



**being** Professional Instrument Supplier



**bluepard**  
Instruments

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Version No:2018-06

- Oven /
- Vacuum Oven /
- Heating Incubator /
- Cooling Incubator /
- CO<sub>2</sub> Incubator /
- Temperature & Humidity Chamber /
- Shaker /
- Water Bath /
- Magnetic Stirrer /
- Rotary Evaporator /

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**bluepard** BLUEPARD INSTRUMENTS CO.,LTD

## LED Microprocessor Controller (with timing function)

Provided for desiccation, torrefaction, wax-melting and sterilization in mining industry, laboratories and scientific research institutes.

### Features

- 304 stainless steel, mirror polishing processing, easy to clean and maintain.
- PID controller with over temperature alarm and timing function ensures precise and reliable control.
- Air circulation system with specific air flow channel ensures a good temperature uniformity performance.
- Silicon door gasket with long lifetime, and easy to change.
- A damper adjustment in the front ensures the gas convection enough in working chamber.

### Option

- Independent over-temperature alarm system ensures experiments running safely.
- RS 485 connector can connect computer to save the data via software.

### Specifications

Model	DHG-9013A	DHG-9030A	DHG-9050A (DHG-9053A)	DHG-9070A	DHG-9140A	DHG-9240A	DHG-9420A	DHG-9620A	DHG-9920A
Electrical Requirement	220V 50Hz						380V 50Hz		
Temperature Range	RT+10°C ~250°C								
Display Resolution	0.1°C								
Temperature Stability	±1°C								
Temperature uniformity	±3% (at 100°C)								
Ambient Temperature	+5~40°C								
Power Consumption	500W	850W	1100W	1550W	2050W	2450W	3100W	4000W	5200W
Chamber Volume	16L	30L	50L	80L	136L	220L	420L	620L	1000W
Interior Dimension (WxDxH)mm	250x260x250	340x320x320	420x395x350	450x400x450	550x450x550	600x500x750	640x585x1355	840x600x1355	1000x600x1600
Exterior Dimension (WxDxH)mm	530x370x420	620x440x490	720x530x520	740x530x630	840x580x730	880x630x930	780x730x1780	980x800x1880	1140x800x2150
Shelves	2(pcs)		2(pcs)	2(pcs)			3(pcs)	4(pcs)	
Timing Range	1~9999min								

Model	DHG-9015A DHG-9035A	DHG-9055A	DHG-9075A	DHG-9145A	DHG-9245A	DHG-9425A	DHG-9625A
Electrical Requirements	220V 50Hz					380V 50Hz	
Temperature Range	RT+10~300°C						
Display Resolution	0.1°C						
Temperature Stability	±1°C						
Temperature uniformity	±3% (at 100°C)						
Ambient Temperature	+5~40°C						
Power Consumption	850W	1100W	1550W	2050W	2450W	3100W	4000W
Chamber Volume	16L/30L	50L	80L	136L	220L	420L	620L
Internal Dimension(WxDxH)mm	250x260x250 340x320x320	420x395x350	450x400x450	550x450x550	600x500x750	640x585x1355	840x600x1355
External Dimension (WxDxH)mm	530x370x420 620x440x490	720x530x520	740x530x630	840x580x730	880x630x930	780x730x1780	980x800x1880
Shelves	2(pcs)	2(pcs)	2(pcs)	2(pcs)	2(pcs)	3(pcs)	4(pcs)
Timing Range	1~9999min						



## LED Microprocessor Controller (with timing function)

Provided for desiccation, torrefaction, wax-melting and sterilization in mining industry, laboratories and scientific research institutes.

### Features

- 304 stainless steel, mirror polishing processing, easy to clean and maintain.
- Natural convection with low noise.
- PID controller with over temperature alarm and timing function ensures precise and reliable control.

### Option

- Independent over-temperature alarm system ensures experiments running safely.
- RS 485 connector can connect computer to save the data via software.

### Specifications

Model	DHG-9031A	DHG-9051A	DHG-9091A	DHG-9141A	DHG-9201A
Electrical Requirement	AC220V 50HZ				
Temperature Range	RT+10 ~ 200°C				
Display Resolution	0.1°C				
Temperature Stability	±1°C				
Ambient Temperature	+5 ~ 35°C				
Power Consumption	850W	1000W	1400W	2000W	2200W
Chamber Volume	27L	56L	96L	140L	200L
Interior Dimension (WxDxH)mm	320x300x355	400x330x415	450x430x505	520x500x575	570x560x640
Exterior Dimension (WxDxH)mm	460x520x660	540x550x720	590x650x810	660x720x880	710x780x945
Shelves	2(pcs)			3(pcs)	



## Touch Screen Microprocessor Controller (with timing function)

The BEING Mechanical Ovens allow for a smooth and efficient control of temperature from 10°C over ambient temperature to 200°C (300°C).

The PID controller, with double color display, continuously displays the set temperature and actual temperature inside the chamber. Operating time is also displayed for the user. The fan generated circulation of air within the chamber helps to guaranty uniformity of temperature throughout the oven. As with all our ovens, we incorporate the best safety features assuring piece of mind to our customers when using BEING products!

### Features

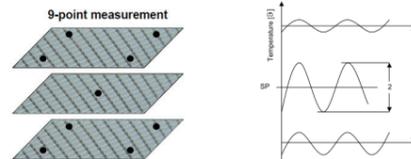
- Colorful touch screen controller.
- Interior Chamber made from 304 stainless steel with a mirror polished finish making for easy cleaning.
- Adjustable 3-Speed fan allows customer to control the flow of air optimal for temperature uniformity.
- Anti-tilt shelving helps avoid accidents when shelves are moved.
- Top centered portal allows real time testing of internal chamber temperature using external temperature measuring equipment.
- Adjustable shelves provide accommodation for different sized containers.
- Our damper Provides proper control of gas convection in chamber.
- Pt100 temperature sensor provides high temperature sensitivity and accuracy.
- The BEING Controller provides programmability for 7 periods and 9 steps for each period making for a total of 63 programmable steps.



USB data collect shelf test hole

### Standard :DIN-12880

Independent temperature safety equipment, 2 class (DIN12880), with second set of temperature alarm. The temperature data was measured according with part 2 of DIN12880 suggested, means the space between the body and wall equal to 10% of the height, width, depth of the chamber.



test standard DIN-12880

### Specifications

Model	BO-30F	BO-50F	BO-120F	BO-200F	BO-400F
Chamber Volume	35L	59L	115L	234L	400L
Temperature Range	RT+10°C ~200°C (300°C)				
Display Resolution	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C
Temperature Uniformity(@150°C)	±2.0°C	±2.0°C	±2.0°C	±2.0°C	±2.0°C
Standard Quantity of Shelves/Max	2/5	2/9	3/12	3/16	3/16
Shelves loading	20Kg	20Kg	20Kg	20Kg	20Kg
Net Weight(Kg)	43	51	83	112	-
Timer Range	1~5999mins	1~5999mins	1~5999mins	1~5999mins	1~5999mins
Internal Dimension (W×H×D,mm)	320×320×300	400×415×305	520×530×430	650×650×500	1000×800×510
External Dimension (W×H×D,mm)	610×540×550	690×640×560	810×755×685	940×875×750	1285×1060×750
Electrical Requirement	AC220V,50Hz	AC220V,50Hz	AC220V,50Hz	AC220V,50Hz	AC220V,50Hz
Power Consumption	900W	1100W	2050W	2500W	3100W

## Touch Screen Microprocessor Controller (with timing function)

The BEING Mechanical Ovens allow for a smooth and efficient control of temperature from 10°C over ambient temperature to 200°C (300°C).

The PID controller, with double color display, continuously displays the set temperature and actual temperature inside the chamber. Operating time is also displayed for the user. The fan generated circulation of air within the chamber helps to guaranty uniformity of temperature throughout the oven. As with all our ovens, we incorporate the best safety features assuring piece of mind to our customers when using BEING products!

### Features

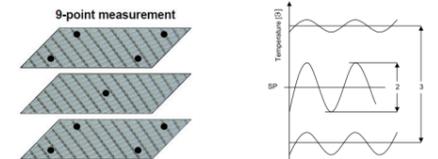
- Colorful touch screen controller.
- Interior Chamber made from 304 stainless steel with a mirror polished finish making for easy cleaning.
- Adjustable 3-Speed fan allows customer to control the flow of air optimal for temperature uniformity.
- Anti-tilt shelving helps avoid accidents when shelves are moved.
- Top centered portal allows real time testing of internal chamber temperature using external temperature measuring equipment.
- Adjustable shelves provide accommodation for different sized containers.
- Our damper Provides proper control of gas convection in chamber.
- Pt100 temperature sensor provides high temperature sensitivity and accuracy.
- The BEING Controller provides programmability for 7 periods and 9 steps for each period making for a total of 63 programmable steps.



USB data collect shelf test hole

### Standard :DIN-12880

Independent temperature safety equipment, 2 class (DIN12880), with second set of temperature alarm. The temperature data was measured according with part 2 of DIN12880 suggested, means the space between the body and wall equal to 10% of the height, width, depth of the chamber.



test standard DIN-12880

### Specifications

Model	BO-30N	BO-50N	BO-115N	BO-200N
Chamber Volume	34L	54L	124L	222L
Temperature Range	RT+10°C ~200°C (300°C)			
Display Resolution	0.1°C	0.1°C	0.1°C	0.1°C
Temperature Uniformity(@150°C)	±2.5°C	±2.5°C	±2.5°C	±2.5°C
Standard Quantity of Shelves/Max	2/5	2/6	2/10	2/16
Shelves loading	20Kg	20Kg	20Kg	20Kg
Net Weight	43 kg	45 kg	74 kg	103 kg
Timer Range	1~5999mins	1~5999mins	1~5999mins	1~5999mins
Internal Dimension (W×H×D,mm)	320×320×300	400×380×330	520×495×450	650×650×500
External Dimension (W×H×D,mm)	610×580×520	690×640×468	810×755×590	940×910×658
Electrical Requirement	AC220V,50Hz	AC220V,50Hz	AC220V,50Hz	AC220V,50Hz
Power Consumption	850W	1050W	1950W	2250W

## LED Microprocessor Controller (with timing function)



Vacuum oven is designed especially for drying material which is thermosensitive, oxidative, decomposable easily. It can also work with inert gas to dry some compound material.

### Features

- 304 stainless steel, mirror polishing processing, easy to clean and maintain.
- PID controller with over temperature alarm and timing function ensures precise and reliable control, also save more than 40% heating time.
- A big dual layer tempered glass on the door provides good observation.
- Door adjustment system with silicon door gasket ensures better vacuity.

### Option

- KF25 Vacuum Port.
- LED lights on the door.
- Inert gas valve.

### Specifications

Model	DZF-6012	DZF-6022	DZF-6050	DZF-6030A DZF-6032 DZF-6034	DZF-6092	DZF-6123	DZF-6213
Electrical Requirement	AC220V 50HZ						
Controller	LED display						
Power Consumption	400W	700W	1450W	550W/850W/850W	1150W	1600W	2100W
Temperature Range	RT-10~200°C						
Display Resolution	0.1						
Temperature Stability	±1°C						
Vacuum Degree	133Pa						
Ambient Temperature	+5~40°C						
Interior Dimension (WxDxH)mm	220x210x220	300x300x275	415x370x345	320x320x300	450x450x450	500x500x500	600x600x600
Exterior Dimension(WxDxH)mm	500x375x410	605x490x450	730x560x550	630x510x490	740x610x591	790x660x641	890x760x741
Shelves	2(pcs)			1/2/4(pc)	2(pcs)	3(pcs) (Independent temperature control)	
Chamber Material	304 Stainless steel			316 SS	304 Stainless steel		

## Touch Screen Microprocessor Controller (with timing function)



The BEING Vacuum Ovens over a variety of sizes to fit the different needs of each of our customers. Due to our excellent design, the BEING vacuum oven offers more usable space than similarly sized ovens from the competition. A large viewing window allows the user to quickly view their samples from a distance. The BEING controller offers superior temperature control and safety for our customers with a large colored LCD display for easy viewing.

### Features

- Colorful touch screen controller.
- Real-time display of measured vacuum helps user monitor progress of the drying sample.
- Inert Gas Inlet.
- Interior Chamber made from 304 stainless steel with a mirror polished finish making for easy cleaning.
- Adjustable shelves for added flexibility to accommodate various size containers.
- Exhaust valve switching and pump switch come with an electromagnetic valve controller which is safe and reliable.
- User friendly and reliable operation while at the same time conserving vacuum pump power.
- The BEING Controller provides programmability for 7 periods and 9 steps for each period making for a total of 63 programmable steps.

### Standard :DIN-12880

Independent temperature safety equipment, 2 class (DIN12880).

### Specifications

Model	BV-20	BV-50	BV-90
Chamber Volume	24L	51L	91L
Temperature Range	RT+10°C ~200°C	RT+10°C ~200°C	RT+10°C ~200°C
Temperature Resolution	0.1°C	0.1°C	0.1°C
Max. degree of vacuum	133Pa	133Pa	133Pa
Standard Quantity of Shelves/Max	2/5	2/7	3/9
Work chamber material	stainless steel	stainless steel	stainless steel
Interior Dimension (WxHxD,mm)	300x275x300	415x345x370	450x450x450
Exterior Dimension (WxHxD,mm)	445x590x505	580x670x594	610x774x721
Max.load	20Kg	20Kg	20Kg
N/W(Kg)	60	95	145
Inert gas air inlet	✓	✓	✓
Electrical Requirement	AC220V/50Hz	AC220V/50Hz	AC220V/50Hz
Power Consumption	700W	1400W	2000W
Timer Range	1~5999mins	1~5999mins	1~5999mins





## LED Microprocessor Controller (with timing function)

Provided as a necessary equipment for scientific research to colleges as well as biological, agricultural and scientific research departments for storage of mould and biology cultivation.

### Features

- 304 stainless steel, mirror polishing processing, easy to clean and maintain.
- PID controller with over temperature alarm and timing function ensures precise and reliable control
- Auto fan speeds ensures a proper fan speed when temperature is stable.
- Inner glass door provide a better observation.
- Glass door switch control automatically cut the heating elements and fan when door is open.

### Option

- Independent over-temperature alarm system ensures experiments running safely.
- RS 485 connector can connect computer to save the data via software.
- UV lamp sterilization system ensures a better and easier sterilizing.



## Heating Incubator(Forced air)

Model	DHP-9012	DHP-9032	DHP-9052	DHP-9082	DHP-9162	DHP-9272	DHP-9402 DHP-9602 DHP-9902
Electrical Requirement	220V 50Hz						
Temperature Range	RT+5~65℃						
Display Resolution	0.1℃ /±0.5℃						
Temperature Uniformity	±1.5℃						±2.0℃
Ambient Temperature	+5~35℃						
Power consumption	200W	200W	300W	400W	600W	750W	1100W 1400W 2200W
Chamber Volume	16L	35L	50L	80L	160L	270L	420L 620L 1000L
Interior Dimension(W×D×H)mm	250×260×250	340×320×320	415×360×355	500×400×400	500×500×650	600×600×750	640×585×1355 840×600×1355 1000×600×1600
Exterior Dimension(W×D×H)mm	530×480×420	620×490×490	690×500×500	780×530×560	790×630×810	890×740×910	780×750×1880 980×800×1880 1140×800×2150
Shelves(pcs)	2						3/4/4
Timing Range	1~5999min						

## Heating Incubator(Natural convection)

Model	DHP-9011 DHP-9011B	DHP-9031 DHP-9031B	DHP-9051 DHP-9051B	DHP-9121 DHP-9121B	DHP-9211 DHP-9211B
Electrical Requirement	AC220V 50HZ				
Temperature Range	RT+5 ~ 65℃				
Display Resolution	0.1℃ /±0.5℃				
Ambient Temperature	+5 ~ 35℃				
Power consumption	85W	125W	250W	550W	900W
Chamber Volume	10L	35L	55L	115L	210L
Interior Dimension(W×D×H)mm	250×200×200	320×300×320	400×410×360	520×450×485	650×500×650
Exterior Dimension(W×D×H)mm	460×300×330	530×400×450	640×550×510	785×588×715	915×658×870
Shelves(pcs)	2	2	2	3	3



## Touch Screen Microprocessor Controller (with timing function)

The PID controller, with colourful touch screen, clearly shows in every moment the temperature set and that oneinside as well as other parameters.

BI-F series forced air heating incubator, forced air circulation guarantees a perfect air replacement and homogeneity of temperature in every parts of the chamber.

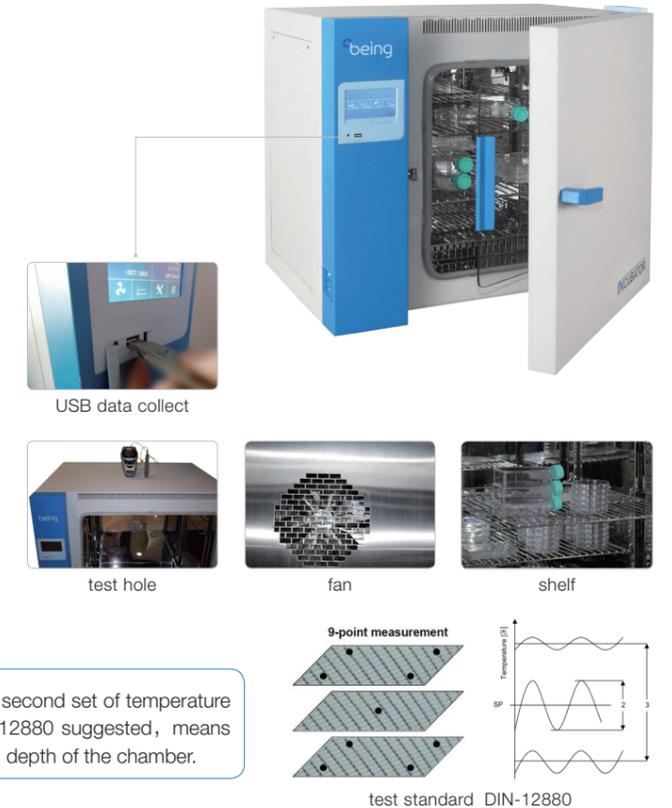
BI-T series natural convection, the airflow in chamber is stable, which is particularly suitable for the rapid drying and disinfection of powder.

### Features

- Colourful touch screen controller.
- 304 stainless steel,mirror polishing processing,easy to clean and maintain.
- The fan is forced-air convection, with good temperature uniformity and two levels power to shift automatic.
- The shelf design of anti-tilting to avoid the accidents when pulling out the shelves.
- With high-precision thermal temperature sensor,high measuring accuracy and control stable.
- With reserved test hole,the temperature in working chamber can be detected accurately.
- With limited temperature alarm system.
- Programming setting function with 7 periods and 9 steps for each period, which means there are 63 programmable steps in total.

### Standard :DIN-12880

Independent temperature safety equipment, 2 class ( DIN12880 ), with second set of temperature alarm.The temperature data was measured according with part 2 of DIN12880 suggested, means the space between the body and wall equal to 10% of the height , width、depth of the chamber.



## Heating Incubator(Forced air)

Model	BI-35F	BI-55F	BI-120F	BI-200F
Chamber Volume	35L	50L	118L	210L
Temperature Range	RT +5~80℃			
Temperature Stability	0.2℃			
Display Resolution	0.1℃			
Temperature uniformity(@37℃ )	±0.8℃			
Standard Quantity of Shelves/Max	2/5	2/6	2/10	2/16
Shelves loading	20Kg	20Kg	20Kg	20Kg
N/W(Kg)	48	56	82	119
Timer Range	1~5999mins	1~5999mins	1~5999mins	1~5999mins
Internal Dimension( W×H×D,mm)	320×320×300	400×415×305	520×530×430	650×650×500
External Dimension( W×H×D,mm)	610×545×550	690×640×560	810×755×685	940×875×755
Electrical Requirement	AC220V,50Hz			
Power Consumption	300W	350W	600W	700W

## Heating Incubator(Natural convection)

Model	BI-35T	BI-55T	BI-120T	BI-200T
Chamber Volume	35L	50L	115L	210L
Temperature Range	RT +5~80℃			
Temperature Stability	0.2℃			
Display Resolution	0.1℃			
Temperature uniformity(@37℃ )	±0.8℃			
Standard Quantity of Shelves/Max	2/5	2/9	2/12	2/16
Shelves Loading	20Kg	20Kg	20Kg	20Kg
N/W(Kg)	44	53	79	108
Timer Range	1~5999mins	1~5999mins	1~5999mins	1~5999mins
Internal Dimension( W×H×D,mm)	320×320×300	400×380×330	520×490×450	650×650×500
External Dimension( W×H×D,mm)	610×580×520	690×640×468	810×755×588	940×910×658
Electrical Requirement	AC220V,50Hz			
Power Consumption	250W	300W	550W	700W

## LED/LCD Microprocessor Controller (with timing function)



The cooling incubator is ideal for every application in microbiological field.

The range of temperature allows the growth of microorganisms in every environmental situation.

### Features

- 304 stainless steel, mirror polishing processing, easy to clean and maintain.
- PID controller with over temperature alarm and timing function ensures precise and reliable control, also guarantee an excellent control by microprocessor and the limited number of setting keys ensures an extremely simple and intuitive operability.
- The inner lamp for observation of the samples is standard supplied.
- 3 fan speed meets all requirements of different experiments.
- Famous brand compressor with refrigerant R134a.

### Option

- Independent over-temperature alarm system ensures experiments running safely.
- RS 485 connector can connect computer to save the data via software.
- A side through-hole diameter of 25 mm in order to install one or more temperature sensors inside the chamber.



## Specifications

Model	LRH-70 LRH-70F	LRH-150 LRH-150F	LRH-250 LRH-250F	LRH-500F	LRH-800F	LRH-1000F	LRH-1500F
Temperature Range	0-60°C						
Display Resolution	0.1°C						
Temperature Stability	HIGH±0.5°C			LOW±1.0°C			
Temperature Uniformity	±1.5°C			±2.5°C			
Humidity Range	-						
Humidity Stability	-						
Electrical Requirement	220V 50Hz						
Ambient Temperature	+5°C ~30°C						
Power consumption	450W	500W	600W	2100W	4100W	4100W	5000W
Interior Dimension (WxDxH)mm	400x350x500	503x470x808	540x460x1000	670x720x1020	800x590x1650	1050x590x1650	1550x590x1650
External Dimension (WxDxH)mm	530x560x1080	600x630x1360	637x662x1590	850x1100x1930	1475x890x1780	1410x890x1950	2110x890x2050
Shelves	2(pcs)		3(pcs)				
Timing Range	1-5999min						
Remark	*F* model is with LCD display LRH-1000F, LRH-1500F is standard with two doors						

※ Specification test under non-load condition: ambient temperature is 20°C, and relative humidity is 50%.

## Touch Screen Microprocessor Controller (with timing function)



The cooling incubator is ideal for every application in microbiological field.

The wide range of temperature allows the growth of microorganisms in every environmental situation.

The stainless-steel chamber with rounded corners and removable shelves which make the sanification operations easy.

The PID regulator guarantee an excellent control by microprocessor and the limited number of setting keys ensures the convenience to operate.

### Features

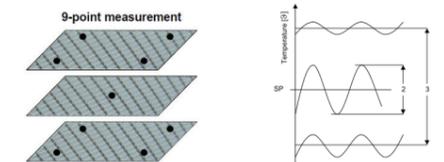
- Colourful touch screen controller.
- The lowest temperature could arrive -10°C ,the applications temperature is wider.
- Using environmentally friendly refrigeration system,fast cooling speed,saving energy and protecting environment.
- Using R134a refrigerant.
- Using advanced control technology,heating systems and refrigeration systems shift automatically.
- 304 stainless steel,mirror polishing processing,easy to clean and maintain.
- Reserving φ25mm test hole,could real-time test the temperature in working chamber.
- Pt100 temperature sensor provides high temperature sensitivity and the accuracy.
- With limited temperature alarm system.
- Programming setting function with 7 periods and 9 steps for each period, which means there are 63 programmable steps in total.

### Options

- RS485 connector and software
- UV Sterilizer
- BOD Socket

### Standard :DIN-12880

Independent adjustable temperature safety equipment, 2 class (DIN12880) , with second set of temperature alarm.The temperature data was measured according with part 2 of DIN12880 suggested, means the space between the body and wall equal to ten percent of the height , width, depth of the chamber.



test standard DIN-12880

## Specifications

Model	BC-60	BC-120	BC-250
Usable Volume	68L	120L	250L
Temperature Range	-10-80°C	-10-80°C	-10-80°C
Temperature uniformity(@25°C )	±1.0°C	±1.0°C	±1.0°C
Temperature Resolution	0.1°C	0.1°C	0.1°C
Timer Range	1-5999min	1-5999min	1-5999min
Number of Shelves	2	3	3
Max Number of Shelves	10	14	16
N/W	85Kg	100Kg	120Kg
Interior Dimension(WxHxD,mm)	400x450x380	500x600x400	550x750x600
Exterior Dimension (WxHxD,mm)	545x1000x670	645x1150x690	695x1300x890
Electrical Requirement	220V 50Hz	220V 50Hz	220V 50Hz
Power Consumption	1300W	1500W	1700W

## PLC Touch Screen Humidity Chamber

### Features

- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the height between the shelves in the chamber are adjustable.
- Homogeneity air circulating system.
- With temperature and humidity sensor.
- With programmable controller, large LCD screen.
- R134A refrigerant, With compressor and fan motor.
- A 25mm validation port on side of the chamber for easy testing operation and temperature validation.
- Over temperature and temperature deviation alarms.
- Compressor over-heat and over-load protections, fan motor over-heat and water-lack protections.
- Independent audible and visible temperature-limiting alarm system ensures experiments run safely.

### Options

- Micro printer
- Independent temperature limiting alarm system.
- RS485 connector can connect computer to record and print the parameters and the variations of temperature.

### Specifications

Model	BPS-50CH BPS-100CH	BPS-50CL BPS-100CL BPS-100CA BPS-100CB	BPS-250CL BPS-250CA BPS-250CB	BPS-500CL BPS-500CA BPS-500CB	BPS-800CL BPS-800CA	BPS-1000CL BPS-1000CA
Temperature control range	RT+10~85℃	L:-10~100℃ A:-20~100℃ B:-40~100℃				
Temperature accuracy	0.1℃					
Temperature Stability	±1.0℃	High temp:±0.5℃ Low temp:±1℃				
Humidity control range	80~95%RH	35~95%RH				
Humidity Accuracy	±3%RH					
Power Consumption	1450W 1650W	1700W 1900W 2300W 7050W	2300W 2700W 7100W	3850W 4150W 7850W	8050W 8050W	8050W 8050W
Ambient Temperature	+5~30℃					
Electrical Requirement	220V 50Hz	220V 50Hz 220V 50Hz 220V 50Hz 380V 50Hz	220V 50Hz 220V 50Hz 380V 50Hz	380V 50Hz	380V 50Hz	380V 50Hz
Interior Dimension(W×D×H,mm)	350×300×500 500×400×550	350×300×500 500×400×550	600×500×820	800×700×900	965×700×1430	900×700×1600
Exterior Dimension(W×D×H,mm)	720×620×725 650×800×1310	720×620×725 650×800×1310	750×900×1580	1000×1100×1860	1475×890×1780	1410×890×1950
Shelves	2PCS	2PCS	3PCS	3PCS	3PCS	3PCS



## PLC Touch Screen Humidity Chamber With Refrigeration System



The humidity chamber creates a climate of temperature and humidity, perfectly designed for the high requirements of stability and climate tests, conditioning or ageing. In each individual appliance, there is a homogenous and stable temperature and humidity distribution over the entire chamber. Chamber complies with the strict requirements of DIN 12880:2007-05 and is equipped with a maximum of safety functions.

### Features

- Colorful touch screen with microprocessor controller with timing function.
- Mirror polished stainless steel chamber with arc welding is easy to clean and disinfection.
- Accurate control of heating and refrigeration system ensure homogeneity of temperature and humidity.
- Refrigeration system colds down and condenses steam to ensure accurate humidity and temperature.
- R134A refrigerant is friendly to environment.
- Reserved  $\phi$  25 validation port is easy to validate the temperature real time.
- Independent temperature limits switch as secondary safety assurance.
- Programming setting function with 7 periods and 9 steps for each period, which means there are 63 programmable steps in total. (option)
- Microprinter and USB connection provides data recording.

### Specifications

Model	BH-60	BH-120	BH-250
Effective volume	68L	120L	252L
Temperature control range	-10~80℃	-10~80℃	-10~80℃
Temperature homogeneity(@25℃ )	±1.0℃	±1.0℃	±1.0℃
Temperature accuracy	0.1℃	0.1℃	0.1℃
Humidity control range	40~95%RH	40~95%RH	40~95%RH
Humidity deviation	±3%RH	±3%RH	±3%RH
Timer Range	1~5999min	1~5999min	1~5999min
Number of Shelves	2	3	3
Max Number of Shelves	10	14	16
N/W	95Kg	115Kg	135Kg
Interior Dimension(W×H×D,mm)	400×450×380	500×600×400	550×750×600
Exterior Dimension (W×H×D,mm)	570×1120×780	670×1270×200	720×1420×1000
Electrical Requirement	220V 50Hz	220V 50Hz	220V 50Hz
Power Consumption	2200W	2300W	2500W



## With Imported Infrared CO<sub>2</sub> Sensor

### Features

- Touch screen controller, 72-hour machine operation record query function to help user tracking abnormal conditions and trace historical operation information.
- Faster CO<sub>2</sub> concentration Restoration Speed.
- Infrared sensor can keep CO<sub>2</sub> concentration stability and uniformity when door open frequently.
- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- Microorganism filter at inlet provides 99.99% filtration of bacteria and dust ( $\Phi < 0.3\mu\text{m}$ ) and supplies pure CO<sub>2</sub> into the incubator.
- Door temperature controller prevents dewfall on glass door of incubator effectively.
- Independent audible and visible temperature-limiting alarm system ensures experiments run safely.
- Alarm function for temperature difference, CO<sub>2</sub> over concentration and concentration difference, door open time, UV working status.
- Auto-controller of fan speed to prevent damage to the samples.
- 90°C high temperature and humidity sterilization function.(RHP series)

### Options

- RS485 Connector: easy to download and save all the data via RS-485 into computer, and identify problems in time.
- High effective filter provides filtration of bacteria and dust.
- CO<sub>2</sub> pressure releasing valve.
- Humidity display system.
- Printer(Nested).
- Temperature-limiting alarm system.

### Specifications

Model	BPN-40RHP	BPN-80RHP	BPN-150RHP	BPN-190RHP	BPN-240RHP	BPN-60RWP	BPN-170RWP	BPN-240RWP
Electrical Requirement	220V 50Hz							
Screen	7" Touch screen							
Power Consumption	350W	500W	700W	750W	1000W	500W	700W	1000W
Heating Method	Air-jacketed, PID Control				Water-jacketed, PID Control			
Temperature Range	RT+5~50°C							
Ambient Temperature	+5~30°C							
Temperature Stability	±0.1°C							
CO <sub>2</sub> Range	0~ 20% V/V							
CO <sub>2</sub> Control Resolution	±0.1%(IR sensor)							
CO <sub>2</sub> Recovery	(Door open 30s,recovery to 5%) ≤ 3min							
Temperature Recovery	(Door open 30s,recovery to 37°C ) ≤ 8min							
Humidity Method	Natural vaporization ≥ 90%							
Chamber Volume	40L	80L	150L	190L	240L	60L	170L	24L
Interior Dimension (WxDxH)mm	400×286×350	400×450×500	480×530×610	520×530×690	600×630×670	380×290×550	530×460×720	600×520×780
Exterior Dimension (WxDxH)mm	590×440×576	590×687×790	670×770×880	708×710×1030	790×840×940	534×530×790	684×700×960	754×760×1020
Shelves	2(pcs)		3(pcs)			2(pcs)	3(pcs)	
Sterilization method	18hrs (90°C moist heat disinfection)					UV Sterilizer		



touch screen

## With Imported Infrared CO<sub>2</sub> Sensor

### Features

- Faster CO<sub>2</sub> concentration Restoration Speed.
- Imported Infrared sensor can keep CO<sub>2</sub> concentration stability and uniformity when door open frequently.
- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- Microorganism filter at inlet provides 99.99% filtration of bacteria and dust ( $\Phi < 0.3\mu\text{m}$ ) and supplies pure CO<sub>2</sub> into the incubator.
- Door temperature controller prevents dewfall on glass door of incubator effectively.
- Independent audible and visible temperature-limiting alarm system ensures experiments run safely.
- Alarm function for temperature difference, CO<sub>2</sub> over concentration and concentration difference,door open time, UV working status.
- Auto-controller of fan speed to prevent damage to the samples.
- UV light system for periodic sterilization of chamber.
- PID controller with LCD screen ensures precise and reliable control.
- Two-layer stacking available.

### Options

- RS485 Connector: Easy to download and save all the data via RS485 into computer, and identify problems in time.
- High effective filter provides filtration of bacteria and dust.
- CO<sub>2</sub> pressure releasing valve.
- Humidity display system.

### Specifications

Model	BPN-80CRH(UV)	BPN-150CRH(UV)	BPN-240CRH(UV)
Chamber Volume	80L	150L	240L
Temperature Range	Ambient+5°C ~50°C		
Electrical Requirement	220V 50Hz		
Power Consumption	500W	750W	950W
Ambient Temperature	+5~30°C		
Heating Method	Air-jacketed, PID Control		
Temperature Resolution	0.1		
Temperature Stability	±0.1°C		
Temperature uniformity(37°C)	±0.3°C		
CO <sub>2</sub> Range	0~ 20% V/V		
CO <sub>2</sub> Control Resolution	±0.1%(IR sensor)		
CO <sub>2</sub> Recovery	(Door open 30s,recovery to 5%) ≤ 3min		
Temperature Recovery	(Door open 30s,recovery to 37°C ) ≤ 8min		
Humidity Method	Natural vaporization ≥ 90%		
Shelves	2(pcs)	3(pcs)	
Interior Dimension (W×H×D)mm	400×450×500	480×530×610	600×630×670
Exterior Dimension(W×H×D)mm	590×687×790	670×767×880	788×837×940
Sterilization method	UV Sterilizer		



shelf

fan

## With Infrared CO<sub>2</sub> Sensor



### Features

- Faster CO<sub>2</sub> concentration Restoration Speed.
- Infrared sensor can keep CO<sub>2</sub> concentration stability and uniformity when door open frequently.
- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- Microorganism filter at inlet provides 99.99% filtration of bacteria and dust ( $\Phi < 0.3\mu\text{m}$ ) and supplies pure CO<sub>2</sub> into the incubator.
- Door temperature controller prevents dewfall on glass door of incubator effectively.
- Independent audible and visible temperature-limiting alarm system ensures experiments run safely.(Option)
- Alarm function for temperature difference, CO<sub>2</sub> over concentration and concentration difference, door open time, UV working status.
- Auto-controller of fan speed to prevent damage to the samples.
- UV light system for periodic sterilization of chamber.
- PID controller with LCD screen ensures precise and reliable control.
- Two-layer stacking available.

### Options

- RS-485 Connector: easy to download and save all the data via RS-485 into computer, and identify problems in time.
- High effective filter provides filtration of bacteria and dust.
- CO<sub>2</sub> pressure releasing valve
- Humidity display system
- Printer(Nested)
- Temperature-limiting alarm system
- Cooling system



### Specifications

Model	BPN-50CH(UV) BPN-80CH(UV)	BPN-150CH(UV)	BPN-240CH(UV)	BPN-30CW(UV) BPN-80CW(UV)	BPN-150CW(UV)
Electrical Requirement	220V 50Hz				
Power Consumption	450W/500W	750W	750W	250W/680W	950W
Heating Method	Air-jacketed, PID Control			Water-jacketed, PID Control	
Temperature Range	RT+5~50°C				
Ambient Temperature	+5~30°C				
Temperature Stability	±0.2°C			±0.1°C	
CO <sub>2</sub> Range	0~ 20% V/V				
CO <sub>2</sub> Control Resolution	±0.1%(IR sensor)				
CO <sub>2</sub> Recovery	(Door open 30s,recovery to 5%) ≤ 3min				
Temperature Recovery	(Door open 30s,recovery to 37°C) ≤ 8min				
Humidity Method	Natural vaporization ≥ 90%				
Chamber Volume	50L/80L	150L	240L	26L/80L	150L
Interior Dimension(W×D×H)mm	400×350×350 400×450×500	480×530×610	600×630×670	290×290×310 400×400×500	500×500×650
Exterior Dimension(W×D×H)mm	580×450×540 590×657×870	670×710×950	788×837×940	440×410×544 550×520×764	650×615×914
Shelves	2(pcs)	2(pcs)	3(pcs)	2(pcs)	3(pcs)
Sterilization method	Sterilization method				

## LCD/Touch Programmable Controller (with timing function)



### Features

- LCD or Touch screen with microcomputer control, mirror polish stainless steel chamber with semicircular arcs at four corners.
- Homogeneity air circulating by fan.
- Over temperature and temperature deviation alarm.
- Capacitance humidity sensor and PT 100 temperature sensor.
- Automatically temperature and humidity balance system.
- Reserved  $\phi 25$  validation port is easy to validate the temperature real time.
- R134A refrigerant is friendly to environment.
- Two sets compressors and fans work alternately that ensure no frost will be produce during test.
- With built in microprinter.

### Components safety

- Compressor over heat and over pressure protection, fan over heat protection, over temperature, over load and water lack protections.

### Options

- Illumination and UV light display,monitoring and control system that comply with ICH.Q1B requirements for Intense light irradiation experiment.
- Independent temperature limits switch as secondary safety assurance.
- RS485 or RS-232 communication port.

### Programmable Touch Screen

- Large LCD screen to display more data at same time.
- English operation menu, display current data curves.
- 100 groups with 1000 periods 999 circulations, max timing for each period is 99 hours 59 minutes.
- Auto lock after setting data.
- Available to programe on computer via RS-484 or RS-232.
- Record temperature and time curves, data storage and logging function.

### Specifications

Model	LHH-80SD LHH-150SD LHH-250SD LHH-500SD	LHH-80SDP LHH-150SDP LHH-250SDP LHH-500SDP	LHH-800SD LHH-1000SD LHH-1500SD	LHH-800SDP LHH-1000SDP LHH-1500SDP
Temperature control range	0~65°C without illumination,10-65°C with illumination			
Temperature Stability	±0.5°C			
Temperature Uniformity	±2°C			
Humidity Rang	35~95%RH			
Humidity Stability	±3%RH			
Timing Rang	Each period 1~5999min			
Controller	Programmable ( LCD screen)	Programmable ( touch screen)	Programmable ( LCD screen)	Programmable ( touch screen)
Ambient Temperature	+5~30°C			
Electrical Requirement	AC220V 50Hz		AC380 50Hz	
Power Consumption	2000W/2100W/2300W/3750W		7150W/7150W/10600W	
Chamber Volume	80L/150L/250L/500L		800L/1000L/1500L	
Interior Dimension (W×D×H)mm	400×400×500 550×405×670 600×500×830 670×725×1020		800×590×1650 1050×590×1650 1550×590×1650	
External Dimension (W×D×H)mm	550×790×1080 690×805×1530 740×890×1680 850×1100×1930		1360×890×2000 1610×890×2000 2110×890×2000	
Shelves	2/3/3/4(pcs)		4(pcs)	

### Illumination specification (Option)

Illumination	Cold white fluorescence and UV light
spectrum range	UV @320nm~400nm, peak wavelength @365nm
Intense/Deviation	Cold white fluorescence 0-6000lux/±500lux, UV0-5W/m2
Standard configuration	Cold white fluorescence (D65,6500K) comply with ISO10977;UVA@340nm~400nm Ultraviolet fluorescent lamp
Comply standard	GMP general standard,ICH-Q1B Cold white fluorescence≥1.2*106 Lux,hr, Ultraviolet fluorescent lamp≥200w.hr/M2



## Touch Screen Microprocessor Controller (with timing function)



Using xenon arc lamp to simulate full solar spectrum and reproduce the aging light environment in different condition, it provides the corresponding environment simulation and the accelerate test for scientific research, product development and quality control.

### More real xenon lamp

- The xenon arc lamp reoccurs the full solar spectrum vividly which include ultraviolet, visible light and red light. With high quality lamp and the use life up to 1200~1500 hours.

### Fast test results

- It can accelerate the aging experiment to achieve the effect of rapid aging.

### Enhanced mirror illuminate

- Polished stainless-steel chamber makes the exposed area large enough and uniformity, and enhanced the light irradiance and shorten the exposure time of sample.

### Water spraying system(B-SUN-II)

- Through the pure water spraying system simulates the wet erosion phenomenon, the spraying could operation dark or light cycle.

### Automatic Irradiance Control System

- It could real time monitor and control the light intensity to ensure the repeatability of the test results, The control point of irradiance could choose 340nm, 420nm or 300~400nm.

### Automatic Blackboard Temperature Monitor and Control

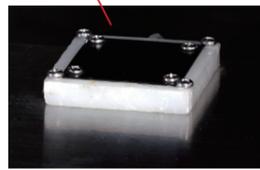
- B-SUN uses the blackboard temperature sensor monitor the exposure temperature of sample accurately. (Cooling way: air cooling).

### Easily calibrate light sensors

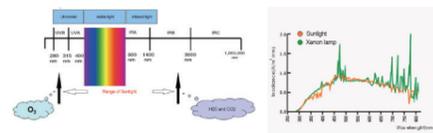
- Irradiance sensors need to be regularly calibrated by the user. The illuminometer must be compatible with the B-SUN.

### Control system easy to operate and stable

- 9.7 inch touch screen, easy to understand and operate. Irradiation, blackboard temperature, rain cycle and so on could be easily set and display.
- Touch screen can display all parameters and diagnose the fault information automatically, With over-temperature protection and over-load protection.
- It provides referring and setting related industry standards. (could set 10 periods)



Blackboard thermometer



The spectrum of sun and Xenon lamp

## Specifications

Model	B-SUN-I	B-SUN-II
Working chamber Dimension (WxDxH,mm)	320x320x320	
Exterior Dimension (WxDxH,mm)	890x580x590	
Control system	Siemens PLC	
Program function	4 groups standard program built-in and 2 groups program can be set	
Sample area	930cm <sup>2</sup>	
Sample surface temperature monitoring	blackboard temperature automatic control by sensor	
Irradiance control	340nm,420nm or 300nm-400nm Wavelength automatic control (standard with@340nm High-precision sensors)	
Spraying system	NO	YES
Lamp cooling method	air cooling	
Sample shelf type	Flat plate type	
Lamp	Standard lamp tube, or Atlas lamp tube(optional)	
Electrical requirement	3500W	
Power consumption	220V, 50Hz	

## Touch Screen Microprocessor Controller (with timing function)



### Product Features

#### Display

- 4.3 inch touch screen, menu type interface could set parameters fast, which is easy to understand and operation.
- BPT sensor, cabinet temperature and rain cycle etc, which can be visually setting and displaying.

#### light source

- With 4 pieces of 20W ultraviolet lamp, more stable and the life of the lamp is up to 5000 hours.

#### Controller

- B-UV-S series provide 3 spray headers which can meet the uniformity of rainfall for flat sample rack.
- Radiation intensity adjustment with optional RM-20 irradiance meter which by manual adjustment.
- Blackboard temperature self-control by test set value, to meet user for lighting, condensation, spray, temperature and other aging test chamber.

#### Sample shelf

- Build-in 4 pieces of 70x150 flat sample racks, the users can test for three-dimensional or flat samples.



## Specifications

Model	B-UV-S( desktop)	B-UV-I	B-UV-II
Temperature Range	Light cycle	45°C -80°C	
	Condensation cycle	40°C -60°C	
Light source	Type	UVA	UVA or UVB fluorescent ultraviolet lamp
	Power	20W/pc, total 4 pcs	40W/pc, total 8pcs
	Wavelength range	Standard with UVA@340nm	Standard with UVA@340nm Optional@351nm or UVB@313nm
	Irradiance	Handle	Irradiance automatic control
Calibration function	No	Have	
Spraying function	3-hole spraying	No	12-hole sample spraying device
Sample shelf size	8 pcs standard sample test shelf	18 pcs standard sample test shelf ( 75x150mm )	
Center distance between sample and lamp	150mm~280mm	50mm±3mm	
Exterior dimension (WxDxH,mm)	770x565x690	1200x450x1500	
Cycle mode	Dark, light, spray, condensate set multi-cycle automatic control		
Light control	Handle	Irradiance automatic monitoring and control	
Electrical requirement	220V 50Hz		
Power consumption	2000W		

## Meeting Standards

Standard Type	Standard NO.		
ASTM	G154	G553	D5208
	D4329	D499	D4587
BS	2782	-	-
ECCA	T10	-	-
ISO	11503	4892-3	11507
JIS	D0205	-	-
PrEN	1062-4	-	-
SAE	J2020	-	-

## LCD Microprocessor Controller (with timing function)



The BEING Orbital Shakers are the preferred method for blending samples inside tubes and flasks. Precision smooth orbital shaking motion is essential for many lab applications. Specific applications are fermentation, hybridization, chemical and biochemical reactions. BEING's PID controller provides accurate speed with timed runs. Auto off and alarm occurs when the real shaking speed is 10% different from setting value, and motor will stop automatically. Speed controller ensures smooth start/stop which can prevent the liquid spill to damage the equipment.



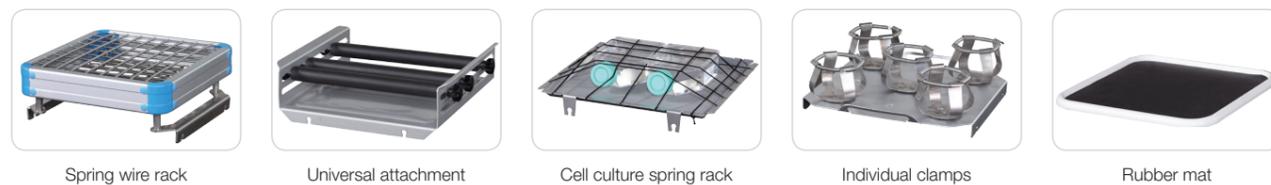
### Features

- Colorful LCD display.
- PID microprocessor controls shaking speed, and timing.
- Smooth start and stop system prevents liquid spillage.
- Stainless-steel and easy to clean platform.
- DC brushless motor provides long term reliability.
- Safety alarm and shutdown feature for speeds 10% over set speed.
- A large number of accessories (platforms, tube-racks, and flask clamps) to accommodate various needs.

### Specifications

Model	BS-1	BS-2	BS-3
Speed	40~250rpm	40~250rpm	40~300rpm
Frequency	20rpm	20rpm	20rpm
Maximum Capacity	1500ml	4000ml	6000ml
Amplitude of Tray	20mm	20mm	20mm
Platform size(mm)	250×250	350×350	450×450
Exterior Dimension (W×H×D)mm	290×110×376	390×124×495	490×137×604
Timer	1~5999min	1~5999min	1~5999min
Net Weight	20 kg	30 kg	40 kg
Electrical Requirement	220V 50Hz		
Power Consumption	60W		

### Options



## LCD Microprocessor Controller (with timing function)

The shaking incubator combines in one instrument two typical laboratory operation: shaking and incubation of samples. Combining the convenience of a benchtop incubator and a shaker, it is ideal for cell culture, solubility studies, extraction procedures and many other laboratory applications.

### Features

- Large LCD screen to display more data at same time.
- Stainless-steel chamber and platform, easy to clean.
- Big observation windows.
- Microprocessor controller for temperature and shaking speed with timing function.
- Self-check function easy to identify problems.
- Smooth start and stop system prevents liquid spillage.
- Auto-controller of fan speed to prevent damage to the samples.
- Safety door switch, auto pause operation when door is opened.
- High effective filter provides filtration of bacteria and dust.
- Temperature-limiting alarm system, auto switch off when over-temperature. (option)
- RS485 connector can connect computer record and inspect the parameters and the variations of temperature. (option)



### Specifications

Model	BSI-1	BSI-2	BSI-3
Temperature Range	RT+5~65°C		
Temperature Resolution	0.1°C	0.1°C	0.1°C
Platform Size(W×D,mm)	250×250	350×350	450×450
Interior Height (H,mm)	220	270	320
Exterior Dimension (W×H×D,mm)	390×370×590	490×450×690	590×550×800
Maximum Capacity	1500ml	4000ml	6000ml
N/W	32 Kg	42 Kg	52 Kg
Convection	Forced Convection	Forced Convection	Forced Convection
Shaking Speed Range	40~250rpm	40~250rpm	40~300rpm
Speed Accurouce	±1rpm	±1rpm	±1rpm
Amplitude	20mm	20mm	20mm
Spring Wire Rack	Standard	Standard	Standard
Timer Range	1~5999mins	1~5999mins	1~5999mins
Electrical Requirement	AC220V/50Hz	AC220V/50Hz	AC220V/50Hz
Power Consumption	450W	650W	750W

Clips for flasks	BSI-1/BS-1	BSI-2/BS-2	BSI-3/BS-3
50(ml)	16	-	-
100(ml)	8	25	-
250(ml)	4	16	18
500(ml)	1	8	9
1000(ml)	-	4	5
2000(ml)	-	2	3

## LCD Microprocessor Controller (with timing function)

It is widely used in cell culture, fermentation, hybridization, biochemistry, and cell organization studies that require for temperature and shaking frequencies. It can be used for the movement and static cultivation of microbial cells and all kinds of bacteria, and applications in the field of laboratory, analytical and process equipment.

### Features

- Large LCD screen to display more data at same time.
- R134a refrigerant, imported compressor and fan motor.
- Big observation windows.
- 304 Stainless steel chamber and platform, easy to clean.
- There is a 25mm instruction connection hole on the left side of the chamber for easy testing operation and temperature measurement.
- The parameters can be automatically stored in case of power failure, and it will continue run as presetting program after turn on.
- Microprocessor PID controller for temperature and shaking speed with timing function.

### Safety

- Safety door switch, auto pause operation when door is opened.
- Smooth start and stop system prevents liquid spillage.
- Auto-controller of fan speed to prevent damage to the samples.
- Self-diagnosis function, it will display error when failure.
- Maintenance-free brushless DC motor can continuous operation for long time.

### Option

- Temperature-limiting alarm system, auto switch off when over-temperature.
- RS485 connector or USB interface can connect computer record and inspect the parameters and the variations of temperature.
- Intelligent programmable temperature controller.
- Printer(Nested).

### Specifications

Model	HZQ-X500 Double-deck	HZQ-X700 Double-deck	HZQ-X500C Double-deck	HZQ-X700C Double-deck
Electrical Requirement	220V 50H			
Shaking Speed Range	40~300r/min			
Amplitude	26mm			
Temperature Range	RT+5~65℃		4~65℃	
Display Resolution	0.1℃			
Timing Range	1~5999min			
Power Consumption	1900W	1900W	2250W	2250W
Platform Size(mm)	750x460x2pcs	920x500x2pcs	750x460x2pcs	920x500x2pcs

### Platform used for flask clamp and tube holder.Maximum of flask clamp (Monolayer)

Model	HZQ-X500 HZQ-X500C	HZQ-X700 HZQ-X700C	HZQ-211 HZQ-211C	HZQ-311 HZQ-311C
Flask(pc)	50ml	82	116	82
	100ml	50	66	50
	250ml	28	45	28
	500ml	23	28	23
	1000ml	12	18	15
	2000ml	-	10	8

## LCD Microprocessor Controller (with timing function)



### Features

- Large LCD screen to display more data at same time.
- R134a refrigerant, imported compressor and fan motor.
- Big observation windows.
- 304 Stainless steel chamber and platform, easy to clean.
- The parameters can be automatically stored in case of power failure, and it will continue run as presetting program after turn on.
- Microprocessor PID controller for temperature and shaking speed with timing function.

### Safety

- Safety door switch, auto pause operation when door is opened.
- Smooth start and stop system prevents liquid spillage.
- Auto-controller of fan speed to prevent damage to the samples.
- Maintenance-free brushless DC motor can continuous operation for long time.
- Self-diagnosis function, it will display error when failure.

### Option

- Temperature-limiting alarm system, auto switch off when over-temperature.
- RS485 connector or USB interface can connect computer record and inspect the parameters and the variations of temperature.
- Intelligent programmable temperature controller.
- Printer(Nested).

### Specifications

Model	HZQ-211	HZQ-311	HZQ-211C	HZQ-311C
Electrical Requirement	220V 50Hz			
ShakingSpeed Range	40~300r/min			
Amplitude	26mm			
Temperature Range	RT+5~65℃		4~65℃	
Display Resolution	0.1℃			
Power Consumption	1050W		1300W	
Platform Size(mm)	750x460	920x500	750x460	920x500
External Dimension (W×H×D)mm	1080x620x915	1250x660x915	1080x620x915	1250x660x915
Timing Range	1~5999min			

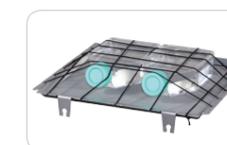
### Options



Spring wire rack



Universal attachment



Cell culture spring rack



Individual clamps



Rubber mat



## LCD Microprocessor Controller (with timing function)



### Features

- Large LCD screen to display more data at same time.
- R134a refrigerant, imported compressor and fan motor.
- Big observation windows.
- 304 Stainless steel chamber and platform, easy to clean.
- There is a 25mm instruction connection hole on the left side of the chamber for easy testing operation and temperature measurement.
- The parameters can be automatically stored in case of power failure, and it will continue run as presetting program after turn on.
- Microprocessor PID controller for temperature and shaking speed with timing function.

### Safety

- Safety door switch, auto pause operation when door is opened.
- Smooth start and stop system prevents liquid spillage.
- Auto-controller of fan speed to prevent damage to the samples.
- Self-diagnosis function, it will display error when failure.
- Maintenance-free brushless DC motor can continuous operation for long time.

### Option

- Temperature-limiting alarm system, auto switch off when over-temperature.
- RS485 connector or USB interface can connect computer record and inspect the parameters and the variations of temperature.
- Intelligent programmable temperature controller.



## Specifications

Model	THZ-98A(Monolayer) THZ-98AB (Double-deck)	HZQ-X300 (Double-deck)	HZQ-F160A (Monolayer)	THZ-98C (Double-deck)	HZQ-X300C (Double-deck)
Electrical Requirement	220V 50Hz				
Shaking Speed Range	40~300r/min				
Amplitude	20mm				
Temperature Range	RT+5~65℃		4~65℃		
Display Resolution	0.1℃				
Power Consumption	750W	1100W	950W	950W	1300W
Platform Size(mm)	400×340	500×350	400×300	400×340	500×350
Exterior Dimension (W×D×H)mm	635×714×1055	725×720×1150	635×714×1055	635×714×1055	725×720×1150
Timing Range	1~5999min				

## Platform used for flask clamp and tube holder. Maximum of flask clamp (Monolayer)

Model	THZ-98A	THZ-98AB THZ-98C	HZQ-X300 HZX-X300C	HZQ-F160A	
Flask(pc)	50ml	29	29	37	29
	100ml	18	18	22	18
	250ml	11	11	14	11
	500ml	7	7	10	7
	1000ml	4	4	6	4
	2000ml	-	-	-	3

## LCD Microprocessor Controller (with timing function)



The BEING Water Baths provide the user with a constant temperature environment that only can be obtained when samples are totally immersed in water. BEING Baths offer a variety of sizes, excellent specifications and safety features.

### Features

- Large colorful LCD display.
- Water level sensor shuts down further heating to the tank upon low water volumes.
- Audible and Visual Alarm indicators when water level reaches critical levels.
- 304 stainless steel molded tank.
- A variety of tube racks can be used for different test tubes.
- The standard stainless-steel bottom plate, helps prevents direct contact by accessories and tubes to heating element and sensors.
- Drain valve makes emptying of bath water fast and easy for cleaning and moving.
- A variety of tube racks and accessories.



water level sensor



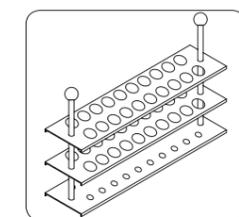
Holed bottom plate



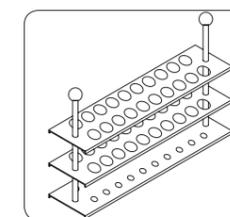
## Specifications

Model	BWB-12	BWB-22
Temperature Range	Ambient+5~100℃	
Temperature Fluctuation	±0.3℃	
Tracking Alarm	≤0.2℃	
Timer	1~5999min	
Internal Dimension(W×H×D)mm	305×130×246	505×150×330
External Dimension(W×H×D)mm	355×340×264	559×340×343
Net Weight	12 Kg	18 Kg
Electrical Requirement	AC220V / 50Hz	
Power Consumption	750W	1450W

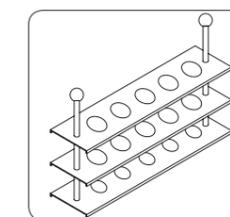
## Rack for Tubes



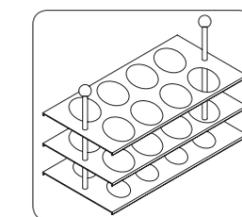
Φ13mm × 20



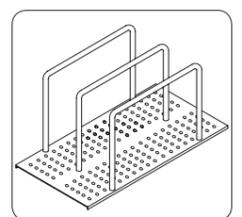
Φ18mm × 20



Φ31mm × 5



Φ56mm × 8



Blood bag holder

## LCD Microprocessor Controller (with timing function)

Provided for precise and constant temperature and auxiliary heating in colleges industrial and mining enterprises and scientific research departments.

### Features

- Microprocessor temperature controller.
- Audible and visible alarm for temperature and water level.
- R134a refrigerant, imported compressor.
- With interface to external water bath.
- RS485 connector is option which can connect computer to record the parameters and the variations of temperature.(option)



### Specifications

Model	Temperature Range	Precision	Interior Dimension	Chamber volume	Electrical Requirements	Pump (flux)	Power Consumption
MP-5H	RT+5~100°C	±0.1	150×160×150	6.7L	220V 50Hz	8L/min	1050W
MP-13H			240×170×150	10.9L			1050W
MP-19H			330×300×150	22.5L			1050W
MPG-13A	RT+5~100°C	±0.2	180×300×150	14.5L			1050W
MPG-100H	RT+5~100°C		240×170×200	14.5L			1050W
MP-501A	RT+5~100°C			1050W			
MP-10C	-10~100°C		150×160×150	4.5L			2300W
MP-20C	-20~100°C						2300W
MP-30C	-30~100°C						2800W
MP-40C	-40~100°C						3150W
MP-50C	-50~100°C						3100W
MPG-10C	-10~100°C						240×170×200
MPG-20C	-20~100°C				2300W		
MPG-40C	-40~100°C	3100W					
MPG-50C	-50~100°C	3100W					
MP-5 (controller)	-100~200°C	0.1			130×150×330	≤50L	

※ When setting temperature is above 80°C , liquid medium should be mineral oil.

※ When setting temperature is below 5°C , liquid medium should be antifreeze (Absolute alcohol or absolute glycol)

※ Ambient temperature: +5-35°C

### Specification test condition

- Ambient temperature: 20°C
- Electrical requirements: 220V/50Hz
- Liquid medium: pure water



MP-13H  
MP-19H



MPG-100H

## Shaking Water Bath

### LED Microprocessor Controller (with timing function)

Widely applicable for laboratory researches on bacteria cultivation, fermentation, hybridization, chemical and biochemical reaction, enzymes and tissues research, which have a high requirement on precision of shaking speed and temperature.



### Specifications

Model	DKZ-1	DKZ-2B	DKZ-3 DKZ-3B	DKZ-1C
Temperature Range	RT+5~99°C			10~99°C
Display Resolution	0.1°C			
Temperature Uniformity	±1°C			
Shaking Speed Range	30~150rpm			
Amplitude	30mm (Standard) or 40mm (Option)			
Power Consumption	1250W		1650W	1500W
Interior Dimension(W×D×H)mm	438×310×250		618×310×250	
Exterior Dimension(W×D×H)mm	643×350×353		823×350×355	

※ Remark: Shell and chamber are all stainless steel with an "B"

Options : Intelligent programmable temperature controller

## Water Bath

### Microprocessor controller (with timing function)

#### Features

- A stamping molding stainless steel tank, easy to clean.
- LCD screen, multiple data display with timing function, easy to operate.
- Stainless steel shelves cover heater and sensor to avoid damage during using.
- Once-forming stainless steel lid.
- Cut off heater automatically in case of lack of water, meanwhile visible and audible alarm ensures to remind users in time.
- Independent temperature-limiting alarm system.
- temperature error alarm.
- Test tube holder can be placed. (Option)



BWS-20

BWS-10

### Specifications

Model	BWS-5	BWS-10	BWS-20	BWS-0505	BWS-0510	BWS-12 BWS-12G	BWS-27 BWS-27G
Electrical Requirement	AC220 50Hz						
Power Consumption	500W	1000W	2050W	500W+500W	500W+1000W	800W	1000W
Temperature Range	RT+5~99°C					RT+5~100°C RT+5~80°C	
Temperature Stability	±0.3°C					±0.2°C	
Temp Alarm	±2°C					0.1°C	
Interior Dimension(W×D×H)mm	130×280×150	220×280×150	290×490×150	130×280×150	130×280×150 290×490×150	300×240×200	500×300×200
Exterior Dimension(W×D×H)mm	396×250×260	396×330×260	600×390×260	450×395×260	526×395×260	480×300×480	680×360×390
Timing Range	1~5999min						
Chamber Volume	2holes Φ112mm	4holes Φ92mm	6holes Φ92mm	2holes+2holes	2holes+4holes	11L	20L

※ Remark: With electromagnetic-pump is marked with an "G"

## LCD Microprocessor Controller (with timing function)



The BEING Magnetic Heated Stirrers offer a large variety of sizes and temperature ranges to accommodate your laboratory needs. Our stirrers provide a user friendly PID controller offering a large LCD color screen for easy viewing. They are constructed for durability, high performance and safety.

### Features

- Large LCD screen to display more data at same time.
- External temperature sensor for liquid, temperature range from ambient temperature to 200°C .
- Free-step speed adjustment.
- Die-cast Aluminum alloy external chamber.
- Aluminum alloy working plate.
- Over-temp alarm system, auto switch off when 470°C .
- Caution indication light when plate temperature reach 50°C .

### Differences between A/B series

- Magnetic Stirrer Series BMS-07A and BMS-09A include external temperature sensor which can measure liquid's temperature directly. Temperature range is from Ambient +5 °C to 200 °C .
- Magnetic Stirrer Series BMS-09B and BMS-07B are able to reach highest temperature as 450 °C .



### Specifications

Model	IT-07A3	IT-09A5	IT-09A12	IT-07B3	IT-09B5
Stirring capacity (H <sub>2</sub> O)	3L	5L	12L	3L	5L
Liquid temp range	RT+5°C ~200°C				/
Working plate temp range	/			ambient+5°C ~320°C	
Speed rang(rpm)	200~2000				
Temperature accuracy	±1%				
Plate dimension(mm)	130×130	180×180	180×180	130×130	180×180
Exterior dimension (W×H×D)mm	150×110×249	210×130×330	210×129×330	150×110×249	210×129×330
POWER(AC Hz)	220V/50				
Heating power / Input power (Max. W)	400/500	550/600	650/750	400/500	550/600
Weight(KG)	4	5	5	3.5	4.5

### Specifications

Model	IT-08A3	IT-08B3	IT-08C5
Stirring capacity (H <sub>2</sub> O)	3		5
Liquid temp range	200~2000		
Working plate temp range	550W		—
Speed rang(rpm)	600W		50W
Liquid temp range	RT+5 ~ 200°C	—	—
Working plate temp range	—	RT+5 ~ 400°C	—
Temperature accuracy	±5°C	±15°C	—
Plate dimension(mm)	Φ 145		
Exterior dimension (W×H×D)mm	150×250×130		
Weight(KG)	4.0	3.5	

## LCD Microprocessor Controller (with timing function)



Serve for chemical element analysis and high-temperature heat treatment for quenching, annealing, tempering of small steel parts which applied in industrial and mining enterprises, universities and research institutes; it can also be used for sintering, dissolution, analysis such high temperature heating of metals, stone tools and ceramics.

### Features

- Unique design of furnace door makes opening door safe and easy, ensure the heat of furnace will not leak out.
- Microcomputer PID controller, easy to operate, accurate, reliable and safe temperature control
- Corrosion-resistant light weight furnace ensure long-term life.
- The excellent door seal makes the heat loss minimum and increases the uniformity of the temperature in the furnace.
- PID Programmable controller with 7 periods and 9 steps for each period, which means there are 63 programmable steps in total, 0~5999mins for each periods and can set rising or remain temperature, and provide a program of temperature, time, heating power cycle.
- Programmable temperature controller can make experiments procedure more simple to realize automatic control. Door and body are all made of stainless steel which with anti-corrosion.

### Safety

- The safety switch will automatic shutdown when door open ensures the safety of the operator, fan motor over-heat and abnormal alarm system( ① Heater , ② temperature sensor, ③ memory contents, ④ over temperature) sound and light alarms reminders operator and ensures experiments run safely
- Over-current, over-voltage, overheat and various safety measures to ensure safety.
- Ceramic fiberboard insulation material with good heat insulation effect, low temperature on shell surface.

### High quality energy-saving design

- The safety performance design prevents the high energy consumption. Double-layer structure and cooling fan to make the furnace body is near room temperature during use.

### Furnace material

- Firebrick furnace (N series) use of traditional refractory materials, wide range of applications, long life and economic.
- Ceramic fiber furnace (T series) with light weight, fast heating speed, saving energy and time etc. to satisfy the requirements under various conditions.

### Specifications

Model	Max. Temp	Volume	Interior Size(mm)	Exterior Size(mm)	Electrical	Power	Heating Element	Temp Accuracy /Uniformity
BX2-2.5-10NPCr	1000	2L	120×200×80	400×580×610	220V/50HZ	2.5KW	Electric furnace wire	±1°C /5°C
BX2-4-10NPCr	1000	7L	200×300×120	520×650×660	220V/50HZ	4KW	Electric furnace wire	
BX2-8-10NPCr	1000	16L	250×400×160	570×810×740	380V/50HZ	8KW	Electric furnace wire	
BX2-12-10NPCr	1000	30L	300×500×200	700×930×845	380V/50HZ	12KW	Electric furnace wire	
BX2-2.5-12NPCr	1200	2L	120×200×80	400×580×610	220V/50HZ	2.5KW	Nickel chrome wire	
BX2-5-12NPCr	1200	7L	200×300×120	520×650×660	380V/50HZ	5KW	Nickel chrome wire	
BX2-10-12NPCr	1200	16L	250×400×160	570×810×740	380V/50HZ	10KW	Nickel chrome wire	
BX2-2.5-10TPCr	1000	2L	120×200×80	400×580×610	220V/50HZ	2.5KW	Electric furnace wire	
BX2-4-10TPCr	1000	7L	200×300×120	520×650×660	220V/50HZ	4KW	Electric furnace wire	
BX2-8-10TPCr	1000	16L	250×400×160	570×810×740	380V/50HZ	8KW	Electric furnace wire	
BX2-10-12TPCr	1200	16L	250×400×160	570×810×740	380V/50HZ	10KW	Nickel chrome wire	



## LCD Microprocessor Controller

Rotary evaporators (also known as "Rotovaps") are mainly used for distillations/separation applications often used for medicinal chemistry, pharmaceutical, chromatography, and petrochemical fields. In summary the system works by increasing the rate of evaporation of the solvent by (1) reducing the pressure to lower the solvent boiling point (2) rotating the sample to increase the effective surface area (3) heating the solution (4) then the evaporated solvent then condenses in a cooled glass condenser.

### The Main Components of a Rotary Evaporator are

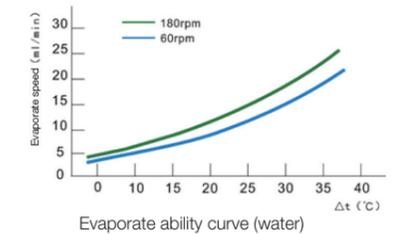
- Motor unit that rotates the evaporation flask or vial containing the user's sample.
- Heated fluid bath (generally water to heat the sample).
- Vapor duct that is the axis for sample rotation, and acts as a vacuum-tight conduit for the vapor being drawn off the sample.
- Vacuum system (an oil free vacuum pump/diaphragm pump) to substantially reduce the pressure within the evaporator system.
- Condenser (this normally connects to a recirculating chiller) with a coil passing coolant (water or ethanol).
- Condensate-collecting flask at the bottom of the condenser to catch the distilling solvent after it re-condenses.
- Mechanical or motorized mechanism to quickly lift the evaporation flask from the heating bath.

### BEING Rotary Evaporator features

- Simple design for one handed operation manually or automatically.
- A unique PTFE sealing system provides exceptional thermostability, minimizes corrosion, and helps to ensure day in day out headache free operation.
- The vertical condenser with dual spiral glass tubing provides a condensing surface area of 0.15m<sup>2</sup>.
- Evaporation speeds of 22ml/min.
- Our Bath offers a dual heating mode for water and oil with overheat protection.
- PID controller offers easy input of parameters and large LCD display for easy viewing.
- Vacuum regulator available.
- Available 110V and 220V power voltage.

### Specifications

Model		RV-211M	RV-211A
Performance	Rotation speed	20-180rpm	
	Water bath temperature range	RT+5~100°C	
	Evaporating speed	22ml/min	
	Ultimate vacuum	8mbar	
Features	Speed setting	LCD display with knob	
	Lifting mode	Manual	automatic
	Motor function	N/A	DC brushless motor
Structure and composition	Main motor DC brushless	DC brushless motor	
	Condenser	Snake Condensate Condensate Area 0.15m <sup>2</sup> , 1L Rotary Bottle, 1L Collecting Bottle, TS29 / 38 Bottle Clamp, Ball Face S35 / 20	
	Vacuum Seal	PTFE and Teflon Coating	
Heating bath	interior wather bath size	D230mm-H130mm	
	Water bath material	Stainless steel Corrosion resistant coating	
	Heating power	120VAC 50HZ 1000W	
Temperature range	5~35°C		
Electrical input	DC24V 2.5W		

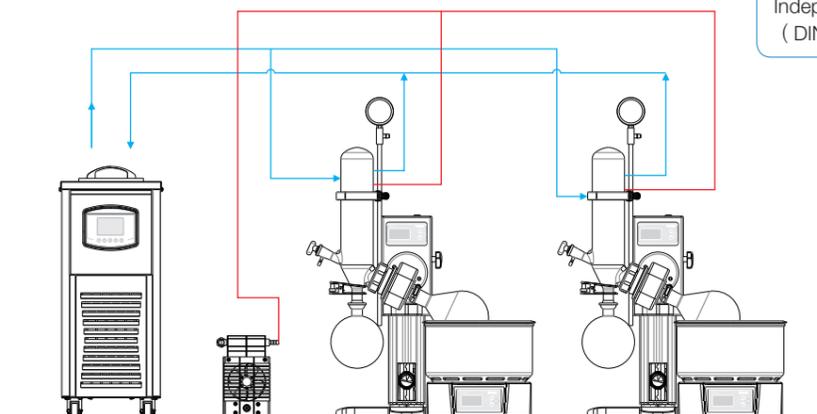


### Water/Oil dual use water bath

Basic version equipped with built-in heater; Pro version equipped with external heater which is easy to clean after use.



### High efficiency can be cycle used for two Rotary Evaporators



**Standard :DIN-12880**  
Independent temperature safety equipment, 2 class (DIN12880) .

- Cooling ———
- Reduce pressure ———
- Working condition
  - 20°C AC220V 50HZ: Ambient temp
  - 20°C AC220V 50HZ
  - 1L Rotary bottle
  - Water Bath temp: Set at 40°C
  - Coolant (alcohol/water): set the temperature at 10°C
  - Rotation speed: 120rpm

## The recirculating chiller with new design and new features!

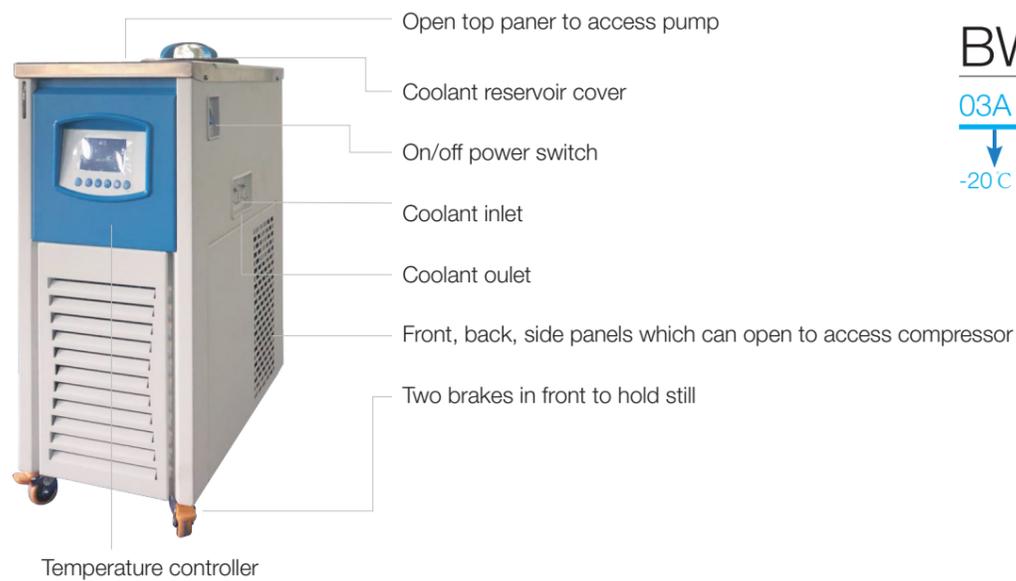
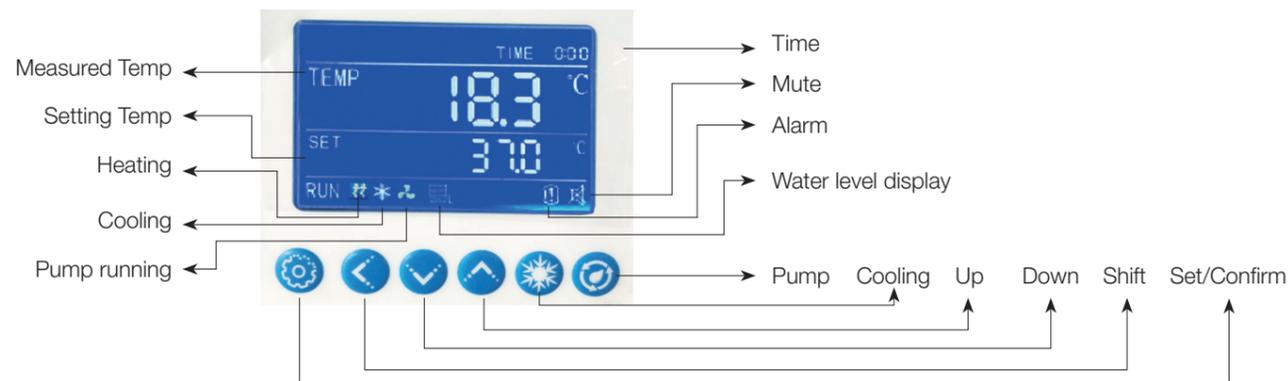
The chiller will provide stability and low temperature environment for experimental instruments like rotary evaporator, etching device high temperature electrode, laser processing machinery heating parts, or spectrophotometer heating module. The precise temperature control provides out-class system cooling effect, prevents damage from overheating and improves the cooling ability of the instrument.

### Features

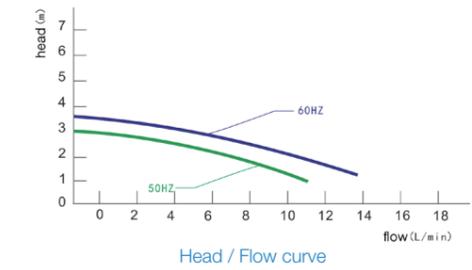
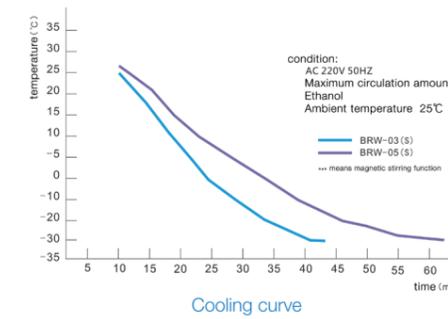
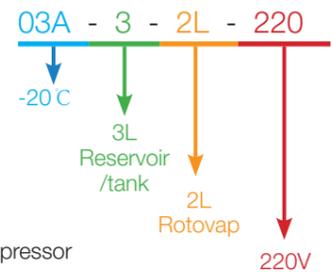
- Eco-friendly refrigerant R404A.
- Cooling parts made by high purity copper nickel plating process with high heat exchange efficiency.
- PID microcomputer control strongly rule out the factors that affect the temperature adjustment accuracy and reduce the error.
- High efficiency circulating pump with quality lift characteristics.
- Built-in stainless steel (SUS304) storage tank with optional configured 0-1200rpm magnetic stirring could achieve multi-purpose.
- The instrument could use both laboratory pure water or ethanol solution as a circulating coolant.
- Built-in compressor protection, over-voltage, and overload protection.



The average operational lifespan of 10 years is supported by a 2 year warranty and make your purchase a worthwhile investment.



## BWR Chillers



IMPORTANT! TESTS ARE UNDER EMPTY LOAD CONDITION (NO ROTARY EVAPORATORS OR JACKETED REACTORS ATTACHED).

### Specifications

Production name	Low temperature cooling cycle system					
Model	BWR-03A/B/C	BWR-05A/B/C	BWR-10A/B/C	BWR-20A/B/C	BWR-30A/B/C	
Storage Tank maximum capacity (L)	3	5	10	20	30	
No-load minimum temperature(°C)	A:-20°C \B:-30°C \C:-40°C					
Best operating temperature(°C)	≤25°C					
Environmental humidity(%RH)	≤65%RH					
Temperature accuracy(°C)	±0.5°C					
Machine noise	≤60dB					
Eco-friendly Refrigerant	R404A					
Machine power (W)	450W	600W	800W	1650W	A:2000W B:2000W C:4100W	
Refrigeration unit current (A)	2.7	3.8	5.8	7.2	7.2	
Cooling capacity at -20°C (kw)	0.5	0.8	2.2	3.7	3.7	
Adaptation Steam Turbine (L)	2	2L*2	5L*2	10L*2	20L	
Power requirements	220V/50HZ (110V/60HZ)	220V/50HZ (110V/60HZ)	220V/50HZ/60HZ	220V/50HZ/60HZ	220V/50HZ/60HZ 380V/50HZ/60HZ	
Magnetic stirrer devices	Optional			N/A		
Pump	Maximum flow rate (L / min)	11	16	23	40	
	Maximum head (m)	3.5m				
	operating pressure (bar)	0.35	0.5	0.5	0.5	1
	Inlet/Outlet pipe diameter (mm)	φ 8	φ 8	φ 12	φ 12	φ 19
Size	Weight (Kg)	30	50	75	105	110
	Liquid tank opening / depth (mm)	φ 180mm*120mm	φ 220mm*180mm	φ 250mm*250mm	φ 300mm*300mm	φ 350mm*350mm
	Dimensions (mm)	245*530*580	310*530*580	400*530*830	450*530*830	500*850*1100
Controller	ontroller, monitor	LCD				
	Computer interface	R485				
Security Features	Protection reminders	delay, leakage, overcurrent, overvoltage				
	Low liquid level alarm	No		Yes		

The B-500 is a simple, easy to handle and has the ability to achieve quality results quickly. He has the speed and power to emulsify, suspend, cut and chop always to deliver accurate results. It has complete flexibility to hold it by hand, mounted to a pole or wall, with mounting plate or type H.

### Features

- The B-500 homogenizer is the ideal solution for dispersing, homogenizing, mixing and grinding biological tissue samples (cells, animal and plant tissues), pharmaceutical products, cosmetics and food products. The WT500 is characterized by a high versatility that makes it unique on the market. A "Quick Lock" single quarter turn assembly shaft can be combined with a wide selection of stator and rotor configurations according to the specific application for which it is to be used. Flexible, easy-to-use, rapid and user-friendly stator and rotor interchangeability: a single instrument for a wide range of uses that ensures excellent performance and safety.



### Specifications

model	B-500-A	B-500-B
Voltage/ Frequency	110-120V/60Hz,220-240V/50-60Hz	
Power input/output(W)	500Watt	
speed range(rpm)	10000-30000rpm	
Rotor speed(m/sec)	22.7-36m/sec	
Speed Setting	6 speeds	
Range(ml,H2O)	100ml-5,000ml (Dispersing Shaft set B-500/SS20CSR20)	100ml-5,000ml (Dispersing Shaft set B-500/SS20FER20)
Max viscosity(mPas)	10,000mPas	
Material	stainless steel PTEE	
Weight(kg)	1.3kg	
Dimensions(mm)	70mmx70mmx255	
noise emission(drive only)	79dB(A)	
Operating Environment	0-40°C , 85%rel.humidity	
Protection class	IP20	

### Options

Dispersing Shaft set	Model	Medium Function	Treatable Volume (H2O)/(ml)	Max linear velocity (m/sec)	Rotor diameter (mm)	Stator diameter (mm)	Min/max emersion depth (mm)
	SS20CSR20	SOLID / LIQUID	10-5000	23.5	15	20	40/175
	SS20FER20	SUSPENSION/ EMULSIONS	10-5000	23.5	15	20	40/175
	SS30CCR30	STRINGY/ FIBROUS	100-8000	36.1	23	30	40/175
	SS30FER30	SUSPENSION/ EMULSIONS	100-8000	36.1	23	30	40/175
	SS40CCR40	SOLID / LIQUID	100-20000	50.3	32	40	40/175
	SS05CSR04	LIQUID / LIQUID	1-50	6	5	5	10/70

The B-170 is a simple, easy to handle and has the ability to achieve quality results quickly. He has the speed and power to emulsify, suspend, cut and chop always to deliver accurate results. It has complete flexibility to hold it by hand, mounted to a pole or wall, with mounting plate or type H.

### Features

- The B- 170 is a rotor/stator type hand held tissue homogenizer which can rapidly dispersing, homogenizing, extractions, cell disruption, mixing, emulsifying, suspending samples in 0.1 - 50 ml of liquid or 1-250ml depending on the dispersing shaft. During operation, the suspended material is drawn into the core of the homogenizer by a rotor turning at up to 30,000 rpm.The material is repeatedly cycled through narrow slits in the stator where it is rapidly sheared and disintegrated by high shear mechanical action. Complete homogenization of tissues (muscle, liver, breast tissue, etc.) is usually achieved in a few seconds. Little, if any, heat is produced during the process.



### Specifications

model	B-170-A	B-170-B
Voltage/ Frequency	110-120V/60Hz,220-240V/50-60Hz	
Power input/output(W)	160Watt	
speed range(rpm)	8000-30000rpm	
Rotor speed(m/sec)	6.3-14m/sec	
Speed Setting	6 speeds	
Range(ml,H2O)	0.1-50ml (Dispersing Shaft set B-170/5)	1-250ml(Dispersing Shaft set B-170/10)
Max viscosity(mPas)	5,000mPas	
Material	stainless steel PTEE	
Weight(kg)	0.6kg	
Dimensions(mm)	46mmx55mmx230mm	
noise emission(drive only)	72dB(A)	
Operating Environment	0-40°C , 85%rel.humidity	
Protection class	IP20	

### Options

Dispersing Shaft set	Model	Medium Function	Treatable Volume (H2O)/(ml)	Max linear velocity (m/sec)	Rotor diameter (mm)	Stator diameter (mm)	Min/max emersion depth (mm)
	B-170/5	LITTLE SAMPLE SOLID / LIQUID	0.1-50	6.3	3	5	7/50
	B-170/10	LITTLE SAMPLE SOLID / LIQUID	1-250	14	6	10	10/120
	B-170/14	LITTLE SAMPLE SOLID / LIQUID	100 - 1000	20	13	14	15/130