-steel Shelf, Adjustable Position			
<b>Safety Device</b>		Over Temp. and Over Current Protector, Sensor Error and Low Level Detector, Leakage Breaker			
<b>Dimension (w×d×h)</b>	Interior (mm)	505×505×610	620×620×800	700×700×820	1,000×800×1,000
	Exterior (mm)	1,100×960×1,550	1,310×1,080×1,765	1,390×1,135×1,690	1,570×1,245×2,060
<b>Packing Dimension (w×d×h) (cm)</b>		134×116×175	152×125×207	160×130×202	178×141×237
<b>Gross Weight</b>		353 kg	369 kg	478 kg	678 kg
<b>Electric Reqts.</b>		1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase			

<b>Cat. No.</b>	230V	DH.STH01155	DH.STH01305	DH.STH01420	DH.STH01800
	120V	DH.STH05155	DH.STH05305	DH.STH05420	DH.STH05800
	3Phase	DH.STH07155	DH.STH07305	DH.STH07420	DH.STH07800
<b>Price, Each. ₩</b>					
<b>Validation (IQ, OQ)</b>	<b>Cat. No.</b>	DH.STH31155	DH.STH31305	DH.STH31420	DH.STH31800
	<b>Model No.</b>	STHV1155	STHV1305	STHV1420	STHV1800
<b>Price, Ea. ₩</b>					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

WiRe™ App Service



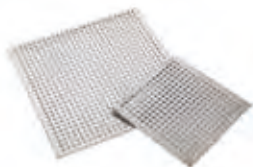
It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

7" Full Touch Screen TFT LCD (Smart-Lab™ Controller)

Controlled by Mobile-Phone



Auto Water Supplementing System



(1) Perforated Stainless-steel Shelf (Included)



Optional ; (2) Temp. & Humidity Recorder 6 Channel 2 Pens (WTH5100)

**Spare Perforated Stainless-steel Shelf**

- DH.WTH11155 (1) Perforated Shelf, “THS1155”, for 155 Lit, 468.5×465mm
- DH.WTH11305 , “THS1305”, for 305 Lit, 588.5×585mm
- DH.WTH11420 , “THS1510”, for 420 Lit, 668.5×675mm
- DH.WTH11800 , “THS1800”, for 800 Lit, 968.5×770mm

Ea. Price, ₩

**Optional Temp & Humidity Recorder and Chart Paper**

- DH.WTH05100 (2) Temperature & Humidity Recorder, “WTH5100”
- DH.WTH05105 Chart Paper, “WTH5105”, 33 Days

Ea. Price, ₩

Articles	Cat. No	Description
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**DAIHAN® -40~100°C Precise Temp/Humidity Chamber "THC", 30~98% RH, 155 · 400 · 800 Lit** NEW  
 With Full Touch Screen Controller; Auto Supplement Water Tank, Viewing Window, Cable Port, 정밀 항온항습기

NEW
2-Year Warranty
-40~100°C

*Optional Chart Recorder*

Precise Temp / Humidity Chamber "THC-800"

- **Made in Korea**
- **5.7" Program Full Touch Screen Controller**
- **Built-in SD Card Slot for Data Download & Built-in Cable Port for Convenient Test**
- \* Precise Temp Control(-40°C to 100°C) and Humidity(30% to 98% Relative Humidity)
- \* Large Clear Viewing Window with Membrane Heating Element (Moisture-Proof)
- \* No Temp Change in the Chamber by Separating the Humidity Heater from the Chamber
- \* Automatic Defrost Function
- \* Sliding Water Supply Tank : Auto Water Supplementing System
- \* Water Recycling System reduce Water Consumption for Longer Operation
- \* Low Water Level Alarm System
- \* 6-Channel & 2-Pen Temperature & Humidity Recorder (Optional)
- \* Warning Signal Lamp (Include)
- **PL(Product Liability) Insurance**
- **Max 120 Pattern / 1200 Segment**
- \* Easy and Safety Door Lock
- \* Built in Emergency Stop Switch

### Specifications & Ordering information

<L1>

Spec.	Model	THC-155 Max. Capa. 155L	THC-400 Max. Capa. 400L	THC-800 Max. Capa. 800L
Capacity		155 Lit	400 Lit	800 Lit
Temp. Range & Humidity		-40 ~ 100°C, 30 ~ 98% RH		
Compressor		1HP × 2Ea.	1.5HP × 2Ea.	2HP × 2Ea.
Power Consumption		5.5 kW	8 kW	11 kW
Heater	for Temp.	2 kW	3 kW	4 kW
	for Humi.	1.5 kW	2 kW	3 kW
Temp.	Accuracy	± 0.3°C		
Humidity	Accuracy	± 0.3% RH		
Sensor		PT100 & Capacitive Sensor		
Material	Internal	Stainless-steel (# 304)		
	External	Stainless-steel (# 430) & Powder Coated steel		
Shelf (Included)		3 Perforated Stainless-steel Shelf, Adjustable Position(THC-155 2ea)		
Safety Device		Over Temp. and Over Current Protector, Sensor Error and Low Level Detector, Leakage Breaker		
Dimension (w×d×h)	Interior (mm)	505 × 505 × 610	700 × 700 × 820	1000 × 800 × 1000
	Exterior (mm)	1000 × 1020 × 1700	1200 × 1220 × 1900	1500 × 1320 × 2000
Packing Dimension (w×d×h) (cm)		1210 × 1220 × 2000	1410 × 1420 × 2200	1710 × 1520 × 2300
Gross Weight		360 kg	480 kg	680 kg
Electric Reqts.		AC 380V 50/60Hz, 3 Phase		
Cat. No.	380V	DH.Thc0155	DH.Thc0400	DH.Thc0800
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불



(1) Perforated Stainless-steel Shelf (Included)



Optional ;  
(2) Temp. & Humidity Recorder

### Validation (IQ, OQ) Service Precise Temp./Humidity Chamber

DH.Thc1155 Validation Service(IQ, OQ), with "THC-155"  
 DH.Thc1400 , with "THC-400"  
 DH.Thc1800 , with "THC-800"

Ea.	Price, ₩

### Spare Perforated Stainless-steel Shelf, Warning Signal Lamp for "THC"

DH.ThcS0155 (1) Perforated Shelf, "THCS155", for 155 Lit, 475 × 455mm  
 DH.ThcS0400 , "THCS400", for 400 Lit, 670 × 650mm  
 DH.ThcS0800 , "THCS800", for 800 Lit, 970 × 750mm  
 DH.ThcL0003 Warning Signal Lamp

Ea.	Price, ₩

### Optional Accessory

DH.ThcR0005 (2) Temperature & Humidity Recorder  
 DH.WTH05105 Chart Paper for Recorder

Ea.	Price, ₩

DAIHAN® Low Temperature(B.O.D) Incubator “ThermoStable™ IR”, 0°C~60°C, ±0.2°C, **Medicaluse(230V)**  
 With 3 Wire Shelf, Digital PID Control, CFC-free Refrigeration(R-404A) System, Forced-air Type, 150 · 250 · 420 · 700 Lit  
 저온(B.O.D) 배양기/인큐베이터, 강제 순환식, 우수한 온도정확성, 친환경 냉매 채용



Medicaluse

- Made in Korea ■ UL, CUL, and CE Certified ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- CFC-free (R-404A) Refrigeration System
- Digital PID Control System Implementing Superior Temperature Accuracy
- Patented Jog-Dial Control System

- \* Variable Application : Animal & Plant Cell Culture, Constant Temperature, Germination Test, BOD Test, and so on
- \* Intelligent Control of Refrigerator for Preventing Overload of Compressor
- \* RS232C Interface for Monitoring and Controlling with PC
- \* Superior Temperature Uniformity by Forced-air
- \* Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)

Specifications & Ordering information

<L1>

Spec.	Model	ThermoStable™ IR-150	ThermoStable™ IR-250	ThermoStable™ IR-420	ThermoStable™ IR-700
		Max. Capa. 150L	Max. Capa. 250L	Max. Capa. 420L	Max. Capa. 700L
Capacity		150 Lit	250 Lit	420 Lit	700 Lit
Temp. Range & Accuracy		0°C~60°C, ± 0.2°C at 37°C			
Temp. Uniformity & Sensor		± 0.5°C at 37°C, ± 1.4°C at 50°C, PT100 Sensor			
Heat-up Time		20 min. to 37°C 20 min. to 50°C		35 min. to 37°C 35 min. to 50°C	
Recovery Time (Door open 30sec)		10 min. to 37°C 12 min. to 50°C		12 min. to 37°C 15 min. to 50°C	
Heating Power/Consumption		700 W	1 kW	1.2 kW	2 kW
Compressor		1/4HP	1/3HP	1/2HP	1/2HP
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end			
Storage		Alarm & Timer			
Display		Digital LCD with Back Light			
Controller		Digital PID Controller with Jog-Shuttle Switch (Turn & Push)			
Inner Door		with 1 Inner Tempered Glass Door			
Shelf (Included)		3 PE-coated steel Shelf			
Permitted Total Load		Total Load : 48kg (16kg×3 Shelf)			
Material		Internal : Stainless-steel (# 304), External : Powder Coated steel			
Dimension (w×d×h)	Interior (mm)	505×505×610	505×505×1,000	705×605×1,000	800×700×1,250
	Exterior (mm)	640×832×1,313	640×832×1,703	840×932×1,753	935×1,027×2,000
Net Weight		118 kg	157 kg	202 kg	234 kg
Packing Size (w×d×h) (mm) & Gross Weight		900×1,000×1,650	900×1,000×2,040	1,100×1,100×2,140	1,220×1,220×2,260
		191 kg	217 kg	277 kg	313 kg
Power Consumption		1.6 kW	1.8 kW	2.3 kW	2.4 kW
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz			



WiseRemote Control Software :

Connection of Temperature Devices with Interface RS232C to a PC

\* You can Download this Software from DAIHAN-Sci.com Shopping-mall

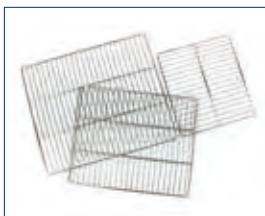
Cat. No.	230V	DH.WIR03150	DH.WIR03250	DH.WIR03420	DH.WIR03700
	120V	DH.WIR04150	DH.WIR04250	DH.WIR04420	DH.WIR04700
Price, Each. ₩					
Validation (IQ, OQ)	Cat. No.	DH.WIR31150	DH.WIR31250	DH.WIR31420	DH.WIR31700
	Model No.	IRV150	IRV250	IRV420	IRV700
Price, Ea. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불



(1) Wire Shelf, PE Coated steel (Included)



(2) Wire Shelf, Stainless-steel (Optional)

(1) Spare PE-coated Steel Wire Shelf

- DH.WIR11150 Wire Shelf, PE Coated steel, “IRS150”, w470×d480mm, for “IR-150”, “IR-250”
- DH.WIR11420 Wire Shelf, PE Coated steel, “IRS420”, w675×d585mm, for “IR-420”
- DH.WIR11700 Wire Shelf, PE Coated steel, “IRS700”, w770×d680mm, for “IR-700”

Ea. Price, ₩

(2) Optional Stainless-steel Wire Shelf

- DH.WIR21150 Wire Shelf, Stainless-steel, “IRU150”, w470×d480mm, for “IR-150”, “IR-250”
- DH.WIR21420 Wire Shelf, Stainless-steel, “IRU420”, w675×d585mm, for “IR-420”
- DH.WIR21700 Wire Shelf, Stainless-steel, “IRU700”, w770×d680mm, for “IR-700”

Ea. Price, ₩

DAIHAN® SMART Low Temperature(B.O.D) Incubator "ThermoStable™ SIR", 150 · 250 · 420 · 700 Lit, **Medicaluse(230V)** With Smart-Lab™ Controller, 4" Full Touch Screen, Fuzzy-PID Control, CFC-free(R-404A), 0°C~60°C, ±0.2°C, with Certi. & Traceability 스마트 저온(B.O.D) 배양기/인큐베이터, 강제 순환식, 우수한 온도정확성, 친환경 냉매 채용, WiRe™서비스, 4인치 풀터치스크린 조절기



Medicaluse

- Made in Korea    ■ UL, CUL, and CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Air Flow ; Forced Air-type    ■ CFC-free (R-404A) Refrigeration System
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Smart-Lab™ Controller : Remote Controlled by Mobile-Phone with WiRe™ App Service

- Ergonomic 4" Full Touch Screen TFT LCD    - Internet Connectivity with WiFi
- RS232 Interface for Remote Monitoring and Controlling with PC    - Automatic Data Recording
- Built in USB port for Data Download and Program Upgrade    - Self-Diagnostic Function
- Variable Program Setting for Multiple Patterns with Multiple Segments

- \* Variable Application : Animal/Plant Cell Culture, Constant Temp. Germination Test, BOD Test, etc.
- \* Stainless-steel Chamber and PE-coated Shelves    \* Compact New Body Design
- \* Intelligent Control of Refrigerator for Preventing Overload of Compressor
- \* Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking.

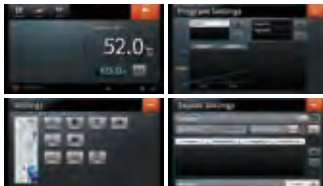
2-Year Warranty

Specifications & Ordering information

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Spec.	Model	ThermoStable™ SIR-150	ThermoStable™ SIR-250	ThermoStable™ SIR-420	ThermoStable™ SIR-700
		Max. Capa. 150L	Max. Capa. 250L	Max. Capa. 420L	Max. Capa. 700L
Capacity		150 Lit	250 Lit	420 Lit	700 Lit
Temp. Range & Accuracy		0°C~60°C, ± 0.2°C at 37°C			
Temp. Uniformity & Sensor		± 0.5°C at 37°C, ± 1.4°C at 50°C, PT100 Sensor			
Heat-up Time		20 min. to 37°C		35 min. to 37°C	
		20 min. to 50°C		35 min. to 50°C	
Recovery Time (Door open 30sec)		10 min. to 37°C		12 min. to 37°C	
		12 min. to 50°C		15 min. to 50°C	
Heating Power/Consumption		700 W	1 kW	1.2 kW	2 kW
Compressor		1/4HP	1/3HP	1/2HP	1/2HP
Compressor Control		Intelligent Control of Refrigerator for preventing Overload of Compressor			
Refrigerant		CFC-Free(R-404A) Refrigeration System			
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end			
Display & Controller		4" Full Touch Screen TFT LCD, Smart-Lab™ Controller			
Inner Door		with 1ea of Inner Tempered Glass Door			
Shelf		Included 3ea of PE-coated steel Shelf			
Permitted		Total Load Total Load : 48 kg (16kg × 3 Shelf)			
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector			
Material		Internal : Stainless-steel (# 304), External : Powder Coated steel			
Dimension (w×d×h)	Interior (mm)	505×505×610	505×505×1,000	705×605×1,000	800×700×1,250
	Exterior (mm)	640×832×1,313	640×832×1,703	840×932×1,753	935×1,027×2,000
Net Weight / Gross Weight		118 kg / 191 kg	157 kg / 217 kg	202 kg / 277 kg	234 kg / 313 kg
Packing Size (w×d×h) (mm)		900×1,000×1,650	900×1,000×2,040	1,100×1,100×2,140	1,220×1,220×2,260
Power Consumption		1.6 kW	1.8 kW	2.3 kW	2.4 kW
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz			

WiRe™ App Service



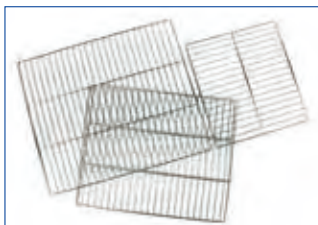
It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

4" Full Touch Screen TFT LCD (Smart-Lab™ Controller)

Controlled by Mobile-Phone



(1) Wire Shelf PE Coated steel (Included)



(2) Wire Shelf Stainless-steel (Optional)

Cat. No.	230V	DH.SWIR03150	DH.SWIR03250	DH.SWIR03420	DH.SWIR03700
	120V	DH.SWIR04150	DH.SWIR04250	DH.SWIR04420	DH.SWIR04700
Price, Each. ₩					
Validation (IQ, OQ)	Cat. No.	DH.SWIR31150	DH.SWIR31250	DH.SWIR31420	DH.SWIR31700
	Model No.	SIR-150	SIR-250	SIR-420	SIR-700
Price, Ea. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

(1) Spare PE-coated Steel Wire Shelf

- DH.WIR11150 Wire Shelf, "IRS150", 470×480mm, for "SIR-150", "SIR-250"
- DH.WIR11420 "IRS420", 675×585mm, for "SIR-420"
- DH.WIR11700 "IRS700", 770×680mm, for "SIR-700"

Ea. Price, ₩

(2) Optional Stainless-steel Wire Shelf

- DH.WIR21150 Wire Shelf, "IRU150", 470×480mm, for "SIR-150", "SIR-250"
- DH.WIR21420 "IRU420", 675×585mm, for "SIR-420"
- DH.WIR21700 "IRU700", 770×680mm, for "SIR-700"

Ea. Price, ₩

**DAIHAN® SMART Plant Growth Chamber “ThermoStable™ GC”, Smart-Lab™ System, 432 · 864 Lit**  
 With **Smart-Lab™** Controller, CFC-Free(R-404A) Refrigeration System, 0~12,000- or 15,000-Lux, 30~95% RH, 10℃~60℃  
 스마트 식물 성장상, 스마트랩 컨트롤러, 정밀한 온도/습도/조도 조절, WiRe™서비스, 7인치 풀터치스크린 스마트랩 조절기



2-Year Warranty

(1) SMART Plant Growth Chamber “ThermoStable™ GC-450”

WiRe™ App Service



It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.

7" Full Touch Screen TFT LCD (Smart-Lab™ Controller)

Controlled by Mobile-Phone



Water Tank/Silicon Tube/Lux Meter (Included)



Wire Shelf, PE-coated steel (Included)

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
  - Suitable for Plant Growth, Stability, Product Self-life QC Testing
  - Ergonomic Screen Design 7" Full Touch Screen TFT LCD
  - Smart-Lab™ Controller : Remote Controlled by Mobile-Phone with WiRe™ App Service.
    - Self-Diagnostic Function    - Automatic Data Recording
    - Variable Program Setting for Multiple Patterns with Multiple Segments
    - The Recorded Data could be transferred to PC by USB memory
    - Controller SW can be upgraded through USB port.
    - Precise Temperature, Relative Humidity and Illumination Control
    - Maintain Uniformity and Accuracy of Growth Circumstance
- \* Inner Tempered Glass Door with Silicone Packing offers easy Observation without Door Opening  
 \* Over Temperature & Over Current Protection, Sensor Error Detection, Leakage Breaking  
 \* Includes Water Tank(with Silicone Tube) and Lux Meter

Specifications & Ordering information

<L1>

Spec.		Model	(1) “ThermoStable™ GC-450” Max. Capa. 432 Lit	(2) “ThermoStable™ GC-1000” Max. Capa. 864 Lit
Temp.	Range & Variation	10℃~60℃, ±1℃ at 20℃		
	Fluctuation	± 0.5℃ at 10℃, ± 0.5℃ at 25℃ (0% light intensity) ± 1℃ at 10℃, ± 1℃ at 25℃ (100% light intensity)		
Humidity	Range & Variation	30% ~ 95% RH, ±3% at 60℃		
	Fluctuation	±1%		
	Humidifier	Evaporation by Fan with Heater		
Illumination	Range	0 to 12,000 Lux	0 to 15,000 Lux	
	Lamp	FPL 55W×14	FPL 55W×28	
	Bank	3 Side Walls		
Temp. & Humidity Sensor		Temp. : PT100, Humidity : Capacitive Sensor		
Heat-up Time (up to 37℃)		11min. (0% illumination) / 9min. (100% illumination)		
Cool-down Time (down to 10℃)		13min. (0% illumination) / 15min. (100% illumination)		
Temp. Recovery (After Door was opened for 30sec)		3min. at 10℃, 1min. at 37℃ (0% illumination) 5min. at 10℃, 1min. at 37℃ (100% illumination)		
Heating Power /Consumption	for Temp.	1.5 kW	3.0 kW	
	for Humi.	1.5 kW	3.0 kW	
Compressor		1/2HP	1HP	
Program Function		Temperature and Humidity : 120 Patterns, 1,200 Segments Light Bank : 7 steps		
Door	Internal	Tempered Safety Glass with Silicone Packing		
	External	3-Side Magnetic Packing Door with Light Bank		
Shelf (Included)		4 PE-coated Steel Shelf	8 PE-coated Steel Shelf	
Permitted Total Load		64kg (16kg×4 Shelves)	128kg (16kg×8 Shelves)	
Material		Internal : Stainless-steel (# 304), External : Power Coated steel		
Dimension (w×d×h)	Interior (mm)	650×700×1,050	1,200×790×1,050	
	Exterior (mm)	850×1,090×1,965	1,400×1,150×1,965	
Packing Size & Gross Weight		1,400×1,220×h2,210mm, 435kg	1,600×1,500×h2,200mm, 585kg	
Power Consumption		4.8 kW	6.5 kW	
Power Supply*		AC 230V, 50/60Hz or 3 Phase		
Cat. No.	230V	DH.SWGC00450	DH.SWGC01000	
	3Phase	DH.SWGC60450	DH.SWGC61000	
Price, Each. ₩				
Validation (IQ, OQ)	Cat. No.	DH.SWGC30450	DH.SWGC31000	
	Model No.	SGCV450	SGCV1000	
Price, Ea. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Spare Wire Shelf, PE Coated steel

DH.WGC10450 Wire Shelf, PE Coated, w640×d620mm, “GCS450”, for 432Lit  
 DH.WGC11000 , w580×d620mm, “GCS1000”, for 864Lit

Ea. Price, ₩



DAIHAN® Precise Shaking Incubator "ThermoStable™ IS-20", BenchTop-type, up to 60°C & 1000ml  
 With Universal Platform, Fuzzy Control, RS232C Interface for PC, Orbital Motion, 30~250 rpm, 101 Lit  
 진탕 배양기/인큐베이터, 벤치 탑 타입, 고정밀 디지털 퍼지 제어, Universal Platform 포함



A. "IS-20" R/T 5°C~60°C  
 B. "IS-20R" 10°C~60°C Refrigerated



WiseRemote Control Software :  
 Download from DAIHAN-Sci.com

Connection of Temperature Devices with Interface RS232C to a PC



(1) Universal Platform "SP600" (Included)  
 (2) Universal Spring Rack Platform "SR500" (Optional)



SS Flask Holder w/Spring Ring (Optional)

Optional Spring Rack Platform and Stainless-steel Flask Holder(with Spring Ring)

- DH.WIS504600 (1) Universal Platform, 478×478mm, "SP600", for "IS-20(R)", Included
- DH.WIS504500 (2) Universal Spring Rack, 483×483×h135mm, "SR500", for "IS-20(R)"
- DH.WIS600100 (3) Stainless-steel Wire Spring Flask Holder, for 100ml Flask, "FHS100"
- DH.WIS600250 (4) , for 250ml Flask, "FHS250"
- DH.WIS600500 (5) , for 500ml Flask, "FHS500"
- DH.WIS601000 (6) , for 1000ml Flask, "FHS1000"

- Made in Korea ■ CE Certified ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Useful for Biological Cultures under various Temperature
- Patented Jog-Shuttle Control System ■ Stabilized Orbital Motion

- \* Precise Temperature Control by Digital Fuzzy Controller, up to 60°C, PT100 Sensor
- \* Advanced Shaking Mechanism Provides Quiet Shaking and Precise Speed Control
- \* Automatic Stop of Shaking, Heating and Refrigeration when a Door opens
- \* Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking
- \* Accommodate Flasks up to 1,000ml
- \* Minimum Noise and No Vibration
- \* RS232C Interface for Monitoring and Controlling with PC
- \* Universal Spring Rack for Various Shapes/Sizes of Flasks (Optional)

Specifications & Ordering information

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Spec.	Model	A. "ThermoStable™ IS-20"	B. "ThermoStable™ IS-20R" with Refrigerator
Temp. Range		Room Temp. 5°C~60°C	10°C~60°C
Temp. Accuracy & Uniformity		Accuracy : ±0.2°C at 37°C, Uniformity : ±0.5°C at 37°C	
Capacity		101Lit	
Temp. Sensor		PT100 Sensor	
Heater		500 W	700 W
Compressor		None	1/4 HP
Compressor Control		None	Intelligent Control of Refrigerator for preventing Overload of Compressor
Refrigerant		None	CFC-Free(404A) Refrigeration System
Shaking Speed & Stroke		30 ~ 250 rpm, 25mm, Orbital Motion	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)	
Room Lamp		60W Krypton Lamp	
Platform(Included) & Capacity for Optional Flask Holders		Universal Platform for Various Shapes & Sizes of Flasks Capacity : 32ea Flask Holders for 50~100ml Flask 20ea Flask Holders for 200~300ml Flask 16ea Flask Holders for 500~1,000ml Flask	
Safety Circuit		Over Temp./ Current Protector, Leakage Breaker, Sensor Error Detector	
Material		Internal : Stainless-steel (# 304), External : Powder Coated steel	
Dimension		Internal : 530×530×h350mm, External : 575×855×h850mm	
Packing Size (w×d×h) (mm)		1,000×800×h1,100mm	
& Gross Weight		147 kg	150 kg
Power Consumption		500 W	1.2 kW
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	

Cat. No.	60Hz	230V	DH.WIS00220	DH.WIS01220
		120V	DH.WIS00120	DH.WIS01120
		50Hz	230V	DH.WIS00520

Price, Each. ₩

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

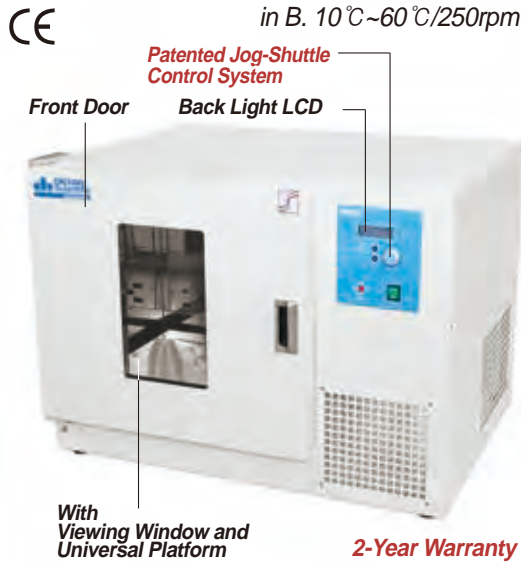
C. Validation (IQ, OQ) Service Shaking Incubator

DH.WIS32010 Validation Service(IQ, OQ), with "IS-20", 60Hz, "ISV2010"  
 DH.WIS32011 , with "IS-20R", 60Hz, "ISV2011"

Ea. Price, ₩

Ea. Price, ₩

DAIHAN® Precise Shaking Incubator “ThermoStable™ IS-30”, Front Door-type, up to 60°C & 1000ml  
 With Universal Platform, Fuzzy Control, RS232C Interface for PC, Orbital Motion, 30~250 rpm, 127 Lit  
 진탕 배양기/인큐베이터, 전면도어 타입, 고정밀 디지털 퍼지제어, Universal Platform 포함



A. “IS-30” R/T 5°C~60°C  
 B. “IS-30R” 10°C~60°C Refrigerated

- Made in Korea    ■ CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Useful for Biological Cultures under various Temperature
- Patented Jog-Shuttle Control System    ■ Stabilized Orbital Motion

- \* Precise Temperature Control by Digital Fuzzy Controller, up to 60°C, PT100 Sensor
- \* Front Door and Sliding Platform Provides Easy Loading and Handling of Samples
- \* RS232C Interface for Monitoring and Controlling with PC.
- \* Advanced Shaking Mechanism Provides Quiet Shaking and Precise Speed Control
- \* Accommodate Flasks up to 1,000ml    \* Minimum Noise and No Vibration.
- \* Universal Spring Rack for Various Shapes/Size of Flasks (Optional)
- \* Automatic Stop of Shaking, Heating and Refrigeration when a Door opens
- \* Over Temperature & Over Current Protection and Leakage Breaking.

Specifications & Ordering information

<L1>

Spec.	Model	A. “ThermoStable™ IS-30”	B. “ThermoStable™ IS-30R” with Refrigerator
Temp. Range		Room Temp. 5°C~60°C	10°C~60°C
Temp. Accuracy & Uniformity		Accuracy : ±0.2°C at 37°C, Uniformity : ±0.5°C at 37°C	
Capacity		127Lit	
Temp. Sensor		PT100 Sensor	
Heater		600 W	800 W
Compressor		None	1/4 HP
Compressor Control		None	Intelligent Control of Refrigerator for preventing Overload of Compressor
Refrigerant		None	CFC-Free(404A) Refrigeration System
Shaking Speed, Stroke & Motion		30 ~ 250 rpm, 25mm, Orbital Motion	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)	
Platform(Included) & Capacity for Optional Flask Holders		Universal Platform for Various Shapes & Sizes of Flasks Capacity : 35ea Flask Holders for 50~100ml Flask 16ea Flask Holders for 200~300ml Flask 12ea Flask Holders for 500~1,000ml Flask	
Safety Circuit		Over Temp./ Current Protector, Leakage Breaker	
Material		Internal : Stainless-steel (# 304), External : Powder Coated steel	
Dimension		Internal : 570×465×h470mm, External : 916×730×h683mm	
Packing Size (w×d×h) (mm)		1,050×900×h900mm	
& Gross Weight		146 kg	156 kg
Power Consumption		600 W	1.3 kW
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	



Connection of Temperature Devices with Interface RS232C to a PC

WiseRemote Control Software : Download from DAIHAN-Sci.com



(1) Universal Platform “SP630” (Included)    (2) Universal Spring Rack Platform “SR530” (Optional)



(3) “FHS100”  
 (4) “FHS250”  
 SS Flask Holder w/Spring Ring (Optional)

Optional Spring Rack Platform and Stainless-steel Flask Holder(with Spring Ring)

- DH.WIS504630 (1) Universal Platform, 485×405mm, “SP630”, for “IS-30(R)”
- DH.WIS504530 (2) Universal Spring Rack, 498×408×h135mm, “SR530”, for “IS-30(R)”
- DH.WIS600100 (3) Stainless-steel Wire Spring Flask Holder, for 100ml Flask , “FHS100”
- DH.WIS600250 (4) , for 250ml Flask , “FHS250”
- DH.WIS600500 (5) , for 500ml Flask , “FHS500”
- DH.WIS601000 (6) , for 1000ml Flask, “FHS1000”

Cat. No.	60Hz	230V	DH.WIS00230	DH.WIS01230
		120V	DH.WIS00130	DH.WIS01130
	50Hz	230V	DH.WIS00530	DH.WIS01530
Price, Each. ₩				

\* Other Specifications (50Hz) are available upon Customer’s Request.

※ 운임 착불

C. Validation (IQ, OQ) Service Shaking Incubator

DH.WIS33010 Validation Service(IQ, OQ), with “IS-30”, 60Hz, “ISV3010”  
 DH.WIS33011 , with “IS-30R”, 60Hz, “ISV3011”

Ea. Price, ₩

Ea. Price, ₩

Articles	Cat. No	Description
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DAIHAN® Precise Shaking Incubator “ThermoStable™ IS-10”, Top Door-type, Orbital Motion, up to 60°C, ±0.2°C With Universal Platform, Fuzzy Control, with or without illuminators & Recorder, 30~250 rpm, with Certi. & Traceability  
 신탄 배양기/인큐베이터, 탑 도어 타입, 고정밀 디지털 퍼지 제어, Universal Platform 포함



R/T 5°C~60°C/250rpm



Jog-Dial with Push Button

2-Year Warranty

A. Room Temp. +5°C~60°C, with Universal Platform “ThermoStable™ IS-10”

- Made in Korea
- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Useful for Biological Cultures under various Temperature
- Patented Jog-Shuttle Control System

- \* Precise Temperature Control by Digital Fuzzy Controller, up to 60°C
- \* Digital LCD with Back-Light Function
- \* Minimum Noise and No Vibration
- \* Advanced Shaking Mechanism Provides Quiet Shaking and Precise Speed Control
- \* Automatic Stop of Shaking, Heating and Refrigeration when a Door opens
- \* Intelligent Control of Refrigerator for preventing Overload of Compressor (IS-10R / IS-10RL)
- \* RS232C Interface for Monitoring and Controlling with PC

Specifications & Ordering information

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Spec.	Model	A. IS-10	B. IS-10R with Refrigerator	C. IS-10RL Illumination
Temp. Range		R/T 5°C~60°C	10°C~60°C	
Temp. Accuracy & Uniformity		Accuracy : ±0.2°C at 37°C, Uniformity : ±0.5°C at 37°C		
Capacity		229Lit		
Temp. Sensor		PT100 Sensor		
Heater		800 W	1 kW	1.2 kW
Compressor		None	1/3HP	
Refrigerant		CFC-Free (404A) Refrigeration System		
Shaking Speed & Stroke		30 ~ 250 rpm, 25mm Orbital Motion		
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end		
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)		
Illumination System		None	FPL 55W × 4ea	
Room Lamp		Krypton Lamp, 60W		None
Platform(Included)		Universal Platform for Various Shapes & Sizes of Flasks		
Safety Circuit		Over Temp./ Current Protector, Leakage Breaker, Sensor Error Detector		
Material		Internal : Stainless-steel ( # 304), External : Powder Coated steel		
Dimension		Internal : 750 × 720 × h400mm, External : 1,065 × 900 × h980mm		
Packing Size (w × d × h) (mm) & Gross Weight		1,220 × 1,060 × h1,200mm		
		231 kg	238 kg	238 kg
Power Consumption		800 W	1.8 kW	2.1 kW
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		



Connection of Temperature Devices with Interface RS232C to a PC

WiseRemote Control Software : Download from DAIHAN-Sci.com

Cat. No.	60Hz	230V	DH.WIS00210	DH.WIS04210	DH.WIS05210
		120V	DH.WIS00110	DH.WIS04110	DH.WIS05110
	50Hz	230V	DH.WIS00510	DH.WIS04510	DH.WIS05510
		120V	DH.WIS00410	DH.WIS04410	DH.WIS05410

Price, Each. ₩

\* Other Specifications are available upon Customer's Request. ※ 운임 착불

D. Validation (IQ, OQ) Service Shaking Incubator

- SL.SIS31010 Validation Service(IQ, OQ), with “ThermoStable IS-10”, 60Hz
- SL.SIS31011 , with “ThermoStable IS-10R”, 60Hz
- SL.SIS31012 , with “ThermoStable IS-10RL”, 60Hz

Ea. Price, ₩

Optional Spring Rack Platform/Recorder/Stainless-steel Flask Holder(with Spring Ring)

- DH.WIS504610 (1) Spare Universal Platform, w688 × h648mm, “SP610”, Flask Holder Capacity ; 68ea for 50~100ml Flask, 36ea for 200~300ml Flask, 21ea for 500~1000ml Flask
- DH.WIS600100 (2) Stainless-steel Wire Spring Flask Holder, for 100ml Flask , “FHS100”
- DH.WIS600250 (3) , for 250ml Flask , “FHS250”
- DH.WIS600500 (4) , for 500ml Flask , “FHS500”
- DH.WIS601000 (5) , for 1000ml Flask, “FHS1000”
- DH.WIS504510 (6) Universal Spring Rack, w693 × d653 × h135mm, “SR510”
- DH.WTH05100 (7) Temperature Recorder, with 6ea Ribbon Cassette & Chart Paper LED, 6ch/10sec, 144 × 144 × h233mm, “WTH5105”
- DH.WTH05108 Ribbon Cassette, 6 Colors, “WTH5108”
- DH.WTH05105 Chart Paper, w100mm × L10m, 33 Days, “WTH5105”

Ea. Price, ₩



(1) Universal Platform “SP610” (Included)VVA (6) Universal Spring Rack Platform “SR510” (Optional)



SS Flask Holder w/Spring Ring (Optional)

DAIHAN® Multi-Stack Refrigerated Shaking Incubator “WIS-ML”, Orbital Motion, with 2 & 4 Universal Platform  
 With Digital Fuzzy Control, 2 or 4 Independent Shaking Speed Control, 10℃~60℃, 30~250 rpm, 2 & 4 Stack  
 대형 멀티 진탕 배양기, 고정밀 디지털 퍼지 제어, 2 & 4 Universal Platform 포함



10℃~60℃ / 250rpm



B. Multi-Stack Refrigerated Shaking Incubator with 4 Universal Platform “WIS-ML04”

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Excellent for Multi-use and wide range of Sample Testing under various Temperature
- Patented Jog-Shuttle Control System

- \* Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- \* Intelligent Control of Refrigerator for Preventing Overload of Compressor
- \* Advanced Shaking Mechanism provides Quiet Shaking and Precise Speed Control
- \* Space Saving Design for Large Quantity Samples with 2 or 4 Independent Shaking Speed Controller
- \* Automatic Stop of Shaking, Heating and Refrigeration when the Door is Opened
- \* RS232C Interface for Monitoring and Controlling with PC    \* Including Universal Platform
- \* Over Temperature & Over Current Protection and Sensor Error Detection
- \* Universal Spring Rack for Various Shapes/Sizes of Flasks (Optional)

Specifications & Ordering information

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Spec.	Model	A. “WIS-ML02” 2 Shaking Platform	B. “WIS-ML04” 4 Shaking Platform
Shaking Stacks		2 Stack	4 Stack
Temp. Range & Accuracy		10℃~ 60℃, ±0.2℃ at 37℃	
Temp. Uniformity & Sensor		±1.0℃ at 37℃, PT100 Sensor	
Heater		1.5 kW	1.8 kW
Compressor		1/2HP	3/4HP
Compressor Control		Intelligent Control of Refrigerator for Preventing Overload of Compressor	
Refrigerant		CFC-Free(404A) Refrigeration System	
Shaking Speed & Stroke		30 ~ 250 rpm, 25mm Orbital Motion	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch (Turn+Push)	
Door		Magnetic Packing Door with Pair Glass	
Plate Size		w700×d600mm	
Platform(Included) & Capacity for Optional Flask Holders		Universal Platform for Various Shapes & Sizes of Flasks Capacity : 68ea Flask Holder, for 50~100ml Flask 36ea Flask Holder, for 200~300ml Flask 21ea Flask Holder, for 500~1,000ml Flask	
Safety Circuit		Over Temp./ Current Protector, Sensor Error Detector	
Material		Internal : Stainless-steel (# 304), External : Powder Coated steel	
Dimension (w×d×h)	Internal (mm)	700×700×1,100	700×700×1,790
	External (mm)	1,290×850×1,445	1,290×850×2,125
Packing Size (w×d×h) (mm) & Gross Weight		1,500×1,200×1,750	1,500×1,200×2,350
		397 kg	555 kg
Power Consumption		2.4 kW	3.2 kW
Electrical Reqt.s.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz	1 Phase AC 120V, 60Hz or AC 230V, 50/60Hz or 3 Phase

Cat. No.	230V	DH.WIS05002	DH.WIS05004
	120V	DH.WIS05102	DH.WIS05104
	3Phase	-	DH.WIS03004
Price, Each. ₩			

※ 운임 착불

C. Validation (IQ, OQ) Service Shaking Incubator

SL.SIS35002 Validation Service(IQ, OQ), with “WIS-ML02”  
 SL.SIS35004 , with “WIS-ML04”

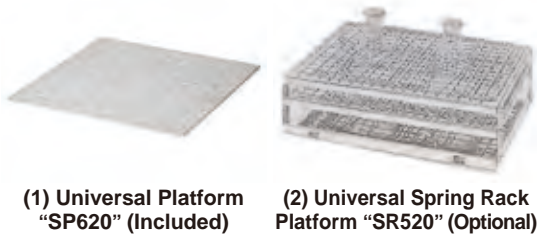
Ea. Price, ₩

Optional Spring Rack Platform and Stainless-steel Flask Holder(with Spring Ring)

- DH.WIS04620 (1) Universal Platform, w645×h645mm, “SP620”, for “WIS-ML02/04”, Included
- DH.WIS04520 (2) Universal Spring Rack, w653×d653×h135mm, “SR520”, for “WIS-ML02/04”
- DH.WIS600100 (3) Stainless-steel Wire Spring Flask Holder, for 100ml Flask, “FHS100”
- DH.WIS600250 (4) , for 250ml Flask, “FHS250”
- DH.WIS600500 (5) , for 500ml Flask, “FHS500”
- DH.WIS601000 (6) , for 1000ml Flask, “FHS1000”

Ea. Price, ₩

Ea. Price, ₩





Fluorescent Light Magnifier "BLM-F"

**Wisdom Multi-use Fluorescent Light Magnifier "BLM-F", ×5 · ×8 Magnification**  
Base Stand-type,  $\phi$  127mm B270 High Clear White Glass Lens, Flexible Arm, 12W, 형광 조명 확대경

- Made in Korea
- Ideal for Laboratory, Hospital, Circuit Board Check-Up, etc.
- International Standard  $\phi$  127mm B270 White Glass Lens
- Light Source : High Brightness Daylight Blue Fluorescent
- 20% Energy Saving Ballast Stabilizer Control System
- Adjustable Height and Lens Angle Direction
- 2-Stage Spring Flexible Arm
- \* Light Illumination : 2,800lx
- \* Adjustable Height : 300 ~ 500mm
- \* Base Size : 220×330mm
- \* Electric Power : AC 220V, 12W

## Ordering Information

DH.Mag3105 Magnifier, Fluorescent Light, ×5, "BLM-F105"  
DH.Mag3108 , ×8, "BLM-F108"

&lt;L2&gt;

Ea.	Price, ₩



LED Light Magnifier "BLM-L"

**Wisdom Multi-use LED Light Magnifier "BLM-L", ×5 · ×8 Magnification**  
Base Stand-type,  $\phi$  127mm B270 High Clear White Glass Lens, Flexible Arm, 12W, LED 조명 확대경

- Made in Korea
- Ideal for Laboratory, Hospital, Circuit Board Check-Up, etc.
- International Standard  $\phi$  127mm B270 White Glass Lens
- Light Source : High Brightness White LED Bulbs (36ea)
- Adjustable Height and Lens Angle Direction
- 2-Stage Spring Flexible Arm
- Scratch and Nick-Resistant PP Lens Cover
- \* Ultra Bright LED Light : 5,000lx
- \* Adjustable Height 300 ~ 350mm
- \* Base Size : 220×330mm
- \* Electric Power : AC 220V, 12W

## Ordering Information

DH.Mag3205 Magnifier, Fluorescent Light, ×5, "BLM-L105"  
DH.Mag3208 , ×8, "BLM-L108"

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Ea.	Price, ₩

**DAIHAN® Pocket Anemometer of Flow · Temp · RH% · Dew-point · Compass, Foldable, IP54 Water Resistance & Shock Proof**  
 1.1~20m/s, -15℃+50℃, 0~100% RH, Dew-point & Compass 360°, Tripod-stand Mountable, 소형 다기능 아네모메타



Pocket Anemometer for 3× Measuring

- \* Small Pocket Knife Shape & Compact Design. \* IP54 Water Resistant & Shock Proof.
- \* Temp. Units °C/°F Selectable. \* Auto Sleep Mode Disable Included. \* Tripod Mountable Receptacle.
- \* Measures 7 Parameters : Air Velocity, Compass, Temperature, Humidity, Windchill, Wet Bulb & Dew Point
- \* 6 Wind Units Selectable : KNT(Knot), BF(Beaufort), FPM(Feet Per Minute), MPH(Mile Per Hour), MPS(Meter Per Second), KPH(Kilometer Per Hour).

**Specifications & Ordering information**

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Spec.	Model	DH.Ane5
<b>3× Measuring Range</b>		(1) Wind Speed : 0.5 ~ 44.7m/h, 60 ~ 3937ft/m, 0.4 ~ 38.8knt, 1.1 ~ 20.0m/s, 0.7 ~ 72.0km/h, 1 ~ 8bf, (2) Temp. : -15℃+50℃, (3) RH% : 0%RH ~ 100%RH
<b>Accuracy</b>		(1) Wind Speed : ±(3% of Reading +0.2m/s), (2) Temp. : ±1℃, (3) RH% : ±3%RH(at 25℃, 10 ~ 90%RH, other ±5%RH)
<b>Resolution</b>		(1) Temp. : 0.1℃/°F, (2) RH% : 0.1%RH
<b>Response time</b>		Temp. & RH% : 60 seconds (typical)
<b>Display</b>		(1) Windchill : -20.0℃+50.0℃, (2) Dew Point : -20.0℃+50.0℃, (3) Wet Bulb : -5.0℃+50.0℃, (4) Compass : 0~360 Degree
<b>Operating Temp. &amp; RH%</b>		-15℃+50℃ & Humidity <80%
<b>Storage Temp. &amp; RH%</b>		-20℃+50℃ & Humidity <90%
<b>Battery</b>		1×CR2032 Battery
<b>Dimension &amp; Weight</b>		140×45×h25 mm (90° Folded), 235×45×h25 mm (180° Full Opened) / 90g LCD Size : 16×28mm
<b>Standard Package</b>		Meter / Battery / Manual / Strap / Paper Box
<b>Cat. No. &amp; Price ₩</b>	<b>DH.Ane3005</b>	<b>Set</b>
<b>Spare ; DH.Ane3005.1</b>	Mini Fan for Anemometer	<b>Ea</b>

**DAIHAN® Combo-Anemometer of Flow · Temp · RH% · Dew-point, PC-interface, Datalogging**  
 0.5m/s, -20℃+60℃, 0.1~99.9% RH, -20℃+59.9℃ D-point, & Wet Bulb, with 18mm Vane Probe & Cable, 정밀 아네모메타



Combo - Anemometer Hard Carrying Case

Vane Probe  
Size 273×18.5mm  
(1055mm Extended)

- \* Measures Air Velocity, Volume, Temperature, Humidity, Dew Point & Wet Bulb Temperature.
- \* Thermistor Temp. Sensor and Capacitive Humidity Sensor for Quick and Accurate Measurement.
- \* 18mm Mini Vane Probe with Built-in Temp. & Humidity Sensor. \* 99 Single Point Memories.
- \* Winds Peed Metric and Imperial Units Selectable. \* Up to 12000 Points Auto Datalogging Points.
- \* PC Interface for Data download \* Date and Time Stamp (12-Hour or 24-Hour)

**Specifications & Ordering information**

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Spec.	Model	DH.Ane3
<b>3× Measuring Range</b>		(1) Wind Speed : 0.5 ~ 20M/S, (2) Temp. : -20℃+60℃, (3) RH% : 0.1 ~ 99.9%RH
<b>Accuracy</b>		(1) Wind Speed : ±(3% of reading + 0.2M/S), (2) Temp. : ±0.6℃, (3) RH% : ±3%RH(at 25℃, 10 ~ 90%RH, other ±5%RH)
<b>Resolution</b>		(1) Temp. : 0.1℃/°F, (2) RH% : 0.1%RH
<b>Response time</b>		Temp. & RH% : 60 seconds (typical)
<b>Display</b>		(1) Wet Bulb & Dew Point Temp. : -20℃+59.9℃, (2) Air Volume : 0 to 99999m³/minute
<b>Operating Temp. &amp; RH%</b>		0℃~50℃ & Humidity <80%
<b>Storage Temp. &amp; RH%</b>		-10℃+50℃ & Humidity <90%
<b>Battery</b>		6×AAA Battery or 9V DC Adaptor
<b>Dimension &amp; Weight(g)</b>		180×58×h24.5 mm (LCD Size : 54×37 mm) / 200g
<b>Standard Package</b>		Meter / Probe / Battery / Manual / Hard Carrying Case / Software Kit
<b>Cat. No. &amp; Price ₩</b>	<b>DH.Ane3003</b>	<b>Set</b>
<b>Spare ; DH.Ane3003.1</b>	Expanded Vane Probe, 273×18.5mm (1055mm Extended), w/Rubber Holder	<b>Ea</b>

**DAIHAN® Digital Anemometer Set, for Air Velocity & Temperature, Max/Min/Average**  
 With 10 Memories Data Storage · Recalling · Clearing, m/s · m/hr · ft/min · knots, and °C/°F, 디지털 아네모메타 세트



- \* Ideal for Professional in Aviation, Laboratory and Ventilation Systems.
- \* Instant Display of the Air Velocity and Temperature.
- \* Selectable Air Velocity Unit m/s, km/hr, mph, ft/min or Knots.
- \* 10 Memories Data Storage/Recalling/Clearing.
- \* CE Approval.
- \* Maximum, Minimum and Average Calculation.
- \* Switchable Temperature Unit °C/°F.
- \* 1/4in. 20 UNC Threading for Tripod Mounting.

**Specifications & Ordering information**

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Spec.	Model	A1.A9201
2 × Measuring Range		(1) Temp.: -50°C +70°C or -58°F +158°F, (2) Air Velocity : 0.5 to 45.0m/s · 1.8 to 162.0km/hr · 1.1 to 100.0mph, 98 to 880ft/min · 1.0 to 88.0knots
Accuracy		(1) Temp.: ±0.5°C (for 0°C~50°C) or ±0.9°F (for 32°F~122°F), otherwise ±1°C or 1.8°F, (2) Air Velocity : ±2%
Resolution		(1) Temp.: 0.1 for whole Range, (2) Air Velocity : 0.1
Ambient Temp.		0°C~50°C or 32°F~122°F
Probe Type		NTC-Probe : 76 × 67 × 32mm (1Meter Cable)
Color		Grey
Battery		3 × 1.5V AAA Battery
Dimension / Weight(g)		Unit : 85 × 175 × h39mm (LCD Size : 54 × 35 mm) / 200g Vane-Probe : 76 × 67 × 32mm / 130g
Cat. No. & Price ₩	A1.A9201	Ea

**DAIHAN® Precise 10cm Vane Anemometer of Flow · Temp · RH% · Dew-point · Wet Bulb · Air Volume**  
 With Optional Air Flow Cones, 0.2~30m/s, -20°C +60°C, 0.1~99.9% RH, D-point & 99,999m³/min., 정밀 아네모메타



- \* Measures Air Velocity, Volume, Temperature, Humidity, Dew Point & Wet Bulb Temperature.
- \* Built-in Thermistor Temp. & Capacitive Humidity Sensor for Quick and Accurate Measurement.
- \* Unlimited Points & Time Weighted Average Auto Calculation.
- \* Hold Function Freezes Current Readings
- \* Auto Power off 20mins Inactivity.
- \* Display Max./Min. Value.
- \* Inlet and Outlet Measurement is Doable
- \* Low Battery Indicator
- \* Blue Backlight for Dark Area Operation.

**Specifications & Ordering information**

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Spec.	Model	DH.Ane7
3 × Measuring Range		(1) Wind Speed : 0.2 ~ 30M/S, (2) Temp. : -20°C +60°C (3) RH% : 0.1%RH ~ 99.9%RH
Accuracy		(1) Wind Speed : ±(1.5% of Reading +0.3m/s) for under 20m/s, ±(3% of Reading +0.3m/s) for above 20m/s, (2) Temp. : ±0.6°C, (3) RH% : / ±3%RH(at 25°C, 10 ~ 90%RH, other ±5%RH)
Resolution		(1) Temp : 0.1°C/°F, (2) RH% : 0.1%RH
Response time		Temp. & RH% : 60 seconds (typical)
Display		(1) Wet Bulb Temp. : -20°C +59.9°C, (2) Dew Point Temp. : -5°C +59.9°C, (3) Air Volume : 0 to 99999m³/minute
Operating Temp. & RH%		0°C~50°C & Humidity < 80%
Storage Temp. & RH%		-10°C +50°C & Humidity < 90%
Battery		4 × AAA Battery
Dimension & Weight		269 × 106 × h51 mm (LCD Size : 32.5 × 54 mm) / 200g
Standard Package		Meter / Manual / Battery / Hard Carrying Case
Cat. No. & Price ₩	DH.Ane3007	Set
Option ; DH.Ane3007.1	Air Flow Cone, Round(φ210mm) + Square(346 × 346mm) Set	Set



**DAIHAN® Methane & Propane Gas Leak Detector, with Alarm, 40~640 ppm**  
**With 5-Level Leakage Indicator & Auto-Calibration Function, 메탄 & 프로판가스 누출 검지기**

- \* Low Cost Handheld type Detector Checking Methane and Propane Gas Leakage.
- \* Bright 5-Level Leakage LED Indicator.
- \* Quality & Reliable Semi-Conductor Sensor.
- \* Built in Auto-Calibration Function while Meter Powers on.
- \* Long & Flexible Stainless Goose Neck Detect Probe.
- \* Status Ready and Battery Low LED Indicator.
- \* Acoustic Intermittent Beep.
- \* Auto Power off Timeout about 10 mins.
- \* Built in Earphone Jack for Mute Mode Use.

**Specifications & Ordering information**

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Spec.	Model	DH.Gas3
<b>Methane / Propane Range</b>		40 ~ 640 ppm
<b>Sensitivity</b>		40 ppm (Methane & Propane)
<b>Response Time &amp; Warm Up</b>		within 10 seconds / within 60 seconds
<b>Battery</b>		4 × AA Battery or 9V Adaptor
<b>Flexible Probe Length</b>		18" (465mm)
<b>Dimension &amp; Weight(g)</b>		175 × 47 × h28 mm / 120g
<b>Standard Package</b>		Meter / Manual / Battery / Carrying Case
<b>Cat. No. &amp; Price ₩</b>	<b>DH.Gas3003</b>	<b>Set</b>

**DAIHAN® Pocket type CO Detector, with Dual LCD Display, Alarm, 0~999 ppm**  
**With Wrist Strap / Soft Carrying Pouch, 핸디 일산화탄소(CO) 디텍터**



- \* Easy to Manually Calibrate at 0 or 500ppm Carbon Monoxide Standard Gas.
- \* Dual LCD Display with Current Carbon Monoxide and Maximum CO Readings.
- \* Long Life and Reliable Electrochemical Carbon Monoxide Sensor.
- \* Warning Carbon Monoxide Audible Alert. Alarm Adjustable, Preset at 25ppm.
- \* Low Battery Indicator.
- \* Backlight Function Works in Dark Area.

**Specifications & Ordering information**

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Spec.	Model	DH.Gas5
<b>CO Range &amp; Resolution</b>		0 ~ 999 ppm / 1 ppm
<b>Accuracy (at 20 ± 5°C, 50 ± 20%RH)</b>		±20% at 0 ~ 100ppm ; ±15% at 100 ~ 500ppm
<b>Response Time / Battery</b>		within 60 seconds / 3 × AAA Battery
<b>Dimension &amp; Weight(g)</b>		175 × 47 × h28 mm (LCD Size : 11 × 26 mm) / 120g
<b>Standard Package</b>		Meter / Manual / Battery / Plain Box / Wrist Strap / Soft Carrying Pouch
<b>Cat. No. &amp; Price ₩</b>	<b>DH.Gas3005</b>	<b>Set</b>

**DAIHAN® Combo Air Quality Meter of CO · CO<sub>2</sub> · Temp · RH% · Dew-point · Wet Bulb, PC Data Analysis**  
**0~1000ppm-CO, 0~9999ppm-CO<sub>2</sub>, -20°C+60°C, 0.1~99.9% RH, -20°C+59.9°C-DP, -5°C+59.9°C-WB, Alarm 콤보 에어테스터**



- \* Manual Calibration is available for CO<sub>2</sub> / CO / RH%
- \* Designed with electrochemical CO Sensor and NDIR(Non-dispersive Infrared) Waveguide Technology CO<sub>2</sub> Sensor
- \* Warning Carbon Monoxide Level Programmable
- \* Max, Min, Average Functions Included
- \* USB Output to PC for Data Analysis
- \* Audible Alarm (-80db) Threshold Setting
- \* 99 Points Memory Review

**Specifications & Ordering information**

<L1>

Spec.	Model	DH.Gas7
<b>6 × Measuring Range</b>		(1) CO <sub>2</sub> : 0 ~ 9999 ppm(5001 ~ 9999 ppm out of scale range), (2) CO : 0 ~ 1000 ppm, (3) Temp. : -20°C+60°C(-5°F+140°F), (4) RH : 0.1 ~ 99.9%RH, (5) DP : -20°C+59.9°C, (6) WB : -5°C+59.9°C
<b>Accuracy</b>		(1) CO <sub>2</sub> : ±30 ppm ±5% of reading (0 ~ 5000 ppm), Other ranges are not specified, (2) CO : ±10 ppm for less than 100 ppm / ±10% of reading for 101 ~ 500 ppm, ±20% of reading for 501 ppm and above, (3) Temp. : ±0.6°C/±0.9°F, (4) RH : ±3%RH(at 25°C, 10~90%RH), ±5%RH(at 25°C, other range)
<b>Resolution</b>		1 ppm, 0.1 °C/°F, 0.1%RH
<b>Response Time</b>		(1) CO <sub>2</sub> : < 30 seconds (90% step change), (2) CO : < 60 seconds (90% step change), (3) Tair : < 2 mins (90% step change), (4) RH : < 10 mins (90% step change)
<b>Power Supply</b>		4 × AA Battery or 9V adaptor (>24hours, Alkaline Battery)
<b>Dimension &amp; Weight(g)</b>		205 × 70 × h56 mm(LCD Size : 26 × 44 mm) / 200g
<b>Standard Package</b>		Meter / Manual / Battery / USB Cable & CD / Carrying case
<b>Cat. No. &amp; Price ₩</b>	<b>DH.Gas3007</b>	<b>Set</b>
<b>Option ; DH.Gas3007.1</b>	① Cal. Salt Bottle, for Calibration, 33%, 56ml	<b>Ea</b>
<b>DH.Gas3007.2</b>	② , 75%, 56ml	<b>Ea</b>



**DAIHAN® Air Quality Meter of CO<sub>2</sub> · Temp · RH% · Dew-point · Wet-Bulb, PC Data Analysis**

0~9999ppm-CO<sub>2</sub>, -10°C+60°C, 0.1~99.9% RH, -20°C+59.9°C-DP, -5°C+59.9°C-WB, 80dB-Alarm, **다기능 에어 미터**



- \* Big LCD display : CO<sub>2</sub>, Temp and Relative Humidity, Display Air / Dew Point / Wet Bulb Temp. by Selection
- \* NDIR(Non-Dispersive Infrared) Waveguide Technology CO<sub>2</sub> Sensor \* Warning Carbon Dioxide Level

<L1>

Spec.	Model	DH.Gas13	
5× Measuring Range		(1) CO <sub>2</sub> : 0 ~ 9999 ppm, (2) Temp. : -10°C+60°C(14°F ~ 140°F), (3) RH% : 0.1 ~ 99.9%RH, (4) DP : -20.0°C+59.9°C, (5) WB : -5.0°C+59.9°C	
Accuracy		(1) CO <sub>2</sub> : ±50 ppm ±5% of reading (0 ~ 2000 ppm), (2) Temp. : ±0.6°C / ±0.9°F, (3) RH : ±3% RH(at 25°C, 10 ~ 90%RH)	
Resolution		1 ppm, 0.1°C/°F, 0.1%RH	
Response Time		(1) CO <sub>2</sub> : <30 sec, (2) Tair : <2 min, (3) RH : <10 min. (90% step change)	
Warm-up Time / Battery		30 sec. / 4×AA Battery	
Dimension / Weight(g)		205×70×h56mm(LCD Size : 26×44mm) / 200g	
Standard Package		Meter / Manual / Battery / Hard Carrying Case	
Cat. No. & Price ₩		<b>DH.Gas3013</b>	<b>Set</b>
Option ; DH.Gas3013.1	①	USB Cable & Software	Ea
DH.Gas3013.2	②	RS232 Cable & Software	Ea
DH.Gas3007.1	③	Cal. Salt Bottle, for Calibration, 33%, 56ml	Ea
DH.Gas3007.2	④	, 75%, 56ml	Ea

**DAIHAN® Wallmount Desktop Air Quality Monitor of CO<sub>2</sub> · Temp · RH% · Dew-point · Wet-Bulb, PC Data Analysis**

0~9999ppm-CO<sub>2</sub>, -10°C+60°C, 0.1~99.9%RH, -20°C+59.9°C-DP, -5°C+59.9°C-WB, NDIR-Sensor, **다기능 벽걸이 에어 모니터**



- \* Super Large LCD display CO<sub>2</sub> Value
- \* NDIR(Non-Dispersive Infrared) Waveguide Technology with ABC(Automatic Background Calibration)
- \* Long Time Drift Compensation
- \* Warning Carbon Dioxide Level with 80dB Alarm
- \* Alarm Output Drive Relay to Control System

<L1>

Spec.	Model	DH.Gas15	
5× Measuring Range		(1) CO <sub>2</sub> : 0 ~ 9999 ppm (2001~9999 ppm out of Scale Range), (2) Temp. : -10°C+60°C(14°F ~140°F), (3) RH : 0.1 ~ 99.9%RH, (4) DP : -20.0°C+59.9°C, (5) WB : -5.0°C+59.9°C	
Accuracy		(1) CO <sub>2</sub> : ±50 ppm ±5% of reading(0 ~ 2000 ppm),(2) Temp. : ±0.6°C / ±0.9°F, (3) RH : ±3% RH(at 25°C, 10 ~ 90%RH) or ±5% RH(at 25°C, others)	
Resolution		1 ppm, 0.1°C/°F, 0.1%RH	
Response Time		(1) CO <sub>2</sub> : <30 sec, (2) Tair : <2 min, (3) RH : <10 min. (90% step change)	
Warm-up Time		30 sec.	
Power Supply		12V DC Adaptor	
Dimension / Weight(g)		130×85×h60mm (LCD Size : 50×65 mm) / 200g	
Standard Package		Meter / Manual / 12V Plug Adaptor / Plain Box	
Cat. No. & Price ₩		<b>DH.Gas3015</b>	<b>Set</b>
Option ; DH.Gas3013.1	①	USB Cable & Software	Ea
DH.Gas3013.2	②	RS232 Cable & Software	Ea
DH.Gas3007.1	③	Cal. Salt Bottle, for Calibration, 33%, 56ml	Ea
DH.Gas3007.2	④	, 75%, 56ml	Ea

**DAIHAN® “Green Life” Indoor Air Monitor of CO<sub>2</sub> · Temp · RH% · Time Clock, Desktop-model, 15 Degree Tilt Angle**

With CO<sub>2</sub> Alarm, 0~9999ppm with Auto-Background Calibration, -10°C+60°C, 0.1~99.9%RH, **“그린라이프” 룸에어모니터**



- \* Display CO<sub>2</sub> Value (with Good, Normal, Poor Air), Year-Month-Date, Hour-Minute, Air Temp. & Relative Humidity
- \* NDIR (Non-dispersive Infrared) Waveguide Technology \* Warning Carbon Dioxide Level from 1000~5000 ppm

<L1>

Spec.	Model	DH.Gas9	
3× Measuring Range		(1) CO <sub>2</sub> : 0 ~ 9999 ppm (2001 ~ 9999 ppm out of scale range), (2) Temp. : -10°C+60°C(14°F ~ 140°F), (3) RH% : 0.1 ~ 99.9%RH	
Resolution		1 ppm, 0.1°C/°F, 0.1%RH	
Accuracy		(1) CO <sub>2</sub> : ±50ppm ±5% of reading (0 ~ 2000 ppm), (2) Temp. : ±0.6°C/±0.9°F, (3) RH% : ±5%RH(at 25°C, 20~90%RH), ±7%RH(at 25°C, other range)	
Response time		(1) CO <sub>2</sub> : < 2 mins (90% step change), (2) Tair : < 2 mins (90% step change), (3) RH : < 10 mins (90% step change)	
Power Supply		5V DC Adaptor(±10%), >= 500mA	
Dimension & Weight(g)		120×80mm(LCD Size : 60×82 mm) / 200g	
Standard Package		Meter / Manual / Adaptor / Plain Box	
Cat. No. & Price ₩		<b>DH.Gas3009</b>	<b>Set</b>

**DAIHAN® Digital Pressure / Vacuum Manometer, 10-Different Units ; psi, mbar, etc**

+/- (±) 30psi / 1551mmHg / 2068 mbar, PC Data Analysisable, Max-Min / Hold / Record, with 8mm Metal Lug, 디지털 마노미터



Digital Pressure / Vacuum Manometer



Hard Carrying Case



- Portable Digital Gauge ; 10 Differential Units Pressure / Vacuum Meter, with 8mm Metal Connection
- PC Interface via Cable and Software to Download Data
- \* Over-range Indication with Error Messages
- \* 10 units or 5 units for Selection (Metric, Imperial)
- \* Connection ; 8mm Metal Lug
- \* Low Battery Indicator
- \* Backlight Function works in Dark Area
- \* Real Time Shows in Recording Mode

**Specifications & Ordering information**

<L1>

Spec.	Model	DH.Man3003
Range & Resolution	psi	± 30.00 & 0.02
	kPa and mmHg	kPa : ±206.8 & 0.2, and mmHg : ±1551 & 1
	Kg/cm <sup>2</sup> and mbar	Kg/cm <sup>2</sup> : ±2.109 & 0.002, and mbar : ±2068 & 2
	bar and inH <sub>2</sub> O	Bar : ±2.068 & 0.002, and inH <sub>2</sub> O : ±830.4 & 0.5
	cmH <sub>2</sub> O and inHg	cmH <sub>2</sub> O : ±2101 & 2, and inHg : ±61.08 & 0.04
	ftH <sub>2</sub> O and oz/inch <sup>2</sup>	ftH <sub>2</sub> O : ±69.2 & 0.04, and oz/inch <sup>2</sup> : ±480.0 & 0.3
Accuracy		± 0.3% of Full Scale at 25 °C
Response Time		0.5 sec
Compensated Temp. Range		0 °C ~ 50 °C
Battery		9V Battery or Adaptor
Dimension / Weight(g)		182 × 72 × 30 mm (LCD Size : 29 × 51mm) / 150g
Standard Package		Meter, Battery, Manual, 2 × Connection Hose(50cm), Hard Carry Case
<b>Cat. No. &amp; Price ₩</b>		<b>DH.Man3003</b> <b>Set</b>
Option ; DH.Gas3013.1	① USB Cable & Software	Ea
DH.Gas3013.2	② RS232 Cable & Software	Ea
DH.Man3003.1	③ Tubing for 30psi Pressure / Vacuum and 8mm Lug, 50cm, Black	Ea

※ Units Conversion : 1psi × 6.8947=kpa , 1psi × 68.947=mbar(hpa), 1psi × 0.068966=bar, 1psi × 51.71433=torr  
1psi × 70.038=cmH<sub>2</sub>O, 1psi × 51.715=mmHg, 1psi × 16=oz/inch<sup>2</sup>, 1psi × 6890=pascal(pa)

※ Note! : Exceeding Maximum Pressure will cause Permanent Sensor Damage!



Salinity Pen-type Meter

**DAIHAN® Pocket Dual Temp. & Salinity Pen-type Meter, Data Hold Function, IP65 Waterproof With Large Display LCD for Salinity and Temp, 0~70.0ppt, 0 °C ~ 50.0 °C, 휴대용 염도계, IP65 방수**

- \* One Touch Auto-calibration & Calibration Values are Adjustable
- \* Large Display LCD for Simultaneous Output of Salinity and Temperature (w18 × h30 mm)
- \* Quick Response & Auto Power off (20min / Disable)
- \* Hold Function to Freeze Current Reading
- \* Auto Temperature Compensation
- \* Built-in NaCl conductivity to TDS Conversion Factor
- \* Temperature unit °C/°F Selectable

**Specifications & Ordering information**

<L1>

Spec.	Model	DH.Sal3
2 × Measuring Range		(1) Salinity : 0.00 ~ 10.0ppt(NaCl), 10.1 ~ 70.0ppt(NaCl), (2) Temp.: 0 °C ~ 50.0 °C
2 × Accuracy		(1) Salinity : ± 1%F.S ± 1digit, for 0 ~ 10.00ppt, ± 2%F.S for 10.1 ~ 70.0ppt, (2) Temp. : ± 0.5 °C
2 × Resolution		(1) Salinity : 0.01, for 0 ~ 10.00ppt, 0.1 for 10.1 ~ 70.0ppt, (2) Temp. : 0.1
Sensor life time / Battery		> 6 months (with Good Maintenance) / LR44 × 4pcs.
Dimension / Weight(g)		165 × 35 × h32mm (LCD Size : 30 × 18mm) / 115g
Standard Package		Meter / Battery / Manual / Paper Box
<b>Cat. No. &amp; Price ₩</b>		<b>DH.Sal3003</b> <b>Set</b>

**DAIHAN® Handy Digital Sound Level Meter, 40~130dB, 0.1dB/1dB Resolution**  
 With Digital Display (30×35mm) & Analog Bar Graph, 휴대용 소음계



Handy Digital Sound Level Meter

- \* Used for Acoustic (sound that travels through air) Measurements, which had been widely used in the HVAC(Heating, Ventilation and Air Conditioning) or Other Industrial Related Application.
- \* The Most Cost-effective Best Selling Meter
- \* Pocket Size Fashion & Rigid Design
- \* Fast / Slow Response is selectable.
- \* A weighting enables the meter to respond in the same manner as the human ear.
- \* C weighting is suitable for flat response measurements with no increase or decrease of amplitude over the frequency spectrum.
- \* with Digital Display (30×35mm) and Analog Bar Graph
- \* Auto / Manual Ranging, 4 Measurement Ranges in 10 Steps.
- \* A/C Weighting is selectable
- \* Tripod Mountable

**Specifications & Ordering information**

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Spec.	Model	DH.Sou3
2× Measuring Range		(1) A Weight : 40dB ~ 130dB (2) C Weight : 45dB ~ 130dB
Accuracy at 94dB, 1KHz		±2dB
2× Resolution		(1) Digital Display : 0.1dB, (2) Quasi-Analog Bar : 1dB
Digital / Quasi-Analog Display (4 Range)		40 ~ 70dB, 60 ~ 90dB, 80 ~ 110dB, 100 ~ 130dB
Digital-/ Bar Updating Time		160mS / 40mS
Microphone		Dia.6mm Electric Condenser Microphone
Battery / Battery Life Time		AAA×4pcs / 60 Hours Typical
Dimension / Weight(g)		57×230×44mm(LCD Size : 30×35mm) / 130g
Standard Package		Meter / Battery / Manual / Paper Box
Cat. No. & Price ₩		DH.Sou3003 <span style="float: right;">Set</span>

**DAIHAN® Digital Sound Level Meter, with Deluxe Super Large LCD, IEC60651 type2 Class Certificated**  
 With Max-Min Backlight, 30dB~130dB, 디지털 소음계



Digital / Analog Sound Level Meter

- \* Meet IEC60651, Type2 Class Standard.
- \* Using the Background Noise Absorber.
- \* Deluxe Super Large LCD Display.
- \* Easy to Calibrate by Standard Calibrator
- \* Auto/Manual Ranging, 6 Measurement Ranged in 10 Steps.
- \* Freezing the Maximum Sound Level Reading.
- \* RS232 interface for PC download.
- \* Max./Min. Recording.
- \* A/C Weighting is Selectable.
- \* Backlight Function to Use in Dark Area.
- \* Automatic Shut off.
- \* Features w/Digital Display and Analog Bar Graph.
- \* Easy to Replace Battery.
- \* Tripod Mountable
- \* AC/DC Analog Output
- \* Professional and Rigid Design.

**Specifications & Ordering information**

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Spec.	Model	DH.Sou5
2× Measuring Range		(1) A Weight : 30dB ~ 130dB (2) C Weight : 35dB ~ 130dB
Accuracy at 94dB, 1KHz		±1.5dB
2× Resolution		(1) Digital Display : 0.1dB, (2) Quasi-Analog Bar : 1dB
Digital / Quasi-Analog Display (6 Range)		30 ~ 80dB, 40 ~ 90dB, 50 ~ 100dB, 60 ~ 110dB, 70 ~ 120dB, 80 ~ 130dB
Digital-/ Bar Updating Time		160mS / 40mS
Analog Output		AC 0.707Vrms(at Full Scale) ; DC 10mV/dB
Microphone		Dia.6mm Electric Condenser Microphone
Frequency Range		31.5Hz ~ 8KHz
Battery / Battery Life Time		9V Battery×1pcs. or 9VDC Adaptor / 30 Hours Typical
Dimension & Weight(g)		254×77×h37 mm (LCD Size : 42×62 mm) / 200g
Standard Package		Meter / Battery / Manual / Carry Case
Cat. No. & Price ₩		DH.Sou3005 <span style="float: right;">Set</span>



Hard Carrying Case



Option ; DH.Gas3013.1	① USB Cable & Software	Ea
DH.Gas3013.2	② RS232 Cable & Software	Ea

**DAIHAN® Digital Pro-Tachometer, Contact & Non-Contact 2 in 1 Meter, 10.0~99,999rpm, Auto Power off in 20min**  
 Non-Contact type with Red LED-Beam, Contact type with Convex Tip or Concave Tip, **프로급 타코미터, 접촉/비접촉 겸용**



- \* Non-Contact Measurement by Red Led Beam
- \* Contact Rotation Object via Convex or Concave Contact Tips
- \* Four Rotation Speed Units are Selectable in Contact Mode : rpm, m.min, ft/min, yd/min
- \* Three Steps to Switch Operation Mode
- \* Auto Power Off in 20mins inactivity

**Specifications & Ordering information**

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Spec.	Model	DH.Tac3
<b>3× Measuring Range</b>		(1) Rotation (Non-contact) : 10.0 ~ 99999rpm (2) Rotation (Contact) : 10.0 ~ 19999rpm (3) Surface Speed (Contact) : 1.0000 ~ 9999.9M/Min.
<b>Accuracy / Measuring Distance</b>		± (0.1% of rdg. +2digit) / 5 ~ 30cm (Non-contact)
<b>Resolution</b>		rpm : 0.001 / 0.01 / 0.1 / 1, Others : 0.0001 / 0.001 / 0.01 / 0.1
<b>Time Base &amp; Sampling Time</b>		4.0Mhz Quartz Crystal / 1sec.(> 60rpm), > 1sec.(10-60rpm)
<b>Dimension / Weight(g)</b>		165×51×h32mm (LCD Size : 15×33 mm) / 90g
<b>Standard Package</b>		Meter / Battery / Manual / Reflective Tape / Convex Tip / Concave Tip
<b>Cat. No. &amp; Price ₩</b>	<b>DH.Tac3003</b>	<b>Set</b>
<b>Spare ; DH.Tac3003.1</b>	① Convex Tip for contact Rotate Speed Use	<b>Ea</b>
<b>DH.Tac3003.2</b>	② Concave Tip for contact Rotate Speed Use	<b>Ea</b>
<b>DH.Tac3003.3</b>	③ Reflective Tape for Non-Contact Rotate Speed, 16×600mm	<b>Ea</b>

**DAIHAN® Digital Pocket Tachometer, Contact or Non-Contact 2-type, 10~99999rpm, Auto Power off in 20min**  
 Non-Contact type with Red LED-Beam, Contact type with Convex Tip or Concave Tip, Hold Function, **접촉식 or 비접촉식 타코미터**



- \* Safe and Easy to Get Rotation Speed
- \* Hold Function Freezes Current Reading
- \* Four Rotation Speed Units are Selectable in Contact Mode : RPM, M/Min, Ft/Min, Yd/Min
- \* Contact Type : Straight-line Contact with the Center of the Rotating Body
- \* Non-contact Type : Reflective Tape Affixed to an Object and Measuring the Rotation. (50 to 150mm)
- \* Auto Power off (20min / Disable)

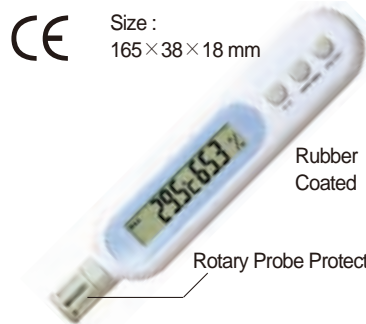
**Specifications & Ordering information**

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Spec.	Model	DH.Tac5	DH.Tac7
<b>Measure Range</b>		Rotation(Non-contact) : 10.0 ~ 99999rpm	Rotation(Contact) : 10.0 ~ 19999rpm, Surface Speed(Contact) : 1.000~9999.9M/Min
<b>Accuracy</b>		± (0.1% of rdg. +2digit)	
<b>Resolution</b>		rpm : 0.001 / 0.01 / 0.1 / 1, Others : 0.0001 / 0.001 / 0.01 / 0.1	
<b>Measure Distance</b>		5~30cm	Contact
<b>Power Consumption / Time Base</b>		5uA(Idle), 18mA(Measurement) / 4.0Mhz Quartz Crystal	
<b>Sampling Time / LCD Size</b>		1Second(> 60RPM), > 1Second(10~60RPM) / 33×h15mm	
<b>Battery</b>		1×9V Battery	
<b>Dimension / Weight(g)</b>		124×50×h33mm / ~80g	149×50×h33mm / ~85g
<b>Standard Package</b>		Meter / Battery / Manual / Paper Box / Reflective Tape / Convex Tip / Concave Tip	
<b>Cat. No. &amp; Price ₩</b>	<b>DH.Tac3005</b>	<b>Set</b>	<b>DH.Tac3007</b> <b>Set</b>
<b>Spare ; DH.Tac3003.1</b>	① Convex Tip for contact Rotate Speed Use		<b>Ea</b>
<b>DH.Tac3003.2</b>	② Concave Tip for contact Rotate Speed Use		<b>Ea</b>
<b>DH.Tac3003.3</b>	③ Reflective Tape for Non-Contact Rotate Speed, 16×600mm		<b>Ea</b>

**DAIHAN® Handy/Digital Thermo-Hygrometer, Rotary Sensor Protector, °C/°F & R.H%, Max/Min**

With Large LCD, Rubber Coated & Black Carrying Case, -50°C + 70°C, 20~99.9% R.H, 0.1 Divi, **포켓/디지털 온습도계**



Size :  
165 × 38 × 18 mm

Rubber Coated

Rotary Probe Protector

"A1.H9237"



with Black Case

- \* Ideal for Storage Rooms, Pharmaceutical Rooms, Greenhouse, Laboratory, etc.
- \* Pocket Size with Large LCD.
- \* Rotary Sensor Protector Protects The Sensor when not in Use.
- \* Easy to Change Battery.
- \* Rubber Coated.
- \* with Black Carrying Case.
- \* Low Battery Indicator.
- \* Battery Included.
- \* CE Approval.

**Specifications & Ordering information**

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Spec.	Model	A1.H9237
Measurement Range		-50°C + 70°C or -58°F + 158°F / 20%~99.9% R.H (No Condensation)
Resolution		0.1° for Whole Range/ 0.1% R.H for Whole Range
Accuracy		± 1.0°C or ± 1.8°F In the Range of 0°C~50°C or -4°F + 122°F, Otherwise more than ± 1.0°C or ± 1.8°F
Sensor Type		NTC & Humidity
Ambient Temperature		0°C~50°C or 32°F~122°F
Weight (g) / Color		55g / White
Battery / Package		1 × 3 Volts "CR 2032" Size or Equivalent / White Box
Dimension		165 × 37 × 18mm (LCD Size : 58 × 12mm)
Cat. No. & Price ₩		A1.H9237 Ea

**DAIHAN® 2 & 3-row Jumbo Display Thermo-Hygrometer, for Indoor / Outdoor, °C/°F & R.H%**

With 3m Cord/Probe, Memory Recalling, -50°C + 70°C, 20~99.9% R.H, 0.1 Divi, **2 & 3열 실내·외 온습도계**



Size :  
120 × 110 × 25 mm

(1) Jumbo 2-Row Display, "A1.H9213"



Stand & Hanger

- \* Ideal for Office, Home, Greenhouse, Laboratory.
- \* Comfortable and Uncomfortable Index (Comfort/Warm/Cool).
- \* 3m Sensor Wire with Probe for Outdoor Temperature Measurement.
- \* (1) Dual or (2) Triple Row Display for Easy Reading.
- \* Temperature Unit °C/°F Selectable.
- \* (1) Dual or (2) Triple Row Display for Easy Reading.
- \* (1) Dual or (2) Triple Row Display for Easy Reading.

**(1) With 2-Row Jumbo Display ;** On/Off, °C/°F, Max/Min (°C/°F), Temperature and Humidity, Indoor Humidity Measurement Indoor/Outdoor Temperature Measurement, Memory Recalling.

**Specifications & Ordering information**

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Spec.	Model	A1.H9213
Measurement Range		-50°C + 70°C or -58°F + 158°F / 20%~99.9% R.H (No Condensation)
Resolution		0.1° for Whole Range/ 0.1% R.H for Whole Range
Accuracy		± 1.0°C or ± 1.8°F In the Range of -20°C + 70°C or -4°F + 158°F, Otherwise more than ± 1.0°C or ± 1.8°F
Ambient Temperature		0°C~50°C or 32°F~122°F
Weight (g) / Color		165g / White
Battery / Package		2 × 1.5 Volts "AAA" Size or Equivalent / Sliding Blister with Print Card
Sensor Type		NTC & Humidity External Sensor : 3m Sensor Wire with Probe(L22.5 × φ 5.5mm)
Dimension		120 × 110 × 25mm (LCD Size : 72 × 61mm)
Cat. No. & Price ₩		A1.H9213 Ea



Size :  
120 × 110 × 25 mm

(2) Jumbo 3-Row Display, with Alarm Timer  
"A1.H9216"



Stand & Hanger

**(2) With 3-Row Jumbo Display, with Alarm Timer ;** On/Off, °C/°F, Max/Min (°C/°F), Temperature and Humidity Memory Recalling, Clock (HH/MM/SS), Alarm/Snooze Set, 12hr or 24hr Format Selectable, Indoor/Outdoor Temperature Measurement, Indoor Humidity Measurement.

**Specifications & Ordering information**

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Spec.	Model	A1.H9216
Measurement Range / Alarm Timer		-50°C + 70°C or -58°F + 158°F / 20%~99.9% R.H (No Condensation) Alarm Timer Function
Resolution		0.1° for Whole Range/ 0.1% R.H for Whole Range
Accuracy		± 1.0°C or ± 1.8°F In the Range of -20°C + 70°C or -4°F + 158°F, Otherwise more than ± 1.0°C or ± 1.8°F
Ambient Temperature		0°C~50°C or 32°F~122°F
Weight (g) / Color		165g / White
Battery / Package		2 × 1.5 Volts "AAA" Size or Equivalent / Sliding Blister with Print Card
Sensor Type		NTC & Humidity External Sensor : 3m Sensor Wire with Probe(L22.5 × φ 5.5mm)
Dimension		120 × 110 × 25mm (LCD Size : 72 × 61mm)
Cat. No. & Price ₩		A1.H9216 Ea

**SciLab® Desktop / Wallmount Thermo-Hygrometer, Jumbo LCD Display with 3-row for Humidity · Temperature · Time**  
 With 1.5m Probe Cable, Hourly Chime · Daily Alarm · Calendar Display, **대형 온습도계**



Size :  
100 × 110 × 21.5 mm

Desktop / Wallmount Thermo-Hygrometer  
"SL.The3001"

- \* Ideal for Use in Incubators, Dying Chambers, Hoods, Cleanrooms, Cabinets and General Lab Applications
- \* Function : ① Temperature/Humidity Display ② Max/Min Temperature and Humidity Memory
- ③ 12/24 Hourly Clock ④ Hourly Chime and Daily Alarm ⑤ Calendar Display

**Specifications & Ordering information**

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Spec.	Model	SL.The3001
Measuring Range		(1) Temperature : -50°C + 70°C / -58°F + 158°F (2) Humidity : 10~90%RH
Accuracy		(1) Temperature : ±1°C (1.8°F) (2) Humidity : +5%RH
Resolution		(1) Temperature : 0.1°C (0.2°F) (2) Humidity : 1%
Dimension / Weight(g)		100 × 110 × 21.5 mm (Body), 80 × 60 mm(LCD)
Sensor Type		NTC & Humidity External Sensor : 1.5m Sensor Wire with Probe(L22.5 × φ 5.5mm)
Standard Package		Meter / Manual / Plastic Blister Package
Battery		1 × AAA 1.5V
Cat. No. & Price ₩	SL.The3001	Set

**DAIHAN® Desktop / Wallmount Dew-point Thermo-Hygrometer of Temp · RH% · DP°C, Max/Min, Hold**  
 Programmable Danger Zone, Alarm 65dB, Time Clock, 0°C ~ 50°C, 20~90% RH, -20°C + 70°C DP, **탁자 / 벽걸이용 이슬점 온습도계**



B. SD-Card Logging  
Dew-point  
Thermo-Hygrometer

(DH.Thh9 only)

- \* Simultaneously Displays Temperature and Humidity
- \* Check Humidity Condense Conditions Through Dew Point
- \* Real Time Display(Hour & Minute, AM/PM)
- \* Audible Beeper and Bright Red Led for Danger Zone Warning
- \* Designed with Capacitance type humidity Sensor to Get Accurate and Quick Reading
- \* Advanced SD Card Logging Design for Continuous Recording(DH.Thh9 only)
- \* Temperature Unit °C/°F Switchable
- \* Max/Min Function to Review Data
- \* Programmable Danger Zone for Warning Purpose
- \* Long Battery Life One year Via Alkaline Battery

**Specifications & Ordering information**

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Spec.	Model	A. DH.Thh7	B. DH.Thh9
3 × Measuring Range		(1) Temp.: 0°C ~ 50°C (display : -10.0°C + 70.0°C), (2) Humidity : 20~90%RH (Display : 0%~99.9%RH), (3) Dew Point : -20°C + 70°C	
2 × Accuracy		(1) Temp.: ±1°C, (2) Humidity: ±5%RH (at 25°C, 10~90%RH, other ±7%RH)	
2 × Resolution		(1) Temp.: 0.1°C/°F, (2) Humidity : 0.1%RH	
Temp. Response Time		2 mins	
SD Card		-	Max. 2GB SD Card or 4GB SDHC Card
Battery		3 × AA Battery	3 × 1.5Volts AA Battery or 5V Adaptor
Dimension / Weight(g)		110 × 91 × h30mm(LCD Size : 63 × 70mm) / 200g	
Standard Package		Meter / Battery / Manual / Paper Box	Meter / Adaptor / Manual / Paper Box / 256MB SD Card
Cat. No. & Price ₩		DH.Thh3007	Ea
			DH.Thh3009
			Ea

**DAIHAN® Pocket Dew-point Thermo-Hygrometer of Temp · RH% · DP°C · WB°C, Max/Min, Hold**  
 Optional External Temp Probe(-20°C + 70°C), -20°C + 50°C, 0~100% RH, -78.7°C + 50°C DP, **포켓 다기능 이슬점 온습도계**



Rotate Cap to  
Protect Sensors  
Design Patent  
Pending

Pocket Dew-point  
Thermo-Hygrometer

- \* Designed with Capacitance-type Humidity Sensor to get Accurate and Quick Reading
- \* Simultaneously Triple Display Temp. / RH% / External Probe Temp
- \* External Probe for Checking Food Quality & HVAC/R Applications
- \* Auto Power Off time frame Selectable
- \* Maximum / Minimum and Reset function
- \* Temperature unit °C/°F Selectable
- \* Hold function to Freeze current Reading

**Specifications & Ordering information**

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Spec.	Model	DH.Thh5
4 × Measuring Range		(1) Temp. : -20°C + 50°C, (2) Humidity : 0%RH~100%RH, (3) Dew Point : -78.7°C + 50.0°C, (4) Wet Bulb : -21.6°C + 50.0°C
2 × Accuracy		(1) Temp. : ±0.6°C, (2) Humidity : ±3%RH (at 25°C, 10~90%RH, other ±5%RH)
2 × Resolution		(1) Temp. : 0.1°C/°F, (2) Humidity : 0.1%RH
Battery		2 × AAA Battery
Dimension / Weight(g)		48.4 × 178.5 × h24.7mm(LCD Size : 28 × 33 mm) / 100g
Standard Package		Meter / Battery / Manual / Paper Box
Cat. No. & Price ₩		DH.Thh3005

Option ; DH.Gas3007.1	① Cal. Salt Bottle for Calibration, 33%, 56ml	Ea
DH.Gas3007.2	② , 75%, 56ml	Ea
DH.Thh3005.1	③ External Temp. Probe, 116cm, with Handle	Ea

**DAIHAN® Handy Dew-point IR Thermo-Hygrometer for Air & Surface Temp · RH% · DP °C**

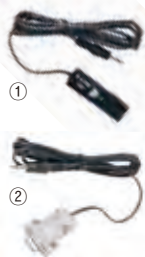
Built in Laser-Beam (670nm), Backlight, PC Data Analysis, -40°C + 500°C IR, 0~100% RH, -68°C + 49.9°C DP, 휴대용 IR 온습도계



Unique Device Patent Pending.



Hard Carrying Case



- \* The Most Popular IR+ Humidity Two in One Meter
- \* Triple Display Measures Air/Surface Temp. & Humidity
- \* Gear Damper Device (Design Patent) for Sensor Protection
- \* IR Emissivity Value Adjustable 0.3~1.0
- \* Laser Beam & Backlight Function Selectable
- \* Design with Precision Humidity Sensor
- \* Auto Power off Time Adjustable
- \* Temperature Unit °C/°F is Switchable
- \* PC Output Data Download
- \* Powered by 4pcs AAA Batteries

**Specifications & Ordering information**

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Spec.	Model	DH.Thh11		
		Temperature	Humidity	Dew Point
Measure Range		-40°C + 500°C	0~100%RH	-68°C + 49.9°C
Resolution		0.1°C / 0.1°F	0.1%RH	0.1°C
Accuracy		±2°C at 20~200°C, Others is ±3°C	±3%RH (at 25°C, 10~90%RH, others ±5%RH)	±0.6°C
3× Measuring Range		(1) IR Temp.: -40°C + 500°C, (2) Temp.: -20°C + 50°C, (3) Humidity : 0~100%RH		
3× Accuracy		(1) IR Temp.: ±2°C at 20~200°C, Others is ±3°C, (2) Temp.: ±0.6°C, (3) ±3%RH (at 25°C, 10~90%RH, others ±5%RH)		
3× Resolution		(1) IR Temp.: 0.1°C/°F, (2) Temp.: 0.1°C/°F, (3) Humidity : 0.1%RH		
Dew Point & Wet Bulb Temp.		-68°C + 49.9°C & -21.6°C + 49.9°C		
IR Repeatability		±1°C		
Emissivity		0.3~1.0 adjustable		
Dimension / Weight(g)		70×50×h175mm(LCD Size : 44×26mm) / 140g		
Standard Package		Meter / Battery / Manual / Carry Case		
Cat. No. & Price ₩		DH.Thh3011 <span style="float: right;">Ea</span>		
Option ; DH.Gas3013.1	① USB Cable & Software	<span style="float: right;">Ea</span>		
DH.Gas3013.2	② RS232 Cable & Software	<span style="float: right;">Ea</span>		

**DAIHAN® Temp °C/°F & RH% USB Datalogger with PDF Report, Waterproof (IP 65), -30°C + 70°C, 0.1~99.9% RH**

Auto-Generate a PDF & Excel Report while Plugged into PC, Programmable by Users, 온습도 측정 및 Data 로거



USB Datalogger

- \* Software & Driver are not required for any operation
- \* High Accuracy Thermistor and Capacitive RH Sensor
- \* Programmable : 6 Language, Sampling Interval, Start Delay, Alarm Delay, Unit, Alarm Range, Alarm Type &c.
- \* Designed with Comprehensive Usage with Waterproof Function(IP 67)
- \* EN12830 and RoHS Compliance

**Specifications & Ordering information**

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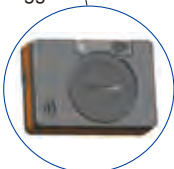
Spec.	Model	DH.Thh3	
		Temperature	Humidity
Measure Range		NTC Thermistor, -30°C + 70°C, -22°F + 158°F	Capacitor, 0.1~99.9%RH
Accuracy		±0.5°C	±3% (at 25°C, 10~90%), others ±5%
Resolution		0.1°C / 0.1°F	0.1%RH
Battery		2×CR2032( 3.0 V ) Battery	
Dimension / Weight(g)		110×45×h17mm / 80g	
Standard Package		Logger / Manual / Paper Box	
Cat. No. & Price ₩		DH.Thh3003 <span style="float: right;">Ea</span>	

**DAIHAN® Temp · Humidity · Barometric Bluetooth Datalogger, -30°C + 70°C, 0.1~99.9% RH, 300~1100hPa**

Generate PDF & Excel Report Through APP, Real Time Check without Stopping, Waterproof (IP 65), 온습도 및 기압 Data 로거



Bluetooth Datalogger



- \* Programming Logger & Download Data Wirelessly Through Advanced Bluetooth 4.0 Technology
- \* Generate and Send Out PDF Report Through APP. Report Contains Data Summary, Graph and Detailed Data
- \* Please Search for "Nice Logger" in APP Store.
- \* EN12830 and RoHS Compliance

**Specifications & Ordering information**

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Spec.	Model	DH.Thh15		
		Temperature	Humidity	Barometric
Measure Range		NTC Thermistor, -30°C + 70°C, -22°C + 158°F	Capacitor, 0.1~99.9%RH	300~1100hPa 8.9~32.5inHg
Accuracy		±0.5°C	±3% (at 25°C, 10~90%), others ±5%	±3hPa(0~60C), ±5hPa(-20~0C)
Resolution		0.1°C / 0.1°F	0.1%RH	0.1hPa, 0.1inHg
Ambient Temp.		-30°C + 70°C, (Humidity < 90%)		
Battery		CR2( 3.0 V ) Battery × 1pc		
Dimension / Weight(g)		70×50×h23mm (Body), 30×18(LCD) / 80g		
Standard Package		Logger / Manual / Paper Box / Battery		
Cat. No. & Price ₩		DH.Thh3015 <span style="float: right;">Ea</span>		

**DAIHAN® WBGT Checker, Temp. 0°C~50°C · 0.1~99.9%RH · WBGT 0°C~50°C, with Alarm Function, 70×60×h22 mm** NEW  
 Ideal for Outdoor & Indoor Heat Stress Measuring, 휴대용 WBGT 습구흑구 온열지수 측정기, 체감온도 측정, 열사병 예방용



Wearable Design

WBGT	Flag	Activity Intensity
< 80°F < 26.7°C	White	Normal activity. Caution should be taken.
80-84.9°F 26.7-29.4°C	Green	Discretion is required in planning intense physical activity.
85-87.9°F 29.4-31°C	Yellow	Intense activity for beginners should be curtailed.
88-89.9°F 31-32.2°C	Red	Intense exercise must be curtailed. Be on high alert.
> 90°F > 32.2°C	Black	Cancel all outdoor exercise.

- **WBGT (Wet Bulb Globe Temperature) = 습구흑구 온열지수 : 건구온도 + 습구온도 + 흑구온도**  
: 기온, 습도, 복사열, 기류 등을 종합적으로 분석해 열에 의해 인간이 받는 스트레스를 나타낸 수치.
- 휴대용, 착용 가능한 제품으로, 야외활동을 주로하는 운동선수나 군인, 산업현장에서의 사용에 유용.
- \* Simultaneously Display WBGT, Temperature & RH.
- \* Programmable Buzzer and Red LED 4 level Danger Zone Warning
- \* Audible Alarm Volume Adjustable (75 dB / 60 dB / mute)
- \* Can be used the Tripod to Hold the Checker Vertically for Long Term use.



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**Specifications & Ordering information**

Spec.	Model	DH.The3021
<b>Temp. &amp; Humidity Range (Resolution)</b>		0°C~50°C & 0.1~99.9% RH (0.1°C & 0.1% RH)
<b>Temp. &amp; Humidity Accuracy</b>		±0.6°C & ±5%RH (at 25°C, 10~90%RH); others : ±7%RH
<b>Globe Temp. &amp; Black Ball Size</b>		0°C~70°C & Dia. 40mm
<b>WBGT Temp. &amp; Alarm Range</b>		0°C~50°C & 20°C~50°C
<b>Dimensions &amp; Weight</b>		70×60×h22mm (LCD Size : 40×39mm) & 90g
<b>Standard Package</b>		Meter, 2×AAA Battery, Manual, Paper Box, Arm Strap
<b>Cat. No. &amp; Price ₩</b>	<b>DH.The3021</b>	<b>Set</b>

**DAIHAN® Professional WBGT Monitor, Temp. 0°C~50°C · 0.1~99.9%RH · WBGT 0°C~50°C, with Alarm Function, 302×75×h36.7mm** NEW  
 Ideal for Outdoor & Indoor Heat Stress Measuring, with Backlight Indicator, 전문가용 WBGT 습구흑구 온열지수 측정기, 열사병 예방용



Pull up to Protect Sensor Design Patent Pending

WBGT indicator	87785 / 87782	WBGT indicator	87785 / 87782
Green backlight (26.7~29.4°C)		Red backlight (31~32.2°C)	
Yellow backlight (29.4~31°C)		Red flashing backlight (Above 32.2°C)	

Indicator Display

- **WBGT (Wet Bulb Globe Temperature) = 습구흑구 온열지수 : 건구온도 + 습구온도 + 흑구온도**  
: 기온, 습도, 복사열, 기류 등을 종합적으로 분석해 열에 의해 인간이 받는 스트레스를 나타낸 수치.
- 야외활동에서 고온에 대한 적절한 노출 수준 결정을 도와줌 (열사병 예방)
- 혹서의 작업환경이나 산업현장에서의 안전관리 목적으로 사용하기에 적합함.
- \* Back Light Indicator Function (Green, Yellow, Red, Flashing red) as WBGT Condition Reminder.
- \* Easy-to-read Big LCD Display, 6 Dust Proof Rubber Keys.
- \* One Button Switch to Check Air / Globe temperature & In/Out WBGT.
- \* Designed with Capacitance Type Humidity Sensor to get Accurate and Quick Reading.
- \* Hold Function to Freeze Reading and Max/Min Function Included
- \* Temperature unit °C/°F Switchable



Can be used with Tripod

**Specifications & Ordering information**

Spec.	Model	DH.The3023
<b>Temp. &amp; Humidity Range(Resolution)</b>		0°C~50°C & 0.1~99.9% RH (0.1°C & 0.1% RH)
<b>Temp. &amp; Humidity Accuracy</b>		±0.6°C & ±3%RH (at 25°C, 10~90%RH); others ±5%RH
<b>Globe Temp.(Inside Black Ball)</b>		0°C~80°C
<b>Globe Temp. Acc.(Indoor &amp; Outdoor)</b>		±1°C at 15°C~40°C, others ±1.5°C & ±1.5°C at 15°C~40°C, others ±2°C
<b>WBGT Temp. &amp; Alarm Range</b>		0°C~50°C & 20°C~50°C
<b>Dimensions &amp; Weight</b>		302×75×h36.7mm (LCD Size : 50×32mm) & 300g, Black Ball : Dia.75×h75mm
<b>Standard Package</b>		Meter, 4×AAA Battery, Manual, Paper Box
<b>Cat. No. &amp; Price ₩</b>	<b>DH.The3023</b>	<b>Set</b>

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**DAIHAN® Heat Stroke Prevention WBGT Monitor, Temp · RH% · WBGT · Alarm 65dB**  
 Desktop / Wallmount, Programmable Danger Zone, 0°C~50°C, 20~90% RH, WBGT 0°C~60°C, WBGT 모니터



W.B.G.T Monitor

- \* Checks Dangerous Heat Conditions through WBGT
- \* Simultaneously Displays Temperature and Humidity
- \* Temperature Unit °C / °F is Switchable
- \* Audible Beeper and Bright Red LED for Danger Zone Warning
- \* Max/Min Function to Review Data
- \* Real Time Display (Hour & Minute, AM/PM)
- \* Battery Low indicator

**Specifications & Ordering information**

Spec.	Model	DH.The3
<b>3× Measuring Range</b>		(1) Temp.: 0°C~50°C (Display : -10°C+70°C), (2) Humidity : 20 ~ 90%RH (Display : 0 ~ 99.9%RH), (3) WBGT : 0 ~ 60°C
<b>2× Accuracy</b>		(1) Temp.: ±1°C (2) Humidity : ±5%RH (at 25°C, 10 ~ 90%RH, others ±7%RH)
<b>2× Resolution</b>		(1) Temp.: 0.1°C/0.1°F, (2) Humidity : 0.1%RH
<b>Temp. Response Time</b>		120 Seconds Typical
<b>Dimension / Weight(g)</b>		110×91×h30mm(LCD Size : 63×70 mm) / ~200g
<b>Standard Package</b>		Meter / 3×AA Battery / Manual / Paper Box
<b>Cat. No. &amp; Price ₩</b>	<b>DH.The3003</b>	<b>Set</b>

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**DAIHAN® Non-Contact Precision IR Thermometer, with OLED Display, Ergonomic Hand Grip** NEW

2× Measuring Mode ; Clinical-mode(32.0℃~43.0℃/±0.2℃), Object-mode(0℃~100℃/±0.2℃), 비접촉식 적외선 저온정밀 온도계

**2× Temperature Measuring Mode :**

- Clinical-mode (32.0℃~43.0℃ / ±0.2℃)
- Object-mode (0℃~100℃ / ±0.2℃)



Non-Contact Precision IR Thermometer with OLED Display

- Made in Korea ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Personal type Compact Ultra Low Temperature Freezer
- 위생적인 비접촉식 측정 방식, 0.5초의 빠른 응답속도
- Non-contact Temperature Checker Designed for 32.0℃~43.0℃, 0℃~100.0℃
- Ideal for Checking Body Heat, Bath Water, Milk Temperature and Other Object.
- 다양한 온도 측정이 가능한 2종류의 측정 모드
- 2× Measuring Mode : (1) Clinical-mode : Ideal for Body Heat, 32.0℃~43.0℃/ ±0.2℃  
(2) Object-mode : Ideal for Various Object, 0℃~100.0℃/ ±0.2℃
- \* High-quality OLED Display \* Ergonomic Hand Grip
- \* Fast Response Time : 500ms \* Temperature Units are °F, °C(Factory Default : °C)

**Specifications & Ordering information**

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Spec.	Model	DH.The01
Measuring Range	Clinical-mode	32.0℃~43.0℃
	Object-mode	0℃~100.0℃
Resolution & Temp Accuracy	Clinical-mode	0.1℃ & ±0.2℃
	Object-mode	0.1℃ & ±0.2℃
Targeting Distance		3~5cm
Battery		2× 3V Battery(AAA)
Dimension & Weight(g)		45×53×h173mm (OLED Size : 33.4×h34mm) & 80g
Standard Package		Meter, Battery, Manual, Paper Box
Cat. No. & Price ₩		DH.The0100 <span style="float:right">Set</span>

**DAIHAN® 22℃~41.5℃ Non-Contact Healthcare IR Thermometer, Precision 0.1 Divi.** NEW

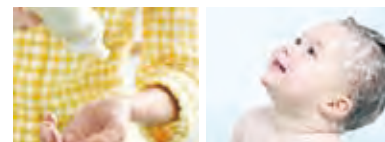
Ideal for Surface Temperature Measuring, with Wrist Strap, 비접촉식 적외선 저온정밀 온도계



Incl. Soft Carry Case

Healthcare IR Thermometer, 22℃~41.5℃

- 위생적인 비접촉식 측정 방식, 0.5초의 빠른 응답속도
- Non-contact Temperature Checker Designed for 22℃~41.5℃
- Ideal for Checking Bath Water and Milk Temperature
- \* Fast Response Time : 500ms
- \* Temperature Unit is Factory Default as °C

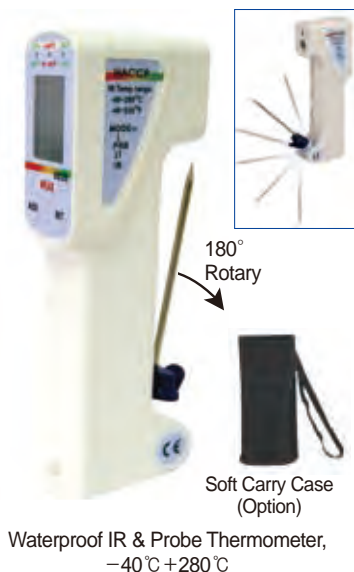


**Specifications & Ordering information**

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Spec.	Model	DH.The19
Measuring Range		22℃~41.5℃
Resolution & Temp Accuracy		0.1℃ & ±0.3℃
Targeting Distance		3~5cm
Battery		1× 9V Battery
Dimension & Weight(g)		44×40×h170mm (LCD Size : 27×17mm) & 140g
Standard Package		Meter, Battery, Manual, Pouch, Wrist Strap, Paper Box
Cat. No. & Price ₩		DH.The3019 <span style="float:right">Set</span>
Spare ; DH.The3019.1	Soft Carry Case(Pouch) 176×75×h35mm, Black for DH.The3019	<span style="float:right">Ea</span>

**DAIHAN® -40°C +280°C Waterproof IP65 IR(infrared)+Contact Pt-Probe Thermometer, with Laser-pointer, MAX/MIN With 180° Rotary Piercing Probe 8cm & Timer, Data-hold °C/°F, 접촉+비접촉 겸용 IR 온도계**



Waterproof IR & Probe Thermometer, -40°C +280°C

- \* Follow HACCP Principle to Check Food Safety
- \* IP65 Waterproof Targeting, Washable Probe
- \* Quick to Inspect Danger Zone Temperature
- \* Big LCD with Backlight to Display Measured Temperature
- \* Flip over Probe for Internal Temperature Measurement
- \* Built-in Laser to Highlight the Area
- \* Certified HACCP
- \* Temperature Unit C / F is Switchable
- \* Auto Power off in 20 mins Inactivity
- \* Quick and Accurate IR Response Time : 500ms
- \* Count down Timer Ensure Food Safety Storage
- \* Max Reading Displays while in IR Scanning Status

**Specifications & Ordering information**

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Spec.	Model	DH.The15
2× Measuring		(1) IR Temp.: -40°C +280°C, (2) Probe Temp.: -40°C +200°C
Accuracy		(1) IR Temp.: [-40°C (32°F)] : ±1°C (2°F) ±0.1, [0°C~65°C (32°F~150°F)] : ±1°C (2°F), [>65°C (150°F)] : ±1.5% of rdg, (2) Probe Temp.: [-5°C (23°F)] : ±1°C (2°F), [-5°C +65°C (23°F~150°F)] : ±0.5°C (1°F), [>65°C (150°F)] : ±1°C or 1.5% of rdg
Resolution		(1) IR Temp.: 0.1°C/°F, (2) Probe Temp.: 0.1°C/°F
D:S ratio / IR Repeatability / Emissivity		3:1 / ±1°C / 0.97
Battery		1×9V Battery or Adaptor
Dimension / Weight		61.5×35.5×167mm (LCD Size : 21×28mm) / 140g
Standard Package		Meter / Battery / Manual / Paper Box
Cat. No. & Price ₩		DH.The3015 Set
Option ; DH.The3015.1	Soft Carry Case(Pouch) 176×75×h35mm, Black for DH.The3015	Ea

**DAIHAN® -40°C +500°C Compact Gun type IR(infrared) Thermometer, Comply with FDA Standard Class II With Ergonomic Hand Grip, °C/°F, 비접촉 적외선(IR) 온도계**



Gun type IR Thermometer, -40°C +500°C

- \* Built in Laser Beam(670nm, <1mw) for Targeting.
- \* Adjustable Emissivity from 0.3 to 1.0 for Metal and Non-Metal Surface Measurement.
- \* Quick and accurate IR Response Time : 500ms.
- \* Product Complies with FDA Standard Class II

**Specifications & Ordering information**

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Spec.	Model	DH.The13
Measurement Range		-40°C +500°C
Temp Accuracy		±2% or ±2°C at -20°C +200°C, others ±3% or 3°C
Resolution		0.1°C/°F for -40°C +110°C, 1°C/°F for others
Repeatability / Distance Ratio		±1°C / 10 : 1
Battery		1×9V Battery
Dimension & Weight(g)		80×45×h157mm (LCD Size : 21.8×31.8mm) / 140g
Standard Package		Meter / Battery / Manual / Paper Box
Cat. No. & Price ₩		DH.The3013 Set
Option ; DH.The3013.1	Soft Carry Case(Pouch), Black for DH.The3013	Ea

**DAIHAN® -40°C +816°C High Temp IR(Infrared) Thermometer, with Large LCD & Laser-pointer With Wrist Strap & Hard Carry Case & Soft Carrying Pouch, °C/°F, 비접촉 적외선(IR) 온도계**



High Temp IR(Infrared) Thermometer, -40°C +816°C

- \* Built in Laser Beam(670nm, <1mw) for Targeting.
- \* Quick and accurate IR Response Time: 500ms.
- \* Rubber-Like Hand Grip Design.
- \* Large LCD w/ Backlight Function.
- \* Adjustable Emissivity from 0.3 to 1.0
- \* Easy Flip Battery Compartment Design.

**Specifications & Ordering information**

<L1>

Spec.	Model	DH.The17
Measurement Range		-40°C +816°C
Temp Accuracy		< 0°C : ±2°C / 0°C~300°C : ±2% or ±2°C, 300°C~500°C : ±2.5% / > 500°C : ±3%
Resolution		0.1°C/°F (<300°C), 1°C/°F (>300°C)
Distance Ratio / Battery		12 : 1 / 2×AA Battery
Dimension & Weight(g)		195×134×h50 mm (LCD Size : 34×37mm) / 240g
Standard Package		Meter / Battery / Manual / Hard Carry Case / Wrist Strap / Soft Carrying Pouch
Cat. No. & Price ₩		DH.The3017 Set
Spare ; DH.The3017.1	Soft Carry Case(Pouch) 200×133×h42mm, Black for DH.The3017	Ea

**DAIHAN® IP67 Waterproof Digital Thermocouple Thermometer, with K-Probe**  
 With 10 Sets Memories Data Storage, Recalling & Clearing, -100°C +800°C, 방수 / 휴대용 1채널 디지털 온도계



Digital Thermocouple Thermometer

- \* Max/Min (°C/°F) Memory Recalling.
- \* EL Backlight for Use in Dim Light Environment.
- \* Alerting Alarm Beeps when Temperature Reaches/Beyond the Pre-set Limit
- \* Built in Holster with Flip Out Stand at the Back of the Unit.
- \* Low Battery Indicator

**Specifications & Ordering information**

<L1>

Spec.	Model	A1.TC9227A
Measurement Range		-100°C+800°C or -148°F+1472°F
Resolution & Accuracy		0.1°, and ±2°C
Water Proof & Weight		IP67 and 185g(only main unit) / Grey&Yellow
Battery		3×1.5Volts "AAA" Size or Equivalent
Sensor Type		K - Probe : od.φ3.5×L110mm Plastic Handle : od.φ17×L165mm, Cable : od.φ4×L1050mm
Dimension		54×165×25 mm (LCD Size : 32×23 mm)
Cat. No. & Price ₩		A1.TC9227A Ea

**DAIHAN® Portable Digital 2-Channel Thermocouple Thermometer, K·J·E·R·T·N·S-Type Probe Acceptable**  
 With ΔT=T1-T2 · Max-Min · Avg Memory, Without Probe, -200°C +1370°C, 0.1 Divi., 휴대용 2채널 디지털 온도계



Self-Standing



2-Channel Thermocouple Thermometer with Optional Probes

**Multiple Thermocouple(Type K, J, T, E, N, R, S) Compatible**

- \* 2 Channel Reading (T1 & T2).
- \* 30 Sets Data Storage
- \* Alarm Beeps when Temperature Reaches/ Beyond/ The Pre-Set Limit.
- \* Optional PVC Holster with Flip Out Stand at the Back of the Unit.
- \* Differential Temperature Measurement (ΔT=T1-T2).
- \* 7" Large LCD with Function Indicators and Backlight.
- \* Audible Alarm.
- \* Low Battery Indicator.

**Specifications & Ordering information**

<L1>

Spec.	Model	A1.T9214T
Measurement Range		K-Type : -200°C+1370°C or -328°F+2498°F, Clock-Timer, Alarm
Resolution		0.1° for Whole Range
Accuracy		±0.05% of Reading +0.3°C(+0.5°F) Below -100°C(+148°F); Add 0.15%
Ambient Temperature		0°C~50°C or 32°F~122°F
Weight (g) / Color		310 / Yellow-Grey
Battery / Package		Battery Included ; 4×1.5Volts "AAA" Size or Equivalent / White Box
Sensor Type		Type K, J, E, T, N, R, S Thermocouple Acceptable ; Not Include
Dimension		81×172×33 mm (LCD Size : 59×35 mm)
Cat. No. & Price ₩		A1.T9214T ; Without Probe Ea

※ Option ; K-Probes ⇒ See the 157 Page.

**DAIHAN® RS232 / PC Data Analysis Thermometer, with Dual Input & Multiple-Type Probe, Compatible**  
 With Time Clock / Backlight, K·J·T·R·S·E-Probe in Use, -200°C +1370°C in K-Type, 2채널 다기종 센서 수용 온도계



PC Data Analysis Thermometer

Hard Carrying Case

- \* Non Sleep Mode Function available, Unit °C/°F is Switchable, Super Big LCD for easy Reading.
- \* RS232 interface for PC download, Data records stamped with real time clock, Backlight for dark area operation.

**Specifications & Ordering information**

\* Hold Function to Freeze Current Reading

<L1>

Spec.	Model	DH.The7
6× Measuring Range		(1) K-temp.: -200°C+1370°C, (2) J-temp.: -200°C+760°C, (3) T-temp.: -200°C+390°C, (4) R-temp.: 0°C~1760°C, (5) S-temp.: 0°C~1760°C, (6) E-temp.: -200°C+736°C
Accuracy		(1) K- / (2) J- / (3) T- / (6) E-temp.: ±(0.1% rdg + 0.7°C) (4) R- / (5) S-temp.: ±(0.3% rdg + 0.7°C)
Resolution		(1) K-temp.: 0.1°C for -200°C+650°C, 1°C for 640°C~1370°C, (2) J-temp.: 0.1°C for -200°C+500°C, 1°C for 490°C~760°C, (3) T-temp.: 0.1°C for -200°C+390°C, etc.
Battery		9V×1pc or Adaptor
Dimension / Weight(g)		182×72×h30 mm(LCD Size : 30×51 mm) / 150g
Standard Package		Meter / K Bead Probe / Battery / Manual
Cat. No. & Price ₩		DH.The3007 Set

- Spare ; DH.The3007.1
- Option ; DH.Gas3013.1
- DH.Gas3013.2
- DH.The3007.2
- ① 4m K-Bead Thermocouple
- ② USB Cable & Software
- ③ RS232 Cable & Software
- ④ Rubber Holster, Blue



- Ea
- Ea
- Ea
- Ea

**DAIHAN® Wallmount SD-card Logging 4-Channel K-type Thermometer, -200°C +1370°C**  
 Ultimated Auto-Logging Memories in SD-card, with 2 Bead K-Probe · Alarm · Time Clock, **벽걸이 4채널 SD로거/온도계**



SD-Card Logging K-type Thermometer

▶ **No-Bothering Computer Setting! Auto-Log Anytime/Anywhere!**

- \* Super Big LCD Portable / Wallmount SD-card Logger Measures Temperature via K-type Thermometer
- \* Hold Function Freezers Current Readings, Checking Max / Min Value from Power On
- \* One Button Press to Display T1-T2, Display Temperature Change from Baseline
- \* Blue Backlight
- \* 12/24 hour Timer

**Specifications & Ordering information**

Spec.	Model	DH.The9	
<b>K temp range / Resolution</b>		-200°C +1370°C, -328°F + 2498°F / 0.1°C, 0.1°F	
<b>K temp accuracy</b>		±(0.3% rdg +1°C)	
<b>Sampling rate</b>		Programmable from 1 second up	
<b>Battery</b>		4 × AA Battery 9V adaptor ; Low Battery Indicator	
<b>Dimension / Weight(g)</b>		152 × 100 × h39mm(LCD Size : 47 × 104 mm) / 300g	
<b>Standard Package</b>		Meter / 2 × Bead Probe / Battery / Manual / SD-card / Plain Box	
<b>Cat. No. &amp; Price ₩</b>	<b>DH.The3009</b>		<b>Set</b>
<b>Option ; DH.The3009.1</b>	① 1m K-Bead Thermocouple		<b>Ea</b>
<b>DH.The3009.2</b>	② Universal Plug 9V Adaptor		<b>Ea</b>

**DAIHAN® Foldable Portable Digital Multi-Thermometer-Set, with 4 K-type Probe**  
 With 180° Moving Probe Connector, Timer(Count Up), -200°C +1370°C, 0.1 Divi.  
 With 4 K-Probe for Air · Immers. · Penetrat. · Surface, **휴대용 접이식 디지털 온도계 셋트**



Foldable/Portable Digital Multi-Thermometer-Set

■ **Ideal for Multi-use with Multi-Function in Lab & Industry**

- \* Unique Feature of Folding Probe
- \* Probe Connector is Adjustable Through 45°, 90°, 135°, 180°
- \* Comprehensive and Variety Use
- \* Four Probes Included for Different Measurement (e.g. Surface, Semi-Solid, Air)
- \* Extra Carrying Box for Easy and Protective Storage
- \* Four Probes Included
- \* Large LCD
- \* Easy to Operate
- \* CE Approval
- \* Battery Included
- \* High Degree of Accuracy

**Function :** On/Off, Hold/Test, °C/°F, Max/Min (°C/°F) Memory Recalling, and Timer.

**Specifications & Ordering information**

Spec.	Model	A1.T9218	
<b>Measurement Range</b>		-200°C +1370°C or -328°F +2498°F, Timer	
<b>Resolution</b>		0.1° for Whole Range	
<b>Accuracy</b>		±1.0°C or ±1.8°F In the Range of -49°C +740°C or -56.2°F +1364°F, Otherwise more than ±2.0°C or ±4°F	
<b>Ambient Temperature</b>		0°C ~50°C or 32°F ~122°F	
<b>Weight (g) / Color</b>		80 / Black	
<b>Battery / Package</b>		2 × 3Volts "CR 2032" Size or Equivalent / Black Carrying Case	
<b>Sensor Type</b>		Included 4 × Type K Thermocouple	
<b>Dimension</b>		153 × 50 × 19 mm (LCD Size : 50 × 22 mm)	
<b>Cat. No. &amp; Price ₩</b>	<b>A1.T9218</b>		<b>Ea</b>
<b>Spare ; A1.TK069T</b>	① Surface Probe, K-type		<b>Ea</b>
<b>; A1.TK066A</b>	② Airflow Probe, K-type		<b>Ea</b>
<b>; A1.TK148O</b>	③ Immersion Probe, Round, K-type		<b>Ea</b>
<b>; A1.TK133S</b>	④ Penetration Probe, K-type		<b>Ea</b>

**Digital Temp Controller / Displayer for K-type Probes**  
 With Female Minisocket for Miniplug, -50°C +400°C, **디지털 온도측정 / 조절계**



Female Minisocket

■ **Ideal for Temp Control of Reactor-system**

- \* Ideal for Temperature Monitor / Controller for Reactor System
- \* With K-type Probe Connector & Electronic Cable 2m
- \* Jumbo LCD with Digit Height 18mm
- \* Dimension : 90 × 70 × h50mm
- \* 100~240VAC Free
- \* High Accuracy

※ **Note : The Controller Can be used in other Cable & Plug System.**

**SL.The5011** Digital Temp. Controller/Displayer-Set, -50°C +400°C, K-type

Ea.	Price, ₩

**Cowie® K-type PTFE Encapsulated Stainless-steel Thermocouple Probe, Can be Bent, -180°C +280°C**  
 With Miniplug & PFA Insulated 1m & 2m Cable, Probe Body L100~900mm, PTFE 내약품 / 내부식 청결형 온도 프로브



- Made in UK. ■ Ideal for Reactor : Especially Long Body Probes
- \* Outstanding Chemical Resistance, No-Contamination of Working Media, and Pressure Resistant
- \* Fully Pure PTFE Encapsulated Stainless-steel Core Probe for Rigidity, But can be Bent
- \* with Push-On Ferrule \* Response : 50% in 6~14 seconds, -180°C+280°C

**(1) With L100~L700mm Probe-body and 1m Cable**

Model	Probe Body	Ferrule	Total Length
CW.600.101.1	$\phi 6 \times L100$	L35mm	L135mm
CW.600.201.1	$\phi 7 \times L200$	L40mm	L240mm
CW.600.301.1	$\phi 8 \times L300$	L40mm	L340mm
CW.600.401.1	$\phi 8 \times L400$	L50mm	L450mm
CW.600.501.1	$\phi 9 \times L500$	L60mm	L560mm
CW.600.601.1	$\phi 9 \times L600$	L60mm	L660mm
CW.600.701.1	$\phi 9 \times L700$	L45mm	L745mm

<L1>	
Ea.	Price, ₩

**(2) With L900mm Probe-body and 2m Cable**

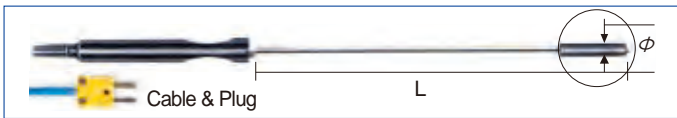
CW.600.901.1.2	PTFE Capsulated K-probe, Body- $\phi 9 \times L900$ , Ferrule-L45mm, Total-L945mm
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Ea.	Price, ₩

**K-type Thermocouple Probe, for Wide-range Temp. -160°C +1200°C**  
 With Common use Plug "Miniature 2 Flat" and Cable, "K형" 온도계 & 각종 열기구 온도 프로브

- K-Type Sensor Probes for Different Applications (Penetration Probe, Surface Probe, Pipe Clamp) ■ Cable : od. $\phi 3 \times L1020$ mm
- Miniature 2 Flat (L14×Thick 1mm) Plug Type ■ Handle : Thermo Plastic od. $\phi 17 \times L170$ mm

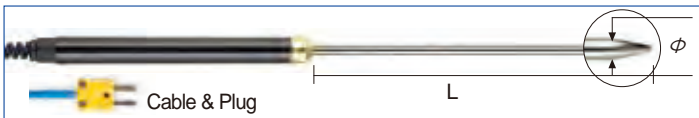
**(1) For Liquid & Air, Stainless-steel Probe, Resin Handle with Cable/Plug, -160°C +1200°C**



SL.The7193	Liquid/ Air Probe "K", -160°C+700°C, $\phi 1.0 \times L306$ mm, 1m Cable/Plug
DH.WHP503040	, -60°C+600°C, $\phi 4.8 \times L250$ mm, 1.8m Cable/Plug
DH.WHP503050	, -60°C+500°C, $\phi 4.8 \times L380$ mm, 1.8m Cable/Plug

<L2>	
Ea.	Price, ₩

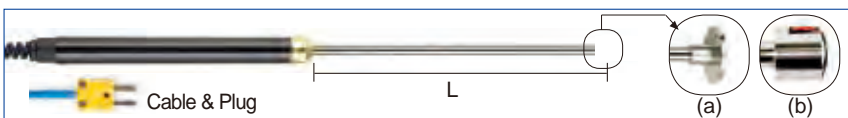
**(2) For Semi - solid Penetration-type, Stainless-steel Probe, Resin Handle with Cable/Plug, -100°C +1000°C**



A1.TK175S	Penetration Probe "K", -100°C+800°C, $\phi 3.2 \times L150$ mm, 1m Cable/Plug
A1.TK225S	, -100°C+1000°C, $\phi 6.4 \times L200$ mm, 1m Cable/Plug

<L1>	
Ea.	Price, ₩

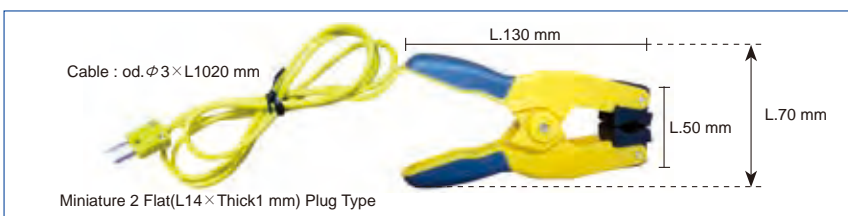
**(3) For Surface / Contact, Stainless-steel Probe, Resin Handle with Cable/Plug, -100°C +400°C**



A1.TK004T	(a) Surface Probe "K", Head : $\phi 15 \times t1.5$ , Stem : $\phi 3.5 \times L180$ mm, -100°C+400°C, 1m Cable/Plug
A1.TK033T	(b) : $\phi 16 \times t14$ , Stem : $\phi 6.5 \times L215$ mm, -100°C+400°C, 1m Cable/Plug

Ea.	Price, ₩

**(4) Pipe Clamping Probe, with Cable Plug, -100°C +120°C**



A1.TK0063	Pipe Clamp Probe, Pipe / Tubing, $\phi 6 \sim 22$ mm Grip -100°C+120°C
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Ea.	Price, ₩

**DAIHAN® IP67 Waterproof Digital Thermocouple Thermometer, with 1 NTC-Probe**  
 With 10 Sets Memories Data Storage, Recalling & Clearing, -50°C + 300°C, 방수 / 휴대용 1채널 디지털 온도계



Unit size :  
77 × 172 × 46 mm

with 1 NTC-Probe

- \* Max/Min (°C/°F) Memory Recalling.
- \* Alerting Alarm Beeps when Temperature Reaches/Beyond the Pre-set Limit
- \* EL Backlight for Use in Dim Light Environment.
- \* Supplied with Sensor Probe and Plastic Handle Assembled Together
- \* PVC Holster with Flip Out Stand at the Back of the Unit.
- \* 1 Second Normal Temperature Sensing Time.
- \* Optional One Hour Auto Shut Off
- \* CE Approval.
- \* Low Battery Indicator.

**Specifications & Ordering information**

<L1>

Spec.	Model	A1.T9234
Measurement Range		-50°C+300°C or -58°F+572°F
Resolution		0.1°C for -19.9°C+199.9°C, Otherwise 1°C
Accuracy		±1.0°C or ±1.8°F In the Range of -30°C+250°C or -22°F+482°F Otherwise more than ±2.0°C or ±4°F
Ambient Temperature		0°C~50°C or 32°F~122°F
Weight(g) / Color / Water Proof		280 / Grey · Yellow / IP 67
Battery / Package		2 × 1.5Volts "AAA" Size or Equivalent / White Box
Sensor Type		NTC Probe : od.φ3.5 × L110mm Plastic Handle : od.φ17 × L120mm, Cable : od.φ4 × L1450mm
Dimension		77 × 172 × 46mm (LCD Size : 51 × 32 mm)
Cat. No. & Price ₩		A1.T9234 Ea

**DAIHAN® IP67 Waterproof Digital 2-Channel Thermocouple Thermometer, with 2 NTC-Probe**  
 With 10 Sets Memories Data Storage, Recalling & Clearing, -50°C + 300°C, 방수 / 휴대용 2채널 디지털 온도계



Unit size :  
77 × 172 × 46 mm

"A1.T9234T" with 2 NTC-Probe

- \* Convenient Function for Calculating Differential Temp-Measurement ( $\Delta T = T_1 - T_2$ ).
- \* Alerting Alarm Beeps when Temperature Reaches/Beyond the Pre-Set Limit
- \* 1 Second Normal Temperature Sensing Time.
- \* Low Battery Indicator.
- \* CE Approval.
- \* EL Backlight for Use in Dim Light Environment.
- \* Universal Kit Set with Two Stainless-steel Probes Together.

**Specifications & Ordering information**

<L1>

Spec.	Model	A1.T9234T
Measurement Range		-50°C+300°C or -58°F+572°F
Resolution		0.1°C for -19.9°C+199.9°C, Otherwise 1°C
Accuracy		±1.0°C or ±1.8°F In the Range of -30°C+250°C or -22°F+482°F Otherwise more than ±2.0°C or ±4°F
Ambient Temperature		0°C~50°C or 32°F~122°F
Weight(g) / Color / Water Proof		280 / Grey · Yellow / IP 67
Battery / Package		2 × 1.5Volts "AAA" Size or Equivalent / White Box
Sensor Type		NTC Probe : od.φ3.5 × L110mm Plastic Handle : od.φ17 × L120mm, Cable : od.φ4 × L1450mm
Dimension		77 × 172 × 46 mm (LCD Size : 51 × 32 mm)
Cat. No. & Price ₩		A1.T9234T Ea

**DAIHAN® NTC-type Probe, for NTC-type Thermocouple Thermometer**

- (1) Penetration Probe : Suitable Semi-Solid, Liquid, Air-Temperature.
- (2) Surface Probe : Superior Contact, Plate-Temperature.
- (3) Robust Piercing Probe : Stronger Penetration Force, Rapid Response Time, Suitable for Frozen Food.

<L1>

Cat. No.	Dimension	Temperature °C / °F / Others	Ea. Price, ₩
(1) A1.TN0300	4Pin(Pole) Plug(φ38 × L39 mm), Cable : od.φ4 × L.1450 mm with Protective Probe Cap Handle : Thermo Plastic od.φ17 × L.120 mm od.φ5.0 × L.275 mm	Penetration, -50°C+300°C / -58°F+572°F, Very Sharp Tip	
(2) A1.TN133T	4Pin(Pole) Plug(φ38 × L39 mm), Cable : od.φ4 × L.1450 mm Handle : Thermo Plastic od.φ17 × L.120 mm od.φ3.5 × L.110 mm Surface Probe φ15mm × thick 1.5mm	Surface, -50°C+300°C / -58°F+572°F, Thin/Flat Disk	
(3) A1.TN332C	4Pin(Pole) Plug(φ38 × L39 mm), Cable : od.φ4 × L.1450 mm Handle : Thermo Plastic od.φ17 × L.120 mm od.φ5.0/3.5 × L.110 mm Piercing-type Probe : od.φ3.5 mm od.φ5.0 mm With Protective Probe Cap	Robust Piercing, -50°C+300°C / -58°F+572°F, Stronger Penetration Force	



**DAIHAN® Foldable Handy Digital Multi-Thermometer Set**  
With 4 NTC-Probe & 180° Moving Probe, -50°C + 300°C, 휴대용 접이식 온도계 세트

- \* Stainless-steel Probe Adjusts From 0° to 180°.
- \* Jumbo LCD with Digit Height 18mm.
- \* Black Carrying Case with EVA Foam for Protective and Convenient Carriage.
- \* 1 Second Normal Temperature Sensing Time.
- \* CE Approval.
- \* Low Battery Indicator.

**Specifications & Ordering information**

<L1>

Spec.	Model	A1.T9306
Measurement Range		-50°C + 300°C or -58°F + 572°F
Resolution		0.1°C for -19.9°C + 199.9°C, Otherwise 1°C
Accuracy		±1.0°C or ±1.8°F In the Range of -30°C + 250°C or -22°F + 482°F, Otherwise more than ±2.0°C or ±4°F
Ambient Temperature for Plastic Case		0°C ~ 50°C or 32°F ~ 122°F
Sensor Type		Included 4 Type NTC Thermocouple
Battery		1 × 1.5Volts "A76" Size (LR44, G13) or Equivalent
Color		Grey
Dimension & Weight		154 × 41 × 17mm (LCD Size : 50 × 23mm) & 65g
Package		Black Carrying Case with EVA foam
Cat. No. & Price ₩	<b>A1.T9306</b>	<b>Ea</b>

**DAIHAN® Module Handy Solar Digital Thermometer, Max/Min**

With 2 of Internal Sensor & 1m External Cable / NTC-Probe, -50°C + 300°C, 0.1/1.0°C Divi., 태양광 충전 온도계



**Unique Design of Using Solar Energy**

- \* 1m Wire with Stainless-steel Probe.
- \* Strong Magnet for Easy Attachment.
- \* 1 Second Normal Temperature Sensing Time.
- \* CE Approval.

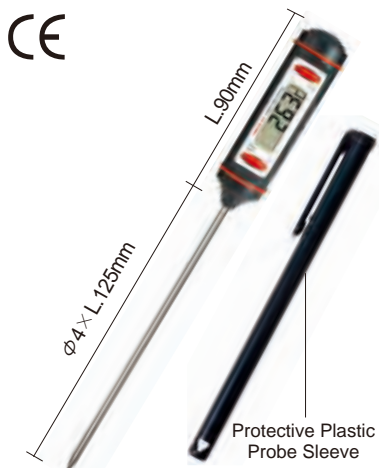
**Specifications & Ordering information**

<L1>

Spec.	Model	A1.T9277B
Measurement Range		-50°C + 300°C or -58°F + 572°F
Resolution		0.1°C for -19.9°C + 199.9°C, Otherwise 1°C
Accuracy		±1.0°C or ±1.8°F In the Range of -30°C + 250°C or -22°F + 482°F, Otherwise more than ±2.0°C or ±4°F
Ambient Temperature		0°C ~ 50°C or 32°F ~ 122°F
Sensor Type		External Sharp NTC-Probe : od. φ 3.2 × L46mm with 1m Cable
Battery		1 × 1.5Volts "A76" Size (LR44, G13) or Equivalent
Package / Color		Sliding Blister with Print Card / Green
Dimension & Weight		103 × 43 × 16mm (LCD Size : 41 × 15mm) & 70g
Cat. No. & Price ₩	<b>A1.T9277B</b>	<b>Ea</b>

**DAIHAN® Pocket Clip Digital Thermometer, Pen-Shape, L.125mm NTC-Probe Type**

With Protective Plastic Sleeve/Pocket Clip, -50°C + 300°C, 0.1/1.0°C Divi., 포켓형 디지털 온도계(포켓 클립형)



- \* 4mm Diameter of Stainless-steel Probe which Good for Solid Measurement.
- \* Instant and Precision Temperature Display.
- \* Large LCD Display with Digit Height 10mm.
- \* 1 Second Normal Temperature Sensing Time.
- \* CE Approval.
- \* Pen-Shaped Design

**Specifications & Ordering information**

<L1>

Spec.	Model	A1.T9307
Measurement Range		-50°C + 300°C or -58°F + 572°F
Resolution		0.1°C for -19.9°C + 199.9°C, Otherwise 1°C
Accuracy		±1.0°C or ±1.8°F In the Range of -30°C + 250°C or -22°F + 482°F, Otherwise more than ±2.0°C or ±4°F
Ambient Temperature		0°C ~ 50°C or 32°F ~ 122°F
Weight (g) / Color		35 / Black
Battery / Package		1 × 1.5 Volts "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type		NTC-Probe : od. φ 4 × L125mm
Dimension		215 × 27 × 27mm (LCD Size : 35 × 11mm)
Cat. No. & Price ₩	<b>A1.T9307</b>	<b>Ea</b>

**NEW**



**Digital Thermometer, with Notification Alarm Function, -50°C + 300°C NEW**  
 With Hanging Sensor Cover, 223×34×h15mm, 디지털 알람 온도계, 안전캡 포함

- 설정된 온도 도달 시 알람 경보 기능, 세척 편리, 긴 사용 수명, 안전한 보관을 위한 안전캡 포함
- Alarm can be Set so as to Sound when Temperature Increases or Decreases
- \* Assured Operating Range of Temperature and Humidity : 0°C~40°C, 85%RH or Lower(No Dew Condensation)
- \* Auto Power-off Function      \* Drip-proof Performance : Equivalent to IPX2

**Specifications & Ordering information** <L2>

Spec.	Model	O-263WT
Temp. Range (Resolution)		-50°C+300°C (1°C)
Temp. Accuracy		±1°C (at 0°C~50°C); ±4°C~±6°C (at 200°C or higher); others : ±2°C
Material		Body, Safety Cap : ABS resin; Temperature Sensor : Stainless Steel
Dimensions & Weight		223×34×h15 mm & 35g
Battery		1×CR2032 Battery
Standard Package		Meter, Battery, Cap
Cat. No. & Price ₩	SL.The3091	Set

**DAIHAN® Metal Housing Waterproof (IP67) Thermometer, with Z-Clip & Protective Plastic Sleeve**  
 Ideal for Kitchen or Lab, Max/Min, with NTC-Probe, -50°C + 150°C, 포켓형 디지털 방수 온도계(조절 가능 Z클립)



- \* Unique Design of Metal Pulling Housing
- \* 2 Points Block Design to Prevent Product Rolling
- \* Main Unit Heat Resistance to 80°C
- \* Waterproof IP67 Rated
- \* Dishwasher Safe
- \* You can adjust the spacing of Z-Clip

**Specifications & Ordering information** <L1>

Spec.	Model	A1.ST9341C
Measurement Range		-50°C + 150°C or -58°F + 302°F
Resolution		0.1°C
Accuracy		±1°C
Ambient Temperature		0°C~50°C or 32°F~122°F
Weight (g) / Color		30(g) / Silver
Battery		1×1.5 Volts "393" Size or Equivalent
Sensor Type		NTC-Probe : od.φ4×L122mm
Dimension		146×37×37 mm (LCD Size : 24×12mm)
Cat. No. & Price ₩	A1.ST9341C	Ea

Metal Housing Waterproof(IP67) Thermometer

**DAIHAN® Waterproof Pocket Digital Thermometer, Max/Min, Extension Handle, with NTC-Probe**  
 With Protective Sleeve / Pocket Clip, -50°C + 300°C, 0.1/1.0°C Divi., 포켓형 디지털 방수 온도계(손잡이 가변형)



- \* Pen-Shaped Design.
- \* Ingenious Design of Using Probe Sleeve Vent Hole as a Holder
- \* Connecting Probe Sleeve to Head of Unit as a Handle Extension.
- \* Press Button Membrane Keypad Function and Display.
- \* Waterproof : IP 67.
- \* Convenient Use of Hanger.
- \* CE Approval.
- \* 1 Second Normal Temperature Sensing Time.

**Specifications & Ordering information** <L1>

Spec.	Model	A1.T9231C
Measurement Range		-50°C + 300°C or -58°F + 572°F
Resolution		0.1°C for -19.9°C + 199.9°C, Otherwise 1°C
Accuracy		±1.0°C or ±1.8°F In the Range of -30°C + 250°C or -22°F + 482°F, Otherwise more than ±2.0°C or ±4°F
Ambient Temperature		0°C~50°C or 32°F~122°F
Weight (g) / Color		40 / Black
Battery / Package		1×1.5 Volts "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type		NTC-Probe : od.φ4×L115mm
Waterproof		IP 67
Dimension		206×13×19mm (LCD Size : 25×8mm)
Cat. No. & Price ₩	A1.T9231C	Ea

"A1.T9231C"  
 Waterproof / Pocket Digital Thermometer



**DAIHAN® Handy Waterproof Multi-Thermometer, with Rubber Coated-Housing/-Hanger**  
 With Detachable  $\phi 5 \times L280$ mm Long NTC-Probe,  $-50^{\circ}\text{C} + 300^{\circ}\text{C}$ ,  $0.1/1.0^{\circ}\text{C}$  Division, **다용도 방수 온도계(분리형 온도센서)**



- \* Unique Design of Probe Changeable Unit.
- \* 1 Second Normal Temperature Sensing Time.
- \* Supplied with Longer and Broader ( $280\text{mm} \times \phi 5\text{mm}$ ) Probe Together.
- \* Waterproof Function : IP 67.
- \* Rubber Coated Housing and Hanger.
- \* Flexible for Multi Usage.
- \* CE Approval.

**Specifications & Ordering information**

Spec.	Model	A1.T9304C
Measurement Range		$-50^{\circ}\text{C} + 300^{\circ}\text{C}$ or $-58^{\circ}\text{F} + 572^{\circ}\text{F}$
Resolution		$0.1^{\circ}\text{C}$ for $-19.9^{\circ}\text{C} + 199.9^{\circ}\text{C}$ , Otherwise $1^{\circ}\text{C}$
Accuracy		$\pm 1.0^{\circ}\text{C}$ or $\pm 1.8^{\circ}\text{F}$ In the Range of $-30^{\circ}\text{C} + 250^{\circ}\text{C}$ or $-22^{\circ}\text{F} + 482^{\circ}\text{F}$ , Otherwise more than $\pm 2.0^{\circ}\text{C}$ or $\pm 4^{\circ}\text{F}$
Ambient Temperature		$0^{\circ}\text{C} \sim 50^{\circ}\text{C}$ or $32^{\circ}\text{F} \sim 122^{\circ}\text{F}$
Weight (g) / Color / Waterproof		275 / Grey · Yellow, IP 67
Battery / Package		$1 \times 1.5\text{Volts}$ "A76" Size (LR44, g13) or Equivalent / White Box
Sensor Type		NTC-Probe : $\text{od.} \phi 6 \times L275\text{mm}$ (with Connection 325mm)
Dimension		$59 \times 127 \times 22\text{mm}$ (LCD Size : $39 \times 35\text{mm}$ )
Cat. No. & Price ₩	A1.T9304C	Ea

**DAIHAN® Waterproof Handy Multi-Thermometer, with Adjustable Hanger & NTC-Probe,  $-50^{\circ}\text{C} + 300^{\circ}\text{C}$**   
 With Jumbo LCD, Max/Min, High-/Low-Alarm, Jumbo LCD,  $0.1/1.0^{\circ}\text{C}$  Divi., **포켓형 디지털 방수 온도계(조절 가능 행거)**



- \* Designed for Comprehensive of Use.
- \* Rubber Coated Adjustable Hanger.
- \* Press Button Membrane Keypad Function and Display.
- \* Alarm Beeps when Temperature Reaches/ Beyond the Pre-Set Unit.
- \* 1 Second Normal Temp. Sensing Time.
- \* Jumbo LCD Display with Digit Height 18mm.

**Specifications & Ordering information**

Spec.	Model	A1.T9314C
Measurement Range		$-50^{\circ}\text{C} + 300^{\circ}\text{C}$ or $-58^{\circ}\text{F} + 572^{\circ}\text{F}$
Resolution		$0.1^{\circ}\text{C}$ for $-19.9^{\circ}\text{C} + 199.9^{\circ}\text{C}$ , Otherwise $1^{\circ}\text{C}$
Accuracy		$\pm 1.0^{\circ}\text{C}$ or $\pm 1.8^{\circ}\text{F}$ In the Range of $-30^{\circ}\text{C} + 250^{\circ}\text{C}$ or $-22^{\circ}\text{F} + 482^{\circ}\text{F}$ , Otherwise more than $\pm 2.0^{\circ}\text{C}$ or $\pm 4^{\circ}\text{F}$
Ambient Temperature		$0^{\circ}\text{C} \sim 50^{\circ}\text{C}$ or $32^{\circ}\text{F} \sim 122^{\circ}\text{F}$
Battery / Package / Waterproof		$1 \times 1.5\text{V}$ "A67" Size(LR44, G13) or Equivalent / Sliding Blister with Print Card, IP 67
Sensor Type		NTC-Probe : $\text{od.} \phi 4 \times L115\text{mm}$
Dimension & Weight		$210 \times 53 \times 18\text{mm}$ (LCD Size : $32 \times 30\text{mm}$ ) , 70g
Cat. No. & Price ₩	A1.T9314C	Ea

**DAIHAN® Waterproof Handy Corkscrew Heavy-Duty Thermometer, for Frozen Food & Solid**  
 With  $\phi 8$ mm Corkscrew NTC-Probe, Protective Sleeve,  $-50^{\circ}\text{C} + 300^{\circ}\text{C}$ ,  $0.1/1.0^{\circ}\text{C}$  Divi., **나사형 방수 온도계**



- \* Rugged Heavy Duty Design.
- \* Corkscrew Probe with 8mm Diameter.
- \* 1 Second Normal Temperature Sensing Time.
- \* CE Approval.
- \* Protective Plastic Probe Sleeve with Pocket Clip
- \* Waterproof : IP 67.

**Specifications & Ordering information**

Spec.	Model	A1.T9311C
Measurement Range		$-50^{\circ}\text{C} + 300^{\circ}\text{C}$ or $-58^{\circ}\text{F} + 572^{\circ}\text{F}$
Resolution		$0.1^{\circ}\text{C}$ for $-19.9^{\circ}\text{C} + 199.9^{\circ}\text{C}$ , Otherwise $1^{\circ}\text{C}$
Accuracy		$\pm 1.0^{\circ}\text{C}$ or $\pm 1.8^{\circ}\text{F}$ In the Range of $-30^{\circ}\text{C} + 250^{\circ}\text{C}$ or $-22^{\circ}\text{F} + 482^{\circ}\text{F}$ , Otherwise more than $\pm 2.0^{\circ}\text{C}$ or $\pm 4^{\circ}\text{F}$
Ambient Temperature		$0^{\circ}\text{C} \sim 50^{\circ}\text{C}$ or $32^{\circ}\text{F} \sim 122^{\circ}\text{F}$
Weight (g) / Color / Waterproof		75 / Ivory White, IP 67
Battery / Package		$1 \times 1.5\text{Volts}$ "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type		NTC-Probe : $\text{od.} \phi 8 \times L100\text{mm}$
Dimension		$161 \times 100 \times 30\text{mm}$ (LCD Size : $35 \times 11\text{mm}$ )
Cat. No. & Price ₩	A1.T9311C	Ea

**Alla® Folding Oven Thermometer, with 1m Stainless Cable & NTC-Probe, Timer · Alarm · Clock, up to 300°C/572°F**  
 With 1m Stainless Cable & Probe, "Cable-Stay- in Oven", 1° - display, "23hr-59min-59sec" Timer, **접이식 오븐 온도계**



■ **Supplied by Alla® in France**

- \* Useable Thermometer Acts as Great Helper in Kitchen. \* Monitoring of Internal Temperature by Probe
- \* Comprehensive Multi-Functional Device for Temperature and Alarm Checking.
- \* With Waterproof Probe (IP 67) and Supplied with 1m Stainless-steel Cable
- \* Battery & Protective Plastic Probe Cap Included \* Magnet at the Back for Easy Attachment
- \* Maximum Count : 23 : 59 : 59 (hr : min. : sec) \* In Blister Packaging

**Function :** On/Off, °C/°F, Timer, Clock, Alarm, High/Low Alarm

**Specifications & Ordering information** <L1>

Spec.	Model	AL.91000.003F
Measurement Range		0°C~300°C(1°C) / 32°F~572°F
Resolution		1°C
Accuracy		±1°C/ 1.8°F between 0°C~150°C/ 32°F~302°F ±3°C/ 5.4°F between 150°C~300°C/ 302°F~572°F
Battery		2×1.5 Volts "AAA" Size
Dimension (mm)		Folding Screen : 125×70×10mm (LCD Size : 50×35mm) Probe & Cable : 150mm×φ4mm Probe & 100cm Cable
Cat. No. & Price ₩	AL.91000.003F	Ea



**DAIHAN® Digital Soil Thermometer, with 0~180° Moving Head**

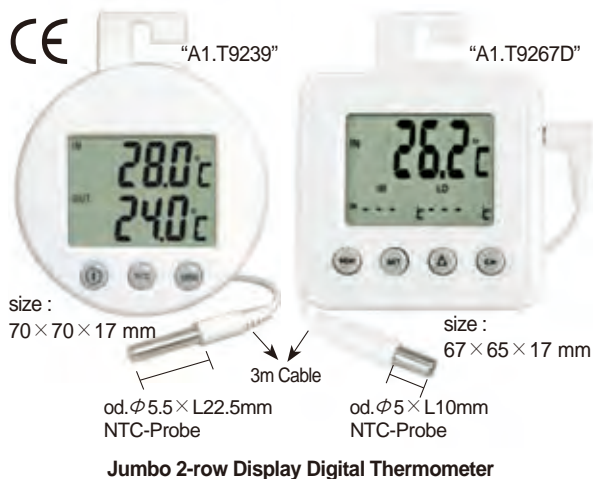
With large LCD Display, Pocket-type, -50°C +300°C, 0.1°C, **토양 온도계, 180° 무빙헤드**

- \* Unique Moving Head for Different Viewing Angle. \* Large LCD Display with Digit Height 10mm.
- \* Reduced Tip for Stronger Penetration Force. \* Supplied with Protective Probe Cap.
- \* 1 Second Normal Temperature Sensing Time. \* CE Approval.

**Specifications & Ordering information** <L1>

Spec.	Model	A1.T9233C
Dimension		191×53×53 mm (LCD Size : 37×13 mm)
Measurement Range		-50°C+300°C or -58°F+572°F
Resolution		0.1° for -19.9° +199.9°, Otherwise 1°
Accuracy		±1.0°C or ±1.8°F In the Range of -30°C+250°C or -22°F+482°F, Otherwise more than ±2.0°C or ±4°F
Ambient Temperature		0°C~50°C or 32°F~122°F
Weight (g) / Color		40 / Black
Battery / Package		1×1.5 Volts "A76" Size (LR44, G13) or Equivalent / Sliding Blister with Print Card
Sensor Type		NTC-Probe : od.φ5/3×L120mm
Cat. No. & Price ₩	A1.T9233C	Ea

**DAIHAN® Jumbo 2-row display Indoor / Outdoor Digital Thermometer, with NTC-Probe & 3m Cable, Max / Min**  
 With Flip Out Stand · Hanging Hole · Magnet for Attachment, -50°C +70°C, 0.1°C Divi., **실내/외용 디지털 온도계(2열 표시)**



- \* Ideal for Office, Home, Laboratory, etc. \* Dual Row Display for Easy Reading.
- \* Indoor/Outdoor Temperature Display. \* Pocket Size with Large LCD Display.
- \* Flip Out Stand, Hanging Hole and Strong Magnet at the Back for Easy Attachment.
- \* 3 Meters Sensor Wire with Probe for Outdoor Temperature Measurement.
- \* CE Approval.

**Specifications & Ordering information** <L1>

Spec.	Model	A1.T9239	A1.T9267D
LCD Size		LCD Size : 30×40 mm	
Measurement Range		-50°C+70°C or -58°F+158°F	
Resolution		0.1 for Whole Range	
Accuracy		±1.0°C or ±1.8°F In the Range of -20°C+70°C or -4°F+158°F Otherwise more than ±1.0°C or ±1.8°F	
Ambient Temperature		0°C~50°C or 32°F~122°F	
Weight (g) / Color		70(g) / White	82(g) / White
Battery		1×1.5 Volts "A76" Size (LR44, G13) or Equivalent	
Dimension		70×70×17mm	67×65×22mm
Cat. No. & Price ₩	A1.T9239	Ea	A1.T9267D Ea

Articles	Cat. No	Description
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**DAIHAN® Specialty Thermometer, Digital Spoon Thermometer & Digital Floating Pool Thermometer, 특수 온도계**



(1) Digital Spoon Thermometer

- CE Approval
- Sensor Type : NTC
- 1 Second Normal Temperature Sensing Time.

**(1) Digital Spoon Thermometer, for Baby/Health-Care, -50°C +110°C, 0.1/1.0°C Division**

- \* Patented
- \* Made of ABS Plastic
- \* Complies with FDA(US)
- \* Ideal for Temp. Measurement of Small amount of Liquid
- \* Streamline Design with Spoon Handle

**(2) Digital Floating Pool Thermometer, Waterproof IP67, 0°C ~50°C, 0.1°C Division**

- \* Floating On Water
- \* Supplied with 3m Nylon Cord with Magnetic Switch to Activate the Unit
- \* Ideal for Pool, Water tank, Aquarium
- \* Top Scale Reading without Hand Wetting



(2) Digital Floating Pool Thermometer

**Specifications & Ordering information**

<L1>

Spec.	Model	(1) Digital Spoon Thermometer	(2) Digital Floating Pool Thermometer
Measurement Range		-50°C +110°C or -58°F +230°F	0°C -50°C or 32°F -122°F
Resolution		0.1° for -19.9° ~ +199.9°, Otherwise 1°	0.1° for Whole Range
Accuracy		± 1.0°C or ± 1.8°F In the Range of 30°C -110°C or -22°F +230°F, Otherwise more than ± 2.0°C or ± 4°F	± 1.0°C or ± 1.8°F for Whole Range
Ambient Temperature		0°C -50°C or 32°F -122°F	0°C -50°C or 32°F -122°F
Weight (g) / Color		25g / Yellow or Pink, NTC	45g / Light Blue
Battery		1 × 1.5Volts "A76" Size (LR44, G13) or Equivalent	1 × 1.5Volts "AAA" Size or Equivalent
Dimension		175 × 22 × 13mm (LCD Size : 26 × 8 mm)	235 × 142 × 142mm (LCD Size : 71 × 29 mm)
Cat. No. & Price ₩		A1.T9220Y ; Yellow	A1.T9257
		A1.T9220P ; Pink	
		Ea	Ea

, Thermometers, Pt100

**DAIHAN® HACCP Precise Pt-100 Thermometer with Timer, Max · Min · Avg. -100°C +300°C**

Ideal for Foodstuff, with IP 67 Waterproof, 99Points Data Record, Alarm & Temp-Programmable, 0.01°C/°F, 정밀 백금 센서 온도계



- \* Rigid Housing Design and the Most Accurate Pt100 Probe
- \* Complete Set IP67 Waterproof and Washable in Washing Machine
- \* Green/Red Dual Color Backlight to Indicate Temp. Hazards
- \* Temp. High Alarm Threshold Programmable
- \* °C/°F Switchable
- \* Max./Min./Avg. Reading Display
- \* Hold Function to Freeze Current Reading
- \* Countdown Timer Function Included

**Specifications & Ordering information**

<L1>

Spec.	Model	DH.The5
Measure Range		-100°C +300°C
Resolution		0.01°C / 0.01°F
Accuracy		± 0.15°C
Temp. Response Time		3 mins
RTD Probe Size (mm)		Length - 150mm Diameter - 3.2mm Handle Length - 100mm, Cable Length - 1100mm
Battery		6 × AAA Battery
Dimension / Weight(g)		169 × 78.3 × h34.4 mm (LCD Size : 54 × 32.5mm) / 200g
Standard Package		Meter / RTD Probe / Stainless Holder / Battery / Manual
Cat. No. & Price ₩		DH.The3005
		Set

**DAIHAN® Single Use Cold Chain Temperature Datalogger, with PDF Report, Waterproof (IP65), -30°C + 70°C NEW**

Auto-Generate a PDF & Excel Report, Programmable by Users, 일회용 콜드체인 온도 Data 로거



- 온도 값을 측정하고 기록하여 사용자의 필요에 따라 Excel 또는 PDF 형식으로 보고서 생성이 가능함.
- Temperature Values can be Measured and Recorded to Generate Reports in Excel or PDF Format by the User.
- USB-type Product : Can be Used by Simply Connecting to a PC without Having to Install any Software.
- \* IP65 waterproof bag could provide the moisture barrier properties of data logger.

**Specifications & Ordering information** <L1>

Spec.	Model	DH.The3035
Measure Range (Resolution) & Accuracy		-30°C + 70°C, -22°F + 158°F (0.1°C, 0.1°F) & ±0.5°C
Sampling Point & Interval		8,192 readings & 30 seconds, 5, 10, 30, 60, 90, 120 minutes
Dimensions & Weight		80×43×2.5mm, 105×55×h2.5 mm(with Bag) & 10g
Standard Package & Battery		Logger, Manual, Paper Box, 1×3.0V CR2032 Battery
Cat. No. & Price ₩		DH.The3035 <span style="float:right">Ea</span>

**DAIHAN® Temperature USB 2.0 Datalogger, with PDF Report, Waterproof (IP67), -30°C + 70°C NEW**

Auto-Generate a PDF & Excel Report, Programmable by Users, USB Type 온도 Data 로거



- 온도 값을 측정하고 기록하여 사용자의 필요에 따라 Excel 또는 PDF 형식으로 보고서 생성이 가능함.
- USB형식의 제품으로 별도의 소프트웨어 설치 필요없이 PC에 연결만 하면 사용할 수 있음.
- Temperature Values can be Measured and Recorded to Generate Reports in Excel or PDF Format by the User.
- USB-type Product : Can be Used by Simply Connecting to a PC without Having to Install any Software.
- \* Automatically Generate a PDF and Excel Report while Plugged into a Computer.

**Specifications & Ordering information** <L1>

Spec.	Model	DH.The3031
Measure Range (Resolution) & Accuracy		-30°C + 70°C, -22°F + 158°F (0.1°C, 0.1°F) & ±0.5°C
Sampling Point & Interval		48,000 readings & 30 seconds, 5, 10, 30, 60, 90, 120 minutes
Dimensions & Weight		110×45×h17mm & 50g
Standard Package & Battery		Logger, Manual, Paper Box, 2×3.0V CR2032 Battery
Cat. No. & Price ₩		DH.The3031 <span style="float:right">Ea</span>

**DAIHAN® Bluetooth 4.0 Wireless Temperature Monitoring Datalogger, Waterproof (IP67), -30°C + 70°C NEW**

With Free Application for Smart Devices, Bluetooth Type 온도 Data 로거



- 온도 값을 측정하고 기록하여 Application을 통해 사용자가 실시간으로 데이터 확인 및 보고서 생성이 가능함.
- Users can Check the Temperature Change in Real-time through the Application "Nice Logger" Downloaded in the App Store.
- \* Report Contains Data Summary, Graph and Detailed Data. \* Big LCD Provides Real-time Data Every 5 seconds.

**Specifications & Ordering information** <L1>

Spec.	Model	DH.The3033
Measure Range (Resolution) & Accuracy		-30°C + 70°C, -22°F + 158°F (0.1°C, 0.1°F) & ±0.5°C
Sampling Point & Interval		48,000 readings & 10 seconds to 120 minutes
Dimensions & Weight		70×50×h23mm & 70g
Standard Package & Battery		Logger, Manual, Paper Box, 1×3.0V CR2 Battery
Cat. No. & Price ₩		DH.The3033 <span style="float:right">Ea</span>

**DAIHAN® LCD Temperature Datalogger, 62000 Sets of Data**

With USB Cable, -20°C + 70°C, 데이터 로거



- \* Instant current temperature read-out \* Completed with hidden buttons to avoid unexpected operation
- \* Hanging hole and magnet for easy mounting \* Works on Windows XP / Vista / 7 or above

**Specifications & Ordering information** <L1>

Spec.	Model	A1.DL104
Measure Range (Resolution) & Accuracy		-20°C + 70°C or -4°F + 158°F (0.1°C) & ±1°C
Mode of recording		One-time, Endless Loop (overwriting), End At
Data Capa. and Waterproof		62000 sets of data, and IP×5
Battery		1×3 volts "CR2032" size or equivalent×2
Log interval		1/2/5/10/15/30 seconds, 1/2/5/10/15/30/60/90/120 minutes
Dimension		41×60×23mm (LCD Size : 28×18mm)
Cat. No. & Price ₩		A1.DL104 <span style="float:right">Ea</span>

## Wisdom Professional Melting Point Analyzer "MP360D", Up to +400°C ±0.5°C, Two Heating Speeds Simultaneous Measurement of 2 Samples, Internal Cooling Fan, 용점 측정기, 2 샘플 동시측정, 급속 냉각



Professional Melting Point Analyzer

- DAIHAN Designed
- PL(Product Liability) Insurance
- Excellent for the most General Lab Sample Melting Point Applications
- Simultaneous Measurement of Two Samples
- Broader and Clear View with : the Internal LED Light, the Magnified Lens, the Second Internal Display, the Second Internal Display, and the Inclination given by the Hind Legs
- Internal Fan for Rapid Cooling after Measurement
- External Manual Control for Easy and Immediate Hold Function
- Included Capillary Tubes, Close Type, L100mm, 100pcs
- \* The Heated Rate is Divided into 2 Speeds to Reduce the Viewing Time :
  - The Fast Stage is Set at 10°C below the Known Melting Point of the Sample.
  - The Temp. is kept at the Fast Stage Point and Beeping for the Next Stage.
- \* Ambient Temperature : 5.0°C~40°C
- \* Hand Held "READ" Push Button to Quick Response
- \* Data Recording System : 32 Sets of Data
- \* Forced Cooling Reduces Analysis Time.
- \* Inside Block Temperature View
- \* External Printer(Optional) Automatically Print Sample ID, Date and Melting Point.
- \* External Calibration

### Specifications & Ordering information

&lt;L1&gt;

Spec.	Model	"MP360D"
Temp. Range & Accuracy		Ambient to 400°C, ±0.5°C
Temp. Resolution		0.1°C
Fast Stage Ramp Rate		20°C/min Fixed
Slow Ramp Rate		0.2~10°C/min Adjustable, 0.1°C/min Interval
Cooling Rate		25°C/min
Number of Samples		2
Display		4 Digit with 8 Segments
Heating Power Consumption		75W
Dimensions(w×d×h) & Net Weight		160×220×170mm, 1.8kg
Electrical Reqts.		1 Phase, AC 230V, 50 / 60Hz
Cat. No.		DH.Mel7011
Price, Each. ₩		

### Optional Printer & Printer Paper

- \* Printing Speed : 75mm/s
- \* Paper & Printing Width : 57.5mm (+/- 0.5) & 48mm
- \* Paper Type : Thermal Paper
- \* Life Time of the Printer Head : 50,000 minutes
- \* Power : Input 100V – 240V AC ; Output 12V, 2A
- \* Component of Set : Serial Cable, Power Adapter

DH.Mel7012 Printer for Melting Point, 135×215×113mm, 1kg

DH.Mel7013 Printer Paper, Thermal Paper, w57.5mm

Ea.	Price, ₩



### Witeg® Melting Point Capillary Tube, Glass, 용점 측정 모세관

- Supplied by Witeg® in Germany
- \* Excellent for Melting Point Determinations. \* Length 80mm×Outside diameter 2.5 mm, Packed 100 pcs.
- \* Use a Powdered Sample \* Automatic or Manual Measurement
- \* 100 pcs/vial pack

&lt;L1&gt;

WI.2700000 Melting Point Tube, od 2.5 mm×L80 mm, Both Ends Open  
WI.2702000 , One End Closed

Pk.	Price, ₩
100ea	
100ea	

DAIHAN® Programmable Ball Mill “BML”, 2-/6- Pots, 50~600 rpm, ±5 rpm, 10 Steps 6 Programs  
 With Digital Feedback Control System, Digital LCD, with Certi. & Traceability, 디지털/프로그래밍식 볼밀/자밀, 2구 & 6구용, 정밀형, 속도조절식



2-Year Warranty

(1) 2-Places Programmable Ball Mill “BML-2”



2-Year Warranty

(2) 6-Places Programmable Ball Mill “BML-6”



Minimum Noise and Safety

Optional Soundproof Cabinet “BMC-6”  
 for 6-Places Programmable Ball Mill “BML-6”

- Made in Korea
- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Grinding / Mixing : Crystalline Chemicals, Inks, Paints, Pigments, Plants, Racks and Soils
- Microprocessor, Programmable, Variable Speed : 50~600 rpm
- Digital Feedback Control and LCD :  
 Speed (RPM), Power Bar-Graph and Timer Status
- \* Antistatic Rubber Roller : Keeps Jars / Pots Centered
- \* Digital LCD with Back-Light Function
- \* Over Load Protection \* Ergonomic and Compact Design
- \* NBR Roller with Pot Guide Ring
- \* Programmable Operation : 10 Steps 6 Programs
- \* Storage Function (RPM, Timer)
- \* Soundproof Cabinet for Safety and Minimum Noise (Optional)

Specifications & Ordering information

<L1>

Spec.	Model	(1) “BML-2” Max. 2 Pots	(2) “BML-6” Max. 6 Pots
Capacity		2-places, up to 2 pots	6-places, up to 6 pots
Motor		DC 40W Geared Motor (5 : 1 ratio)	DC 100W Geared Motor (5 : 1 ratio)
Maximum Load		30 kg	60 kg
Speed Range		50 ~ 600 rpm	
Speed Accuracy		±5 rpm	
Timer		99 hr 59 min (Programmable)	
Display		Digital LCD with Back-Light Function	
Controller		Programmable Digital Feedback Controller with Jog-Shuttle Switch (Turn+Push)	
Program Function		10 Steps, 6 Programs	
Safety Device		Over Load Protector for Motor	
Dimension (w×d×h)	Roller (mm)	50×300	70×800
	External (mm)	620×300×515	1,200×500×795
Packing Size (w×d×h) (mm) & Gross Weight		760×460×700	1,300×620×1,010
		52 kg	115 kg
Power Consumption		40 W	100 W
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.WBM05002	DH.WBM05006
	120V	DH.WBM05102	DH.WBM05106
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Optional Soundproof Cabinet

\* Designed for Minimizing Noise, and Safety Work

- DH.WBM505102 Soundproof Cabinet, “BMC2”, for 2-places“BML-2”,  
w1,020×d570×h1,120mm
- DH.WBM505106 Soundproof Cabinet, “BMC6”, for 6-places“BML-6”,  
w1,600×d770×h1,400mm

Ea.	Price, ₩

**Wisdom Cutting Mill & Pin Mill Common Use "Cml140" & "Pml140"**, Dry type, Max 4600rpm, Output <0.4~1.3mm  
 With Stainless-steel Body, Powerful 1Phase 3HP Motor, Maximum load 5kg, Input <10mm, **실험실용 커팅밀 & 핀밀 겸용**

1-Year Warranty



Pin Mill, "Pml140"

- Made in Korea
  - PL(Product Liability) Insurance
  - Low Noise
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
  - Ideal for Chemicals, Pharmaceuticals, Synthetic Resins, Metals, Ceramics, Mining, etc.
  - Extensive Crushing from Granular to Fine Grinding
  - Excellent Quality of Output Material due to Low Heat Generated
- \* High Strength and Hardness : SS304 Body/Feeder/Rotor, SS430 Screen, SS400 Base Frame  
 \* The Raw Material is Diffused together with the Airflow by Rotation, and Crushed by the Impact of the Rotating Plate and the Fixed Plate.  
 \* Adjust the Desired Grinding Particle Size by Replacing the Internal Screen.  
 \* Pulverizing Various Raw Materials by Replacing the Grinding Disk  
 \* Easy to Separate and Assemble \* Easy to Clean and Maintain \* Simple Interface  
 \* Include : 0.4~1.3mm 5 SS Screen Sieves, 1 SS Base Frame, 2 collection hopper

Specifications & Ordering information

<L3>

Spec.	Model	"Cml140" Cutting Mill	"Pml140" Pin Mill
Grinding Disc		Knife type Rotor 8ea × Cutting Knife	Pin type Rotor & Stator 10ea × Rotator Pin, 17ea × Stator Pin
Capacity		5kg(3~10kg/h)	
Hopper Size(w × d × h) / Input Raw Material		120 × 120 × 200 / <10mm	
Screen / Output material Dia. (included)		60, 80, 100, 140, 180 / <1.3, 0.8, 0.6, 0.5, 0.4mm	
Speed & Motor	Feeder	25RPM, 40W, DC MOTER	
	Mill & Cutting	4600RPM, 1Phase 3HP	
Body Dia.		φ 165mm	
Dimension & Weight		450 × 550 × h1150, Net. 85kg / Gross. 90kg	
Power Consumption		2.2kW	
Electrical Reqts.		1 Phase, 220V 50/60Hz	

Cat. No.	60Hz	DH.Cml7010	DH.Pml7010
		50Hz	DH.Cml7015
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불



(1) Grinding Disk Rotor



(2) Grinding Disk Stator



(3) Grinding Disk Knife



(4) Screen Sieve

Spare Accessory for Standard Chamber

- DH.PmlR1011 (1) Grinding Disk Rotor, Stainless-steel, "R1011", for "Pml140"
- DH.PmlS1012 (2) Grinding Disk Stator, Stainless-steel, "S1012", for "Pml140"
- DH.CmlK1011 (3) Grinding Disk Knife, Stainless-steel, "K1011", for "Cml140"
- DH.PmlS1015 (4) Screen Sieve 60, Stainless-steel, Output Material Dia.<φ 1.3mm, "S1015", for "Pml140", "Cml140"
- DH.PmlS1016 (4) Screen Sieve 80, Stainless-steel, Output Material Dia.<φ 0.8mm, "S1016", for "Pml140", "Cml140"
- DH.PmlS1017 (4) Screen Sieve 100, Stainless-steel, Output Material Dia.<φ 0.6mm, "S1017", for "Pml140", "Cml140"
- DH.PmlS1018 (4) Screen Sieve 180, Stainless-steel, Output Material Dia.<φ 0.5mm, "S1018", for "Pml140", "Cml140"
- DH.PmlS1019 (4) Screen Sieve 180, Stainless-steel, Output Material Dia.<φ 0.4mm, "S1019", for "Pml140", "Cml140"

Ea. Price, ₩

Drying Chamber 50 °C~90 °C **New** ..... P. 169

## Ovens

**General Purpose**, Forced-air ..... P. 170~171

, Forced-air, SMART ..... P. 172~173

, Gravity-air ..... P. 174~175

, Gravity-air, SMART ..... P. 176~177

**High Clean Air** ..... P. 178

**Industrial/Large-capacity** ..... P. 179

**Vacuum**, Gas Exchangeable ..... P. 180

, SMART-type ..... P. 181

, Pumps for Vacuum Ovens ..... P. 182

**NEW**



**Drying Chamber**  
"DryG-105"



**Gravity-air Oven**  
"ThermoStable™ SON-105"



**Hi-clean Air Oven**  
"ThermoStable™ WOC-560"



**Industrial Oven**  
"ThermoStable™ WOF-L1000"



**Vacuum Oven**  
"ThermoStable™ SOV-70"



WiRe™ App Service

**Controlled by Mobile-Phone**



DAIHAN® 105 & 155 Lit Multi-purpose Drying Chamber, I.Gravity-air "DryG" & II.Forced-air "DryF", 50°C~90°C, ±1.0°C **NEW**  
With Digital PID Control, FND-display, Viewing Window, and 2 Stainless steel Wire Shelves, 자연대류식 & 강제순환식 다용도 드라이링 챔버

**NEW**

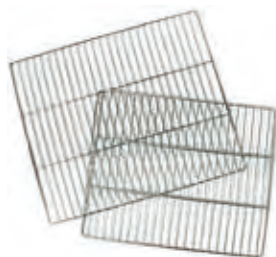
2-Year Warranty

I. 105Lit. Gravity-Air type

**NEW**

2-Year Warranty

II. 155Lit. Forced-Air Type, with Casters

Stainless-steel Wire Shelf  
(Included)

- Made in Korea
- PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Optimized Air Flow by Forced-air & Gravity-air Convection Mechanism
- \* Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
- \* Digital PID Control System Implementing Superior Temperature Accuracy
- \* Seven-segment FND-display
- \* Compact Design
- \* Ambient to Max 90°C Temp Range, Accuracy of ±1.0°C
- \* Corrosion Resistant 304 Stainless-steel Chamber and Shelves
- \* Perfect Heat Insulation made by Heat-Resistant Rubber Packing and Air Flow Layer
- \* Over Temp & Over Current Protection and Sensor Error Detection
- \* 2 Stainless-steel Shelves are Included

## Specifications &amp; Ordering information

&lt;L1&gt;

Spec.	Model	I. Gravity-Air type		II. Forced-Air type	
		(1) DryG-105	(2) DryG-155	(3) DryF-105	(4) DryF-155
Air Flow Fan		None		Yes	
Capacity		105 Lit	155 Lit	105 Lit	155 Lit
Temp	Range & Sensor	50°C~90°C, PT100 Sensor			
	Accu. & Uniform.	Accuracy ±1.0°C at 90°C, Uniformity ±1.5°C at 90°C			
Heater Power		1,100 W	1,200 W	1,150 W	1,300 W
Heat-up Time		30min up to 90°C			
Timer & Alarm		99hr 59min (with Delay / Continuous Run.), Error Status & Timer-end			
Display		Seven segments FND			
Controller		Digital PID Controller			
Resolution		Control : ±1.0°C, Display : ±1.0°C			
Shelf (Included)		2 Stainless-steel Wire Shelf			
Load per Shelf		16 kg			
Movable Caster		none	4ea	none	4ea
Permitted Total Load		32 kg (16 kg × 2 Shelves)			
Ventilation		1 of Ventilation Hole (id. φ40mm) with Stainless Steel Cap			
Safety Circuit		Over Temp, and Over Current Protector, Sensor Error Detector			
Material	Internal	Stainless-steel (#304)			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Dimension (w×d×h)	Interior (mm)	485×410×535	550×470×600	485×410×535	550×470×600
	Exterior (mm)	653×739×783	718×804×848	653×739×783	718×804×848
Net Weight		60 kg	71 kg	62 kg	74 kg
Packing Size (w×d×h)(mm)		753×818×934	818×878×995	753×818×934	818×878×995
Gross Weight		75 kg	89 kg	77 kg	92 kg
Power Consumption		1.1 Kw	1.2 Kw	1.2 Kw	1.3 Kw
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50/60Hz			
Cat. No.	230V	DH.DryG0105	DH.DryG0155	DH.DryF0105	DH.DryF0155
	120V	DH.DryG1105	DH.DryG1155	DH.DryF1105	DH.DryF1155
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

## Spare Stainless-steel Wire Shelves

DH.WOF11105 Wire Shelf, for 105 Lit, "OFS105", w455×d375mm  
DH.WOF11155 , for 155 Lit, "OFS155", w520×d449mm

Ea. Price, ₩

DAIHAN® Forced-air Drying Oven "ThermoStable™ OF", 3-Side Heating Zone, 50 · 105 · 155 · 305 Lit, up to 250°C, ±0.3°C With Wire Shelves, Digital PID Control, Jog-Dial & Push Button, Digital LCD, with Back-light, Pre-Heating Zone, Certi. & Traceability 강제 순환식 정밀 건조기/오븐, 고정밀 디지털 퍼지 제어, 우수한 온도 정확성/균일성



up to 250°C

2-Year Warranty

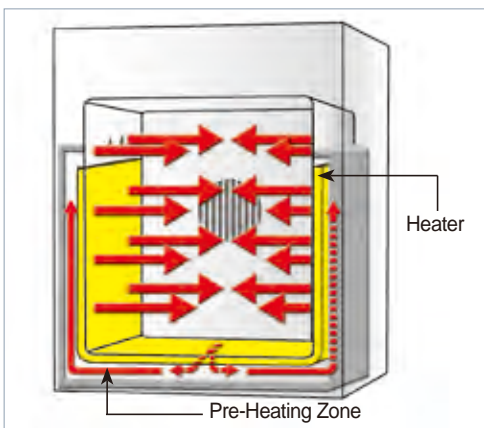
(1) Standard Model, Forced-air Oven

- Made in Korea
- UL, CUL, and CE Certified(Exclude 305Lit-model)
- GD(Good Design)-mark
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- 3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism
- Digital PID Control System Implementing Superior Temperature Accuracy
- Optimized Air Flow by Forced-air Mechanism
- Patented Jog-Dial Control System
- \* Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
- \* Compact New Body Design
- \* Alarm Function : Error status and Timer-end
- \* RS232C Interface for Monitoring and Controlling with PC
- \* Ambient 5°C~250°C Range with Fluctuation of ±0.3°C at 100°C
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)

Specification

Spec.	Model	(1) Standard Model			
		ThermoStable OF-50 Max. Capa. 50L	ThermoStable OF-105 Max. Capa. 105L	ThermoStable OF-155 Max. Capa. 155L	ThermoStable OF-305 Max. Capa. 305L
			(2) Window Model		
		ThermoStable OF-W105	ThermoStable OF-W155	ThermoStable OF-W305	
Capacity	50 Lit	105 Lit	155 Lit	305 Lit	
Dimension (w×d×h)	Interior (mm)	370×345×420	485×415×535	550×480×600	550×470×1,180
	Exterior (mm)	518×647×724	653×712×882	718×777×947	721×777×1,619
Heater Power	650 W	1.4 kW	1.6 kW	3.4 kW	
Temp.	Range	Room Temp 5°C~250°C			
	Fluctuation	±0.3°C at 100°C, ±0.5°C at 150°C			
	Variation	±1°C at 100°C, ±1.8°C at 150°C, ±1°C at 100°C, ±2°C at 150°C			
	Sensor	PT 100			
Control Resolution	±1°C				
Heat-up Time	25 min. to 100°C, 45 min. to 150°C	25 min. to 100°C, 40 min. to 150°C			
Recovery Time (Door open 30sec)	8 min. to 100°C, 8 min. to 150°C	6 min. to 100°C, 6 min. to 150°C			
Controller	Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button				
RS232 Port	Available to connect with PC				
Display	Digital LCD with Back Light				
Timer	99hr 59 min (delay/continuous function)				
Storage	Temperature and Timer setting values				
Material	Internal	Stainless-steel (#304), Corrosion Resistant			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Shelf (included)	2 Wire Shelf		3 Wire Shelf		
	Load per Stainless-steel Wire Shelf : 16kg				
Ventilation	Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm				
	1ea	2ea	3ea		
Circulation	Forced-air Type				
Safety device	Over Temp. and Over Current Protector, Sensor Error Detector				
Alarm	Error Status and Timer-end				
Net Weight (kg)	44	69	78	159	
Packing Size (w×d×h)(mm)	622×754×807	743×819×1,068	808×884×1,133	1,000×1,000×1,870	
Shipping Weight (kg)	59	79	92	219	
Power Consumption	674 W	1390 W	1566 W	3200 W	
Energy Consumption, at 100°C , at 150°C	117 Wh	187 Wh	204 Wh	-	
	230 Wh	337 Wh	398 Wh	-	
Electric Reqts.	120V, 60Hz or 230V, 50/60Hz				

\* Other Specifications are available upon Customer's Request.



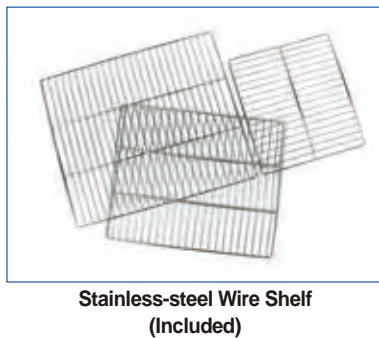
3-Side Heating Zone Forced-air Mechanism : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism (Exclude OF-305, OF-W305)



Perfect Door Lock by Double Latch

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<Continued From...DAIHAN® Forced-air Drying Oven "ThermoStable™ OF">



**WiseRemote Control Software :**  
Connection of Temperature Devices with  
Interface RS232C to a PC

\* You can Download this Software at  
DAIHAN-Sci.com Shopping-mall

### Ordering Information

#### (1) Standard Model, Forced-air, with Wire Shelf

DH.WOF05050	Oven, Standard, 230V, 50 Lit, "ThermoStable OF-50"
DH.WOF05105	, 105 Lit, "ThermoStable OF-105"
DH.WOF05155	, 155 Lit, "ThermoStable OF-155"
DH.WOF05305	, 305 Lit, "ThermoStable OF-305"
DH.WOF06050	Oven, Standard, 120V, 50 Lit, "ThermoStable OF-50"
DH.WOF06105	, 105 Lit, "ThermoStable OF-105"
DH.WOF06155	, 155 Lit, "ThermoStable OF-155"
DH.WOF06305	, 305 Lit, "ThermoStable OF-305"

#### (2) Built in Viewing Window Model, Forced-air, with Wire Shelf

DH.WOF07105	Oven, Window, 230V, 105 Lit, "ThermoStable OF-W105"
DH.WOF07155	, 155 Lit, "ThermoStable OF-W155"
DH.WOF07305	, 305 Lit, "ThermoStable OF-W304"
DH.WOF08105	Oven, Window, 120V, 105 Lit, "ThermoStable OF-W105"
DH.WOF08155	, 155 Lit, "ThermoStable OF-W155"
DH.WOF08305	, 305 Lit, "ThermoStable OF-W305"

#### Spare Stainless-steel Wire Shelf

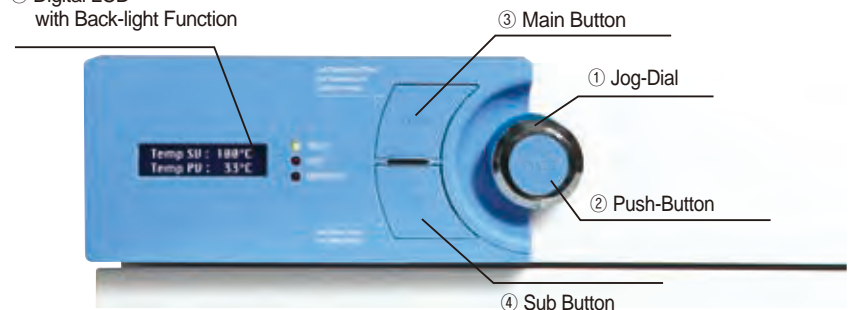
DH.WOF11050	Wire Shelf, for 50 Lit, "OFS050", w340×d310mm
DH.WOF11105	, for 105 Lit, "OFS105", w455×d375mm
DH.WOF11155	, for 155-/305-Lit, "OFS155", w520×d440mm

#### Forced-air Oven with Validation (IQ, OQ) Service

DH.WOF31050	Validation Service(IQ, OQ), with "ThermoStable OF-50", "OFV1050"
DH.WOF31105	Validation Service(IQ, OQ), with "ThermoStable OF-105", "OFV1105"
DH.WOF31155	Validation Service(IQ, OQ), with "ThermoStable OF-155", "OFV1155"
DH.WOF32105	Validation Service(IQ, OQ), with "ThermoStable OF-W105", "OFV2105"
DH.WOF32155	Validation Service(IQ, OQ), with "ThermoStable OF-W155", "OFV2155"

## ➤ New Jog-Dial Controller

⑤ Digital LCD  
with Back-light Function



- Provides the user interface with an ergonomic design for users to operate in an easy and convenient way.
- A new 2-way Jog-Dial Knob (Jog Dial + Push Button) and presents excellent durability and mobility.
- High-quality LCD with Back-light function.
- A durable Main Button and a Sub Button that features superb and user-friendly operation.

※ 운임 착불 <L1>

Ea. Price, ₩

Ea. Price, ₩

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Ea. Price, ₩

DAIHAN® SMART Forced-air Drying Oven “ThermoStable™ SOF”, 3-Side Heating Zone, 50 · 105 · 155 · 305 Lit  
 With Smart-Lab™ Controller, 4" Full Touch Screen TFT LCD, Fuzzy-PID Control, WiRe™ Service, Certi. & Traceability, up to 250°C, ±0.3°C  
 스마트 강제 순환식 정밀 건조기/오븐, 우수한 온도 정확성/균일성, WiRe™서비스, 4인치 풀터치스크린 조절기



(1) SMART Model, “ThermoStable™ SOF-105”

- Made in Korea
- UL, CUL, and CE Certified(Exclude 305 Lit-model)
- GD(Good Design)-mark
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- 3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism

■ Digital Fuzzy Control System Implementing Superior Temperature Accuracy

■ Optimized Air Flow by Forced-air Mechanism

■ Smart-Lab™ Controller WiRe™ App Service

- Automatic Data Recording
- Self-Diagnostic Function
- Variable Program Setting for Multiple Patterns with Multiple Segments
- Internet Connectivity with WiFi
- Controller SW can be upgraded through USB port.
- The Recorded Data could be transferred to PC by USB memory
- RS232C Interface for Monitoring and Controlling with PC

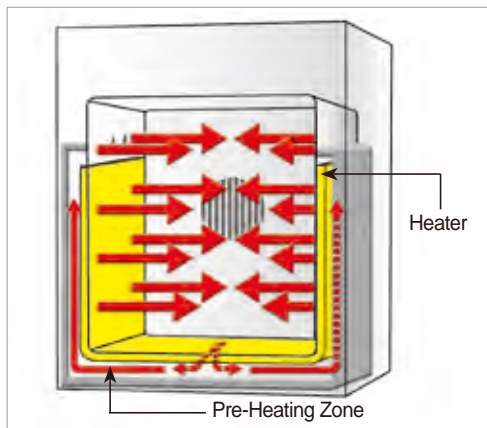
\* Ambient to 250°C of Temp. Range, Fluctuation of ±0.3°C at 100°C

\* Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging

Specification

Spec.	Model	(1) SMART Model			
		ThermoStable SOF-50 Max. Capa. 50L	ThermoStable SOF-105 Max. Capa. 105L	ThermoStable SOF-155 Max. Capa. 155L	ThermoStable SOF-305 Max. Capa. 305L
		(2) SMART-Window Model			
		ThermoStable SOF-W105	ThermoStable SOF-W155	ThermoStable SOF-W305	
Capacity	50 Lit	105 Lit	155 Lit	305 Lit	
Dimension (w×d×h)	Interior (mm)	370×345×420	485×415×535	550×480×600	550×470×1,180
	Exterior (mm)	518×647×724	653×712×882	718×777×947	721×777×1,619
Heater Power	650 W	1.4 kW	1.6 kW	3.4 kW	
Temp.	Range	Room Temp 5°C~250°C			
	Fluctuation	±0.3°C at 100°C, ±0.5°C at 150°C			
	Variation	±1°C at 100°C, ±1.8°C at 150°C		±1°C at 100°C, ±2°C at 150°C	
	Sensor	PT 100			
Control Resolution	±1°C				
Heat-up Time	25 min. to 100°C, 45 min. to 150°C	25 min. to 100°C, 40 min. to 150°C			
Recovery Time (Door open 30sec)	8 min. to 100°C, 8 min. to 150°C	6 min. to 100°C, 6 min. to 150°C			
Controller	Smart-Lab™ Controller				
RS232 Port	Available to connect with PC				
Display	4" Full Touch Screen TFT LCD				
Timer	99hr 59min (delay/continuous function)				
Storage	Temperature and Timer setting values				
Material	Internal	Stainless-steel (#304), Corrosion Resistant			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Shelf (included)	2 Wire Shelf		3 Wire Shelf		
	Load per Stainless-steel Wire Shelf : 16kg				
Ventilation	Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm				
	1ea	2ea	3ea		
Circulation	Forced-air Type				
Safety device	Over Temp. and Over Current Protector, Sensor Error Detector				
Alarm	Error Status and Timer-end				
Net Weight (kg)	44	69	78	159	
Packing Size (w×d×h)(mm)	622×754×807	743×819×1,068	808×884×1,133	1,000×1,000×1,870	
Shipping Weight (kg)	59	79	92	219	
Power Consumption	674 W	1390 W	1566 W	3200 W	
Energy Consumption, at 100°C , at 150°C	117 Wh	187 Wh	204 Wh	-	
	230 Wh	337 Wh	398 Wh	-	
Electric Reqts.	120V, 60Hz or 230V, 50/60Hz				

\* Other Specifications are available upon Customer's Request.



3-Side Heating Zone Forced-air Mechanism :  
 The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism  
 (Exclude SOF-305, SOF-W305)



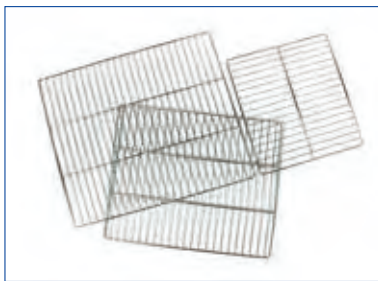
Perfect Door Lock by Double Latch

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<Continued From...DAIHAN® SMART Forced-air Drying Oven "ThermoStable™ SOF">



(2) SMART-Window Model, Forced-air Oven



Stainless-steel Wire Shelf (Included)

Ordering Information

(1) Smart Model, Forced-air, with Wire Shelf

DH.SWOF05050	Oven, Standard, 230V, 50 Lit, "ThermoStable SOF-50"
DH.SWOF05105	, 105 Lit, "ThermoStable SOF-105"
DH.SWOF05155	, 155 Lit, "ThermoStable SOF-155"
DH.SWOF05305	, 305 Lit, "ThermoStable SOF-305"
DH.SWOF06050	Oven, Standard, 120V, 50 Lit, "ThermoStable SOF-50"
DH.SWOF06105	, 105 Lit, "ThermoStable SOF-105"
DH.SWOF06155	, 155 Lit, "ThermoStable SOF-155"
DH.SWOF06305	, 305 Lit, "ThermoStable SOF-305"

(2) Built in Viewing Window Model, Forced-air, with Wire Shelf

DH.SWOF07105	Oven, Window, 230V, 105 Lit, "ThermoStable SOF-W105"
DH.SWOF07155	, 155 Lit, "ThermoStable SOF-W155"
DH.SWOF07305	, 305 Lit, "ThermoStable SOF-W305"
DH.SWOF08105	Oven, Window, 120V, 105 Lit, "ThermoStable SOF-W105"
DH.SWOF08155	, 155 Lit, "ThermoStable SOF-W155"
DH.SWOF08305	, 305 Lit, "ThermoStable SOF-W305"

Spare Stainless-steel Wire Shelf

DH.WOF11050	Wire Shelf, for 50 Lit, "OFS050", w340 × d310mm
DH.WOF11105	, for 105 Lit, "OFS105", w455 × d375mm
DH.WOF11155	, for 155 / 305 Lit, "OFS155", w520 × d440mm

Forced-air Oven with Validation (IQ, OQ) Service

DH.SWOF31050	Validation Service(IQ, OQ), with "SOF-50", "SOFV1050"
DH.SWOF31105	, with "SOF-105", "SOFV1105"
DH.SWOF31155	, with "SOF-155", "SOFV1155"
DH.SWOF32105	Validation Service(IQ, OQ), with "SOF-W105", "SOFV2105"
DH.SWOF32155	, with "SOF-W155", "SOFV2155"

※ 운임 착불 <L1>

Ea. Price, ₩

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» WiRe™ App Service



4" Full Touch Screen TFT LCD (Smart-Lab™ Controller)

It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.



WiRe™ App Service

Controlled by Mobile-Phone

DAIHAN® Gravity-air Drying Oven "ThermoStable™ ON", 3-Side Heating Zone, 32 · 50 · 105 Lit, up to 230°C, ±0.5°C  
 With 2 Wire Shelf, Digital PID Control, Jog-Dial & Push Button, Digital LCD with Back-light, with Certi. & Traceability  
 자연 대류식 정밀 건조기/오븐, 고정밀 디지털 퍼지 제어, 우수한 온도 정확성



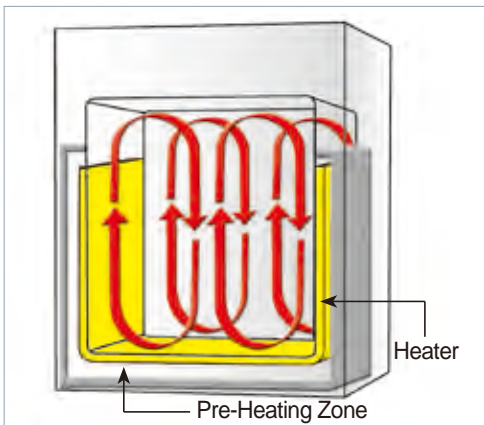
(1) Standard Model, Gravity-air Oven

- Made in Korea    ■ UL, CUL, and CE Certified    ■ GD(Good Design)-mark
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
  - 3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism
  - Digital PID Control System Implementing Superior Temperature Accuracy
  - Optimized Air Flow by Gravity-air Mechanism
  - Patented Jog-Dial Control System    ■ PL(Product Liability) Insurance
- \* Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging  
 \* New Jog-Dial with Push Button  
 \* RS232C Interface for Monitoring and Controlling with PC  
 \* Ambient +5°C to 230°C Range with Fluctuation of ±0.5°C at 100°C  
 \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)

Specification

Spec.	Model	(1) Standard Model			
		ON-32 Max. Capa. 32L	ON-50 Max. Capa. 50L	ON-105 Max. Capa. 105L	ON-155 Max. Capa. 155L
		(2) Window Model			
		ON-W105	ON-W155		
Capacity		32 Lit	50 Lit	105 Lit	155 Lit
Dimension	Interior (mm)	310×290×360	370×350×420	485×409×535	550×474×600
(w×d×h)	Exterior (mm)	458×557×664	518×647×724	653×712×882	718×777×947
Heater Power		500 W	650 W	1.4 kW	1.6 kW
Temp.	Range	Room Temp 5°C to 230°C			
	Fluctuation	± 0.5°C at 100°C, ± 0.6°C at 150°C			± 0.5°C at 100°C, ± 0.8°C at 150°C
	Variation	± 1.2°C at 100°C, ± 2.2°C at 150°C			
	Sensor	PT 100			
Control Resolution		± 1°C			
Heat-up Time		30 min. to 100°C, 43 min. to 150°C	30 min. to 100°C, 45 min. to 150°C	35 min. to 100°C, 50 min. to 150°C	
Recovery Time (Door open 30sec)		8 min. to 100°C, 10 min. to 150°C		10 min. to 100°C, 12 min. to 150°C	
Controller		Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button			
RS232 Port		Available to connect with PC			
Display		Digital LCD with Back Light			
Timer		99hr 59 min (delay/continuous function)			
Storage		Temperature and Timer setting values			
Material	Internal	Stainless-steel (#304), Corrosion Resistant			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Shelf (included)		2 Stainless-steel Wire Shelf, Load per Shelf : 16 kg			
Ventilation		Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
		1ea		2ea	
Circulation		Gravity-air Type			
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector			
Alarm		Error Status and Timer-end			
Net Weight (kg)		36	44	69	78
Packing Size (w×d×h) (mm)		562×664×747	622×754×807	743×819×1,068	808×884×1,133
Shipping Weight (kg)		43	59	79	92
Power Consumption		502 W	674 W	1390 W	1566 W
Energy Consumption, at 100°C , at 150°C		90 Wh	117 Wh	187 Wh	204 Wh
		181 Wh	230 Wh	337 Wh	398 Wh
Electric Reqts.		120V, 60Hz or 230V, 50/60Hz			

\* Other Specifications are available upon Customer's Request.



3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism (Gravity-air Mechanism)



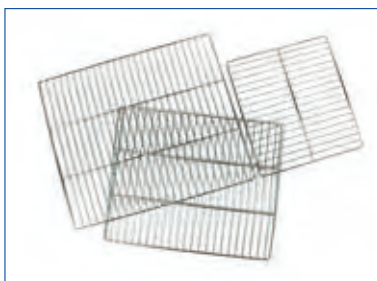
Perfect Door Lock by Double Latch

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<Continued From...DAIHAN® Gravity-air Drying Oven "ThermoStable™ ON">



(2) Window Model, Gravity-air Oven



Stainless-steel Wire Shelf  
(Included)



#### WiseRemote Control Software :

Connection of Temperature Devices  
with Interface RS232C to a PC

\* You can Download this Software at  
DAIHAN-Sci.com Shopping-mall

#### Ordering Information

##### (1) Standard Model, Gravity-air, with Wire Shelf

DH.WON05032	Oven, Standard, 230V, 32 Lit, "ThermoStable ON-32"
DH.WON05050	, 50 Lit, "ThermoStable ON-50"
DH.WON05105	, 105 Lit, "ThermoStable ON-105"
DH.WON05155	, 155 Lit, "ThermoStable ON-155"
DH.WON06032	Oven, Standard, 120V, 32 Lit, "ThermoStable ON-32"
DH.WON06050	, 50 Lit, "ThermoStable ON-50"
DH.WON06105	, 105 Lit, "ThermoStable ON-105"
DH.WON06155	, 155 Lit, "ThermoStable ON-155"

##### (2) Built in Viewing Window Model, Gravity-air, with Wire Shelf

DH.WON07105	Oven, Window, 230V, 105 Lit, "ThermoStable ON-W105"
DH.WON07155	, 155 Lit, "ThermoStable ON-W155"
DH.WON08105	Oven, Window, 120V, 105 Lit, "ThermoStable ON-W105"
DH.WON08155	, 155 Lit, "ThermoStable ON-W155"

#### Spare Stainless-steel Wire Shelf

DH.WON11032	Wire Shelf, for 32 Lit., "ONS032", w280 × d280mm
DH.WON11050	, for 50 Lit., "ONS050", w340 × d310mm
DH.WON11105	, for 105 Lit., "ONS105", w455 × d375mm
DH.WON11155	, for 155 Lit., "ONS155", w520 × d440mm

#### Gravity-air Oven with Validation (IQ, OQ) Service

DH.WON31032	Validation Service(IQ, OQ), with "ON-32", "ONV1032"
DH.WON31050	, with "ON-50", "ONV1050"
DH.WON31105	, with "ON-105", "ONV1105"
DH.WON31155	, with "ON-155", "ONV1155"
DH.WON32105	Validation Service(IQ, OQ), with "ON-W105", "ONV2105"
DH.WON32155	, with "ON-W155", "ONV2155"

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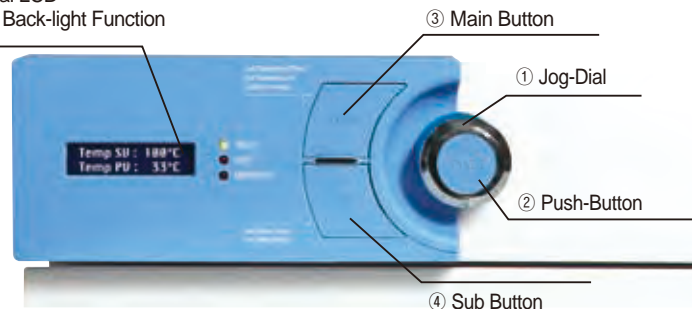
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## » New Jog-Dial Controller

⑤ Digital LCD  
with Back-light Function



- Provides the user interface with an ergonomic design for users to operate in an easy and convenient way.
- A new 2-way Jog-Dial Knob (Jog Dial + Push Button) and presents excellent durability and mobility.
- High-quality LCD with Back-light function.
- A durable Main Button and a Sub Button that features superb and user-friendly operation.

DAIHAN® SMART Gravity-air Drying Oven “ThermoStable™ SON”, 3-Side Heating Zone, 32 · 50 · 105 · 155 Lit  
 With Smart-Lab™ Controller, 4” Full Touch Screen, Fuzzy-PID Control, WiRe™ Service, with Certi. & Traceability, up to 230°C, ±0.5°C  
 스마트 자연 대류식 정밀 건조기/오븐, 우수한 온도 정확성/균일성, WiRe™서비스, 4인치 풀터치스크린 조절기



2-Year Warranty

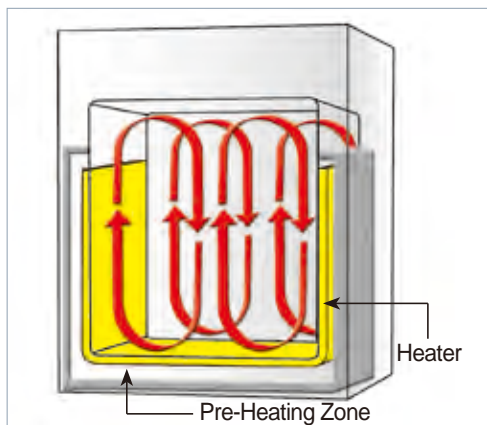
(1) SMART Model, “ThermoStable™ SON-105”

- Made in Korea    ■ UL, CUL, and CE Certified    ■ GD(Good Design)-mark
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- 3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Optimized Air Flow by Gravity-air Mechanism    ■ PL (Product Liability) Insurance
- Smart-Lab™ Controller WiRe™ App Service
  - Automatic Data Recording
  - Ergonomic Design 4” Full Touch Screen TFT LCD
  - Self-Diagnostic Function
  - Self-Diagnostic Function
  - Variable Program Setting for Multiple Patterns with Multiple Segments
  - The Recorded Data could be transferred to PC by USB memory
  - Controller SW can be upgraded through USB port.
  - RS232C Interface for Monitoring and Controlling with PC
- \* Ambient to 230°C of Temp. Range, Fluctuation of ±0.5°C at 100°C
- \* Suitable for Drying, Baking, Conditioning, Curing, Pre-Heating and Aging
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)

Specification

Spec.	Model	(1) SMART Model			
		SON-32 Max. Capa. 32L	SON-50 Max. Capa. 50L	SON-105 Max. Capa. 105L	SON-155 Max. Capa. 155L
Capacity		32 Lit	50 Lit	105 Lit	155 Lit
Dimension (w × d × h)	Interior (mm)	310×290×360	370×350×420	485×409×535	550×474×600
	Exterior (mm)	458×557×664	518×647×724	653×712×882	718×777×947
Heater Power		500 W	650 W	1.4 kW	1.6 kW
Temp.	Range	Room Temp 5°C to 230°C			
	Fluctuation	± 0.5°C at 100°C, ± 0.6°C at 150°C			± 0.5°C at 100°C, ± 0.8°C at 150°C
	Variation	± 1.2°C at 100°C, ± 2.2°C at 150°C			
	Sensor	PT 100			
Control Resolution		±1°C			
Heat-up Time		30 min. to 100°C, 43 min. to 150°C	30 min. to 100°C, 45 min. to 150°C	35 min. to 100°C, 50 min. to 150°C	
Recovery Time (Door open 30sec)		8 min. to 100°C, 10 min. to 150°C		10 min. to 100°C, 12 min. to 150°C	
Controller		Smart-Lab™ Controller			
RS232 Port		Available to connect with PC			
Display		4” Full Touch Screen TFT LCD			
Timer		99hr 59 min (delay/continuous function)			
Storage		Temperature and Timer setting values			
Material	Internal	Stainless-steel (#304), Corrosion Resistant			
	External	Powder Coated steel			
	Insulation	Glass Wool			
Shelf (included)		2 Stainless-steel Wire Shelf, Load per Shelf : 16 kg			
Ventilation		Ventilation hole with Stainless-steel Cap, Hole Diameter 40mm			
		1ea		2ea	
Circulation		Gravity-air Type			
Safety device		Over Temp. and Over Current Protector, Sensor Error Detector			
Alarm		Error Status and Timer-end			
Net Weight (kg)		36	44	69	78
Packing Size (w × d × h) (mm)		562×664×747	622×754×807	743×819×1,068	808×884×1,133
Shipping Weight (kg)		43	59	79	92
Power Consumption		502 W	674 W	1390 W	1566 W
Energy Consumption, at 100°C , at 150°C		90 Wh	117 Wh	187 Wh	204 Wh
		181 Wh	230 Wh	337 Wh	398 Wh
Electric Reqt.s.		120V, 60Hz or 230V, 50/60Hz			

\* Other Specifications are available upon Customer's Request.



3-Side Heating Zone : The Best Temp. Uniformity & Accuracy by High Performance Heating Mechanism (Gravity-air Mechanism)



Perfect Door Lock by Double Latch

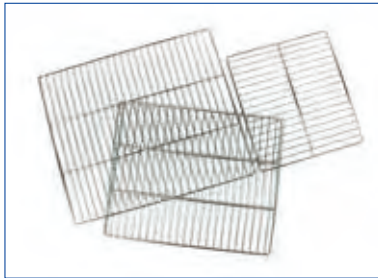
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(2) SMART-Window Model, Gravity-air Oven



Stainless-steel Wire Shelf  
(Included)

Ordering Information

(1) Smart Model, Gravity-air, with Wire Shelf

DH.SWON05032	Oven, Standard, 230V, 32 Lit, "ThermoStable SON-32"
DH.SWON05050	, 50 Lit, "ThermoStable SON-50"
DH.SWON05105	, 105 Lit, "ThermoStable SON-105"
DH.SWON05155	, 155 Lit, "ThermoStable SON-155"
DH.SWON06032	Oven, Standard, 120V, 32 Lit, "ThermoStable SON-32"
DH.SWON06050	, 50 Lit, "ThermoStable SON-50"
DH.SWON06105	, 105 Lit, "ThermoStable SON-105"
DH.SWON06155	, 155 Lit, "ThermoStable SON-155"

(2) Built in Viewing Window Model, Gravity-air, with Wire Shelf

DH.SWON07105	Oven, Window, 230V, 105 Lit, "ThermoStable SON-W105"
DH.SWON07155	, 155 Lit, "ThermoStable SON-W155"
DH.SWON08105	Oven, Window, 120V, 105 Lit, "ThermoStable SON-W105"
DH.SWON08155	, 155 Lit, "ThermoStable SON-W155"

Spare Stainless-steel Wire Shelf

DH.WON11032	Wire Shelf, for 32 Lit, "ONS032", w280×d280mm
DH.WON11050	, for 50 Lit, "ONS050", w340×d310mm
DH.WON11105	, for 105 Lit, "ONS105", w455×d375mm
DH.WON11155	, for 155 Lit, "ONS155", w520×d440mm

Gravity-air Oven with Validation (IQ, OQ) Service

DH.SWON31032	Validation Service(IQ, OQ), with "SON-32". "SONV1032"
DH.SWON31050	, with "SON-50", "SONV1050"
DH.SWON31105	, with "SON-105", "SONV1105"
DH.SWON31155	, with "SON-155", "SONV1155"
DH.SWON32105	Validation Service(IQ, OQ), with "SON-W105", "SONV2105"
DH.SWON32155	, with "SON-W155", "SONV2155"

※ 운임 착불 <L1>

Ea. Price, ₩

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» WiRe™ App Service



4" Full Touch Screen TFT LCD  
(Smart-Lab™ Controller)

← It is possible to monitor and control the Smart-Lab™ equipment through all smart phone, tablet without restraint of time and place.



WiRe™ App Service

Controlled by Mobile-Phone

“ThermoStable™ WOC” High Clean Air Drying Oven, with Class 100 HEPA Filter, 560 · 800 Lit, with Certi. & Traceability  
 With Chrome Coated Steel Wire Shelves, Digital Fuzzy Control System, Clean Air Convection Mechanism, up to 250°C, ±1.0°C  
 청정 고온 건조기/오븐, 고정밀 디지털 퍼지 제어, 우수한 청정도



2-Year Warranty

High Clean Air Oven, with HEPA Filter  
 “ThermoStable™ WOC-560”

- Made in Korea ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Specially Designed Clean Air Convection Mechanism Provides Dynamic Air Flow for Exhaust of Contaminated Air from the Chamber and Supply of Filtered Clean Air into the Chamber
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy.
- Patented Jog-Shuttle Control System
- \* Suitable for Critical Clean Application such as Electronics, Semiconductor, Pharmaceutical and Clinical Applications-Class 100 HEPA Filter is used.
- \* Specially Designed Clean Air Convection Mechanism Provides Dynamic Air Flow for Exhaust of Contaminated Air from the Chamber and Supply of Filtered Clean Air into the Chamber
- \* Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- \* User's Self-Compensation Function to Control Difference between Real Temp. and Indicated Temp. (±20.0°C)
- \* Storage Function : Set Values of Temperature and Timer
- \* Locking Mode Supported for Experimental Safety(Input to Jog-Shuttle can be Disabled)
- \* Over Temperature & Over Current Protection, Sensor Error Detection

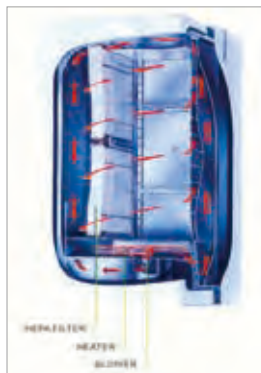
Specifications & Ordering information

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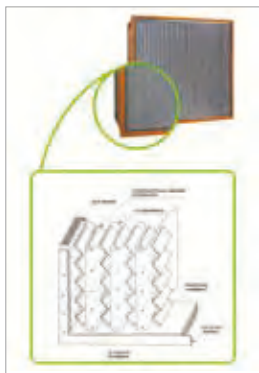
Spec.	Model	“WOC-560” Max. Capa. 560L	“WOC-800” Max. Capa. 800L
Capacity		560 Lit	800 Lit
Air Flow-type		High Clean Air Convection Mechanism	
Filter for Clean Air		HEPA Filter Class 100 for High Temperature	
Temp.	Range & Sensor	60°C~250°C, PT100 Sensor	
	Accuracy & Uniformity	±1.0°C, ±2.0°C at 200°C	
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back Light	
Controller		Digital Fuzzy Controller with Jog-Shuttle Switch(Turn+Push)	
Verification		Timer Operated Verification System	
Resolution		Control : ±1.0°C, Display : ±1.0°C	
Shelf		3ea of Perforated Shelf of Adjustable Position	
Load per Rack		16 kg, Total : 48 kg (16kg × 3 Shelf)	
Safety Circuit		Over Temp. and Over Current Protector, Sensor Error Detector	
Material		Internal : Stainless-steel (# 304), External : Powder Coated steel, Insulation : Glass Wool	
Others		Storage Function, Locking Mode	
Dimension (w × d × h)	Interior (mm)	800 × 700 × 1,000	1,000 × 800 × 1,000
	Exterior (mm)	1,000 × 1,155 × 1,735	1,500 × 1,200 × 1,900
Packing Size (w × d × h) (mm) & Gross Weight		1,200 × 1,400 × h2,120mm, 386 kg	1,700 × 1,400 × h2,270mm, 446 kg
Power Consumption		6.5 kW	9.4 kW
Electric Reqts.		3 Phase 230V or 380V, 50/60Hz	
Cat. No.	230V 3 Phase	DH.WOC00560	DH.WOC00800
	380V 3 Phase	DH.WOC03560	DH.WOC03800
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불



High Efficiency and High Clean Air Convection Mechanism



High Temp. HEPA Filter



(1) Perforated Shelf, Stainless-steel (Included)

Spare Perforated Shelf, Stainless-steel

DH.WOC10560 (1) Perforated Shelf, “OCS560”, w780 × d680, for “WOC-560”  
 DH.WOC10800 , “OCS800”, w980 × d880, for “WOC-800”

Ea. Price, ₩

Optional N<sub>2</sub> Gas Inlet Device

DH.WOCN2GIN N<sub>2</sub> Gas Inlet Device, “WOC-N2GIN”

Ea. Price, ₩

High Clean Air Oven with Validation (IQ, OQ) Service

DH.WOC30560 Validation Service(IQ, OQ), with “WOC-560”, “OCV560”  
 DH.WOC30800 , with “WOC-800”, “OCV800”

Ea. Price, ₩

**“ThermoStable™ WOF” Industrial Forced-air Drying Oven, 486 · 840 · 1176 Lit, with Certi. & Traceability**  
 With Stainless-steel Perforated Shelves, Digital PID Control System, Superior Temp. Accuracy, up to 250°C, ±1.0°C  
 대용량 산업용 열풍 순환식 건조기 / 오븐, 우수한 온도 정확성



2-Year Warranty

Industrial Forced-air Oven “ThermoStable™ WOF-L1000”  
 with Stainless-steel Perforated Shelf



(1) Perforated Shelf, Stainless-steel  
 (Included)

- Made in Korea ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Heavy Forced Air-Circulation by Strong and Reliable Fan System : ideal for Semiconductor and Electronic Parts Baking Purpose
- \* Heavy Forced Air-Circulation by Strong and Reliable Fan System : Ideal for Semiconductor and Electronic Parts Baking Purpose
- \* Voltage and Ampere Meter Equipped for Monitoring Safe Operation of the Machine
- \* Digital PID Control System Enables Superior Temperature Accuracy
- \* Digital Timer Function with Buzzer Alarm : up to 99 hrs 59 min
- \* Locker is Available for Operational Safety Control by an Administrator
- \* Over Temperature & Over Current Protection, Sensor Error Detection and Leakage Breaking
- \* Multi-Channel Temperature Sensors with Digital Display for Monitoring Temperature Uniformity in the Chamber is available(Optional)
- \* Default Damper to Enhance Thermal Efficiency \* Automatic Gas Exhaust Available (Optional)

### Specifications & Ordering information

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Spec.	Model	“WOF-L400” Max. Capa. 486L	“WOF-L800” Max. Capa. 840L	“WOF-L1000” Max. Capa. 1,176L
Capacity		486 Lit	840 Lit	1,176 Lit
Air Flow-type		Forced-air Type		
Air Circulation Fan Motor		1/3HP	1/3 HP × 2 ea	1/3HP × 3 ea
Temp.	Range	Room Temp. 5°C to 250°C		
	Accuracy	±1.0°C at 150°C		
	Uniformity	±2.0°C at 150°C		
	Sensor	PT100		
Heating Power/Consumption		3 kW	5 kW	7 kW
Timer & Alarm		99hr 59min (with Continuous run.), Timer-end Alarm		
Display		2 lines LED for Temperature and Timer		
Controller		Digital PID Control		
Resolution		Control : ±1.0°C, Display : ±1.0°C		
Door		Powder coated Steel Door with Silicone Packing		
		1 Door	2 Doors	
Shelf		Included Stainless-steel Perforated Shelf		
		3 ea	4 ea	6 ea
Load per Rack		16 kg		
Permitted Total Load		48 kg (16kg×3 Shelf)		96 kg (16kg×6 Shelf)
Material		Internal : Stainless-steel ( # 304), External : Powder Coated steel, Insulation : Ceramic and Glass Wool Board		
Dimension (w×d×h)	Interior (mm)	900×600×900	1,250×700×960	1,400×700×1,200
	Exterior (mm)	1,200×750×1,700	1,500×840×1,800	1,650×840×2,150
Net Weight		316 kg	408 kg	478 kg
Others		Over Temp. and Over Current Protector, Sensor Error Detector, Leakage Breaker Locking Mode by Mechanical Locker		
Packing Size (w×d×h) (mm) & Gross Weight		1,400×1,220×1,960	1,700×1,310×2,060	1,850×1,310×2,410
		376 kg	488 kg	568 kg
Power Consumption		3.6 kW	6.2 kW	8.8 kW
Electric Reqs.	230V	1Phase AC 230V, 50/60Hz		
	3 Phase	-	3Phase AC 380V, 50/60Hz	
Cat. No.	230V	DH.WOFL0400	DH.WOFL0800	-
	3 Phase	-	DH.WOFL0802	DH.WOFL1002
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

### Spare Perforated Shelf, Stainless-steel

DH.WOF10400 (1) Perforated Shelf, “OFLS400”, w880×d580mm, for “WOF-400”  
 DH.WOF10800 , “OFLS800”, w1230×d680mm, for “WOF-800”  
 DH.WOF11000 , “OFLS1000”, w660×d680mm, for “WOF-1000”

Ea. Price, ₩

### Industrial Forced Convection Oven with Validation (IQ, OQ) Service

DH.WOF30400 Validation Service(IQ, OQ), with “WOF-L400”, “OFLV400”  
 DH.WOF30800 , with “WOF-L800”, “OFLV800”  
 DH.WOF31000 , with “WOF-L1000”, “OFLV1000”, 3Phase

Ea. Price, ₩

DAIHAN® Gas Exchangeable Precise Vacuum Drying Oven “ThermoStable™ OV”, 20·30·70 Lit, 10~750 mmHg, 200°C With Highly Safety View Window, 2 Al-Shelf, Digital PID Control, Superior Temp. & Vacuum Accuracy, Excellent Thermal Conductivity  
 가스 교환 정밀 진공 건조기/오븐, 고정밀 디지털 PID 제어, 알루미늄 선반 포함



- Made in Korea ■ UL, CUL, and CE Certified ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Suitable for Drying, Baking, Conditioning, Curing, Out-Gassing Solids and Liquids, Vacuum Embedding, Moisture Testing, Plating and Aging Test
- Patented Jog-Dial Control System and Back-Light LCD
- Gas Exchangeable, High Heat Conduction and New Jog-Dial Controller & Precise Gauge
- WiseRemote Control Software ; Download at DAIHAN-Sci.com.

- \* Very Easy and Convenient for Vacuuming and Venting, Easy to read Vacuum Gauge
- \* Highly Safety Viewing Window (Tempered Safety Glass + Polycarbonate Window)
- \* Heavy-duty Safety Front Door for User Safety
- \* High Quality Door Sealing : High Temperature Grade Silicone Molded Gasket
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be disabled)
- \* Compact New Body Design

Specifications & Ordering information

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Spec.	Model	ThermoStable™ OV-20 Max. Capa. 20 Lit	ThermoStable™ OV-30 Max. Capa. 30 Lit	ThermoStable™ OV-70 Max. Capa. 70 Lit
		20 Lit	30 Lit	70 Lit
Capacity		20 Lit	30 Lit	70 Lit
Vacuum Range & Level & Rate		10 ~ 750 mmHg, 0.63mbar, 0.39mbar/hr		
Temp.	Range / Sensor	R/T 10°C to 200°C, PT100		
	Accuracy	± 0.5°C at 100°C & 150°C		
	Uniformity	± 2.0°C at 100°C, ± 3.0°C at 150°C		± 2.5°C at 100°C, ± 3.5°C at 150°C
Heating Power/Consumption		170W×2ea 130W×2ea	350W×2ea 450W×2ea	
Heat-up Time		60 min. to 100°C, 90 min. to 150°C	70 min. to 100°C, 100 min. to 150°C	80 min. to 100°C, 100 min. to 150°C
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end		
Display		Digital LCD with Back Light		
Controller		Digital PID Controller with Jog-Dial Switch (Turn & Push)		
Resolution		Control : ± 1.0°C, Display : ± 1.0°C		
Shelf (Included)		2 Aluminum Shelf		
Safety Circuit		Over Temp. & Over Current Protector, Sensor Error Detector, Leakage Breaker		
Material		Internal : Stainless-steel (# 304), External : Powder Coated steel, Window : Tempered Safety Glass 12T, Poly Carbonate 5T for Safety		
Others		Storage Function (Temp and Timer), Locking Mode (Jog-Dial Input Disabled)		
Dimension (w×d×h)	Interior (mm)	265×290×265	300×330×300	400×435×400
	Exterior (mm)	480×475×547	515×515×582	618×620×682
Vacuum & Gas Inlet Valve Size		od. 10 mm		
Net Weight		48 kg	55 kg	85 kg
Packing Size (w×d×h) (mm) & Gross Weight		600×580×850	640×640×900	740×720×1000
		57 kg	80 kg	112 kg
Power Consumption		600 W	600 W	1.6 kW
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	230V	DH.WOV03020	DH.WOV03030	DH.WOV03070
	120V	DH.WOV04020	DH.WOV04030	DH.WOV04070
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Spare Aluminum Shelf

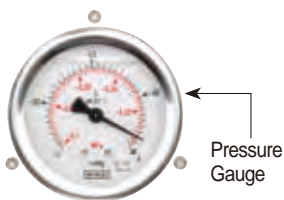
- DH.WOV12020 (1) Standard Shelf, Al., “OVSN020”, 260×245×h3mm, for 20 Lit
- DH.WOV12030 , “OVSN030”, 290×285×h3mm, for 30 Lit
- DH.WOV12070 , “OVSN070”, 390×390×h3mm, for 70 Lit

Ea.	Price, ₩

※ Note! Optional Vacuum Pump : See the “Pumps” Section.



WiseRemote Control Software :  
 Connection of Temperature Devices with Interface RS232C to a PC  
 \* You can Download this Software at DAIHAN-Sci.com Shopping-mall



(1) Standard Shelf, Al.(Included)

DAIHAN® Gas Exchangeable SMART Vacuum Drying Oven "ThermoStable™ SOV", 20 · 30 · 70 Lit, 10~750mmHg, 200°C With Smart-Lab™ Controller, 4" Full Touch Screen, Highly Safety View Window, 2 Al-Shelf, Digital PID Control, Superior Temp. & Vacuum Accuracy Excellent Thermal Conductivity, 가스 치환 스마트 진공 건조기/오븐, 고정밀 디지털 PID 제어, 알루미늄 선반 포함



- Made in Korea ■ UL, CUL, and CE Certified ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Suitable for Drying, Baking, Conditioning, Curing, Out-Gassing Solids and Liquids, Vacuum Embedding, Moisture Testing, Plating and Aging Test
- Gas Exchangeable, High Heat Conduction and Precise Gauge
- Smart-Lab™ Controller
  - WiRe™ App Service. - Automatic Data Recording
  - Self-Diagnostic Function - Internet Connectivity with WiFi
  - Variable Program Setting for Multiple Patterns with Multiple Segments
  - The Recorded Data Could be transferred to PC by USB memory
  - Controller SW can be upgraded through USB port.

- \* Very Easy and Convenient for Vacuuming and Venting, Easy to read Vacuum Gauge
- \* Highly Safety Viewing Window (Tempered Safety Glass+ Polycarbonate Window)
- \* Heavy-duty Safety Front Door for User Safety \* Compact New Body Design
- \* High Quality Door Sealing : High Temperature Grade Silicone Molded Gasket
- \* Over Temperature & Over Current Protection and Sensor Error Detection

### Specifications & Ordering information

&lt;L1&gt;

Spec.	Model	ThermoStable™ SOV-20	ThermoStable™ SOV-30	ThermoStable™ SOV-70
		Max. Capa. 20 Lit	Max. Capa. 30 Lit	Max. Capa. 70 Lit
Capacity		20 Lit	30 Lit	70 Lit
Vacuum Range & Level & Rate		10 ~ 750 mmHg, 0.63mbar, 0.39mbar/hr		
Temp.	Range / Sensor	R/T +10 °C to 200 °C, PT100		
	Accuracy	± 0.5 °C at 100 °C & 150 °C		
	Uniformity	± 2.0 °C at 100 °C, ± 3.0 °C at 150 °C	± 2.5 °C at 100 °C, ± 3.5 °C at 150 °C	
Heating Power/Consumption		170W×2ea 130W×2ea	350W×2ea 450W×2ea	
Heat-up Time		60 min. to 100 °C, 90 min. to 150 °C	70 min. to 100 °C, 100 min. to 150 °C	80 min. to 100 °C, 100 min. to 150 °C
Timer & Alarm		99hr 59min (with delay / Continuous run.), Error status & Timer-end		
Display		4" Full Touch Screen TFT LCD		
Controller		Smart-Lab™ Controller		
Resolution		Control : ± 1.0 °C, Display : ± 1.0 °C		
Shelf (Included)		2 Aluminum Shelf		
Safety Circuit		Over Temp. & Over Current Protector, Sensor Error Detector, Leakage Breaker		
Material		Internal : Stainless-steel (# 304), External : Powder Coated steel, Window : Tempered Safety Glass 12T, Poly Carbonate 5T for Safety		
Others		Program Function, WiRe™ App & Web Service.		
Dimension (w×d×h)	Interior (mm)	265×290×265	300×330×300	400×435×400
	Exterior (mm)	480×475×547	515×515×582	618×620×682
Vacuum & Gas Inlet Valve Size		od. 10 mm		
Net Weight		48 kg	55 kg	85 kg
Packing Size (w×d×h) (mm) & Gross Weight		600×580×850	640×640×900	740×720×1000
		57 kg	80 kg	112 kg
Power Consumption		600 W	600 W	1.6 kW
Electric Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz		
Cat. No.	230V	DH.SWOV03020	DH.SWOV03030	DH.SWOV03070
	120V	DH.SWOV04020	DH.SWOV04030	DH.SWOV04070
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

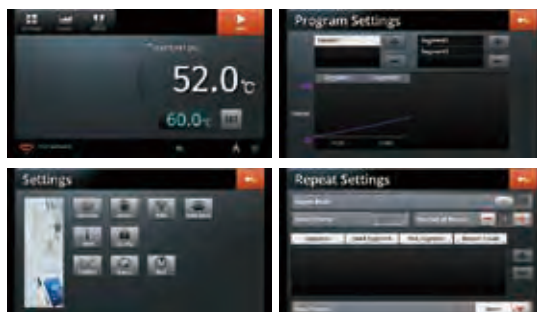
※ 운임 착불

### Spare Aluminum Shelf

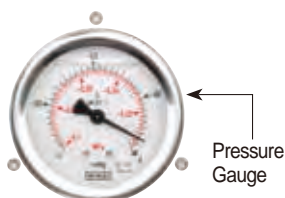
DH.WOV12020 (1) Standard Shelf, Alu., "OVSN020", 260×245×h3mm, for 20 Lit  
 DH.WOV12030 "OVSN030", 290×285×h3mm, for 30 Lit  
 DH.WOV12070 "OVSN070", 390×390×h3mm, for 70 Lit

Ea. Price, ₩

※ Note! Optional Vacuum Pump : See the "Pumps" Section.



Display of Smart-Lab™ Controller



Pressure Gauge



(1) Standard Shelf, Al.(Included)



**DAIHAN® 105mbar Oil Free Vacuum Pump "PU-300", with Fine Vacuum Regulator and Moisture Trap, 20Lit/min**  
With Prote™ Overflow Protection, Built-in Thermal Protection, Protection Class IP30, 진공 펌프



1-Year Warranty



105mbar Oil Free Vacuum Pump  
"PU-300"

■ CE, CSA, and RoHS Certified

■ Used for General Filtration, Microbiological Test, Suspended Solid Test, Solid-Phase Extraction, Microplate Vacuum Manifold, Air Sampling, etc.

\* Driven by Piston without Lubricant, Regular Oil Change and Maintenance ; No Oil Pollution

\* Prote™ Overflow Protection is Installed to Prevent a Large Amount of Liquid from being Sucked into the Pump.

\* Equipped with Filter Cartridge in Air Inlet to Filter Particle and Moisture to Prolong the Life of Pump.

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Spec.	Model	"PU-300"	
Speed of Evacuation		20 Lit/min	23 Lit/min
Max. Vacuum		105 mbar, 78.8 torr	
Motor Power & Max. Current		60 W, 0.3A	65 W, 0.7A
Motor Rotation & Noise Level		1450 rpm, 50 dB	1750 rpm, 50 dB
Hose Barb		8mm	
Size & Weight		268 × 135 × h204mm, 4.1kg	
Electric Rqts.		220V, 50Hz	110V, 60Hz
Cat. No.		DH.Pu0300	DH.Pu0301
Price, Each. ₩			

**DAIHAN® 10mbar Anticorrosive Vacuum Diaphragm Pump "PU-20", with Fine Regulator and Moisture Trap, 18Lit/min**  
With Built-in Thermal Protection, Quiet and Low Vibration, 내부식성 저소음/저진동 진공 다이어프램 펌프

1-Year Warranty



10mbar Anticorrosive Vacuum  
Diaphragm Pump "PU-20"

■ Used for Solvent purification, Gel dryer, Rotary Evaporator, Vacuum Filtration, etc.

■ Resistance to Chemicals ; the Parts in Contact with the Gas are PTFE Coated.

\* Driven by Diaphragm without Lubricant, Regular Oil Change and Maintenance ; No Oil Pollution

\* Quiet and Low Vibration \* Built-in Thermal Protection

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Spec.	Model	"PU-20"	
Speed of Evacuation		18 Lit/min	
Max. Vacuum		10 mbar, 7.5 torr	
Motor Power & Max. Current		90 W, 0.5A	
Motor Rotation & Noise Level		1450 rpm, 52dB	
Hose Barb		8mm	
Size & Weight		262 × 236 × h193mm, 7.4kg	
Electric Rqts.		220V, 50Hz	
Cat. No.		DH.Pu8020	
Price, Each. ₩			

**DAIHAN® 15mbar Anticorrosive Vacuum/Pressure Diaphragm Pump "PU-30", 25psi, 30Lit/min**  
Ideal for Multi-purpose, Oil-free, Double Heads, 내부식성 진공/압력 다이어프램 펌프, 더블헤드

1-Year Warranty



15mbar Vacuum/Pressure  
Diaphragm Pump "PU-30"

■ Used for Centrifugal Concentration, Evaporating System, Reduced Pressure Distillation, Solid Phase Extraction, Vacuum Concentration, Vacuum Filtration & Drying System, etc.

■ Resistance to Chemicals ; the Parts in Contact with the Gas are PTFE Coated.

\* Tolerance to almost all Strong Acid, Alkali, Oxidizer, Reductant and Organic Solvents

\* No Air Pollution due to the Gas Exchange Room with Filtering Material

\* Automatic Cooling Exhaust System ensures Continuous Operation 24hrs a day.

\* Automatic Power off to Protect Motor when the Pump Body Temp Reached at 130℃.

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Spec.	Model	"PU-30"	
Speed of Evacuation		30 Lit/min	
Max. Vacuum & Max. Pressure		15 mbar, 11.3 torr & 25 Psi.	
Motor Power		160 W	
Noise Level & Temp of the body		< 60 dB & < 55℃	
Pump Head		2	
Inlet & Outlet (mm)		id. φ6 & 6 mm, od. φ8 & 8 mm	
Diaphragm & Valves		PTFE	
Size & Weight		370 × 144 × h275mm, 13.5kg	
Electric Rqts.		220V, 50Hz	
Cat. No.		DH.Pu8030	
Price, Each. ₩			

Your Friend in Reaction System- - -

## Convenient LaboRactor™ 0.1 ~ 100Lit

# All for Glass Reactor System for Lab & Pilot Plant

AutoLifting- / Classic- / H.Mantle-Models in Vacuum-Line,  $-80^{\circ}\text{C}$   $+260^{\circ}\text{C}$   
with Glass Vessel / Lid or PTFE Lid,  $45^{\circ}$  DN Flange, Safety Connection, and Assembly Frame

Ideal for ▶ Experiment, ▶ Pilot- & Mass-Production



5~100 Lit. AutoLifting-Model I  
Manual Tilt, Double-Wall Vessel  
High Performance  
Ideal for Cleaning



5~100 Lit. Classic-Model II  
Double-Wall Vessel  
Good for Economic  
Operation



0.5~20 Lit. Suspended-Model III  
Double-Wall Vessel  
Good for Economic  
Operation



2~50 Lit. H.Mantle-Model IV  
Single-Wall Vessel  
Good for Simply  
Economic Operation



High-Torque Digital  
Overhead Stirrer



PTFE Lids &  
Clamping Sys.



Flasks, Round-type



Vessel, Double Wall



PTFE Stirring Impeller  
and

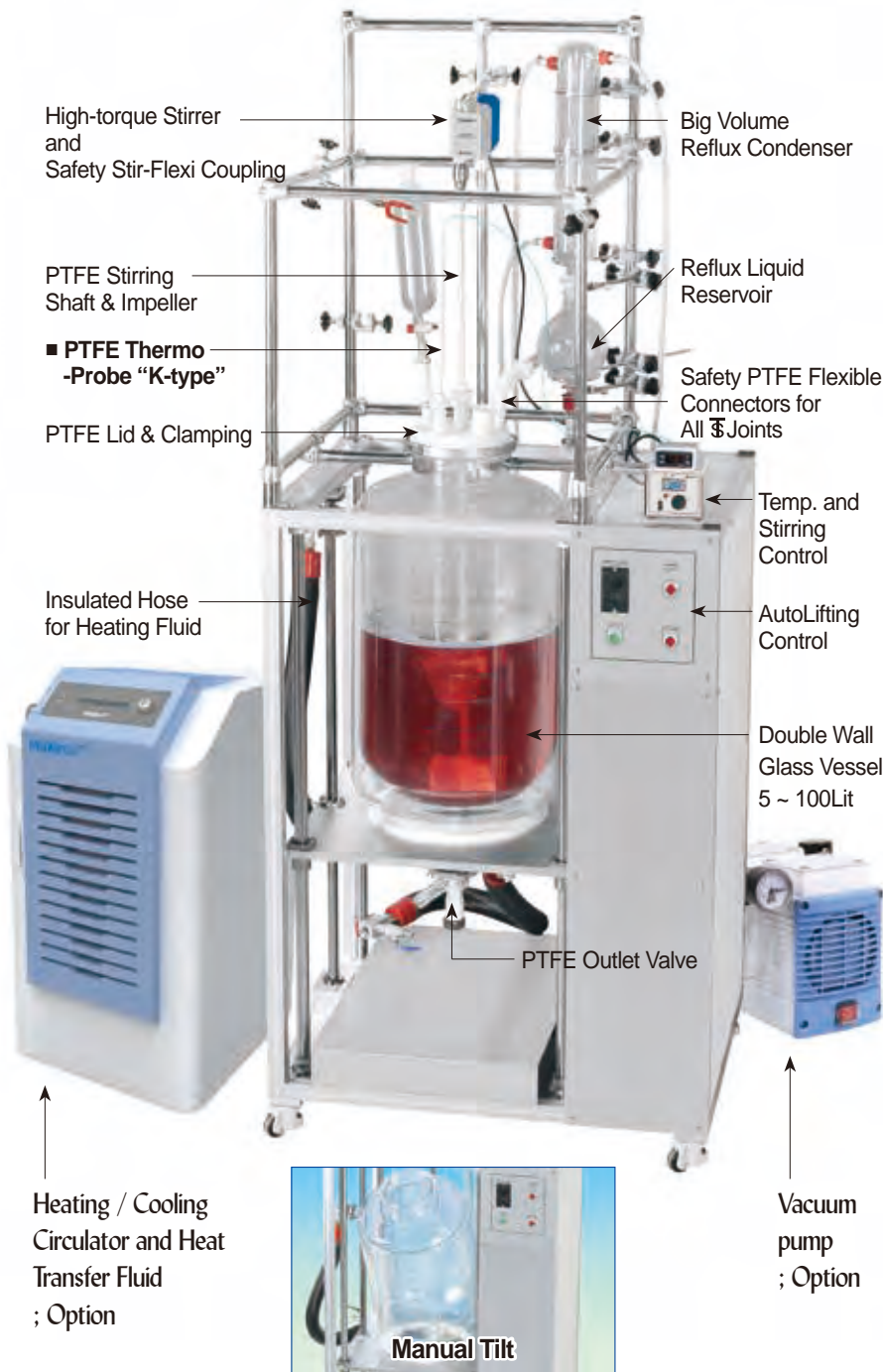


General  
Multi-Neck Flasks



LaboRactor™ 0.1~100Lit All for Reaction System, for Lab & Pilot Plant, with Glass Vessel,  $-80^{\circ}\text{C}$   $+260^{\circ}\text{C}$   
 Ideal for Chemistry · Pharmacy · Biomedical · Synthesis in Laboratory & Production Scales in Vacuum Line  
 For Reaction, Mixing, Dispersion & Homogenization, 0.5~1.5bar, 연구 및 제품 생산용 진공반응장치

## New Innovation AutoLifting & Tilt-System



### Applications

■ *Ideal for the Experiment, Pilot Production, and Production in Chemistry, Fine Chemical Engineering, Pharmacy, Synthesis, and Biomedical Engineering.*

■ *Dispersion, Distillation, Evaporation, Homogenization & Mixing Processes at Laboratory & Production-Scales.*

### Features

■ *Can be Used Direct Contact Thermo-Probe "K-type"*

■ **Modular System:**

You can choose Glass Vessel & Lid or PTFE-Lid, Stirrers, Vacuum Pump & Controller, Heating Mantle, Chiller / Cooler or Heating Circulator.

■ **Wide-Range Vessels and Convenience:**

- \* 0.1~100Lit Vacuum-Purpose Vessels or General Multi-Neck Flasks.
- \* Single or Double Walled Glass Vessels.
- \* With or Without Out-Let Valve at Vessel Bottom.

■ **"45° DN 60~ DN 200" Standardized Flat-Flange System :** with a Comprehensive Range of Accessories and Replacement Parts.

■ **Convenient O-Ring GROOVE in the Vessel's Flange:**

Ideal for Vacuum or Pressure Applications, and Safe Mounting of the Vessel with the Associated Lid.

■ **All PTFE Safety Lid with Screw Joint or Glass Lid Available : You can choose**

■ **Safety Flexible PTFE Connection for All Joint Parts.**

■ **Fully Digital Feedback Microprocessor Controlled Agitator(Stirrer) :**

LCD Display, Power Bar Graph & Status, Over-Load /-Heat Protection Function.

■ **With Safety Flexible Coupling between Stirring-Motor & Shaft.**

■ **Easy Installation ; Assembly Frame & Component Parts.**

- \* Good for Heavier-Work.
- \* Modular Components-Spare or Option Parts.
- \* Bench- or Floor-Type Assembly Frames.
- \* Adjustable Height Length and Removable Frame.
- \* Suppling the Component Parts.

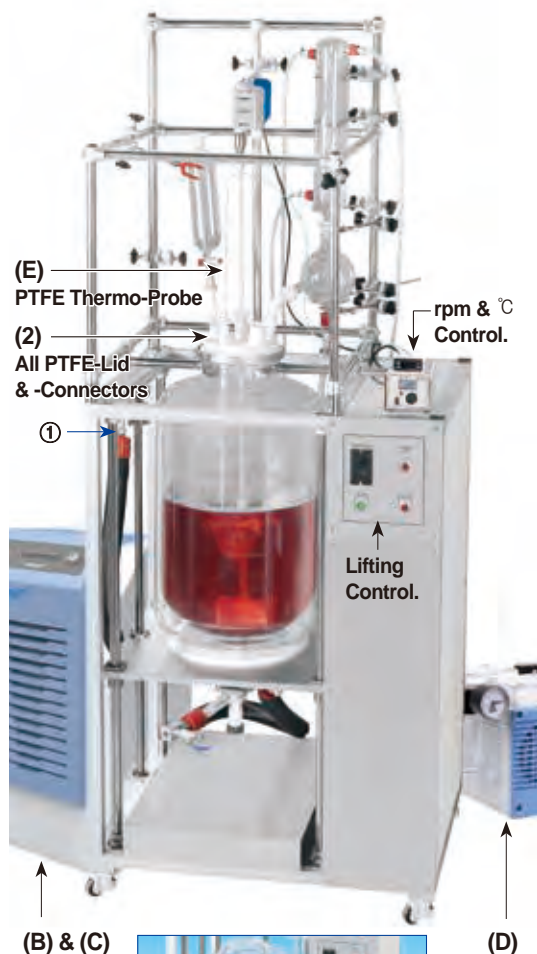
## AutoLifting and Manual Tilting Reactor System "Model-I"

LaboRactor™ 5~100 Lit AutoLifting Vacuum Reactor Set, with Jacketed Glass Vessel · Agitator · Frame · Glass Assembly With DN O-ring Flange · PTFE Impeller · PTFE Drainvalve, Digital Agitation & Lifting System, 자동리프팅/자켓 글라스 진공 반응조 세트

▶ Advantage of Lifting System

- Safety Cleaning the Vessel
- Easy Feeding of Large Volume Raw Materials
- Ideal for Maintenance

■ Made in Korea



(A) AutoLifting & Manual Tilt Reactor Set, -80°C+260°C



(1) Glass Lid With 5 Joints



(2) All PTFE Lid With 6 Screwjoint  
○ Top Safety : Non-Breakage, Anti-Chemical, & +280°C

▶ AutoLifting “Up-Down” and Manual Tilt System

- With Induction Gear Motor, TM-Screw, Timing Belt & Pulley, and Limit Switch
- \* Adjustable Lifting Speed 1~53rpm & Height Length 200~500mm \* Tilt Angle 30 Degree

▶ Graduated Double-wall Vacuum Glass Vessel, 5~100Lit

- 45° DN Flange & 5mm Thick High Boro-glass 3.3 with Good Physical, Chemical Properties.
- PTFE Lid ; -80°C+260°C ■ PTFE Drain Valve ; Aperture  $\phi$ 25mm, No-Dead Space
- \* Work in Constant Pressure and Vacuum Degree below 0.095MPa in stationary.
- \* Cooling and Heating Solution in the Interlayer can be Completely Removed after Reaction.

▶ High-Torque Digital Agitator System, 50~1000rpm(800rpm/100Lit)

- CE Certified ■ with Certificate & Traceability : Controlled by Serial Number
- Patented Jog-Shuttle Control System ■ PL (Product Liability) Insurance
- With Safety Flex-Coupling between Stir-Motor and PTFE Shaft, PTFE Impeller.
- \* Storage Function for the set values : RPM, Timer, and Locking \* Chuck - Corrosion Free.

▶ Heavier-work Assembly Frame System

- Material : OD  $\phi$ 27.2×thick 1.5/2.0mm Stainless-steel Pipe and AL-Profile 4040
- \* Assembly Construction System : Fully Adjustable \* Frames according to the Vessel Volumes.
- \* with 4 Castors including 2 Lockable Castors. \* 80 / 100Lit : OD  $\phi$ 27.2×thick 2.0mm SS Pipe

Specification of (A) Reactor Set

Models	“REA-5A”	“REA-10A”	“REA-20A”	“REA-30A”	“REA-50A”	“REA-80A”	“REA-100A”	
Jacket Vessel Volume	5 Lit	10 Lit	20 Lit	30 Lit	50 Lit	80 Lit	100 Lit	
Jacket Volume Approx.	1.2 Lit	2.6 Lit	5 Lit	8 Lit	12 Lit	20 Lit	25 Lit	
Vessel OD×h mm	215×370	250×480	300×630	365×710	410×800	460×970	500×970	
Inner Vessel OD mm	185	215	250	330	365	410	460	
Heat Hose Connector	GL25	GL32	GL32	① od 35×id 18mm Flat Flange & Metal Clamp				
Drain Tube Size	Glass Tube : od 24×id 19mm			Glass Tube : od 34×id 20mm				
Digital Stirrer (Agitator)	Model, Control	Direct Controlled “SHT-50DX”			Remote Controlled “SHT-120T”			“SHT-140T”
	Viscosity & Torque	100,000 mPas			150,000 mPas			160,000mPas
	Speed	300 Ncm			500 Ncm			550 Ncm
	Motor & Rating	50~1,000 rpm, Resolution : 1 rpm-Display / 1 rpm-Control						50~800 rpm
Lifting	Worm-Geared DC Motor (3.5:1 Ratio)							
	In · Output 83 / 75 W, 1 / 10 HP			In · Output 130 / 120 W, 1 / 6 HP				
Tilt Angle	1~53 rpm, 15 Step Control							
	200~500mm Distance Control							
Timer & Alarm	Manual 30 Degree							
Display	99hr 59min (with Continuous run.), Error status & Timer-end							
Controller	Digital LCD with Back-Light Function							
Shaft / Impeller	Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)							
Safety Device	$\phi$ 14mm PTFE Encapsulated Stainless-steel, Exposed End $\phi$ 2mm, up to 50 Lit.							
Power Consumption	Overload & Heat Protector for Motor					175 W		
Dimension Overall	800×620×h1900		915×670×h2100		1000×720×h2400		1200×790×h2445	
Power Supply	300 W							
	1 Phase, AC 230 V, 50 / 60 Hz							

Ordering for (A) Reactor Set, without Circulator & Vacu-Pump

Lifting Reactor Model & Volume	Stirrer Torque and DN-Flange	(1) with Glass Lid, 5 Neck		(2) with PTFE Lid, 6 Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
“REA-5A”, 5 / 0.1Lit	300Ncm, DN 150	SL.Rea2531		SL.Rea2541	
“REA-10A”, 10 / 0.2Lit	“ , DN 200	SL.Rea2532		SL.Rea2542	
“REA-20A”, 20 / 0.4Lit	“ , “	SL.Rea2533		SL.Rea2543	
“REA-30A”, 30 / 0.5Lit	“ , “	SL.Rea2534		SL.Rea2544	
“REA-50A”, 50 / 1Lit	500Ncm, “	SL.Rea2535		SL.Rea2545	
“REA-80A”, 80 / 1Lit	“ , “	SL.Rea2536		SL.Rea2546	
“REA-100A”, 100 / 1Lit	“ , “	SL.Rea2537		SL.Rea2547	

※ Note! DN 150 Flanged PTFE Lid ; 5 Neck for 5Lit Vessel

※ Note!

- ▶ (B) & (C) Heat/Cool Circulators & Heat Transfer Fluid : See the “Heating Circulators” Section.
- ▶ (D) Vacuum Pumps : See the “Pumps” Section.
- ▶ (E) PTFE Thermo-Probe “K-type” : See the “Measuring, Thermometers” Section.

LaboRactor™ 5~100 Lit Classic Vacuum Reactor Set, with Jacketed Glass Vessel · Agitator · Frame · Glass Assembly  
With DN O-ring Flange · PTFE Impeller · PTFE Drainvalve, Digital 50~1000rpm, 5~100 Lit 자켓 글라스 진공 반응조 셋트

■ Made in Korea



(B) & (C) (A) Classic Reactor Set  
-80°C+260°C (D)



(1) Glass Lid  
With 5 Joint



(2) All PTFE Lid  
With 6 Screwjoint

◎ Top Safety : Non-Breakage,  
Anti-Chemical, & +280°C

Heavy-work Support Frame dimension  
φ 27.2 × thick 1.5mm SS Pipe

5 & 10 Lit : 45 × 45 × h130cm | 50 & 80 Lit : 60 × 60 × h180cm  
20 & 30 Lit : 55 × 55 × h170cm | 100 Lit : 67 × 67 × h200cm

### ▶ Graduated Double-wall Vacuum Glass Vessel, 5~100Lit

■ 45° DN Flange & 5mm Thick High Boro-glass 3.3 with Good Physical, Chemical Properties.

■ PTFE Lid ; -80°C+260°C ■ PTFE Drain Valve ; Aperture φ25mm, No-Dead Space

■ Can be Used Direct Contact Thermo-Probe "K-type"

\* Work in Constant Pressure and Vacuum Degree below 0.095MPa in stationary.

\* Cooling and Heating Solution in the Interlayer can be Completely Removed after Reaction.

### ▶ High-Torque Digital Agitator System, 50~1000rpm(800rpm/100Lit)

■ CE Certified ■ with Certificate & Traceability : Controlled by Serial Number

■ Patented Jog-Shuttle Control System

■ PL(Product Liability) Insurance

■ With Safety Flex-Coupling between Stir-Motor and PTFE Shaft, PTFE Impeller.

\* Digital LCD with Back-Light Function. \* Smooth Start and Change of the Stirring Speed.

\* Storage Function for the set values : RPM and Timer \* Chuck - Corrosion Free.

\* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

### ▶ Heavier-work Assembly Frame System ; Fully Adjustable

■ Material : OD φ27.2 × thick 1.5/2.0mm Stainless-steel Pipe

\* with 4 Castors including 2 Lockable Castors. \* 80 / 100Lit : OD φ27.2 × thick 2.0mm SS Pipe

### Specification of (A) Reactor Set

Models	"REA-5C"	"REA-10C"	"REA-20C"	"REA-30C"	"REA-50C"	"REA-80C"	"REA-100C"	
Jacket Vessel Volume	5 Lit	10 Lit	20 Lit	30 Lit	50 Lit	80 Lit	100 Lit	
Jacket Volume Approx.	1.2 Lit	2.6 Lit	5 Lit	8 Lit	12 Lit	20 Lit	25 Lit	
Vessel OD × h mm	215 × 370	250 × 480	300 × 630	365 × 710	410 × 800	460 × 970	500 × 970	
Inner Vessel OD mm	185	215	250	330	365	410	460	
Heat Hose Connector	GL25	GL32	GL32	① od 35 × id 18mm Flat Flange & Metal Clamp				
Drain Tube Size	Glass Tube : od 24 × id 19mm			Glass Tube : od 34 × id 20mm				
Digital Stirrer (Agitator)	Model, Control	Direct Controlled "SHT-50DX"			Remote Controlled "SHT-120T"			"SHT-140T"
	Viscosity & Torque	100,000 mPas 300 Ncm			150,000 mPas 500 Ncm			160,000mPas 550 Ncm
	Speed	50~1,000 rpm, Resolution : 1 rpm-Display / 1 rpm-Control					50~800 rpm	
	Motor & Rating	Worm-Gear DC Motor (3.5:1 Ratio)						
	Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end						
	Display	Digital LCD with Back-Light Function						
	Controller	Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)						
	Shaft / Impeller	φ 10/8 PTFE Encapsulated Stainless-steel Shaft			φ 12/10 PTFE Encapsulated Stainless-steel Shaft			
Safety Device	Overload & Heat Protector for Motor							
Power Consumption	85 W			120 W				
Dimension Overall	45 × 45 × h130cm		55 × 55 × h170cm		60 × 60 × h180cm		67 × 67 × h200	
Power Supply	1 Phase, AC 230 V, 50 / 60 Hz							

### Ordering for (A) Reactor Set, without Circulator & Vacu-Pump

<L1>

Classic Reactor Model & Volume	Stirrer Torque and DN-Flange	(1) with Glass Lid, 5 Neck		(2) with PTFE Lid, 6 Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
"REA-5C", 5 / 0.1Lit	300Ncm, DN 150	SL.Rea2511		SL.Rea2521	
"REA-10C", 10 / 0.2Lit	" , DN 200	SL.Rea2512		SL.Rea2522	
"REA-20C", 20 / 0.4Lit	" , "	SL.Rea2513		SL.Rea2523	
"REA-30C", 30 / 0.5Lit	" , "	SL.Rea2514		SL.Rea2524	
"REA-50C", 50 / 1Lit	500Ncm, "	SL.Rea2515		SL.Rea2525	
"REA-80C", 80 / 1Lit	" , "	SL.Rea2516		SL.Rea2526	
"REA-100C", 100 / 1Lit	" , "	SL.Rea2517		SL.Rea2527	

※ Note/ DN 150 Flanged PTFE Lid ; 5 Neck for 5Lit Vessel

※ Note!

▶ (B) & (C) Heat/Cool Circulators & Heat Transfer Fluid : See the "Heating Circulators" Section.

▶ (D) Vacuum Pumps : See the "Pumps" Section.

▶ (E) PTFE Thermo-Probe "K-type" : See the "Measuring, Thermometers" Section.

LaboRactor™ 0.5~20 Lit Suspended Vacuum Reactor Set, with Jacketed Glass Vessel · Agitator · Frame · Glass Assembly  
 With DN O-ring Flange · PTFE Impeller · PTFE Drainvalve, Digital 50~1000rpm, 행잉 타입 자켓 글라스 진공 반응조 세트 0.5~20 Lit

■ Made in Korea

▶ Easy Installation & Remove, and Safety

▶ 0.5~20Lit Graduated Double-wall Vacuum Glass Vessel

- 45° DN Flange & 5mm Thick High Boro-glass 3.3 with Good Physical, Chemical Properties.
- PTFE Lid ; -80°C+260°C. ■ PTFE Drain Valve ; No-Dead Space.
- Can be Used Direct Contact Thermo-Probe "K-type"

\* Work in Constant Pressure and Vacuum Degree below 0.095MPa in stationary.  
 \* Cooling and Heating Solution in the Interlayer can be Completely Removed after Reaction.

▶ High-Torque Digital Agitator System, 50~1000rpm

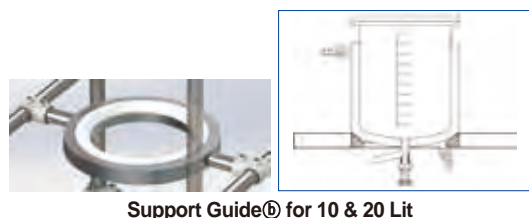
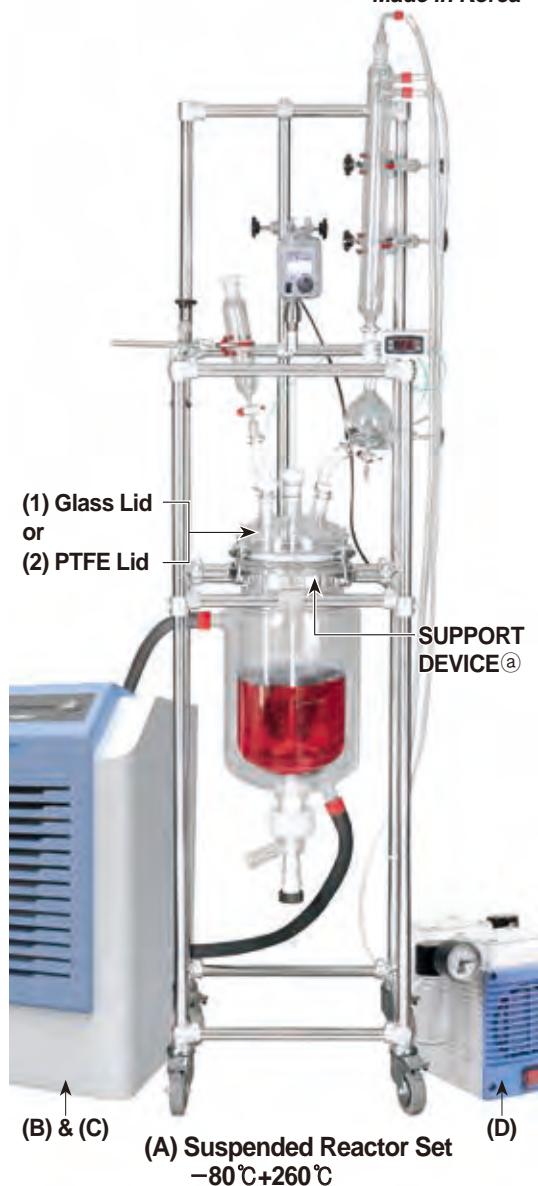
- CE Certified. ■ with Certificate & Traceability : Controlled by Serial Number.
  - Patented Jog-Shuttle Control System. ■ PL (Product Liability) Insurance
  - With Safety Flex-Coupling between Stir-Motor and PTFE Shaft, PTFE Impeller.
- \* Digital LCD with Back-Light Function. \* Smooth Start and Change of the Stirring Speed.  
 \* Storage Function for the set values : RPM and Timer. \* Chuck - Corrosion Free.  
 \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled).

▶ Heavier-work Assembly Frame System ; Fully Adjustable

- Material : OD  $\phi$  27.2 × thick 1.5mm Stainless-steel Pipe.
  - With Heavy-duty Aluminium VESSEL SUSPENSION SUPPORT DEVICE<sup>®</sup> ; Very Easy Vessel Exchange!
  - With Heavy-duty Stainless-steel SUPPORT Guide<sup>®</sup> for the Bottom of 10 & 20Lit Vessels.
- \* with 4 Castors including 2 Lockable Castors. \* Benchtop Frame(With Feet) Available.

Specification of (A) Reactor Set

Models	"REA-S0.5"	"REA-S1"	"REA-S2"	"REA-S3"	"REA-S5"	"REA-S10"	"REA-S20"
Jacket Vessel Volume	0.5Lit	1Lit	2Lit	3Lit	5Lit	10Lit	20Lit
Jacket Volume Approx.	0.2Lit	0.4Lit	0.8Lit	1.1Lit	1.2Lit	2.6Lit	5Lit
Vessel OD × h mm	130 × 140	130 × 210	160 × 250	160 × 340	215 × 370	250 × 480	300 × 630
Inner Vessel OD mm	105	105	130	130	185	215	250
Heat Hose Connector	GL18		GL25		GL32		
Drain Tube Size	od 15 × id 10mm		od 18 × id 13mm		od 24 × id 19mm		
Digital Stirrer (Agitator)	Model, Control	Direct Controlled "SHT-50DX"					
	Viscosity & Torque	100,000 mPas 300 Ncm					
	Speed	50~1,000 rpm, Resolution : 1 rpm-Display / 1 rpm-Control					
	Motor & Rating	Worm-Geared DC Motor (3.5:1 Ratio) In · Output 83 / 75 W, 1 / 10 HP					
	Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end					
	Display	Digital LCD with Back-Light Function					
	Controller	Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)					
Shaft / Impeller	$\phi$ 8/6 PTFE Encapsulated Stainless-steel Shaft			$\phi$ 10/8 PTFE Encapsulated Stainless-steel Shaft			
Safety Device	Overload & Heat Protector for Motor						
Power Consumption	85 W						
Dimension Overall	45 × 45 × h75cm	45 × 45 × h130cm	50 × 50 × h150cm	55 × 55 × h170			
Power Supply	1 Phase, AC 230 V, 50 / 60 Hz						



Ordering for Suspended Reactor Set, without Circulator & Vacu-Pump <L1>

Suspen-Reactor Model & Volume	Stirrer Torque and DN-Flange	(1) with Glass Lid, 5-Neck		(2) with PTFE Lid, 5-Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
"REA-S0.5", 0.5 / 0.1Lit	300Ncm, DN 100	SL.Rea2481		SL.Rea2491	
"REA-S1", 1 / 0.1Lit	" , "	SL.Rea2482		SL.Rea2492	
"REA-S2", 2 / 0.2Lit	" , DN 120	SL.Rea2483		SL.Rea2493	
"REA-S3", 3 / 0.5Lit	" , "	SL.Rea2484		SL.Rea2494	
"REA-S5", 5 / 0.5Lit	" , DN 150	SL.Rea2485		SL.Rea2495	
"REA-S10", 10 / 1Lit	" , DN 200	SL.Rea2486		SL.Rea2496	
"REA-S20", 20 / 1Lit	" , "	SL.Rea2487		SL.Rea2497	

※ Note! DN 200 Flanged PTFE Lid ; 6-Neck for 10 & 20 Lit Vessel

※ Note!

- ▶ (B) & (C) Heat/Cool Circulators & Heat Transfer Fluid : See the "Heating Circulators" Section.
- ▶ (D) Vacuum Pumps : See the "Pumps" Section.
- ▶ (E) PTFE Thermo-Probe "K-type" : See the "Measuring, Thermometers" Section.

Articles

Cat. No

Description

LaboRactor™ 2~50 Lit Mantle-Heated Reactor Set, with (1) Single-wall Glass Vessel "Kettle" or (2) Round Flask  
With O-ring Flange · PTFE Impeller · PTFE Drainvalve, Digital 50~1000rpm, 맨틀가열형 진공반응조 셋트, 케틀 & 환형



I. M-Model Kettle-type II. MR-Model R.Flask-type

■ Made in Korea



With Mantle Remote Controller

Mantle Heated Reactor Set,  
with (I) "Kettle" Vessel or (II) Round Flask



(1) Glass Lid  
With 5 Joint



(2) All PTFE Lid  
With 6 Screwjoint  
◎ Top Safety : Non-Breakage,  
Anti-Chemical, & 280℃

### ▶ DURAN-glass Single-wall Vacuum Glass Vessel

- Ideal for Lab, Pilot- & Mass-Production ■ -80℃+260℃ Stable.
- Can be Used Direct Contact Thermo-Probe "K-type"
- Single-wall Vacuum Glass Reaction Vessel System with DN Grooved Flange.
- 5mm Thick High Borosilicate Glass 3.3 with Good Physical, Chemical Properties.

\* Work in Constant Pressure and Vacuum Degree below 0.095MPa in stationary.

### ▶ Remote-controlled Heating Mantle & Upper Cover, 450℃

- With Digital Feedback Controller "WGD-30S" : Can be used PTFE External Direct Contact Thermo-Probe "K-type" (E) - Option.
- (B) Fabric-housed Mantle Cover Available - Option ※ Details ⇒ See the Mantle-Section!

### ▶ High-Torque Digital Agitator System, 50~1000rpm

- CE Certified ■ with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Jog-Shuttle Control System ■ PL(Product Liability) Insurance
- With Safety Flex-Coupling between Stir-Motor and PTFE Shaft, PTFE Impeller.

Models	I. Kettle-type	"REA-2M"	"REA-4M"	"REA-6M"	"REA-10M"	"REA-20M"	-	
	II. R.Flask-type	"REA-2MR"	"REA-3MR"	"REA-5MR"	"REA-10MR"	"REA-20MR"	"REA-50MR"	
Vessel Work Volume	M-Model	2Lit	4/5Lit	6/7Lit	10/12Lit	20/21Lit	-	
	MR-Model	2Lit	3Lit	5Lit	10Lit	20Lit	50Lit	
Vessel od×h mm	M-Model	130×240	200×165	215×165	240×165	250×215	-	
	MR-Model	165×215	185×240	225×280	280×350	350×430	480×650	
Drain Tube Size		od 13×id 9mm		od 15×id 10mm		od 18×id 13mm		
Digital Stirrer (Agitator)	Model, Control	Direct Controlled "SHT-50DX"					Remote Cont. SHT-120T	
	Viscosity & Torque	100,000 mPas 300 Ncm					150,000 mPas 500 Ncm	
	Speed	50~1,000 rpm, Resolution : 1 rpm-Display / 1 rpm-Control						
	Motor & Rating	Worm-Geared DC Motor (3.5:1 Ratio)					130/120 W, 1 / 6 HP	
	Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end						
	Display	Digital LCD with Back-Light Function						
	Controller	Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)						
Heating Mantle	▶ See the Mantle-Section							
Shaft / Impeller	φ 8/6 PTFE Encapsulated Stainless-steel Shaft			φ 10/8 PTFE Encapsulated Stainless-steel Shaft		φ 12/10 PTFE Shaft		
Safety Device	Overload & Heat Protector for Motor							
Power Consumption	635W	885W	935W	1485W	2085W	4120W		
Power Supply	1 Phase, AC 230 V, 50 / 60 Hz							

### I. M-model With 2~20Lit Single-Wall Vessel "Kettle-type", with PTFE Drain Valve <L1>

Mantle-heated Reactor Model & Volume	Mantle watts(W) and DN Flange	(1) with Glass Lid, 5 Neck		(2) with PTFE Lid, 5 Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
"REA-2M", 2Lit	550W, DN100	SL.Rea2553		SL.Rea2563	
"REA-4M", 4 / 5Lit	800W, DN150	SL.Rea2554		SL.Rea2564	
"REA-6M", 6 / 7Lit	" , "	SL.Rea2555		SL.Rea2565	
"REA-10M", 10 / 12Lit	1400W, "	SL.Rea2556		SL.Rea2566	
"REA-20M", 20 / 22Lit	2000W, DN200	SL.Rea2557		SL.Rea2567	

\* PTFE DN 200 Flanged Lid : 6-neck for 20Lit vessel

### II. MR-model With 2~50Lit Round Bottom Flask, with PTFE Drain Valve

Mantle-heated Reactor Model & Volume	Mantle watts(W) and DN Flange	(1) with Glass Lid, 5 Neck		(2) with PTFE Lid, 5 Neck	
		Cat. No.	Price, ₩	Cat. No.	Price, ₩
"REA-2MR", 2Lit	450W, DN100	SL.Rea2573		SL.Rea2583	
"REA-3MR", 3Lit	750W, DN120	SL.Rea2574		SL.Rea2584	
"REA-5MR", 5Lit	850W, "	SL.Rea2575		SL.Rea2585	
"REA-10MR", 10Lit	1500W, DN150	SL.Rea2576		SL.Rea2586	
"REA-20MR", 20Lit	2000W, "	SL.Rea2577		SL.Rea2587	
"REA-50MR", 50Lit	4000W, DN200	SL.Rea2578		SL.Rea2588	

\* PTFE DN 200 Flanged Lid : 6-neck for 20Lit vessel

↑ (E) Option ; PTFE Thermo-Probe "K-type"  
⇒ See the "Measuring, Thermometers" Section

# Refrigerators & ULT Freezers

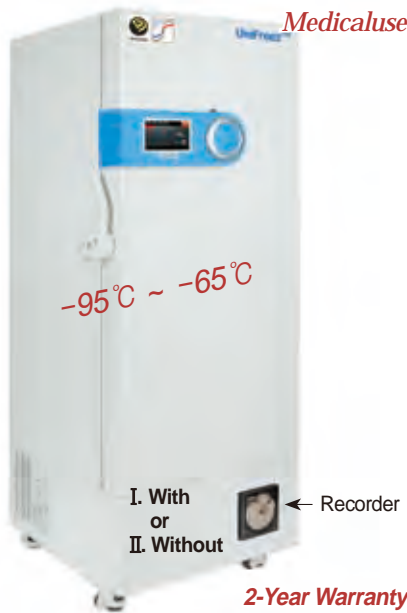
–95°C ULT Freezers, Upright-type .....	P. 191
–86°C ULT Freezers, Personal-type .....	P. 193
–86°C ULT Freezers, Upright-type .....	P. 192
–45°C ULT Freezers, Upright-type <b>New</b> .....	P. 194
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<b>0~10°C Laboratory Refrigerators <b>New</b></b> .....	P. 198
<b>2~10°C Blood Bank Refrigerators <b>New</b></b> .....	P. 199
<b>2~10°C Pharm Refrigerators <b>New</b></b> .....	P. 200~201



**DAIHAN® -95°C ~ -65°C SMART Multiuse ULT Freezer, DuoFreez™ Double Security, I. Medicaluse & II. Lab-use**

**Smart-Lab™** with WiRe™ App, Programmable & Monitoring System, CFC-free Refrigerant, 393 · 503 · 714 · 796Lit

Ideal for Secure Storage of Vaccine · Viruses · Anatomy Components · Bio-products · DNA · Blood · Tissue Samples etc. in Lab & Industry  
 스마트 다용도 안전 초저온 백신냉동고, 백신·바이러스·해부조직물·Bio물질·DNA·혈액·티슈시료 등을 안전 보관 유지용



ULT Freezer "Fre500-B95"



※ Note! You can choose 4 or 5 Inner Doors Model



WiRe™ App Service

**Controlled by Mobile-Phone**

It is possible to monitor and control the Smart-Lab™ equipment through all mobile phone, tablet without restraint of time and place.

※ Note! Optional Freezer Racks, Boxes, etc.  
 ⇒ See the "Refrigerators, Freezer Accessories" Section

- Made in Korea ■ GD(Good Design)-mark ■ PL(Product Liability) Insurance
- With Certificate · Traceability · Delivery-information ; Controlled by Serial Number
- DuoFreez™ System can Down to -95°C and High-stability System can be offered ; If One Freezing System Fails in operation The Other One System Still Maintains Down to -80°C
- Smart-Lab™ Control : Remote Controlled by Mobile-Phone with WiRe™ App Service
  - Internet Connectivity with WiFi. - Storage Management & Automatic Temp. Data Recording.
  - Ergonomic 7" Full Touch Screen TFT LCD ; Easy Monitoring and Control.
  - Self-Diagnostic Function : Built in Standard Warning and Alarm Function
- \* Easy Maintenance and Improved Performance
- \* High-quality Insulation Panel and Inner Doors ensure Defrosting around Outer Surface
- \* Automatic Vacuum Breaker : Easy to re-open the Door
- \* Robust & Flexible Design of Door Handle \* External Temp. Sensor Hole
- \* Filter-free Mechanism Lowers Heat Generated by the Compressor

**I. Medicaluse Approved Model ; Built-in Temp Chart Recorder**

**II. Laboratory / Standard Model ; Without Recorder**

Specifications & Ordering information

<L1>

		"Fre400-B95" Max. 393Lit	"Fre500-B95" Max. 503Lit	"Fre700-B90" Max. 714Lit	"Fre800-B90" Max. 796Lit
<b>I. Medicaluse Approved</b>		with Built in Temp Chart Recorder Record Range : -100°C ~ 0°C, divi 2°C ; 7days/1Chart, 60Charts/Cs.			
<b>II. Laboratory / Standard</b>		without Temp Chart Recorder			
<b>Capacity</b>		393 Lit	503 Lit	714 Lit	796 Lit
<b>Temp. Range</b>		-95°C ~ -65°C		-90°C ~ -65°C	
		at R/T of 30°C and Humidity of 70%			
<b>Temp. Resolution &amp; Sensor</b>		1°C - Display, 1°C - Control & PT100 Sensor			
<b>Compressor</b>		Hermetic-type			
<b>Condenser-type</b>		Block Condenser, Pin and Filter Free Mechanism			
<b>Refrigerant</b>		CFC Free Mixed Gas Refrigerant(DH.MGR)			
<b>Controller</b>		Smart-Lab™ ; 7" Full Touch Screen TFT LCD			
<b>Shelf(Included)</b>		3ea(4-Inner Door), 4ea(5-Inner Door) Perforated Stainless-steel Shelves			
<b>Max. Q'ty of Racks</b>	<b>4-Inner Door (Height 31.2cm)</b>	16pcs of 15(5×3)-Placed Rack (RFU4234)	16pcs of 20(5×4)-Placed Rack (RFU4257)	24pcs of 20(5×4)-Placed Rack (RFU4257)	28pcs of 20(5×4)-Placed Rack (RFU4257)
	<b>5-Inner Door (Height 25.2cm)</b>	20pcs of 12(4×3)-Placed Rack (RFU5234)	20pcs of 16(4×4)-Placed Rack (RFU5257)	30pcs of 16(4×4)-Placed Rack (RFU5257)	35pcs of 16(4×4)-Placed Rack (RFU5257)
<b>Material</b>	<b>Internal</b>	Stainless-steel(#304)			
	<b>External</b>	Powder Coated Steel			
	<b>Inner Door</b>	Powder Coated Stainless-steel(#304)			
<b>Dimension (w×d×h)</b>	<b>Internal (cm)</b>	60×50×131	60×64×131	88×62×131	100×62×131
	<b>External (cm)</b>	84×75×190	84×89×190	112×87×190	124×87×190
<b>Weight</b>		210 kg	240 kg	320 kg	350 kg
<b>Packing Size(w×d×h) (cm) &amp; Gross Weight</b>		116×116×222	116×124×222	140×140×221	150×140×221
		296 kg	327 kg	442 kg	472 kg
<b>Power Consumption</b>	<b>Standard Mode</b>	474 w/h	507 w/h	596 w/h	629 w/h
	<b>Eco. Mode</b>	373 w/h	458 w/h	503 w/h	588 w/h
<b>Electric Reqts.</b>		1 Phase, AC120V, 60Hz or AC 230V, 50/60Hz			

**I. Medicaluse Approved Model ; Built-in Temp Chart Recorder**

Cat. No.	230V	DH.FreB9400	DH.FreB9500	DH.FreB9700	DH.FreB9800
(4-Inner Door)	120V	DH.FreB9401	DH.FreB9501	DH.FreB9701	DH.FreB9801
Price, Each. ₩					

**II. Laboratory / Standard Model ; Without Recorder**

Cat. No.	230V	DH.FreL9400	DH.FreL9500	DH.FreL9700	DH.FreL9800
(4-Inner Door)	120V	DH.FreL9401	DH.FreL9501	DH.FreL9701	DH.FreL9801
Price, Each. ₩					
Cat. No.	230V	DH.FreL94005	DH.FreL95005	DH.FreL97005	DH.FreL98005
(5-Inner Door)	120V	DH.FreL94015	DH.FreL95015	DH.FreL97015	DH.FreL98015
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

**DAIHAN® -86°C ~ -65°C SMART Multiuse ULT Freezer, UniFreez™ Single Compressor, I. Medicaluse & II. Lab-use Smart-Lab™ with WiRe™ App, Programmable & Monitoring System, CFC-free Refrigerant, 393 · 503 · 714 · 796Lit**

Ideal for Secure Storage of Vaccine · Viruses · Anatomy Components · Bio-products · DNA · Blood · Tissue Samples etc. in Lab & Industry  
 스마트 다용도 안전 초저온 백신냉동고, 백신·바이러스·해부조직물·Bio물질·DNA·혈액·티슈시료 등을 안전 보관 유지용



ULT Freezer "Fre500-B86"

2-Year Warranty

I. With or II. Without Recorder



※ Note! You can choose 4 or 5 Inner Doors Model



WiRe™ App Service

Controlled by Mobile-Phone

It is possible to monitor and control the Smart-Lab™ equipment through all mobile phone, tablet without restraint of time and place.

※ Note! Optional Freezer Racks, Boxes, etc.  
 ⇒ See the "Refrigerator, Freezer Accessories" Section

- Made in Korea ■ GD(Good Design)-mark ■ PL(Product Liability) Insurance
- With Certificate · Traceability · Delivery-information ; Controlled by Serial Number
- UniFreez™ Single Freezing System : Ensure Robust and Long Life-cycle
- Smart-Lab™ Control : Remote Controlled by Mobile-Phone with WiRe™ App Service
  - Internet Connectivity with WiFi. - Storage Management & Automatic Temp. Data Recording.
  - Ergonomic 7" Full Touch Screen TFT LCD ; Easy Monitoring and Control.
  - Self-Diagnostic Function : Built in Standard Warning and Alarm Function
- \* Easy Maintenance and Improved Performance
- \* High-quality Insulation Panel and Inner Doors ensure Defrosting around Outer Surface
- \* Automatic Vacuum Breaker : Easy to re-open the Door
- \* Robust & Flexible Design of Door Handle \* External Temp. Sensor Hole
- \* Filter-free Mechanism Lowers Heat Generated by the Compressor

**I. Medicaluse Approved Model ; Built-in Temp Chart Recorder**

**II. Laboratory / Standard Model ; Without Recorder**

Specifications & Ordering information

<L1>

		"Fre400-B86" Max. 393Lit	"Fre500-B86" Max. 503Lit	"Fre700-B80" Max. 714Lit	"Fre800-B80" Max. 796Lit
<b>I. Medicaluse Approved</b>		with Built in Temp Chart Recorder Record Range : -100°C~0°C, divi 2°C ; 7days/1Chart, 60Charts/Cs.			
<b>II. Laboratory / Standard</b>		"Fre400-86" Max. 393Lit	"Fre500-86" Max. 503Lit	"Fre700-80" Max. 714Lit	"Fre800-80" Max. 796Lit
		without Temp Chart Recorder			
Capacity		393 Lit	503 Lit	714 Lit	796 Lit
Temp. Range		-86°C~-65°C		-80°C~-65°C	
		at R/T of 30°C and Humidity of 70%			
Temp. Resolution & Sensor		1°C - Display, 1°C - Control & PT100 Sensor			
Compressor		Hermetic-type			
Condenser-type		Block Condenser, Pin and Filter Free Mechanism			
Refrigerant		CFC Free Mixed Gas Refrigerant(DH.MGR)			
Controller		Smart-Lab™ ; 7" Full Touch Screen TFT LCD			
Shelf(Included)		3ea(4-Inner Door), 4ea(5-Inner Door) Perforated Stainless-steel Shelves			
Max. Q'ty of Racks	4-Inner Door (Height 31.2cm)	16pcs of 15(5×3)-Placed Rack (RFU4234)	16pcs of 20(5×4)-Placed Rack (RFU4257)	24pcs of 20(5×4)-Placed Rack (RFU4257)	28pcs of 20(5×4)-Placed Rack (RFU4257)
	5-Inner Door (Height 25.2cm)	20pcs of 12(4×3)-Placed Rack (RFU5234)	20pcs of 16(4×4)-Placed Rack (RFU5257)	30pcs of 16(4×4)-Placed Rack (RFU5257)	35pcs of 16(4×4)-Placed Rack (RFU5257)
Material	Internal	Stainless-steel(#304)			
	External	Powder Coated Steel			
	Inner Door	Powder Coated Stainless-steel(#304)			
Dimension (w×d×h)	Internal (cm)	60×50×131	60×64×131	88×62×131	100×62×131
	External (cm)	84×75×190	84×89×190	112×87×190	124×87×190
Weight		210 kg	240 kg	320 kg	350 kg
Packing Size(w×d×h) (cm) & Gross Weight		116×116×222	116×124×222	140×140×221	150×140×221
		296 kg	327 kg	442 kg	472 kg
Power Consumption		373 w/h	458 w/h	503 w/h	588 w/h
Electric Reqts.		1 Phase, AC120V, 60Hz or AC 230V, 50/60Hz			

**I. Medicaluse Approved Model ; Built-in Temp Chart Recorder**

Cat. No. (4-Inner Door)	230V	DH.FreB8400	DH.FreB8500	DH.FreB8700	DH.FreB8800
		120V	DH.FreB8401	DH.FreB8501	DH.FreB8701
Price, Each. ₩					

**II. Laboratory / Standard Model ; Without Recorder**

Cat. No. (4-Inner Door)	230V	DH.FreL8400	DH.FreL8500	DH.FreL8700	DH.FreL8800
		120V <th>DH.FreL8401</th> <th>DH.FreL8501</th> <th>DH.FreL8701</th> <th>DH.FreL8801</th>	DH.FreL8401	DH.FreL8501	DH.FreL8701
Price, Each. ₩					
Cat. No. (5-Inner Door)	230V	DH.FreL84005	DH.FreL85005	DH.FreL87005	DH.FreL88005
		120V <th>DH.FreL84015</th> <th>DH.FreL85015</th> <th>DH.FreL87015</th> <th>DH.FreL88015</th>	DH.FreL84015	DH.FreL85015	DH.FreL87015
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.



Articles	Cat. No	Description
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**DAIHAN® -86°C ~ -65°C Personal SMART Multiuse ULT Freezer, UniFreez™ Single Compressor, I. Medicaluse & II. Lab-use Smart-Lab™ with WiRe™ App, Programmable & Monitoring System, CFC-free Refrigerant, Upright- & Under Bench-type, 25 · 82Lit**  
 Ideal for Secure Storage of Vaccine · Viruses · Anatomy Components · Bio-products · DNA · Blood · Tissue Samples etc. in Lab & Industry  
 퍼스널(소형) 스마트 다용도 안전 초저온 백신냉동고, 백신 · 바이러스 · 해부조직물 · Bio물질 · DNA · 혈액 · 티슈시료 등을 안전 보관 유지용



- Made in Korea ■ CE Certified ■ PL(Product Liability) Insurance
- UL, CUL Certified and GD mark(Only 82Lit Model)
- With Certificate · Traceability · Delivery-information ; Controlled by Serial Number
- UniFreez™ Single Freezing System : Ensure Robust and Long Life-cycle
- Smart-Lab™ Control : Remote Controlled by Mobile-Phone with WiRe™ App Service
  - Internet Connectivity with WiFi. - Storage Management & Automatic Temp. Data Recording.
  - Ergonomic 7" Full Touch Screen TFT LCD ; Easy Monitoring and Control.
  - Self-Diagnostic Function : Built in Standard Warning and Alarm Function
- \* Easy Maintenance and Improved Performance \* Robust & Flexible Design of Door Handle
- \* High-quality Insulation Panel and Inner Doors ensure Defrosting around Outer Surface.
- \* CFC-free Mixed Gas Refrigerant is used. \* External Temp. Sensor Hole
- \* Filter-free Mechanism Lowers Heat Generated by the Compressor

I. Medicaluse Approved Model ; Built-in Temp Chart Recorder  
 II. Laboratory / Standard Model ; Without Recorder

Specifications & Ordering information

<L1>

Spec.	Model-type	Upright-type	Under Bench-type
I. Medicaluse Approved		(1) "Fre25-B86" Max. 25Lit	(5) "Fre80-B86U" Max. 82Lit
		with Built in Temp Chart Recorder Record Range : -100°C ~ 0°C, divi 2°C ; 7days/1Chart, 60Charts/Cs.	
II. Laboratory / Standard		(2) "Fre25-86" Max. 25Lit	(6) "Fre80-86U" Max. 82Lit
		without Temp Chart Recorder	
Capacity		25 Lit	82 Lit
Temp. Range		-86°C ~ -65°C at R/T of 30°C and Humidity of 70%	
Temp. Resolution & Sensor		1°C - Display, 1°C - Control & PT100 Sensor	
Compressor		Hermetic-type	
Condenser-type		Block Condenser, Pin and Filter Free Mechanism	
Refrigerant		CFC Free Mixed Gas Refrigerant(DH.MGR)	
Controller	Digital Feedback Controller	Smart-Lab™ ; 7" Full Touch Screen TFT LCD	
Shelf(Included)	None	1ea Stainless-steel Shelf	None
Inner Door	None	2 Door Height 252mm	None
Max. Q'ty of Racks	None, Only 10~15 Boxes are applicable	4pcs of 12(4×3)-Placed Rack (RFU5234)	3pcs of 12(4×3)-Placed Rack or Max. 54 Box without Rack
Material	Internal	Stainless-steel(#304)	
	External	Powder Coated Steel	
	Inner Door	Powder Coated Stainless-steel(#304)	
Dimension (w×d×h)	Internal (cm)	20×42×30	52×48.5×34
	External (cm)	39×62.7×78.5	106.5×72.2×61.2
Weight		52 kg	60 kg
Packing Size(w×d×h) (cm) & Gross Weight		88×86×130	135×76×96
		69 kg	102 kg
Power Consumption		321 w/h	
Electric Reqts.		1Phase, AC 120V, 60Hz or AC 230V, 50/60Hz	

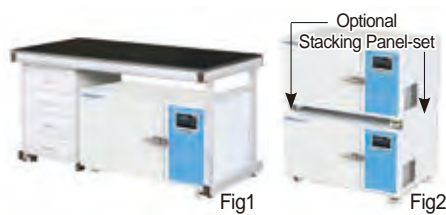


Fig1 ; Under-bench Installation  
 Fig2 ; 2 unit Stacked with Optional Stacking Panel-set



It is possible to monitor and control the Smart-Lab™ equipment through all mobile phone, tablet without restraint of time and place.

Controlled by Mobile-Phone

I. Medicaluse Approved Model ; Built-in Temp Chart Recorder

Cat. No.	230V	DH.FreB8025	DH.FreB8080	DH.FreB8080U
		120V	DH.FreB8026	DH.FreB8081
Price, Each. ₩				

II. Laboratory / Standard Model ; Without Recorder

Cat. No.	230V	DH.FreL8025	DH.FreL8080	DH.FreL8080U
		120V	DH.FreL8026	DH.FreL8081
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Optional Stacking Panel-set for Under Bench-type

DH.SWUF.SP02 (a) Stacking Panel-set, 590×126mm(3mm Thickness)

Set.	Price, ₩
2ea	



※ Note! Optional Freezer Racks, Boxes, etc.  
 ⇒ See the "Refrigerator, Freezer Accessories" Section

DAIHAN® -45°C ~ -15°C SMART Multiuse Freezer, UniFreez™ Single Compressor, **Medicaluse** **NEW**

Smart-Lab™ with WiRe™ App, Programmable & Monitoring System, CFC-free Refrigerant, 393 · 503 · 714 · 796Lit

Ideal for Secure Storage of Vaccine · Viruses · Anatomy Components · Bio-products · DNA · Blood · Tissue Samples etc. in Lab & Industry

스마트 다용도 안전 초저온 백신냉동고, 백신·바이러스·해부조직물·Bio물질·DNA·혈액·티슈시료 등을 안전 보관 유지용



- Made in Korea    ■ PL(Product Liability) Insurance
- With Certificate · Traceability · Delivery-information ; Controlled by Serial Number
- UniFreez™ Single Freezing System : Ensure Robust and Long Life-cycle
- Smart-Lab™ Control : Remote Controlled by Mobile-Phone with WiRe™ App Service
  - Internet Connectivity with WiFi.    - Storage Management & Automatic Temp. Data Recording.
  - Ergonomic 7" Full Touch Screen TFT LCD ; Easy Monitoring and Control.
  - Self-Diagnostic Function : Built in Standard Warning and Alarm Function
- \* Easy Maintenance and Improved Performance
- \* High-quality Insulation Panel and Inner Doors ensure Defrosting around Outer Surface
- \* Automatic Vacuum Breaker : Easy to re-open the Door
- \* Robust & Flexible Design of Door Handle    \* External Temp. Sensor Hole
- \* Filter-free Mechanism Lowers Heat Generated by the Compressor

Specifications & Ordering information

<M1>

Medicaluse Approved	"Fre400-B45"	"Fre500-B45"	"Fre700-B45"	"Fre800-B45"	
	Max. 393Lit	Max. 503Lit	Max. 714Lit	Max. 796Lit	
<b>with Built in Temp Chart Recorder</b> Record Range : -100°C~0°C, divi 2°C ; 7days/1Chart, 60Charts/Cs.					
Capacity	393 Lit	503 Lit	714 Lit	796 Lit	
Temp. Range	-45°C~-15°C at R/T of 30°C and Humidity of 70%				
Temp. Resolution & Sensor	1°C - Display, 1°C - Control & PT100 Sensor				
Compressor	Hermetic-type				
Condenser-type	Block Condenser, Pin and Filter Free Mechanism				
Refrigerant	CFC Free Mixed Gas Refrigerant(DH.MGR)				
Controller	Smart-Lab™ ; 7" Full Touch Screen TFT LCD				
Shelf (Included)	3ea Perforated Stainless-steel Shelves				
Inner Door	5-Door(Height 25.2cm)				
Max. Q'ty of Racks	20pcs of 12(4×3)- Placed Rack (RFU5234)	20pcs of 16(4×4)- Placed Rack (RFU5257)	30pcs of 16(4×4)- Placed Rack (RFU5257)	35pcs of 16(4×4)- Placed Rack (RFU5257)	
Material	Internal	Stainless-steel(#304)			
	External	Powder Coated Steel			
	Inner Door	Powder Coated Stainless-steel(#304)			
Dimension (w×d×h)	Internal (cm)	60×50×131	60×64×131	88×62×131	100×62×131
	External (cm)	84×75×190	84×89×190	112×87×190	124×87×190
Weight		210 kg	240 kg	320 kg	350 kg
Packing Size(w×d×h) (cm) & Gross Weight		116×116×222	116×124×222	140×140×221	150×140×221
		296 kg	327 kg	442 kg	472 kg
Power Consumption		373 w/h	458 w/h	503 w/h	588 w/h
Electric Reqts.	1 Phase, AC120V, 60Hz or AC 230V, 50/60Hz				

Medicaluse Approved Model ; Built-in Temp Chart Recorder

Cat. No.	230V	DH.FreB34005	DH.FreB35005	DH.FreB37005	DH.FreB38005
	120V	DH.FreB34015	DH.FreB35015	DH.FreB37015	DH.FreB38015
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ Note! Optional Freezer Racks, Boxes, etc.  
⇒ See the "Refrigerators, Freezer Accessories" Section



Fig. 5-Chamber & 5-Inner Door



Controlled by Mobile-Phone

It is possible to monitor and control the Smart-Lab™ equipment through all mobile phone, tablet without restraint of time and place.

## “ThermoStable™ WLF” Digital Bio Freezer, -35°C ~ -15°C, 320 · 420 · 620 Lit

With 3 Shelf, Digital Fuzzy Control System, Fast Freezing Function, CFC-Free Refrigeration, Certi. & Traceability  
 디지털 저온 냉동고, 디지털 퍼지 컨트롤, 친환경 냉매(404A) 채용, 급속 냉동 기능



-35°C to -15°C

2-Year Warranty

Digital Bio Freezer “ThermoStable™ WLF”



with SS Inner Doors “ThermoStable™ WLF”

- Made in Korea ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- Fast Freezing Function
- Patented Jog-Shuttle Control System
- CFC-Free (404A) Refrigeration System

- \* Suitable for Storage of Bio Reagent, Seed, Enzyme and Various Samples
- \* Digital Fuzzy Control System Implementing Superior Temperature Accuracy
- \* Storage Function : Set Values of Temperature and Timer
- \* Digital LCD with Back-Light Function
- \* Locking Mode supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
- \* Intelligent Control of Refrigerator for Preventing Overload of Compressor
- \* Corrosion Resistant 304 Stainless-steel Chamber and Shelves
- \* Over Current Protection, Sensor Error Detection, Leakage Breaking

### Specifications & Ordering information

<L1>

Spec.	Model	“WLF-320” Max. Capa. 330 Lit	“WLF-420” Max. Capa. 420 Lit	“WLF-620” Max. Capa. 600 Lit
Capacity		330 Lit	420 Lit	600 Lit
Type		Upright Type		
Temp. Range & Sensor		-35°C ~ -15°C, PT100		
Temp. Resolution		1°C-Display, 1°C-Control		
Refrigerant & Compressor		CFC-Free(404A) Refrigeration System, 3/4HP	CFC-Free(404A) Refrigeration System, 1HP	
Display		Digital LCD with Back-Light Function		
Controller		Digital Controller with Jog-Shuttle Switch (Turn+Push)		
Shelf (Included)		3 Stainless-steel Shelf( # 304)		
Safety Device		Over Current Protector, Sensor Error Detector, Leakage Breaker		
Material		Stainless-steel ( # 304)-Internal, Powder Coated steel-External		
Dimension : Interior & Exterior		600×550×h1,000mm, 820×700×h1,700mm	600×700×h1,000mm, 820×850×h1,700mm	780×800×h1,000mm, 1000×950×h1,700mm
Packing Size & Gross Weight		1,160×910×h2,160mm 290 kg	1,160×1,060×h2,160mm 314 kg	1,340×1,160×h2,160mm 350 kg
Power Consumption		1.7 kW	1.8 kW	1.8 kW
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		
Cat. No.	230V	DH.WLF00320	DH.WLF00420	DH.WLF00620
	120V	DH.WLF01320	DH.WLF01420	DH.WLF01620
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

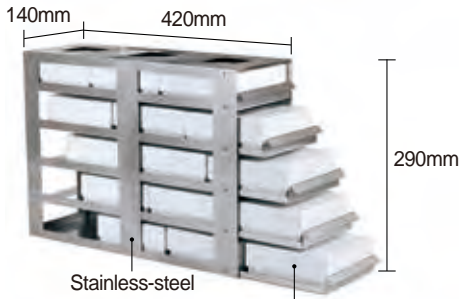
※ 운임 착불

### Spare Stainless-steel Flat Shelf

- DH.WLF10320 Flat Shelf, w580×d530mm, “LFS320”, for “WLF-320”
- DH.WLF10420 , w580×d680mm, “LFS420”, for “WLF-420”
- DH.WLF10620 , w760×d780mm, “LFS620”, for “WLF-620”

Ea. Price, ₩

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Stainless-steel

Fiberboard Freezer Box, 81 holes

(1) Sliding Drawer-type Rack, 15 Place  
"RFU4234SD"

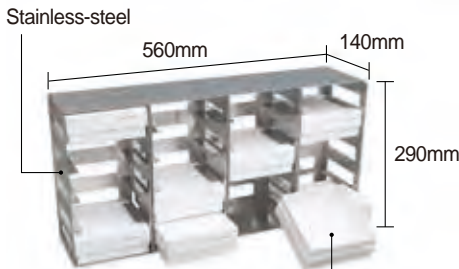
Optional Freezer Rack, Sliding Drawer-type & Side Access-type  
For DAIHAN® Freezer, Stainless-steel(304)

\* Not Include Freezer Boxes

(1) Sliding Drawer-type for 0.5~2ml, 3~4ml, 5ml Vial Box

<L1>

Cat. Number	Model	Rack Size(mm) (w×d×h)	Freezer Box & No. of Box	Freezer Capacity (No. of Rack)	Ea. Price, ₩
<b>For 80Lit &amp; 80Lit Under</b>					
DH.RFU5234SD	"RFU5234SD"	140×420×232	0.5~2ml, 12(4×3)	80Lit (4ea) 80Lit Under (3ea)	
DH.RFU5434SD	"RFU5434SD"	140×420×171	3~4ml, 6(2×3)		
DH.RFU5534SD	"RFU5534SD"	140×420×211	5ml, 6(2×3)		
<b>For 3 Door-type 300Lit</b>					
DH.RFU5257SD	"RFU5257SD"	140×560×232	0.5~2ml, 16(4×4)	300Lit(12ea)	
DH.RFU5457SD	"RFU5457SD"	140×560×171	3~4ml, 8(2×4)		
DH.RFU5557SD	"RFU5557SD"	140×560×211	5ml, 8(2×4)		
<b>For 4 Door-type 400·500·700·800Lit</b>					
DH.RFU4234SD	"RFU4234SD"	140×420×290	0.5~2ml, 15(5×3)	400Lit(16ea)	
DH.RFU4434SD	"RFU4434SD"	140×420×256	3~4ml, 9(3×3)		
DH.RFU4534SD	"RFU4534SD"	140×420×311	5ml, 9(3×3)		
DH.RFU4257SD	"RFU4257SD"	140×560×290	0.5~2ml, 20(5×4)	500Lit(16ea)	
DH.RFU4457SD	"RFU4457SD"	140×560×256	3~4ml, 12(3×4)	700Lit(24ea)	
DH.RFU4557SD	"RFU4557SD"	140×560×311	5ml, 12(3×4)	800Lit(28ea)	
<b>For 5 Door-type 400·500·700·800Lit</b>					
DH.RFU5234SD	"RFU5234SD"	140×420×232	0.5~2ml, 12(4×3)	400Lit(20ea)	
DH.RFU5434SD	"RFU5434SD"	140×420×171	3~4ml, 6(2×3)		
DH.RFU5534SD	"RFU5534SD"	140×420×211	5ml, 6(2×3)		
DH.RFU5257SD	"RFU5257SD"	140×560×232	0.5~2ml, 16(4×4)	500Lit(20ea)	
DH.RFU5457SD	"RFU5457SD"	140×560×171	3~4ml, 8(2×4)	700Lit(30ea)	
DH.RFU5557SD	"RFU5557SD"	140×560×211	5ml, 8(2×4)	800Lit(35ea)	



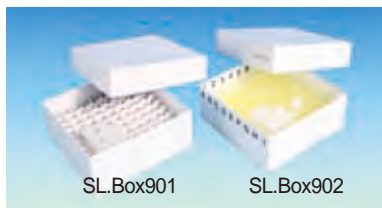
Stainless-steel

(2) Side Access-type Rack, 20 Place  
"RFU4257SA"

(2) Side Access-type for 0.5~2ml, 3~4ml, 5ml Vial Box

Cat. Number	Model	Rack Size(mm) (w×d×h)	Freezer Box & No. of Box	Freezer Capacity (No. of Rack)	Ea. Price, ₩
<b>For 80Lit &amp; 80Lit Under</b>					
DH.RFU5234SA	"RFU5234SA"	140×420×232	0.5~2ml, 12(4×3)	80Lit (4ea) 80Lit Under (3ea)	
DH.RFU5434SA	"RFU5434SA"	140×420×171	3~4ml, 6(2×3)		
DH.RFU5534SA	"RFU5534SA"	140×420×211	5ml, 6(2×3)		
<b>For 3 Door-type 300Lit</b>					
DH.RFU5257SA	"RFU5257SA"	140×560×232	0.5~2ml, 16(4×4)	300Lit(12ea)	
DH.RFU5457SA	"RFU5457SA"	140×560×171	3~4ml, 8(2×4)		
DH.RFU5557SA	"RFU5557SA"	140×560×211	5ml, 8(2×4)		
<b>For 4 Door-type 400·500·700·800Lit</b>					
DH.RFU4234SA	"RFU4234SA"	140×420×290	0.5~2ml, 15(5×3)	400Lit(16ea)	
DH.RFU4434SA	"RFU4434SA"	140×420×256	3~4ml, 9(3×3)		
DH.RFU4534SA	"RFU4534SA"	140×420×311	5ml, 9(3×3)		
DH.RFU4257SA	"RFU4257SA"	140×560×290	0.5~2ml, 20(5×4)	500Lit(16ea)	
DH.RFU4457SA	"RFU4457SA"	140×560×256	3~4ml, 12(3×4)	700Lit(24ea)	
DH.RFU4557SA	"RFU4557SA"	140×560×311	5ml, 12(3×4)	800Lit(28ea)	
<b>For 5 Door-type 400·500·700·800Lit</b>					
DH.RFU5234SA	"RFU5234SA"	140×420×232	0.5~2ml, 12(4×3)	400Lit(20ea)	
DH.RFU5434SA	"RFU5434SA"	140×420×171	3~4ml, 6(2×3)		
DH.RFU5534SA	"RFU5534SA"	140×420×211	5ml, 6(2×3)		
DH.RFU5257SA	"RFU5257SA"	140×560×232	0.5~2ml, 16(4×4)	500Lit(20ea)	
DH.RFU5457SA	"RFU5457SA"	140×560×171	3~4ml, 8(2×4)	700Lit(30ea)	
DH.RFU5557SA	"RFU5557SA"	140×560×211	5ml, 8(2×4)	800Lit(35ea)	

Articles	Cat. No	Description
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(1) Hard Board Storage Box

### Optional Cardboard Freezer Box

(1) for 1.5/2.0ml Cryovial/Microtube, 81 Holes Cell  $\phi$  13mm, Hard Board Storage Box with Hard Board / Polypropylene Divider <L1>

SL.Box901	Hard Board Box, w/ Hard Board Divider, 81Holes $\times$ $\phi$ 13mm, 133 $\times$ 133 $\times$ h52mm	Ea.	Price, ₩
SL.Box902	, w/ PP Divider , 81Holes $\times$ $\phi$ 13mm, 133 $\times$ 133 $\times$ h52mm		



(2) ~ (4) White Box

(2) for 0.5~2ml Cryovial/Microtube, 81 & 100 Holes White Box 133  $\times$  133  $\times$  h52mm

SL.Box9001	Hard Board Box, White, h52mm, 81Holes $\times$ $\phi$ 13mm	Ea.	Price, ₩	Cs.	Price, ₩
SL.Box9002	, 100Holes $\times$ $\phi$ 12mm			100ea	
				100ea	

(3) for 3/4ml Cryovial, 81 & 100 Holes White Box 133  $\times$  133  $\times$  h77mm

SL.Box9003	Hard Board Box, White, h77mm, 81Holes $\times$ $\phi$ 13mm	Ea.	Price, ₩	Cs.	Price, ₩
SL.Box9004	, 100Holes $\times$ $\phi$ 12mm			100ea	
				100ea	



(5) 5 Color Assorted Box-Set

(4) for 5ml Cryovial, 64 & 81 Holes White Box, 133  $\times$  133  $\times$  h98mm

SL.Box9007	Hard Board Box, White, h98mm, 64Holes $\times$ $\phi$ 14.5mm	Ea.	Price, ₩
SL.Box9008	, 81Holes $\times$ $\phi$ 13mm		

(5) for 0.5~2ml Cryovial & Microtube, 81 & 100 Holes, 133  $\times$  133  $\times$  h52mm 5 Colors Assorted Box-Set : Blue · Green · Pink · Yellow · White-Assorted

SL.Box9005	5 color Hard Board Box set, h52mm, 81Holes $\times$ $\phi$ 13mm	Set.	Price, ₩	Cs.	Price, ₩
SL.Box9006	, 100Holes $\times$ $\phi$ 12mm	5ea		25set	
		5ea		25set	

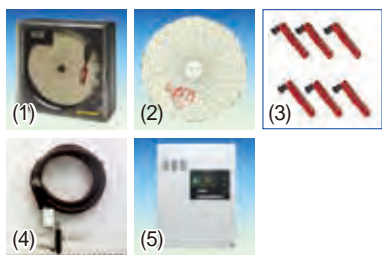


(6) 5 Color Hinged Box

(6) for 0.5~2ml Cryovial & Microtube, 4 Color Cardboard Freezer Box, 81 & 100 Holes 133  $\times$  133  $\times$  h52mm

- \* 81-Holes Box Dimensions : 133  $\times$  133  $\times$  h52mm, 81Holes  $\times$   $\phi$  13mm
- \* 100-Holes Box Dimensions : 133  $\times$  133  $\times$  h52mm, 100Holes  $\times$   $\phi$  12mm

81-holes Color	Cat. No.	Ea.	Price, ₩	100-holes Color	Cat. No.	Ea.	Price, ₩
Blue	SL.Box9014.B			Blue	SL.Box9015.B		
Green	SL.Box9014.G			Green	SL.Box9015.G		
Orange	SL.Box9014.O			Orange	SL.Box9015.O		
White	SL.Box9014.W			White	SL.Box9015.W		



### Optional Recorder · LCO<sub>2</sub> Back up System · Remote Alarm System <L1>

DH.KT622	(1) Built-in Temp. Chart Recorder, "KT622", with "C657" Chart Paper Record Range : -100°C ~ 0°C, divi 2°C ; 7days/1Chart, 60Charts/Cs.	Ea.	Price, ₩
DH.C657	(2) Chart Paper, "C657", 60 Charts, for 420 days recording		
DH.P222	(3) Replacement Pens, "P222", 6ea Red color, for "KT622" Chart Recorder		
DH.LCO2B	(4) LCO <sub>2</sub> Back up System, "LCO2B"		
DH.RWAS	(5) Remote Wire/Wireless Alarm System, "RWAS"		

### Freezer with Validation (IQ, OQ) Service

(1) Laboratory Freezer <L1>

Cat. No.	Model	Price, ₩	Cat. No.	Model	Price, ₩
DH.FreL9400.VS	"Fre400-95"		DH.FreL8700.VS	"Fre700-80"	
DH.FreL9500.VS	"Fre500-95"		DH.FreL8800.VS	"Fre800-80"	
DH.FreL9700.VS	"Fre700-90"		DH.FreL84005.VS *	"Fre400-86"	
DH.FreL9800.VS	"Fre800-90"		DH.FreL85005.VS *	"Fre500-86"	
DH.FreL94005.VS *	"Fre400-95"		DH.FreL87005.VS *	"Fre700-80"	
DH.FreL95005.VS *	"Fre500-95"		DH.FreL88005.VS *	"Fre800-80"	
DH.FreL97005.VS *	"Fre700-90"		DH.FreL8025.VS	"Fre25-86"	
DH.FreL98005.VS *	"Fre800-90"		DH.FreL8080.VS	"Fre80-86"	
DH.FreL8400.VS	"Fre400-86"		DH.FreL8080U.VS	"Fre80-86U"	
DH.FreL8500.VS	"Fre500-86"				* 5-Inner Door

(2) Vaccine · Pharmaceutical & Blood Bank Freezer

Cat. No.	Model	Price, ₩	Cat. No.	Model	Price, ₩
DH.FreB9400.VS	"Fre400-B95"		DH.FreB8080U.VS	"Fre80-B86U"	
DH.FreB9500.VS	"Fre500-B95"		DH.FreB34005.VS *	"Fre400-B45"	
DH.FreB9700.VS	"Fre700-B90"		DH.FreB35005.VS *	"Fre500-B45"	
DH.FreB9800.VS	"Fre800-B90"		DH.FreB37005.VS *	"Fre700-B45"	
DH.FreB8400.VS	"Fre400-B86"		DH.FreB38005.VS *	"Fre800-B45"	
DH.FreB8500.VS	"Fre500-B86"				* 5-Inner Door
DH.FreB8700.VS	"Fre700-B80"				
DH.FreB8800.VS	"Fre800-B80"				
DH.FreB8025.VS	"Fre25-B86"				
DH.FreB8080.VS	"Fre80-B86"				

DAIHAN® 0°C ~ 10°C SMART Laboratory Refrigerator "Ref.L", 150 · 280 · 600 · 1300Lit, I. Glass & II. Solid Door **NEW**  
 With Smart-Lab™ System, Dual Eva-defrost. CFC-Free, Forced-air, Stainless-steel Perforated Shelf, Door Lock Device, 실험실용 다용도 냉장고



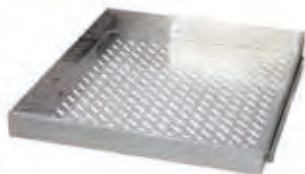
2-Year Warranty

(2) & (4) 280 · 1300Lit with 1 & 2-Glass Door



2-Year Warranty

(6) & (8) 280 · 1300Lit with 1 & 2-Solid Door



(a) Stainless-steel Perforated Shelf



(b) Temp. Chart Recorder, "KT622"



(c) Remote Alarm System "RWAS"

- Made in Korea ■ PL(Product Liability) Insurance
- With Certificate · Traceability · Delivery-information ; Controlled by Serial Number
- Dual Evaporator for Natural Defrosting Ensures High Accuracy and Uniformity of Temp.
- Smart-Lab™ Control : Remote Controlled by Mobile-Phone with WiRe™ App Service
  - Internet Connectivity with WiFi. - Storage Management & Automatic Temp. Data Recording.
  - Ergonomic 7" Full Touch Screen TFT LCD ; Easy Monitoring and Control.
  - Self-Diagnostic Function : Built in Standard Warning and Alarm Function
- \* Height-adjustable Perforated Stainless-steel Shelves
- \* Forced-air Circulation Fan : Superior Temp Uniformity and Quick Recovery Time.
- \* Self-diagnostic Function for Air Circulation Fan
- \* Intelligent Control of Refrigerator for Preventing Overload of Compressor
- \* Double Fold Tempered Glass Window \* Built in Battery for Power Failure Alarm
- \* Alarm Set Points of Temperature Deviation at +5.5 and -1.5 Under Temperature
- \* Automatic Condensate Removal, No Drain Line Required
- \* Available Built in Chart Recorder and Remote Alarm System(Optional)

Specifications & Ordering information

<L1>

0~10°C Laboratory Refrigerator					
I. Glass Door Models		(1) "Ref150.L"	(2) "Ref300.L"	(3) "Ref600.L"	(4) "Ref1300.L"
II. Solid Door Models		(5) "Ref150S.L"	(6) "Ref300S.L"	(7) "Ref600S.L"	(8) "Ref1300S.L"
Capacity		150 Lit	280 Lit	600 Lit	1300 Lit
Door		1-Door	1-Door	1-Door	2-Door
Temp. Range		0°C~10°C at R/T of 30°C and Humidity of 70%			
Temp. Resolution & Sensor		1°C - Display, 1°C - Control & PT100 Sensor			
Refrigerant		CFC-Free(R-404A) Refrigeration System			
Compressor & Evaporator		1/2HP, Auto Exchange Dual Evaporator System for Temperature Accuracy			
Air Circulation		Forced-air Type			
		2 EC Fan	3 EC Fan	4 EC Fan	6 EC Fan
Shelf (Included)		Stainless-steel Perforated Shelf with Front Guard			
		2	3	5	10
Material		Internal : Stainless-steel, External : Powder Coated-steel			
Safety		Door Lock System, Sensor Error Detection			
Dimension (w×d×h)	Internal (cm)	57.5×53.2×50	59×71.5×67	62×77×129	137×77×129
	External (cm)	72.2×80.3×143.6	75×100.8×162	75×98×195	149×98×195
Net Weight		90 kg	130 kg	150 kg	208 kg
Power Consumption		650 W	670 W	700 W	750 W
Electric Reqts.		1 Phase, AC120V, 60Hz or AC 230V, 50/60Hz			
I. Glass Door Model	230V	DH.RefL0150	DH.RefL0300	DH.RefL0600	DH.RefL1300
	120V	DH.RefL0151	DH.RefL0301	DH.RefL0601	DH.RefL1301
Price, Each. ₩					
Validation(IQ, OQ)		DH.RefL0150.VS	DH.RefL0300.VS	DH.RefL0600.VS	DH.RefL1300.VS
Price, Each. ₩					
II. Solid Door Model	230V	DH.RefL0150S	DH.RefL0300S	DH.RefL0600S	DH.RefL1300S
	120V	DH.RefL0151S	DH.RefL0301S	DH.RefL0601S	DH.RefL1301S
Price, Each. ₩					
Validation(IQ, OQ)		DH.RefL0150S.VS	DH.RefL0300S.VS	DH.RefL0600S.VS	DH.RefL1300S.VS
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Spare Stainless-steel Perforated Shelf

- DH.RefS8150 (a) Stainless-steel Perforated Shelf, w477×d407 mm, for "Ref150.L", "Ref150S.L"
- DH.RefS8300 (a) Stainless-steel Perforated Shelf, w492×d590 mm, for "Ref300.L", "Ref300S.L"
- DH.RefS8600 (a) Stainless-steel Perforated Shelf, w532×d610 mm, for "Ref600.L", "Ref600S.L"
- DH.RefS81300 (a) Stainless-steel Perforated Shelf, w520×d650 mm, for "Ref1300.L", "Ref1300S.L"

Ea. Price, ₩

Optional Accessory

- DH.KT622 (b) Temp. Chart Recorder, "KT622", with "C657" Chart Paper
- DH.RWAS (c) Remote Wire/Wireless Alarm System, "RWAS"

Ea. Price, ₩

Articles	Cat. No	Description
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**DAIHAN® 2°C ~ 10°C SMART Blood Bank Refrigerator "Ref.B", 150 · 280 · 600 · 1300Lit, *Medicaluse* **NEW****  
 With **Smart-Lab™** System, CFC-Free(R-404A), Forced-air, Built in Temperature Chart Recorder, Dual Eva-defrost, **I. Glass & II. Solid Door**  
 Stainless-steel Perforated Drawer Shelf, Door Lock Device, 혈액 냉장고, 의료용



2-Year Warranty

(2) & (4) 280 · 1300Lit with 1 & 2-Glass Door

*Medicaluse*

- Made in Korea ■ PL (Product Liability) Insurance
- With Certificate · Traceability · Delivery-information ; Controlled by Serial Number
- Dual Control System for Safety : Even if one of the Two Main Controller Boards Fails to Run, the Other One is still Running properly for Safe Storage of Sample.
- Dual Evaporator for Natural Defrosting Ensures High Accuracy and Uniformity of Temp.
- **Smart-Lab™ Control : Remote Controlled by Mobile-Phone with WiRe™ App Service**
  - Internet Connectivity with WiFi. - Storage Management & Automatic Temp. Data Recording.
  - Ergonomic 7" Full Touch Screen TFT LCD ; Easy Monitoring and Control.
  - Self-Diagnostic Function : Built in Standard Warning and Alarm Function
- \* Forced-air Circulation Fan : Superior Temp Uniformity and Quick Recovery Time.
- \* Self-diagnostic Function for Air Circulation Fan
- \* Intelligent Control of Refrigerator for Preventing Overload of Compressor
- \* Double Fold Tempered Glass Window \* Built in Battery for Power Failure Alarm
- \* Alarm Set Points of Temperature Deviation at +5.5 and -1.5 Under Temperature
- \* Automatic Condensate Removal, No Drain Line Required
- \* Available Built in Remote Alarm System(Optional)

**Specifications & Ordering information**

<M1>

2°C~10°C Blood Bank Refrigerator				
I. Glass Door Models	(1) "Ref150.B"	(2) "Ref300.B"	(3) "Ref600.B"	(4) "Ref1300.B"
II. Solid Door Models	(5) "Ref150S.B"	(6) "Ref300S.B"	(7) "Ref600S.B"	(8) "Ref1300S.B"
Capacity	150 Lit	280 Lit	600 Lit	1300 Lit
Door	1-Door			2-Door
Temp. Range	2°C~10°C at R/T of 30°C and Humidity of 70%			
Temp. Resolution & Sensor	1°C - Display, 1°C - Control & PT100 Sensor			
Refrigerant	CFC-Free(R-404A) Refrigeration System			
Compressor & Evaporator	1/2HP, Auto Exchange Dual Evaporator System for Temperature Accuracy			
Air Circulation	Forced-air Type			
	2 EC Fan	3 EC Fan	4 EC Fan	6 EC Fan
Shelf (Included)	Stainless-steel Perforated Drawer Shelf			
	2	3	5	10
Built in Chart Recorder	for Temp. Data, Includes 60 Chart Paper			
Material	Internal : Stainless-steel, External : Powder Coated-steel			
Safety	Door Lock System, Sensor Error Detection			
Dimension (w×d×h)	Internal (cm)	57.5×53.2×50	59×71.5×67	62×77×129
	External (cm)	72.2×80.3×143.6	75×100.8×162	75×98×195
Net Weight	90 kg	130 kg	150 kg	208 kg
Power Consumption	650 W	670 W	700 W	750 W
Electric Reqts.	1 Phase, AC120V, 60Hz or AC 230V, 50/60Hz			
I. Glass Door Model Cat. No.	230V	DH.RefB0150	DH.RefB0300	DH.RefB0600
	120V	DH.RefB0151	DH.RefB0301	DH.RefB0601
Price, Each. ₩				
Validation(IQ, OQ)		DH.RefB0150.VS	DH.RefB0300.VS	DH.RefB0600.VS
Price, Each. ₩				
II. Solid Door Model Cat. No.	230V	DH.RefB0150S	DH.RefB0300S	DH.RefB0600S
	120V	DH.RefB0151S	DH.RefB0301S	DH.RefB0601S
Price, Each. ₩				
Validation(IQ, OQ)		DH.RefB0150S.VS	DH.RefB0300S.VS	DH.RefB0600S.VS
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

**Spare Drawer Shelf, Replacement Chart Paper and Pens**

- DH.RefS8150D (a) Drawer SS Shelf, w517×d407mm, for "Ref150.B", "Ref150S.B"
- DH.RefS8300D , w532×d590mm, for "Ref300.B", "Ref300S.B"
- DH.RefS8600D , w572×d610mm, for "Ref600.B", "Ref600S.B"
- DH.RefS81300D , w560×d650mm, for "Ref1300.B", "Ref1300S.B"
- DH.C657 Replacement Chart Paper, 60Charts for 420Days Recording
- DH.P222 Replacement Pens, 6Pens, Red Color for Chart Recorder

**Optional Accessory**

- DH.RWAS (b) Remote Wire/Wireless Alarm System, "RWAS"



2-Year Warranty

(6) & (8) 280 · 1300Lit with 1 & 2-Solid Door

*Medicaluse*



(a) Stainless-steel Perforated Drawer Shelf



Temp. Chart Recorder, "KT622"

(c) Remote Alarm System "RWAS"

Ea. Price, ₩

Ea. Price, ₩

DAIHAN® 2°C ~ 10°C Vaccine & Pharm. Refrigerator "Ref.P", 105 & 295Lit, **Medicaluse**  
 With Microprocessor PID Controller, 60mm(t) Polyurethane Insulation, Vacuum Sealed Glass Door, CFC/HCFC-Free, Forced Air Circulation  
 Wire Shelf, Superior Temp Uniformity, 시약약품보관용 냉장고



- Made in Korea    ■ PL(Product Liability) Insurance
- With Certificate · Traceability · Delivery-information ; Controlled by Serial Number
- \* Energy Saving LED Lamp Installation
- \* High Density Polyurethane Insulation(60mm thick) Provides Excellent Low Temperature
- \* Invisible Heating Film Protects from water Condensation on the Glass Door
- \* Self-Diagnostic and Visual & Audible Alarm System :
  - High/Low Working Room Temp Alarm
  - Electric Power Failure Alarm
  - Status of Door Opening Warning Alarm
  - Low Battery for Controller Warning Alarm
  - Password Locking System for Set Temp

Specifications & Ordering information

<M2>

Spec. / Model	"Ref100.P" 105 Lit, Bench Top	"Ref290.P" 295 Lit, Floor Standing
Temp Range	2°C ~ 10°C	
Shelf (Included)	1 Basket & 2 Wire Shelf	3 Wire Shelf
Compressor	1 / 8 HP	1 / 4 HP
Recorder	Option	
Defrost Heater	300 W, Automatic Defrost and Dehumidify System	
Forced Air Circulation	Turbo Fan with Automatic Stop During Door Open	
Controller & Display	Microprocessor Digital Controller / 4 Digit LED Display	
Door	Outer Door with Glass Window with Safety Door Lock System	
Safety	High / Low Temp Alarm, Electric Current Leakage Breaker	
Material	Internal : Stainless-steel, External : Epoxy Powder Coated-steel	
Dimension (w × d × h), (cm)	Interior	46.5 × 42 × h63
	Exterior	56 × 64 × h90
	Packing	72 × 63 × h105
Net & Gross Weight	65 & 80 kg	170 & 185 kg
Power Consumption	100 W	195 W
Electric Reqts.	220V, 50/60Hz, 1 Phase	
Cat. No.	DH.RefP0100	DH.RefP0290
Price, Each. ₩		
Validation(IQ, OQ)	DH.RefP5100	DH.RefP5290
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.

Spare Stainless-steel Teflon-coated Steel Wire Shelf & Basket

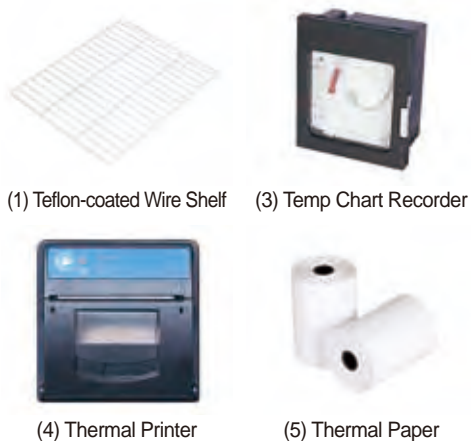
- DH.RefA0005 (1) Teflon-coated Wire Shelf, w440 × d350 mm, for "Ref100.P"
- DH.RefA0006 (1) Teflon-coated Wire Shelf, w590 × d470 mm, for "Ref290.P"
- DH.RefA0010 (2) Teflon-coated Wire Basket, w440 × d340 × h175 mm, for "Ref100.P"

Ea. Price, ₩

Optional Accessory

- DH.SteA1001 (3) Temp Chart Recorder, "STEA1001", with "STEA1002" Chart Paper, for "Ref290.P"
- DH.SteA1002 Chart Paper, "STEA1002", 52 Chart, for 7 day Recording, for "STEA1001"
- DH.SteA1003 Replacement Pen, "STEA1003", 6ea Red Color, for "STEA1001"
- DH.SteA1005 (4) Thermal Printer, Paper Roll, "STEA1005", for "Ref100.P"
- DH.SteA1006 (5) Thermal Paper Package, 4 Paper Roll, for "STEA1005"
- DH.SteA1010 Mobile Alarm System, "STEA-Mobile"

Ea. Price, ₩







# Safety Cabinets

**Safety Cabinets, For Chemicals *New*** ..... P. 203~205  
**, For Flammables** ..... P. 206

**PP Safety Cabinet  
for Strong Acid & Corrosives**  
2 Doors, 170Lit



**PP/PVC Filtered Reagent Cabinet  
for Chemicals, Ductless**

2 Rooms, 660Lit

**NEW**



**Safety Cabinet  
for Acid & Corrosives**  
Single Door, 45Lit



**Safety Cabinet  
for Flammables**  
Single Door, 45Lit

**DAIHAN® PP/PVC Filtered Reagent Storage Cabinet, Ductless, Air Circulation System, 240 · 470 · 660-Lit. NEW**

Ideal for Storage of Acid · Chemical · VOCs, With Hybrid Composite Filter · All PP Chamber & Clear PVC Window

PP/PVC 내산성 밀폐형 시약장, 에어필터링 순환식, 휘발성 유기화합물 · 산 · 염기성 및 유해시약 보관용, 무덕트



I. "RSC240" & II. "RSC470"  
1-Room Models

2-Year Warranty

- Made in Korea
- Fully Enclosed Self-Circulating System ;
  - Prevents Exposure of the Air Inside the Cabinet to the Room.
  - Reagent Fumes are Filtered through 4-Layer Hybrid Composite Filter(VOCs, Acids, Bases, HEPA) and Circulated Inside.
- Durable PP Chamber is Resistant to most Corrosive Chemicals.
  - \* Height Adjustable PP Sliding Drawer Shelf & PP Tray for Spill Storage
  - \* Perforated Drawer Shelf Available(Optional)
  - \* Easy to Observe Inside with PVC Window.
  - \* High Efficiency Low Noise Turbo Fan with Overheat Protection System
  - \* Display Temp, Humidity, VOCs Concentration
  - \* Alarm Function when VOCs, Temp and Humidity are above the Set Value
  - \* Fan Speed can be Set from 1 to 5 Steps to Increase Filter Life and Minimize Energy Consumption.
  - \* Additional Sensors Available for External Monitoring (Optional ; Request when Ordering Cabinets.)
  - \* Provides Key Lock for Security.
  - \* Front Opening for Convenient Filter Management
  - \* Completed Hazardous Gas Removal Capability & Door Durability Test

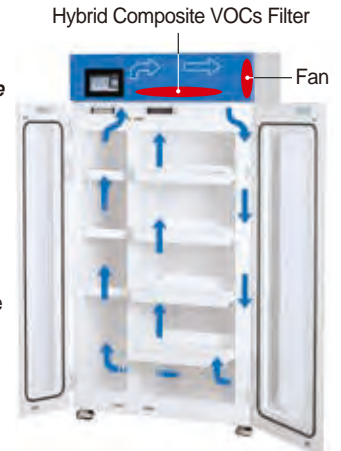


Fig1. Circulation Air Flow of 2-Room Model

**Specifications & Ordering information**

<L1>

Spec.	Model	I. "RSC240" 1-Room	II. "RSC470" 1-Room	III. "RSC660" 2-Room ; 660Lit	
				Left (260Lit)	Right (400Lit)
Capacity		240Lit	470Lit	660Lit	
Door		1 Door	1 Door	2 Doors	
Material	External	White PP(Polypropylene) 8T, Front Panel : Gray PVC 10T			
	Internal	White PP(Polypropylene) 8T			
	Door	White PP(Polypropylene) 8T, Window : Clear PVC 5T			
	Drawer	White PP(Polypropylene) 8T			
Dimension (w×d×h, mm)	Internal	685×480×730	685×480×1,450	369×500×1,450	527×525×1,450
	External	700×600×1,000	700×600×2,000	1,000×600×2,000	
Shelf	Type	Sliding Drawer		Fixed Shelves	Sliding Drawer
	Size(mm)	525×395×h80		369×500	527×525×h80
	Included	2	4	3	4
	Max	4	8	3	8
	Max Load	30kg / Shelf		35kg / Shelf	30kg / Shelf
Circulation Fan		Air Flow : 3.48m <sup>2</sup> /min, Glass Fiber Reinforced Plastic, Power Consumption : 21W			
Controller & Display		7"Full Touch Screen TFT LCD			
Filter	Type	4-Layer Hybrid Composite Filter(VOCs, Acid, Base, HEPA) ※ VOCs(Volatile Organic Compounds)			
	Size(mm)	500×300×h100		700×300×h100	
Net Weight		65kg	95kg	135kg	
Electrical Reqs.		230V 50/60Hz			
Cat. No.		DH.RSC240	DH.RSC470	DH.RSC660	
Price, Ea. ₩					

\* Other Specifications are available upon Customer's Request.



III. "RSC660"  
2-Room Model

2-Year Warranty

**Spare Drawer Shelf & Tray, Filter**

- DH.RSC.D50 (1) PP Drawer Shelf, w525×d395, for 240Lit & 470Lit
- DH.RSC.D70 (1) PP Drawer Shelf, w527×d525, for 660Lit
- DH.RSC.D50R (2) PP Drawer Rail, for 240Lit & 470Lit
- DH.RSC.D70R (2) PP Drawer Rail, for 660Lit
- DH.RSC.T50 (3) PP Tray for Spill Storage, w685×d480, for 240Lit & 470Lit
- DH.RSC.T70 (3) PP Tray for Spill Storage, w527×d525, for 660Lit
- DH.RSC.CF50 (4) Composite Hybrid Filter, w500×d300×h100, for 240Lit & 470Lit
- DH.RSC.CF70 (4) Composite Hybrid Filter, w700×d300×h100, for 660Lit

**Optional Drawer**

- DH.RSC.D50P (5) PP Perforated Drawer Shelf, w525×d395, for 240Lit & 470Lit
- DH.RSC.D70P (5) PP Perforated Drawer Shelf, w527×d525, for 660Lit

Ea. Price, ₩

Ea. Price, ₩



Zoyet® Safety Cabinet for Acid & Corrosives, with Double Layer Fire Proof Steel with Insulation Layer, 15~410 Lit for Easy Open & Close 180° Door with Double Keys, with Steel Shelves, Optional PP Trays, with Manual-/Self Closing-Door Compliance with OSHA 29 CFR 1910.106 and NFPA CODE 30, 안전 케비닛, 산 또는 부식성 시약 보관용



■ Complies with OSHA 29 CFR 1910.106, NFPA CODE 30 and FM Standard.

■ Safe Construction ;

- Complete Double Layer Fire Proof Sheet Steel, 38mm of Insulation Layer between Double Layer Wall Space.
- Sheet Steel of Thickness over 1.0mm All-welded Together making it more Durable and Robust.
- Inside and Outside surface of Cabinet is finished on Blue Permanent and Corrosion-resistant Paints.
- Spill Control Sill of 5cm Height prevent Maximum Leak Control on Accidental Spill.
- 3-point Inter-active Locking System Provides Easy, Fail-safe, Positive Door Closure.
- Easy open-close 180° Cabinet Door with Double Keys

■ Special Features ;

- (a) Fully Welded, not Riveted Construction holds Squareness for Long Life and offers greater Protection in a Fire since Air Gaps are reduced.
- (b) Inside and Outside surface of Cabinet is finished on Blue Permanent and Corrosion-resistant Paints.
- (c) Highly Secure Lock with Dual Protection (Padlock and Key lock) makes Storage Safer.
- (d) Dual Vents with Built-in Flash Arresters Strategically placed at Bottom and Opposite Top.
- (e) 5cm Leakproof Containment Sump holds Leaks and meets US EPA Requirements.
- (f) Adjustable Leveling Feet make it easy to Balance Cabinets on Uneven Surface.
- (g) Label makes it Apparently Visible for Site Manager or Operators to identify where the Chemicals stored quickly.
- (h) Continuous Piano Hinge provides better Open-close Smooth Operation, ensuring Endurance and Reliability.



(1), (3) Single Door, 45Lit

(1), (3) Single Door, 83 Lit

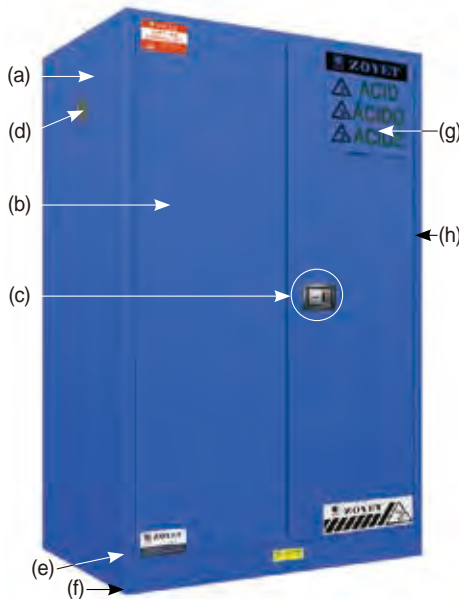
(1) with Manual-closing Single Door, 15~83 Lit Shelves Capacity : 50kg

<L1>

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0004B	1 Door, Manual, 1 Shelf , 15Lit	w430×d430×h560mm , 35kg	
HW.ZYC0012B	, 45Lit	w590×d460×h890mm , 56kg	
HW.ZYC0022B	, 2 Shelves, 83Lit	w590×d460×h1650mm, 85kg	

(2) with Manual-closing 2 Doors, 114~410 Lit Shelves Capacity : 100kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0030B	2 Doors, Manual, 1 Shelf , 114Lit	w1090×d460×h1120mm, 100kg	
HW.ZYC0045B	, 2 Shelves, 170Lit	w1090×d460×h1650mm, 138kg	
HW.ZYC0060B	, 227Lit	w860×d860×h1650mm , 165kg	
HW.ZYC0090B	, 340Lit	w1090×d860×h1650mm, 190kg	
HW.ZYC0110B	, 410Lit	w1500×d860×h1650mm, 270kg	



(2), (4) for Acid & Corrosives, 2 Doors, 340Lit

(3) with Self-closing Single Door, 15~83 Lit Shelves Capacity : 50kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0004BS	1 Door, Self-closing, 1 Shelf , 15Lit	w430×d430×h560mm , 35kg	
HW.ZYC0012BS	, 45Lit	w590×d460×h890mm , 56kg	
HW.ZYC0022BS	, 2 Shelves, 83Lit	w590×d460×h1650mm, 85kg	

(4) with Self-closing 2 Doors, 114~410 Lit Shelves Capacity : 100kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0030BS	2 Doors, Self-closing, 1 Shelf , 114Lit	w1090×d460×h1120mm, 100kg	
HW.ZYC0045BS	, 2 Shelves, 170Lit	w1090×d460×h1650mm, 138kg	
HW.ZYC0060BS	, 227Lit	w860×d860×h1650mm , 165kg	
HW.ZYC0090BS	, 340Lit	w1090×d860×h1650mm, 190kg	
HW.ZYC0110BS	, 410Lit	w1500×d860×h1650mm, 270kg	

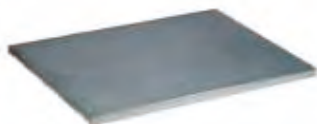
※ 운임 착불

(5) Spare Steel Shelves for Flammable / Acid & Corrosives Safety Cabinets

		Ea.	Price, ₩
HW.GB0004	Steel Shelf, for 15Lit Cabinets , w340×d340×h28mm		
HW.GB0012	, for 45/83Lit Cabinets , w500×d370×h28mm		
HW.GB0030	, for 114/170Lit Cabinets, w1000×d370×h28mm		
HW.GB0060	, for 227Lit Cabinets , w770×d770×h28mm		
HW.GB0090	, for 340Lit Cabinets , w1000×d770×h28mm		
HW.GB0110	, for 410Lit Cabinets , w1400×d770×h28mm		

(6) Optional PP Trays for Acid & Corrosives Safety Cabinets

		Ea.	Price, ₩
HW.PPGB0004	PP Tray, for 15Lit Cabinets , w330×d330×h35mm		
HW.PPGB0012	, for 45/83Lit Cabinets , w490×d360×h35mm		
HW.PPGB0030	, for 114/170Lit Cabinets, w990×d360×h35mm		
HW.PPGB0060	, for 227Lit Cabinets , w760×d760×h35mm		
HW.PPGB0090	, for 340Lit Cabinets , w1000×d760×h35mm		
HW.PPGB0110	, for 410Lit Cabinets , w1390×d760×h35mm		



(5) Spare Steel Shelf

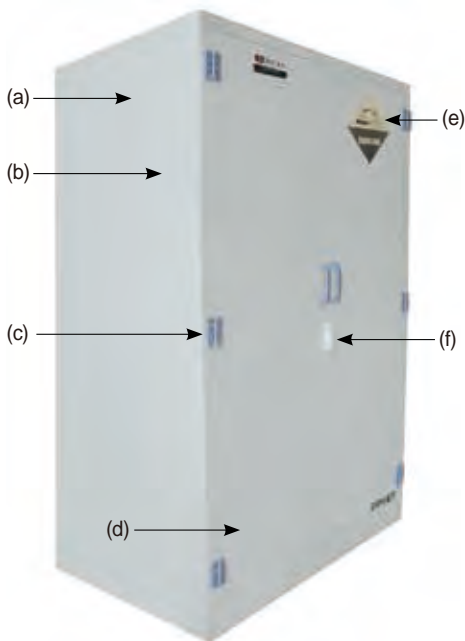


(6) Optional PP Tray

Zoyet® PP Safety Cabinet for Strong Acid & Corrosives, with Liquid-tight, with All-welded Interior, 15~170 Lit  
According to OSHA Requirement, with White Durable Polypropylene, PP 안전 케비닛, 산 & 부식물질 보관용



(1) PP, Single Door, 15Lit



(2) PP, 2 Doors, 170Lit



(3) Spare PP Shelf (4 Hooks included)

- Meets OSHA Requirement for Secondary Containment.
- White Durable Polypropylene Cabinet is intended to store Acid and Corrosive Substance, such as Example, Sulfuric Acid, Hydrochloric Acid, Acetic Acid, Nitric Acid, Sodium Hydroxide, Potassium Hydroxide etc.
- Store the most Corrosive Chemicals with no fear of Rust or Corrosion of the Storage Cabinet.
- All Cabinets have Liquid-tight, All-welded Interior to Contain Accidental Spills.
- Special Features ;
  - (a) PP Cabinet Body adopts High Quality Anti-shock White PP board of 8mm Thickness, Welded as a Whole with Same Property and Color Welding Bar.
  - (b) Equipped with Internationally recognized Leakage Proof Shelves, which could be detached out to be cleaned. Shelves are Adjustable.
  - (c) PP Hinges for Durability and Long Life.
  - (d) Cabinet Door could be customized as Left-open or Right-open.
  - (e) Cabinet Doors are marked clearly with Warning Label Reading "CORROSIVE".
  - (f) To improve Operational Safety, Padlock could be used to provide Extra Protection.

(1) Manual-closing Single Door, 15~45 Lit Shelves Capa. : 25kg(for 15L), 30kg(for 45L) <L1>

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYP0004	1 Door, Manual, 1 Shelf, 15Lit	w430×d430×h560mm, 11kg	
HW.ZYP0012	, 45Lit	w590×d460×h890mm, 25kg	

(2) Manual-closing 2 Doors, 100~170 Lit Shelves Capa. : 35kg(for 100L), 40kg(for 114/170L)

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYP0026	2 Doors, Manual, 1 Shelf , 100Lit	w910×d600×h900mm , 46kg	
HW.ZYP0030	, 114Lit	w1090×d460×h1120mm, 52kg	
HW.ZYP0045	, 2 Shelves, 170Lit	w1090×d460×h1650mm, 75kg	

※ 운임 착불

(3) Spare PP Shelves for Acid & Corrosives PP Safety Cabinets

- HW.PPS04 PP Shelf, for 15Lit Cabinets, w405×d345×h78mm
- HW.PPS12 , for 45Lit Cabinets, w565×d375×h78m
- HW.PPS26 , for 100Lit Cabinets, w885×d515×h78mm
- HW.PPS30 , for 114 & 170Lit, Cabinets, w1065×d375×h78mm

Ea.	Price, ₩



Polypropylene (PP) Safety Cabinet for Acid & Corrosives

Zoyet® Safety Cabinet for Flammables, with Double Layer Fire Proof Steel with Insulation Layer, 15~410 Lit for Easy Open & Close 180° Door with Double Keys, with High Visible Warning Label, with Manual-/Self Closing-Door Compliance with OSHA 29 CFR 1910.106 and NFPA CODE 30, 안전 케비닛, 인화성 시약 보관용



■ Complies with US OSHA 29 CFR 1910.106, NFPA CODE 30 and FM Standard

■ Safe Construction ;

- Complete Double Layer Fire Proof Sheet Steel, 38mm of Insulation Layer between Double Layer Wall Space.
- Sheet Steel of Thickness over 1.0mm All-welded Together making it more Durable and Robust, with Better Fire Proof Capacity.
- Galvanized Steel Shelves direct Spills to Back and Bottom of a Leakproof 50mm/150mm Bottom Sump.
- Spill Control Sill of 5cm Height prevent Maximum Leak Control on Accidental Spill.
- 3-point Inter-active Locking System Provides Positive Closure with Increased Heat Resistance.
- Easy open-close 180° Door with Double Keys (Padlock and Key Lock)
- Built-in Grounding Connector on Outside Side Panel for Easy Grounding

■ Special Features ;

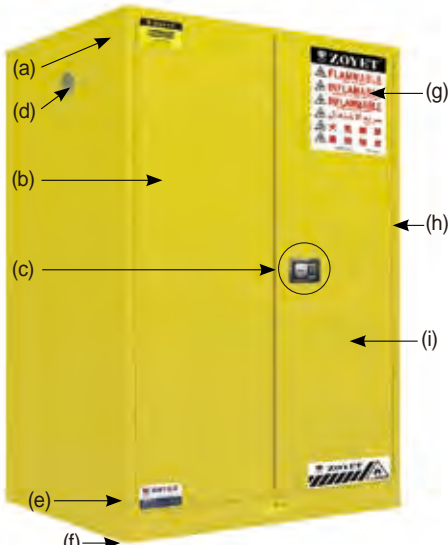
- (a) Fully Welded, not Riveted Construction holds Squareness for Long Life and offers greater Protection in a Fire since Air Gaps are reduced.
- (b) Safety Shelves direct Spills to back and Bottom of Leakproof Sump. Adjustable on 60mm Centers, they meet ANSI Standards with a 99kg Theoretically Allowable Load.
- (c) Highly Secure Lock with Dual Protection (Padlock and Key lock) makes Storage Safer.
- (d) Dual Vents with Built-in Flash Arresters Strategically placed at Bottom and Opposite Top.
- (e) 5cm Leakproof Containment Sump holds Leaks and meets US EPA Requirements.
- (f) Adjustable Leveling Feet make it easy to Balance Cabinets on Uneven Surface.
- (g) Label makes it Apparently Visible for Site Manager or Operators to identify where the Chemicals stored quickly.
- (h) Continuous Piano Hinge provides better Open-close Smooth Operation, ensuring Endurance and Reliability.
- (i) Durable and Chemical-resistant, Lead-free Powder-coat Paint Finish, Inside and Out, retains High Gloss Look and minimizes the Effects of Corrosion and Humidity.



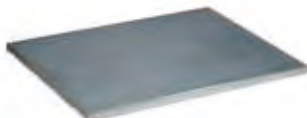
(1), (3) for Flammables, Single Door, 15Lit



(2), (4) for Flammables, 2 Doors, 114Lit



(2), (4) for Flammables, 2 Doors, 340Lit



(5) Spare Steel Shelf

(1) with Manual-closing Single Door, 15~83 Lit Shelves Capacity : 50kg

<L1>

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0004	1 Door, Manual, 1 Shelf , 15Lit	w430 × d430 × h560mm , 35kg	
HW.ZYC0012	, 45Lit	w590 × d460 × h890mm , 56kg	
HW.ZYC0022	, 2 Shelves, 83Lit	w590 × d460 × h1650mm, 85kg	

(2) with Manual-closing 2 Doors, 114~410 Lit Shelves Capacity : 100kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0030	2 Doors, Manual, 1 Shelf , 114Lit	w1090 × d460 × h1120mm, 100kg	
HW.ZYC0045	, 2 Shelves, 170Lit	w1090 × d460 × h1650mm, 138kg	
HW.ZYC0060	, 227Lit	w860 × d860 × h1650mm , 165kg	
HW.ZYC0090	, 340Lit	w1090 × d860 × h1650mm, 190kg	
HW.ZYC0110	, 410Lit	w1500 × d860 × h1650mm, 270kg	

(3) with Self-closing Single Door, 15~83 Lit Shelves Capacity : 50kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0004S	1 Door, Self-closing, 1 Shelf , 15Lit	w430 × d430 × h560mm , 35kg	
HW.ZYC0012S	, 45Lit	w590 × d460 × h890mm , 56kg	
HW.ZYC0022S	, 2 Shelves, 83Lit	w590 × d460 × h1650mm, 85kg	

(4) with Self-closing 2 Doors, 114~410 Lit Shelves Capacity : 100kg

Cat. No.	Description	Dimensions & Weight	Price, Ea. ₩
HW.ZYC0030S	2 Doors, Self-closing, 1 Shelf , 114Lit	w1090 × d460 × h1120mm, 100kg	
HW.ZYC0045S	, 2 Shelves, 170Lit	w1090 × d460 × h1650mm, 138kg	
HW.ZYC0060S	, 227Lit	w860 × d860 × h1650mm , 165kg	
HW.ZYC0090S	, 340Lit	w1090 × d860 × h1650mm, 190kg	
HW.ZYC0110S	, 410Lit	w1500 × d860 × h1650mm, 270kg	

※ 운임 착불

(5) Spare Steel Shelves for Flammable / Acid & Corrosives Safety Cabinets

			Ea.	Price, ₩
HW.GB0004	Steel Shelf, for 15Lit Cabinets	, w340 × d340 × h28mm		
HW.GB0012	, for 45/83Lit Cabinets	, w500 × d370 × h28mm		
HW.GB0030	, for 114/170Lit Cabinets,	w1000 × d370 × h28mm		
HW.GB0060	, for 227Lit Cabinets	, w770 × d770 × h28mm		
HW.GB0090	, for 340Lit Cabinets	, w1000 × d770 × h28mm		
HW.GB0110	, for 410Lit Cabinets	, w1400 × d770 × h28mm		

DAIHAN Scientific

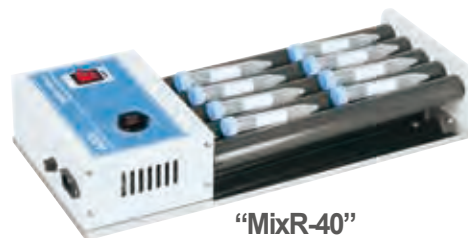
# Shakers

<b>Mixers, Microplate-Orbital Motion <i>New</i></b> .....	P.210
, Rocking & Rolling <i>New</i> .....	P.209
, Vortex .....	P.208
<b>Shakers, Orbital Motion</b> .....	P.211~213
, Reciprocating Motion .....	P.213~214
, Rockers .....	P.215
, Rotators .....	P.216
, Sieve Shaker <i>New</i> .....	P.217

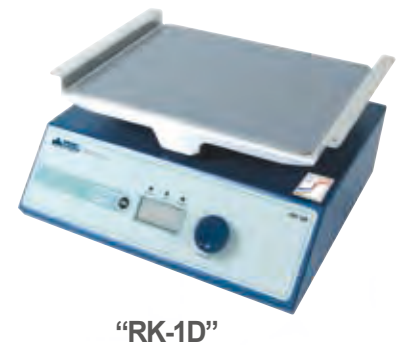
● Mixer, Vortex



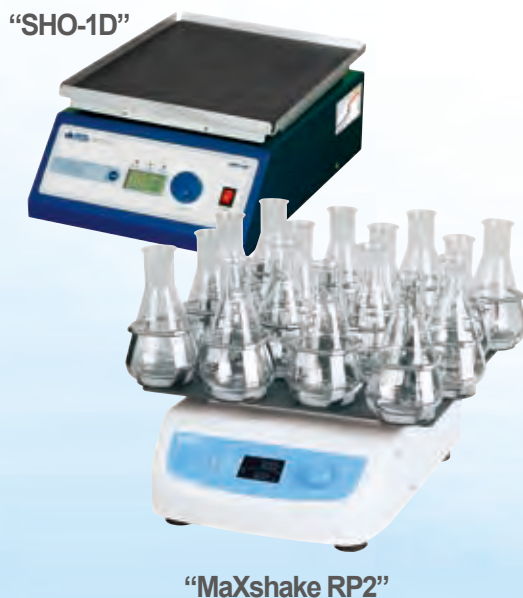
● Mixer, Tube Mix Rotor



● Shaker, Rocker



● Shaker, Orbital/Reciprocating



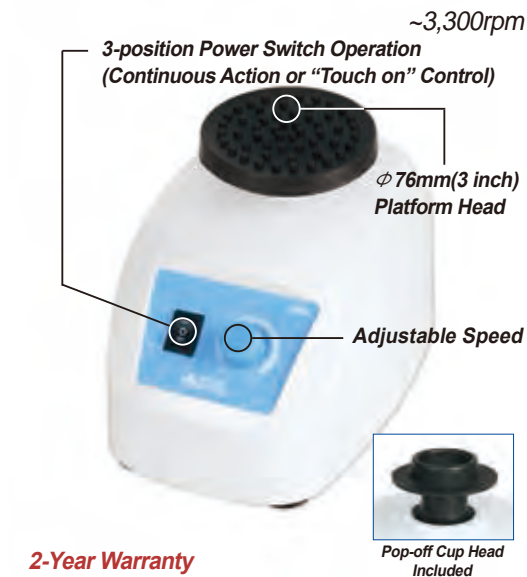
● Shaker, Rotator



● Sieve Shaker



DAIHAN® Hi-performance Multifunction Vortex Mixer-set “MaXshake™ VM30”, Circular Orbit, Constant Torque, 3,300rpm  
 With  $\phi$  76mm(3inch) Platform Head & Pop-off Cup Head, Variable Speed Control, Continuous or Touch-on Mixing  
 다용도 볼텍스 믹서, 다양한 속도 조절, 인체공학적 디자인 적용, 강력하고 안정된 동작과 저소음



2-Year Warranty

Multifunction Vortex Mixer Set “MaXshake™ VM30”  
 with  $\phi$  76mm(3”) Platform(PM110)



(1) Platform Head,  
 $\phi$  76mm(3inch) “PM110”  
 (Included)

(2) Pop-off Cup Head “PM210”  
 (Included)



(3) Microtube Platform Head,  
 0.5~2.0ml Tube “PM310”  
 (Optional)

Remove Applicator  
 (Included)

- PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Mixing Solutions in Test Tubes or Small Flasks with Circular, Oscillating Movement
- Variable Speed Control Allows Slow Speed Shaking Action up to High Speed Vortexing

- \* Ergonomic Design with Stable Low Profile Body.
- \* A Robust and Sturdy Diecast Construction. \* Powerful Motor for Efficient Mixing
- \* Eccentric with Oil-less Ball Bearings
- \* Optimized Counter Balance System Minimizes Vibration.
- \* Special Designed Silicon Feet Absorb Vibration at High Speeds.
- \* Electronic Speed Control for Constant Speed even during Changes in Load
- \* One Mixing Head for a Variety of Tube Sizes(Conical Tube can be Mixed Smoothly by Hand Holding)
- \* Universal Head for a Variety of Mixing Applications(Accepting Vessels up to 76mm Diameter)
- \* NBR(Nitrile Butadiene Rubber) Feet for Ultra Stability and Vibration Damping

Specifications & Ordering information

<L1>

Spec.	Model	“MaXshake™ VM30”
Speed Range		0 ~ 3,300 rpm
Shaking Motion		Orbital, Circuit Orbit : 4.0mm
Control		Analog Phase Controller
Motor		Brushless AC Motor
Head (Included)		Pop-off Cup Head and $\phi$ 76mm Platform Head
Max. Load		0.5 kg
Material		Aluminum Die-casting with Powder Coating
Dimensions (w×d×h) (mm)		140×190×h123 mm
Weight		3 kg
Others		3-position Power Switch Operates Aluminum Die-casting with Powder Coating
Packing Dimension (w×d×h) (mm)		175×255×h215 mm
Gross Weight		3 kg
Power Consumption		30 W
Electrical Reqts.		1 Phase, AC 120V, 50 / 60Hz or AC 230V, 50 / 60Hz

Cat. No.	230V	60Hz	DH.WVM00030
		50Hz	DH.WVM00031
120V	60Hz	DH.WVM00032	
	50Hz	DH.WVM00033	

Price, Each. ₩

\* Other Specifications are available upon Customer's Request.

Spare Platform Head

- DH.WVM00110 (1) Platform Head, “PM110”,  $\phi$  76mm(3inch)
- DH.WVM00210 (2) Pop-off Cup Head, “PM210”

Ea. Price, ₩

Optional Platform Head

- DH.WVM00310 (3) Microtube Platform Head(0.5~2.0ml), “PM310”

Ea. Price, ₩

DAIHAN® Mini Vortex Mixer “VM-100”, Up to 3,200rpm  
 With Silicone Head, Space Saving Compact Design, Variable Speed Control, 소형 볼텍스 믹서



2-Year Warranty

- Quality Certification : ISO 9001
- Ideal for Mixing Solutions in Test Tubes Oscillating Movement
- \* Mini Size save the Space of Working Desk
- \* Variable Speed Control and Automatically Press Start
- \* Powerful and Quiet Vortex Mixing Action for Tubes up to 50ml
- \* Blue/Orange Silicone Top Head
- \* Max. Speed : 3,200 rpm \* Orbit : 4.5mm
- \* Overall Dimension & Weight(N.W./G.W.) : 55×173×h81 mm, 0.77 / 0.9 kg

- DH.WVM0100.B Mini Vortex Mixer, “VM-100”, for 230V, Blue Silicon Head
- DH.WVM0100.O , Orange Silicon Head

<L2>

Ea. Price, ₩



**DAIHAN® Compact Multifunction Mixer/Rocker "MixM", Smoothly Rocking Motion, 24rpm**With Rubber Cushion Platform, Continuous Operation, Ideal for Dishes ( $\geq \phi 100\text{mm}$ ) or 1.5~50ml Tubes, 소형 다기능 믹서/락커**2-Year Warranty**

- **Quality Certification : ISO 9001.**
- **Ideal for Dishes ( $\geq \phi 100\text{mm}$ ) and 1.5 ~ 50ml Tubes.**
- **Capacity ; 3ea -  $\phi 100\text{mm}$  Dishes, 30ea - 1.5ml Microtubes, 15ea - 15ml Tubes, or 8ea - 50ml Tubes.**
- **Easy to load and unload the Test Tubes without Turning the Mixer Off.**
- **Rubber Cushion preventing the Test Tubes from Slipping.**

- \* Widely used in Hematology, Chemistry, Research and Bacteriology Laboratories.
- \* Smooth, Steady, Quiet, and Continuous Operation      \* Rocking Angle : 23°
- \* Speed : 24rpm at 60Hz / 20rpm at 50Hz      \* Platform Dimension : w300×d115 mm <L1>
- \* Overall Dimension & Weight(N.W./G.W.) : w350×d140×h110 mm, 1.5 / 2.0 kg

**DH.MixM0100** Compact Mixer/Rocker, "MixM-100", for 230V  
**DH.MixM0101** , "MixM-101", for 120V

Ea. Price, ₩

**DAIHAN® Tube Mix Rotor "MixR-40", with 5 Mixing Roller, Rocking & Rolling-motion, Fixed 40rpm**

Ideal for 15~50ml Test Tube, with Minimum Noise Motor and 0~60min Timer, 튜브 믹싱 로터

**2-Year Warranty**

- **Made in Korea**      ■ **with 5×Mixing Rollers( $\phi 32 \times L325\text{mm}$ )**
- **Ideal for Mixing Blood Samples, Viscous Substances and Liquid-Solid Suspensions, Use in a Variety of Applications, Prevention of Blood Coagulation and Immune Precipitation, etc.**
- **Rocking & Rolling Mixing-motion for Complete Sample Mixing**

- \* Stability Mixing Motion and Built in Minimize Noise AC Synchronous Motor
- \* Can Use with 8ea×15ml Test Tubes or 8ea×50ml Test Tubes.      \* Stability Fixed 40rpm Mixing Speed
- \* Built in 99hr 59min Timer for User Convenience      \* Can be Used in Cold Lab Chambers or Incubators

**Specifications & Ordering information**

&lt;L1&gt;

Spec.	Model	"MixR-40"
No. of Mixing Roller		5ea×Mixing Rollers
Mixing Roller Size & Material		$\phi 32 \times L325$ mm, PVC
Mixing Speed		Fixed 40rpm
Motor		AC Synchronous Motor, 12W
Timer		0~60min Analog Timer/Continuous Run
Material(Body)		Powder-coated Steel
Dimension & Weight		490×220×h100mm, 3 kg
Electric Reqts.		AC 230V, 50/60Hz
Cat. No.		<b>DH.MixR1040</b>
Price, Each. ₩		

**DAIHAN® Premium Digital Tube Roller "MixR-T6", with 6 Mixing Rollers, Rocking & Rolling Motion, Speed Range 10~70rpm**

Ideal for Mixing Blood Sample · Viscous Substance · Liquid-Solid Suspension, 디지털 튜브 롤러, LCD 디스플레이

**CE NEW****2-Year Warranty**

Premium Digital Tube Roller, "MixR-T6"

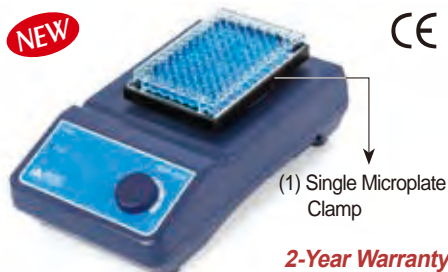
- **CE Certified**
- **혈액 샘플, 점성 물질 및 액체-고체 서스펜션의 혼합과 응고/침전 방지 등에 매우 효율적인 롤링 동작을 제공.**
- \* Used in a Variety of Applications, such as the Prevention of Blood Coagulation, Immune Precipitation, etc.
- \* LCD Displays the Speed and Time      \* Six Roller Design for Gentle Rolling and Easy to Clean.

**Specifications & Ordering information**

&lt;L1&gt;

Spec.	Model	"MixR-T6"
Speed Range		10~70rpm
Mixing Roller Length		L280mm
Max. Load Capacity		4 kg
Ambient Temp & Humidity		5°C~40°C & 80%RH
Motor Type		DC Motor
Operation Mode		Continuous / Timer
Timer Setting Range		1~1199 min
Dimension & Weight		450×260×h120mm, 5.1kg
Power Consumption		30W
Electric Reqts.		110V-220V, 50Hz/60Hz
Cat. No.		<b>DH.MixR1070</b>
Price, Each. ₩		

DAIHAN® Microplate Mixer “MixM-1500”, with the Microplate Clamp, Orbital Motion, Max. 1,500rpm **NEW**  
 For Holding Single or Double Microplates, Continuous Operation, 마이크로 플레이트 믹서, 마이크로 플레이트 클램프 포함



Microplate Mixer, “MixM-1500”  
 with (1) Single Microplate Clamp (Included)

※ Microplate is not Included



■ CE Certified

■ 마이크로 플레이트용 소형믹서로 생명과학분야에서 널리 사용됨.

\* Widely Used in Life Sciences Including Microbiology, Cell and Molecular Biology, Immunology, and Biotechnology.

\* Compact Shape of Microplate Mixer.

\* Various Mixing Applications with Optional Adapters.

\* Maintenance-free Brushless DC Motor

Specifications & Ordering information

<L1>

Spec.	Model	“MixM-1500”
Speed Range		Single Microplate : 0~1,500rpm Double Microplate : 0~1,000rpm
Shaking Motion		Orbital (Dia. 4.5mm)
Max. Shaking Weight		0.5kg (with Accessory)
Motor Type		Brushless DC Motor
Motor Rating (Input/Output)		18W / 10W
Ambient Temp & Humidity		5℃~40℃ & 80%RH
Dimension & Weight		260×150×h80mm & 3kg
Power Consumption		20W
Electric Reqts.		110V-220V, 50Hz/60Hz
Cat. No.		<b>DH.MixM1500</b>
Price, Each. ₩		

Optional Accessory



Fig 1. with (2) Double Microplate Clamp



Fig 2. with (3) Universal Top Plate & (8) Tube Adapter



(3) Universal Top Plate



(4) Tube Adapter, φ6mm, 48-Hole



(5) Tube Adapter, φ10mm, 15-Hole



(6) Tube Adapter, φ12mm, 12-Hole



(7) Tube Adapter, φ16mm, 8-Hole



(8) Tube Adapter, φ20mm, 8-Hole

Spare Microplate Clamp

DH.Cla7001 (1) Single Microplate Clamp “PS1.2”

Optional Accessory

DH.Cla7002 (2) Double Microplate Clamp “MXM-116”

DH.Cla7003 (3) Universal Top Plate “PS1.1”, Used with Tube Adapter

DH.Ada6001 (4) Tube Adapter, for Test Tube “VT1.3.1”, φ6mm, 48-Hole

DH.Ada6002 (5) “VT1.3.2”, φ10mm, 15-Hole

DH.Ada6003 (6) “VT1.3.3”, φ12mm, 12-Hole

DH.Ada6004 (7) “VT1.3.4”, φ16mm, 8-Hole

DH.Ada6005 (8) “VT1.3.5”, φ20mm, 8-Hole

Ea. Price, ₩

Articles	Cat. No	Description
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**DAIHAN® Analog Orbital Shaker “ShkO-300”, 10 Levels Speed Control/40~300rpm**  
 With Standard Rubber Mat Platform, 0~60min Timer, **궤도형 셰이커**

40~300rpm

Included Rubber Mat Platform



2-Year Warranty

Orbital Shaker “ShkO-300”

- Made in Korea
  - Stepless Speed Controller(10Levels Speed/40~300rpm)
  - Ideal for Culturing Cells to Hybridization, Staining and Destaining Gels, and Combinatorial Chemistry, etc.
  - Included Rubber Mat Platform
  - Optional PCR Plate- / Universal Perforated-Platform
- \* Brushless DC Motor : Low Noise and Long Life time  
 \* Optimal Platform Rotation for Intensive Mixing  
 \* Built in 0~60min Timer for User Convenience

**Specifications & Ordering information**

<L1>

Spec.	Model	“ShkO-300”
Speed Range		40~300 rpm, 10 Levels Speed Control
Shaking Motion		Orbital Motion
Motor		20W DC 12V Motor
Timer		0~60min Analog Timer/Continuous Run
Platform Size		285 × 285 × h10mm
Material		Powder-coated Steel
Dimension (w × d × h)		250 × 280 × 180mm
Net Weight		7 kg
Packing Size (w × d × h) & Gross Weight		320 × 350 × 250mm 7.5 kg
Electric Reqts.		AC 230V, 50/60Hz
Cat. No.		<b>DH.ShkO1300</b>
Price, Each. ₩		

*Optional or Spare Platforms/Flask Holder*

Ea. Price, ₩



(1) PCR Plate Platform



(2) Universal Perforated Platform and SS Wire Spring Flask Holder

- DH.ShkO3001 (1) PCR Plate Platform, for PCR Plate, w285 × d285mm
- DH.WSO504100 (2) Universal Platform, for Flask Holder, w230 × d230mm
- DH.WIS600100 (2) SS Wire Spring Flask Holder, “FHS100”, for 100ml Flask
- DH.WIS600250 , “FHS250”, for 250ml Flask
- DH.WIS600500 , “FHS500”, for 500ml Flask
- DH.WIS601000 , “FHS1000”, for 1000ml Flask

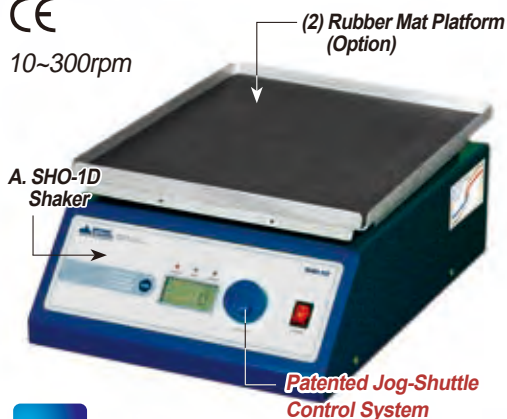
Spec.	Model	ShkO-300
Max. Capacity of Flask Holder	For 50~100ml	9 ea
	For 200~300ml	7 ea
	For 500~1000ml	4 ea

DH.ShkO3003 Spare ; Rubber Mat Platform, Multi-use, w285 × d285mm

**DAIHAN® Digital Orbital Shaker "SHO", 10~300 rpm, Low Noise & Long Life Cycle, with Certi. & Traceability**  
 With Programmable Digital Feedback Control, without Platforms, 디지털 궤도형 셰이커, 저소음 및 긴 수명, 부드러운 시동 동작 및 속도조절



10~300rpm



2-Year Warranty

Figure ; Orbital Shaker "SHO" +  
 (2) Rubber Mat Platform(Optional)

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Culturing Cells to Hybridization, Staining and Destaining Gels, and Combinatorial Chemistry
- Patented Jog-Shuttle Control System

- \* Optimal Platform Rotation for Intensive Mixing    \* Brushless DC Motor(Low Noise & Long Life Cycle)
- \* High Precision Digital Rotation Speed Control    \* Programmable Operation Mode Supported
- \* Digital LCD with Back-Light Function
- \* Smooth Start and Change of Shaking Speed for Stable Running
- \* Storage Function(Program, RPM, Timer), Alarm(Error Status and Timer-end) & Overload Protection
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

<L1>

Spec.	Model	A. "SHO-1D" Plate Size 230×230 mm	B. "SHO-2D" Plate Size 350×350 mm
Shaking Motion		Orbital Motion	
Speed Range		10 ~ 300 rpm	
Max. Load		8 kg	10 kg
Amplitude of Rotation (mm)		8 mm	15 mm
Motor		Brushless DC Motor	
Permissible Ambient Temp.		Ambient 5℃~50℃	
Permissible Relative Moisture		85%	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Programmable Digital Feedback Controller with Jog-Shuttle Switch(Turn+Push)	
Program Function		10 Steps, 6 Programs	
Safety Circuit		Overload Protector for Motor	
Dimension (w×d×h) (mm)		260×330×150	400×480×160
Net Weight		14 kg	20 kg
Packing Size (w×d×h) (mm)		450×350×250	580×500×250
& Gross Weight		18 kg	23 kg
Power Consumption		40 W	
Electrical Reqt.s.		Free Voltage (1 Phase, AC 80V~240V, 50/60Hz)	
Cat. No.	230V	DH.WSO04010	DH.WSO04012
	120V	DH.WSO05010	DH.WSO05012
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Optional Platform/Flask Holder/Spring Rack

- DH.WSO504100 (1) Universal Platform, "SP100", for "SHO-1D", 230×230mm
- DH.WSO504200 "SP200", for "SHO-2D", 350×350mm
- DH.WIS600100 (1) SS Wire Spring Flask Holder, "FHS100", for 100ml Flask
- DH.WIS600250 "FHS250", for 250ml Flask
- DH.WIS600500 "FHS500", for 500ml Flask
- DH.WIS601000 "FHS1000", for 1000ml Flask

Spec.	Model	SHO-1D	SHO-2D
Max. Capacity of Flask Holder	For 50~100ml	9 ea	20 ea
	For 200~300ml	7 ea	16 ea
	For 500~1000ml	4 ea	9 ea

- DH.WSO504110 (2) Rubber Mat Platform, "SP110", for "SHO-1D", 270×270mm
- DH.WSO504210 "SP210", for "SHO-2D", 370×370mm
- DH.WSO504140 (3) Uni. Spring Rack, "SP140", for "SHO-1D", 270×270×h100mm
- DH.WSO504240 "SP240", for "SHO-2D", 370×370×h100mm
- DH.WSO504120 (4) Platform for Flasks, "SP120", for "SHO-1D", 350×230×h153mm
- DH.WSO504220 "SP220", for "SHO-2D", 350×350×h153mm
- DH.WSO504130 (5) Platform for Sep. Funnels, SP130, for SHO-1D, 350×235×h174mm
- DH.WSO504230 SP230, for SHO-2D, 351×355×h174mm

Ea. Price, ₩

<Optional Accessory>



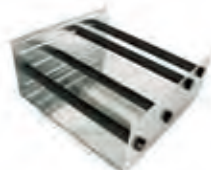
(1) Universal Perforated Platform & Flask Holder



(3) Universal Spring Rack "SP140" / "SP240"



(4) Platform for Flasks "SP120" / "SP220"



(5) Platform for Separatory Funnels "SP130" / "SP230"

DAIHAN® Premium Digital Orbital & Reciprocating Shaker "MaXshake™", Powerful Compact Design, 10~300 rpm With Programmable func., Large LCD Display, Quiet & Low-vibration, Available Rubber Mat-/Universal-Platform(Optional), without Platform 디지털 궤도형 & 왕복형 셰이커, Small Gaint Power, 저소음/저진동 긴 수명, 부드러운 시동 동작 및 속도 조절

10~300rpm



Figure ; Orbital Shaker "MaXshake™ OB2" + (2) Rubber Mat Platform(Optional)

- Made in Korea
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Culturing Cells to Hybridization, Staining and Destaining Gels, Chemistry
- PL(Product Liability) Insurance      ■ Patented Jog-Shuttle Control System

- \* Variable Accessories are Available (Optional)
- \* Hybridization, Washing Blots, Culturing Microbes
- \* Compact Design Easily Fits in Incubators and on the Laboratory Bench.
- \* Soft Start and Noise-free Operation.      \* Digital Speed Control easily adjusts from 10 to 300 rpm
- \* Built-in Digital Timer. Use in Continuous Shaking or Timer Mode up to 99 hr 59 min.
- \* Gentle Speed up and Slow down by PID Speed Control. Slow Start Motion decreases Risk of Spills.
- \* Large LCD for Speed and Time Adjustment, makes it possible to read the Speed, Timer Function and Operating Mode.
- \* Low Vibration, Low Noise      \* Clearly laid out Control Panel for easy Operation.
- \* Speed Regulation by Microprocessor.      \* Excellently Applicable for Continuous Operation.
- \* Constant Speed Independent Ofload.      \* Comprehensive Range of Accessories.
- \* Audible Buzzer Alarms on Time Expiration and when an Error Occurs.
- \* Over-speed Detection and Protection.      \* Automatic Recovery from Power Break.
- \* Brushless Motor Provides Maintenance Free Operation.

Specifications & Ordering information

<L1>

10~300rpm



Figure ; Orbital Shaker "MaXshake™ RP2" + (1) Universal Platform & Flask Holder(Optional)

Spec.	Model	A. "MaXshake™ OB2" Orbital Motion	B. "MaXshake™ RP2" Reciprocating Motion
Shaking Platform Size		255×255 mm	
Shaking Motion		Orbital Motion	Reciprocating Motion
Speed Range & Max. Load		10 ~ 300 rpm, 10kg	
Amplitude of Rotation (mm)		10 mm	
Motor		Brushless DC Motor	
Permissible Temp. & Moisture		Ambient 5℃ ~ 50℃, 80%	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Large Size Digital LCD with Back-Light Function	
Controller		Digital Fuzzy Controller with Touch Button, Jog-dial	
Program Function		10 Steps, 6 Programs	
Platform		Universal Platform for various Shapes & Size of Flask	
Dimension & Weight		376×375×h138 mm(Base Platform : 255×255 mm), 13kg	
Packing Dimension & Weight		345×420×h205 mm, 13.5kg	
Safety Circuit		Overload Protector for Motor	
Power Consumption		45 W	
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	
Cat. No.	230V 120V	DH.WSO00300 DH.WSO00301	DH.WSR00300 DH.WSR00301
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

<Optional Accessory>



(1) Universal Perforated Platform & Flask Holder



(3) Universal Spring Rack



(4) Platform for Flasks



(5) Platform for Separatory Funnels

Optional Platform · Flask Holder · Spring Rack

- DH.WSO604100 (1) Universal Platform, w251×d251mm
- DH.WSO604200 (1) , w346×d346mm
- DH.WIS600100 (1) STS Wire Spring Flask Holder, "FHS100", for 100ml Flask
- DH.WIS600250 , "FHS250", for 250ml Flask
- DH.WIS600500 , "FHS500", for 500ml Flask
- DH.WIS601000 , "FHS1000", for 1000ml Flask

Spec.	Model	251×251mm Universal Platform	346×346mm Universal Platform
Max. Capacity of Flask Holder	For 100ml	9 ea	20 ea
	For 250ml	7 ea	15 ea
	For 500ml	5 ea	9 ea
	For 1000ml	4 ea	6 ea

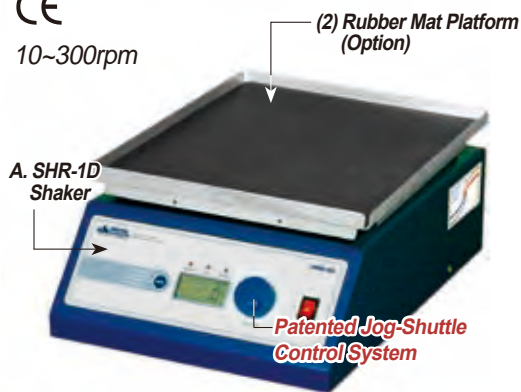
- DH.WSO604110 (2) Rubber Mat Platform, w295×d295mm
- DH.WSO604210 (2) , w370×d370mm
- DH.WSO604140 (3) Universal Spring Rack, w295×d295×h100mm
- DH.WSO604240 (3) , w370×d370×h100mm
- DH.WSO604130 (4) Platform for Round Flask, w350×d260×h153mm
- DH.WSO604230 (5) Platform for Separatory Funnels, w350×d260×h153mm

Ea. Price, ₩

DAIHAN® Digital Reciprocating Shaker "SHR", 10~300 rpm, Low Noise & Long Life Cycle, with Certi. & Traceability  
 With Programmable Digital Feedback Control, without Platforms, 디지털 왕복형 셰이커, 저소음 및 긴 수명, 부드러운 시동 동작 및 속도 조절



10~300rpm



2-Year Warranty

Figure ; Reciprocating Shaker "SHR" +  
 (2) Rubber Mat Platform(Optional)

- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Culturing Cells to Hybridization, Staining and Destaining Gels, and Combinatorial Chemistry
- Patented Jog-Shuttle Control System

- \* Optimal Platform Rotation for Intensive Mixing    \* Brushless DC Motor(Low Noise&Long Life Cycle)
- \* High Precision Digital Rotation Speed Control    \* Programmable Operation Mode Supported
- \* Digital LCD with Back-Light Function
- \* Smooth Start and Change of Shaking Speed for Stable Running
- \* Storage Function(Program, RPM, Timer), Alarm(Error Status and Timer-end) & Overload Protection
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

Specifications & Ordering information

<L1>

Spec.	Model	A. "SHR-1D" Plate Size 230×230 mm	B. "SHR-2D" Plate Size 350×350 mm
Shaking Motion		Reciprocating	
Speed Range		10 ~ 300 rpm	
Max. Load		8 kg	10 kg
Amplitude of Rotation (mm)		8 mm	15 mm
Motor		Brushless DC Motor	
Permissible Ambient Temperature		Ambient 5℃~50℃	
Permissible Relative Moisture		85%	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Programmable Digital Feedback Controller with Jog-Shuttle Switch(Turn+Push)	
Program Function		10 Steps, 6 Programs	
Safety Circuit		Overload Protector for Motor	
Dimension (w×d×h) (mm)		260×330×150	400×480×160
Net Weight		14 kg	20 kg
Packing Size (w×d×h) (mm)		450×350×250	580×500×250
& Gross Weight		18 kg	23 kg
Power Consumption		40 W	
Electrical Reqts.		Free Voltage (1 Phase, AC 80V~240V, 50/60Hz)	

Cat. No.	230V	DH.WSR04020	DH.WSR04022
	120V		DH.WSR05020
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Optional Platform/Flask Holder/Spring Rack

- DH.WSO504100 (1) Universal Platform, "SP100", for "SHR-1D", 230×230mm
- DH.WSO504200 "SP200", for "SHR-2D", 350×350mm
- DH.WIS600100 (1) SS Wire Spring Flask Holder, "FHS100", for 100ml Flask
- DH.WIS600250 "FHS250", for 250ml Flask
- DH.WIS600500 "FHS500", for 500ml Flask
- DH.WIS601000 "FHS1000", for 1000ml Flask

Spec.	Model	SHR-1D	SHR-2D
Max. Capacity of Flask Holder	For 50~100ml	9 ea	20 ea
	For 200~300ml	7 ea	16 ea
	For 500~1000ml	4 ea	9 ea

- DH.WSO504110 (2) Rubber Mat Platform, "SP110", for "SHR-1D", 270×270mm
- DH.WSO504210 "SP210", for "SHR-2D", 370×370mm
- DH.WSO504140 (3) Uni. Spring Rack, "SP140", for "SHR-1D", 270×270×h100mm
- DH.WSO504240 "SP240", for "SHR-2D", 370×370×h100mm
- DH.WSO504120 (4) Platform for Flasks, "SP120", for "SHR-1D", 350×230×h153mm
- DH.WSO504220 "SP220", for "SHR-2D", 350×350×h153mm
- DH.WSO504130 (5) Platform for Sep. Funnels, SP130, for SHR-1D, 350×235×h174mm
- DH.WSO504230 SP230, for SHR-2D, 351×355×h174mm

Ea. Price, ₩

<Optional Accessory>



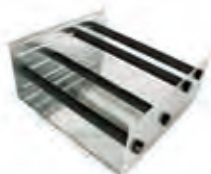
(1) Universal Perforated Platform & Flask Holder



(3) Universal Spring Rack "SP140" / "SP240"



(4) Platform for Flasks "SP120" / "SP220"



(5) Platform for Separatory Funnels "SP130" / "SP230"

Articles	Cat. No	Description
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**DAIHAN® Programmable Digital Rocker “RK”, Digital Feedback Control, 5~50 rpm, with Certi. & Traceability**  
 With 290×200mm or 300×300mm Platform with Non-slip Ruuber Mat, Smooth Start & Wave Motion, Tilt Angle ±6°/±9°  
 디지털 락커, 디지털 피드백 컨트롤 시스템, 부드러운 시동 동작 및 속도 조절

CE 5~50rpm

2-Year Warranty



Back-light LCD

Patented Jog-Shuttle Control System



(1) 290×200 mm Rocker “RK-1D” with Included Platform

- CE Certified    ■ PL(Product Liability) Insurance
- Stainless-steel Platform Comes with Gray Nonslip Rubber Mat
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- High Precision Digital Speed Control : 1rpm
- Patented Jog-Shuttle Control System
- \* Gel Staining, Destaining, Blotting
- \* Cell Culture, Hybridization, Washing
- \* High Precision Digital Speed Control : 1rpm
- \* Programmable Operation Mode Supported : 10 Steps and 6 Programs
- \* Digital Timer : Max. 99hr 59min
- \* Digital LCD with Back-Light Function for Timer, RPM and Power Bar-Graph
- \* Smooth Start and Change of Rocking Speed
- \* Overload Protection Function for Motor
- \* Storage Function for Set Values : RPM and Timer
- \* Alarm Function : Error Status and Timer-end
- \* Stackable Platform with Pad to Double Mixing Area (Optional)
- \* Locking Mode supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

**Specifications & Ordering information**

<L1>

CE



Second Platform “RK5021”(Optional)

Pillars



2-Year Warranty

(2) 300×300 mm Rocker “RK-2D” with Second Platform(Optional)

Spec.		Model	(1) “RK-1D” Platform Size 290×200 mm	(2) “RK-2D” Platform Size 300×300 mm
Dimensions (w×d×h)	Platform (mm)		290×200	300×300
	Overall (mm)		290×240×150	300×330×150
Speed Range (rpm)			5 ~ 50	
Angle (degree)			±6 or ±9 (±9 as Factory Default)	
Motor			14W Geared DC Motor	
Program Function			10 Steps, 6 Programs	
Timer & Alarm			99hr 59min (with Continuous run.), Error status & Timer-end	
Display			Digital LCD with Back-Light Function	
Controller			Programmable Digital Feedback Controller with Jog-Shuttle Switch(Turn+Push)	
Safety Circuit			Overload Protector for motor	
Platform (Included)			290×200mm Platform	300×300mm Platform
Others			PL(Product Liability) Insurance Smooth Start and Change of the Stirring Speed for Stable Running Storage Function (RPM, Timer) Locking Mode (Jog-Shuttle Input Disabled) Alarm ( Error Status and Timer-end )	
Packing Dimension (w×d×h) (mm)			450×350×250	
Gross Weight			7 kg	8 kg
Power Consumption			35 W	
Electrical Reqts.			Free Voltage (1 Phase, AC 80V~240V, 50/60Hz)	
Cat. No.	230V		DH.WRK01010	DH.WRK01020
	120V		DH.WRK02010	DH.WRK02020
Price, Each. ₩				

\* Other Specifications are available upon Customer’s Request.

**Optional Second Platform**

- DH.WRK05011 Second Platform, “RK5011”, for “RK-1D”, w290×d200, with 4 Pillars(L120mm)
- DH.WRK05021 Second Platform, “RK5021”, for “RK-2D”, w300×d300, with 4 Pillars(L120mm)

Ea. Price, ₩

**DAIHAN® Programmable Digital Rotator “RT-10”, 0~90° Mixing Angle, 5~60rpm, with Certi. & Traceability**  
 With Digital Feedback Control, Adjustable Speed & Angle of Rotation, Continuous or Timed Operation  
 디지털 로테이터, 디지털 피드백 컨트롤 시스템, 회전각 및 회전속도 조절 가능



5~60rpm



2-Year Warranty

Programmable Digital Rotator “RT-10”  
 with Optional Disk “WRT120” for 32 x 1.5ml Tube

50ml Conical Tube : 8ea



(1) Disk “WRT100”

15ml Conical Tube : 16ea



(2) Disk “WRT110”

1.5ml Conical Tube : 32ea



(3) Disk “WRT120”

1.5ml Conical Tube : 60ea

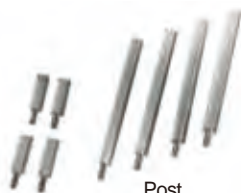


(4) Disk “WRT130”

250ml Flask : 4ea



(5) Disk “WRT140”



(6) Knob & Post “WRT300”  
 (Included)

- Made in Korea    ■ CE Certified    ■ PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Adjustable Speed and Angle of Rotation : 0 to 90°
- Patented Jog-Shuttle Control System
- \* General Mixing, Diffusing, Dialyzing and Hybridization, Aerating Culture
- \* Keeping Biological Samples in Suspension
- \* Adjustable Speed and Angle of Rotation : 0 to 90°
- \* Digital Feedback Control: Steady and Constant Rotating
- \* Continuous or Timed Operation
- \* Digital LCD with Back-Light Function
- \* Programmable Operation Mode Supported : 10 Steps and 6 Programs
- \* Overload Protection for motor
- \* Smooth Start and Change of Stirring Speed
- \* Storage Function for Set values of RPM and Time
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
- \* Durable Construction for Long-Term Operation
- \* 5 Different Disks and 3 Roller Drums(Optional)
- \* Disk for 250ml Flask is available

Specifications & Ordering information

<L1>

Spec.	Model	“RT-10”
Speed range		5~ 60 rpm
Angle range		0° ~ 90°
Motor		35W
Program Function		10 Steps, 6 Programs
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end
Display		Digital LCD with Back-Light Function
Controller		Programmable Digital Feedback Controller with Jog-Shuttle
Temp. Resistance		Lower than 65℃ (Dry Air)
Safety Circuit		Overload Protector for motor
Dimensions (w x d x h) (mm)		200 x 250 x h260 mm
Weight		6 kg
Others		PL(Product Liability) Insurance Storage Function (RPM, Timer) Locking Mode (Jog-Shuttle Input Disabled) User Self-compensation Function, Alarm (Error Status and Timer-end)
Packing Size (w x d x h) (mm)		370 x 240 x h430 mm
& Gross Weight		8.5 kg
Power Consumption		40 W
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz
Cat. No.	230V	DH.WRT00010
	120V	DH.WRT00020
Price, Each. ₩		

\* Other Specifications are available upon Customer's Request.

Optional Disk & Roller Drum

- DH.WRT00100 (1) Disk, “WRT100”, for 50ml conical tube x 8ea
- DH.WRT00110 (2) , “WRT110”, for 15ml conical tube x 16ea
- DH.WRT00120 (3) , “WRT120”, for 1.5ml conical/centrifuge Tube x 32ea
- DH.WRT00130 (4) , “WRT130”, for 1.5ml conical/centrifuge Tube x 60ea
- DH.WRT00140 (5) , “WRT140”, 250ml Flask-capacity x 4ea

Ea. Price, ₩

Ea. Price, ₩

Spare Knob & Post

- DH.WRT00300 (6) 4 x knobs & 4 x Post, “WRT300”, for Installing Disk



**NEW**



8-layer Test Sieve



**1-Year Warranty**

φ 75~203mm, Sieve Shaker

**DAIHAN® Digital Vibrating Sieve Shaker, for up to 8-layer φ 75/203mm Test Sieve **NEW****  
 Ideal for Sieving · Classifying · Filtering, CE Certified, without Sieves, 시브셰이커, 최대 8단, 표준망체 별도구매

- **CE Certified** ■ **Ideal for Effective Sieving, Classifying and Filtering Materials in the Test Sieve in Chemical Industry and Lab.**
- \* High Efficiency, Elaborate Design and Durable      \* Any Powder or Liquid can be Sieved.
- \* Max. 8-layer Test Sieve(Including the Sieve Pan & Cover) can be Placed.
- \* Accurately Separate one kind of Particle into 2~7 Particle Segments at the same time.
- \* Can be Shut Down Automatically at time.                      \* Can Experiment Repeatedly.
- \* Full Functionality and Simpler Operation.                      \* Timer Range: within 0~99min. and 0~59sec
- \* Universal Supply : 230V- 50Hz/60Hz                      \* Wooden Packing                      \* Not Including Sieves
- ※ Must be Tightened the Locking Nuts on both Sides to Prevent Sieve's Departure.

**Specifications & Ordering information** <L1>

Spec.	Model	"SieS0200"
Adjustable Sieve Diameter		φ 75~203mm
Sieving Particle Size		0.025~25mm
Motor Power		0.12(0.15 Common Motor)kw
Noise		Less than 50dB
Amplitude		0~3mm
Vibration Frequency		1400 Vibrations/min (Approx. 23Hz)
Dimensions (w × d × h) & Weight		350 × 380 × h300mm, 35kg
Power Supply		230V-50Hz/60Hz
Cat. No.		<b>DH.SieS0200</b>
Price, Each. ₩		



Spare; Accessory Kit

**Accessory**

**DH.Sie8200** Spare; Accessory kit (2 × Rod, 1 × Rod Jig, 4 × Clamps) for SieS0200

Ea.	Price, ₩

**DAIHAN® φ 203 × h41mm Standard Test Sieve, with Stainless-steel Mesh Holes(■) & Brass-Frame**  
 표준망체, 스텐레스 메쉬홀(■) & 황동틀, KS/ASTM/ISO 규격에 준함.



Dia φ 203 × h41mm Sieve

- **Made in Korea**      \* Consist of Brass-frame with Stainless-steel mesh
- \* Same Specifications ASTM & ISO standard, but Sieve-height is different.
- ※ **Note : Only Sieving mesh is Fulfilled all of KS, ASTM and ISO Specification**

<L2>

Cat. No.	ASTM No.	Sieve Opening Size	Ea. Price, ₩
DH.Si8022	No. 4	4.75 mm	
DH.Si8023	No. 5	4 mm	
DH.Si8024	No. 6	3.35 mm	
DH.Si8025	No. 7	2.80 mm	
DH.Si8026	No. 8	2.36 mm	
DH.Si8027	No. 10	2.00 mm	
DH.Si8028	No. 12	1.70 mm	
DH.Si8029	No. 14	1.40 mm	
DH.Si8030	No. 16	1.18 mm	
DH.Si8031	No. 18	1.00 mm	
DH.Si8032	No. 20	850 μm	
DH.Si8033	No. 25	710 μm	
DH.Si8034	No. 30	600 μm	
DH.Si8035	No. 35	500 μm	
DH.Si8036	No. 40	425 μm	
DH.Si8037	No. 45	355 μm	
DH.Si8038	No. 50	300 μm	
DH.Si8039	No. 60	250 μm	
DH.Si8040	No. 70	212 μm	
DH.Si8041	No. 80	200 μm	
DH.Si8043	No.100	150 μm	
DH.Si8044	No.120	125 μm	
DH.Si8045	No.140	106 μm	
DH.Si8047	No.170	90 μm	
DH.Si8048	No.200	75 μm	
DH.Si8049	No.230	63 μm	
DH.Si8050	No.270	53 μm	
DH.Si8051	No.325	45 μm	
DH.Si8052	No.400	38 μm	
DH.Si8053	No.450	32 μm	
DH.Si8054	No.500	25 μm	

※ More Sieves are available on [DAIHAN-Sci.com Shopping-mall!](http://DAIHAN-Sci.com Shopping-mall/)

# Sterilizers

<b>Autoclaves, Bench-top Front Door</b> .....	P.219
, Front Door .....	P.222
, Top-loading / Vertical .....	P.220~221
<b>Dry Heat Sterilizers <i>New</i></b> .....	P.223
<b>Accessories <i>New</i></b> .....	P.221



Autoclave, Bench-top Front Door  
25 · 40 Lit, "MaXterile™ BT"



Autoclave, Top-loading / Vertical  
47 · 60 · 80 · 100 Lit, "MaXterile™"



Autoclave, Front Door, 90 Lit  
"MaXterile™ FL90"



Dry Heat Sterilizer, 32 · 50 Lit  
"SteD"



DAIHAN® Digital Fuzzy-control Autoclave “MaXterile™”, *I. Medicaluse(Recorder-type)* & *II. Lab-use(Standard-type)*  
 With Electronic Door Lock System, Lever-type Sliding Door, Steam Condensing, Solid-/Liquid-Modes, 47 · 60 · 80 · 100 Lit, up to 132 °C  
 (1) PED Certified-model(φ 3.0mm Thick-Tank), (2) Non-PED-model(φ 2.0mm Thick-Tank), Max.2 kgf/cm², 전자동 고압 멸균기, 전자식 도어 잠금 시스템



- Made in Korea ■ CE and PED Certified ■ PL(Product Liability) Insurance
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
  - Patented Special Steam Condensing Mechanism, Lever-type Sliding Door
  - Built in DAIHAN® New Generation Controller : Patented Jog-Dial Control System
  - Electronic Door Lock Sensing System for User Safety.
- \* Door Open Button Automatically Lock Over 80 °C for User Safety  
 \* “B-type” Recorder model (only MaXterile 47R · 60R · 80R · 100R models) :  
 Print Sterilization Cycle Data for Validation and Analyze Sterilization (Temperature, Pressure, Time, Error Status, etc.)  
 \* Ideal for Biotechnology, Clinical, Environmental, Medical and Food Industry.  
 \* Digital Timer Function - ‘Delay Time’ and ‘Operation Time’ can be Controlled.  
 \* Water Low Level Detection  
 \* Automatic Over Pressure Release Valve ensures User Safety.  
 \* Sterilization Error Indication : Error Alarm and Message in case of Power Failure and Temperature Error

Specifications & Ordering information

<M1>

	“MaXterile 47R” Max. 47Lit	“MaXterile 60R” Max. 60Lit	“MaXterile 80R” Max. 80Lit	“MaXterile 100R” Max. 100Lit	
<b>I. Medicaluse Approved Recorder type</b>	Thermal printer with 1 Record Paper Roll: w58 × φ40mm 1000 Sterilization Cycle Data / roll (Date, Temperature, Pressure, Time, Error Status, etc.)				
<b>II. Laboratory Standard type</b>	“MaXterile 47”	“MaXterile 60”	“MaXterile 80”	“MaXterile 100”	
<b>Capacity</b>	47 Lit	60 Lit	80 Lit	100 Lit	
<b>Temp. Range &amp; Accuracy</b>	Room Temp 5°C~132°C, ±0.5°C at 121°C				
<b>Pressure &amp; Gauge</b>	1.2 kgf/cm² at 121°C / 2.0 kgf/cm² at 132°C, 0 ~ 3 kgf/cm²				
<b>Sterilization Mode</b>	Solid- or Liquid-mode, Chosen by a Customer				
<b>Heating Power/Consumption</b>	2 kW	3 kW	2 kW×2	2 kW×2	
<b>Timer &amp; Alarm</b>	60 min, Error status & Timer-end				
<b>Display</b>	Digital LCD with Back-Light Function				
<b>Controller</b>	Digital Fuzzy-Control System (Fully Automatic)				
<b>Door &amp; Closing System</b>	Lever-type Sliding Door / Safety Electronic Door Closing System				
<b>Safety Circuit</b>	Over-Temp./-Pressure/-Current protection, Sensor Error Detection				
<b>Material</b>	Pressure Vessel-Stainless-steel( # 304), External-Powder Coated steel				
<b>Basket (Included)</b>	2 Stainless-steel Wire Basket				
<b>Basket Dimension (mm)</b>	φ270 × h240	φ320 × h240	φ370 × h240	φ420 × h240	
<b>Dimension</b>	<b>Inner (mm)</b>	φ300 × h670	φ350 × h650	φ400 × h650	φ450 × h630
<b>(w × d × h)</b>	<b>Outer (mm)</b>	700 × 470 × 1080	700 × 470 × 1080	810 × 580 × 1140	810 × 580 × 1140
<b>Packing Size (mm)</b>	840 × 610 × h1,252mm		950 × 730 × h1,352mm		
<b>Gross Weight (kg)</b>	117kg	120kg	170kg	170kg	
<b>Electric Reqts.</b>	1Phase - AC 120V, 60Hz or - AC 230V, 50/60Hz		1 Phase - AC 120V, 60Hz or - AC 230V, 50/60Hz 3 Phase with Terminal Block		

(1) With PED(Pressure Equipment Directive) Certification, φ 3.0mm Thickness Tank

I. Medicaluse Cat. No.	230V	DH.WACR2047P	DH.WACR2060P	DH.WACR2080P	DH.WACR2100P
	120V	DH.WACR1047P	DH.WACR1060P	DH.WACR1080P	DH.WACR1100P
	3Phase	-	-	DH.WACR3080P	DH.WACR3100P
Price, Each. ₩					
II. Standard Cat. No.	230V	DH.WAC05047P	DH.WAC05060P	DH.WAC05080P	DH.WAC05100P
	120V	DH.WAC06047P	DH.WAC06060P	DH.WAC06080P	DH.WAC06100P
	3Phase	-	-	DH.WAC07080P	DH.WAC07100P
Price, Each. ₩					

(2) Without PED(Pressure Equipment Directive) Certification, φ 2.0mm Thickness Tank

I. Medicaluse Cat. No.	230V	DH.WACR2047	DH.WACR2060	DH.WACR2080	DH.WACR2100
	120V	DH.WACR1047	DH.WACR1060	DH.WACR1080	DH.WACR1100
	3Phase	-	-	DH.WACR3080	DH.WACR3100
Price, Each. ₩					
II. Standard Cat. No.	230V	DH.WAC05047	DH.WAC05060	DH.WAC05080	DH.WAC05100
	120V	DH.WAC06047 <td>DH.WAC06060</td> <td>DH.WAC06080</td> <td>DH.WAC06100</td>	DH.WAC06060	DH.WAC06080	DH.WAC06100
	3Phase	-	-	DH.WAC07080	DH.WAC07100
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

I. Medicaluse Approved, “MaXterile™ 80R”

- (1) With PED Certi. 3mm Thick-Tank
- (2) Without PED Certi. 2mm Thick-Tank



II. Standard-type, “MaXterile™ 80”

- (1) With PED Certi. 3mm Thick-Tank
- (2) Without PED Certi. 2mm Thick-Tank

<Continued On Next Page>

Articles	Cat. No	Description
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<Continued From...DAIHAN® Digital Fuzzy-control Autoclave, "MaXterile™" Standard-type/Recorder-type>



(3) Wire Basket  
Stainless-steel  
(Included)



(4) Perforated Bottom  
Basket,  
Stainless-steel  
(Optional)

**(3) Spare Wire Basket, Stainless-steel & Thermal Paper for Recorder**

- SL.Bas7011** Wire Basket,  $\phi 270 \times h240$ mm, "Bas7011", for 47 Lit, "MaXterile 47 & 47R"
- SL.Bas7012** ,  $\phi 320 \times h240$ mm, "Bas7012", for 60 Lit, "MaXterile 60 & 60R"
- SL.Bas7013** ,  $\phi 370 \times h240$ mm, "Bas7013", for 80 Lit, "MaXterile 80 & 80R"
- SL.Bas7014** ,  $\phi 420 \times h240$ mm, "Bas7014", for 100 Lit, "MaXterile 100 & 100R"
- DH.WACR5004** Thermal Paper for Recording Printer, 4 × Paper Roll, for 1000 Sterilization Cycle Data / roll (Date, Temperature, Pressure, Time, Error Status, etc.)

<L1>  
Ea. Price, ₩

**(4) Optional Perforated Bottom Basket, Stainless-steel**

- DH.WAC20047** Basket,  $\phi 270 \times h250$ mm, "WAC20047", for 47 Lit, "MaXterile 47 & 47R"
- DH.WAC20060** ,  $\phi 320 \times h250$ mm, "WAC20060", for 60 Lit, "MaXterile 60 & 60R"
- DH.WAC20080** ,  $\phi 370 \times h250$ mm, "WAC20080", for 80 Lit, "MaXterile 80 & 80R"
- DH.WAC20100** ,  $\phi 420 \times h250$ mm, "WAC20100", for 100 Lit, "MaXterile 100 & 100R"

Ea. Price, ₩

**Autoclave with Validation (IQ, OQ) Service**

- DH.WAC30047**
- DH.WAC30060**
- DH.WAC30080**
- DH.WAC30100**

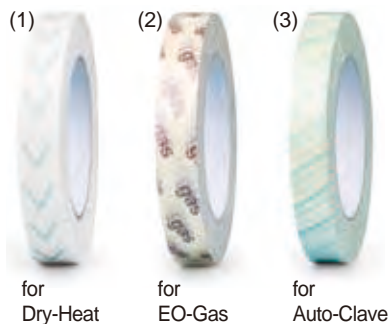
Validation Service(IQ, OQ), with "MaXterile 47"  
, with "MaXterile 60"  
, with "MaXterile 80"  
, with "MaXterile 100"

Ea. Price, ₩

- DH.WACR0047**
- DH.WACR0060**
- DH.WACR0080**
- DH.WACR0100**

Validation Service(IQ, OQ), with "MaXterile 47R"  
, with "MaXterile 60R"  
, with "MaXterile 80R"  
, with "MaXterile 100R"

Ea. Price, ₩



for Dry-Heat

for EO-Gas

for Auto-Clave

**Sterilization Indicator Tape, w19mm × L50m/Roll**  
For Dry-Heat, EO-Gas, and Steam Sterile(Autoclaving), **멸균 감지 테이프**

\* Changing Color after Expose to Sterilization Process(Dry-Heat, EO-gas, Steam Sterile)

**(1) For Dry-Heat Sterile, <Italy-made>**

**KA.1051** Dry-Heat Sterile Indicator, w19mm × L50m/Roll, White → Brown

<L1>  
Ea. Price, ₩  
1roll

**(2) For EO-Gas Sterile, <Germany-made>**

**HH.1080551** EO-Gas Sterile Indicator, w19mm × L50m/Roll, Red → Green

Ea. Price, ₩  
1roll

**(3) For Steam Sterile(Autoclaving), <Germany-made>**

**HH.1080550** Autoclave/Steam Sterile Indicator, w19mm × L50m/Roll, Green → Brown

Ea. Price, ₩  
1roll



**Sterilization Indicator Roll Bags, with Printed Graduations, L200m/Roll** NEW  
For Autoclave & EO-Gas Sterilization, **멸균 감지 포장지**

- 오토클레이브 또는 EO가스 멸균 시 포장하여 포장지의 색변화를 통해 멸균 여부를 감지할 수 있음.
- When Autoclave or EO Gas Sterilization, It can be Indicated Sterilization through a Color Change of Packaging.
- It has Printed Graduations for Convenience to Cut, It is not Necessary to Worry about Object Length.

\* Bag can be Sealed with Tape. \* Autoclave and Indicator for EO-Gas are Included.  
\* Material : PET+CPP · Paper \* Discoloration : Autoclave / Blue → Black. EO-Gas / Red → Brown

<L2>  
Roll. Price, ₩

- SL.Bag9092** Sterilization Indicator Bag, w75 × L200m/Roll
- SL.Bag9093** , w100 × L200m/Roll
- SL.Bag9094** , w150 × L200m/Roll
- SL.Bag9095** , w200 × L200m/Roll
- SL.Bag9096** , w250 × L200m/Roll



**Dry-Heat Sterilizer Indicator Label on Sheet, 160°C/3h, 180°C/30min, Pink ⇒ Brown**  
For Indicating Sterilizer, Color-Changing : from Pink to Brown, **가열 멸균 감지 라벨**

\* Change of Color : Pink ▶ Brown \* Changing Time : 30 minutes at 180°C, 3 Hours at 160°C

**SL.Lab9051** Heat-Sterile Label "D-L", w19 × L32mm

<L2>  
Cs. Price, ₩  
500ea



**Anabac® Deodorant "Classic" for Autoclaving, 100 Tablets**  
Ideal for Deodorization, Deodorant Capacity : max 200Lit per One-tablet, **사과향 오토클레이브용 탈취제**

\* French Bracing Fragrance \* 100 Tablets / Packed in PP/Paper Container  
\* Deodorant Volume : Max 200Lit per 1-Tablet

**SL.Deo1011** Deodorant for Autoclave Apple, 100 Tablets/a Container

<L2>  
Pk. Price, ₩  
100ea

DAIHAN® 90Lit Steam Sterilizer “MaXterile™ FL90”, Floor-type Front Door, 110~135 °C, *Medicaluse*  
 With Built-in Steam Generator, Water Ejector Vacuum Pump, Thermal Printer, 2 Perforated SS Tray, HEPA Filter  
 SQUARE Chamber Autoclave, Pre- & Post-Vacuum Drying, Auto-Door Lock & Alarm System, Max 2.30 bar, *사각챔버/전면문 고압 멸균기*



90Lit Front Door Steam Sterilizer “MaXterile™ FL90”

- Made in Korea    ■ PL(Product Liability)
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.
- Class-B Sterilization Cycle by EN285 Standard :  
 Pre-vacuum → Steam Generation → Steam Injection → Sterilizing → Exhaust → Post-vacuum Drying → End of Cycle
- \* Ideal for Dental Clinical, Medical, Biotechnology, etc.
- \* Pre-vacuum Air Removal & Post Vacuum Drying for Perfect Sterilizing
- \* Built-in Steam Generator Supplies Water Automatically and Sprays Steam into the Chamber
- \* Water Ejector Vacuum Pump : Effective for Fluid Control(1800L/hr)
- \* Air Filtration System : 0.3 $\mu$ m HEPA Filter of Efficiency up to 99.97%
- \* Automatic Dual Door Locking System for User Safety.
- \* Programmable Function : Provides 6-Program & User Customizable 1 Program
- \* Intuitive User Interface(LCD) & Indicator of Working(LED Lamp)
- \* Self-Diagnostic and Display Error Codes
- \* Visual and Audible Alarm System
- \* Sturdy and Convenient Locking Wheel helps to Move Easily
- \* Built-in Thermal Printer

Specifications & Ordering information

<M3>

Spec.	Model	“MaXterile™ FL90”
Capacity		90 Lit
Sterilizing Cycle-type		Class-B Cycle by EN-285 Standard
Temp. Range		110°C~135°C
Pressure & Gauge		0.4 ~ 2.3 bar, Built-in Analog & Digital Pressure Gauge
Timer & Alarm		60 min, Error Status & Timer-end Alarm
Display		Digital LCD with Back-Light Function & LED Lamp (Working Process)
Controller		Microprocessor Digital PID Control System (Full Automatic)
Programmable Function		Pre-set 6 Programs (Customizable 5- & Fixed Bowie Dick 1- Program)
Door-type		Manual Vertical Sliding Door, Automatic Door Locking System
Chamber		Reinforced and Electro Polished Square Chamber with Double Jacket
Tray (Included)		2 Stainless-steel Perforated Tray
Safety Circuit		Over-Temp / -Pressure / -Current protection, Sensor Error Detection
Printer		Thermal printer with 1 Record Paper Roll: w58 × $\phi$ 40mm 1000 Sterilization Cycle Data / roll (Date, Temperature, Pressure, Time, Error Status, etc.)
Material		Interior : Stainless-steel 304 Pressure Vessel, Exterior : Stainless-steel
Dimension (w×d×h) & Weight	Interior	338×712×h378 mm
	Exterior	625×990×h1300 mm, 280 kg
	Packing	850×1100×h1400 mm, 295 kg
Power Consumption		6.0 kW
Electric Reqts.		220 V 50 / 60 Hz, 1 Phase
Cat. No.		DH.SteF8001
Price, Each. ₩		

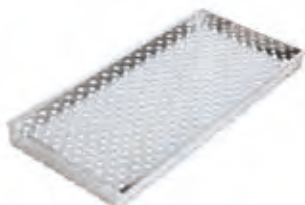
\* Other Specifications are available upon Customer's Request.

※ 운임 착불

Fig1. Vertical Sliding Door & Square Chamber

MODE	Temperature (°C)	Pressure (bar)	Sterilizing Time (min)	Drying Time (min)
Unwrapped 1	121	1.1	20	30
Unwrapped 2	134	2.1	5	30
Wrapped 1	121	1.1	30	30
Wrapped 2	134	2.1	15	30
Liquid	121	1.1	20	0
Bowie Dick	134	2.1	4	5
User Program	110 - 135	0.4 - 2.3	4 - 30	0 - 60

Program Cycle



(1) SS Perforated Tray



(2) Thermal Paper Roll

Spare Accessory

- DH.SteFA1001 (1) SS Perforated Tray, 323×667×h54 mm for “MaXterile FL90”
- DH.SteA1006 (2) Thermal Paper Package, 4 Paper Roll for Thermal Recorder
- DH.SteA1016 Replacement HEPA Filter-kit

Ea. Price, ₩

Front Loading Sterilizer with Validation (IQ, OQ) Service

- DH.SteF5001 Validation Service(IQ, OQ), with “MaXterile™ FL90”

Ea. Price, ₩

DAIHAN® 32 & 50Lit Dry Heat Sterilizer "SteD", with Thermal Printer, Forced Air, Up to 250°C, **Medicaluse** **NEW**  
With 3-Side Pre-Heating Zone, Digital PID Control, Jog-Dial & Push Button, and 2 Wire Shelf, **건열 멸균기**

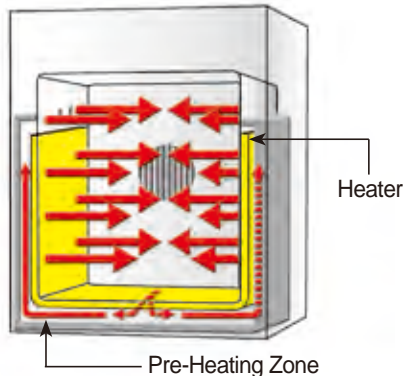
**NEW**

Medicaluse

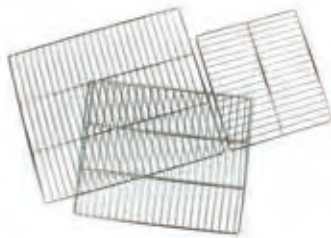


2-Year Warranty

A. Dry Heat Sterilizer "SteD-30"



3-Side Heating Zone Forced-air Mechanism



(1) SS Wire Shelf (Included)

- Made in Korea    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.
- Optimized Air Flow by Forced-air Mechanism
- 3-Side Heating Zone : The Best Temp Uniformity & Accuracy by High Performance Heating Mechanism

- \* Ideal for Dental Clinical, Medical, Biotechnology, etc.
- \* Digital PID Control System Implementing Superior Temperature Accuracy
- \* Patented Jog-Dial Control System
- \* Space Saving Compact Size
- \* Efficient Square Inner Chamber
- \* Alarm Function : Error Status and Timer-end

## Specifications &amp; Ordering information

&lt;M1&gt;

Spec.	Model	A. "SteD-30"	B. "SteD-50"
Capacity		32 Lit	50 Lit
Heater Power		500 W	650 W
Temp.	Range	Room Temp 5°C~250°C	
	Fluctuation	± 0.3°C at 100°C, ± 0.5°C at 180°C,	
	Variation	± 1°C at 100°C, ± 2.0°C at 180°C	
	Sensor	PT100	
Temp. Resolution		± 0.1°C	
Circulation		Forced-air Type	
Controller		Digital PID Control by Advanced Microprocessor Jog-Dial with Push Button	
Display		Digital LCD with Back Light	
Timer		99hr 59min (Delay / Continuous Function)	
Printer		Thermal printer with 1 Record Paper Roll: w58 × φ40mm 1000 Sterilization Cycle Data / roll (Date, Temperature, Time, Error Status, etc.)	
Material	Internal	Stainless-steel (#304)	
	External	Powder Coated Steel	
	Insulation	Glass Wool	
Shelf (Included)		2 Stainless-steel Wire Shelf Load per Shelf : 16kg	
Safety Device		Over Temp and Over Current Protector, Sensor Error Detector	
Dimension (w×d×h)	Interior	312×290×h360mm	370×350×h420mm
	Exterior	458×477×h624mm	518×537×h701mm
	Packing	568×592×h698mm	628×652×h775mm
Net Weight		32kg	40kg
Shipping Weight		39kg	53kg
Power Consumption		550 W	700 W
Electric Reqs.		230V, 50 / 60 Hz	
Cat. No.		DH.SteD0003	DH.SteD0005
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

## Spare Stainless-steel Wire Shelf

DH.WIG12032 (1) Wire Shelf, 280×260mm, for 32 Lit, "IGSN032"  
DH.WON11050 , 340×310mm, for 50 Lit, "ONS050"

Ea. Price, ₩

## Dry Heat Sterilizer with Validation (IQ, OQ) Service

SL.SteD5003 Validation Service(IQ, OQ), with "SteD-30"  
SL.SteD5005 , with "SteD-50"

Ea. Price, ₩

# Stirrers

**Magnetic Stirrers** ..... P. 225~228

**Magnetic Stirring with Heating / Hotplate Stirrer** ... P. 229~231

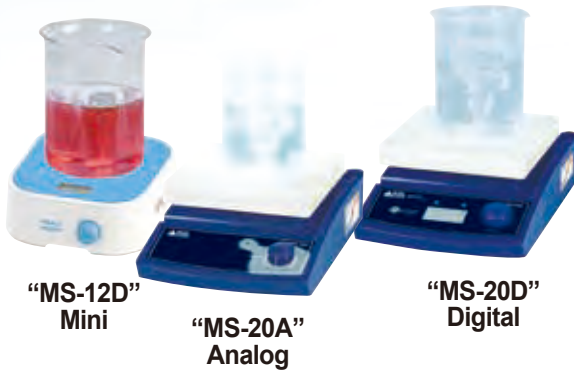
**Overhead Stirrers, High Speed-type** ..... P. 233~235

    , High Torque-type ..... P. 236~239

    , Jar Tester/6-paddle Stirrer ..... P. 240

    , Accessories (Impeller/Rod/Stand) ... P. 240~247

• **Magnetic Stirrer**



• **Magnetic Stirrer Multi-point**



• **Hotplate Stirrer**



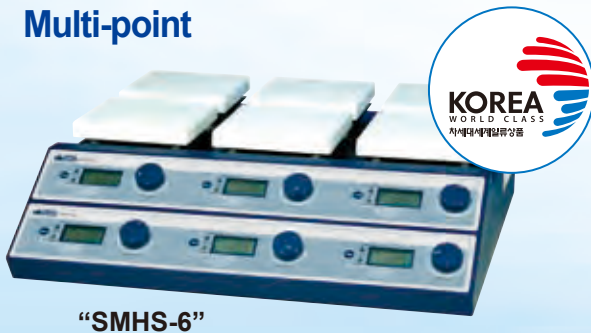
• **Overhead Stirrer High Speed**



• **Overhead Stirrer High Torque**



• **Hotplate Stirrer Multi-point**



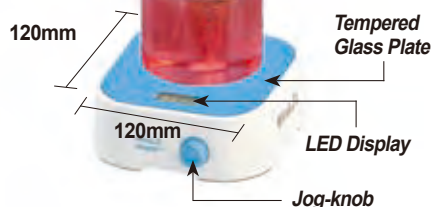


**Wisdom** 120×120 Mini Hi-Quality Digital Magnetic Stirrer "MS-12D", Max. 2,500rpmWith Tempered Glass Plate & PP Housing, BLDC-motor, Digital LED Display, Waterproof, Max. 2Lit(H<sub>2</sub>O), 소형 디지털 자력교반기

CE

100~2,500rpm  
120×120mm

Stir Bar

**2-Year Warranty**

120×120mm Mini Magnetic Stirrer "MS-12D"

- CE Certified
- PL (Product Liability) Insurance
- High Performance Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control (Minimize RPM Fluctuation), Low Maintenance Cost.
- Outstanding Chemical Resistance due to Tempered Glass Plate (120×120mm) and PP Housing
- Higher Speed Range from 100 ~ 2,500 rpm
- Waterproof Structure
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System

- \* Digital Speed LED Display.
- \* Electronically Controlled Motor for more Capacity
- \* Includes 1ea × 3cm Stirring Bar
- \* Can be used with up to 5cm bar

## Specifications &amp; Ordering information

&lt;L1&gt;

Spec.	Models	"MS-12D" 120×120mm Plate
Stirring Capacity		Max. 2Lit (H <sub>2</sub> O)
Motor Rating(Input/Output)		6 / 3W
Speed Range & Motor		100~2,500rpm, High Performance Brushless DC-motor
Controller & Display		Digital PID Control with Jog-knob & Digital LED display
Stirring Bar		3cm bar-included, Usable : up to 5cm bar
Material		Tempered Glass Plate(5mm thick) & PP Housing
Dimension		Plate : 120×120mm, Body : 136×136×h50.5mm
Weight		0.5kg
Electrical Reqts.		DC 12V, with AC 230V Adapter, 50/60Hz
Cat. No.	230V	DH.StiM012
	120V	DH.StiM012.1
Price, Set. ₩		

**Wisdom** 180×180 Midi Hi-Quality Digital Magnetic Stirrer "MS-18D", Max. 2,500rpmWith Tempered Glass Plate & PP Housing, BLDC-motor, Digital LED Display, Waterproof, Max. 5Lit(H<sub>2</sub>O), 미디 디지털 자력교반기

CE

100~2,500rpm  
180×180mm

Stir Bar

**2-Year Warranty**

180×180mm Midi Magnetic Stirrer "MS-18D"

- CE Certified
- PL (Product Liability) Insurance
- High Performance Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control (Minimize RPM Fluctuation), Low Maintenance Cost.
- Outstanding Chemical Resistance due to Tempered Glass Plate (180×180mm) and PP Housing
- Higher Speed Range from 100 ~ 2,500 rpm
- Waterproof Structure
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System

- \* Digital Speed LED Display.
- \* Electronically Controlled Motor for more Capacity
- \* Includes 1ea × 3cm Stirring Bar
- \* Can be used with up to 5cm bar

## Specifications &amp; Ordering information

&lt;L1&gt;

Spec.	Models	"MS-18D" 180×180mm Plate
Stirring Capacity		Max. 5Lit (H <sub>2</sub> O)
Motor Rating(Input/Output)		12 / 6W
Speed Range & Motor		100~2,500rpm, High Performance Brushless DC-motor
Controller & Display		Digital PID Control with Jog-knob & Digital LED display
Stirring Bar		3cm bar-included, Usable : up to 5cm bar
Material		Tempered Glass Plate(5mm thick) & PP Housing
Dimension		Plate : 180×180mm, Body : 193×193×h80.5mm
Weight		1.6kg
Electrical Reqts.		DC 12V, with AC 230V Adapter, 50/60Hz
Cat. No.	230V	DH.StiM018
	120V	DH.StiM018.1
Price, Set. ₩		

**DAIHAN® Standard Digital & Analog Magnetic Stirrer “MS-20”, 180×180mm Ceramic-Coated Plate, Max. 1,500rpm**  
 With Precise Speed Control, with Certi. & Traceability, Max. 20 Lit, 디지털/아날로그 자력교반기, 세라믹 코팅 플레이트

**CE**  
80~1,500rpm



**A. Digital Magnetic Stirrer “MS-20D”**

- **CE Certified**
- **PL (Product Liability) Insurance**
- **with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System**
- **Ceramic Coated Plate-Chemical/Acid Resistance**
- \* Ideal for Heat-sensitive Procedures such as Microbiology and Biochemistry Applications
- \* Mixing for Chemical, Laboratory, Pharmaceutical Materials
- \* Smart Design of Body made by Aluminum Die-Casting
- \* Powerful Motor for Stirring Quantities of up to 20Lit (Water)
- \* Free Voltage (AC 80V ~ 240V, 50 / 60Hz) by SMPS

**A. Digital Microprocessor Control System “MS-20D”**

- **Digital Feedback Control by High-Performance Microprocessor**
- **Patented Jog-Shuttle Control System**
- \* Digital LCD Display with Back-Light Function
- \* Storage function for the set values : RPM and Time
- \* Digital Timer Function : 99hr 59min(with Continuous run.)
- \* Alarm Function : Error Status and Timer-End
- \* Locking Mode Supported for Experimental Safety (Jog-shuttle input blocked)

**CE**  
~1,500rpm



**B. Analog Magnetic Stirrer “MS-20A”**

**B. Analog PWM Control System “MS-20A”**

- \* Superior Linearity for the Control of Stirring Speed by Specially Designed Control Circuitry (PWM Control)
- \* Long Life Power & Mechanism
- \* High Stability in Very Low & High-speed

**Specifications & Ordering information**

<L1>

Spec.	Model	A. “MS-20D” Digital-type	B. “MS-20A” Analog-type
Plate Size		180×180mm	
Stirring Capacity (H <sub>2</sub> O)		Max. 20Lit	
Speed Range		80 ~ 1,500 rpm	Max. 1,500 rpm
Motor Rating		10 W	
Speed Accuracy (%)		± 5	-
Speed Control Resolution		5 rpm	-
Timer & Alarm		99hr 59min, Error status & Timer-end	-
Display		Digital LCD with Back-Light	-
Controller		Digital Feedback Controller with Jog Shuttle Switch(Turn+Push)	Superior Linearity PWM Controller
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Permissible Ambient Temp.		Room Temp. 5℃~50℃	
Permissible Relative Moisture		85%	
Material	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance)	
	Body	Powder Coated Aluminum	
Dimension (w×d×h)		206×307×99mm	
Weight (kg)		3.1 kg	
Packing Size (w×d×h)		280×400×200mm	
& Gross Weight		5 kg	
Power Consumption		10 W	
Electrical Reqts.		Free Voltage (1 Phase, AC 80 ~ 240V, 50 / 60 Hz)	

Cat. No.	230V	DH.WMS03022	DH.WMS03122
	120V	DH.WMS02022	DH.WMS02122
Price, Each. ₩			

\* Other Specifications are available upon Customer’s Request.

**Optional Stand Rod · Holder · Clamp · Clip**

- DH.WHP503036** (1) Stand Rod “RD200”, Stainless-steel, screw, φ12×L450mm, for “MS-20A/20D”
- DH.WHP503012** (2) Holder/Clamp/Clip, “CL220”, for Temp. Probe

Ea. Price, ₩

**Long Life Power & Mechanism!**

SMPS (Switching Mode Power Supply)  
Use with Safety & Regular DC !!

AC → Stable DC !!

SSR (Solid State Relay)-Non Contact  
No Electronic Harm!  
Realize **Long Life Cycle!**

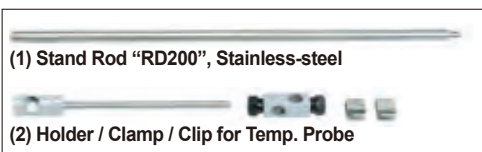
**High Stability in Very Low & High-speed**

General Phase Control  
Use with AC !!  
(Very sensitive Point)

PWM Control  
Use with DC !!  
(Super linearity)

DAIHAN Realize **Stable & Easy to Use!**

**Specialized Features of “MS-20A”**



**DAIHAN® Premium Magnetic Stirrer “MaXtir™ MS500”**, Shade Motor, Max. 80~1,500 rpm, Max 20Lit  
 With Large LCD, Solid Ceramic Glass Plate, 200×200mm, Touch-button Controller, Digital Feedback Control, Precise Speed Control  
 고성능 디지털 자력 교반기, 디지털 피드백 제어, 초강력 쉐이드 모터



80~1,500rpm

2-Year Warranty



Premium Digital Magnetic Stirrer “MaXtir™ MS500”

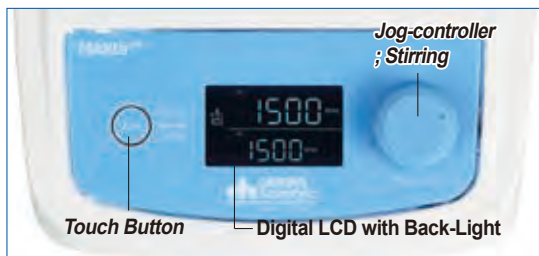
- CE Certified
- Ergonomic Design
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Digital Feedback Control by High-Performance Microprocessor
- Brushless Shade Motor & Powerful Magnet ensures Powerful Stirring and Precise Speed Control
- High-quality Solid Ceramic Glass Plate :  
 Heat · Chemical · Acid-Resistance and Easy to Clean
- \* Large LCD Display for Current and Speed, and Timer
- \* Patented Controller “Jog-Dial” and Main Touch Button - Best Durability, Best Mobility, Best Convenient to Operate.
- \* Mixing for Chemical, Laboratory, Pharmaceutical Materials
- \* Storage Function for the set Values : RPM and Timer
- \* Minimization of Noise and Improved the Product Life
- \* Use of the Special Advanced Insulation for the safety of the Body Temp.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)
- \* Digital Timer Function(99hr 59min)
- \* Ergonomic Design of Body made by Aluminum Die-casting

Specifications & Ordering information

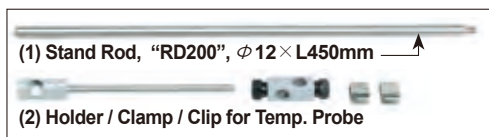
<L2>

Spec.		Model	“MaXtir™ MS500”
Material	Body	Powder Coated Aluminum	
	Plate	Solid Ceramic Glass Plate, 200×200mm	
Stirring Capa.		Max. 20 Lit	
Speed & Control Resolution		80 ~ 1,500 rpm, 5 rpm	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Large Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Dial (Turn+Push) and Touch button.	
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Permissible Temp. & RH %		Room Temp. 5℃ ~ 50℃, 85% RH	
Dimension & Weight		200×332×h114mm, 3.8kg	
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	
Cat. No.	230V	DH.WMS00500	
	120V	DH.WMS00501	
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.



Controller of “MaXtir™ MS500”



Optional Stand Rod/Holder/Clamp/Clip

- DH.WHP503036 (1) Stand Rod, “RD200”, Stainless-steel, screw, ϕ12×L450mm
- DH.WHP503012 (2) Holder/Clamp/Clip, “CL220”, for Temp. Probe

Ea. Price, ₩

**DAIHAN® Digital Multi-point Magnetic Stirrer “MS-MP”, 4 & 8-Points, Max. 500ml per Point**

With Digital Feedback Control System, Digital LCD Display, Synchronous Operation, 80~1,200 rpm, with Certi. & Traceability

4 & 8-멀티포인트 디지털 자력교반기, 디지털 피드백 컨트롤 시스템

CE 80~1,200rpm **2-Year Warranty**



**A. Digital 4-Point Magnetic Stirrer “MS-MP4”**

- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideally Suitable for Use in Incubators and Climatic Chambers
- Excellent for Multi-use and wide range of Sample Testing
- Patented Jog-Shuttle Control System

- \* Ideal for Heat-sensitive Procedures such as Microbiology and Biochemistry Applications
- \* Synchronous Operation of 4 / 8 Stirring Points
- \* Up to 0.5 Lit. Stirring Capacity per Point
- \* Increased Effectiveness by Microprocessor Control
- \* Digital LCD with Back-Light Function
- \* Digital Timer Function (99 hr 59 min)
- \* Smooth Start and Change of Stirring Speed
- \* Storage Function for the Set Values : RPM and Timer
- \* Extraordinary Mechanical, Physical and Chemical Resistance
- \* Locking Mode supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)
- \* Free Voltage (AC 80V ~ 240V, 50 / 60Hz) by SMPS

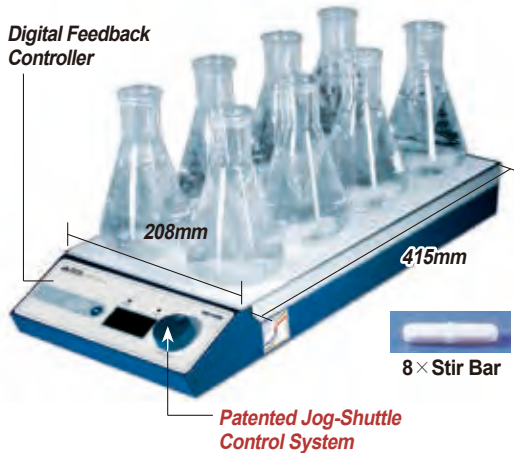
**Specifications & Ordering information**

<L1>

Spec.	Model	A. “MS-MP4” 4 Stirring Points	B. “MS-MP8” 8 Stirring Points
Number of Stirring Points		4 (2×2) Stirring Points	8 (4×2) Stirring Points
Plate Size		208×215mm	208×415mm
Stirring Capacity (H <sub>2</sub> O)		Max. 0.5 Lit per Point	
Distance between Stirring Points		100 mm	
Speed Range		80 ~ 1,200 rpm	
Motor Rating		16/9 W	
Speed Control Resolution		5 rpm	
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Shuttle Switch(Turn+Push)	
Stirring Bar		4ea 3cm bar-included, Usable : up to 3cm bar	8ea 3cm bar-included, Usable : up to 3cm bar
Permissible Ambient Temperature		Room Temp. 5℃~50℃	
Permissible Relative Moisture		85%	
Material	Plate	Stainless-steel (# 304)	
	Body	Power Coated Steel	
Dimension (w×d×h)		208×280×75mm	208×480×75mm
Weight		2.5 kg	3.5 kg
Others		PL(Product Liability) Insurance Storage Function (RPM, Timer) Locking Mode (Jog-Shuttle Input Disabled) Alarm (Error Status and Timer-end)	
Packing Size (w×d×h) & Gross Weight		300×330×180mm	330×540×180mm
		6 kg	
Power Consumption		20 W	
Electrical Reqts.		Free Voltage (1 Phase, AC 80~240V, 50/60 Hz)	
Cat. No.	230V	DH.WMS03036	DH.WMS03038
	120V	DH.WMS02036	DH.WMS02038
Price, Each. ₩			

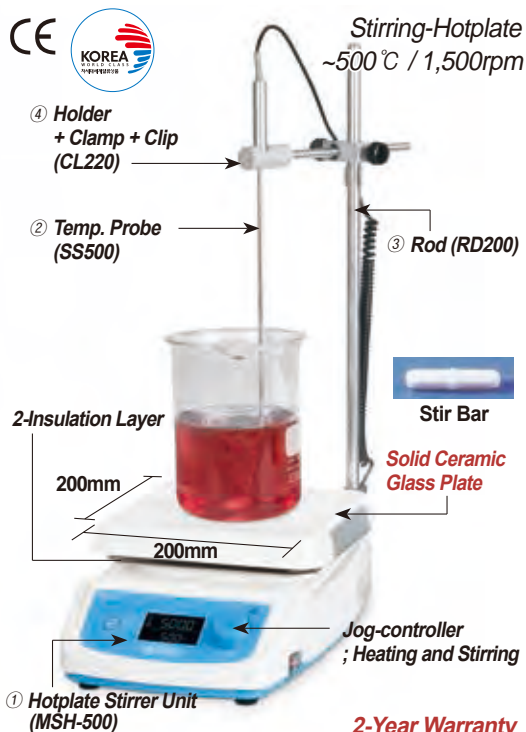
\* Other Specifications are available upon Customer's Request.

CE 80~1,200rpm **2-Year Warranty**



**B. Digital 8-Point Magnetic Stirrer “MS-MP8”**

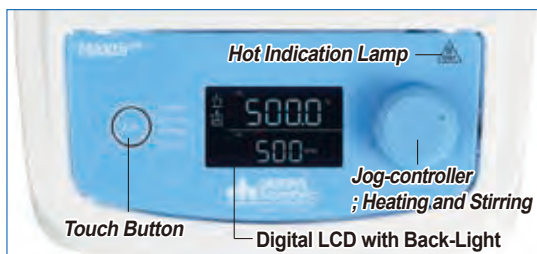
DAIHAN® 500°C Premium High-Temp Hotplate Stirrer "MaXtir™ MSH500", Solid Ceramic Glass Plate, 200×200mm With Large LCD, Optimum Insulation Layer. Accurate Temp. Control, Touch-button Controller, Hot-Top Indicator, 80~1,500rpm 고온용 디지털 가열 자력 교반기, 최적의 방열구조, 디지털 피드백 온도 제어, 내열성·내화학성·내산성 솔리드 세라믹 글라스 플레이트



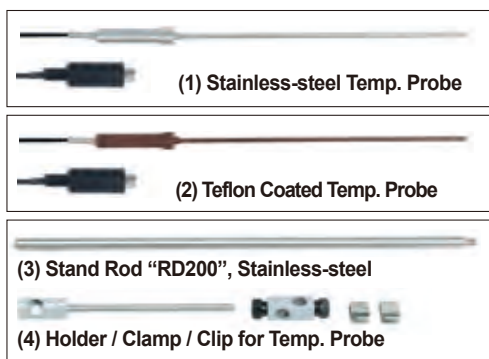
A. "MaXtir™ MSH500" Package-set



B. "MaXtir™ MSH500" Unit only



Controller of "MaXtir™ MSH500" model



- CE Certified
- PL (Product Liability) Insurance
- Ergonomic Design
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- High-quality Solid Ceramic Glass Plate : Heat-/Chemical-/Acid-Resistance and Easy to Clean
- Optimum Insulation Fourfold Layer : BTU + Ceramic Paper + 2 SS Insulation Layer
- Brushless Shade Motor & Powerful Magnet ensures Powerful Stirring and Precise Speed Control, Minimization Noise
- \* Microprocessor PID control
- \* Patented Controller "Jog-Dial" and Main Touch Button - Best Durability, Best
- \* Mobility, Best Convenient to Operate with Back-Light Function
- \* 2 Internal K-type Temp. Sensor Operating Independently :
  - 1 Temp. Control Sensor for Temperature Accuracy
  - 1 Over Temp. Detection Sensor for User Safety
- \* Hot Top Indicator LED Lamp : Hot Surface(Over 50°C) Warning Lamp for User Safety
- \* Excellent for Sample Drying and most General Lab Heating Applications
- \* User's Self -Compensation Function : to Control Difference between Real Temp. and Indicated Temp. (±20.0°C)
- \* Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
- \* Storage Function for the set Values : Temp. and Timer
- \* Use of the Special Advanced Insulation for the safety of the Body Temp.
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Dial can be Disabled)

Specifications & Ordering information

<L2>

Spec.		Model	A. "MaXtir™ MSH500" (Package-set)	B. "MaXtir™ MSH500" (Unit Only)
Material	Body	Powder Coated Aluminum		
	Plate	Solid Ceramic Glass Plate, 200×200mm		
Stirring Capa.	Max. 20 Lit			
Speed & Control Resolution	80 ~ 1,500 rpm, 5 rpm			
Temp. Range & Accuracy	Max. 500°C, ±0.3°C at Set Temperature			
Temp. Resolution	0.1°C-Display, 0.5°C-Control			
Temp. Uniformity	Specially Designed Heating Module : Temp. Difference 10% less			
Heating Power / Consumption	850W			
Timer & Alarm	99hr 59min (with Continuous run.), Error status & Timer-end			
Display	Digital LCD with Back-Light Function			
Controller	Digital Feedback Controller with Jog Dial (Turn+Push) and Touch button.			
Stirring Bar	3cm bar-included, Usable : up to 5cm bar			
Safety Circuit	Over Temp. Protection, Hot Top Indicator LED Lamp			
included Standard Acc.	1ea Stir Bar, ②Temp. Probe ③Rod ④Holder+Clamp		1ea Stir Bar	
Permissible Temp. & RH %	Ambient 5°C~50°C, 85% RH			
Dimension & Weight	200×332×h114mm, 3.8kg			
Electrical Reqts.	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz, with Cord/Plug			
Cat. No.	230V	DH.WMH00500	DH.WMH01500	
	120V	DH.WMH00501	DH.WMH01501	
Price, Each. ₩				

\* Other Specifications are available upon Customer's Request.

Component of Package set

- \* Package-set : ① Hotplate Stirrer Unit ② "SS500" PT100 External / Direct Contact Temp. Probe,
- ③ "RD200" Stainless-steel Support Rod  $\phi 12 \times L450$ mm
- ④ "CL220" Holder+Clamp+Clip for External Temp. Probe

Optional External Temp Probe · Stand Rod · Holder · Clamp · Clip

- DH.WHP503060 (1) External / Direct Contact Temp. Probe, "SS500", Stainless-steel,  $\phi 4 \times L250$ mm, Cable L190mm
- DH.WHP503061 (2) External / Direct Contact Temp. Probe, "SS510", Teflon Coated,  $\phi 4 \times L250$ mm, Cable L190mm,
- DH.WHP503036 (3) Stand Rod "RD200", Stainless-steel,  $\phi 12 \times L450$ mm, 1.5p screw, for "MaXtir™ MSH500"
- DH.WHP503012 (4) Holder/Clamp/Clip, "CL220", for Temp. Probe

Ea.	Price, ₩

DAIHAN® 380°C Standard Analog & Digital Hotplate Stirrer "MSH-A" & "MSH-D", Ceramic-Coated Plate, 80~1,500 rpm  
 180×180mm or 260×260mm Plate, with Accurate Temp. Control, Superior Temp. Uniformity, with Certi. & Traceability  
 아날로그 & 디지털 가열 자력 교반기, 우수한 온도제어 · 온도균일성 · 세라믹 코팅 플레이트

180×180 Plate  
 Analog  
 ~380°C / 1,500rpm

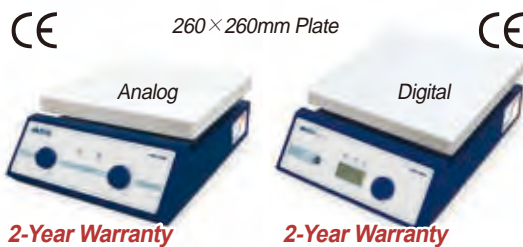


(I-A) Analog "MSH-20A", 180×180mm Plate-type

180×180 Plate  
 Digital Package Set  
 ~380°C / 1,500rpm



(III-A) Digital "MSH-20D" Package-set, 180×180mm Plate-type



(I-B) Analog "MSH-30A", 260×260mm Plate

(II-B) Digital "MSH-30D", 260×260mm Plate

- CE Certified
- PL (Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Excellent for Sample Drying and most General Lab Heating Applications

### I. Analog PWM Control System "MSH-A"

\* Superior Linearity PWM Control for Temperature & Stirring Speed

### II. Digital Microprocessor Control System "MSH-D"

#### ■ Patented Jog-Shuttle Control System

- \* Speed & Control Resolution : 80 ~ 1,500 rpm, 5 rpm
- \* Temp. Accuracy / Resolution : ±0.3°C at Set Temp. / 0.1°C-Display, 0.5°C-Control
- \* Timer & Alarm : 99hr 59min(with Continuous run), Error status & Timer-end
- \* Safety Circuit : Over Temp. Protection
- \* User's Self-Compensation : Control Difference between Real Temp. & Indicated Temp. (±20.0°C)
- \* Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor
- \* Storage Function for the set Values : Temp. and Timer
- \* Locking Mode Supported for Experimental Safety (Input to Jog-Shuttle can be Disabled)

### III. Digital Package-set ; Complete with

- \* III-A. "MSH-20D" Set : ① Hotplate Stirrer "MSH-20D", ② "SS500" PT100 External / Direct Contact Temp. Probe, ③ "RD200" Stainless-steel Support Rod φ12×L450mm, ④ "CL220" Holder+Clamp+Clip for External Temp. Probe
- \* III-B. "MSH-30D" Set : ① Hotplate Stirrer "MSH-30D", ② "SS500" PT100 External / Direct Contact Temp. Probe, ③ "RD100" Stainless-steel Support Rod φ12.7×L390mm, ④ "CL220" Holder+Clamp+Clip for External Temp. Probe

### Specifications & Ordering information

Spec.	Model	A. 180×180mm Plate	
		(I-A) Analog "MSH-20A"	(II-A) Digital "MSH-20D"
Plate Size(mm)		180×180mm Plate-type	260×260mm Plate-type
Material	Body	Powder Coated Aluminum	Powder Coated steel
	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance, Easy to Clean)	
Stirring Capa. & Motor Rating		Max. 20Lit, 10W	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power/Consumption		600W	1.2kW
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Permissible Temp. & RH %		Ambient 5°C~50°C, 85% RH	
Dimension & Weight		206×307×h99mm, 3.3kg	286×387×h99mm, 3.5kg
Packing Size & Gross Weight		400×280×h200mm, 5kg	430×320×h200mm, 5kg
Electrical Reqt.s.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	

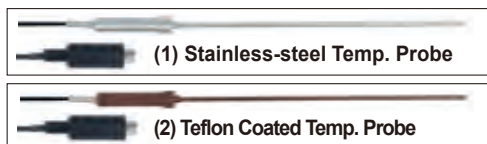
I. Analog Unit Only		(I-A) "MSH-20A"	(I-B) "MSH-30A"
Cat. No.	230V	DH.WMH03120	DH.WMH03121
	120V	DH.WMH02120	DH.WMH02121
Price, Each. ₩			
II. Digital Unit Only		(II-A) "MSH-20D"	(II-B) "MSH-30D"
Cat. No.	230V	DH.WMH03020	DH.WMH03022
	120V	DH.WMH02020	DH.WMH02022
Price, Each. ₩			
III. Digital Package-set		(III-A) "MSH-20D" Set	(III-B) "MSH-30D" Set
Cat. No.	230V	DH.WMH03021	DH.WMH03023
	120V	DH.WMH02021	DH.WMH02023
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

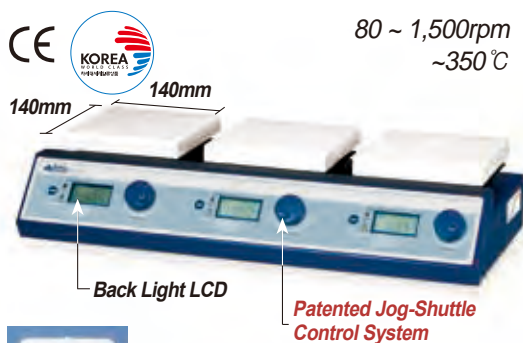
### Optional External Temp Probe · Stand Rod · Holder · Clamp · Clip

- DH.WHP503060 (1) Temp. Probe, "SS500", "PT100", φ4×L250mm
- DH.WHP503061 (2) Teflon Coated Temp. Probe, "SS510", φ4×L250mm
- DH.WHP503011 Stand Rod, "RD100", φ12.7×L390 for "MSH-30A / 30D"
- DH.WHP503036 "RD200", φ12×L450 for "MSH-20A / 20D"
- DH.WHP503012 Holder / Clamp / Clip, "CL220", for Temp. Probe

Ea. Price, ₩



**DAIHAN® 350°C Systematic Multi-Hotplate Stirrer "SMHS", 3- or 6-Places, Ceramic-Coated Plate, 80~1,500 rpm**  
 With Digital Feedback Control, Independent Heating & Stirring Control, 멀티 가열 자력 교반기, 우수한 온도균일성, 3- or 6- 구 개별 조절 가능



80 ~ 1,500rpm  
~350°C

- Made in Korea
- CE Certified
- PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Excellent for Multi-use and Wide Range Sample Testing
- Patented Jog-Shuttle Control System

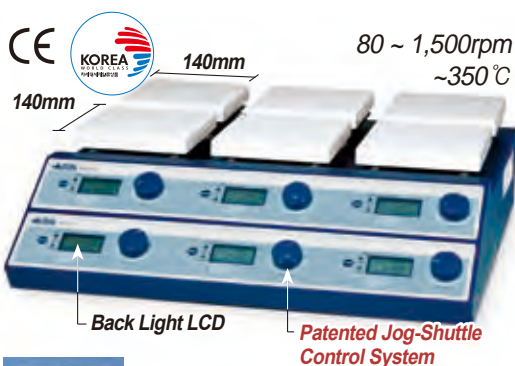
- \* Digital Feedback Control by High-Performance Microprocessor
- \* Ceramic Coated Plate-Chemical/Acid Resistance
- \* Maximum Temperature of 350°C with ±0.3°C Control Accuracy
- \* Accurate Temp. Control of the Sample in the Vessel using PT100 Sensor (Optional)
- \* Digital Timer Function Included : 99 hr 59 min
- \* Storage Function for the Set Values : Temperature, RPM and Timer
- \* Locking Mode for Experimental Safety Supported



Stir Bar

2-Year Warranty

A. 3 Plate-type Multi-Hotplate Stirrer "SMHS-3"



80 ~ 1,500rpm  
~350°C

Specifications & Ordering information

<L1>

Spec.	Model	A. "SMHS-3" 3 Plates	B. "SMHS-6" 6 Plates
Plate-type		3 Plate-type	6(3×2) Plate-type
Plate Size		140×140mm	
Stirring Capa. & Motor Rating		Max. 20 Lit(H <sub>2</sub> O), 9/4W×3	Max. 20 Lit(H <sub>2</sub> O), 9/4W×6
Speed & Control Resolution		80 ~ 1,500 rpm, 5 rpm	
Temp. Range & Accuracy		Max. 350°C, ±0.3°C at Set Temp.	
Temp. Resolution		0.1°C-Display, 0.5°C-Control	
Temp. Uniformity		Specially Designed Heating Module : Temp. Difference 10% less	
Heating Power/Consumption		400 W × 3 Plates	400 W × 6 Plates
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Display		Digital LCD with Back-Light Function	
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)	
Stirring Bar		3cm bar-included, Usable : up to 5cm bar	
Ports for Stand Rod		2ea	4ea
Permissible Temp. & RH %		Room Temp. 5°C~50°C, 85% RH	
Material	Body	Powder Coated steel	
	Plate	Ceramic Coated Aluminum	
Dimension & Weight		510×240×h100mm, 10kg	510×410×h180mm, 18kg
Packing Size & Gross Weight		540×330×h170mm, 10kg	570×540×h230mm, 18kg
Electrical Reqts.		1 Phase, AC 120V, 60Hz or AC 230V, 50 / 60Hz	



Stir Bar

2-Year Warranty

B. 6(3×2) Plate-type Multi-Hotplate Stirrer "SMHS-6"

\* 3 Rear Hotplate Stirrer SMHS-6 have 3 Ports available to connect External Temp. Probe

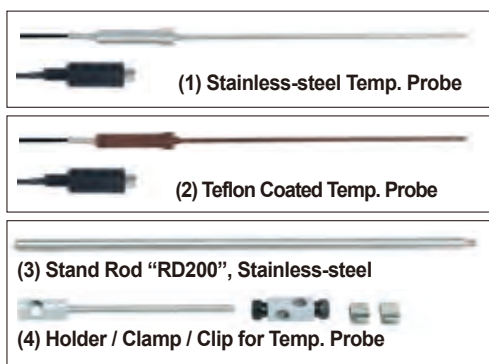
Cat. No.	230V	DH.WMH03503	DH.WMH03506
	120V	DH.WMH02503	DH.WMH02506
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불

\* 3 Rear Hotplate Stirrer SMHS-6 have 3 Ports available to connect External Temp. Probe.

Optional External Temp Probe · Stand Rod · Holder · Clamp · Clip



- DH.WHP503060 (1) External / Direct Contact Temp. Probe, "SS500", Stainless-steel, φ4×L250mm, Cable L190mm
- DH.WHP503061 (2) External / Direct Contact Temp. Probe, "SS510", Teflon Coated, φ4×L250mm, Cable L190mm,
- DH.WHP503036 (3) Stand Rod "RD200", Stainless-steel, 1.5p screw, φ12×L450mm, for "SMHS"
- DH.WHP503012 (4) Holder/Clamp/Clip, "CL220", for Temp. Probe

Ea.	Price, ₩

# DAIHAN® Overhead Stirrer Selection Guide of Product Line

## Key Specification of Product Line

Speed or High Torque	High Speed							High Torque									
	Analog Model		Digital Model					Analog Model		Digital Model							
Controller Type	Integrated Controller		Integrated Controller		Remote Controller		Premium Digital Model	Integrated Controller		Integrated Controller		Remote Controller			Premium Digital Model		
	HS-50A	HS-120A	HS-30D	HS-100D	HS-30T	HS-100T	OVS-S05	HT-50AX	HT-120AX	HT-50DX	HT-120DX	HT-50T	HT-120T	HT-140T	OVS-T16	OVS-G30	
Max. Stirring Capacity(H <sub>2</sub> O)	10Lit	20Lit	10Lit	20Lit	10Lit	20Lit	100Lit	40Lit	60Lit	40Lit	60Lit	40Lit	60Lit	100Lit	100Lit	100Lit	
Max. Viscosity(mPas) (Viscosity Standard Oil 1.5Lit)	5,000	10,000	5,000	10,000	5,000	10,000	50,000	60,000	90,000	60,000	90,000	60,000	90,000	120,000	200,000	350,000	
Motor Rating (Input / Output)	83W /75W	130W /120W	83W /75W	130W /120W	83W /75W	130W /120W	200W /180W	83W /75W	130W /120W	83W /75W	130W /120W	83W /75W	130W /120W	130W /120W	200W /180W	200W /180W	
Max. Torque (N·cm)	70	80	70	80	70	80	200	180	210	180	210	180	210	300	700	800	
Speed Range (RPM)	200 ~ 3,000							50 ~ 1,000								50 ~ 2,000	10 ~ 550
Max. Push Through Shafts φ (mm)	8						10										
Max. Chcuk Grip Capa. φ (mm)	10							12							10		
Controller	Analog Phase Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push), Remote type		Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)	Analog Phase Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push), Remote type			Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)		
Display	None		Back Light LCD					None		Back Light LCD							
Permissible Temp. & Humidity	0 ~ 40°C / 80%																
Power Supply	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz																

## Selection Guide for Standard Viscosity

(Unit : mPas)

Material	Viscosity	Recommended Models														
Water	1	HS-50A HS-30D HS-30T	HS-120A HS-100D HS-100T	OVS-S05	HT-50AX HT-50DX HT-50T	HT-120AX HT-120DX HT-120T	HT-140T	OVS-T16	OVS-G30							
Milk	3															
Soybean oil	160															
Varnish	500															
Lacquer	1,000															
Honey	3,000															
Viscosity Standard Oil	5,000															
	10,000															
	15,000															
Ketchup	30,000															
Viscosity Standard Oil	50,000															
	60,000															
	70,000															
Viscosity Standard Oil	90,000															
Corn Syrup	100,000															
Viscosity Standard Oil	120,000															
	150,000															
	200,000															
Peanut Butter	250,000															
Viscosity Standard Oil	350,000															



**DAIHAN® Premium Hi-Speed Overhead Stirrer “OVS-S05”**, with Hi-Capacity BLDC-motor, 2:1, Max. 3,000rpm  
 With Torque(Ncm) · Viscosity(mPas) · Temperature(°C) · Real Time Display, Optional Remote Control, 50,000mPas, Max. 100Lit  
 “Push-Through” Shaft( $\phi$  10mm or Less), 프리미엄 고속 교반기, 저/중점도용, 고사양 BLDC-motor, 토크 · 점도 · 온도 표시기능



- Made in Korea ■ CE Certified ■ PL (Product Liability) Insurance
  - Patented Jog Dial & Touch Button
  - Hi-Capacity Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control(Minimize RPM Fluctuation), Low Maintenance Cost
  - Torque Value(Ncm)-/Viscosity(mPas)-/Temperature(°C) Real-time Display  
Can be used with K-type Temp. Probe for Temperature Display.
  - Can be used with Optional Digital Remote Controller.
  - “Push-Through” Shafts( $\phi$ 10mm or Less) ; Ideal for Raising or Lowering the Stir-Shafts without Moving the Motor Head - “Adjustable Height of Shaft”
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- \* Ideal for Low-/Middle-Viscosity \* Smooth Start and Change of the Stirring Speed.  
 \* Large Size Digital LCD Display

Specifications & Ordering information

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Spec.	Model	“OVS-S05” Max. Speed 3,000rpm
Stirring Capacity		Max. 100Lit (H <sub>2</sub> O)
Maximum Viscosity / Torque		50,000 mPas / 200 Ncm
Speed Range & Motor		200~3,000RPM, Hi-Capacity Brushless DC-motor, 2:1
Motor Rating (Input / Output)		200 / 180W
Controller / Safety Device		Digital PID Control / Over Heat & Current Protector for Motor
Chuck Grip Capa. $\phi$ mm		dia $\phi$ 3~10mm Shafts, Flex-Coupling( $\phi$ 6~12mm)
“Push-Through” Shafts		dia $\phi$ 10mm or Less
Permissible Temp. & Humidity		0°C~40°C, 80%
Dimension & Weight & Material		84×205×h275mm, 3.5kg, Aluminum Die Casting
Power Consumption		250W
Electrical Reqts.		1 Phase, AC 120V, 60 Hz or AC 230 V, 50 / 60 Hz

\* Other Specifications are available upon Customer's Request



A. Unit-only

Model	Description	Ea. Price, ₩
DH.StiO0005	Hi-Speed Overhead Stirrer Unit “OVS-S05”, 230V	
DH.StiO0005.1	, 120V	

B. Package-set

- \* Complete with ① “OVS-S05” StirrerUnit
- ② “S723” Stainless-steel Impeller (Rod  $\phi$  8×L650mm, 3-Blade  $\phi$  80mm)
- ③ “CL200” Clamp
- ④ “KA1177” Safety Stand (Rod  $\phi$  23×L800mm, Base 34×29cm)

Model	Description	Ea. Price, ₩
DH.StiO0105	Overhead Stirrer “OVS-S05” Package-set, 230V	
DH.StiO0105.1	, 120V	

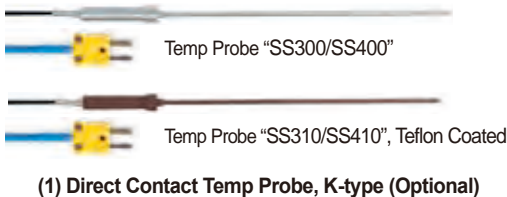
C. Optional Digital Remote Controller, with Connecting Cable 1.5m

- \* Assembly-type, Torque / Viscosity / Temp-Control & Display
- \* Connecting Cable 1.5m(Included) and 2m(Option)
- \* Size : w75×d150×h30mm, Weight : 150g

Model	Description	Ea. Price, ₩
DH.WOS50010	Digital Remote Controller with 1.5m Connecting Cable & Plug	
DH.Cabl002	Optional Connecting Cable & Plug, 2m	

Optional Temperature Probe

(1) Direct Contact Temp Probe, K-type



(1) Direct Contact Temp Probe, K-type (Optional)

Model	Description	Ea. Price, ₩
DH.WHP503040	Temp Probe, K-type, “SS300”, L250× $\phi$ 4.8 mm	
DH.WHP503050	, “SS400”, L380× $\phi$ 4.8 mm	
DH.WHP503041	Temp Probe, K-type, “SS310”, Teflon Coated, L250× $\phi$ 5 mm	
DH.WHP503051	, “SS410”, Teflon Coated, L380× $\phi$ 5 mm	

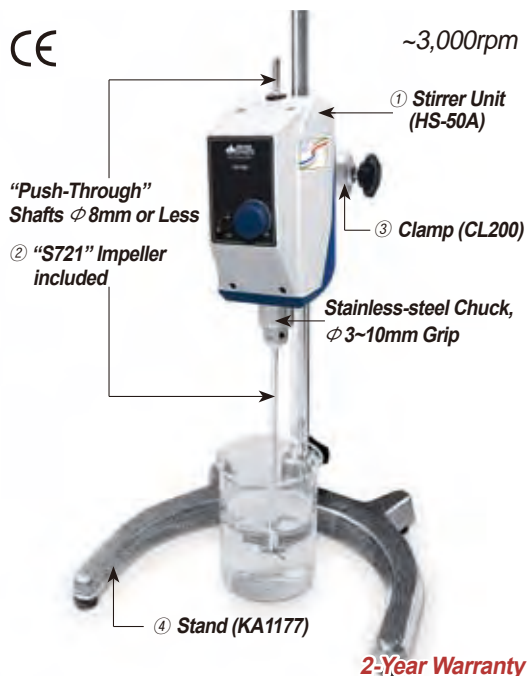
(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe



(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe (Optional)

※ Note! For the Optional Probes ⇒ See the “Measuring, Thermometers” Section.  
 For the Optional Impellers ⇒ See the “Stirrers, Accessories” Section.

DAIHAN® High-Speed Analog Overhead Stirrer "HS-A", for Low-/Middle-Viscosity, Max.10 · 20Lit, Max. 3,000rpm  
 With "Push-Through" Shaft(φ 8mm or Less) and Chuck grip φ 3~10mm, Flex-Coupling φ 6~12mm, up to 5,000 · 10,000mPas  
 아날로그 고속 교반기, 저/중점도용, 사용교반봉 ; ①기본은 φ 3~10mm, ②관통은 φ 3~8mm, & ③별도의 Flex-Coupling 활용시 φ 6~12mm



Max. 10 Lit (H<sub>2</sub>O) High-Speed Analog Overhead Stirrer "HS-50A" Package-set

- Made in Korea ■ CE Certified ■ PL (Product Liability) Insurance
- Ensure Minimize RPM Fluctuation : Very Stable Stirring Speed(RPM) Performance
- \* with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- \* "Push-Through" Shafts(φ 8mm or Less) ; Ideal for Raising or Lowering of the Stir-Shafts without Moving the Motor Head - "Adjustable Height of Shaft"
- \* Easy-to-use Dial for Speed Setting \* Smooth Start and Change of the Stirring Speed

Specifications & Ordering information

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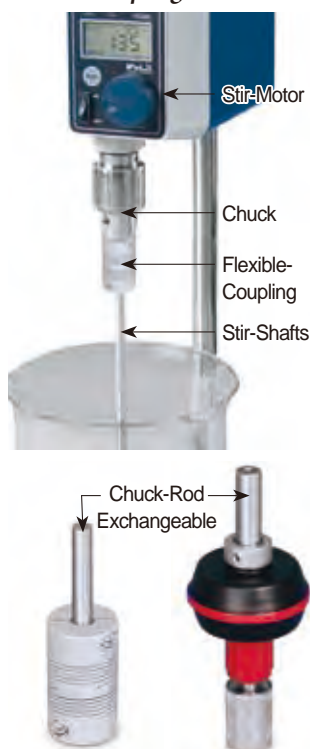
Spec.	Models	"HS-50A" Max. Stirring Capa. 10 Lit	"HS-120A" Max. Stirring Capa. 20 Lit
Stirring Capacity		Max. 10 Lit (H <sub>2</sub> O)	Max. 20 Lit (H <sub>2</sub> O)
Maximum Viscosity / Torque		5,000 mPas / 85 Ncm	10,000 mPas / 145 Ncm
Speed Range & Motor		200 ~ 3,000 rpm, Direct Driven DC Motor	
Motor Rating (Input / Output)		83 / 75 W	130 / 120 W
Controller / Safety Device		Analog Phase Controller / Over Heat Protector for motor	
Chuck Grip Capa. φ mm		dia φ 3~10mm Shafts	
"Push-Through" Shafts		dia φ 8mm or Less	
Permissible Temp. & Humidity		0°C~40°C, 80%	
Material		ABS and Aluminum	
Dimension & Weight		90 × 145 × h180mm, 4.5 kg	90 × 145 × h180mm, 5.3 kg
Packing Size & Gross Weight		320 × 300 × h180mm, 5 kg	320 × 300 × h180mm, 8 kg
Power Consumption		85 W	130 W
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz	

Unit-only			
Cat. No.	230V	DH.WOS01210	DH.WOS01215
	120V	DH.WOS02210	DH.WOS02215
Price, Each. ₩			
Package-set (with ① Stirrer Unit, ② Impeller, ③ Clamp, ④ Stand)			
Cat. No.	230V	DH.WOS01211	DH.WOS01216
	120V	DH.WOS02211	DH.WOS02216
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

- \* "HS-50A" Package-set : Complete with ① "HS-50A" Stirrer Unit, ② "S721" Stainless-steel Impeller (Rod φ 8 × L500mm, 3-Blade φ 50mm), ③ "CL200" Clamp, and ④ "KA1177" Safety Stand (Rod φ 23 × L800mm, Base w34 × d29cm)
- \* "HS-120A" Package-set : Complete with ① "HS-120A" Stirrer Unit, ② "S723" Stainless-steel Impeller (Rod φ 8 × L650mm, 3-Blade φ 80mm), ③ "CL200" Clamp, and ④ "KA1177" Safety Stand (Rod φ 23 × L800mm, Base w34 × d29cm)

The Figure ;  
Use of Coupling



(1) Hi-flex Metal ; (2) Rubber Based for φ 6-12 Shafts ; for φ 7-10 Shafts

Flexible Coupling, for Safety Stirring of φ 6~12mm Shafts of Overhead Stirrers  
 For Stirrers between Stirring Motor and Shaft, 안전교반용 유연성 커플링

■ Used to Compensate Any Vibrations Between The Motor and Stirring Shafts

(1) UTILITY High-Flex. Metal Coupling, with 2 × Flex-band, for φ 6~12mm Stir-Shafts  
 Ideal for Low/High Viscosity and High/Low Speed

- \* Made in Korea \* Shaft Fastening by Screw Clamp Band \* Made of DURALUMIN
- \* with Exchangeable SS Chucking Rod φ 8 & 10mm, L40mm

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SL.StiC011	Stir-Coupling, Hi-flex, φ 8mm Chuck-rod , for-φ 6mm Stir-Shaft , 56g, φ 25 × h44mm	Ea.	Price, ₩
SL.StiC012	-φ 8mm Stir-Shaft , 53g, φ 25 × h44mm		
SL.StiC013	-φ 10mm Stir-Shaft, 49g, φ 25 × h44mm		
SL.StiC014	Stir-Coupling, Hi-flex, φ 10mm Chuck-rod, for-φ 8mm Stir-Shaft , 49g, φ 25 × h44mm		
SL.StiC015	-φ 10mm Stir-Shaft, 43g, φ 25 × h44mm		
SL.StiC016	-φ 12mm Stir-Shaft, 33g, φ 25 × h44mm		

(2) Very Flexible Rubber Based Coupling, for φ 7~10mm Shafts  
 Especially, Ideal for GLASS Shafts and Low/Middle Viscosity & High Speed

- \* Made in Germany \* Shaft Fastening by Screw Compression Rubber Ring Pad.
- \* with φ 10 × L40mm Exchangeable Stainless-steel Chucking Rod

WI.1445000 Stir-Coupling, Rubber Based, for φ 7~φ 10mm Shafts, 72.5g, Body φ 46 × h80mm

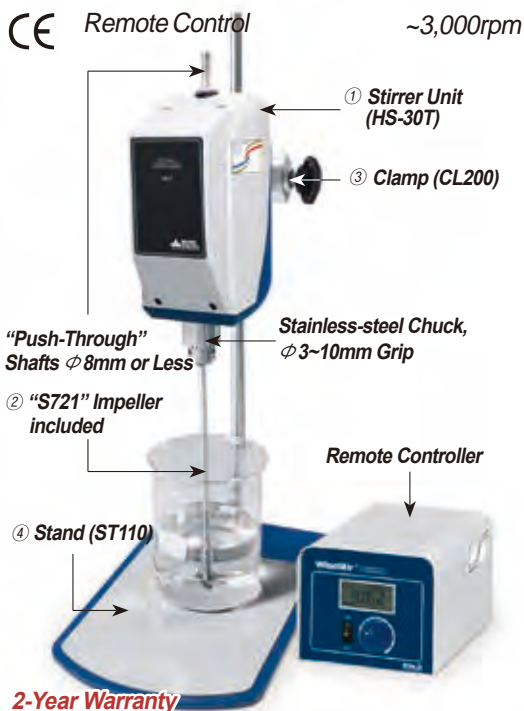
※ Note! Details of Wide-Range Coupling : See the "Stirrers, Accessories" Section.

Ea.	Price, ₩

DAIHAN® High-Speed Digital Overhead Stirrers “HS-D” & “HS-T”, for Low-/Middle-Viscosity, Max.10 · 20Lit  
 With “Push-Through” Shaft and Chuck grip  $\phi$  3~10mm, Flex-Coupling  $\phi$  6~12mm, Max. 3,000rpm, up to 5,000 · 10,000mPas  
 디지털 고속 교반기, 저/중점도용, 사용교반봉 ; ①기본은  $\phi$  3~10mm, ②관통은  $\phi$  3~8mm, & ③별도의 Flex-Coupling 활용시  $\phi$  6~12mm



(I-A) Max. 10 Lit (H<sub>2</sub>O) High-Speed Digital Overhead Stirrer “HS-30D” Package-set



(II-A) Max. 10 Lit (H<sub>2</sub>O) High-Speed Digital Overhead Stirrer, with Remote Controller “HS-30T” Package-set

- Made in Korea ■ CE Certified ■ PL (Product Liability) Insurance
- Ensure Minimize RPM Fluctuation : Very Stable Stirring Speed(RPM) Performance
- Patented Jog-Shuttle Control System

\* with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System  
 \* “Push-Through” Shafts( $\phi$  8mm or Less) ; Ideal for Raising or Lowering of the Stir-Shafts without Moving the Motor Head - “Adjustable Height of Shaft”  
 \* Smooth Start and Change of the Stirring Speed

I. Digital Standard-type “HS-D”

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Spec.	Models	A. “HS-30D” Max. Stirring Capa. 10 Lit	B. “HS-100D” Max. Stirring Capa. 20 Lit
Maximum Viscosity / Torque		5,000 mPas / 70 Ncm	10,000 mPas / 80 Ncm
Speed Range & Resolution		200~3,000 rpm, 1 rpm-Display / 1 rpm-Control	
Motor / Safety		Device Direct Driven DC Motor / Overload & Heat Protector for Motor	
Motor Rating (Input / Output)		83 / 75 W	130 / 120 W
Timer & Alarm		99hr 59min (with Continuous run.), Error status & Timer-end	
Controller / Display		Digital Feedback Controller / Digital LCD with Back-Light Function	
Chuck Grip Capa. $\phi$ mm		dia $\phi$ 3~10mm Shafts	
“Push-Through” Shafts		dia $\phi$ 8mm or Less	
Permissible Temp. & Humidity		0°C~40°C, 80%	
Material		ABS and Aluminum	
Dimension & Weight		90 × 145 × h180mm, 4.5kg	90 × 145 × h180mm, 5.3kg
Packing Size & Gross Weight		320 × 300 × h180mm, 5kg	320 × 300 × h180mm, 8kg
Power Consumption		85 W	130 W
Electrical Reqts.		1 Phase, AC 120V, 60 Hz or AC 230V, 50 / 60 Hz	

Unit-only

Cat. No.	230V	DH.WOS01015	DH.WOS01025
	120V	DH.WOS02015	DH.WOS02025

Price, Each. ₩

Digital Package-set (with ① Stirrer Unit, ② Impeller, ③ Clamp, ④ Stand)

Cat. No.	230V	DH.WOS01016	DH.WOS01026
	120V	DH.WOS02016	DH.WOS02026

Price, Each. ₩

II. Digital Remote Controlled-type “HS-T”

Spec.	Model	A. “HS-30T” Max. Stirring Capa. 10 Lit	B. “HS-100T” Max. Stirring Capa. 20 Lit
Maximum Viscosity / Torque		5,000 mPas / 70 Ncm	10,000 mPas / 80 Ncm
Speed Range & Motor		200~3,000 rpm, Direct Driven DC Motor	
Motor Rating (Input / Output)		83 / 75 W	130 / 120 W
Timer & Alarm		99hr 59min (with Continuous run.), Timer-end Alarm	
Controller / Display		Digital Feedback Controller / Digital LCD with Back-Light Function	
Chuck Grip Capa. $\phi$ mm		dia $\phi$ 3~10mm Shafts	
“Push-Through” Shafts		dia $\phi$ 8mm or Less	
Permissible Temp. & Humidity		0°C~40°C, 80%	
Safety Device / Material		Overload & Heat Protector for motor / ABS and Aluminum	
Dimension & Weight*		90 × 100 × h180mm, 3kg	90 × 100 × h180mm, 3.8kg
Packing Size & Gross Weight		580 × 340 × h230mm, 5kg	580 × 340 × h230mm, 8kg
Power Consumption		75 W	120 W
Electrical Reqts.		1 Phase, AC 120V, 60 Hz or AC 230V, 50 / 60 Hz	

Unit & Remote Controller

Cat. No.	230V	DH.WOS01035	DH.WOS01045
	120V	DH.WOS02035	DH.WOS02045

Price, Each. ₩

Remote Package-set (with ① Stirrer Unit + Remote Controller, ② Impeller, ③ Clamp, ④ Stand)

Cat. No.	230V	DH.WOS01036	DH.WOS01046
	120V	DH.WOS02036	DH.WOS02046

Price, Each. ₩

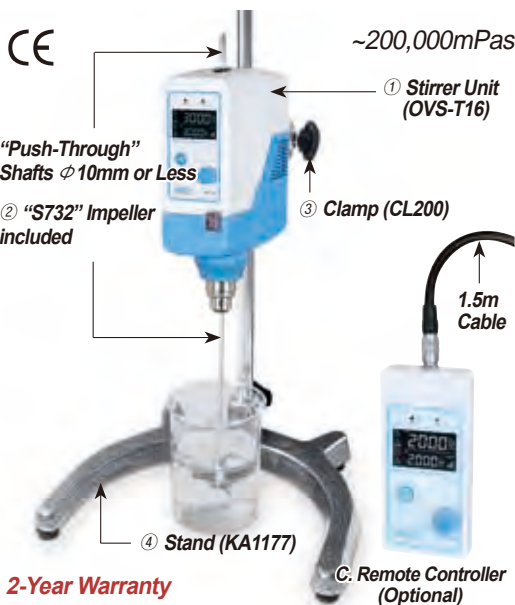
\* Weight of Remote Controller = 2.5kg \*\* Other Specifications are available upon Customer's Request.

- \* “HS-30D(30T)” Package-set : Complete with ① “HS-30D(30T)” Stirrer Unit (with Remote Controller), ② “S721” Stainless-steel Impeller(Rod  $\phi$  8 × L500mm, 3-Blade  $\phi$  50mm), ③ “CL200” Clamp, and ④ “ST110” Standard Plate Stand(Rod  $\phi$  16 × L800mm, Base w20 × d35cm)
- \* “HS-100D(100T)” Package-set : Complete with ① “HS-100D(100T)” Stirrer Unit (with Remote Controller), ② “S723” Stainless-steel Impeller(Rod  $\phi$  8 × L650mm, 3-Blade  $\phi$  80mm), ③ “CL200” Clamp, and ④ “ST120” Wide Plate Stand(Rod  $\phi$  23 × L1,000mm, Base w30 × d40cm)

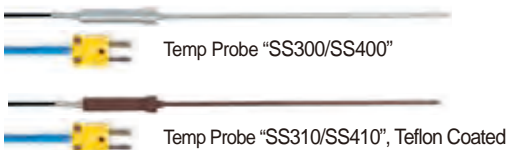
DAIHAN® Premium Hi-Torque Overhead Stirrer "OVS-T16", with Hi-Capacity BLDC-motor, Max. 14:1, 200,000mPas  
 With Torque(Ncm) · Viscosity(mPas) · Temperature(°C) · Real Time Display, Optional Remote Control, Max. 2,000rpm  
 "Push-Through" Shaft(φ 10mm or Less), Chuck Grip Capa. φ 6~14mm Shafts, 프리미엄 중/고점도용 교반기, 고사양 BLDC-motor, 토크 · 점도 · 온도 표시기능



C. Remote Controller (Optional) 2-Year Warranty  
 A. Max. 100Lit (H<sub>2</sub>O) Premium "OVS-T16" Unit Only



2-Year Warranty  
 B. Max. 100Lit (H<sub>2</sub>O) Premium "OVS-T16" Package-set



(1) Direct Contact Temp Probe, K-type (Optional)

(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe (Optional)

- Made in Korea ■ CE Certified ■ PL(Product Liability) Insurance
  - 다양한 점도 교반을 위해 φ6~14mm 의 Impeller Shaft가 장착 가능한 Chuck Grip.
  - Patented Jog Dial & Touch Button
  - Hi-Capacity Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control(Minimize RPM Fluctuation), Low Maintenance Cost
  - Torque Value(Ncm)-/Viscosity(mPas)-/Temperature(°C) Real-time Display Can be used with K-type Temp. Probe for Temperature Display.
  - Can be used with Optional Digital Remote Controller.
  - "Push-Through" Shafts(φ 10mm or Less) ; Ideal for Raising or Lowering the Stir-Shafts without Moving the Motor Head - "Adjustable Height of Shaft"
  - Wide Range Chuck Grip Capa. φ6~14mm for High Viscosity.
  - with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- \* Ideal for Low-/Middle-Viscosity \* Smooth Start and Change of the Stirring Speed.  
 \* Large Size Digital LCD Display

Specifications & Ordering information

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Spec.	Model	"OVS-T16" Max. Torque 200,000mPas
Stirring Capacity		Max. 100 Lit (H <sub>2</sub> O)
Maximum Viscosity / Torque		200,000 mPas / 700 Ncm
Speed Range & Motor		50~2,000RPM, Hi-Capacity Brushless DC-motor, Gear(2.6:1 / 14:1)
Motor Rating (Input / Output)		200 / 180W
Controller / Safety Device		Digital PID Control / Over Heat & Current Protector for Motor
Chuck Grip Capa. φ mm		dia φ 6~14mm Shafts, Flex-Coupling(φ 6~16mm)
"Push-Through" Shafts		dia φ 10mm or Less
Permissible Temp. & Humidity		0°C~40°C, 80%
Dimension & Weight & Material		84 × 205 × h275mm, 3.5kg, Aluminum Die Casting
Power Consumption		250W
Electrical Reqt.s.		1 Phase, AC 120V, 60 Hz or AC 230V, 50 / 60 Hz

\* Other Specifications are available upon Customer's Request

A. Unit-only

Model	Description	Ea. Price, ₩
DH.Sti00016	Hi-Torque Overhead Stirrer Unit "OVS-T16", 230V	
DH.Sti00016.1	, 120V	

B. Package-set

- \* Complete with ① "OVS-T16" Stirrer Unit
- ② "S732" Stainless-steel Impeller (Rod φ 8 × L500mm, 4-Blade φ 70mm)
- ③ "CL200" Clamp
- ④ "KA1177" Safety Stand (Rod φ 23 × L800mm, Base 34 × 29cm)

Model	Description	Ea. Price, ₩
DH.Sti00116	Overhead Stirrer "OVS-T16" Package-set, 230V	
DH.Sti00116.1	, 120V	

C. Optional Digital Remote Controller, with Connecting Cable 1.5m

- \* Assembly-type, Torque / Viscosity / Temp-Control & Display
- \* Connecting Cable 1.5m(Included) and 2m(Optional)
- \* Size : w75 × d150 × h30mm, Weight : 150g

Model	Description	Ea. Price, ₩
DH.WOS50010	Digital Remote Controller with 1.5m Connecting Cable & Plug	
DH.Cabi002	Optional Connecting Cable & Plug, 2m	

Optional Temperature Probe

(1) Direct Contact Temp Probe, K-type

Model	Description	Ea. Price, ₩
DH.WHP503040	Temp Probe, K-type, "SS300", L250 × φ 4.8 mm	
DH.WHP503050	, "SS400", L380 × φ 4.8 mm	
DH.WHP503041	Temp Probe, K-type, "SS310", Teflon Coated, L250 × φ 5 mm	
DH.WHP503051	, "SS410", Teflon Coated, L380 × φ 5 mm	

(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe

\* Note! For the Optional Probes ⇒ See the "Measuring, Thermometers" Section.  
 For the Optional Impellers ⇒ See the "Stirrers, Accessories" Section.

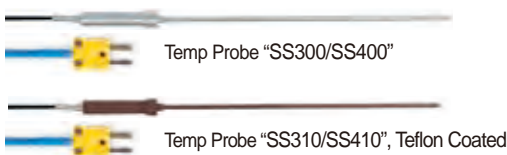
**DAIHAN® Premium Ultra Hi-Torque Overhead Stirrer “OVS-G30”, with Hi-Capacity BLDC-motor, Max. 60:1, 350,000mPas With Planetary-gear, Torque(Ncm) · Viscosity(mPas) · Temperature(°C) · Real Time Display, Optional Remote Control, Max. 550rpm Chuck Grip Capa.  $\phi$ 6~14mm Shafts, 프리미엄 초고점도용 교반기, 고사양 BLDC-motor, 토크 · 점도 · 온도 표시기능**



A. Max. 100Lit (H<sub>2</sub>O) Premium Ultra “OVS-G30” Unit Only



B. Max. 100Lit (H<sub>2</sub>O) Premium Ultra “OVS-G30” Package-set



(1) Direct Contact Temp Probe, K-type (Optional)



(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe (Optional)

- Made in Korea ■ CE Certified ■ PL (Product Liability) Insurance
- 다양한 점도 교반을 위해  $\phi$ 6~14mm 의 Impeller Shaft가 장착 가능한 Chuck Grip.
- Patented Jog Dial & Touch Button
- High Performance Brushless DC-motor : High Efficiency Stirring Performance and Precise Speed Control(Minimize RPM Fluctuation), Low Maintenance Cost
- Torque Value(Ncm)-/Viscosity(mPas)-/Temperature(°C) Real-time Display  
Can be used with K-type Temp. Probe for Temperature Display.
- Excellent Planetary Gear Design for High Torque(60:1 Ratio)
- Wide Range Chuck Grip Capa.  $\phi$ 6~14mm for High Viscosity.
- Can be used with Optional Wire Digital Remote Controller.
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- \* Ideal for Low-/Middle-Viscosity \* Smooth Start and Change of the Stirring Speed.
- \* Large Size Digital LCD Display

Specifications & Ordering information <L1>

Spec.	Model	“OVS-G30” Max. Torque 350,000mPas
Stirring Capacity		Max. 100 Lit (H <sub>2</sub> O)
Maximum Viscosity / Torque		350,000 mPas / 800 Ncm
Speed Range & Motor		10~550RPM, Hi-Capacity Brushless DC-motor, Gear(11:1 / 60:1)
Motor Rating (Input / Output)		200 / 180W
Controller / Safety Device		Digital PID Control / Over Heat & Current Protector for Motor
Chuck Grip Capa. $\phi$ mm		dia $\phi$ 6~14mm Shafts, Flex-Coupling( $\phi$ 6~16mm)
Permissible Temp. & Humidity		0°C~40°C, 80%
Dimension & Weight & Material		84×205×h355mm, 3.5kg, Aluminum Die Casting
Power Consumption		250W
Electrical Reqts.		1 Phase, AC 120V, 60 Hz or AC 230V, 50 / 60 Hz

\* Other Specifications are available upon Customer's Request

A. Unit-only

Code	Description	Ea. Price, ₩
DH.StiO0030	Ultra Hi-Torque Overhead Stirrer Unit “OVS-G30”, 230V	
DH.StiO0030.1	, 120V	

B. Package-set

- \* Complete with ① “OVS-G30” Stirrer Unit
- ② “S732” Stainless-steel Impeller (Rod  $\phi$ 8×L500mm, 4-Blade  $\phi$ 70mm)
- ③ “CL200” Clamp
- ④ “KA1177” Safety Stand (Rod  $\phi$ 23×L800mm, Base 34×29cm)

Code	Description	Ea. Price, ₩
DH.StiO0130	Overhead Stirrer “OVS-G30” Package-set, 230V	
DH.StiO0130.1	, 120V	

C. Optional Digital Remote Controller, with Connecting Cable 1.5m

- \* Assembly-type, Torque / Viscosity / Temp-Control & Display
- \* Connecting Cable 1.5m(Included) and 2m(Optional)
- \* Size : w75×d150×h30mm, Weight : 150g

Code	Description	Ea. Price, ₩
DH.WOS50010	Digital Remote Controller with 1.5m Connecting Cable & Plug	
DH.Cabl002	Optional Connecting Cable & Plug, 2m	

Optional Temperature Probe

(1) Direct Contact Temp Probe, K-type

Code	Description	Ea. Price, ₩
DH.WHP503040	Temp Probe, K-type, “SS300”, L250× $\phi$ 4.8 mm	
DH.WHP503050	“SS400”, L380× $\phi$ 4.8 mm	
DH.WHP503041	Temp Probe, K-type, “SS310”, Teflon Coated, L250× $\phi$ 5 mm	
DH.WHP503051	“SS410”, Teflon Coated, L380× $\phi$ 5 mm	

(2) K-type PTFE Encapsulated Stainless-steel Thermocouple Probe

※ Note! For the Optional Probes ⇒ See the “Measuring, Thermometers” Section.  
For the Optional Impellers ⇒ See the “Stirrers, Accessories” Section.

DAIHAN® High-Torque Overhead Stirrer “HT-AX” & “HT-DX”, for Middle-/High-Viscosity, Max.40 · 60Lit, 60,000 · 90,000mPas With “Push-Through” Shaft(φ 10mm or Less) and Chuck grip φ 6~12mm, Flex-Coupling φ 6~16mm, Max.1,000rpm  
중/고점도용 강력교반기, 사용교반봉; ①기본은 φ 6~12mm, ②관통은 φ 6~10mm, & ③별도의 Flex-Coupling 활용시 φ 6~16mm



(III-B) Max. 60Lit Analog “HT-120AX” Package-set



(IV-B) Max. 60Lit Digital “HT-120DX” Package-set



(II-B) HT-120DX



- Made in Korea   ■ CE Certified   ■ PL(Product Liability) Insurance
- Ensure Minimize RPM Fluctuation : Very Stable Stirring Speed(RPM) Performance
- \* with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- \* “Push-Through” Shafts(φ 10mm or Less) ; Ideal for Raising or Lowering of the Stir-Shafts without Moving the Motor Head - “Adjustable Height of Shaft”
- \* 3.5:1 Ratio Worm-gear Motor

**I. Analog Control Stirrer “HT-AX”**

- \* Easy-to-use Dial for Speed Setting
- \* Speed Range : 50~1,000 rpm
- \* Smooth Start and Change of the Stirring Speed

**II. Digital Control Stirrer “HT-DX”**

- Patented Jog-Shuttle Control System
- \* Digital LCD with Back-Light Function
- \* Speed Range : 50 ~ 1,000 rpm, Control and Display by 1 rpm
- \* Timer : 99hr 59min (with Continuous run), Error status & Timer-end Alarm

**III. Analog Stirrer Package-set**

- \* III-A. “HT-50AX” Set : Complete with ① “HT-50AX” Stirrer Unit, ② “S732” Stainless-steel Impeller(Rod φ 8×L500mm, 4-Blade φ 70mm), ③ “CL200” Clamp, and ④ “KA1177” Safety Stand(Rod φ 23×L800mm, Base w34×d29cm)
- \* III-B. “HT-120AX” Set : Complete with ① “HT-120AX” Stirrer Unit, ② “S736” Stainless-steel Impeller(Rod φ 10×L650mm, 4-Blade φ 90mm), ③ “CL200” Clamp, and ④ “KA1177” Safety Stand(Rod φ 23×L800mm, Base w34×d29cm)

**IV. Digital Stirrer Package-set**

- \* IV-A. “HT-50DX” Set : Complete with ① “HT-50DX” Stirrer Unit, ② “S732” Stainless-steel Impeller (Rod φ 8×L500mm, 4-Blade φ 70mm), ③ “CL200” Clamp, and ④ “ST120” Wide Plate Stand (Rod φ 23×L1000mm, Base w30×d40cm)
- \* IV-B. “HT-120DX” Set : Complete with ① “HT-120DX” Stirrer Unit, ② “S736” Stainless-steel Impeller (Rod φ 10×L650mm, 4-Blade φ 90mm), ③ “CL200” Clamp, and ④ “ST200” Deluxe Safety Stand (Rod φ 23×L1200mm, Base w39× up to 75cm)

**Specifications & Ordering information**

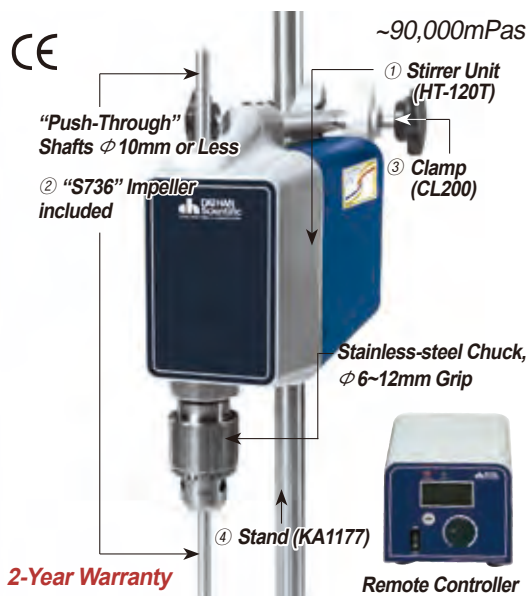
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Spec.	Model	A. Max. Stirring Capa. 40Lit (I-A) Analog “HT-50AX” (II-A) Digital “HT-50DX”	B. Max. Stirring Capa. 60 Lit (I-B) Analog “HT-120AX” (II-B) Digital “HT-120DX”
Stirring Capacity		Max. 40 Lit (H <sub>2</sub> O)	Max. 60 Lit (H <sub>2</sub> O)
Maximum Viscosity / Torque		60,000 mPas / 180 Ncm	90,000 mPas / 210 Ncm
Motor		Worm-Gear DC Motor (3.5:1 Ratio)	
Motor Rating (Input / Output)		83 / 75 W	130 / 120 W
Chuck Grip Capa. φ mm		dia φ 6~12mm Shafts	
“Push-Through” Shafts		dia φ 10mm or Less	
Permissible Temp. & Humidity		0℃~40℃, 80%	
Safety Device / Material		Overload & Heat Protector for Motor / ABS and Aluminum	
Dimension & Weight		90×180×h130mm, 3.5 kg	90×210×h130mm, 4 kg
Packing Size & Gross Weight		320×300×h180mm, 5 kg	320×300×h180mm, 8 kg
Power Consumption		85 W	130 W
Electrical Reqts.		1 Phase, AC 120V, 60 Hz or AC 230V, 50 / 60 Hz	

I. Analog Stirrer Only		(I-A) “HT-50AX”	(I-B) “HT-120AX”
Cat. No.	230V	DH.WOS01251	DH.WOS01271
	120V	DH.WOS02251	DH.WOS02271
Price, Each. ₩			
II. Digital Stirrer Only		(II-A) “HT-50DX”	(II-B) “HT-120DX”
Cat. No.	230V	DH.WOS01051	DH.WOS01071
	120V	DH.WOS02051	DH.WOS02071
Price, Each. ₩			
III. Analog Package Set		(III-A) “HT-50AX” Set	(III-B) “HT-120AX” Set
Cat. No.	230V	DH.WOS01252	DH.WOS01272
	120V	DH.WOS02252	DH.WOS02272
Price, Each. ₩			
IV. Digital Package Set		(IV-A) “HT-50DX” Set	(IV-B) “HT-120DX” Set
Cat. No.	230V	DH.WOS01052	DH.WOS01072
	120V	DH.WOS02052	DH.WOS02072
Price, Each. ₩			

\* Other Specifications are available upon Customer’s Request.

DAIHAN® Remote Control High-Torque Digital Overhead Stirrer "HT-T", for Middle-/High-Viscosity, Max.40 · 60 · 100Lit  
 With "Push-Through" Shaft(φ 10mm or Less) and Chuck grip φ 6~12mm, Flex-Coupling φ 6~16mm, 120,000mPas, Max.1,000rpm  
 원격조절식 디지털 중/고점도용 강력교반기, 사용교반용; ①기본은 φ 6~12mm, ②관통은 φ 6~10mm, & ③별도의 Flex-Coupling 활용시 φ 8~16mm



Digital High-Torque Overhead Stirrer with Stirring Speed Remote Controller "HT-120T" Package-Set

- Made in Korea ■ CE Certified ■ PL(Product Liability) Insurance
- Ensure Minimize RPM Fluctuation : Very Stable Stirring Speed(RPM) Performance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Patented Jog-Shuttle Control System

- \* "Push-Through" Shafts(φ 10mm or Less) ; Ideal for Raising or Lowering of the Stir-Shafts without Moving the Motor Head - "Adjustable Height of Shaft"
- \* Included Remote-type Digital Feedback Controller :
  - "HT-50T", "HT-120T" model : Included Stirring-speed Remote Controller
  - "HT-140T" model : Ideal for Reaction System.

Specifications & Ordering information

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Spec.	Model	"HT-50T" Max. Stirring Capa. 40L	"HT-120T" Max. Stirring Capa. 60L	"HT-140T" Max. Stirring Capa. 100L
Stirring Capacity(H <sub>2</sub> O)		Max. 40 Lit	Max. 60 Lit	Max. 100 Lit
Maximum Viscosity / Torque		60,000 mPas / 180 Ncm	90,000 mPas / 210 Ncm	120,000 mPas / 300 Ncm
Speed Range & Motor		50~1,000 rpm Worm-Geared Motor(3.5:1 Ratio)		50~800 rpm
Motor Rating (Input / Output)		83 / 75 W		130 / 120 W
Timer & Alarm		99hr 59min (with Continuous run.), Timer-end Alarm		
Controller / Display		Digital Feedback Remote Controller / Digital LCD with Back-Light Function		
		Stirring Speed Remote Controller		Stirring Speed & Temp. Display Remote Controller
Max. Impeller Shaft Diameter		φ 10 mm		
Permissible Temp. & Humidity		0°C~40°C, 80%		
Safety Device		Overload & Heat Protector for motor		
Material		ABS and Aluminum		
Dimension & Weight*		155×180×h110mm, 3.5kg	155×230×h110mm, 4kg	
Packing Size & Gross Weight		580×340×h230mm, 5kg	580×340×h230mm, 8kg	
Power Consumption		75 W		120 W
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz		

Unit & Remote Controller

Cat. No.	230V	DH.WOS01065	DH.WOS01075	DH.WOS01085
	120V	DH.WOS02065	DH.WOS02075	DH.WOS02085
Price, Each. ₩				

Package-set (with ① Stirrer+Remote Controller, ② Impeller, ③ Clamp, ④ Stand)

Cat. No.	230V	DH.WOS01066	DH.WOS01076	-
	120V	DH.WOS02066	DH.WOS02076	-
Price, Each. ₩				

\* Weight of Remote Controller = 2.5kg \*\* Other Specifications are available upon Customer's Request.

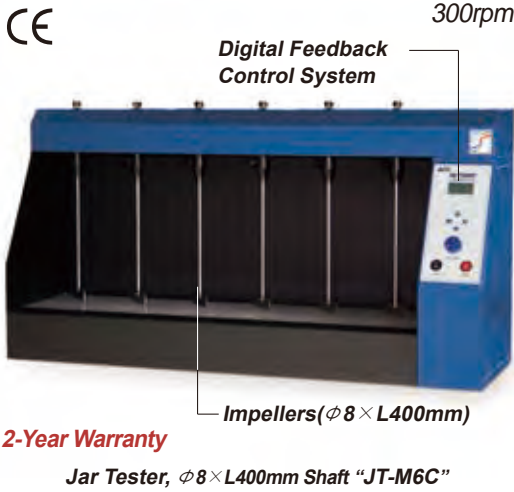
- \* "HT-50T" Package-set : Complete with ① "HT-50T" Stirrer Unit with Remote Controller ② "S732" Stainless-steel Impeller (Rod φ 8×L500mm, 4-Blade φ 70mm) ③ "CL200" Clamp, and ④ "ST120" Wide Plate Stand(Rod φ 23×L1000mm, Base w30×d40cm)
- \* "HT-120T" Package-set : Complete with ① "HT-120T" Stirrer Unit with Remote Controller ② "S736" Stainless-steel Impeller (Rod φ 10×L650mm, 4-Blade φ 90mm) ③ "CL200" Clamp, and ④ "ST200" Deluxe Safety Stand (Rod φ 23× L1,200mm, Base 39× up to 75cm)

※ Note! Details of Wide-Range Coupling : See the "Stirrers, Accessories" Section.



"HT-140T" Digital High-Torque Overhead Stirrer (included Stirring Speed Remote Controller and Temp. Display) in Modular Reactor System

DAIHAN® Digital Jar Tester "JT-M6C", 6-Paddle Stirrer for Flocculation Test, 300 rpm, with Certi. & Traceability  
 With Programmable Digital Feedback Control, 6 Impellers, 6 Independent Light Source, up to 6 × 1Lit Beakers  
 프로그램/디지털 자 테스터, 정밀 직류 기어드 모터와 특화된 타이밍벨트, 디지털 피드백 컨트롤



- Made in Korea    ■ CE Certified    ■ PL(Product Liability) Insurance
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Ideal for Flocculation Testing in Water Treatment Laboratories
- 6 Independent Light Source for Each Stirring Point

- \* Deciding on Coagulant Chemistries    \* Digital Display for RPM, Power Bar-Graph and Status
- \* Digital Feedback Control using Microprocessor : Stable and Accurate Stirring Speed
- \* Geared DC Motor and Specially Designed Timing Belt used
- \* Stable and Accurate Stirring Speed by Feedback Control
- \* Digital LCD with Back-Light Function    \* Programmable Operation : 10 Steps, 6 Programs

Specifications & Ordering information

Spec.	Model	"JT -M6C"
6 × Paddler (Stainless steel Shaft)		φ8 × L400mm
Stirring Capacity		Straight Blade w75 × h25mm
Motor & Power		6 × 1 Liter Beaker
Speed & Accuracy		Geared DC Motor with Timing Belt (10:1 ratio), 40W
Timer		20~300 rpm, ± 5 rpm
Display		99hr 59min 59sec (Programmable)
Controller		Digital LCD with Back-Light for RPM, Power Bar-Graph and Status
Program Function		Programmable Digital Feedback Controller with Jog-Shuttle Switch (Turn + Push)
Florescent Lamp		10 Steps, 6 Programs, and Storage for Set Values : RPM and Timer
Dimension (w × d × h) (mm)		20W × 6 (Independent Light Source for Each Sample)
Safety Device		1,000 × 310 × 535
Others		Overload & Over Heat Protector for motor
Packing and Gross Weight		PL(Product Liability) Insurance and Storage Function (RPM, Timer)
Electrical Reqts.		1,120 × 430 × h740mm, 69 kg
		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz
Cat. No.	230V	DH.WJT06020
Price, Each. ₩	120V	DH.WJT06021

※ 운임 착불



Geared DC Motor with Special Timing Belt

, Accessories



SciLab® DURAN glass Stirring Rod, with Round Ends, φ7~φ10, L200~650mm  
 Borosilicate Glass α 3.3, 글라스핸디 교반봉, 끝부분이 둥근모양, 굽힘방지

- Made of DURAN® Glass Rod : by SciLab Korea.    \* Rounded Ends for Extra Safety    \* Non-Scratching

(1) L200~350mm Length

SL.StiS201	Glass Rod, φ7, L200mm
SL.StiS202	, L250mm
SL.StiS203	, L300mm
SL.StiS204	Glass Rod, φ8, L300mm
SL.StiS205	, L350mm

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Ea. Price, ₩

(2) L400~650mm Length

SL.StiS206	Glass Rod, φ8, L400mm
SL.StiS207	, L500mm
SL.StiS208	Glass Rod, φ10, L450mm
SL.StiS209	, L500mm
SL.StiS210	, L650mm

Ea. Price, ₩



SciLab® DURAN glass Double-ended Stirring Rod, φ6~φ10mm, L200~L500mm  
 Useful for Crushing Clumped Powder and Solids, Borosilicate Glass α 3.3

- Made of DURAN® Borosilicate Glass 3.3 Rod : by SciLab Korea.
- \* With Rounded Button and Paddle Ends for Extra Safety and to Minimize Scratching
- \* Button End is Useful for Crushing Clumped Powder and Solids

(1) L200~300mm Length

SL.StiS211	2-end Rod, φ6, L200mm
SL.StiS212	, L250mm
SL.StiS213	, L300mm
SL.StiS214	2-end Rod, φ9, L300mm

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Ea. Price, ₩

(2) L350~500mm Length

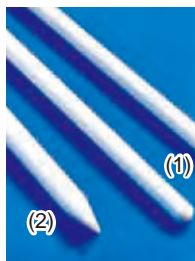
SL.StiS215	2-end Rod, φ9, L350mm
SL.StiS216	, L400mm
SL.StiS217	2-end Rod, φ10, L450mm
SL.StiS218	, L500mm

Ea. Price, ₩

Glass Double-ended Stirring Rods



Articles	Cat. No	Description
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**Cowie® PTFE Handy Stirring Rod,  $\phi 6/8 \times L200 \sim 400$ mm**  
 With Steel-core or Solid PTFE,  $-200^{\circ}\text{C} + 280^{\circ}\text{C}$ , <UK-made>, Teflon **핸디 교반봉**

\* Can be Bent into a Permanent Shape

**(1) With PTFE/Steel Core**

<b>CW.003.250</b>	PTFE/Steel Rod, $\phi 6 \times L250$ mm
<b>CW.003.300</b>	, $\phi 6 \times L300$ mm
<b>CW.003.350</b>	, $\phi 6 \times L350$ mm
<b>CW.003.400</b>	, $\phi 6 \times L400$ mm

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Ea. Price, ₩

**(2) With Solid PTFE, Tapered End**

<b>CW.003.1200</b>	PTFE Rod, $\phi 8 \times L200$ mm
<b>CW.003.1250</b>	, $\phi 8 \times L250$ mm
<b>CW.003.1300</b>	, $\phi 8 \times L300$ mm

Ea. Price, ₩

**Stainless-steel Stirring Rod, L165/242mm**

For Bacteriological Applications, Autoclavable, **삼각 교반봉, 다용도**

\* Ideal for Spreading and Dispersing, Distribution of Bacterial Substances on Solid Nutrient Media  
 \* Smooth Triangular ends for Smooth Spreading

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Ea. Price, ₩

<b>SL.Spr7001</b>	Cell Spreader/Stirring Rod, Stainless-steel, $\phi 3 \times L165 \times$ Blade width 35mm
<b>SL.Spr7002</b>	, $\phi 3 \times L165 \times$ Blade width 45mm
<b>SL.Spr7003</b>	, $\phi 3 \times L240 \times$ Blade width 30mm

**Hammacher® Premium Stirring Rod, Wironit™ Special Non-magnetic/Rust-free, L150 & 195mm**  
 For Bacteriological Applications, Autoclavable, <Germany-made>, **삼각 교반봉, 다용도, 비자성/비부식 특수스텐**

■ **Wironit™ Stainless-steel of 18/12 Cr-Ni; Non-magnetic, Rust-free, Excellent of Acid / Chemical / Heat**

\* Used to Mix Different Liquids Together to Get a Homogen Liquid  
 \* For even Spreading or Better Distribution Across Media

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Ea. Price, ₩

<b>HA.HWN074.15</b>	Cell Spreader/Stirring Rod, Stainless-steel, $\phi 3 \times L150 \times$ Blade width 25mm
<b>HA.HWN072.19</b>	, $\phi 4 \times L195 \times$ Blade width 35mm

**SciLab® DURAN glass Stir-Guide Set, with PTFE Blade/Impeller**

For 50~10000ml Stirring Glass, **유리 교반봉 셋트**

■ **Made of Original DURAN® Borosilicate Glass 3.3 : by SciLab Korea.**

\* Stir-Guide : od.  $\phi 15 \times$  id.  $\phi 10$ mm, internal Ground      \* Shaft / Rod :  $\phi 10$ mm Ground.

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**(1) General-type**

<b>SL.StiS221</b>	for-50~500 ml , L : 400 mm, ₩24/40, Blade w52 × h14 mm
<b>SL.StiS222</b>	-500~5000 ml , L : 450 mm, ₩24/40, Blade w76 × h19 mm
<b>SL.StiS223</b>	-500~5000 ml , L : 450 mm, ₩34/45, Blade w75 × h25 mm
<b>SL.StiS224</b>	-2000~10000 ml, L : 500 mm, ₩45/50, Blade w125 × h25 mm

Ea. Price, ₩

**(2) Water Cooled-type**

<b>SL.StiS226</b>	for-500~5000 ml , L : 450 mm, ₩24/40, Blade w76 × h19 mm
<b>SL.StiS227</b>	-500~5000 ml , L : 450 mm, ₩34/45, Blade w75 × h25 mm
<b>SL.StiS228</b>	-2000~10000 ml, L : 500 mm, ₩45/50, Blade w125 × h25 mm

Ea. Price, ₩

**Spare ₩ Stirrer-Guide(Seal), with Internal Ground  $\phi 10$ mm**

① General-type

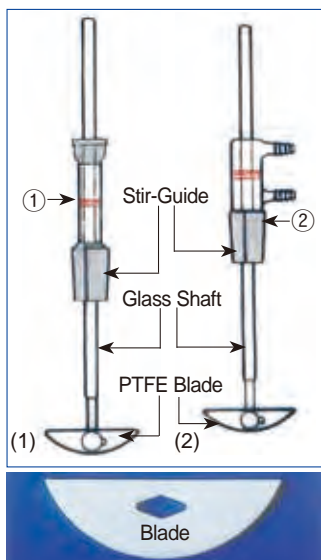
<b>SL.StiS231</b>	Stir-Guide, ₩24/40
<b>SL.StiS232</b>	, ₩29/42
<b>SL.StiS233</b>	, ₩34/45

Ea. Price, ₩

② Water Cooled-type

<b>SL.StiS231.1</b>	Stir-Guide, ₩24/40
<b>SL.StiS232.1</b>	, ₩29/42
<b>SL.StiS233.1</b>	, ₩34/45

Ea. Price, ₩



**SciLab® DURAN glass Lubri-Stir-Guide/Seal, for  $\phi 8$  &  $\phi 10$ mm shafts, ₩24/40 & ₩34/45**  
 With Red PBT Opentop Screwcap & PTFE/Silicone O-ring Seal, **루부리 스티러 씰**

■ **Made of Original DURAN® PBT Screw Seal Kit / Borosilicate Glass 3.3 : by SciLab Korea**

\* The Cup : To Accept a Suitable Sealing Lubricants <Ex.> : Glycerol, Liquid Paraffin, Spindle Oil, etc.

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**(1) for  $\phi 8$ mm Stir-Shaft**

<b>SL.StiS235</b>	Lubri-Stir-Guide, for $\phi 8$ mm Rod, GL18, ₩24/40
<b>SL.StiS236</b>	, GL25, ₩34/45

Ea. Price, ₩

**(2) for  $\phi 10$ mm Stir-Shaft**

<b>SL.StiS237</b>	Lubri-Stir-Guide, for $\phi 10$ mm Rod, GL18, ₩24/40
<b>SL.StiS238</b>	, GL25, ₩34/45

Ea. Price, ₩



**SciLab® Vacuum Stirrer-Guide, with DURAN® PBT Opentop Cap & PTFE/ Silicone O-Ring Seal and ₩24/- ~ 45/- Glass Joints**  
 For  $\phi 8 \sim 14$ mm Shafts, with Red PBT Screw Grip System, Chemically Inert, 200°C Stable, 스크류 스티러 쥘

■ Made of DURAN® Borosilicate Glass  $\alpha 3.3$  and Seal Kit with PBT GL-Opentop Screwcap / PTFE-Silicone O-Ring Seal : by SciLab Korea.



(1) with ASTM ₩24/40 ~ 45/50 Joints

Part No.	Specs	Ea. Price, ₩
SL.StiS241	for $\phi 8$ mm Rod, GL25, 24/40	
SL.StiS242	, 29/42	
SL.StiS243	, 34/45	
SL.StiS245	for $\phi 10$ mm Rod, GL25, 24/40	
SL.StiS246	, 29/42	
SL.StiS247	, GL32, 34/45	
SL.StiS251	for $\phi 12$ mm Rod, GL32, 34/45	
SL.StiS252	, 45/50	
SL.StiS253	for $\phi 14$ mm Rod, GL32, 34/45	
SL.StiS254	, 45/50	

<L1>

(2) with DIN ₩24/29 ~ 45/40 Joints

Part No.	Specs	Ea. Price, ₩
SL.StiS241D	for $\phi 8$ mm Rod, GL25, 24/29	
SL.StiS242D	, 29/32	
SL.StiS243D	, 34/35	
SL.StiS245D	for $\phi 10$ mm Rod, GL25, 24/29	
SL.StiS246D	, 29/32	
SL.StiS247D	, GL32, 34/35	
SL.StiS251D	for $\phi 12$ mm Rod, GL32, 34/35	
SL.StiS252D	, 45/40	
SL.StiS253D	for $\phi 14$ mm Rod, GL32, 34/35	
SL.StiS254D	, 45/40	

**SciLab® PTFE Stirrer-Guide/Seal, for  $\phi 8 \sim \phi 14$ mm Shafts, with ₩24/-, ₩29/-, and ₩34/-Joints**  
 With 2 Bearings · Screw-Retainer · Viton O-ring, All PTFE, -180°C +260°C Stable, PTFE 스티러 쥘

■ Made in Korea  
 ■ Common-use : to ASTM & DIN-type Socket Joints



(1) for  $\phi 8$ mm Stir-Shaft

Part No.	Specs	Ea. Price, ₩
SL.Ada405	for $\phi 8$ mm Rod, ₩24/40	
SL.Ada406	, ₩29/42	
SL.Ada407	, ₩34/45	

<L1>

(2) for  $\phi 10$ mm Stir-Shaft

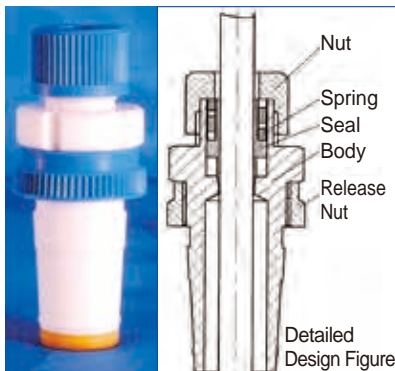
Part No.	Specs	Ea. Price, ₩
SL.Ada409	for $\phi 10$ mm Rod, ₩24/40	
SL.Ada410	, ₩29/42	
SL.Ada411	, ₩34/45	

(3) for  $\phi 12$  & 14mm Stir-Shaft

Part No.	Specs	Ea. Price, ₩
SL.Ada413	PTFE Stir-Guide, for $\phi 12$ mm Rod, ₩34/45	
SL.Ada415	, for $\phi 14$ mm Rod, ₩34/45	

**₩Joint-Screw-NPT-PTFE/PEEK High-class Vacuum Stirrer Guide, with ASTM/DIN ₩Glass Cone Joint, for  $\phi 8 \sim 16$ mm Shaft**  
 Ideal for Middle/Low-Vacuum, 500/800rpm, Chemically Inert, -200°C +280°C Stable, <UK-made>, 고품질 진공 ₩교반 쥘

■ Suitable for Glass Same Size Socket of ASTM or DIN \* PTFE in the only Media Contact Material

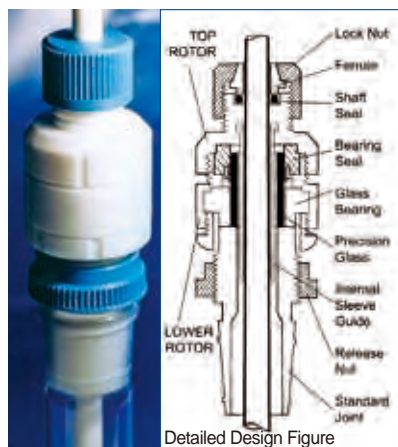


(1) for ASTM Socket Joint Sizes ; for  $\phi 8 \sim 16$ mm Shaft

Part No.	Specs	Ea. Price, ₩
CW.005.0.0824	Stirrer Seal, USA-type, for- $\phi 8$ mm Shafts, ₩24/40 Joint	
CW.005.0.1024	- $\phi 10$ mm Shafts, ₩24/40 Joint	
CW.005.0.1034	- $\phi 10$ mm Shafts, ₩34/45 Joint	
CW.005.0.1434	- $\phi 14$ mm Shafts, ₩34/45 Joint	
CW.005.0.1634	- $\phi 16$ mm Shafts, ₩34/45 Joint	

(2) for DIN/ISO Socket Joint Sizes ; for  $\phi 8 \sim 16$ mm Shaft

Part No.	Specs	Ea. Price, ₩
CW.005.00.0824	Stirrer Seal, EUROPE-type, for- $\phi 8$ mm Shafts, ₩24/29 Joint	
CW.005.00.1029	- $\phi 10$ mm Shafts, ₩29/32 Joint	
CW.005.00.1045	- $\phi 10$ mm Shafts, ₩45/40 Joint	
CW.005.00.1434	- $\phi 14$ mm Shafts, ₩34/35 Joint	
CW.005.00.1645	- $\phi 16$ mm Shafts, ₩45/40 Joint	



**Cowie® High-Vacuum / Pressure Stirrer Guide, ₩PTFE/PEEK & Glass-Bearing Seal**  
 For  $\phi 8 \sim 16$ mm Shafts, Useable up to 800rpm, 280°C Stable, <UK-made>, 고진공/압력용 ₩교반 쥘

■ High Vacuum 5mmHg & Pressure 3~5psi Performance  
 \* Anti-Whip, Reduced Vibration, No-Shedding, Self-Releasing Joint Ring, Totally Inert.  
 \* Specially Fabricated Glass Ball-Bearing & PTFE/PEEK Seal : Useable up to 800rpm

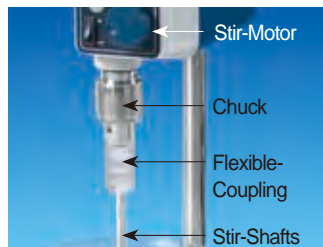
(1) for ASTM Socket Joint Sizes ; for  $\phi 8 \sim 16$  mm Shafts

Part No.	Specs	Ea. Price, ₩
CW.005.1047	Stirrer Seal, USA-type, for- $\phi 8$ mm Shafts, ₩24/40 Joint	
CW.005.1057	- $\phi 10$ mm Shafts, ₩24/40 Joint	
CW.005.1067	- $\phi 10$ mm Shafts, ₩29/42 Joint	
CW.005.1097	- $\phi 14$ mm Shafts, ₩34/45 Joint	
CW.005.1117	- $\phi 16$ mm Shafts, ₩34/45 Joint	

(2) for DIN/ISO Socket Joint Sizes ; for  $\phi 10 \sim 16$  mm Shafts

Part No.	Specs	Ea. Price, ₩
CW.005.2067	Stirrer Seal, EUROPE-type, for- $\phi 10$ mm Shafts, ₩29/32 Joint	
CW.005.2077	- $\phi 10$ mm Shafts, ₩34/35 Joint	
CW.005.2097	- $\phi 14$ mm Shafts, ₩34/35 Joint	
CW.005.2127	- $\phi 16$ mm Shafts, ₩45/40 Joint	

Articles	Cat. No	Description
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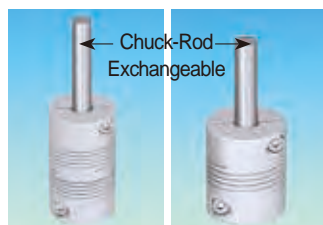


**Flexible Coupling, for Safety Stirring of  $\phi 6\sim 16$ mm Shafts of Overhead Stirrers**  
**For Stirrers between Stirring Motor and Shaft, 안전교반용 유연성 커플링**

■ **Used to Compensate Any Vibrations Between The Motor and Stirring Shafts** \* Made in Korea \* Shaft Fastening by Screw Clamp Band \* Made of DURALUMIN \* with Exchangeable SS Chucking Rod  $\phi 8 / 10 / 12$ mm, L40mm

**(1) UTILITY High-Flex. Metal Coupling, with 2  $\times$  Flex-band, for  $\phi 6\sim 16$ mm Stir-Shafts**  
**Ideal for Low/High Viscosity and High/Low Speed** <L1>

	Ea.	Price, ₩
SL.StiC011	Stir-Coupling, Hi-flex, $\phi 8$ mm Chuck-rod, for- $\phi 6$ mm Stir-Shaft, 56g, $\phi 25 \times h44$ mm	
SL.StiC012	- $\phi 8$ mm Stir-Shaft, 53g, $\phi 25 \times h44$ mm	
SL.StiC013	- $\phi 10$ mm Stir-Shaft, 49g, $\phi 25 \times h44$ mm	
SL.StiC014	Stir-Coupling, Hi-flex, $\phi 10$ mm Chuck-rod, for- $\phi 8$ mm Stir-Shaft, 49g, $\phi 25 \times h44$ mm	
SL.StiC015	- $\phi 10$ mm Stir-Shaft, 43g, $\phi 25 \times h44$ mm	
SL.StiC016	- $\phi 12$ mm Stir-Shaft, 33g, $\phi 25 \times h44$ mm	
SL.StiC017	Stir-Coupling, Hi-flex, $\phi 12$ mm Chuck-rod, for- $\phi 10$ mm Stir-Shaft, 33g, $\phi 25 \times h44$ mm	
SL.StiC018	- $\phi 12$ mm Stir-Shaft, 123g, $\phi 32 \times h60$ mm	
SL.StiC019	- $\phi 14$ mm Stir-Shaft, 120g, $\phi 32 \times h60$ mm	
SL.StiC020	- $\phi 16$ mm Stir-Shaft, 118g, $\phi 32 \times h60$ mm	



(1) Hi-flex Metal ; (2) Heavy-duty Metal for  $\phi 6\sim 16$  Shafts; for  $\phi 10\sim 16$  Shafts

**(2) Heavy-duty Metal Coupling, with Short Flex-band, for  $\phi 10\sim 16$ mm Stir-Shafts**  
**Low-Flexible type, Ideal for High Viscosity and Middle/Low Speed**

	Ea.	Price, ₩
SL.StiC023	Stir-Coupling, Low-flex, $\phi 10$ mm Chuck rod, for- $\phi 10$ mm Stir-Shafts, 45g, $\phi 25 \times h30$	
SL.StiC024	- $\phi 12$ mm Stir-Shafts, $\phi 25 \times h30$	
SL.StiC025	Stir-Coupling, Low-flex, $\phi 12$ mm Chuck rod, for- $\phi 12$ mm Stir-Shafts, 105g, $\phi 32 \times h38$	
SL.StiC026	- $\phi 14$ mm Stir-Shafts, $\phi 32 \times h38$	
SL.StiC027	- $\phi 16$ mm Stir-Shafts, $\phi 32 \times h38$	



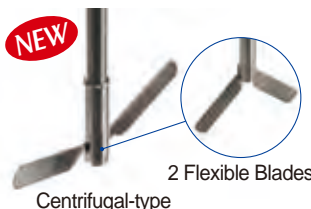
(3) Rubber Based for  $\phi 7\sim 10$  Shafts

**(3) Very Flexible Rubber Based Coupling, for  $\phi 7\sim 10$ mm Shafts**  
**Especially, Ideal for GLASS Shafts and Low/Middle Viscosity & High Speed**

\* Made in Germany \* Shaft Fastening by Screw Compression Rubber Ring Pad.  
 \* with  $\phi 10 \times L40$ mm Exchangeable Stainless-steel Chucking Rod

	Ea.	Price, ₩
WI.1445000	Stir-Coupling, Rubber Based, for $\phi 7\sim \phi 10$ mm Shafts, 72.5g, Body $\phi 46 \times h80$ mm	

**Bochem® Stainless-steel Centrifugal-type Stirring Shaft, for Lab & Industrial Overhead Stirrers, Rod  $\phi 8$  &  $10 \times L400\sim 650$ mm** **NEW**  
**Ideal for Low/Middle Viscosity, with 2 Flexible Blades, Non-magnetic/Rust-free, <Germany-made>, 스텐레스 교반봉 / 임펠러**



Centrifugal-type

■ **Good Finished : Surface & Stirring Center** ■ **Recommended to use with Flexible Coupling for Gentle Stirring & Safety Working** \* 18/10 SS ; Non-magnetic, Rust-free, Anti-Acid / Chemicals / Heat <L1>

	Ea.	Price, ₩
BC.9210	Stir-Shaft, SS, Rod- $\phi 8 \times L400$ mm, Swingrotor- $\phi 90 \times h10$ mm	
BC.9211	, Rod- $\phi 8 \times L500$ mm, Swingrotor- $\phi 90 \times h10$ mm	
BC.9213	, Rod- $\phi 10 \times L400$ mm, Swingrotor- $\phi 90 \times h10$ mm	
BC.9214	, Rod- $\phi 10 \times L500$ mm, Swingrotor- $\phi 90 \times h10$ mm	
BC.9215	, Rod- $\phi 10 \times L650$ mm, Swingrotor- $\phi 90 \times h10$ mm	

**SciLab® Stainless-steel Stirring Shaft, for Lab & Industrial Overhead Stirrers, Rod  $\phi 8\sim 12 \times L500\sim 1000$ mm**  
**Ideal for Universal-use of Wide-range Speed & Viscosity, 스텐레스 교반봉 / 임펠러**



(1) 3-bladed Propeller-type Universal-use

■ **Made of Rustless Stainless-steel #304** ■ **Good Finished : Surface & Stirring Center** ■ **Recommended to use with Flexible Coupling for Gentle Stirring & Safety Working** ■ **The Rod may be Cut to Any Length with a Hacksaw**

**(1) 3-bladed Propeller-type, ideal for Universal-use in Middle/High Speed**  
**with Rod  $\phi 8\sim 12 \times L500\sim 1000$ , Rotor  $\phi 50\sim 140$  mm, and Good for Low/Middle Viscosity** <L1>

\* Designed for Efficient Flow : mixed from Top to Bottom of Vessel \* Minimum Shearing

	Ea.	Price, ₩
SL.StiS721	Stir-Shaft, "S721", #304, Rod- $\phi 8 \times L500$ , Rotor- $\phi 50 \times h15$ mm	
SL.StiS722	, "S722", - $\phi 8 \times L500$ , - $\phi 60 \times h15$ mm	
SL.StiS723	, "S723", - $\phi 8 \times L650$ , - $\phi 80 \times h20$ mm	
SL.StiS724	, "S724", - $\phi 8 \times L650$ , - $\phi 100 \times h24$ mm	
SL.StiS726	Stir-Shaft, "S726", #304, Rod- $\phi 10 \times L500$ , Rotor- $\phi 60 \times h15$ mm	
SL.StiS727	, "S727", - $\phi 10 \times L650$ , - $\phi 80 \times h20$ mm	
SL.StiS728	, "S728", - $\phi 10 \times L800$ , - $\phi 100 \times h24$ mm	
SL.StiS729	Stir-Shaft, "S729", #304, Rod- $\phi 12 \times L1000$ , Rotor- $\phi 140 \times h30$ mm	



(2) 4-bladed Propeller-type Standard-model

**(2) Standard 4-bladed Propeller-type, ideal for Low/Middle Speed & Viscosity**  
**Popular-model, with Rod  $\phi 8\sim 12 \times L500\sim 1000$ , Rotor  $\phi 50\sim 140$ mm, 45° Angled**

	Ea.	Price, ₩
SL.StiS731	Stir-Shaft, "S731", #304, Rod- $\phi 8 \times L500$ , Rotor- $\phi 50 \times h20$ mm	
SL.StiS732	, "S732", - $\phi 8 \times L500$ , - $\phi 70 \times h25$ mm	
SL.StiS733	, "S733", - $\phi 8 \times L650$ , - $\phi 90 \times h35$ mm	
SL.StiS734	, "S734", - $\phi 8 \times L650$ , - $\phi 110 \times h35$ mm	
SL.StiS736	Stir-Shaft, "S736", #304, Rod- $\phi 10 \times L650$ , Rotor- $\phi 90 \times h35$ mm	
SL.StiS737	, "S737", - $\phi 10 \times L800$ , - $\phi 110 \times h40$ mm	
SL.StiS738	, "S738", - $\phi 10 \times L1000$ , - $\phi 110 \times h40$ mm	
SL.StiS739	Stir-Shaft, "S739", #304, Rod- $\phi 12 \times L1000$ , Rotor- $\phi 140 \times h40$ mm	

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<Continued From...SciLab® Stainless-steel Stirring Shaft >

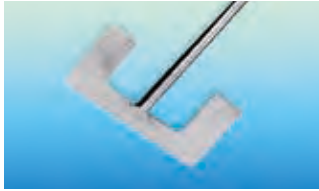


(3) 3-bladed Dissolver Diamond-type

(3) 4-bladed Dissolver Diamond-type, Good for Particle Reduction in Middle/High Speed with Rod  $\phi 8$  &  $10 \times L500 \sim 650$ , Rotor  $\phi 70 \sim 110$ mm, and Good for Low/Middle Viscosity

- SL.StiS741 Stir-Shaft, "S741", #304, Rod- $\phi 8 \times L500$ , Rotor- $\phi 70 \times h20$  mm
- SL.StiS742, "S742",  $\phi 8 \times L500$ ,  $\phi 90 \times h25$  mm
- SL.StiS743, "S743",  $\phi 8 \times L650$ ,  $\phi 110 \times h25$  mm
- SL.StiS744 Stir-Shaft, "S744", #304, Rod- $\phi 10 \times L650$ , Rotor- $\phi 110 \times h25$  mm

<L1>  
Ea. Price, ₩



(4) Heavy-duty Anchor-type

(4) Heavy-duty Anchor-type, ideal for Middle/High Viscosity, Rod  $\phi 8 \sim 12$ mm Good for Low/Middle Speed, Rotor  $\phi 70 \sim 180$ mm

- SL.StiS751 Stir-Shaft, "S751", #304, Rod- $\phi 8 \times L500$ , Rotor- $\phi 70 \times h14$  mm
- SL.StiS752, "S752",  $\phi 8 \times L650$ ,  $\phi 90 \times h16$  mm
- SL.StiS753 Stir-Shaft, "S753", #304, Rod- $\phi 10 \times L650$ , Rotor- $\phi 90 \times h16$  mm
- SL.StiS754, "S754",  $\phi 10 \times L800$ ,  $\phi 140 \times h25$  mm
- SL.StiS755, "S755",  $\phi 10 \times L1000$ ,  $\phi 160 \times h30$  mm
- SL.StiS757 Stir-Shaft, "S757", #304, Rod- $\phi 12 \times L1000$ , Rotor- $\phi 180 \times h30$  mm

Ea. Price, ₩

Bochem® Stainless-steel Square-type Stirring Shaft, with  $6 \times \phi 12$ mm Hole, for Lab & Industrial Overhead Stirrers, Rod  $\phi 8$  &  $10 \times L400$  &  $500$ mm Ideal for Low/Middle Viscosity, Non-magnetic/Rust-free, <Germany-made>, 스텐레스 교반봉 / 임펠러 **NEW**

**NEW**



Square-type

- Good Finished : Surface & Stirring Center
- Recommended to Use with a Flexible Coupling for Gentle Stirring & Safety Working
- \* 18/10 Stainless-steel; Non-magnetic, Rust-free, Anti-Acid / Chemicals / Heat

- BC.9504 Stir-Shaft, SS, Rod- $\phi 8 \times L400$ mm, Rotor- $\phi 70 \times h65$ mm  $\times t1.7$ mm,  $6 \times \phi 12$ mm Hole
- BC.9505, Rod- $\phi 8 \times L500$ mm, Rotor- $\phi 70 \times h65$ mm  $\times t1.7$ mm,  $6 \times \phi 12$ mm Hole
- BC.9507, Rod- $\phi 10 \times L400$ mm, Rotor- $\phi 70 \times h65$ mm  $\times t1.7$ mm,  $6 \times \phi 12$ mm Hole
- BC.9508, Rod- $\phi 10 \times L500$ mm, Rotor- $\phi 70 \times h65$ mm  $\times t1.7$ mm,  $6 \times \phi 12$ mm Hole

<L1>  
Ea. Price, ₩



Heavy-duty Helical Ribbon-type

Heavy-duty Helical Ribbon-type, Ideal for Middle/High Viscosity and Lab~Industry With Rod  $\phi 8 \sim 12$ mm,  $L500 \sim 1000$ , Rotor  $\phi 60 \sim 190$ mm, Good for Reaction-system

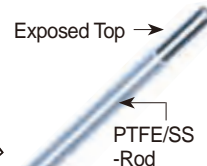
- \* Patented Helical Ribbon High Efficient Mixing Performance \* Generates Axial Flow.
- \* Designed for Middle / High Viscosity, High Flow Rate and Efficient Mixing.
- \* For Homogeneous Mixing and Medium is Conveyed from the Bottom upwards.

- SL.StiS761 Stir-Shaft, "S761", #304, Rod- $\phi 8 \times L500$ , Rotor- $\phi 60 \times h100$  mm
- SL.StiS762, "S762",  $\phi 8 \times L650$ ,  $\phi 80 \times h130$  mm
- SL.StiS762.1 Stir-Shaft, "S762.1", #304, Rod- $\phi 10 \times L650$ , Rotor- $\phi 100 \times h160$  mm
- SL.StiS763, "S763",  $\phi 10 \times L650$ ,  $\phi 115 \times h175$  mm
- SL.StiS764, "S764",  $\phi 10 \times L800$ ,  $\phi 125 \times h190$  mm
- SL.StiS765 Stir-Shaft, "S765", #304, Rod- $\phi 12 \times L1000$ , Rotor- $\phi 160 \times h240$  mm
- SL.StiS766, "S766",  $\phi 12 \times L1100$ ,  $\phi 190 \times h290$  mm

<L1>  
Ea. Price, ₩

PTFE Stirring Shaft, with Stainless-steel Insert, for Lab & Industrial Overhead Stirrers, Rod  $\phi 8$  &  $10 \times L300 \sim 650$ mm With Centrifugal & Square-type, High Temperature Resistant and Corrosion-Proof,  $-200^\circ\text{C} + 260^\circ\text{C}$ , Normal-grade, PTFE 교반봉/임펠러

- Supplied by SciLab Korea
- Recommended to Use with a Flexible Coupling for Gentle Stirring & Safety Working
- The PTFE Rod with Stainless-steel Insert : ① OD  $\phi 8$ mm with  $\phi 6$ mm Steel Insert-" $\phi 8/6$ "  
② OD  $\phi 10$ mm with  $\phi 8$ mm Steel Insert-" $\phi 10/8$ "
- Ideal for PURE-Working / Chemically Inert / Non-Contaminating / Thermally Stable
- Exposed Top Rod 4~5cm (Stainless-steel Core) : For Strong Clamping in the Stir-Chuck or Flexible Coupling. ⇒

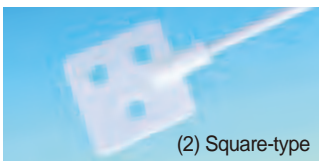


(1) 2-bladed

(1) 2-bladed Centrifugal-type

- SL.StiS4091 PTFE Stirring Rod,  $\phi 8/6 \times L300$ mm, Swing rotor- $\phi 63$ mm  $\times h24$ mm
- SL.StiS4092,  $\phi 8/6 \times L400$ mm,  $\phi 80$ mm  $\times h25$ mm
- SL.StiS4093,  $\phi 8/6 \times L500$ mm,  $\phi 100$ mm  $\times h30$ mm
- SL.StiS4094,  $\phi 8/6 \times L600$ mm,  $\phi 110$ mm  $\times h34$ mm
- SL.StiS4095,  $\phi 10/8 \times L650$ mm,  $\phi 110$ mm  $\times h34$ mm

<L1>  
Ea. Price, ₩



(2) Square-type

(2) Square-type, with  $\phi 12$ mm Three Holes

- SL.StiS4098 PTFE Stirring Rod,  $\phi 10/8 \times L350$ mm, Rotor  $70 \times 70$ mm  $\times t4$ mm,  $3 \times \phi 12$ mm Hole
- SL.StiS4099,  $\phi 10/8 \times L450$ mm, Rotor  $70 \times 70$ mm  $\times t4$ mm,  $3 \times \phi 12$ mm Hole

Ea. Price, ₩

SciLab® Hi-grade PTFE Stirring Shaft, with Stainless-steel Insert, for Overhead Stirrers, Rod  $\phi 8\sim 14 \times L500\sim 1100\text{mm}$   
Ideal for PURE Working & Universal-use of Wide-range Speed & Viscosity, Chemically Inert,  $-200^{\circ}\text{C} + 280^{\circ}\text{C}$ -stable, PTFE 교반봉/임펠러

■ Recommended to Use with a Flexible Coupling for Gentle Stirring & Safety Working.

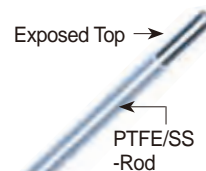
■ The PTFE Rod with Stainless-steel Insert :

- ① OD  $\phi 8\text{mm}$  with  $\phi 6\text{mm}$  Steel Insert-" $\phi 8/6$ ", ② OD  $\phi 10\text{mm}$  with  $\phi 8\text{mm}$  Steel Insert-" $\phi 10/8$ ",  
③ OD  $\phi 12\text{mm}$  with  $\phi 10\text{mm}$  Steel Insert-" $\phi 12/10$ ", and ④ OD  $\phi 14\text{mm}$  with  $\phi 12\text{mm}$  Steel Insert-" $\phi 14/12$ ".

■ Rod may be Cut to Any Length with a Hacksaw.

■ Ideal for PURE-Working / Chemically Inert / Non-Contaminating / Thermally Stable,  $-200^{\circ}\text{C} + 280^{\circ}\text{C}$ -stable.

■ Exposed Top Rod 4~5cm (Stainless-steel Core) : For Strong Clamping in the Stir-Chuck or Flexible Coupling. ⇒



(1) 2-bladed Centrifugal-type  
Good for Narrow-Neck  
<ex>  $\text{ㄱ}$ 24/- & 34/-Joint neck

(1) 2-bladed Centrifugal-type, ideal for  $\text{ㄱ}$ 24/- &  $\text{ㄱ}$ 34/-Joints(Narrow) Necks & Low Viscosity <L1>  
with Rod  $\phi 8$  &  $10 \times L500\sim 650$ , Rotor  $\phi 50\sim 100$  mm, and Good for Middle/High Speed

SL.StiS403	Stir-Shaft, PTFE, Rod- $\phi 8/6 \times L500$ , Swingrotor- $\phi 50 \times h14\text{mm}$ , fit to $\text{ㄱ}$ 24/-joints	Ea. Price, ₩
SL.StiS404	- $\phi 8/6 \times L500$ , - $\phi 70 \times h17\text{mm}$ , fit to $\text{ㄱ}$ 24/-joints	
SL.StiS405	- $\phi 8/6 \times L650$ , - $\phi 100 \times h24\text{mm}$ , fit to $\text{ㄱ}$ 34/-joints	
SL.StiS406	Stir-Shaft, PTFE, Rod- $\phi 10/8 \times L650$ , Swingrotor- $\phi 100 \times h24\text{mm}$ , fit to $\text{ㄱ}$ 34/-joints	



(2) Standard 4-bladed  
Propeller-type

(2) Standard 4-bladed Propeller-type, ideal for Low/Middle Speed and High Viscosity  
Good for Reactors, with Rod  $\phi 8\sim 14 \times L500\sim 1100$  and Rotor  $\phi 50\sim 140$  mm,  $45^{\circ}$  Angled

\* Standard Stirring Shafts. \* Designed for Efficient Mixing : from Top to Bottom of Vessel

SL.StiS410	Stir-Shaft, PTFE, Rod- $\phi 8/6 \times L500$ , Rotor- $\phi 50 \times h20\text{mm}$	Ea. Price, ₩
SL.StiS411	- $\phi 8/6 \times L500$ , - $\phi 70 \times h25\text{mm}$	
SL.StiS412	- $\phi 8/6 \times L650$ , - $\phi 70 \times h25\text{mm}$	
SL.StiS413	Stir-Shaft, PTFE, Rod- $\phi 10/8 \times L650$ , Rotor- $\phi 90 \times h35\text{mm}$ , Good for 5~10Lit Vessels	
SL.StiS414	- $\phi 10/8 \times L800$ , - $\phi 90 \times h35\text{mm}$ , Good for 10~20Lit Vessels	
SL.StiS415	- $\phi 10/8 \times L1000$ , - $\phi 90 \times h35\text{mm}$ , Good for 20~50Lit Vessels	
SL.StiS416.1	Stir-Shaft, PTFE, Rod- $\phi 12/10 \times L800$ , Rotor- $\phi 110 \times h40\text{mm}$ , Good for 10~20Lit Vessels	
SL.StiS416.2	- $\phi 12/10 \times L1000$ , - $\phi 110 \times h40\text{mm}$ , Good for 30~50Lit Vessels	
SL.StiS416.3	- $\phi 12/10 \times L1000$ , - $\phi 140 \times h40\text{mm}$ , Good for 30~80Lit Vessels	
SL.StiS417	Stir-Shaft, PTFE, Rod- $\phi 14/12 \times L1100$ , Exchangeable Rotor- $\phi 140 \times h40\text{mm}$ , Good for 50~100Lit Reactors	



(3) with 2-Rotors, Propeller-type

(3) with 2-Exchangeable Rotors of 4-bladed Propeller-type, for 20~100Lit Reaction Vessels  
Ideal for High Viscosity/ Large Volume Stirring, with Rod  $\phi 12$  &  $14 \times L 800\sim 1100$  mm

\* Translucent PFA Shaft with Stainless-steel Insert, Totally Chemical Inert

SL.StiS416.4	Stir-Shaft, PTFE, for 20~30Lit, Rod- $\phi 12/10 \times L800$ , 2-Rotors of (1) Exchangeable 1st Rotor $\phi 110 \times h40$ and (2) Bottom Rotor $\phi 110 \times h40\text{mm}$	Ea. Price, ₩
SL.StiS418	Stir-Shaft, PTFE, for 30~80Lit, Rod- $\phi 12/10 \times L1000$ , 2-Rotors of (1) Exchangeable 1st Rotor $\phi 110 \times h40$ and (2) Bottom Rotor $\phi 140 \times h40\text{mm}$	
SL.StiS419	Stir-Shaft, PTFE, for 50~100Lit, Rod- $\phi 14/12 \times L1100$ , 2-Rotors of (1) Exchangeable 1st Rotor $\phi 140 \times h40$ and (2) Bottom Rotor $\phi 140 \times h40\text{mm}$	



(4) Heavy-duty Anchor-type

(4) Heavy-duty Anchor-type, ideal for Middle/High Viscosity, Rod  $\phi 8\sim 12\text{mm}$   
Good for Low/Middle Speed, Rotor  $\phi 80\sim 140$  mm, <UK-made>

CW.005.340.82	Shaft, $\phi 8 \times L400\text{mm}$ Rod , $\phi 80\text{mm}$ Anchor	Ea. Price, ₩
CW.005.350.82	, $\phi 8 \times L500\text{mm}$ Rod , $\phi 80\text{mm}$ Anchor	
CW.005.355.2	, $\phi 10 \times L550\text{mm}$ Rod , $\phi 100\text{mm}$ Anchor	
CW.005.0365.102	, Ex-type, $\phi 10 \times L650\text{mm}$ Rod , $\phi 140\text{mm}$ Anchor	
CW.005.0375.102	, $\phi 10 \times L750\text{mm}$ Rod , $\phi 140\text{mm}$ Anchor	
CW.005.0375.122	, $\phi 12 \times L750\text{mm}$ Rod , $\phi 140\text{mm}$ Anchor	
CW.005.03100.122	, $\phi 12 \times L1000\text{mm}$ Rod , $\phi 140\text{mm}$ Anchor	



(1) Glass

Glass & PFA (Stainless-steel Insert) PLAIN Shaft, for Exchangeable Rotor  
For Exchangeable Rotor, 글라스 및 스텐심 PFA봉

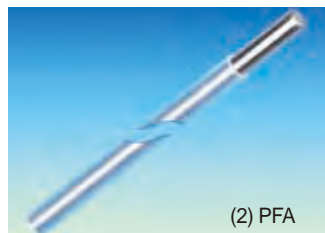
(1) DURAN® Glass Shaft, Round Ends, Boro-glass 3.3,  $\phi 8$  &  $10$ ,  $L400\sim 650\text{mm}$  <L1>

SL.StiS206	Glass Shaft, $\phi 8 \times L400\text{mm}$	Ea. Price, ₩	SL.StiS208	Glass Shaft, $\phi 10 \times L450\text{mm}$	Ea. Price, ₩
SL.StiS207	, $\phi 8 \times L500\text{mm}$		SL.StiS209	, $\phi 10 \times L550\text{mm}$	
			SL.StiS210	, $\phi 10 \times L650\text{mm}$	

(2) PFA with Stainless-steel Insert Shaft,  $\phi 8\sim 14 \times L500\sim 1100\text{mm}$

\* The Rod may be Cut to Any Length with a Hacksaw \* Translucent PFA, Totally Chemical Inert,  $-200^{\circ}\text{C} + 260^{\circ}\text{C}$

SL.StiS451	Shaft, PFA, $\phi 8/6 \times L500\text{mm}$	Ea. Price, ₩	SL.StiS455	Shaft, PFA, $\phi 10/8 \times L800\text{mm}$	Ea. Price, ₩
SL.StiS452	, $\phi 8/6 \times L650\text{mm}$		SL.StiS456	, $\phi 12/10 \times L800\text{mm}$	
SL.StiS453	, $\phi 8/6 \times L800\text{mm}$		SL.StiS457	, $\phi 12/10 \times L1000\text{mm}$	
SL.StiS454	, $\phi 10/8 \times L650\text{mm}$		SL.StiS458	, $\phi 14/12 \times L1100\text{mm}$	



(2) PFA



(1) Glass-shaft



(2) PTFE-shaft



(3) PTFE Blade,  
with  $\phi 6.5$  Connect-hole

**GLASS and PTFE/Steel Cored Shaft and PTFE Blade, Exchangeable**  
Ideal for  $\text{㉔}24/-$  &  $\text{㉔}34/-$  Joint (Narrow) Necks, 교체형 글라스 & PTFE 교반봉과 임펠러

\* Glass Shafts : DURAN Borosilicate Glass 3.3 Rod  $\phi 8$  & 10mm : Made in Korea  
\* PTFE Encapsulated Stainless-steel Shafts  $\phi 8$  & 12mm,  $-200^{\circ}\text{C}+280^{\circ}\text{C}$  Stable : Made in U.K.

		<L1>		
		Ea. Price, ₩	Ea. Price, ₩	
(1) GLASS-Shaft, $\phi 8/10$ , L400~600mm				
SL.StiS260	Glass-Shaft, $\phi 8$ , L400mm		SL.StiS265	Glass-Shaft, $\phi 10$ , L400mm
SL.StiS261	, L500mm		SL.StiS266	, L500mm
SL.StiS262	, L600mm		SL.StiS267	, L600mm

(2) Cowie® PTFE/Steel Cored Shaft,  $\phi 8$  & 12mm, L400~750mm, without Blade, <UK-made>

\* The Rod may by Cut to Any Length with a Hacksaw

		Ea. Price, ₩		
CW.005.540.81	Shaft, PTFE, $\phi 8 \times L400\text{mm}$		CW.005.565.1	Shaft, PTFE, $\phi 10 \times L650\text{mm}$
CW.005.550.81	, $\phi 8 \times L500\text{mm}$		CW.005.0575.101	, $\phi 10 \times L750\text{mm}$
CW.005.555.1	, $\phi 10 \times L550\text{mm}$		CW.005.0575.121	, $\phi 12 \times L750\text{mm}$

(3) Cowie® PTFE Stir-Blade, Thick-3.2mm, Ideal for  $\text{㉔}24/-$  &  $\text{㉔}34/-$  Joint Necks, <UK-made>

① with Square End, Fit to $\text{㉔}24/-$ Joints		Ea. Price, ₩		② with Plain End, Fit to $\text{㉔}34/-$ Joints		Ea. Price, ₩	
CW.002.052.1	Blade, Squ. $52 \times h14\text{mm}$			CW.002.1065.1	Blade, Pla. $65 \times h25\text{mm}$		
CW.002.076.1	, $.76 \times h19\text{mm}$			CW.002.1075.1	, $.75 \times h25\text{mm}$		
CW.002.090.1	, $.90 \times h28\text{mm}$			CW.002.1105.1	, $.105 \times h25\text{mm}$		
				CW.002.1125.1	, $.125 \times h25\text{mm}$		
				CW.002.1150.1	, $.150 \times h25\text{mm}$		



(1) "Screw Propeller" only  
 $\phi 50 \sim \phi 140\text{mm}$



(2) "Turbine" Rotor Only  
 $\phi 50 \sim \phi 150\text{mm}$

**All PTFE Adjustable Exchangeable Rotor, Screw Propeller- & Turbine-type**  
For Shaft  $\phi 8 \sim 16\text{mm}$ ,  $-200^{\circ}\text{C} + 280^{\circ}\text{C}$ , PTFE 교체형/조절식 교반 임펠러

■ The Exchangeable Rotors fit to  $\phi 8 \sim 16\text{mm}$  Rods and Lock in place with Screw Nut

(1) SciLab® Exchangeable "Screw Propeller" Rotor,  $45^{\circ}$  Angled 4 Blade

\* Made in Korea

		<L1>	
		Ea. Price, ₩	Ea. Price, ₩
SL.StiS461	Rotor, PTFE, for Shaft- $\phi 8$ , Rotor- $\phi 50 \times h20\text{mm}$		
SL.StiS462	, $\phi 70 \times h25\text{mm}$		
SL.StiS463	, for Shaft- $\phi 10$ , Rotor- $\phi 70 \times h25\text{mm}$		
SL.StiS464	, $\phi 90 \times h35\text{mm}$		
SL.StiS465	, for Shaft- $\phi 12$ , Rotor- $\phi 110 \times h40\text{mm}$		
SL.StiS466	, for Shaft- $\phi 14$ , Rotor- $\phi 140 \times h40\text{mm}$		

(2) Cowie® Exchangeable "Turbine" Rotor only,  $\phi 50 \sim 150\text{mm}$ , <UK-made>

		Ea. Price, ₩	
CW.005.90850	Rotor, PTFE, for Shaft- $\phi 8\text{mm}$ , Rotor- $\phi 50\text{mm}$		
CW.005.90875	, $\phi 75\text{mm}$		
CW.005.91075	, for Shaft- $\phi 10\text{mm}$ , Rotor- $\phi 75\text{mm}$		
CW.005.910100	, $\phi 100\text{mm}$		
CW.005.912100	, for Shaft- $\phi 12\text{mm}$ , Rotor- $\phi 100\text{mm}$		
CW.005.916150	, for Shaft- $\phi 16\text{mm}$ , Rotor- $\phi 150\text{mm}$		



(1) (2) (3) (4)

**Kartell® PP & PVC Plastic Stirring Shaft, PP-Blade, PVC-Rod with Steel Core, Rod  $\phi 8 \times L350\text{mm}$**   
Good for Acid & Chemicals resistance, PP & PVC 플라스틱 교반봉/임펠러

■ Supplied by Kartell® in Italy

■ Ideal for Acids, Chemicals and Anti-corrosion

■ Material : PP-Blade, PVC-Rod with Steel Core :  $\phi 8 \times L350\text{mm}$

\* Polypropylene(PP) :  $-10^{\circ}\text{C} + 125/140^{\circ}\text{C}$  \* Polyvinylchloride(PVC) :  $-20^{\circ}\text{C} + 80^{\circ}\text{C}$

		<L1>	
		Ea. Price, ₩	Ea. Price, ₩
KA.428	(1) Stirring Paddle, with 2 fixed blade (w39 $\times$ h15mm), Rod $\phi 8 \times L350\text{mm}$		
KA.430	(2) , "U" shaped blade (w65 $\times$ h78mm), Rod $\phi 8 \times L350\text{mm}$		
KA.431	(3) , with 2 flexible paddle (Swing w57mm), Rod $\phi 8 \times L350\text{mm}$		
KA.432	(4) , with 2 flexible paddle (Swing w98mm), Rod $\phi 8 \times L350\text{mm}$		



### DAIHAN® Plate Stand, High Quality, with Stainless-steel Rod $\phi$ 16/23 mm Ideal for the Stand of Homogenizer & Overhead Stirrers 대리석 뷰렛 스탠드

- High-Quality Plate-type Stand with Support Rod and Silicone Rubber Pad adhered
- with 1.5P Screwed Support Rod made of Stainless-steel specially designed

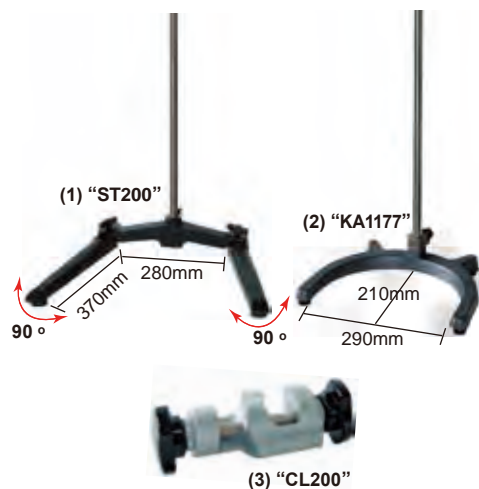
&lt;L1&gt;

DH.WOS501510 (1) "ST110" Standard Steel Plate Stand, Powder Coated,  
with Base Plate/Silicone Pad, for Stirrer and Homogenizer, Base Plate w20×35cm  
"RD 511" 1.5P Screw Rod,  $\phi$  16×h800 mm

Ea. Price, ₩

DH.WOS501515 (2) "ST120" Wide Steel Plate Stand, Powder Coated,  
with Base Plate/Silicone Pad, for Stirrer and Homogenizer, Base Plate w30×40 cm  
"RD 522" 1.5P Screw Rod,  $\phi$  23×h1000 mm

Ea. Price, ₩



### DAIHAN® Heavy Duty Safety Stand, High Safety, with Stainless-steel Rod $\phi$ 23mm Ideal for the Stand of Overhead Stirrers

- Never Fall Down by Safety Mechanism.
- High-Safety H-U-type Stand with Stainless-steel Support Rod

&lt;L1&gt;

#### (1) Adjustable Foot Distance Deluxe Safety Stand

DH.WOS501520 Deluxe Safety Stand, "ST200",  
H-type Base w39~75cm adjust, Rod  $\phi$  23×h1200mm

Ea. Price, ₩

#### (2) U-type Safety Stand

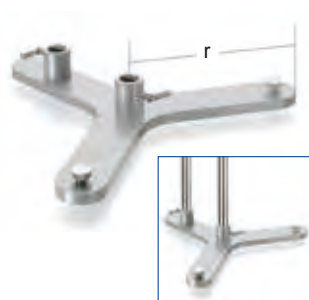
DH.WOS1177 Safety Stand, "KA1177",  
U-type Base w34/29×27/21cm, Rod  $\phi$  23×h800mm

Ea. Price, ₩

#### (3) Universal Jumbo Clamp Holder, for Stand Rod

SL.Cla8011 Clamp Holder, "CL200", Cast Aluminum, Grip Capacity,  
 $\phi$  23mm for Stand Rod

Ea. Price, ₩



Steel Retort Base Duo Stand

### Steel Retort Base Duo Stand, for 2×Plain Rods of up to $\phi$ 16mm, without Rods With Nonskid Feet equipped, 2×Level Screw Nut, and Base Thick-8mm, <Germany-made>

#### Retort Stand Base only, acceptable 2 Plain Rod(below $\phi$ 16mm)

&lt;L1&gt;

US.2040 Stand Base only, "US2040", r=150mm  
US.2041 "US2041", r=185mm

Ea. Price, ₩

#### Optional Stainless-steel Rod of $\phi$ 16mm, without Screw

DH.WOS502001 Stainless-steel Rod, "RD501",  $\phi$  16×h800mm, non-screw  
DH.WOS502002 "RD502",  $\phi$  16×h1000mm, non-screw  
DH.WOS502003 "RD503",  $\phi$  16×h1200mm, non-screw

Ea. Price, ₩

### DAIHAN® $\phi$ 16 & 23mm High-Quality Stainless-steel (#304) Rod, for Stand Bases

#### (1) Plain-type $\phi$ 16mm Rod, without Screw

&lt;L1&gt;

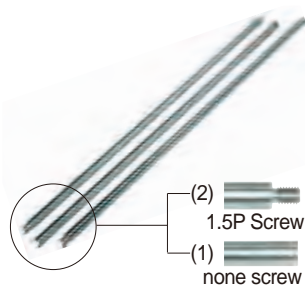
DH.WOS502001 Stainless-steel Rod, "RD501",  $\phi$  16×h800mm, non-screw  
DH.WOS502002 "RD502",  $\phi$  16×h1000mm, non-screw  
DH.WOS502003 "RD503",  $\phi$  16×h1200mm, non-screw  
DH.WOS502031 Stainless-steel Rod, "RD531",  $\phi$  23×h800mm, non-screw  
DH.WOS502033 "RD533",  $\phi$  23×h1200mm, non-screw

Ea. Price, ₩

#### (2) 1.5P Screw-type $\phi$ 16 & 23mm Rod

DH.WOS502011 Stainless-steel Rod, "RD511",  $\phi$  16×h800mm, 1.5P Screw  
DH.WOS502012 "RD512",  $\phi$  16×h1000mm, 1.5P Screw  
DH.WOS502013 "RD513",  $\phi$  16×h1200mm, 1.5P Screw  
DH.WOS502021 Stainless-steel Rod, "RD521",  $\phi$  23×h800mm, 1.5P Screw  
DH.WOS502022 "RD522",  $\phi$  23×h1000mm, 1.5P Screw  
DH.WOS502023 "RD523",  $\phi$  23×h1200mm, 1.5P Screw

Ea. Price, ₩

Stainless-steel Rod  
With or Without 1.5P Screw

# Ultrasonic Cleaners

**Ultrasonic Cleaners - Analog** ..... P. 249  
**- Digital** ..... P. 250  
**- Remote Control, Large Capacity** ..... P. 251

• **Analog Ultrasonic Cleaner**



“WUC-A”

• **Digital Ultrasonic Cleaner**



“WUC-D”



• **Large Capacity Ultrasonic Cleaner**



“WUC-N”



Wire Basket  
(Optional)

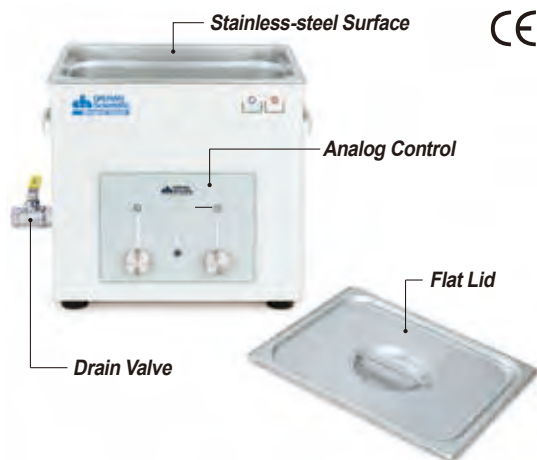


Remote  
Generator



Articles	Cat. No	Description
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**DAIHAN® Analog Ultrasonic Cleaner “WUC-A”, Timer/Temp. Output Controller, with Certi. & Traceability, 1.2~22 Lit**  
 With Stainless-steel Flat Lid, Highly Effective Cleaning, up to 85°C, 0~30min, 40kHz Frequency, without Basket  
 초음파 세척기, 온도 및 시간 설정, 고효율, 다용도, 리드 포함



2-Year Warranty

10 Lit Analog Ultrasonic Cleaner with Flat Lid  
 “WUC-A10”

- Made in Korea    ■ CE Certified
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Made of Stainless-steel, Finished Surface
- Analog Controller, Timer, Temperature and Output Control
- PL(Product Liability) Insurance

- \* Useful for Cleaning to Remove Dirt, Grease, Waxes and Oil from all Lab Instruments by Ultrasonic Frequency
- \* Made of Stainless-steel, Finished Surface
- \* Analog Controller, Timer, Temperature and Output Control
- \* Temperature Range from Ambient to 85°C. (1.2 & 1.8 Lit : 65°C Fixed)
- \* Convenient Preset Function : Heating and Timer
- \* HF-Frequency : 40kHz
- \* Bottom-Mounted Drain (WUC-A10 and WUC-A22)
- \* Maximum 30 minutes of Cleaning Time (Except WUC-A10)

Specifications & Ordering information

<L1>

Spec. Model	“WUC-A01”	“WUC-A02”	“WUC-A03”	“WUC-A06”	“WUC-A10”	“WUC-A22”
	Max. Capa. 1.2 Lit	Max. Capa. 1.8 Lit	Max. Capa. 3.3 Lit	Max. Capa. 6 Lit	Max. Capa. 10 Lit	Max. Capa. 22 Lit
Capacity	1.2 Lit	1.8 Lit	3.3 Lit	6 Lit	10 Lit	22 Lit
Frequency	40KHz					
HF-Peak Out	72 W	75 W	124 W	168 W	265 W	379 W
Heating Temp.	65°C Fixed	65°C Fixed	ambient to 85°C	ambient to 85°C	ambient to 85°C	ambient to 85°C
Heating Power	55 W	55 W	110 W	110 W	240 W	320 W
Timer	None	0~30 min.	0~40 min.	0~40 min.	0~40 min.	0~40 min.
Drain-Valve	None	None	None	None	1/2" NPT	1/2" NPT
Tank Size inner (w×d×h) (mm)	150×135×60	150×135×100	240×140×100	290×150×150	290×240×150	500×300×150
Weight	1.7 kg	2.7 kg	4.4 kg	5.7 kg	7.8 kg	12 kg
Packing Dimension (w×d×h) (mm)	200×200×190	200×200×240	320×200×290	370×220×350	430×320×360	640×380×370
Gross Weight	2.1 kg	3.1 kg	5 kg	6.7 kg	9.4 kg	14.3 kg
Power Consumption	117 W	117 W	230 W	280 W	528 W	739 W
Electrical Reqts.	1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz					

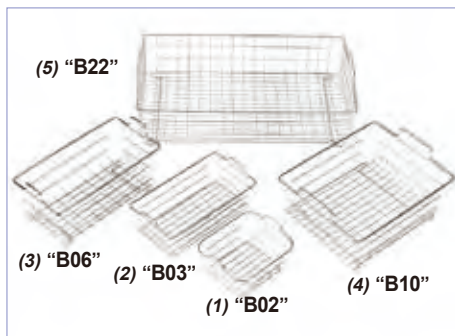


2-Year Warranty

1.2 & 6 Lit Analog Ultrasonic Cleaner with Flat Lid  
 “WUC-A01 & WUC-A06”

Cat. No.	230V	DH.WUC.A01H	DH.WUC.A02H	DH.WUC.A03H	DH.WUC.A06H	DH.WUC.A10H	DH.WUC.A22H
	120V	DH.WUC.A101H	DH.WUC.A102H	DH.WUC.A103H	DH.WUC.A106H	DH.WUC.A110H	DH.WUC.A122H
Price, Each. ₩							

\* Other Specifications are available upon Customer's Request.



Stainless-steel Wire Basket (Optional)

Optional Stainless-steel Wire Basket

- DH.WUC.B02 (1) Basket, Wire, “B02”, for 1.8 Lit, 144×131×h92mm
- DH.WUC.B03 (2) , “B03”, for 3.3 Lit, 224×128×h83mm
- DH.WUC.B06 (3) , “B06”, for 6 Lit, 267×136×h126mm
- DH.WUC.B10 (4) , “B10”, for 10 Lit, 276×218×h132mm
- DH.WUC.B22 (5) , “B22”, for 22 Lit, 467×275×h131mm
- DH.WUC.B100 (6) Fine Mesh Strainer, “B100”, for “WUC-A”, φ100mm

Ea. Price, ₩



(6) Fine Mesh Strainer

DAIHAN® Digital Ultrasonic Cleaner-set "WUC-D", Microprocessor Control, 3.3~22 Lit  
 With Stainless-steel Wire Basket & Flat Lid, Highly Effective Cleaning, up to 80°C, 0~60min, 40kHz Frequency  
 디지털 초음파 세척기 세트, 와이어 바스켓 및 리드 포함, 마이크로프로세서 제어



10 Lit Digital Ultrasonic Cleaner Set, "WUC-D10H" with Flat Lid and Wire Basket

- Made in Korea ■ CE Certified
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System
- Useful for Cleaning to Remove Dirt, Grease, Waxes and Oil from all Lab Instruments by Ultrasonic Frequency
- Microprocessor Control : Timer, Temperature and Output Control
- PL (Product Liability) Insurance
- \* Useful for Cleaning to Remove Dirt, Grease, Waxes and Oil from all Lab instruments by Ultrasonic Frequency
- \* Microprocessor Control : Timer, Temperature and Output Control
- \* Multi-Frequency Sonication Body
- \* HF-Frequency : 40kHz
- \* Temperature Range from Ambient to 80°C
- \* Convenient Preset Function : Heating and Timer
- \* Drain is mounted in the bottom (WUC-D10H, WUC-D22H)
- \* Maximum 60 minutes of Cleaning Time
- \* Very Strong Cleansing Degassing & Sweep Function

Specifications & Ordering information

<L1>

Spec.	Model	"WUC-D03H" Max. Capa. 3.3 Lit	"WUC-D06H" Max. Capa. 6 Lit	"WUC-D10H" Max. Capa. 10 Lit	"WUC-D22H" Max. Capa. 22 Lit
Capacity		3.3 Lit	6 Lit	10 Lit	22 Lit
Frequency		40kHz	40kHz	40kHz	40kHz
HF-peak out		100W	253W	407W	528W
Heat temp.		ambient to 80°C	ambient to 80°C	ambient to 80°C	ambient to 80°C
Heating Power		172W	172W	258W	344W
Timer		0~30 min.	0~60 min.	0~60 min.	0~60 min.
Display		FND			
Drain-valve		None	None	1/2" NPT	1/2" NPT
Tank Size inner (w×d×h) (mm)		240×140×100	290×150×150	290×240×150	500×300×150
Weight net		3.4 kg	5.8 kg	8 kg	12.9 kg
Packing Dimension (w×d×h) (mm)		320×200×290	360×220×350	440×320×360	640×380×370
Gross Weight		3.7 kg	6.3 kg	8.5 kg	13.4 kg
Power Consumption		290W	425W	665W	872W
Electrical Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 / 60 Hz			
Cat. No.	230V	DH.WUC.D03H	DH.WUC.D06H	DH.WUC.D10H	DH.WUC.D22H
	120V	DH.WUC.D103H	DH.WUC.D106H	DH.WUC.D110H	DH.WUC.D122H
Price, Each. ₩					

\* Other Specifications are available upon Customer's Request.

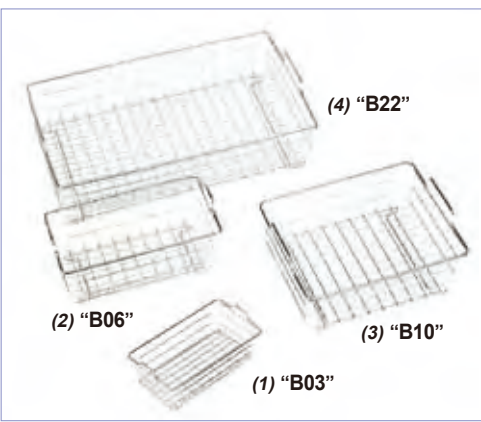


3.3 Lit Digital Ultrasonic Cleaner Set, "WUC-D03H" with Flat Lid and Wire Basket

Spare Wire Basket, Stainless-steel

- DH.WUC.B03 (1) Basket, Wire, "B03", for 3.3 Lit, 224×128×h83mm
- DH.WUC.B06 (2) , "B06", for 6 Lit, 267×136×h126mm
- DH.WUC.B10 (3) , "B10", for 10 Lit, 276×218×h132mm
- DH.WUC.B22 (4) , "B22", for 22 Lit, 467×275×h131mm
- DH.WUC.B100 (5) Fine Mesh Strainer, "B100", for "WUC-D", φ100mm

Ea. Price, ₩



Stainless-steel Wire Basket (included)



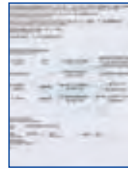
(5) Fine Mesh Strainer



**DAIHAN® Standard Rotary Viscometer-full Set "WVS-0.1M" & "WVS-2M", with Calibration Certificate, 1~2,000,000 cP**  
 With Standard Spindle-kit(LV1~4), Lifting Stand, Hand Handling Case, 0.3~60rpm, 표준형 디지털 회전 점도계-풀세트

~ 2,000,000cP

**2-Year Warranty**



with Calibration Certificate

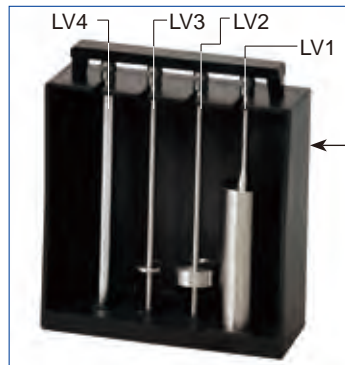


Hand Handling Case

Standard Rotary Viscometer Full Set "WVS"

- Ideal for measuring the Viscosity of Various Liquid such as Grease, Painting, Foodstuff, Dope, Paper making, Cosmetics, Chemical industry, Capsule Stickiness Agent and Medicines.
- Component of Set : Viscometer Unit "WVS", Spindle Kit(LV 1~4), Lifting Stand, Hand Handling Case, Calibration Certificate
- Included ASTM Standard Spindle-kit of 4 Ea. : LV1 : 15~20K, LV2 : 50~100K, LV3 : 200~400K, LV4 : 1K~2M
- Direct Readout of all Measurement Parameters on an illuminated LCD.
- The Viscometer is equipped with many Pre-sets speeds : ("WVS-0.1M" : 6- / 12- / 30- / 60- RPM, "WVS-2M" : 0.3- / 0.6- / 1.5- / 3- / 6- / 12- / 30- / 60-RPM)
- Auto Range Function to determine the Maximum Viscosity with each Spindle / Speed Combination.
- Safety Protection Against Sudden Rises in the Power Supply.

- \* Data on screen :
  - Speed Selected : RPM
  - Viscosity Reading : cP(mPa.s)
  - Sample Temperature : °C
  - Spindle Selected : S.P.
  - Percentage of Full Scale : %
- \* Viscosity Reading : Dynamic Viscosity (cP or mPa.s)
- \* The Viscometer and the PT100 can be calibrated by the User.
- \* Ultra-sensitive Front Keyboard that allows Easy Input of all Parameters.
- \* Error Message in the Screen with Sound Alarm when the Viscosity of the Test Material exceeds the Full Scale of the selected Combination(SP / rpm.)
- \* Sound Alarm if the Equipment is Working at Under 20% of Selected full Scale
- \* Direct reading in cP(mPa.s) \* without Limits
- \* Can be Use with Various Optional Accessories : Ultra-Low Viscosity Adaptor RTD Temp. Probe, Micro Printer



Spindle-Rack / Stand

(1) Standard LV Spindle kit, LV1 ~ 4  
 Included for "WVS-0.1M" & "WVS-2M" Meter



(2) Ultra-Low Viscosity Adaptor



(3) RTD Temp. Probe



(4) Micro Printer, with Cable

**Specifications & Ordering information**

<L1>

Spec.	Model	A. "WVS-0.1M" Max. Viscosity. 100,000 cP	B. "WVS-2M" Max. Viscosity. 2,000,000 cP
Viscosity Range, cP(mPa.s)		1~100,000 cP	1~2,000,000 cP
Speed Range (RPM)		6, 12, 30, 60	0.3, 0.6, 1.5, 3, 6, 12, 30, 60
Certificate		with Individual Calibration Certificate	
ASTM Standard Spindle-kit & Measure Viscosity Range : cP		Included Standard Spindle-kit(LV1~LV4), Stainless-steel ① LV1 : 15~20,000 cP    ② LV2 : 50~100,000 cP ③ LV3 : 200~400,000 cP    ④ LV4 : 1,000~2,000,000 cP ※ LV0 Spindle for 1~20 cP(Optional)	
Measurement Error		± 5% (Newton Liquid)	
Accuracy		± 1.0% of range	
Repeatability		± 0.5%	
Ambient Temperature		5°C ~ 35°C Relative Humidity : ≤80%	
Weight		4 kg	
Electrical Reqts.		AC 230V, 50/60Hz	
Cat. No.	230V	DH.WV1011	DH.WV1012
Price, Each. ₩			

\* K=1,000 cP(mPa.s), M =1,000,000 cP(mPa.s)

**Spare Spindle-kit**

	Ea. Price, ₩
DH.WV2011 (1) Standard LV Spindle kit, LV1 ~ 4, LV1 : 15~20K, LV2 : 50~100K, LV3 : 200~400K, LV4 : 1K~2M	

**Optional Temp Probe · Printer · Spindle**

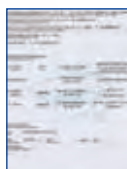
	Ea. Price, ₩
DH.WV2011.2 (2) Ultra-Low Viscosity Adaptor for 1~20cP (LV0 Spindle) * Please order with the product!, Calibration is required because there is no Software and Data of LV0 in the Viscometer	
DH.WV2041 (3) RTD Temp. Probe, 0.0~100.0°C, Accu. ± 0.1, Resolution 0.1 °C	
DH.WV2043 (4) Micro Printer, with RS-232, 1.5m Cable (Print Information : Temp., RPM, Spindle, Torque, Viscosity)	

Articles	Cat. No	Description
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**DAIHAN® Multi-speed Rotary Viscometer-full Set "WVM-0.6M" & "WVM-6M", 1~6,000,000 cP**  
 With Cal. Certi. & Standard Spindle kit(LV1~4), Lifting Stand, Hand Handling Case, 0.1~60-/100-rpm, 멀티 스피드 디지털 회전 점도계

~ 6,000,000cP

**2-Year Warranty**



with Calibration Certificate



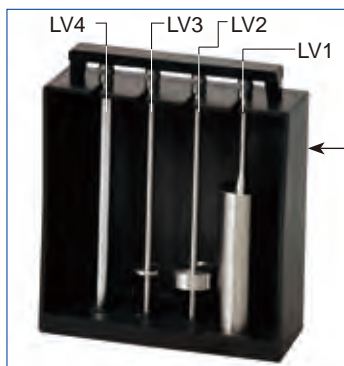
Hand Handling Case

Multi-speed Rotary Viscometer Full Set "WVM"

- **Ideal for measuring the Viscosity of Various Liquid such as Grease, Painting, Foodstuff, Dope, Paper making, Cosmetics, Chemical industry, Capsule Stickiness Agent and Medicines.**
  - **Component of Set : Viscometer Unit "WVM", Spindle Kit(LV 1~4), Lifting Stand, Hand Handling Case, Calibration Certificate**
  - **Included ASTM Standard Spindle-kit of 4 Ea. : LV1 : 15~20K, LV2 : 50~100K, LV3 : 200~400K, LV4 : 1K~2M**
  - **Direct Readout of all Measurement Parameters on an illuminated LCD.**
  - **Available Pre-sets speeds, 0.1~100 rpm**
  - **Auto Range Function to determine the Maximum Viscosity with each Spindle / Speed Combination.**
  - **Safety Protection Against Sudden Rises in the Power Supply.**
- \* Data on screen :  
 • Speed Selected : RPM  
 • Viscosity Reading : cP(mPa.s)  
 • Sample Temperature : °C  
 • Spindle Selected : S.P.  
 • Percentage of Full Scale : %
- \* Viscosity Reading : Dynamic Viscosity (cP or mPa.s)  
 \* The Viscometer and the PT100 can be calibrated by the User.  
 \* Ultra-sensitive Front Keyboard that allows Easy Input of all Parameters.  
 \* Error Message in the Screen with Sound Alarm when the Viscosity of the Test Material exceeds the Full Scale of the selected Combination(SP / rpm.)  
 \* Sound Alarm if the Equipment is Working at Under 20% of Selected full Scale  
 \* Direct reading in cP(mPa.s) \* without Limits  
 \* Can be Use with Various Optional Accessories : Ultra-Low Viscosity Adaptor RTD Temp. Probe, Micro Printer, Small Sample Adapter

**Specifications & Ordering information**

<L1>



Spindle-Rack / Stand

(1) Standard LV Spindle kit, LV1~4  
 Included for "WVM-0.6M" & "WVM-6M" Meter

Spec.	Model	A. "WVM-0.6M" Max. Viscosity. 600,000cP	B. "WVM-6M" Max. Viscosity. 6,000,000cP
Viscosity Range cP(mPa.s)		1~600,000cP	1~6,000,000cP
Speed Range (RPM)		1~60	0.1~100
Certificate		with Individual Calibration Certificate	
Certificate		Included Standard Spindle-kit(LV1~LV4), Stainless-steel ① LV1 : 15~20,000cP    ② LV2 : 50~100,000cP ③ LV3 : 200~400,000 cP    ④ LV4 : 1,000~2,000,000cP ※ LV0 Spindle for 1~20cP(Optional)	
Measurement Error		±5% (Newton Liquid)	
Accuracy		±1.0% of range	
Repeatability		±0.5%	
Ambient Temperature		5°C~35°C Relative Humidity : ≤80%	
Weight		4 kg	
Electrical Reqts.		AC 230V, 50/60Hz	
Cat. No.		DH.WV1021	DH.WV1022
Price, Each. ₩			

\* K=1,000 cP(mPa.s), M =1,000,000 cP(mPa.s)



(2) Ultra-Low Viscosity Adaptor



(3) RTD Temp. Probe

**Spare Spindle-kit**

DH.WV2011 (1) Standard LV Spindle kit, LV1~4,  
 LV1 : 15~20K, LV2 : 50~100K, LV3 : 200~400K, LV4 : 1K~2M

Ea. Price, ₩

**Optional Temp Probe · Sample Adapter · Printer · Spindle**

DH.WV2011.2 (2) Ultra-Low Viscosity Adaptor for 1~20cP (LV0 Spindle)

\* Please order with the product!, Calibration is required because there is no Software and Data of LV0 in the Viscometer

Ea. Price, ₩

DH.WV2041 (3) RTD Temp. Probe, 0.0~100.0°C, Accu. ±0.1, Resolution 0.1°C

DH.WV2042 (4) Small Sample Adapter, Stainless-steel, 2~16ml

\* Please order with the product!, Calibration is required because there is no Software and Data of SSA in the Viscometer

Ea. Price, ₩

DH.WV2043 (5) Micro Printer, with RS-232, 1.5m Cable  
 (Print Information : Temp., RPM, Spindle, Torque, Viscosity)

Ea. Price, ₩



(4) Small Sample Adapter



(5) Micro Printer, with Cable

MaXcrub™

# Glass/Labware Washer

Ideal for Laboratory, etc.

## Glass/Labware Washer

High Performance Cleaning

User Safety

Program Cycle

### High-performance Cleaning

- Outstanding fast cycle and high-performance cleaning results from efficient direct injection washing.
- High performance pump ensure high flow rate of water.
- Efficient water spray pressure bring about better and faster cleaning.
- Water, liquid detergent and distilled water automatically injected by program washing cycle.

### Safety Door Lock

- Door is automatically locked for user safety when washing cycle starts.

### Compact, Robust Design & Efficient Construction

- Compact design for space saving and maximize working capacity in laboratory.
- Double layer structure ensures soundproof and heatproof during operation.
- Built-in steam condenser prevents steam to enter into the laboratory.
- Telescopic sliding rails ensures safe and easy to load and unload.

### Efficient Washing Cycle Program

- Provide 7 program washing cycles : Pre-set 6 programs & customized 1 program.

#### Pre-set 6 Program Cycles Setting Value

Pre-set 6 Washing Cycle	PreWash	Light Wash	Standard Wash	Light Demi	Standard Demi	Intense Wash
Tap Water Wash	3min	-	-	-	-	-
Detergent Wash	-	60°C / 8min	75°C / 8min	60°C / 5min	75°C / 5min	80°C / 10min
Rinse Wash	-	75°C / 5min	80°C / 5min	75°C / 3min	80°C / 3min	80°C / 5min
Distilled Water Wash	-	-	-	2 cycle 3min / cycle	2 cycle 3min / cycle	2 cycle 2min / cycle



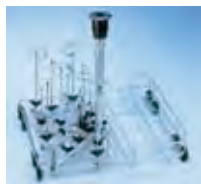
Irrigation Nozzle



Spray Arm

### Various Interchangeable Racks & Baskets

- Included 1ea SS wire basket.
- Customizable various rack, Basket, Pipette rack, Volumetric flask rack, Direct injection kit, etc.



Articles

Cat. No

Description

**“MaXcrub™ T1” Glass/Labware Washer, Max 85°C, Washing Surface 0.52m<sup>2</sup>, 400Lit/min, Max 5bar**

With 1 × SS Wire Basket, Water · Detergent · Distilled Water-Auto Injection, Program Washing Cycle, Double Wall, Telescopic Rail, **초자 세척기**



**2-Year Warranty**

Glass/Labware Washer “MaXcrub™ T1”



**2-Year Warranty**

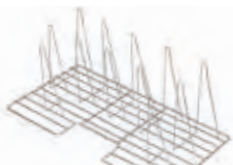
Glass/Labware Washer “MaXcrub™ T1”  
with Optional Customizing Rack



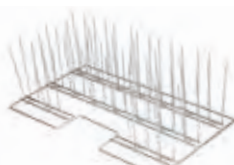
(1) (Included) SS Wire Basket



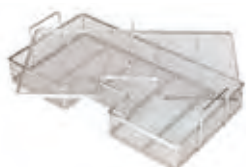
(2) SS Injection Rack



(3) SS Rack, for Vessel



(4) SS Rack, for Test Tube



(5) Mesh-type SS Rack



(6) Cleaner (7) Rinse

Optional Liquid Detergent

- Made in Korea ■ **PL(Product Liability) Insurance.**
- with Certificate & Traceability : Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System.
- Ideal for Clinical, Pharmaceutical, Bioresearch, Chemical Research, etc.
- Outstanding Fast Washing Cycle and High-performance Cleaning Results from Efficient Direct Injection Washing.
- Water-/Detergent-/Distilled Water- Automatically Injected into Wash Chamber via Pumps.
- Double Layer Wall ensures Soundproof and Heatproof.
- Automatic Door Lock system for User Safety.
- Special Steam Condensing Mechanism for User Safety.

\* Built-in Telescopic Sliding Rail for Safety and Easy to Use.

\* Provides Efficient Program Washing Cycle : Pre-set 6Programs and Customizable 1Program.

\* Built-in Steam Condenser Prevents Steam to enter into the Laboratory.

\* Customizable Various Rack, Basket, Pipette Rack, Volumetric Flask Rack, Direct Injection Kit, etc.

### Specifications & Ordering information

<L1>

Spec.	Model	“MaXcrub™ T1”
Total Washing Surface		0.52m <sup>2</sup>
Temp. Range		Room Temp 5°C ~80°C
Display		Digital LCD with Back-Light Function
Controller		Digital Fuzzy-Control System (Fully Automatic), Touch Button UI
Programmable Function		Pre-set 6 Programs & Customizable 1 Programs
Wash Pump		Recirculation : 400Lit/min, Water Pressure : 3~5bar, Water Consumption : 8~10Lit
Rack		Included 1ea Stainless-steel Standard Rack
Safety Circuit		Over-Temp./-Pressure/-Current protection, Sensor Error Detection
Material		Stainless-steel (#304)-Internal, Stainless-steel (#304)-External
Dimension (w × d × h)	Interior	508 × 515 × h407 mm
	Exterior	600 × 625 × h870 mm
Power Consumption		5 kW
Net Weight		95 kg
Electric Reqts.		1 Phase, AC 120 V, 60 Hz or AC 230 V, 50 or 60 Hz

Cat. No.	60Hz	230V	DH.WGW0400
		120V	DH.WGW0401
	50Hz	230V	DH.WGW5400

Price, Each. ₩

\* Other Specifications are available upon Customer's Request.

※ Electrical Work (Earth Leakage Circuit Breaker 30A) and Water Drainage System should be Prepared in Advance for Installation.

※ Note! Freight and Installation Charges Separately.

설치 운임 - 서울 경기 : ₩ 150,000 지방 : ₩ 200,000 (※ 공사비가 아닌 설치 · 운임비용입니다.)

### Spare Stainless-steel Standard Rack

DH.WGW01001 (1) SS Wire Basket, for Rail, 495 × 510mm

Ea. Price, ₩

### Optional Stainless-steel Injection Rack for Various Vessel

DH.WGW01002 (2) SS Injection Rack for Various Vessel, 495 × 510mm

Ea. Price, ₩

### Optional Stainless-steel Wire Rack, Use for Included Standard Rack

DH.WGW01003 (3) SS Wire Rack, for Various Vessel, 248 × 460 × h180mm

DH.WGW01004 (4) , for Test Tube , 248 × 460 × h160mm

DH.WGW01005 (5) , Mesh-type, for Petri Dish, 248 × 460 × h65mm

Ea. Price, ₩

### Optional Liquid Cleaning Detergent & Rinse

DH.WGW02010 (6) Potassium Hydroxide Liquid Cleaning Detergent, 18Lit

DH.WGW02011 (7) Nonionic Surfactant Liquid Rinse, 18Lit

Ea. Price, ₩

### Optional Tube & Bottle for Distilling Water Supply

SL.Bot3105 Bottle, Aspiration, White, 50L, Neck id-φ95, φ380 × h700mm

TUB.Si020 Tubing, 10-size : id/od-φ10/13 × thick-1.5mm

0338-403 Clamp, Width 8, Grip-φ6 ~ 16mm

Ea. Price, ₩

# Water Purification

**Basic Water Still** ..... P. 257

**Classic Water Stills** ..... P. 258~259

**Water Purification Systems** ..... P. 260~262

- Reverse Osmosis(RO) ..... P. 260
- Ultra Pure(UP) ..... P. 261
- Ultra Pure(UP) & Pure(RO) ..... P. 262

## » Water Still



**“W4L”** model  
4Lit Basic Water Still,  
with 304 Stainless-steel Heater



**“CWS”** model  
With PP 1 $\mu$ m pore Cartridge Prefilter  
3.5 & 7.5 Lit/hr

**“WWS-P”** model  
With PP 1 $\mu$ m pore Cartridge Prefilter  
4, 8, & 12 Lit/hr



## » Water Purification System



**Reverse Osmosis(RO)**  
“New-P.NIX RO”



**Ultra Pure(UP)**  
“New-P.NIX UP”



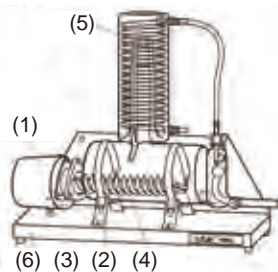
**Ultra Pure(UP) & Pure(RO)**  
“New-P.NIX Power”



SciLab® Laboratory Basic Water Still “W4L”, with 304 Stainless-steel Heater, 4 Lit/hr, 3.0~4.0µs/cm  
 Suitable for Bench & Wall Mounting, Borosilicate Glass Boiler, 랩용 증류수 제조기



4Lit Basic Water Still,  
with 304 Stainless-steel Heater



■ Connect and Operate Directly from Tap Water

■ Heat Resistant Borosilicate Glass Boiler fitted with 3kW 304 Stainless-steel Heater.

- \* High Efficiency Coil Condenser ensures Low Temperature, High Output Quality Distillate of Conductivity 3 to 4 µs/cm.
- \* Compact Construction Suitable for Bench and wall Mounting
- \* Built-in Constant Level Device with Schott Vendura-Nova Valve for Drainage provides Easy Descaling without Dismantling
- \* Safety Thermostat Built into the Heater protects the Water Still in the Event of Water Supply Failure and Automatically Resets when the Water Supply is restored.
- \* Borosilicate Glass Boiler and High-efficiency Condenser ensure the Highest in Distillate Purity.

<L1>

Spec.	Model	“W4L”
Distillate Output		4 Liters/hour
Quality of Distillate : pH / Conductivity Resistivity / Temperature Pyrogen Content		5.0 ~ 6.5 pH / 3.0 ~ 4.0 µs/cm 0.25 ~ 0.30 MΩ·cm / 25°C~35°C Pyrogen Free
Water Supply Requirement		1 Liter/min, minimum 3psi (0.2 bar)
Dimensions (w × d × h), Weight		500 × 150 × h450 mm, 5.25kg
Power Supply		220/240V, 50/60Hz, 3kW
Cat. No.		SL.Wat201
Price, Each. ₩		

Spare Accessory

- SL.Wat201.1 (1) Stainless-steel Heater
- SL.Wat201.2 (2) Strap
- SL.Wat201.3 (3) Metal Flange

Ea. Price, ₩

- SL.Wat201.4 (4) Glass Boiler
- SL.Wat201.5 (5) Condenser
- SL.Wat201.6 (6) Support Stand

Ea. Price, ₩

## DAIHAN® Electric Classic Water Still "WWS", All Stainless-steel, Built-in Prefilter & Auto On/Off system

For Laboratory Water, Pyrogen-free, 0.3MΩ·cm(resistivity), pH5.4 to 7.3, Capa. 4 · 8 · 12 Lit/hr

(1) with Stainless-steel 100 mesh Prefilter, (2) with PP 1 $\mu$ m pore Cartridge Prefilter, 필터부착형 증류수 제조기

### 2-Year Warranty



(1) with Stainless-steel 100 mesh Prefilter, "WWS-S": 4 · 8 · 12 Lit/hr

### 2-Year Warranty



(2) with PP 1 $\mu$ m pore Cartridge Prefilter, "WWS-P": 4 · 8 · 12 Lit/hr

- Made in Korea ■ 2-Year Warranty
- High-performance / All Stainless-steel (SS-430/304) models : Designed for the Durability & Consistent Quality
- "WWS-S" models, Built-in Stainless-steel(SS-304) Prefilter Kit, interchangeable 100 mesh (150 $\mu$ m) : Remove Particles & Scale-forming impurity.
- "WWS-P" models, Built-in PP(Polypropylene) 1 $\mu$ m Prefilter / Cartridge Kit, interchangeable : Remove Rust, Particles & Scale-forming impurity.
- All Models, Complete Set with :
  - ① Stainless-steel Unit Kit,
  - ② External Consistent-Level Device,
  - ③ Drain Valve, ④ Prefilter Kit,
  - ⑤ 2m Feeding Water Tubing (Silicone) Assembly for Connection of Water Tap  $\phi$ 15 or  $\phi$ 19 mm,
  - ⑥ PP Un-equal Tapered Connector  $\phi$ 8,10,12 / 14,16mm-for Different Diameter Tubings
- Auto On/Off with Water Level Sensor/Micro Level Sensor.

- \* This space-saving horizontal condenser was designed for durability and consistent quality
- \* Energy saving features include a condenser that preheats the feedwater and a double-walled evaporator.
- \* A low water cutoff protects heating elements from burn-out when water supply is interrupted
- \* Stainless-steel Heater Built-in 0.4mm Ni/Cr. Element, Boiler, Efficient Energy and Water Consumption.
- \* Sealing : Silicone O-ring packing.



Ex> Installation of Water Still

## Specifications & Ordering information

<L1>

Spec.	Model	(1) With Stainless steel 100 mesh Prefilter			(2) With PP 1 $\mu$ m pore Cartridge Prefilter		
		"WWS-S4"	"WWS-S8"	"WWS-S12"	"WWS-P4"	"WWS-P8"	"WWS-P12"
Capacity(Water)		4 Lit/hr	8 Lit/hr	12 Lit/hr	4 Lit/hr	8 Lit/hr	12 Lit/hr
Filter	Function	Remove Particles & Scale-forming impurity			Remove Rust, Particles & Scale-forming impurity		
	Material	Stainless-steel, SS304			PP(Polypropylene)		
	Housing	POM(Polyoxymethylene)			PE(Polyethylene)		
	Pore size	150 $\mu$ m(100 mesh)			1 $\mu$ m		
Heat-resisting	-29 $^{\circ}$ C + 85 $^{\circ}$ C			85 $^{\circ}$ C			
Water Purity	0.3M $\Omega$ ·cm (resistivity), pH5.4 to 7.3						
Level Sensor	Auto On/Off with Water Level Sensor / Micro Level Sensor						
Material	Boiler	SS-430	SS-430	SS-430	SS-430	SS-430	SS-430
	Condenser	SS-304	SS-304	SS-304	SS-304	SS-304	SS-304
	Base	SS-430	Aluminum	SS-304	Aluminum	Aluminum	Aluminum
Size	Condenser(only)	$\phi$ 85 × L375	$\phi$ 120 × L430	$\phi$ 120 × L490	$\phi$ 85 × L375	$\phi$ 120 × L430	$\phi$ 120 × L490
	Body	$\phi$ 350 × h670	$\phi$ 350 × h760	$\phi$ 350 × h760	$\phi$ 400 × h670	$\phi$ 400 × h760	$\phi$ 400 × h760
Heater		3kW	6kW (3kW × 2Ea)	9kW (3kW × 3Ea)	3kW	6kW (3kW × 2Ea)	9kW (3kW × 3Ea)
Plug Style		Plug Code "C"	Plug Code "F"		Plug Code "C"	Plug Code "F"	
Electrical Reqts.	1 Phase, AC 220 V, 60 Hz						
Cat. No.	220V	DH.WWS01004	DH.WWS01008	DH.WWS01012	DH.WWS02004	DH.WWS02008	DH.WWS02012
Price, Each. ₩							

### Spare Prefilter & Optional Storage Bottle

		Ea.	Price, ₩
DH.WWS10101	(a) Spare, Stainless-steel 100 mesh Prefilter Kit, "SF101", POM Housing $\phi$ 36 × h61mm, SS-304 Filter only $\phi$ 22 × h46mm		
DH.WWS10102	(b) , PP 1 $\mu$ m pore Cartridge Prefilter & Housing Kit, "PF102", PE Housing $\phi$ 110 × h300mm, PP Filter only $\phi$ 60 × h252mm		
DH.WWP.10PF	Spare, PP 1 $\mu$ m pore Cartridge Prefilter, "PF103", $\phi$ (od.) PP Filter 60 × $\phi$ (id.) 30 × h252mm		
DH.WWS10104	, PE Housing only, "PF104", $\phi$ 110 × h300mm		
SL.Bot3102	Optional, Bottle, HDPE, Aspiration, White, 5L, Neck id- $\phi$ 70, $\phi$ 200 × h360mm		
SL.Bot3103	, 10L, - $\phi$ 70, $\phi$ 250 × h460mm		
SL.Bot3104	, 20L, - $\phi$ 95, $\phi$ 300 × h555mm		
SL.Bot3105	, 50L, - $\phi$ 95, $\phi$ 380 × h700mm		

**DAIHAN® 3.5 & 7.5 Lit/hr Electric Chamber Water Still "CWS", All Stainless-steel, Auto On/Off System**

Good for Laboratory Water, Double Wall Still Chamber, Built-in PP 1 $\mu$ m pore Cartridge Prefilter, 스텐레스 사각 증류수 제조기, 필터부착형



**2-Year Warranty**

**3.5 & 7.5 Lit/hr Cabinet-type Water Still "CWS"**

- Made in Korea
- All Stainless-steel for Corrosion Resistance
- Double-walled Chamber Structure for Protects Burn Injuries
- High-performance & Compact Design

- \* Designed for the Durability & Consistent Quality
- \* Built-in Interchangeable PP(Polypropylene) 1 $\mu$ m Prefilter Cartridge Kit
- \* Condenser and Boiler are Separable for Easy Cleaning and Maintenance
- \* Auto Heater On/Off with Water Level Sensor & OPT Sensor
- \* Pre-filter Removes Rust, Particles & Scale-forming Impurity
- \* Economical Energy and Water Consumption
- \* Built in Low water Sensor for Protects Heating Elements
- \* Sealing : Silicone Gasket

**Specifications & Ordering information**

<L2>

Spec.	Model	"CWS-4"	"CWS-8"
Capacity		Max. 3.5 Lit / hr	Max. 7.5 Lit / hr
Cooling Water		30~50 Lit	60~80 Lit
Filter	Function	Remove Rust, Particles & Scale-forming Impurity	
	Material	PP (Polypropylene)	
	Housing	PC (Polycarbonate) Bottle + PP (Polypropylene) Lid	
	Pore size	1 $\mu$ m	
	Heat-resisting	85 $^{\circ}$ C	
Water Purity		0.3M $\Omega$ -cm (resistivity), pH5.4 to 7.3	
Level Sensor		Auto On / Off with Water Level Sensor / Micro Level Sensor	
Material	Interior	Stainless-steel	
	Exterior	Stainless-steel Hair Lined with Powder Coating	
	Heater	Stainless-steel Pipe	
Safety		Low Water & Over Temperature Protection, Electric Leakage Circuit Breaker	
Dimension(w×d×h)		430×315×h570 mm	445×325×h630 mm
Net Weight		12 kg	18 kg
Packing Size(w×d×h)		440×370×h610 mm	450×380×h670 mm
Gross Weight		13 kg	19 kg
Power Consumption		3 kW	6 kW
Plug Style		Plug Code "C"	Plug Code "F"
Electric Reqts.		220 V, 50 / 60 Hz, 1 Phase	
Cat. No.		<b>DH.WatS8001</b>	<b>DH.WatS8002</b>
Price, Each. ₩			

\* Other Specifications are available upon Customer's Request.

※ 운임 착불



Plug Code "C"

Plug Code "F"



(1) Cartridge Prefilter & PE Housing



(2) HDPE Storage Bottle 5-50L

**(1) Spare Prefilter**

- DH.WatA1001 PP 1 $\mu$ m pore Cartridge Prefilter Housing Kit, "CWS-A1001"
- DH.WatA1002 PP 1 $\mu$ m pore Cartridge Prefilter Only, "CWS-A1002"
- DH.WatA1003 Housing Only, PC Bottle & PP Lid "CWS-A1003"

Ea. Price, ₩

**(2) Optional HDPE Storage Bottle**

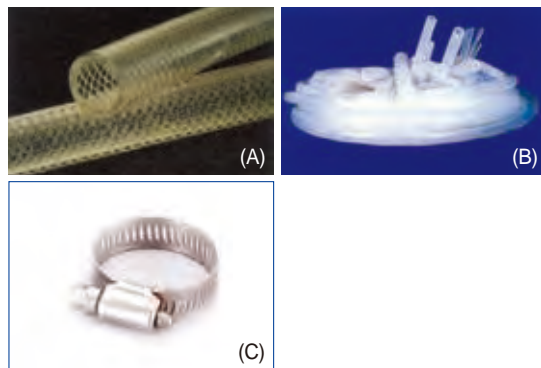
- SL.Bot3102 Bottle, Aspiration, White, 5L, Neck id-φ70, φ200×h360 mm
- SL.Bot3103, 10L, -φ70, φ250×h460 mm
- SL.Bot3104, 20L, -φ95, φ300×h555 mm
- SL.Bot3105, 50L, -φ95, φ380×h700 mm

Ea. Price, ₩

**(3) Optional Inlet / Outlet Tube & Clamp**

- TUB.PV034 (A) Tubing, PVC, id/od-φ10/14×thick-2mm, for Feeding Water
- TUB.Si020 (B) Tubing, 10-size; id.od-φ10/13 thick-1.5mm, for Distilled & Cooling Water
- 0338-405 (C) Clamp, with 8. Grip-φ8~22mm

m/dh.pk. Price, ₩	Roll. Price, ₩
1m	90m
1m	10m
	<b>Pk. Price, ₩</b>
	10ea



## “New-P.NIX® RO(Reverse Osmosis)” Water Purification System, 15 · 25 · 35-L/hr With Pretreatment System, 2-Steps of Filter Exchange Indicator, (RO) Product 0.2~30 $\mu$ S/cm, 순수 제조장치



2-Year Warranty



Included Pretreatment System 'HMC-PT1'



5~50 Lit

5~50 Lit  
(2) Amber, HDPE Aspiration Bottle

(1) White, HDPE Aspiration Bottle



(3) 14" Super A/C Filter



(4) 10" Prefilter



(5) P.NIX RO Pack I



(6), (7) P.NIX RO Pack II, III

- Made in Korea ■ Certified CE, ISO 9001, ISO 14001
- Built-In RS 232C Port and Volumetric Dispensing Function by Timer, Included Level sensor
- Auto Regular Recycling to Maintain the Optimum water Quality Level
- Programming by 2 Steps for the Filter Exchange
- Filter Replace Message Indicating by LCD Display & Blinking LED Light

- \* Microprocess One Touch Technology Controller
- \* 16×4 Characters Backlight LCD Digital Display
- \* Awarded the Korean Excellent Products
- \* Included Pretreatment System HMC-PT1, 14" Super A/C Filter, RO Pack

### Specifications & Ordering information

<L2>

Spec.	Model	“New-P.NIX RO 180” Max. Daily Volume. (Max. 60L/day)	“New-P.NIX RO 280” Max. Daily Volume. (Max. 100L/day)	“New-P.NIX RO 380” Max. Daily Volume. (Max. 120L/day)
Certified Mark	CE, ISO 9001, ISO 14001			
Product Flow Rate(RO)		Max. 15L/Hr.	Max. 25L/Hr.	Max. 35L/Hr.
Daily Volume		60L/day	100L/day	120L/day
Water Quality Display	<ul style="list-style-type: none"> <li>• RO Product : 0.2 to 250.0<math>\mu</math>S/cm</li> <li>• Feed water : 10 to 1000<math>\mu</math>S/cm</li> <li>• Temperature : 0°C to 99.9°C</li> </ul>			
Display	16×4 Characters Backlight LCD Digital Display			
Controller	Microprocess One Touch Technology			
Dimensions (w×d×h)	300×460×h 470mm			
Power	210~230V, 50/60 Hz, 60W			

Cat. No.	DH.WWP.RO180	DH.WWP.RO280	DH.WWP.RO380
Price, Each. ₩			

### Optional Accessory

SL.Bot3102	(1) Bottle, HDPE, Aspiration, White,	5L, Neck id- $\phi$ 70, $\phi$ 200×h360mm
SL.Bot3103		, 10L, - $\phi$ 70, $\phi$ 250×h460mm
SL.Bot3104		, 20L, - $\phi$ 95, $\phi$ 300×h555mm
SL.Bot3105		, 50L, - $\phi$ 95, $\phi$ 380×h700mm
SL.Bot3106	(2) Bottle, HDPE, Aspiration, Amber,	5L, Neck id- $\phi$ 70, $\phi$ 200×h360mm
SL.Bot3107		, 10L, - $\phi$ 70, $\phi$ 250×h460mm
SL.Bot3108		, 20L, - $\phi$ 95, $\phi$ 300×h555mm
SL.Bot3109		, 50L, - $\phi$ 95, $\phi$ 380×h700mm

Ea.	Price, ₩

### Spare Filter

Cat. No.	Description	Filter Replace Period	Ea. Price, ₩
DH.WWP.PR14AC	(3) 14" Super A/C Filter	Approx. 3~4 Month	
DH.WWP.10PF	(4) 10" Prefilter for HMC-PT1	20 ~ 40 Day	
DH.WWP.ROM1	(5) P.NIX RO Pack I for DH.WWP.RO180	Approx. 1 Year	
DH.WWP.ROM2	(6) P.NIX RO Pack II for DH.WWP.RO280		
DH.WWP.ROM3	(7) P.NIX RO Pack III for DH.WWP.RO380		

• The above mentioned Filter replacement period can be changed according to various factors such as feed water condition, producing volume and so on.

**“New-P.NIX® UP 900” Ultra Pure(UP) Water Purification System, Max 1.5L/min**  
 With Total Organic Carbon(TOC), 2-Steps of Filter Exchange Indicator, (UP) Up to 18.3MΩ·cm, 초순수 제조장치



2-Year Warranty

- Made in Korea    ■ Certified CE, ISO 9001, ISO 14001
- RS 232C Port and Volumetric Dispensing Function by Timer
- Auto Regular Recycling to Maintain the Optimum water Quality Level
- Programming by 2 Steps for the Filter Exchange
- Filter Replace Message Indicating by LCD Display & Blinking LED Light

- \* Microprocess One Touch Technology Controller
- \* 16×4 Characters Backlight LCD Digital Display
- \* Obtain GD, QD Mark, Awarded the Korean Excellent Products
- \* Included 0.2μm Final Capsule Filter, UP Membrane Pack
- \* This Device needs Pure Water entering.  
 (Please see the Preceding Page for the Water Purification System.)

Specifications & Ordering information

<L2>

Spec.	Model	New-P.NIX UP 900			
		Scholar-type	UV-type	Bio-type	Integrate-type
Certified Mark		CE, ISO 9001, ISO 14001			
Product Flow Rate(UP)		Max. 1.5L/min			
Water Quality Display		• UP Product : Up to 18.3MΩ·cm • Feed water : 0 to 250μS/cm • Temperature : 0°C to 99.9°C			
Display		16×4 Characters Backlight LCD Digital Display			
Included Filter Composition		• 0.2μm Final Capsule Filter • UP Pack (DH.WWP.UPS)	• 0.2μm Final Capsule Filter • UP Pack (DH.WWP.UPU) • 254/185UV Lamp	• 0.2μm Final Capsule Filter • UP Pack (DH.WWP.UPS) • MW 5000 UF Filter(L)	• 0.2μm Final Capsule Filter • UP Pack(DH.WWP.UPI) • 254/185UV Lamp • MW 5000 UF Filter(L)
Controller		Microprocess One Touch Technology			
Dimensions (w×d×h)		300×500×h 470mm			
Power		210~230V, 50/60 Hz			



5~50 Lit

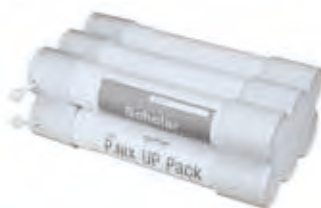
5~50 Lit

(1) White, HDPE Aspiration Bottle

(2) Amber, HDPE Aspiration Bottle



(3) 0.2μm Final Capsule Filter



(4) P.NIX UP Pack, Scholar / Bio



(5) P.NIX UP Pack, Scholar-UV / Integrate

Cat. No.	DH.WWP.UPS	DH.WWP.UP.U	DH.WWP.UP.B	DH.WWP.UP.I
Price, Each. ₩				

• TOC monitoring system is also available for the Integrate-type on request. (TOC monitoring display range : 0~200ppb)

Optional Accessory

SL.Bot3102	(1) Bottle, HDPE, Aspiration, White, 5L, Neck id-φ70, φ200×h360mm
SL.Bot3103	, 10L, -φ70, φ250×h460mm
SL.Bot3104	, 20L, -φ95, φ300×h555mm
SL.Bot3105	, 50L, -φ95, φ380×h700mm
SL.Bot3106	(2) Bottle, HDPE, Aspiration, Amber, 5L, Neck id-φ70, φ200×h360mm
SL.Bot3107	, 10L, -φ70, φ250×h460mm
SL.Bot3108	, 20L, -φ95, φ300×h555mm
SL.Bot3109	, 50L, -φ95, φ380×h700mm

Ea.	Price, ₩

Spare Filter & UV Lamp

Cat. No.	Description	Filter Replace Period	Ea. Price, ₩
DH.WWP.0.2CF	(3) 0.2μm Final Capsule Filter	Approx. 6~8 Month	
DH.WWP.UPS	(4) P.NIX UP Pack, Scholar / Bio	Approx. 1 Year	
DH.WWP.UPU	(5) P.NIX UP Pack, Scholar-UV / Integrate		
DH.WWP.MWL	MW 5000 UF Filter(L)	Approx. 6~8 Month	
DH.WWP.UV	254/185 UV Lamp	Approx. 3 Year	

• The above mentioned Filter replacement period can be changed according to various factors such as feed water condition, producing volume and so on.



# CERTIFICATES

- ✓ Quality
- ✓ Safety
- ✓ Environment Management

- CE** EMC & LVD Compliance  
The Certified DAIHAN Laboratory Instruments are Specified in this Catalog
- UL** UL Certification  
Laboratory-use Electrical Equipment for General-type Incubators & Oven, B.O.D Incubators, Vacuum Ovens, ULT Freezers
- GD (Good Design) Mark**
- GMP** GMP Certification  
Good Manufacturing Practices of Medical Device
- ISO 9001** System Certification  
Design, Development, Manufacture & Servicing for All DAIHAN Laboratory Instruments
- ISO 13485** System Certification  
Design, Development, Manufacture & Servicing for All DAIHAN Laboratory Instruments
- SQ (Service Qualification) Certification**



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검색 대한 과학



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