













Stirring&Heating



Labfirst Scientific Instruments (Shanghai) Co., Ltd.

Magnetic hotplate stirrers are used for low viscosity liquids or solid mixing, chemical synthesis, physical and chemical analysis, bio-pharmaceuticals etc. Lab1st provides different series, heating range covers from 120°C–550°C:




Magnetic Hotplate Stirrers:

Series	Model	Image	Stirring Position	Display	Work plate Size	Max. Heating Temp.	Max. stirring quantity[H ₂ O]
Super HS series	Super HS-10Pro		1	LCD	254x254mm	500°C	30L
	Super HS-7Pro		1	LCD	184x184mm	550°C	20L
	Super HS-7		1	LED	184x184mm	550°C	10L
HS series	HS-5		1	LCD	Ø135mm	340°C	20L
	HS-5+		1	LCD	Ø135mm	340°C	20L
	HS-5T		1	LCD	Ø135mm	340°C	20L
	HS-5S		1	Scale	Ø135mm	340°C	20L
Basic [HS] series	HS-5 basic 2		1	LCD	140x140mm	380°C	5L
	HS-5 basic		1	LED	Ø135mm	280°C	3L
Multi-point series	Multi-point HS-4		4	LCD	Ø135mm	340°C	3Lx4
	Multi-point HS-10		10	Scale	180x450mm	120°C	0.4Lx10

Magnetic Stirrers:

Image	Model	Stirring Position	Display	Work plate Size	Max. stirring quantity[H:0]
	Super MS-7S	1	Scale	184x184mm	10L
	MS-5S	1	Scale	Ø135mm	20L
	MS-5 basic 2	1	LCD	140x140mm	5L
	MS-5 basic	1	LED	Ø135mm	3L
	MS-5 basic B	1	Scale	Ø135mm	3L
	MiStir Square	1	Scale	120x115mm	1.5L
	MiStir	1	Scale	Ø120mm	1.5L
	MinThi	1	-	Ø90mm	0.8L
	Multi-point RO-15**	15	LCD	460x304mm	0.4Lx15
	Multi-point RO-10	10	Scale	180x450mm	0.4Lx10

Hotplate:

Image	Model	Display	Work plate Size	Max. Heating Temp.
	Super HP-10 Pro	LCD	254x254mm	500°C
	Super HP-7	LED	184x184mm	550°C
	HP-5 basic 2	LCD	140x140mm	380°C

**Coming soon

Application guidance:

Notice: HS-5 basic 2, HP-5 basic 2 & HS-5 basic are not available for chemical fields.

Fields		Super HS-10Pro/ Super HS-7Pro/ Super HS-7/ Super HP-10Pro/ Super HP-7	HS-5/ HS-5T/ HS-5+/ HS-5S/ Multi-point HS-4	HS-5 basic 2/ HP-5 basic 2	HS-5 basic	Multi-point HS-10	Magnetic Stirrers (none heating models)
Pharmaceutical	Chemical Synthesis	■	■				
	Biochemical Drugs	■	■				
	Medicine Testing	■	■				
	Drug Formulation	■	■				
Chemical Industry	Petrochemical Industry	■	■				
	Inorganic Chemical Synthesis	■	■				
	Organic Chemical Synthesis	■	■				
	Daily Use Chemical Industry	■	■				
	Painting/Rubber/Plastic	■	■				
	Fertilizer/Pesticide	■	■				
Environmental	Water Quality Analysis				■	■	■
	Pesticide Residue Testing				■	■	■
	Chemical Pollution Analysis				■	■	■
Research & Education	Basic Chemical Experiments	■	■		■	■	■
	Material Analysis			■	■	■	■
	Liquid Mixing			■	■	■	■
	Chemical Synthesis	■	■				
Food Industry	Food Additive	■	■	■	■		
	Dairy Products	■	■	■	■		
	Nutrition Analysis	■	■	■	■		
Biological Engineering	Cell Culture						
	Biological Reagents		■	■	■	■	
	Biochemistry		■	■	■	■	

Overhead stirrers are used for middle or high viscosity samples mixing, widely used in chemical synthesis, pharmaceutical synthesis, physical and chemical analysis, petrochemical industries etc.

Overhead stirrers:

Models					
Models	MICROSTIR 20Pro	MICROSTIR 20	MICROSTIR 40Pro	MICROSTIR 40	MICROSTIR 70Pro
Max. Stirring Quantity[H ₂ O]	20L	20L	40L	40L	70L
Constant Speed	YES	NO	YES	NO	YES
Display	LCD	LED	LCD	LED	LCD
Speed Range	50–2200rpm	50–2200rpm	50–2200rpm	50–2200rpm	50–1100rpm
Max. Torque	40N · cm	40N · cm	60N · cm	60N · cm	300N · cm
Viscosity Max.	10000mPa · s	10000mPa · s	50000mPa · s	50000mPa · s	100000mPa · s

SUPER HS-10PRO

LCD Digital Magnetic Hotplate Stirrer With 10 Inch Ceramic Plate

Features >>>

- Large volume: Up to 30L of liquid on 10-inch hot plate with powerful magnetic stirring
- Glass ceramic work plate provides excellent chemical resistant performance and most efficient heat transfer
- LCD display for precise monitoring of speed and temperature. External temperature control is possible by connecting the temperature sensor (PT1000) with an accuracy at $\pm 0.2^{\circ}\text{C}$
- Digital speed control of 100 ~ 1500rpm
- Max. heating plate temperature 500°C
- The "HOT" warning will flash when the work plate temperature is above 50°C even when the hotplate is turned off
- Data connector: The SD card records the instrument's running data in real time.
- Timing function: the running time of the instrument can be set.



SUPER HS-7PRO

LCD Digital Magnetic Hotplate Stirrer
With 7 Inch Ceramic Plate



SUPER HS-7

LED Magnetic Hotplate Stirrer
With 7 Inch Ceramic Plate



Features >>>

- LCD displays actual temperature & speed
- Built-in PID controller ensures safe heating of the medium with overheating protection
- Maximum heating plate temperature up to 550°C
- Glass ceramic work plate is resistant to corrosion and is easy to clean
- External temperature control is possible by connecting temperature sensor (PT1000) with an accuracy of $\pm 0.2^{\circ}\text{C}$
- Digital speed control with maximum range of 1500rpm
- Outstanding brushless DC motor offers more stirring power
- Two knobs enable easy adjustment of speed and temperature
- "HOT" warning flashes when work plate temperature is above 50°C even when hotplate is turned off
- Remote function provides PC control and data transmission

Specifications	Super HS-10Pro	Super HS-7Pro	Super HS-7
Work plate Dimension [W x D]	254x254mm (10 inch)	184x184mm (7 inch)	184x184mm (7 inch)
Work plate material	Glass ceramic	Glass ceramic	Glass ceramic
Motor type	Brushless DC motor	Brushless DC motor	Shaded pole motor
Stirring positions	1	1	1
Max. stirring quantity, [H ₂ O]	30L	20L	10L
Max. magnetic bar[length]	80mm	80mm	80mm
Speed range	100-1500rpm, resolution±1rpm	100-1500rpm, resolution±1rpm	0-1500rpm
Speed display	LCD	LCD	Scale
Temperature display	LCD	LCD	LED
Heating temperature range	Room Temp.-500°C, increment 1°C	Room Temp.-550°C, increment 1°C	Room Temp.-550°C, increment 5°C
Temperature control accuracy	±1°C(<100°C)±1%(>100°C)	±1°C(<100°C) ±1%(>100°C)	±10°C
Overheating protection	540°C	580°C	580°C
Temperature display accuracy	±0.1°C	±0.1°C	±1°C
External temperature sensor	PT1000(accuracy ±0.2°C)	PT1000(accuracy ±0.2°C)	PT1000(accuracy ±0.2°C)
"Hot" warning	50°C	50°C	50°C
Data connector	SD card	RS232	-
Protection class	IP21	IP21	IP21
Motor rating input	18W	18W	15W
Motor rating output	10W	10W	1.5W
Power	1400W	1050W	1030W
Heating output	1350W	1000W	1000W
Voltage,Frequency	100-120/200-240V, 50/60Hz	100-120/200-240V, 50/60Hz	100-120/200-240V, 50/60Hz
Dimension [WxDxH]	328x424x138mm	215x360x112mm	215x360x112mm
Weight	7.2kg	5.3kg	4.5kg
Timer function	1min-99h59min	-	-
Permissible ambient temperature and humidity	5-40°C,80%RH	5-40°C,80%RH	5-40°C,80%RH



Overheating protection



External sensor



Chemical resistance



Wide range of accessories

HS-5

LCD Digital Magnetic Hotplate Stirrer

Three heating models for selecting (fast heating, standard heating and stable heating)

HS-5+

LCD Digital Magnetic Hotplate Stirrer

HS-5T

LCD Digital Magnetic Hotplate Stirrer with Timer

HS-5S

Analog Magnetic Hotplate stirrer



Features >>>

- Brushless DC motor is maintenance free and explosion-proof
- Digital temperature control up to 340°C
- Digital speed control up to 1500rpm
- Maximum stirring quantity of H₂O is 20L
- Safety circuits provide overheating protection
- "HOT" warning flashes if plate temperature is above 50°C even when hotplate is turned off
- Wide range timer function from 1 min to 99h 59min (HS-5T only)
- High-resolution LCD display shows actual temperatures and speed(HS-5T displays the time)
- External temperature control is possible by connecting the temperature sensor (PT 1000)with accuracy at ±0.2°C
- Work plate with ceramic coating provides good chemical-resistant performance
- Remote function provides PC control and data transmission
- Wide variety of accessories available to choose

Security >>>

- International safety certification: CE, CTÜVuS, FCC and other product safety cert,certifications issued by TUV Rheinland
- Safety circuits provide overheating protection
- "HOT" warning flashes if the work plate temperature is above 50°C
- Brushless DC motor is maintenance free and explosion-proof
- Fully enclosed aluminum alloy housing with good heat dissipation performance and reliable protection capability



External sensor



RS232 connector



Wide range of accessories



Chemical resistance



Brushless DC motor

HS-5 BASIC 2

LCD Digital Magnetic Hotplate Stirrer

Features >>>

- Maximum heating temperature is 380°C
- High resolution LCD displays actual temperature and speed
- Brushless DC motor is maintenance free
- Aluminum ceramic coating work plate, allowing immediate heat transfer
- External temperature control is possible with temperature sensor PT1000
- Digital speed control with maximum speed up to 1500rpm
- Maximum stirring quantity of H₂O at 5L



HS-5 BASIC

LED Digital Magnetic Hotplate Stirrer

HS-5 basic is a perfect hotplate stirrer for handling small volume task and daily applications, with maximum temperature of 280°C

Features >>>

- Digital temperature control with maximum temperature up to 280°C
- Digital speed control with maximum speed up to 1500rpm
- Stainless steel with ceramic coating work plate provides high chemical resistant performance
- External temperature control is possible by connecting temperature sensor(PT1000) with an accuracy at $\pm 0.2^{\circ}\text{C}$
- LED display shows temperature and stirring speed
- "HOT" warning flashes if work plate temperature is above 50°C

Specifications	HS-5	HS-5+	HS-5T	HS-5S	HS-5 basic 2	HS-5 basic
Work plate Dimension [W x D]	Ø135mm (5 inch)	Ø135mm (5 inch)	Ø135mm (5 inch)	Ø135mm (5 inch)	140x140mm	Ø135mm (5 inch)
Work plate material	Aluminum cover with ceramic coating	stainless steel cover with ceramic coating	stainless steel cover with ceramic coating	stainless steel cover with ceramic coating	Aluminum cover with ceramic coating	stainless steel cover with ceramic coating
Motor type	Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor	Brushless DC motor
Stirring positions	1	1	1	1	1	1
Max. stirring quantity, [H ₂ O]	20L	20L	20L	20L	5L	3L
Max. magnetic bar[length]	80mm	80mm	80mm	80mm	50mm	50mm
Speed range	100–1500rpm resolution ±1rpm	100–1500rpm resolution ±1rpm	100–1500rpm resolution ±1rpm	0–1500rpm	200–1500rpm	200–1500rpm
Speed display	LCD	LCD	LCD	Scale	LCD	LED
Temperature display	LCD	LCD	LCD	Scale	LCD	LED
Heating temperature range	Room temp.–340°C, increment 1°C	Room Temp.–340°C, increment 1°C	Room Temp.–340°C, increment 1°C	Room Temp.–340°C	Room Temp–380°C	Room Temp–280°C
Heating liquid temperature control accuracy	±1°C(<100°C) ±1%(>100°C)	±1°C(<100°C) ±1%(>100°C)	±1°C(<100°C) ±1%(>100°C)	–	±1°C(<100°C) ±1%(>100°C)	±1 °C (<100 °C) ±1% (>100 °C)
Overheating temperature protection	420°C	420°C	420°C	420°C	420°C	320°C
Temperature display accuracy	±0.1°C	±0.1°C	±0.1°C	–	±0.1°C	±1°C
External temperature sensor	PT1000 (accuracy±0.2°C)	PT1000 (accuracy±0.2°C)	PT1000 (accuracy±0.2°C)	–	PT1000 (accuracy±0.2°C)	PT1000 (accuracy±0.2°C)
"Hot" warning	50°C	50°C	50°C	–	–	50°C
Data connector	RS232	RS232	RS232	–	–	–
Protection class	IP21	IP21	IP21	IP21	IP21	IP42
Timer function	–	–	1min to 99h59min	–	–	–
Motor rating input	18W	18W	18W	18W	2.4W	5W
Motor rating output	10W	10W	10W	10W	1.8W	3W
Power	650W	550W	550W	530W	510W	515W
Heating output	600W	500W	500W	500W	500W	500W
Voltage,Frequency	100–120/200–240V, 50/60Hz	100–120/200–240V, 50/60Hz	100–120/200–240V, 50/60Hz	100–120/200–240V, 50/60Hz	100–120/200–240V, 50/60Hz	100–120/200–240V, 50/60Hz
Dimension [WxDxH]	280x160x100mm	160x280x100mm	160x280x100mm	160x280x100mm	320x180x108mm	150x260x100mm
Weight	2.8kg	2.8kg	2.8kg	2.8kg	2.2kg	1.8kg
Permissible ambient temperature and humidity	5–40°C,80%RH	5–40°C,80%RH	5–40°C,80%RH	5–40°C,80%RH	5–40°C,80%RH	5–40°C,80%RH



MULTI-POINT HS-4

LCD 4-Channel Digital Magnetic Hotplate Stirrer

It is widely used in chemical synthesis, physical and chemical analysis, bio pharmaceuticals etc.



Features >>>

- Independent heating and stirring control for each position
- LCD display shows real-time temperature and speed
- PID controller ensures a precise and stable heating process (maximum temperature up to 340°C)
- Brushless DC motor is quiet, reliable & maintenance free, and provides more powerful speed control
- External temperature sensor (PT1000) with accuracy 0.2°C
- Overheating protection temperature at 420°C
- Stainless steel work plate with ceramic coating provides good chemical resistance
- Wide variety of accessories available to choose from

Specifications	Multi-point HS-4
Work plate dimension	Ø135mm(5inch) x4
Plate material	Stainless steel with ceramic coating
Motor type	Brushless DC motor
Stirring positions	4
Max. stirring quantity of single position (H ₂ O)	10L x 4
Max. magnetic bar	40mm
Speed range	200-1500rpm
Speed display	LCD
Temperature display	LCD
Control accuracy of sensor	±20rpm
Temperature range	25-340°C
Over temperature protection	420°C
Temperature display accuracy	±0.1°C
External temperature sensor	PT1000(accuracy±0.2°C)
IP Protection class	IP20
Motor input power	1.8Wx4
Power	515Wx4
Heating Power	500Wx4
Voltage,Frequency	100-120V,60Hz; 200-240V,50 Hz
Dimensions[WxDxH]	698x270x128mm
Weight	9.5kg
Permissible ambient temperature	5-40°C
Permissible relative humidity	80%RH

MULTI-POINT HS-10

10-Position Magnetic
Hotplate Stirrer



Specifications	Multi-point HS-10
Work plate dimension[W x D]	180x450mm
Work Plate material	Stainless steel covered with silicone cushion
Motor type	Brushless DC motor
Stirring positions	10
Max. stirring quantity	0.4Lx10
Max. magnetic bar [length]	40mm
Speed range	0-1100rpm
Speed display	scale
Temperature display	scale
Heating temperature range	Room temp.-120°C
Over temperature protection	140°C
IP Protection class	IP20
Motor rating input	12W
Motor rating output	4W
Power	490W
Heating Power	470W
Voltage,Frequency	100-120/200-240V, 50/60Hz
Dimensions[WxDxH]	182x622x65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

Features >>>

- Maintenance-free brushless DC motor °C
- Maximum speed 1100rpm
- Maximum temperature of work plate up to 120°C
- Stainless steel work plate, Covered with silicone cushion, provide excellent of heating uniformity and skid resistance



Skidresistance



Multiple position



Brushless DC motor



Tips For Temperature Control











- It is recommended to use the beads with all full ranges hotplate magnetic stirrers
- Place the external temperature sensor in the hole on the heating bath and ensure that the probe is submerged within 1/2~1/3 of the depth of the bead

Alloy-bead Heating Bath

Features

- High strength aluminum alloy beads provides high thermal conductivity over wide temperature range
- Flexible, convenient, easy to operate and adaptable to reaction essels with different shapes and sizes
- Accommodates the external temperature probe on hotplate magnetic stirrer to achieve precise temperature control
- The alloy beads do not adhere to the container inside surface. whereas the silicone oil when used is difficult to dean in oil bath application
- Eco-friendly, pollution free, paisan free, fume free, highly safe and splash free heating
- PTFE shell can effectively retains the heat and ensure human safety fram burn injuries
- The beads are easy to clean and replace separately



Cat.NO.	Picture	Name of stirrer bars	Size [mm]
920604		Stirrer bar, cross	Ø5 X 10
920605		Stirrer bar, cross	Ø10 X 20
920606		Stirrer bar, cross	Ø9 X 25
920607		Stirrer bar, cross	Ø10 X 30
920608		Stirrer bar, cross	Ø11 X 38
920609		Stirrer bar, cross	Ø20 X 65
920610		Stirrer bar, Triangular prism	Ø14 X 25
920611		Stirrer bar, Triangular prism	Ø14 X 50
920612		Stirrer bar, Triangular prism	Ø9 X 35
920613		Stirrer bar, Triangular prism	Ø14 X 80
920614		Stirrer bar, Gear shape	Ø8 X 30
920615		Stirrer bar, Gear shape	Ø8 X 38
920616		Stirrer bar, Gear shape	Ø10 X 50
920617		Stirrer bar, ellipse	Ø10 X 20
920618		Stirrer bar, ellipse	Ø12 X 25
920619		Stirrer bar, ellipse	Ø11X 30
920620		Stirrer bar, ellipse	Ø15X 35
920621		Stirrer bar, ellipse	Ø20 X 40
920622		Stirrer bar, ellipse	Ø20 X 50
920623		Stirrer bar, ellipse	Ø22 X 70
920624		Stirrer bar, slide round	Ø6 X 25
920625		Stirrer bar, slide round	Ø6 X 30
920626		Stirrer bar, slide round	Ø8 X 40
920627		Stirrer bar, slide round	Ø8 X 50
920628		Stirrer bar, slide round	Ø10 X 60
920629		Stirrer bar, slide round	Ø13 X 80
920630		Stirrer bar, slide round	Ø24 X 159
920631		Stirrer bar, Eight prism	Ø8 X 20
920632		Stirrer bar, Eight prism	Ø10 X 30
920633		Stirrer bar, Eight prism	Ø8 X 40
920634		Stirrer bar, Eight prism	Ø8 X 50
920635		Stirrer bar, Eight prism	Ø9 X 90
920636		Stirrer bar, round	Ø27X57
920637		Stirrer bar, round	Ø27X108
920638		Stirrer bar, round	Ø27X159
920016		Stirrer bar, round	Ø6 X 10
920017		Stirrer bar, round	Ø8 X 15
920018		Stirrer bar, round	Ø8 X 20
920019		Stirrer bar, round	Ø8 X 25
920020		Stirrer bar, round	Ø6X 30
920021		Stirrer bar, round	Ø8 X 40
920022		Stirrer bar, round	Ø8 X 50
920216		Stirrer bar, round	Ø8X 65
920217	Stirrer bar, round	Ø13X 80	
920639		Stirrer bar, crown	Ø9X6
920024		Stirrer bar remover	length of 30cm
920023		Stirrer bar remover	length of 25cm



920222 7 inch Magnetic Stirrer transparent safety shield



920221 5 inch Magnetic Stirrer transparent safety shield



920223 10 inch Magnetic Stirrer transparent safety shield

Cat.NO./Picture	RS 1 Set of magnetic stirring bars	Cat.NO./Picture	RS 2 Set of magnetic stirring bars
 920601	Stirrer bar, round, Ø6X10, 2	 920603	Stirrer bar, round, Ø8X40, 2
	Stirrer bar, round, Ø6X15, 2		Stirrer bar, Eight prism, Ø8 X 40, 2
	Stirrer bar, round, Ø8X20, 2		Stirrer bar, Gear shape, Ø8 X 30, 2
	Stirrer bar, round, Ø8X25, 2		Stirrer bar, slide round, Ø8 X 40, 2
	Stirrer bar, round, Ø6X30, 2		Stirrer bar, ellipse, Ø20 X 40, 2
	Stirrer bar, round, Ø8X40, 2		Stirrer bar, cross, Ø9 X 25, 2
	Stirrer bar, round, Ø8X50, 2		Stirrer bar, crown, Ø9X6, 2
	Stirrer bar, round, Ø10X80, 2		Stirrer bar, round, Ø8X50, 2
	Stirrer bar, Triangular prism, Ø14 X 25, 2		Stirrer bar, Triangular prism, Ø9 X 35, 2
	Stirrer bar, Triangular prism, Ø14 X 50, 2		

Cat. No.	Description	Super HS-10Pro	Super HS-7Pro Super HS-7	HS-5 HS-5T	Multi-point HS-4	HS-5S	HS-5 basic	HS-5 basic 2
 920201	Blue carrying plate, use with color quarter pies			■	■	■	■	
 920202	Blue Fixed ring, use with color quarter pies			■	■	■	■	
 920203	Red quarter pie, 11 holes, 4 mL reaction vessel, Ø15.2mm, 20mm depth	■	■	■	■	■	■	■
 920204	Purple quarter pie, 4 holes, 20 mL reaction vessel, Ø28mm, 24mm depth	■	■	■	■	■	■	■
 920205	Blue quarter pie, 4 holes, 30mL reaction vessel, Ø28mm, 30mm depth	■	■	■	■	■	■	■
 920206	Black quarter pie, 4 holes, 40 mL reaction vessel, Ø28mm, 43mm depth	■	■	■	■	■	■	■
 920207	Green quarter pie, 6 holes, 8 mL reaction vessel, Ø17.8mm, 26mm depth	■	■	■	■	■	■	■
 920208	Golden quarter pie, 4 holes, 16 mL reaction vessel, Ø21.6mm, 31.7mm depth	■	■	■	■	■	■	■
 920008	Reaction block for 50mL round bottom flask (one flask capacity)			■	■	■	■	
 920011	Reaction block for 100 mL round bottom flask (one flask capacity)			■	■	■	■	
 920012	Reaction block for 250mL round bottom flask (one flask capacity)			■	■	■	■	
 920013	Reaction block for 500mL round bottom flask (one flask capacity)			■	■	■	■	
 920220	F101 protective cover, temperature resistance of 135°C			■		■	■	
 920002	PT1000-A, length of 230mm	■	■	■	■		■	■
 920003	PT1000-B, temperature sensor with glass coated, length of 230mm	■	■	■	■		■	■
 920218	Support clamp of PT1000 Vertical bar length: 45cm, stents length: 25cm, Stem diameter:10cm	■	■	■				
 920005	Support clamp of PT1000 Vertical bar length: 35cm, stents length: 18cm, Stem diameter:10cm				■		■	■

NEW

SUPER HP-10PRO

LCD Digital Hotplate



Features >>>

- LCD screen shows temperature, Max. temperature up to 500°C
- 10-inch glass ceramic work plate provides excellent chemical-resistant performance and most efficient heat transfer
- External temperature control is possible by connecting the temperature sensor (PT 1000) with an accuracy at $\pm 0.2^{\circ}\text{C}$
- The "HOT" warning will flash if the work plate temperature is above 50°C even when the hotplate is turned off
- Heating temperature: room temperature -500°C.
- Data connector : The SD card records the instrument's running data in real time.
- Timing function: the running time of the instrument can be set.

Specifications	Super HP-10Pro
Work plate Dimension [W x D]	254x254mm (10 inch)
Work plate material	Glass ceramic
Heating position	1
Heating temperature range	Room Temp.-500°C, increment 1°C
Temperature control accuracy	$\pm 1^{\circ}\text{C}$ (<100°C) $\pm 1\%$ (>100°C)
Safety temperature	540°C
Temperature,time display	LCD
Timer function	1min-99h59min
Temperature display accuracy	$\pm 0.1^{\circ}\text{C}$
External temperature sensor	PT1000($\pm 0.2^{\circ}\text{C}$)
"Hot" warning	50°C
Protection class	IP21
Power	1400W
Heating output	1350W
Voltage,Frequency	100-120/200-240V, 50/60Hz
Dimension[WxDxH]	328x424x138mm
Weight	7.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

SUPER HP-7

LED Hotplate

Features >>>

- LED screen display actual and accurate temperature
- Maximum temperature up to 550°C
- Separate safety circuits with safety temperature of 580°C
- External temperature control is possible by connecting temperature sensor (PT 1000) with an accuracy of $\pm 0.2^{\circ}\text{C}$
- Work plate provides excellent chemical-resistant performance and most efficient heat transfer
- “HOT” warning flashes when the workplate temperature is above 50°C



Specifications	Super HP-7
Work plate Dimension [W x D]	184x184mm (7 inch)
Work plate material	Glass ceramic
Heating position	1
Heating temperature range	Room Temp.-550°C, increment 5°C
Control accuracy of work plate	$\pm 10^{\circ}\text{C}$
Safety temperature	580°C
Temperature display	LED
Temperature display accuracy	$\pm 1^{\circ}\text{C}$
External temperature sensor	PT1000 (accuracy $\pm 0.2^{\circ}\text{C}$)
Heating warning	50°C
Protection class	IP21
Power	1010W
Heating Power	1000W
Voltage,Frequency	100-120/200-240V, 50/60Hz
Dimension[WxDxH]	215x360x112mm
Weight	4.5kg
permissible ambient temperature and humidity	5-40°C,80%RH

HP-5 BASIC 2

LCD Digital Hotplate

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Features >>>

- Maximum heating temperature is 380 °C
- High resolution LCD displays actual temperature
- Aluminum ceramic coating work plate, allowing an immediate heat transfer
- External temperature control is possible with temperature sensor PT1000

Specifications	HP-5 basic 2
Work plate Dimension [W x D]	140x140mm (6 inch)
Work plate material	Aluminum cover with ceramic coating
Heating position	1
Heating temperature range	Room temp.-380°C increment 1°C
Over heat Protection	420°C
Temperature,time display	LCD
Temperature display accuracy	±1°C
External temperature sensor	PT1000(±0.2°C)
Protection class	IP21
Power	510W
Heating output	500W
Voltage,Frequency	100-120/200-240V, 50/60Hz
Dimension[WxDxH]	180x320x108mm
Weight	2.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

MS-5S

Magnetic Stirrer

SUPER MS-7S

7" Square Magnetic Stirrer

- Speed range of 0–1500rpm
- Maximum stirring quantity of H₂O up to 10L
- Ceramic work plate provides excellent corrosion resistance



Super MS-7S



MS-5S



MS-5 basic 2

MS-5 BASIC 2

LCD Digital Magnetic Stirrer

- High resolution LCD displays actual stirring speed
- Brushless DC motor is maintenance free
- Aluminum covered ceramic coating, corrosion resistant and easy to clean
- Digital speed control up to 1500rpm
- Maximum stirring quantity of H₂O at 5L

Specifications	Super MS-7S	MS-5S	MS-5 basic 2
Work plate Dimension [W x D]	184x184mm (7 inch)	Ø135mm (5 inch)	140x140mm
Work plate material	Glass ceramic	Stainless steel cover with ceramic	Aluminum cover with ceramic coating
Motor type	Shaded pole motor	Brushless DC motor	Brushless DC motor
Stirring positions	1	1	1
Max. stirring quantity[H ₂ O]	10L	20L	5L
Max.magnetic bar[length]	80mm	80mm	40mm
Speed range	0–1500rpm	0–1500rpm	200–1500rpm
Speed display	Scale	Scale	LCD
Protection class	IP21	IP21	IP21
Motor input Power	15W	18W	2.4W
Motor output Power	1.5W	10W	1.8W
Power	30W	30W	10W
Voltage,Frequency	100–120/200–240V, 50/60Hz	100–240V, 50/60Hz	100–240V, 50/60Hz
Dimension[WxDxH]	215x360x112mm	160x280x85mm	320x180x108mm
Weight	3.8kg	2.8kg	2.2kg
Permissible ambient temperature and humidity	5–40°C, 80%RH	5–40°C, 80%RH	5–40°C, 80%RH

MS-5 BASIC

LED Digital Magnetic Stirrer

MS-5 BASIC B

Magnetic Stirrer

Features >>>

- Digital speed control within the range of 0–1500rpm
- Maximum stirring quantity of H₂O at 3L
- LED display shows stirring speed (MS-5 basic)



Specifications	MS-5 basic	MS-5 basic B
Work plate Dimension	Ø135mm (5 inch)	Ø135mm (5 inch)
Work plate material	Nylon+GF	Nylon+GF
Motor type	Brushless DC motor	Brushless DC motor
Stirring positions	1	1
Max. stirring quantity[H ₂ O]	3L	3L
Max.magnetic bar[length]	50mm	50mm
Speed range	200–1500rpm	0–1500rpm
Speed display	LED	scale
Protection class	IP42	IP42
Motor input power	5W	5W
Motor output Power	3W	3W
Power	15W	10W
Voltage,Frequency	100–120/200–240V, 50/60Hz	100–120/200–240V, 50/60Hz
Dimension[WxDxH]	150x260x80mm	150x260x80mm
Weight	1.8kg	1.8kg
Permissible ambient temperature and humidity	10–40°C,80%RH	5–40°C,80%RH



Strong magnetism



Chemical resistance



LED display

MULTI-POINT RO-15

15-Position magnetic stirrer

NEW

Features >>>

- Efficient, simple, safe, multi-position agitator is the ideal choice for sample testing.
- Simple and easy operation panel: 15 stirring positions are controlled by 3 independent channels, all channels are available at different speeds and times.
- Brushless DC motor and powerful magnetic ensure fast and accurate stirring speed.
- Aluminum laser engraving disk surface, skid and corrosion proof anti-abrasive.



Specifications	Multi-point RO-15
Work plate Dimension [WxD]	460x304mm
Work plate material	Aluminum
Motor type	DC brushless
Stirring positions	15
Max. stirring quantity [H ₂ O]	0.4Lx15
Max. magnetic bar[length]	40mm
Speed control accuracy	±10rpm
Speed , Time display	LCD
Speed range	0-1500rpm
Timer function	0min-99h59min
Protection class	IP21
Power	40w
Voltage ,Frequency	110V/220V50Hz/60Hz
Dimension [DxWxH] [mm]	615x307x90mm
Weight	9.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH



0.4Lx15



0-1500rpm



Timer



Skid resistance



Multiple position



Brushless DC motor

MULTI-POINT RO-10

10-Position Magnetic Stirrer



Specifications	Multi-point RO-10
Work plate Dimension [W x D]	180x450mm
Work plate material	Stainless steel with silicone coating
Motor type	Brushless DC motor
Stirring positions	10
Max. stirring quantity[H ₂ O]	0.4Lx10
Max.magnetic bar[length]	40mm
Speed range	0-1100rpm
Speed display	Scale
Protection class	IP20
Motor input Power	12W
Motor output Power	4W
Power	20W
Voltage,Frequency	100-120/200-240V, 50/60Hz
Dimension[WxDxH]	622x205x65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

Features >>>

- Efficient, simple and safe stirring
- High performance and space-saving design to maximize the use of benchtop space and saving time by stirring multiple solutions
- Maintenance-free brushless DC motor
- Speed range 0-1100rpm
- Stainless steel work plate covered with silicone cushion, provides excellent performance of skid resistance



Skid resistance



Multiple position

MINTHI

Ultra-flat Compact Magnetic Stirrer

With excellent stirring functionality, the compact shape of MinThi takes less bench space and makes storage easier.



Specifications	MinThi
Work plate Dimension	Ø90mm
Work plate material	PET
Stirring positions	1
Max. stirring quantity[H ₂ O]	0.8L
Max.magnetic bar[length]	40mm
Speed range	15–1500rpm
Protection class	IP21
Output Power	3W
Power	5W
Voltage,Frequency	100–120/200–240V, 50/60Hz
Dimension[WxDxH]	175x120x15mm
Weight	0.3kg
Permissible ambient temperature and humidity	5–40°C,80%RH

Features >>>

- Speed range 15 to 1500rpm
- Automatic reverse rotation for excellent mixing
- PET top work plate provides excellent chemical resistance
- Motorless technology provides ultra silent and vibration-free operation
- Perfect magnetic stirrer for use during titration (bottle-top burette) in analytical chemistry



MISTIR

Economical Magnetic Stirrer

MiStir is a magnetic stirrer customized for liquid mixing, suitable for chemical analysis, biology reagent mixing, regular laboratory experiments and liquid handling.

Features >>>

- Maintenance free brushless DC motor
- Rare earth magnets give powerful stirring
- Stepless speed regulation 300–2000rpm
- Ultra silence and vibration-free design
- PET top provides excellent chemical resistance
- Shaft can be fitted with a pH sensor or other sensors for different purposes

MISTIR SQUARE

Square Plate Magnetic Stirrer

Lab1st square Plate Magnetic Stirrer with electrode holder has a reliable design and a powerful stirring ability. It is a basic and ideal tool for electrochemistry measurements or water & environment monitoring; drug or food analysis; liquid culture mixing, etc.

Features >>>

- Compact design with small footprint, 12V voltage available for mobile labs.
- Square work plate supports 1.5L stirring capacity.
- Holder with clamp for pH electrode or other sensor.
- Default PET top provides excellent chemical resistance.
- Extra colorful stickers satisfy DIY design by yourself.
- Maintenance free brushless DC motor.
- An economical choice of a reliable & durable magnetic stirrer with an electrode holder for stable & powerful stirring ability.



Specifications	MiStir Square	MiStir
Work plate size	120x115mm	Ø120mm
Work plate material	PET	PET
Motor type	Brushless DC Motor	Brushless DC motor
Stirring position	1	1
Max. stirring quantity (H ₂ O)	1.5L	1.5L
Max. magnetic bar (length)	40mm	40mm
Speed range	300–2000rpm	300–2000rpm
Speed setting	scale	scale
Protection class	IP21	IP21
Motor output power	1.2W	1.2W
Power	7.2W	7.2W
Voltage, Frequency	DC 12V, 100–240V, 50/60Hz	100–120/200–240V, 50/60Hz
Dimension [WxDxH]	150x144x54mm	150x145x50mm
Weight	0.3Kg	0.3kg
Permissible ambient temperature and humidity	5–40°C, 80%RH	5–40°C, 80%RH

MICROSTIR 20PRO/ MICROSTIR 40PRO/ MICROSTIR 70PRO

LCD Digital Overhead Stirrer

Lab1st overhead Stirrers are competent for most demanding tasks with guaranteed safety and performance. They are widely used in chemical synthesis, pharmaceutical synthesis, physical and chemical analysis, petrochemical industries, etc.



Specifications	MICROSTIR 20Pro	MICROSTIR 40Pro	MICROSTIR 70Pro
Max. stirring quantity[H ₂ O]	20L	40L	70L
Speed range	50~2200rpm	50~2200rpm	50~1100rpm
Speed display accuracy	±3rpm	±3rpm	±10rpm
Time settings range	-	-	0~99h59min
Max. torque	40N·cm	60N·cm	300N·cm
Viscosity max.	10000mPa·s	50000mPa·s	100000mPa·s
Weight	2.8kg	2.8kg	3.2kg
Motor type	Brushless DC motor	Brushless DC motor	Brushless DC motor
Voltage,Frequency	100~240V, 50/60 Hz	100~240V, 50/60 Hz	100~240V, 50/60 Hz
Speed display	LCD	LCD	LCD
Torque display	LCD	LCD	LCD
Overload protection display	LCD	LCD	LCD
Chuck clamp range diameter	0.5~10mm	0.5~10mm	0.5~10mm
Motor input/output power	60W/50W	120W/100W	180W/160W
Power	70W	130W	200W
Dimension[WxHxD]	83 x 220 x 186mm	83 x 220 x 186mm	83 x 220 x 186mm
Protection class	IP21	IP21	IP21
Permissible ambient temperature and humidity	5~40°C,80%RH	5~40°C,80%RH	5~40°C,80%RH
Data interface	RS232	RS232	RS232



MICROSTIR 20/ MICROSTIR 40

LED Overhead Stirrer

Features >>>

- High reliability and outstanding performance
- Wide range of speed from 50 to 2200rpm
- Brushless DC motor for long life, maintenance free and explosion proof
- LED screen for monitoring actual speed
- Safety circuits allow for safe stop function in anti-stall or overload conditions
- Large chuck diameter for many shaft types

Set of Overhead Stirrer tools

Cat.No. 920821



Contains one vertical rod, six stirring blades, Such as Propeller stirrer, Paddle stirrer, Centrifugal stirrer, Flat-blade stirrer, Radial-flow stirrer, Anchor stirrer and Disassembling tool

Specifications	MICROSTIR 20	MICROSTIR 40
Max. stirring quantity[H ₂ O]	20L	40L
Speed range	50~2200rpm	50~2200rpm
Max. torque	40N·cm	60N·cm
Viscosity max.	10000mPa·s	50000mPa·s
Motor type	Brushless DC motor	Brushless DC motor
Speed display	LED	LED
Overload protection display	LED	LED
Chuck range diameter	0.5~10mm	0.5~10mm
Motor input power	60W	120W
Motor output power	50W	100W
Power	70W	130W
Voltage,Frequency	100~240V, 50/60 Hz	100~240V, 50/60 Hz
Dimension[WxHxD]	83 x 220 x 186mm	83 x 220 x 186mm
Protection class	IP21	IP21
Weight	2.8kg	2.8kg
Permissible ambient temperature and humidity	5~40°C,80%RH	5~40°C,80%RH

Plate Stands >>>

Universal Plate Stand (for MICROSTIR 20/40/70)

Cat. No.920803



Dimension [W x D x H] :
20x31x78cm
Material: cast iron

Grand Plate Stand (for MICROSTIR 70)

Cat. No.920801



Dimension [W x D x H] :
33.5x46.3x78cm
Material: cast iron

Lab1st overhead Stirrer provides a variety of stirring tools, such as impellers, paddles and blades:

<p>Propeller stirrer</p> <p>Shaft length: 40cm Stirrer diameter: 5cm Shaft diameter: Ø8mm Material: 316L stainless steel Standard stirring applications at medium and high speed</p> 	<p>Cat. No.920804</p>	<p>Paddle stirrer</p> <p>Shaft length: 40cm Stirrer diameter: 6.8cm Shaft diameter: Ø8mm Material: 316L stainless steel For gentle mixing at low and medium speeds</p> 	<p>Cat. No.920806</p>
<p>Straight stirrer</p> <p>Shaft length: 40cm Stirrer diameter: 6cm Shaft diameter: Ø8mm Material: 316L stainless steel For low viscosity media at medium and high speeds</p> 	<p>Cat. No.920805</p>	<p>Centrifugal stirrer</p> <p>Shaft length: 40cm Stirrer diameter: 9cm Shaft diameter: Ø8mm Material: 316L stainless steel Blades open while speeding. For narrow neck vessels at medium to high speed.</p> 	<p>Cat. No.920807</p>
<p>Propeller stirrer</p> <p>Shaft length: 35cm Stirrer diameter: 6.5cm Shaft diameter: Ø8mm Material: PTFE coated Standard stirring applications at medium and high speed</p> 	<p>Cat. No.920812</p>	<p>Paddle stirrer</p> <p>Shaft length: 35cm Stirrer diameter: 6.8cm Shaft diameter: Ø8mm Material: PTFE coated For gentle mixing at low and medium speeds</p> 	<p>Cat. No.920814</p>
<p>Straight stirrer</p> <p>Shaft length: 35cm Stirrer diameter: 7cm Shaft diameter: Ø8mm Material: PTFE coated For low viscosity media at medium and high speeds</p> 	<p>Cat. No.920813</p>	<p>Centrifugal stirrer</p> <p>Shaft length: 35cm Stirrer diameter: 8.5cm Shaft diameter: Ø8mm Material: PTFE coated Blades open while speeding. For narrow neck vessels at medium to high speed.</p> 	<p>Cat. No.920815</p>
<p>Grand propeller stirrer</p> <p>Shaft length: 60cm Stirrer diameter: 10cm Shaft diameter: Ø8mm Material: 316L stainless steel Standard stirring</p> 	<p>Cat. No. 920808</p>	<p>Grand paddle stirrer</p> <p>Shaft length: 60cm Stirrer diameter: 10cm Shaft diameter: Ø8mm Material: 316L stainless steel Gentle mixing for those stratify easily or sensitive to shear</p> 	<p>Cat. No.920810</p>
<p>Grand anchor stirrer</p> <p>Shaft length: 60cm Stirrer diameter: 10cm Shaft diameter: Ø8mm Material: 316L stainless steel Standard stirring or for those easily precipitate</p> 	<p>Cat. No. 920809</p>	<p>Grand dissolving stirrer</p> <p>Shaft length: 60cm Stirrer diameter: 10cm Shaft diameter: Ø8mm Material: 316L stainless steel Breaking down granules in the mixture with strong shear</p> 	<p>Cat. No.920811</p>
<p>Flat-blade stirrer</p> <p>Shaft length: 40cm Stirrer diameter: 6cm Shaft diameter: Ø8mm Material: 316L stainless steel Suitable for medium speed stirring, low viscosity and medium viscosity materials</p> 	<p>Cat. No. 920817</p>	<p>Anchor stirrer</p> <p>Shaft length: 40cm Stirrer diameter: 6cm Shaft diameter: Ø8mm Material: 316L stainless steel Suitable for low speed stirring, medium viscosity and high viscosity materials</p> 	<p>Cat. No.920819</p>
<p>Radial-flow stirrer</p> <p>Shaft length: 40cm Stirrer diameter: 5cm Shaft diameter: Ø8mm Material: 316L stainless steel Suitable for medium speed or high speed agitation, low viscosity or medium viscosity materials, recommended for the treatment of gas in liquid</p> 	<p>Cat. No. 920818</p>	<p>Spiral stirrer</p> <p>Shaft length: 40cm Stirrer diameter: 5cm Shaft diameter: Ø8mm Material: 316L stainless steel Suitable for medium speed or high speed agitation, medium viscosity and high viscosity materials, recommended for liquid homogenization or suspension treatment</p> 	<p>Cat. No. 920820</p>