

WiseStir®  
& WiseTherm®

## Hotplates & Stirrers

**Wisd**  
LABORATORY INSTRUMENTS

- Hotplates
- Hotplate Stirrers

- Smart Design of Body.
- Superior Temperature Uniformity.
- Long Life Power & Mechanism.
- High Stability in Very Low & High-Speed/-Temperature.

**The World Best Quality  
with Cost-Effectiveness!!**

▶ Compact & Round Plate Type  
Hotplate Stirrers



MSH-55A



MSH-50D-Set

▶ Analog Hotplate  
Stirrer



MSH-20A

▶ Digital Hotplate  
Stirrer



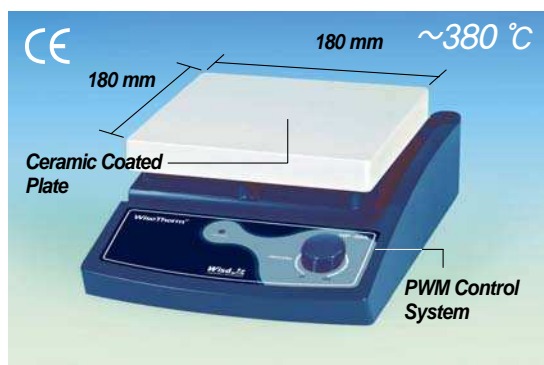
MSH-20D-Set

▶ Digital Hotplate



HP-20D

“witeg” **Wisetherm® HP-20A/HP-30A** Premium Hotplate, Ceramic-Coated Plate  
up to 380 °C, 180×180 mm / 260×260 mm

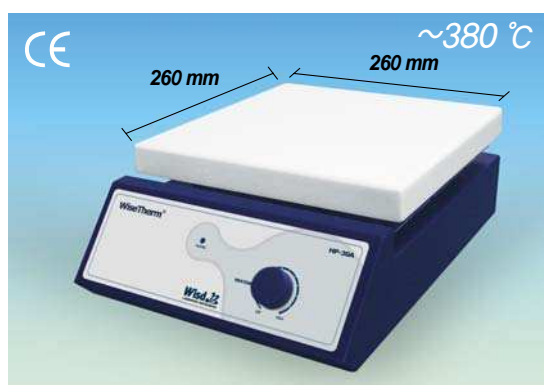


Premium Hotplate (HP-20A)

- Excellent for Sample Drying and Most General Lab Heating Applications
- Superior Temperature Uniformity : Less than 10 % on the Plate at Ambient Temperature
- CE Certified

Application & Features

- \* Excellent for Sample Drying and most General lab Heating Applications.
- \* Smart Design of Body made by Aluminum Die-Casting. (HP-20A)
- \* Superior Temperature Uniformity : Less than 10 % on the Plate at Ambient Temperature.
- \* Superior Linearity for Control Temperature by Specially Designed Control Circuitry. (PWM control)
- \* Ceramic Coated Plate - Chemical / Acid Resistance.
- \* CE Certified.



Premium Hotplate, Large Type (HP-30A)

Specification

Model	HP-20A	HP-30A
Plate Size (mm)	180×180	260×260
Temp. Range	Max. 380 °C	
Heating Power	600 W	1.000 W
Controller	Superior Linearity PWM Controller	
Heating Plate	Specially Designed Heating Module (High Uniformity : Temp. Difference 10 % less)	
Permissible Ambient Temperature	Ambient +5 – 50 °C	
Permissible Relative Moisture	85 %	
Material	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance)
	Body	Powder Coated Aluminum / Powder Coated Steel
Dimension (w×d×h) (mm)	206×307×99	286×387×99
Weight	2,8 kg	3,3 kg
Others	CE Certified	
Packing Dimension (w×d×h) (mm)	400×280×200	430×320×200
Gross Weight	5 kg	
Power Consumption	600 W	1 kW
Power plug type	Hybrid E+F	
Power Supply*	AC 230 V, 50 / 60 Hz	

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

Ordering Information

- DH.WHP03120 Hotplate, **HP-20A**, 180×180 mm, Max. 380 °C  
 DH.WHP03121 , **HP-30A**, 260×260 mm, Max. 380 °C

Additional Function Accessories

- DH.WHP503011 Stand Rod, **RD100**, Stainless Steel,  
 φ 12,7×450 mm, for **HP-30A / 30D, MSH-30A / 30D**  
 DH.WHP503036 Stand Rod, **RD200**, Stainless Steel,  
 φ 12×L450 mm, for **HP-20A / 20D, MSH-20A / 20D**  
**MSH-50A / 55A, MSH-50D / 55D** and **SMHS**  
 DH.WHP503012 Holder + Clamp, **CL220**, for Temperature Sensor

※ You will find matching beakers and flasks in our general catalogue at following pages : 33, 34, 293–296.

※ You will find matching stirring bars in our general catalogue at following pages : 362, 363.

## “witeg” **WiseTherm®HP-LP** Large Digital Hotplate, Anodized or Ceramic-Coated Plate Built-in Digital PID Controller or Remote Controller, Superior Temperature Uniformity, 310×620 mm, up to 320 °C

- Superior Temperature Uniformity : Less than 10 % on the Plate at Ambient Temperature
- Digital PID Controller
- Patented Jog-Shuttle Control System and Back-Light LCD Display
- CE Certified

### Application & Features

- \* 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. (HP-LP1)
- \* Anodized Plate - Scratch Resistance. (HP-LP2)
- \* The Remote Controller Cable helps to put the Controller away from the Hotplate up to 1.5m distance.
- \* Maximum Temperature of 320 °C
- \* Digital PID Control.
- \* Patented Jog-Shuttle Control System and Back-Light LCD Display.
- \* CE Certified.

### Specification

Model	HP-LP1	HP-LP2
Plate Surface	Ceramic-Coated	Anodized
Plate Size	310×620 mm	
Temp.	Range	Max. 320 °C
	Accuracy	±0,3 °C at Set Temperature (< 70 °C)
Temp. Display Resolution	0,1 °C	
Temp. Control Resolution	0,5 °C	
Heating Power	2 kW	
Heating Plate	Specially Designed Heating Module (High Uniformity : Temp. Difference 10 % less)	
Permissible Ambient Temperature	Ambient +5 ~ 50 °C	
Permissible Relative Moisture	85 %	
Controller	Digital PID Controller with Jog Shuttle Switch (Turn + Push) Remote Controller Available	
Display	Digital LCD Display (Temp., Timer)	
Timer	99 hr 59 min (Continuous Function Included)	
Dimension (w × d × h) (mm)	670 × 360 × 150	
Weight	12.2 kg	
Others	CE Certified, Storage Function (Temp., Timer) Locking Mode (Jog -Shuttle Input disabled) User Self-compensation function Alarm (Error Status and Timer-end)	
Power Consumption	2 kW	
Packing Dimension (w × d × h) (mm)	750 × 430 × 220	
Gross Weight	14 kg	
Power plug type	Hybrid E+F	
Power Supply*	AC 230 V, 50 / 60 Hz	

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

### Ordering Information

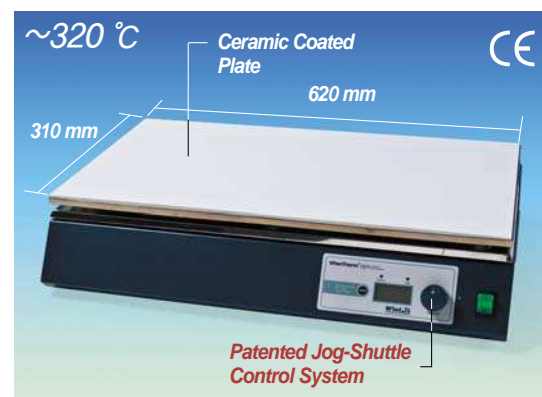
#### Large Digital Hotplate, Built-in Digital PID Controller

DH.WHP03024 Large Digital Hotplate, Ceramic-Coated, **HP-LP1**, 620 × 310 mm, 320 °C  
DH.WHP03027 , Anodized, **HP-LP2**, 620 × 310 mm, 320 °C

#### Large Digital Hotplate, Separated Remote Controller

DH.WHP03025 Large Digital Hotplate, Ceramic-Coated, **HP-LP-C-Set**  
620 × 310 mm, 320 °C, Digital Remote Controller  
Packing Dimension w 750 × d 430 × h 220 mm, Gross Weight 20 kg

DH.WHP03028 Large Digital Hotplate, Anodized, **HP-LP-A-Set**  
620 × 310 mm, 320 °C, Digital Remote Controller  
Packing Dimension w 750 × d 430 × h 220 mm, Gross Weight 20 kg



Large Digital Hotplate (HP-LP1)



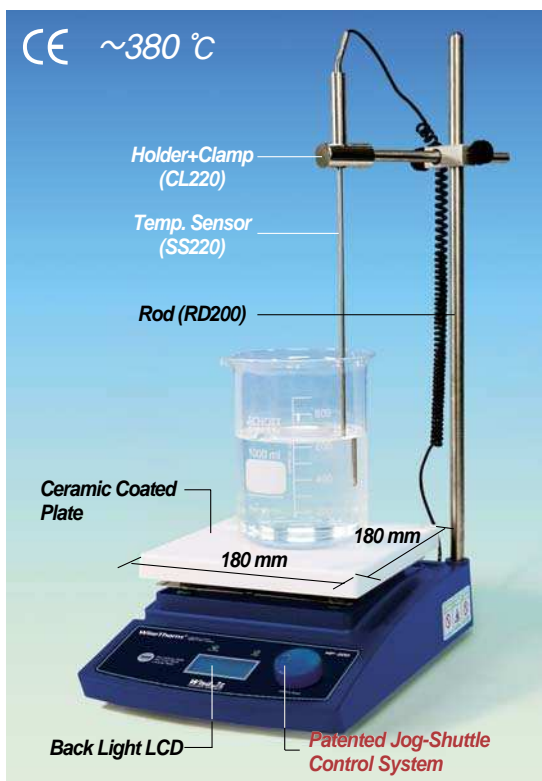
Large Digital Hotplate with Remote Controller (HP-LP-A-Set)

### Patented Control System (No. 10-0554098)

1 or 2 Mode Buttons + Jog Shuttle Switch  
Realize “Easy to Use”

# “witeg” **WiseTherm® HP-D** Digital Precise Hotplate, Ceramic-Coated Plate

Digital Feedback Control, Back Light LCD, up to 380 °C, ±0,3 °C, 180×180 mm / 260×260 mm



Digital Precise Hotplate (HP-20D-Set)

- Patented Jog-Shuttle Control System
- CE Certified

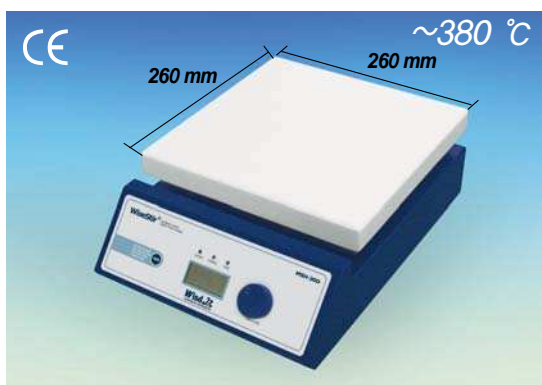
## Application & Features

- \* Digital Feedback Control by High-Performance Microprocessor.
- \* Smart Design of Body made by Aluminum Die-Casting. (HP-20D)
- \* Ceramic Coated Plate-Chemical/Acid Resistance.
- \* Superior Temperature Uniformity : 10 % less on the Plate at Ambient Temperature.
- \* Accurate Temp. Control of the Sample in the Vessel using Optional PT100 Sensor.
- \* Digital LCD Display with Back-Light Function.
- \* Digital Timer Function Included : 99 hr 59 min Settable.
- \* Storage Function for the Set Values : Temp. and Timer.
- \* Locking Mode for Experimental Safety Supported. (Input to Jog Shuttle can be disabled)
- \* User's Self-Compensation Function : to Control Difference between Real Temp. and Indicated Temp. (±10.0 °C)
- \* Alarm Function : Error Status and Timer-End.
- \* Patented Jog-Shuttle Control System.
- \* CE Certified.

## Specification

Model		HP - 20D	HP - 30D
Plate Size (mm)		180×180	260×260
Temp.	Range	Max. 380 °C	
	Accuracy	±0,3 °C at Set Temperature (< 70 °C)	
Temp. Display Resolution		0,1 °C	
Temp. Control Resolution		0,5 °C	
Heating Power		600 W	1 kW
Heating Plate		Specially Designed Heating Module (High Uniformity : Temp. Difference 10% less)	
Permissible Ambient Temperature		Ambient +5 ~ 50 °C	
Permissible Relative Moisture		85 %	
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)	
Display		Digital LCD Display with Back -Light Function	
Timer		99 hr 59 min (Continuous Function Included)	
Material	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance)	
	Body	Powder Coated Aluminum	Powder Coated Steel
Dimension (w×d×h) (mm)		206×307×99	286×387×99
Weight		2,8 kg	3,2 kg
Others		CE Certified Storage Function (Temp., Timer) Locking Mode (Jog -Shuttle Input Disabled) User Self - compensation Function Alarm (Error Status and Timer - end)	
Power Consumption		600 W	1 kW
Packing Dimension (w×d×h) (mm)		400×280×200	430×320×200
Gross Weight		5 kg	
Power plug type		Hybrid E+F	
Power Supply*		AC 230 V, 50 / 60 Hz	

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



Digital Precise Hotplate, Large Type (HP-30D)

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<Continued from... "witeg" **WiseTherm®HP-D** Digital Precise Hotplate >

## Ordering Information

### HP-20D Hotplate Unit & Package Set

- DH.WHP03020** Digital Hotplate, **HP-20D-Unit Only**, 180 × 180 mm, to 380 °C  
**DH.WHP03021** Digital Hotplate Package, **HP-20D-Set**  
 with **SS200** External Temp. Sensor,  
**RD200** Support Rod and **CL220** Clamp  
 Packing Dimension w 400 × d 280 × h 200 mm, Gross Weight 5 kg

### HP-30D Hotplate Unit & Package Set

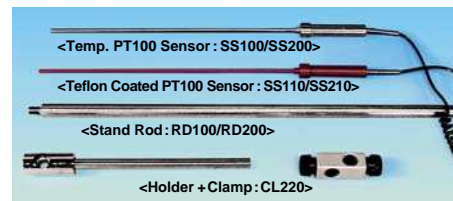
- DH.WHP03022** Digital Hotplate, **HP-30D-Unit Only**, 260 × 260 mm, to 380 °C  
**DH.WHP03023** Digital Hotplate Package, **HP-30D-Set**  
 with **SS100** External Temp. Sensor,  
**RD100** Support Rod and **CL220** Clamp  
 Packing Dimension w 430 × d 320 × h 200 mm, Gross Weight 5 kg

### Additional Function Accessories

- DH.WHP503020** Direct Contact Temperature Sensor, **SS100**,  
**PT100\***, for **HP-30D**, **MSH-30D** and **SMHS**  
**DH.WHP503021** Direct Contact Temperature Sensor, **SS110**,  
**PT100\***, **Teflon Coated**, for **HP-30D**,  
**MSH-30D** and **SMHS**  
**DH.WHP503030** Direct Contact Temperature Sensor, **SS200**,  
**PT100\***, for **HP-20D**, **MSH-20D**  
 and **MSH-50D / 55D**  
**DH.WHP503031** Direct Contact Temperature Sensor, **SS210**,  
**PT100\***, **Teflon Coated**, for **HP-20D**,  
**MSH-20D** and **MSH-50D / 55D**  
**DH.WHP503011** Stand Rod, **RD100**, Stainless Steel,  $\phi$  12,7 × 450 mm,  
 for **HP-30A/30D**, **MSH-30A / 30D**  
**DH.WHP503036** Stand Rod, **RD200**, Stainless Steel,  $\phi$  12 × L 450 mm,  
 for **HP-20A/20D**, **MSH-20A / 20D**, **MSH-50A / 55A**,  
**MSH-50D/55D** and **SMHS**  
**DH.WHP503012** Holder + Clamp, **CL220**, for Temp. Sensor

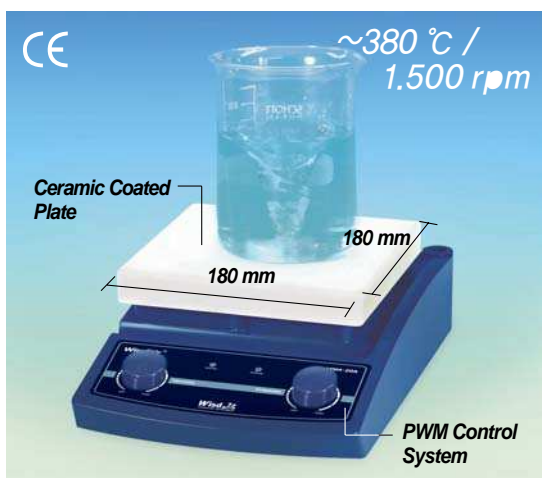
\*PT100 : External Sensor for Feedback Control of the Temperature in the Vessel, Accuracy of  $\pm 0.3$  °C

※ You will find matching beakers and flasks in our general catalogue at following pages : 33, 34, 293–296.



## “witeg” **WiseStir**® **MSH-A** Premium Hotplate Stirrer, Ceramic-Coated Plate

PWM Control System, Superior Temperature Uniformity, Precise Control of Temp. & RPM, up to 380 °C, 1.500 rpm, 180×180 mm or 260×260 mm



Premium Hotplate Stirrer (MSH-20A)



Premium Hotplate Stirrer, Large Type (MSH-30A)

- Superior Temperature Uniformity : Less than 10 % on the Plate at Ambient Temperature
- Superior Linearity for the Control of Temperature & Stirring Speed
- Ceramic Coated Plate-Chemical / Acid Resistance
- CE Certified

### Application & Features

- \* Excellent for Sample Drying and most General Lab Heating Applications.
- \* Superior Temperature Uniformity : Less than 10 % on the Plate at Ambient Temperature.
- \* Superior Linearity for Temperature Control & Stirring Speed by Specially Designed Control Circuitry. (PWM Control)
- \* Smart Design of Body made by Aluminum Die-Casting. (MSH-20A)
- \* Ceramic Coated Plate-Chemical/Acid Resistance.
- \* Maximum Temperature of 380 °C
- \* CE Certified.

### Specification

Model	MSH-20A	MSH-30A	
Plate Size (mm)	180×180	260×260	
Stirring Capacity (H <sub>2</sub> O)	Max. 20 Lit.		
Motor Rating	9 / 4W		
Speed Range	Max. 1.500 rpm		
Temp. Range	Max. 380 °C		
Heating Power	600 W	1.000 W	
Controller	Superior Linearity PWM Controller		
Heating Plate	Specially Designed Heating Module (High Uniformity : Temp. Difference 10 % less)		
Permissible Ambient Temperature	Ambient +5 ~ 50 °C		
Permissible Relative Moisture	85 %		
Max. Length of Stirring Bar	50 mm		
Material	Plate	Ceramic Coated (Chemical / Acid Resistance)	
	Body	Powder Coated Aluminum	Powder Coated Steel
Dimension (w×d×h) (mm)	206×307×99	268×387×99	
Weight	2,8 kg	3,3 kg	
Others	CE Certified		
Packing Dimension (w×d×h) (mm)	400×280×200	430×320×200	
Gross Weight	5 kg		
Power Consumption	600 W	1 kW	
Power plug type	Hybrid E+F		
Power Supply*	AC 230 V, 50 / 60 Hz		

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

### Ordering Information

#### MSH-20A Hotplate Stirrer

DH.WMH03120 Hotplate Stirrer, **MSH-20A**, 180×180 mm, 0~1.500 rpm, to 380 °C

#### MSH-30A Hotplate Stirrer

DH.WMH03121 Hotplate Stirrer, **MSH-30A**, 260×260 mm, 0~1.500 rpm, to 380 °C

#### Additional Function Accessories

DH.WHP503011 Stand Rod, **RD100**, Stainless Steel, φ 12,7×450 mm, for **HP-30A / 30D, MSH-30A / 30D**

DH.WHP503036 Stand Rod, **RD200**, Stainless Steel, φ 12×L 450 mm, for **HP-20A / 20D, MSH-20A / 20D, MSH-50A / 55A, MSH-50D / 55D** and **SMHS**

DH.WHP503012 Holder + Clamp, **CL220**, for Temperature Sensor

※ You will find matching beakers and flasks in our general catalogue at following pages : 33, 34, 293–296.

※ You will find matching stirring bars in our general catalogue at following pages : 362, 363.

**“witeg” WiseStir® MSH-50A Premium Compact Hotplate Stirrer, Round-Type Plate,  $\phi$  135 mm**  
 Ceramic Coated or Anodized Plate, Superior Temperature Uniformity, Precise Control of Temp. & RPM, up to 380 °C, 1.500 rpm

- Superior Temperature Uniformity : Less than 10 % on the Plate at Ambient Temperature
- Superior Linearity for the Control of Temperature & Stirring Speed
- Ceramic Coated Plate (MSH-50A) for Chemical/Acid Resistance or Anodized Plate (MSH-55A) for Scratch Prevention
- CE Certified

**Application & Features**

- \* Excellent for Sample Drying and most General Lab Heating Applications.
- \* Superior Temperature Uniformity : Less than 10 % on the Plate at Ambient Temperature.
- \* Superior Linearity for Temperature Control & Stirring Speed by Specially Designed Control Circuitry. (PWM Control)
- \* Smart Design of Body made by Aluminum Die-Casting.
- \* Ceramic Coated Plate (MSH-50A) for Chemical/Acid Resistance or Anodized Plate (MSH-55A) for Scratch Prevention.
- \* Maximum Temperature of 380 °C
- \* CE Certified.

**Specification**

Model	MSH-50A	MSH-55A
Plate Size (mm)	$\phi$ 135	
Stirring Capacity (H <sub>2</sub> O)	Max. 20 Lit.	
Motor Rating	9 / 4 W	
Speed Range	Max. 1.500 rpm	
Temp. Range	Max. 380 °C	
Heating Power	350 W	
Controller	Superior Linearity PWM Controller	
Heating Plate	Specially Designed Heating Module (High Uniformity : Temp. Difference 10 % less)	
Fixed Safety Circuit	380 °C	
Permissible Ambient Temperature	Ambient +5 ~ 50 °C	
Permissible Relative Moisture	85 %	
Max. Length of Stirring Bar	50 mm	
Material	Plate	Ceramic Coated / Anodized
	Body	Powder Coated Aluminum
Dimension (w x d x h) (mm)	160 x 280 x 95	
Weight	2,3 kg	
Others	CE Certified	
Packing Dimension (w x d x h) (mm)	400 x 280 x 200	
Gross Weight	4 kg	
Power Consumption	350 W	
Power plug type	Hybrid E+F	
Power Supply*	AC 230 V, 50 / 60 Hz	

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

**Ordering Information**

**MSH-50A Hotplate Stirrer**

DH.WMH03150 Hotplate Stirrer, **MSH-50A**,  $\phi$  135 mm, Ceramic Coated Plate, 0~1.500 rpm, to 380 °C

**MSH-55A Hotplate Stirrer**

DH.WMH03155 Hotplate Stirrer, **MSH-55A**,  $\phi$  135 mm, Anodized Plate, 0~1.500 rpm, to 380 °C

**Additional Function Accessories**

DH.WHP503036 Stand Rod, **RD200**, Stainless Steel,  $\phi$  12 x L 450 mm, for **HP-20A / 20D, MSH-20A / 20D MSH-50A/55A, MSH-50D / 55D** and **SMHS**

DH.WHP503012 Holder + Clamp, **CL220**, for Temperature Sensor



Premium Compact Hotplate Stirrer, Round Type & Anodized Plate (MSH-55A)

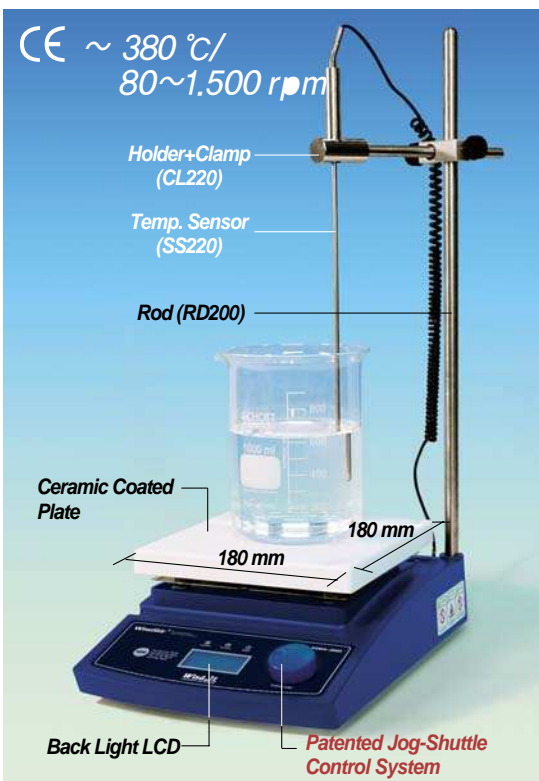


Premium Compact Hotplate Stirrer, Round Type & Ceramic-Coated Plate (MSH-50A)

※ You will find matching beakers and flasks in our general catalogue at following pages : 33, 34, 293–296.

※ You will find matching stirring bars in our general catalogue at following pages : 362, 363.

“witeg” **WiseStir® MSH-D** Digital Hotplate Stirrer, Ceramic-Coated Plate, up to 380 °C, ±0,3 °C  
 Digital Feedback Control, Accurate Temperature Control, 180 × 180 mm / 260 × 260 mm, 80 ~ 1.500 rpm



Digital Precise Hotplate (MSH-20D-Set)

- Patented Jog-Shuttle Control System
- CE Certified

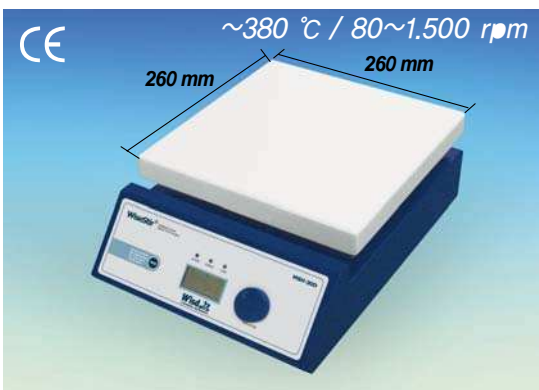
**Application & Features**

- \* Digital Feedback Control by High - Performance Microprocessor.
- \* Superior Temperature Uniformity : 10 % less on the Plate at Ambient Temperature.
- \* Accurate Temp. Control of the Sample in the Vessel Using Optional PT100 Sensor.
- \* User's Self - Compensation Function : to Control Difference between Real Temp. and Indicated Temp. (± 10,0 °C)
- \* Digital LCD Display with Back - Light Function.
- \* Aluminum Die - Casting Body. (MSH-20D)
- \* Ceramic Coated Plate - Chemical / Acid Resistance.
- \* Storage Function : Timer and Alarm.
- \* Locking Mode Supported for Experimental Safety. (Input to Jog - Shuttle can be Disabled)
- \* Patented Jog-Shuttle Control System.
- \* CE Certified.

**Specification**

Model		MSH-20D	MSH-30D
Plate Size (mm)		180 × 180	260 × 260
Stirring Capacity (H <sub>2</sub> O)		Max. 20 Lit.	
Motor Rating		9 / 4 W	
Speed Range		80 ~ 1.500 rpm	
Speed Control Resolution		5 rpm	
Temp.	Range	Max. 380 °C	
	Accuracy	±0,3 °C at Set Temperature (< 70 °C)	
Temp. Display Resolution		0,1 °C	
Temp. Control Resolution		0,5 °C	
Heating Power		600 W	1.200 W
Heating Plate		Specially Designed Heating Module (High Uniformity : Temp. Difference 10 % less)	
Permissible Ambient Temperature		Ambient +5 ~ 50 °C	
Permissible Relative Moisture		85 %	
Max. Length of Stirring Bar		50 mm	
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn + Push)	
Display		Digital LCD Display with Back - Light Function	
Timer		99 hr 59 min (Continuous Function Included)	
Material	Plate	Ceramic Coated Aluminum (Chemical / Acid Resistance)	
	Body	Powder Coated Aluminum	Powder Coated Steel
Dimension (w × d × h) (mm)		206 × 307 × 99	286 × 387 × 99
Weight		3,3 kg	3,5 kg
Others		CE Certified Storage Function (Temp., RPM, Timer) Locking Mode (Jog - Shuttle Input Disabled) User Self - compensation Function Alarm (Error Status and Timer - end)	
Power Consumption		600 W	1,2 kW
Packing Dimension (w × d × h) (mm)		400 × 280 × 200	430 × 320 × 200
Gross Weight		5 kg	
Power plug type		Hybrid E+F	
Power Supply *		AC 230 V, 50 / 60 Hz	

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



Digital Precise Hotplate, Large Type (MSH-30D)

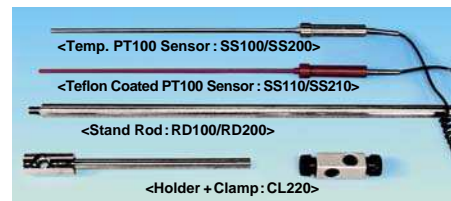
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## Ordering Information

### MSH-20D Hotplate Stirrer Unit & Package Set

- DH.WMH03020** Digital Hotplate Stirrer, **MSH-20D-Unit Only**,  
180 × 180 mm, 80~1.500 rpm, to 380 °C
- DH.WMH03021** Digital Hotplate Stirrer Package, **MSH-20D-Set**  
with **SS200** External Temp.Sensor,  
**RD200** Support Rod and **CL220** Clamp  
Packing Dimension w 400 × d 280 × h 200 mm, Gross Weight 5 kg



### MSH-30D Hotplate Stirrer Unit & Package Set

- DH.WMH03022** Digital Hotplate Stirrer, **MSH-30D-Unit Only**,  
260 × 260 mm, 80~1.500 rpm, to 380 °C
- DH.WMH03023** Digital Hotplate Stirrer Package, **MSH-30D-Set**  
with **SS100** External Temp. Sensor,  
**RD100** Support Rod and **CL220** Clamp  
Packing Dimension w 430 × d 320 × h 200 mm, Gross Weight 5 kg

### Additional Function Accessories

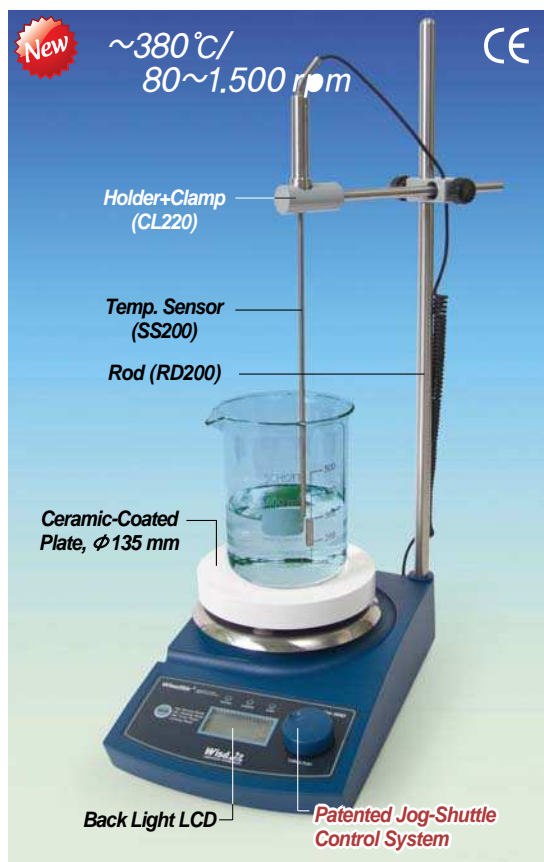
- DH.WHP503020** Direct Contact Temperature Sensor, **SS100**,  
**PT100\***, for **HP-30D**, **MSH-30D** and **SMHS**
- DH.WHP503021** Direct Contact Temperature Sensor, **SS110**,  
**PT100\***, Teflon Coated, for **HP-30D**,  
**MSH-30D** and **SMHS**
- DH.WHP503030** Direct Contact Temperature Sensor, **SS200**,  
**PT100\***, for **HP-20D**, **MSH-20D** and **MSH-50D / 55D**
- DH.WHP503031** Direct Contact Temperature Sensor, **SS210**,  
**PT100\***, Teflon Coated, for **HP-20D**,  
**MSH-20D** and **MSH-50D / 55D**
- DH.WHP503011** Stand Rod, **RD100**, Stainless Steel,  $\phi$  12,7 × L 450 mm,  
for **HP-30A / 30D**, **MSH-30A / 30D**
- DH.WHP503036** Stand Rod, **RD200**, Stainless Steel,  $\phi$  12 × L 450 mm,  
for **HP-20A / 20D**, **MSH-20A / 20D**, **MSH-50A / 55A**,  
**MSH-50D / 55D** and **SMHS**
- DH.WHP503012** Holder + Clamp, **CL220**, for Temp. Sensor

\*PT100 : External Sensor for Feedback Control of the Temperature in the Vessel, Accuracy of  $\pm 0,3$  °C

※ You will find matching beakers and flasks in our general catalogue at following pages : 33, 34, 293–296.

※ You will find matching stirring bars in our general catalogue at following pages : 362, 363.

**“witeg” WiseStir® MSH-50D Digital Compact Hotplate Stirrer, Round-Type Plate,  $\phi$  135 mm**  
 Ceramic Coated or Anodized Plate, Digital Feedback Control, Back Light LCD, up to 380 °C,  $\pm 0,3$  °C, 80 ~ 1.500 rpm



Digital Compact Hotplate Stirrer,  
 Round Type & Ceramic-Coated Plate (MSH-50D-Set)

**Patented Control System**  
 (No. 10-0554098)

**1 or 2 Mode Buttons + Jog Shuttle Switch**  
 Realize “Easy to Use”

- Digital Feedback Control by High-Performance Microprocessor
- Ceramic Coated Plate (MSH-50D) for Chemical/Acid Resistance or Anodized Plate (MSH-55D) for Scratch Prevention
- Patented Jog-Shuttle Control System
- CE Certified

**Application & Features**

- \* Digital Feedback Control by High-Performance Microprocessor.
- \* Superior Temperature Uniformity : 10 % less on the Plate at Ambient Temperature.
- \* Accurate Temp. Control of the Sample in the Vessel Using Optional PT100 Sensor.
- \* User's Self-Compensation Function :  
 To Control Difference between Real Temp. and Indicated Temp. ( $\pm 10,0$  °C)
- \* Digital LCD Display with Back-Light Function.
- \* Ceramic Coated Plate (MSH-50D) for Chemical/Acid Resistance or Anodized Plate (MSH-55D) for Scratch Prevention.
- \* Aluminum Die - Casting Body.
- \* Storage Function : Timer & Alarm.
- \* Locking Mode Supported for Experimental Safety. (Input to Jog-Shuttle can be Disabled)
- \* Patented Jog-Shuttle Control System.
- \* CE Certified.

**Specification**

Model		MSH-50D	MSH-55D
Plate Size (mm)		$\phi$ 135	
Stirring Capacity (H <sub>2</sub> O)		Max. 20 Lit.	
Motor Rating		9 / 4 W	
Speed Range		80 ~ 1.500 rpm	
Speed Control Resolution		5 rpm	
Temp.	Range	Max. 380 °C	
	Accuracy	$\pm 0,3$ °C at Set Temperature (< 70 °C)	
Temp. Display Resolution		0,1 °C	
Temp. Control Resolution		0,5 °C	
Heating Power		350 W	
Heating Plate		Specially Designed Heating Module (High Uniformity : Temp. Difference 10 % less)	
Fixed Safety Circuit		380 °C	
Permissible Ambient Temperature		Ambient +5 ~ 50 °C	
Permissible Relative Moisture		85 %	
Max. Length of Stirring Bar		50 mm	
Controller		Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)	
Display		Digital LCD Display with Back-Light Function	
Timer		99 hr 59 min (Continuous Function Included)	
Material	Plate	Ceramic Coated	Anodized
	Body	Powder Coated Aluminum	
Dimension (w × d × h) (mm)		160 × 280 × 95	
Weight		2,3 kg	
Others		CE Certified Storage Function (Temp., RPM, Timer) Locking Mode (Jog-Shuttle Input Disabled) User Self-compensation Function Alarm (Error Status and Timer-end)	
Packing Dimension (w × d × h) (mm)		400 × 280 × 200	
Gross Weight		4 kg	
Power Consumption		350 W	
Power plug type		Hybrid E+F	
Power Supply*		AC 230 V, 50 / 60 Hz	

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

<Continued on Next page>

<Continued from... "witeg" **WiseStir® MSH-50D** Digital Compact Hotplate Stirrer >

### Ordering Information

#### MSH-50D Hotplate Stirrer Unit & Package Set

- DH.WMH03050** Digital Hotplate Stirrer, **MSH-50D-Unit**,  
Ceramic-Coated,  $\phi$  135 mm, 80~1.500 rpm, to 380 °C
- DH.WMH03051** Digital Hotplate Stirrer Package, **MSH-50D-Set**  
with **SS500** External Temp. Sensor,  
**RD200** Support Rod and **CL220** Clamp  
Packing Dimension w 400 × d 280 × h 200 mm, Gross Weight 4 kg

#### MSH-55D Hotplate Stirrer Unit & Package Set

- DH.WMH03055** Digital Hotplate Stirrer, **MSH-55D-Unit**,  
Anodized,  $\phi$  135 mm, 80~1.500 rpm, to 380 °C
- DH.WMH03056** Digital Hotplate Stirrer Package, **MSH-55D-Set**  
with **SS500** External Temp. Sensor,  
**RD200** Support Rod and **CL220** Clamp  
Packing Dimension w 400 × d 280 × h 200 mm, Gross Weight 4 kg

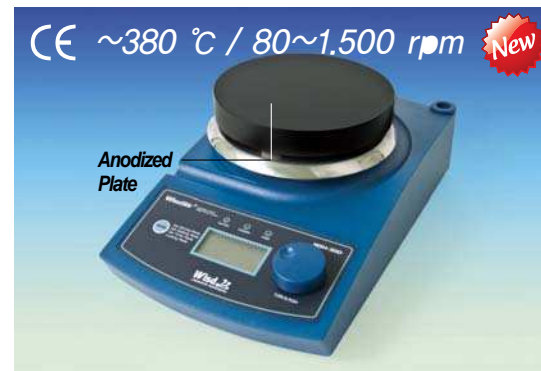
#### Additional Function Accessories

- DH.WHP503060** Direct Contact Temperature Sensor, **SS500**,  
**PT100\***, for **MSH-50D / 55D**
- DH.WHP503061** Direct Contact Temperature Sensor, **SS510**,  
**PT100\***, Teflon Coated, for **MSH-50D / 55D**
- DH.WHP503036** **Stand Rod, RD200**, Stainless Steel,  $\phi$  12 × L 450 mm,  
for **HP-20A / 20D, MSH-20A / 20D, MSH-50A / 55A,**  
**MSH-50D / 55D** and **SMHS**
- DH.WHP503012** Holder + Clamp, **CL220**, for Temp. Sensor

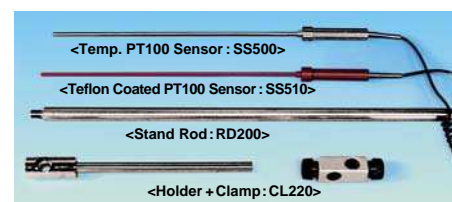
\*PT100 : External Sensor for Feedback Control of the Temperature in the Vessel, Accuracy of  $\pm 0,3$  °C

※ You will find matching beakers and flasks in our general catalogue at following pages : 33, 34, 293–296.

※ You will find matching stirring bars in our general catalogue at following pages : 362, 363.

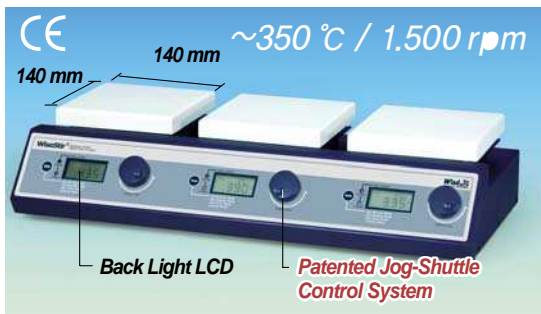


Digital Compact Hotplate Stirrer,  
Round Type & Anodized Plate  
(MSH-55D)



# “witeg” **WiseStir<sup>®</sup> SMHS** Systematic Multi-Hotplate Stirrers, 3-/6- Places, Ceramic-Coated Plates

Digital Feedback Control, Back Light LCD, Independent Heating & Stirring Control, up to 350 °C / 1.500 rpm



**Systematic Multi-Hotplate Stirrers,  
3 × 1 Ceramic-Coated Plates (SMHS-3)**

- **Excellent for Multi-use and a Wide Various Sample Testing**
- **Patented Jog-Shuttle Control System**
- **CE Certified**

### Application & Features

- \* Excellent for Multi-use and wide range of Sample Testing.
- \* Systemized 3 and 6-Hotplate Stirrer.
- \* Independent Heating and Stirring Control.
- \* 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 Optional PT100 Sensor.
- \* Digital LCD Display with Back-Light Function.
- \* Digital Timer Function Included : 99 hr 59 min.
- \* Storage Function for the Set Values : Temperature, RPM and Timer.
- \* Locking Mode for Experimental Safety Supported.
- \* **Patented Jog-Shuttle Control System.**
- \* CE Certified.

### Specification

Model	SMHS-3 : 3 Places	SMHS-6 : 6 Places
Number of Places	3 × 1 Places	3 × 2 Places
Stirring Capacity (H <sub>2</sub> O)	Max. 20Lit.	
Motor Rating	(9 / 4 W) × 3	(9 / 4 W) × 6
Speed Range	80 ~ 1.500 rpm	
Speed Control Resolution	5 rpm	
Temp. Range	Max. 350 °C	
Temp. Accuracy	±0,3 °C at Set Temperature (< 70 °C)	
Temp. Display Resolution	0,1 °C	
Temp. Control Resolution	0,5 °C	
Heating Power	400 W / Place (Total 1,2 kW)	400 W / Place (Total 2,4 kW)
Heating Plate	Specially Designed Heating Module (High Uniformity : Temp. Difference less than 10 %)	
Permissible Ambient Temperature	Ambient +5 ~ 50 °C	
Permissible Relative Moisture	85 %	
Max. Length of Stirring Bar	50 mm	
Controller	Digital Feedback Controller with Jog Shuttle Switch (Turn+Push)	
Display	Digital LCD Display with Back-Light Function	
Timer	99 hr 59 min (Continuous Function Included)	
Plate Size (mm)	140 × 140	
Material Plate	Ceramic Coated Aluminum	
Material Body	Powder Coated Steel	
Dimension (w × d × h) (mm)	510 × 240 × 100	510 × 410 × 180
Weight	7,9 kg	15,2 kg
Others	CE Certified Storage Function (Temp., RPM, Timer) Locking Mode (Jog-Shuttle Input Disabled)	
Power Consumption	1,5 kW	3 kW
Packing Dimension (w × d × h) (mm)	540 × 330 × 170	570 × 540 × 230
Gross Weight	10 kg	18 kg
Power plug type	Hybrid E+F	
Power Supply	AC 230 V, 50 / 60 Hz	

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

### Ordering Information

#### 3 × Hotplate Stirrer, 3 × 1 Places

**DH.WMH03503** 1 × 3 Hotplate & Stirrer, **SMHS-3**, 3 Position, 510 × 240 × 100 mm, 140 × 140 mm, to 350 °C

#### 6 × Hotplate Stirrer, 3 × 2 Places

**DH.WMH03506** 2 × 3 Hotplate & Stirrer, **SMHS-6**, 6 Position, 510 × 410 × 180 mm, 140 × 140 mm, to 350 °C

#### Additional Function Accessories

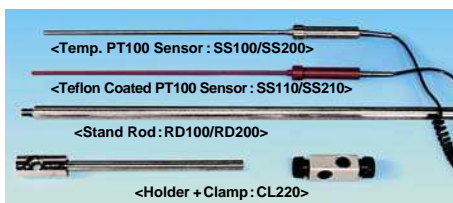
**DH.WHP503020** Direct Contact Temperature Sensor, **SS100, PT100\*** for **HP-30D, MSH-30D** and **SMHS**

**DH.WHP503021** Direct Contact Temperature Sensor, **SS110, PT100\*** Teflon Coated, for **HP-30D, MSH-30D** and **SMHS**

**DH.WHP503036** Stand Rod, **RD200**, Stainless Steel, φ 12 × 450 mm, for **HP-20D, MSH-20D** and **SMHS**

**DH.WHP503012** Holder + Clamp, **CL220** for Temp. Sensor

\*PT100 : External Sensor for Feedback Control of the Temperature in the Vessel, Accuracy of ±0,3 °C



## Patented Control System (No. 10-0554098)

**1 or 2 Mode Buttons + Jog Shuttle Switch**  
Realize “Easy to Use”

\* You will find matching beakers and flasks in our general catalogue at following pages : 33, 34, 293–296.

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