HotPlate Stirrers

HS1

Digital

HS1-A

Analogue

Features

▍ **Brushless shade motor**
: Powerful and precise stirring function by strong magnetic drive
: Stable and long-life cycle by "Slow start function"

▍ **High durability and uniformity**
: High chemical resistance and specially designed heat line realize good temp. uniformity

▍ **HS1 offers 2 control modes for "Water" and "Oil"**
: Affords different thermal conductivity samples

▍ **HS1-A also offers visibility of heating output**
: As heating output is being increased blinking interval of pilot lamp becomes longer and stopped finally at max. temp. and illuminance of pilot lamp is getting brighter

▍ **HS1 offers Jog-Dial controller w/electrostatic touch-type mode button and High fidelity LCD display (Graphic icons for each mode)**

▍ **Safety functions**
: Over-heat/load/current protection for safety of products and samples

▍ **Made in Korea**

Specifications

Model		HS1 Digital Hotplate Stirrer	HS1-Set Digital Hotplate Stirrer Set	HS1-A Analogue Hotplate Stirrer
Plate Size		180 x 180 mm		
Operation mode		Water or Oil mode available		
Material	Plate	Ceramic coated aluminum		
	Body	Powder coated aluminum		
Stirring capacity		Max 20 Lit		
Motor		Brushless shade motor		
Speed range		80 to 1,500 rpm		
Speed resolution		5 rpm		
Temp. range / accuarcy		Max. 400℃ / ±0.3℃		Max. 400℃
Temp. resolution		0.1℃-display, 0.1℃-control		
Heating output / consumption		600W / 650W		
Timer / Alarm		99hr 59min/Error status, Timer-end		
Display		High fidelity LCD with Back-Light function		
Controller		Digital fuzzy controller w/Electrostatic Touch button+Jog-dial		Fine PMW/Heat Stepless/Speed
Stirring bar usable		up to 50mm		
Permissible temp. / RH%		ambient +5 ~ 40℃/80% RH		
Safety device		Over-heat/load/current protection		
Dimension / Weight		180x325x110mm/3.43kg	180x325x110mm/3.9kg	180x325x110mm/3.13kg
Packing size / Gross weight		285x400x170mm/4.13kg	285x400x170mm/4.6kg	285x400x170mm/3.83kg
Power supply		AC120V,60Hz or AC230V, 50/60Hz, 1P		
Standard accessories			External temp. probe Stand rod/Clamp holder	

Digital Overhead Stirrer-High speed/torque

OS1-10-Set

ST110
: Premium Plate Stand with Rod, High Quality

Features

▌ **Belt-type gear system**
: "Belt-type gear" system with powerful motor realize soft and powerful operation
3-ratio of gear enables various range of viscosity-max. **70,000mPas**

▌ High durability
: Chrome-plated anti-rust chuck

▌ High stability
: "Anti-trembling" function for impeller

▌ **High fidelity LCD display (Graphic icons for each mode)**

▌ Jog-Dial controller and electrostatic touch-type mode button

▌ Safety functions
: Over-heat/load/current protection for safety of products and samples

▌ Made in Korea

Specifications

Model		OS1-10-Set
Stirring Capacity		Max. 25 Lit (H2O)
Maximum Viscosity		70,000 mPas
Maximum Torque		120 Ncm
Speed	Range	2.0 : 1
	Resolution	100 ~ 2,000 rpm
Grear rate		5 rpm-display/5 rpm-control
Motor		Direct driven DC motor
Motor rating (Input / Output)		110/85W
Timer / Alarm		99hr 59min/Error status, Timer-end
Controller		Digital fuzzy controller w/Electrostatic Touch button+Jog-dial
Display		High fidelity LCD with Back-Light function
Max. impeller shaft diameter		10mm
Permissible temp. / RH%		0 ~ 40℃/80% RH
Material		ABS and Aluminum
Safety Device		Over-heat/load/current protection
Power Consumption		150W
Dimension / Weight		80x194x245mm/10.39kg
Packing size / Gross weight		290x800x180mm/12.14kg
Power supply		AC120V,60Hz or AC230V,50/60Hz, 1P
Standard accessories		Imeller 3-blade/Standard plate stand/Clamp

Vortex Mixer

Features

▌ **Brushless Shade motor**
: Soft and long life cycle

▌ Various sample application

▌ Soft "Touch—On" mechanism

▌ Variable speed control

▌ Multi—function switch enables continuous or Touch—on control

▌ Safety functions
: Over—heat/load/current protection for safety of products and samples

▌ Made in Korea

VM1

Specifications

Model	VM1
Speed Range	0 ~ 3,300 rpm
Shaking Motion	Orbital (Circuit orbit 4.0mm)
Operation Mode	Touch or Continuous
Speed Control	Stepless
Motor	Brushless Shade motor
Head (Included)	Pop—off cup head and Φ76mm Platform head
Max Load / Power	0.5kg/30W
Material	Aluminum die—casting with powder coating
Safety Device	Over—heat/load/current protection
Permissible Temp./RH %	5 ~ 40℃/80% RH
Dimensions / Weight	131x185x125mm/2.64kg
Packing Size / Gross Weight	190x250x215mm/2.94kg
Power Supply	AC120V, 60Hz or AC230V, 50/60Hz, 1P

Autoclave

JSAT

Stainless Steel 304 Self-Balance Door
with Silicone Gasket an Safety Interlock

Features

Program control
: Fully automatic sterilization cycle
: Maximum sterile temp. and pressure up to 123℃ and 0.13Mpa

Construction
: Vertical loading chamber with light weight self-balanced door
: Stainless steel 304 chamber, lid and top platek

Safety door Inter-Locking system
: Lock the door during operation which integrated with temp., pressure in the chamber and in case of electric cut-off

Convenience utility
: Two steam collection bottles remove most of steam generated during operation for comfortable laboratory environment

Made in Korea

Specifications

Model		JSAT-45	JSAT-65	JSAT-85	JSAT-105
Capacity		45 L	65 L	85 L	105 L
Dimension	Inner	Ø350xH490mm	Ø350xH680mm	Ø450xH535mm	Ø450xH665mm
	Outer	555x670x955mm	555x670x1105mm	655x780x1010mm	655x780x1110mm
	Basket	Ø330xH195mm	Ø330xH280mmm	Ø430xH220mm	Ø430xH270mm
Temp	Range	Maximum 123℃			
	Accuarcy	±0.5 at 121℃			
	Uniformity	±2.0℃ at 121℃			
Pressure		up to 0.12 Mpa at 121℃			
Controller		Fully Automatic Sterilization Process Microprocessor PID Control Auto start/stop timer			
Display		Digital LED			
Timer / Alarm		99hr 59min/Error status, Timer-end			
Sensor		Class A Pt-100 Ohm sensor			
Safety		Safety door lock/Over-temp./pressure/current cut-off			
Material	Body	Epoxy powder coated steel			
	Chamber	Stainless steel #304			
Service Basket		Stainless steel #304 wire basket x 2			
Heater Capacity		2.0 kW	3.0 kW	4.0 kW	5.0 kW
Power Rating		9.2 Amp	13.7 Amp	18.2 Amp	22.8 Amp
Packing Size		740x650x1130mm	740x650x1280mm	850x750x1180mm	850x750x1280mm
Gross Weight		98.0 kg	107.0 kg	130.0 kg	138.0 kg
Power Supply		AC 120V, 60Hz or AC 230V, 50/60Hz, 1P			
Power Plug		CEE 7/7 Schuko	CEE 7/7 Schuko	30 AMP	30 AMP

JSCB

Features

▌ BSC Class II Type A2 protects operator, samples and laboratory environment from pollution sources classified Biosafety level 1,2,3

▌ **PRE—PURGE function**
: When blower ON, it operated 30 sec. automatically and purify potentially polluted chamber environment through HEPA filter then notify operation—ready to operator by buzzer alarming

▌ **POST—PURGE function**
: When blower OFF, it operated 30 sec. automatically and purify potentially polluted chamber environment through HEPA filter to make up clean chamber atmosphere for next experiment

▌ 3° sloped front and ergonomic elbow—rest make it comfortable to operator

▌ LED light enables high—illuminance and no flickering

▌ Perfect sealed front glass door enables perfect protection of UV—light

▌ Graphic icons for each mode

▌ Made in Korea

Specifications

Model		JSCB—900SB	JSCB—1200SB	JSCB—1500SB	JSCB—1800SB
Dimension	Inner	830x550x585mm	1205x550x585mm	1490x550x585mm	1790x550x585mm
	Outer	900x800x1970mm	1275x800x1970mm	1560x800x1970mm	1860x800x1970mm
Safety—type		BSC Class II Type A2			
Air Circulation		Vertical laminar air stream (70% re—circulation/30% exhaust) Downdraft air velocity : 0.3 m/sec Inlet air velocity : 0.5 m/sec			
Purifying Efficiency		HEPA : 99.993% to 99.995% for particles >0.3 um ULPA : 99.999% for particles >0.12 um (optional)			
Controller		Integrated Digital Microprocessor Control System **UV coated Touch—panel features Electrostatic Touch button** 10—steps Velocity control Fan ON/OFF function LED light ON/OFF function UV light ON/OFF function HEPA filter running time/exchange time display			
Display		High fidelity LCD display (Back—Light function)			
Noise Level		< 65 dB			
Material	Inner	Stainless—steel #304			
	Outer	Epoxy powder coated steel			
	Door	Tempered glass 5.0mm			
LED Light (1510 Lux)		11 W x 2 ea	15 W x 2 ea	20 W x 2 ea	20 W x 2 ea
UV Lamp (253.7nm)		20 W	30 W	30 W	40 W
Utility Devices		220V water—proof outlet x 2, Gas cock x 1, Air cock x 1			
Safety		Over—current protector/UV lamp auto—off when door is opened			
Net Weight		130.0 kg	182.0 kg	200.0 kg	267.0 kg
Packing Size		950x940x1650mm	1330x940x1650mm	1610x940x1650mm	1940x940x1650mm
Gross Weight		180.0 kg	213.0 kg	250.0 kg	290.0 kg
Power Consumption		200 W	350 W	350 W	375 W
Power Supply		AC120V, 60Hz or AC230V, 50/60Hz, 1P			

Forced Convection Incubator

JSGI

Features

▌ Integrated Digital Microprocessor Control System
  : Graphic LCD display (Back-Light function)
  : **UV coated Polycarbonate touch-panel features Electrostatic Touch button + Jog-Dial**
  : 3-zone PID algorithm/3-point calibration/1-point offset

▌ Construction and material
  : **Seamless chamber construction is easy to clean and strong for pollution**
  : Durable Epoxy powder coating for outer body

▌ User-friendly
  : Inner tempered glass enables observing samples
  : **Cable port in chamber affords external power source or sensors**
  : Graphic icons for each mode

▌ Safety
  : Independently operated Dual over-heat protection system

▌ Made in Korea

Specifications

Model		JSGI-050T	JSGI-100T	JSGI-150T	JSGI-250T
Capacity		50 L	100 L	150 L	250 L
Circulation		Forced-convection type			
Dimension	Inner	400x300x400mm	400x400x600mm	500x500x600mm	500x500x1000mm
	Outer	580x535x720mm	580x635x920mm	680x735x920mm	680x735x1320mm
Temp	Range	ambient +5℃ ～ +70℃			
	Accuarcy	±0.2℃ at 37.0℃			
	Uniformity	±0.5℃ at 37.0℃			
Sensor		Class A Pt-100 Ohm sensor			
Control Resolution		0.1℃			
Heat-up time 37.0℃		15 min	15 min	15 min	20 min
Heater		150 W	200 W	250 W	400 W
Controller		Integrated Digital Microprocessor Control System UV coated Touch-panel features Electrostatic Touch button + Jog-Dial 3-zone PID algorithm/3-point calibration/1-point offset			
Display		High fidelity LCD display (Back-Light function)			
Timer/Alarm		99hr 59min/Error status, Timer-end			
Safety		Over-temp./pressure/current cut-off			
Cable Port		1 ea			
Material	Inner	Stainless-steel #304			
	Outer	Epoxy powder coated steel			
	Inner Door	Tempered glass 5.0mm			
Packing Size		560x600x860mm	660x610x1060mm	760x720x1070mm	760x720x1480mm
Gross Weight		48.0 kg	62.0 kg	76.0 kg	111.0 kg
Power Consumption		160 W	210 W	260 W	410 W
Power Supply		AC120V, 60Hz or AC230V, 50/60Hz, 1P			

Forced Convection Oven

JSOF

Features

Integrated Digital Microprocessor Control System
: Graphic LCD display (Back−Light function)
: **UV coated Polycarbonate touch−panel features Electrostatic Touch button + Jog−Dial**
: 3−zone PID algorithm/3−point calibration/1−point offset

Construction and material
: **Seamless chamber construction is easy to clean and strong for pollution**
: Durable Epoxy powder coating for outer body
: Aluminum wrapped 50mm thick insulation enables high efficiency

User−friendly
: **Viewing window−double tempered glass−is provided as standard**
: Graphic icons for each mode

Safety
: Independently operated Dual over−heat protection system

Made in Korea

Specifications

Model		JSOF−050	JSOF−100	JSOF−150	JSOF−250
Capacity		50 L	100 L	150 L	250 L
Circulation		Forced−convection type			
Dimension	Inner	400x300x400mm	500x400x500mm	560x450x600mm	600x600x700mm
	Outer	560x605x710mm	660x705x810mm	720x755x910mm	760x905x1010mm
Temp	Range	ambient +10℃ ~ +250℃			
	Accuarcy	±0.2℃ at 120℃			
	Uniformity	±1.0℃ at 120℃			
Sensor		Class A Pt−100 Ohm sensor			
Control Resolution		0.1℃			
Heat−up time 120℃		10 min	12 min	13 min	13 min
Heater		1.0 kW	1.5 kW	1.7 kW	2.5 kW
Controller		Integrated Digital Microprocessor Control System UV coated Polycarbonate touch−panel features Electrostatic Touch button + Jog−Dial 3−zone PID algorithm/3−point calibration/1−point offset			
Display		High fidelty LCD display (Back−Light function)			
Timer/Alarm		99hr 59min/Error status, Timer−end			
Safety		Over−temp./pressure/current cut−off			
Viewing Window		Standard			
Material	Inner	Stainless−steel #304			
	Outer	Epoxy powder coated steel			
	Insulation	Aluminum wrapped Mineral wool 50mm			
Packing Size		640x590x850mm	750x710x950mm	780x740x1050mm	950x790x1160mm
Gross Weight		55.0 kg	75.0 kg	87.0 kg	112.0 kg
Power Consumption		1.1 kW	1.6 kW	1.8 kW	2.6 kW
Power Supply		AC 120V, 60Hz or AC 230V, 50/60Hz, 1P			