

## LCD Programmable controller (with timing function)

### Features:

- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- Auto-controller of fan speed to prevent damage to the samples.
- Large LCD screen to display more data at same time.
- Self-check function easy to identify problems.
- Over temperature and temperature difference alarms.
- There is a 25mm instruction connection hole on the left side of the chamber for easy testing operation and temperature.
- Programmable controller: 7 periods 63 steps, 0~5999min for each periods, fan speed 0 to 100% adjustable.
- Independent audible and visible temperature-limiting alarm system ensures experiments run safely.
- RS485 connector can connect computer and printer to record the parameters and the variations of temperature.(Option)



### Specifications

Model	BPG-9040A	BPG-9070A	BPG-9140A	BPG-9240A	BPG-9420A
Electrical Requirement	220V 50HZ				
Controller	Programmable LCD display				
Power Consumption	850W	1100W	1550W	2050W	3000W
Temperature Range	RT+10~250°C				
Display Resolution	0.1°C				
Temperature Stability	±1°C				
Temperature Uniformity	±2.5%				
Shelves	2(PCS)		3(PCS)		
Interior Dimension(W×D×H)mm	350×300×400	400×320×550	500×380×750	600×450×900	1000×510×800
Exterior Dimension(W×D×H)mm	505×655×600	550×660×750	655×715×980	755×785×1130	1140×850×1080
Chamber Volume	40L	80L	150L	250L	400L
Timing Range	0~5999min				

### Options:

- Printer



- RS485 connector



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# Natural Convection Oven

## 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	320×300×355	400×330×415	450×430×505	520×500×575	570×560×640
Exterior Dimension (WxDxH)mm	460×520×660	540×550×720	590×650×810	660×720×880	710×780×945
Shelves	2(pcs)			3(pcs)	

## Options:

- Printer



- Independent temperature-limiting Alarm system



- RS485 connector



- Intelligent programmable temperature controller
- Test hole(φ 25mm or 50mm)

## LCD Programmable controller (with timing function)

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

### Features:

- 304 stainless steel, mirror polishing processing, semicircular arcs at corners easy to clean and maintain. The space between the shelves in the chamber is adjustable.
- PID controller with over temperature alarm and timing function ensures precise and reliable control.
- Ceramic fiber door seal, which can run at high temperature for a long time and has a long service life.
- Programmable controller: 7 periods 63 steps, 0 ~5999mins for each period, can preset boot and shutdown time, adjustable circulating fan.
- Independent over-temperature alarm system ensures experiments running safely



## Specifications

Model	BPG-9050AH BPG-9050BH	BPG-9100AH BPG-9100BH	BPG-9200AH BPG-9200BH	BPG-9760AH BPG-9760BH
Electrical Requirements	AC380V 50HZ			
Temperature Range	AH series: RT+20℃ 400℃ BH series: RT+20℃ 500℃			
Display Resolution	0.1℃			
Temperature Stability	±0.5℃			
Ambient Temperature	+5~40℃			
Power Consumption	3250W 4050W	4050W 4900W	4900W 6050W	12750W 12750W
Chamber Volume	50L	100L	220L	760L
Internal Dimension (W×D×H)mm	350×350×400	450×450×450	600×600×600	980×1000×780
External Dimension (W×D×H)mm	890×700×920	990×790×990	1140×950×1140	1324×1263×1770
Shelves	2(pcs)			
Timing Range	0~5999min			

### Options:

- Micro printer
- RS485 connector

# Vacuum Oven

## 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-6020 DZF-6022 DZF-6024	DZF-6050 DZF-6053 DZF-6055 DZF-6056	DZF-6030A DZF-6032 DZF-6034 (Special for chemistry)	DZF-6092 DZF-6094 DZF-6096	DZF-6123 DZF-6126	DZF-6213 DZF-6216	DZF-6030B DZF-6050B DZF-6055B (Special for biology)
Electrical Requirement	AC220V 50HZ							
Controller	LED display							
Power Consumption	400W	700W	1450W	550W 850W 850W	870W	1500W	1550W	300W 650W
Temperature Range	RT-10~200°C							RT-10~65°C
Display Resolution	0.1							
Temperature Stability	±1°C							
Vacuum Degree	133Pa							
Chamber Volume	10L	24L	50L	30L	90L	125L	216L	30L/50L
Ambient Temperature	+5~40°C							
Interior Dimension (WxDxH)mm	220x210x220	300x300x275	415x370x345	320x320x300	450x450x450	500x500x500	600x600x600	320x320x300 415x370x345
Exterior Dimension (WxDxH)mm	500x375x410	605x490x450	730x560x550	630x510x490	740x610x591	790x660x641	890x760x741	610x510x490 730x560x550
Shelves	2(pcs)	1(pcs) 2(pcs) 4(pcs)	2(pcs) 3(pcs) 5(pcs) 6(pcs)	1(pcs) 2(pcs) 4(pcs)	2(pcs) 4(pcs) 6(pcs)	3(pcs)-Independent temp. control 6(pcs)		1(pcs) 2(pcs) 5(pcs)
Chamber Material	304 Stainless steel			316 SS	304 Stainless steel			

## Microprocessor controller (with timing function)

Vacuum oven is designed especially for drying of material which is thermo-sensitive or decomposes and oxidative easily. It can be filled with inert gases, which is especially for a rapid drying of some compound material.

### Features:

- Microprocessor controller.
- Dual layer tempered glass door for clear observation.
- Minimum heating time 50% less than traditional vacuum oven.
- Interior chamber made from stainless steel with a mirror polished finish making for easy cleaning.
- Standard with vacuum pump.
- Direct heating and control by shelves: Each shelf has a separate temperature sensor, can be independently displayed and controlled temperature in setting, monitoring and timing, more accurate and stable(except model DZF-6216A & DZF-6094A).



## Specifications (With Vacuum Pump)

Model	DZF-6930	DZF-6500	DZF-6210 DZF-6216A	DZF-6090 DZF-6094A
Electrical Requirement	AC380V 50HZ	AC380V 50HZ	AC220V 50HZ	AC220V 50HZ
Controller	LED display			
Power Consumption	5800W	3800W	2100W	1350W
Temperature Range	RT+10 ~ 200°C			
Display Resolution	0.1			
Temperature Stability	±1°C			
Vacuum Degree	133Pa			
Ambient Temperature	+5~40°C			
Chamber Volume	913L	431L	215L	90L
Interior Dimension (WxDxH) mm	750×1160×1050	630×810×845	560×600×640	450×450×450
Exterior Dimension (WxDxH) mm	1400×1395×2010	1000×1040×1855	720×820×1750	610×590×1350
Shelves	5pcs (Independent temp. control)	4pcs (Independent temp. control)	3pcs (Independent temp. control) 6pcs	2pcs (Independent temp. control) 4pcs
Chamber Material	304 Stainless steel			

## Options

- LED lamp
- Oil mist filter
- Inert gas valve
- Intelligent programmable temperature controller(LCD)

# Vacuum Oven

## Programmability controller (with timing function)

Vacuum oven is designed especially for drying of material which is thermo-sensitive or decomposes and oxidative easily. It can be filled with inert gases, which is especially for a rapid drying of some compound material.

### Features:

- Microprocessor controller.
- Dual layer tempered glass door for clear observation.
- Minimum heating time 50% less than traditional vacuum oven.
- Interior chamber made from stainless steel with a mirror polished finish making for easy cleaning.
- Standard with vacuum pump.
- Provides programmability for 7 periods and 9 steps for each period making for a total of 63 programmable step.



## Specifications (With Vacuum Pump)

Model	BPZ-6933B	BPZ-6503B	BPZ-6213	BPZ-6123	BPZ-6063	BPZ-6033
Electrical Requirement	AC380V 50HZ		AC220V 50HZ			
Controller	LCD Programmability controller					
Power Consumption	5600W	3800W	2100W	2050W	1800W	1200W
Temperature Range	RT+10 ~ 200°C					
Display Resolution	0.1					
Temperature Stability	±1°C					
Vacuum Degree	133Pa					
Ambient Temperature	+5~40°C					
Chamber Volume	913L	431L	197L	125L	63L	33L
Interior Dimension (W×D×H) mm	750×1160×1050	630×810×845	540×575×635	500×500×500	400×400×400	320×320×320
Exterior Dimension (W×D×H) mm	1400×1395×2010	790×1030×1855	720×740×1530	660×640×1400	600×570×1390	550×490×1240
Shelves	5pcs (Independent temp. control)	4pcs (Independent temp. control)	3pcs	3pcs	3pcs	2pcs
Chamber Material	304 Stainless steel					

## Options

- LED lamp
- Oil mist filter
- Inert gas valve

## Microprocessor controller (with timing function)

### Vacuum degree Control:

Vacuum oven adopts the digital technique of simulated engineering to control vacuum degree.

The vacuum degree controlled by full-automatic electromagnetism valve which make the degree control more exact.

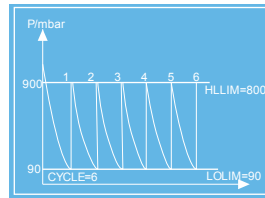
Vacuum control rang: 20Pa ~9999Pa

Vacuum display rang: 1Pa ~9999Pa

Vacuum accuracy: 1Pa

### Features:

- Programmable vacuum cycle
- LCD vacuum degree window
- Suitable for drying thermo-sensitive material
- Shorter drying time for sample that does not dry easily
- Dual layer tempered glass door for clear observation
- Fully automatic electromagnetism controlled vacuum
- Minimum heating time 50% less than traditional vacuum oven



## Specifications

Model	BPZ-6933LC (BPZ-6930LC)	BPZ-6503LC (BPZ-6500LC)	BPZ-6213LC (BPZ-6210LC)	BPZ-6123LC	BPZ-6093LC (BPZ-6090LC)	BPZ-6063LC	BPZ-6033LC
Electrical Requirement	AC380V 50HZ			AC220 50HZ			
Temperature Range	RT+10~200℃						
Display Resolution	0.1℃						
Temperature Stability	±1℃						
Vacuum Gauge	Digital Display						
Vacuum Degree	133Pa						
Vacuum Sensor	Resistance silicon tube pressure sensor						
Vacuum Control Range	10~10 <sup>5</sup> Pa						
Power Consumption	5600W	3800W	2100W	2050W	1350W	1800W	1200W
Interior Dimension (W×D×H, mm)	750×1160×1050	630×810×845	560×600×640	500×500×500	450×450×450	400×400×400	320×320×320
Exterior Dimension (W×D×H, mm)	1400×1395×2010	1000×1040×1855	720×820×1750	660×640×1400	610×590×1350	600×570×1390	550×490×1240
Shelves	5pcs (Independent temperature control)	4 pcs (Independent temperature control)	3 pcs (Independent temperature control)	3pcs	2pcs (Independent temperature control)	3pcs	2pcs
Chamber Material	304 Stainless steel (1Cr18Ni9Ti)						

# Heating Incubator

## LCD Programmable controller (with timing function)

### Features:

- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- Auto-controller of fan speed to prevent damage to the samples.
- Large LCD screen to display more data at same time.
- Self-check function easy to identify problems.
- Over temperature and temperature difference alarms.
- There is a 25mm instruction connection hole on the left side of the chamber for easy testing operation and temperature measurement.
- Programmable controller: 7 periods 63 steps, 0 ~ 5999mins for each periods, fan speed 0 to 100% adjustable.
- Independent audible and visible temperature-limiting alarm system ensures experiments run safely.
- RS485 connector can connect computer and printer to record the parameters and the variations of temperature.(Option)



### Specifications

Model	BPH-9042	BPH-9082	BPH-9162	BPH-9272	BPH-9402
Electrical Requirement	220V 50HZ				
Controller	LCD Programmable controller				
Temperature Range	RT+5°C ~80°C				
Display Resolution	0.1°C				
Temperature Stability	±0.2°C				
Temperature Uniformity	±1.5(at 37°C )				
Ambient Temperature	+5~35°C				
Power Consumption	250W	250W	500W	600W	1200W
Interior Dimension(WxDxH)mm	350×300×400	400×320×550	500×380×750	600×450×900	1000×510×800
Exterio Dimension(WxDxH)mm	505×635×600	550×660×750	655×715×980	755×785×1130	1140×850×1080
Shelves	2(pcs)				
Timing Range	0~5999min				
Remark	Model BPH-9042 without observation window				

### Options:

- Printer



- USB data collect

- RS485 connector



- UV Sterilizer





## Technical Advantage Performance and Features

- Temperature Range: Amb+5°C ~65°C .
- P.I.D temperature controller provides accurate and reliable temperature control.
- Natural convection heating allows the sample temperature to be uniform, suitable for sterilization, powder drying and high temperature storage.
- Extended Life Silicone Rubber Gasket provides excellent sealing and long service life, but is easily replaced when the time for replacement is needed.

### Convenience

- Volume(10L~210L).
- Inner chamber is made from corrosion-resistant mirror stainless steel.
- Round curved inner angle is easy to clean.
- Anti-skid shelf design, easy to operate by single hand.

### Safety

- Auto Start Feature after power loss/return.
- Temperature deviation alarm.
- Over current protection alarm.
- Independent Over-temperature protection meets DIN 12880 International standard requirements provides you double protection.(Option)



## Specifications

Model	DHP-9011	DHP-9031	DHP-9051	DHP-9121	DHP-9211
Electrical Requirement	220V 50Hz				
Temperature Range	Amb+5~65°C				
Display Resolution	0.1°C				
Ambient Temperature	+5~35°C				
Power Consumption	85W	125 W	250 W	550W	900W
Inner glass door	None			Has	
Viewing window	Has			None	
Chamber Volume	10L	35L	55L	115L	210L
Interior Dimension (WxDxH ,mm)	250×200×200	320×300×320	400×410×360	520×450×485	650×500×650
Exterior Dimension (WxDxH, mm)	460×300×330	530×400×450	640×550×510	785×588×715	915×658×870
Shelves	2PCS			3PCS	

### Options:

- Intelligent programmable temperature controller

- Independent temperature-limiting Alarm system



- RS485 connector



# Cooling Incubator

## 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.



LRH-70(F) LRH-150(F) LRH-250(F)



LRH-1000F LRH-1500F

## 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℃						
Display Resolution	0.1℃						
Temperature Stability	HIGH±0.5℃			LOW±1.0℃			
Temperature Uniformity	±1.5℃			±2.5℃			
Electrical Requirement	220V 50Hz						380V 50Hz
Ambient Temperature	+5℃ ~30℃						
Power consumption	450W	500W	600W	2100W	4100W	4100W	5000W
Chamber Volume	70L	150L	248L	492L	778L	1000L	1500L
Interior Dimension (W×D×H)mm	400×350×500	503×470×808	540×460×1000	670×720×1020	800×590×1650	1050×590×1650	1550×590×1650
External Dimension (W×D×H)mm	530×560×1080	600×630×1360	637×662×1590	850×1100×1930	1475×890×1780	1410×890×1950	2110×890×2050
Shelves	2(pcs)	3(pcs)					
Timing Range	0~5999min						
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℃, and relative humidity is 50%.

## LCD Programmable controller (with timing function)

### Features:

- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- Latest PID LCD Programmable controller: 7 periods 63 steps, 0 to 5999mins for each periods, fan speed 0 to 100% adjustable.
- Independent temperature-limiting alarm system ensures experiments run safely.
- There is a 25mm instruction connection hole on the left side of the chamber for easy testing operation and temperature measurement.
- Using environmentally friendly R134a refrigerant,fast cooling speed,saving energy and protecting environment.Auto-controller of fan speed to prevent damage to the samples.
- Shaker can be put inside BEING incubator to function as shaking incubator.
- Printer connector and RS485 connector are options which can connect printer and computer to record the parameters and the variations of temperature.(Option)



### Specifications

Model	BPC-70F	BPC-150F	BPC-250F	BPC-500F
Controller	LCD Programmable controller			
Temperature Range	-5~70°C			
Display Resolution	0.1°C			
Temperature Stability	HIGH±0.3°C    LOW±0.5°C			
Temperature Uniformity	±1.5°C (at 25°C)			
Electrical Requirement	220V 50Hz			
Ambient Temperature	+5~35°C			
Power consumption	650W	850W	1300W	2250W
Chamber Volume	70L	150L	250L	495L
Interior Dimension(WxDxH)mm	400×440×500	500×460×800	520×550×1050	670×725×1020
Shelves	2(pcs)	3(pcs)		
Timing Range	1~5999min			

### Options:

- Printer
- USB data collect



- BOD socket
- UV Sterilizer



- RS485 connector



# Cooling Incubator

## Microprocessor control

### Summary:

Serve for preserve culture medium, serum, medicine as well as microorganism training and environmental testing etc.

### Features:

- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- Latest PID controller
- R134a refrigerant, imported compressor
- Independent temperature-limiting alarm system ensures experiments run safely.(Option)
- Printer connector and RS485 connector are options which can connect printer and computer to record the parameters and the variations of temperature.(Option)
- There is a 25mm instruction connection hole on the left side of the chamber for easy testing operation and temperature measurement.



## Specifications

Model	LRH-50CL LRH-50CA LRH-50CB	LRH-100CL LRH-100CA LRH-100CB	LRH-150CL LRH-150CA LRH-150CB	LRH-250CL LRH-250CA LRH-250CB	LRH-500CL LRH-500CA LRH-500CB
Temperature Range	CL: -10°C ~65°C		CA: -20°C ~65°C	CB: -40°C ~65°C	
Display Resolution	0.1°C				
Temperature Stability	High:±0.5°C Low:±1°C				
Electrical Requirement	220V 50Hz	CL/CA: 220V 50Hz		CB: 380V 50Hz	
Ambient Temperature	+5°C ~35°C				
Power consumption	1100W 1100W 2800W	1100W 1200W 4100W	1300W 1300W 5100W	1500W 1600W 6100W	2250W 2550W 7100W
Interior Dimension(WxDxH)mm	400×300×420 400×300×420 400×380×450	500×400×600 500×400×600 500×400×600	550×405×670 550×405×670 550×430×670	600×500×830 600×500×830 600×600×700	670×720×1020 670×720×1020 800×700×900
Exterior Dimension(WxDxH)mm	660×720×930 660×720×930 650×1040×1650	650×770×1320 650×770×1320 700×1040×1750	690×800×1410 690×800×1410 750×1040×1810	740×900×1580 740×900×1580 800×1160×1850	850×1100×1930 850×1100×1930 1000×1204×1985
Shelves	2(pcs)	3(pcs)			
Timing Range	0~9999min				

## Options:

- Printer



- Independent temperature-limiting Alarm system
- BOD socket



- RS485 connector



- UV Sterilizer



## 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(except water-jacketed type), 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-190CH(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/190L	240L	26L/80L	150L
Interior Dimension(W×D×H)mm	400×350×350 400×450×500	480×530×610 520×530×690	600×630×670	290×290×310 400×400×500	500×500×650
Exterior Dimension(W×D×H)mm	580×450×540 590×657×870	670×710×950 708×710×1030	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	UV Sterilizer				

# Orbital Shaker & Thermo-shaker

## Microprocessor controller (with timing function)

### Summary:

Widely applicable for researches on bacteria cultivation, fermentation, hybridization, chemical and biochemical reaction.

### Features:

- Microprocessor PID controller, with timing function.
- Stainless-steel or alnico plate, non-eroding and easy clean.
- DC Brushless motor with long using life, wide speed control with long using life, wide speed control.
- The alarm will get off when the real shaking speed is 10% different with setting value, and motor will stop automatically.
- Speed controller ensures smooth start /stop which can prevent the liquid spill to damage the equipment.
- HZQ-50H and HZQ-120H are with heating plate function.
- HZQ-50H and HZQ-120H are with LCD screen, programmable controller. (18periods with temperature, speed and timing)
- HZQ-50H and HZQ-120H are with over-temperature alarm.



## Specifications

Model	WSZ-10A(HZQ-10A) WSZ-20A(HZQ-20A)	WSZ-50A(HZQ-50A) WSZ-100A(HZQ-100A)	HZQ-50H HZQ-120H
Electrical Requirement	220V 50Hz		
Shaking Speed Range	50~250r/min	40~300r/min	40~250r/min
Amplitude	10mm/20mm	10mm/20mm	20mm
Temperature Range	-	-	RT+5~100°C
Display Resolution	-	-	0.1°C
Power Consumption	60W	60W	350W 400W
Platform Size(mm)	280×270	350×260 400×340	350×260 380×340
Platform optional	Universal platform or Spring wire racks(Default)		Spring wire racks
Timing Range	0~5999min		

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

Model	WSZ-10A WSZ-20A	WSZ-50A WSZ-50H	WSZ-100A	HZQ-120H	
Flask(pc)	50ml	-	-	29	24
	100ml	12	12	18	15
	250ml	6	6	11	8
	500ml	-	-	7	7
	1000ml	-	-	4	4
	2000ml	-	-	3	2

## Application

Being shaker incubator adopts new outlook, large LCD screen, latest technology of motor driven system, Large torque, stable operation, low noise, fast heat dissipation and long service life. It is widely used in cell culture, fermentation, hybridization, biochemistry and enzyme research etc that need shaker function in laboratory experiment or pilot experiment.

## Features

### Intelligent LCD control

- Parameters real time display, operation easily.
- Temp., rotation speed and time etc parameters fast setting

### Humanization design

- Silent working
- Colorful touch screen display, multi data display at one screen, easily to observe and operate.
- Platform is stainless steel, easy to detach and clean.
- Various kinds of clamps and racks for selection, easily change racks and clamps improve work efficient

### Quality guaranty

- User's set parameters can be stored automatically when power off suddenly, and it resume last program settings when power on.
- PID microcomputer control temp. and shake frequency with timer, it starts shake gently to prevent liquid coming out from the vessels and stop the machine working.
- With rotation speed monitoring circuit. When the instrument detects rotation speed is too fast or too slow, it can stop shaking to ensure no accident occur.
- Large start torque, wide speed adjustment.

### Three-eccentric axis balance drive

- Three-eccentric axis balance drive ensures all samples in the shaker platform movements at the same rotation frequency. Durable structure guarantees the shaker incubator can work properly no matter full load or high speed working.
- Preset parameter and work data can be shown at the same time. It simplified complicated culture requirements and realize auto control and run.

### Convenient data process

- Equip with USB as options, record temp. parameter changes.(Option)
- Equip with RS232 data interface, through software to remote control machine performance.(option)
- Above two options can be selected only one.

## Specifications

Model	HZQ-3111 (Single platform)	HZQ-3112 (Dual universal platforms)	HZQ-3221 (Single platform)	HZQ-3222 (Dual universal platforms)
Rotation speed	40-300rpm			
Amplitude	35mm			
Max load	250ml×48pcs or 500ml×30pcs or 1000ml×20pcs or 2000ml×12pcs (single platform)		250ml×63pcs or 500ml×35pcs or 1000ml×35pcs or 2000ml×16pcs (single platform)	
Standard configuration	500ml×30pcs (single platform)		1000ml×35pcs (single platform)	
Platform size (mm)	800×600		920×640	
Platform quantity	1 pc	2 pcs	1 pc	2 pcs
Overall size W×D×H (mm)	895×740×460	895×740×900	1115×835×460	1115×835×900
Electrical Requirement	AC220V 50HZ			
Power Consumption	250W			





# Shaking Incubator

## 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.
- 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°C		4~65°C	
Display Resolution	0.1°C			
Power Consumption	1050W		1300W	
Platform Size(mm)	750×460	920×500	750×460	920×500
External Dimension (W×H×D)mm	1080×620×915	1250×660×915	1080×620×915	1250×660×915
Timing Range	0~5999min			

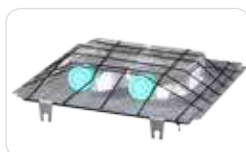
## Options



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.

### 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	0~5999min				

## 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

# Shaking Incubator

## 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.

### 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°C		4~65°C	
Display Resolution	0.1°C			
Timing Range	0~5999min			
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	116	82	116
	100ml	66	50	66
	250ml	45	28	45
	500ml	28	23	28
	1000ml	18	15	18
	2000ml	-	10	8

## Microprocessor controller (with timing function)

### Summary:

It is equipped with a precise system of temperature and humidity control, which provide various necessary environmental simulative conditions for industrial researches and biotechnology tests. Widely applied in sterile tests and stability check-up of pharmaceuticals, textile and food processing as well as tests in material, performance, packing and lifetime of industrial products.

### Features:

- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- Microprocessor controller for temperature and humidity ensures of precise and reliable control.
- Imported compressor.
- Independent temperature-limiting alarm system ensures experiments run safely.
- Printer connector and RS485 connector are options which can connect printer and computer to record the parameters and the variations of temperature.(option)
- There is a 25mm instruction connection hole on the left side of the chamber for easy testing operation and temperature measurement.



## Specifications

Model	LHS-80HC-I LHS-80HC-II	LHS-150HC-I LHS-150HC-II	LHS-250HC-I LHS-250HC-II	LHS-500HC-I LHS-500HC-II	LHS-800HC-I LHS-800HC-II
Temperature Range	I:-5~80°C II:-10~70°C				
Display Resolution	0.1°C				
Temperature Stability	High ±0.5°C Low ±1°C				
Temperature Uniformity	±2°C				
Humidity Range	I:40~85% II:40~95%				
Humidity Accuracy	±3%RH				
Power Consumption	2000W	2100W	2300W	3850W	8050W
Ambient Temperature	+5~35°C				
Electrical Requirement	220V 50Hz				
Interior Dimension(WxDxH,mm)	400×400×500	550×405×670	600×500×830	670×720×1020	800×590×1650
Exterior Dimension(WxDxH,mm)	550×790×1080	690×800×1430	740×900×1580	850×1100×1930	1360×890×2000
Shelves	2PCS	3PCS		4PCS	

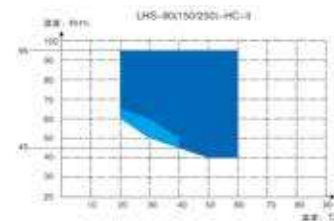
\* With model "I" optional printer with model "II" standard printer

### Options:

- Printer



- Independent temperature-limiting Alarm system



# Temperature & Humidity Chamber

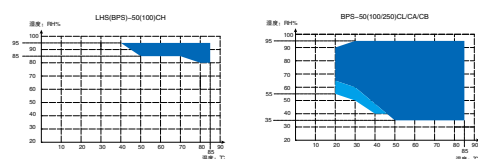
## Touch Screen Humidity Chamber

### 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-250CH	BPS-50CL BPS-50CA BPS-50CB	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°C	L:-10~100°C A:-20~100°C B:-40~100°C					
Temperature accuracy	0.1°C						
Temperature Stability	±1.0°C	High temp:±0.5°C Low temp:±1°C					
Humidity control range	80~95%RH	35~95%RH					
Humidity Accuracy	±3%RH						
Power Consumption	1450W 1650W 2050W	1700W 2250W 2650W	1900W 2300W 7050W	2300W 2700W 7100W	3850W 4150W 7850W	8050W 8050W	8050W 8050W
Ambient Temperature	+5~30°C						
Electrical Requirement	220V 50HZ		220V 50HZ 220V 50HZ 380V 50HZ			380V 50Hz	380V 50Hz
Interior Dimension (W×D×H,mm)	350×300×500 500×400×550 600×500×820	350×300×500	500×400×600	600×500×820	670×720×1020	800×590×1650	1050×590×1650
Exterior Dimension (W×D×H,mm)	720×620×725 650×800×1310 750×900×1580	720×620×725	700×1040×1750	750×900×1580	850×1100×1930	1475×890×1780	1700×890×1950
Shelves	2PCS	2PCS	2PCS	3PCS	3PCS	3PCS	3PCS

## Microprocessor controller (with timing function)

### Features

- Microprocessor control, stainless steel chamber, semicircular arcs at corners for easy cleaning
- Even air circulating system
- R134a refrigerant, 2 imported compressors and fan motor
- Over temperature and temperature difference alarms
- Imported humidity sensor which can be used in high humidity environment
- Balance temperature and humidity adjusting system
- There is a 25mm instruction connection hole on the left side of the chamber for easy testing operation and temperature measurement.
- UV light system for periodic sterilization of chamber.(Option)
- Independent audible and visible temperature-limiting alarm system ensures experiments run safely. (Option)
- RS485 connector can connect computer record and inspect the parameters and the variations of temperature.(Option)

### 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

### Safety device:

- Compressor over-heat protection
- Fan over-heat protection
- Over-temperature alarm system
- Over-compressing protection
- Over-load protection
- Water lack protection
- With temperature & Humidity  
Model: LHH-150SDP/LHH-250SDP/LHH-500SDP
- With temperature , Humidity & Light  
Model: LHH-150GSP/LHH-250GSP, LHH-SSG
- With temperature & Light  
Model: LHH-150GP/LHH-250GP

### Storage conditions for long-term retention sample stability test

Temperature: +25°C ±2°C

Humidity: 60±5%RH

Time: 12 months

### Storage conditions for accelerated stability test

Temperature: +40°C ±2°C

Humidity: 70±5%RH

Time: 6 months

Illumination under strong light conditions: 4500±500LX

Above related parameter is for reference only.



SD/GSD Series



SDP series



GP series



GSP series

Top illuminator

# Medicine Stability Testing Chamber

## Specifications

Model	LHH-80SD LHH-150SD LHH-250SD	LHH-80SDP LHH-150SDP LHH-250SDP	LHH-150GSD LHH-250GSD	LHH-150GSP LHH-250GSP	LHH-150GP LHH-250GP LHH-400GP
Temperature control range	0~65℃		0~65℃ without illumination 10~50℃ with illumination		
Temperature Stability	±0.5℃				
Temperature Uniformity	±2℃				
Humidity Rang	35~95%RH				/
Humidity Stability	±3%RH				/
Illumination	/		0~6000LX adjustable		
Illumination difference	/		≤±500LX		
Timing Rang	1~99 hours each period				
Humidity and temp adjusting	Balance temperature and humidity adjusting			Balance temperature adjusting	
Cooling system/cooling mode	Two sets of imported compressor work rotationally ( LHH-80SDP only one set)				
Controller	Programmable ( LCD screen)	Programmable ( touch screen)	Programmable ( LCD screen)	Programmable ( touch screen)	Programmable ( LCD screen)
Sensor	Temp: Pt100, Humidity: capacitance sensor				Temp: Pt100
Ambient Temperature	RT+5~30℃				
Electrical Requirement	AC220V 50Hz				
Power Consumption	2000W/2100W/2300W	2000W/2100W/2300W	2250W/2500W	2250W/2500W	1450W/1700W/3200W
Chamber Volume	80L/150L/250L	80L/150L/250L	150L/250L	150L/250L	150L/250L/400L
Interior Dimension (W×D×H)mm	400×400×500 550×405×670 600×500×830	400×400×500 550×405×670 600×500×830	550×405×670 600×500×830	550×405×670 600×500×830	550×405×670 600×500×830 700×550×1140
External Dimension (W×D×H)mm	550×790×1080 690×805×1530 740×890×1680	550×790×1080 690×805×1530 740×890×1680	690×805×1530 740×890×1680	690×805×1530 740×890×1680	690×805×1530 740×890×1680 950×850×1850
Shelves	2/3/3(pcs)	2/3/3(pcs)	3/3(pcs)	3/3(pcs)	3/3/4(pcs)
Safety Device	Compressor overheating and overpressure protection, Fan overheating protection Over temperature protection, Overload protection, Water protections				
Remark	1. Bulid in mini printer. 2. Paperless recorder (Option). 3. GP/GSD/GSP series products have installed intensity of illumination detector. 4. GP/GSD/GSP series products have installed intensity of illumination detector.				



LHH-500 series  
LHH-800 series



LHH-1000 series  
LHH-1500 series

## Specifications

Model	LHH-500SD LHH-500SDP	LHH-800SD LHH-800SDP	LHH-1000SD LHH-1000SDP	LHH-1500SD LHH-1500SDP	LHH-500GSD LHH-500GSP	LHH-800GSD LHH-800GSP	LHH-1000GSD LHH-1000GSP LHH-1500GSP
Temperature control range	0~65℃				0~65℃ without illumination 10~50℃ with illumination		
Temperature Stability	±0.5℃						
Temperture uniformity	±2℃						
Humidity Rang	35~95%RH						
Humidity Stability	±3%RH						
Illumination	/				0~6000LX adjustable		
Illumination difference	/				≤±500LX		
Cooling system cooling mode	Two sets of imported compressor work rotationally						
Controller	Programmable ( touch screen)						
Sensor	Temp: Pt100, Humidity: capacitance sensor						
Ambient Temperature	RT+5~30℃						
Electrical Requirement	AC220V 50Hz	AC380V 50Hz			AC220V 50Hz	AC380V 50Hz	
Power Consumption	3750W	7150W	7150W	10600W	3910W	7350W	7350W 10800W
Chamber Volume	500L	800L	1000L	1500L	500L	800L	1000L/1500L
Interior Dimension (W×D×H)mm	670×725×1020	800×590×1650	1050×590×1650	1550×590×1650	670×725×1020	800×590×1650	1050×590×1650 1550×590×1650
External Dimension (W×D×H)mm	850×1100×1930	1360×890×2000	1610×890×2000	2110×890×2000	850×1100×1930	1360×890×2000	1610×890×2000 2110×890×2000
Shelves	4(pcs)						
Safety Device	Compressor overheating and overpressure protection, Fan overheating protection Over temperature protection, Overload protection, Water protections						
Remark	1. Bulid in mini printer 2. Paperless recorder (Option). 3. GP/GSD/GSP series products have installed intensity of illumination detector. 4. GSD/GSP series products have 2 layers of light control (Option). 5. 1000L and 1500L are double doors						

# Plant Growth Chamber

## Microprocessor controller (with timing function)

### Summary

- Widely applied in cultivation of biological histolytic, seed gemmating, breeding test, plant cultivation and feeding of insects and beasts. The incubators can simulate different climatic conditions accurately.

### Features:

- Microprocessor controller for temperature and humidity ensures of precise and reliable control.
- Simulate changing temperature and light in day/night
- Independent temperature-limiting alarm system ensures experiments run safely.
- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- Even air circulation
- Imported compressor
- RS485 connector is option which can connect computer to record the parameters and the variations of temperature.(option)



## Specifications

Parameter	Without humidity control				With humidity control		
	MGC-300A	MGC-300B MGC-350BP	MGC-400B MGC-450BP	MGC-800B MGC-800BP	MGC-300H MGC-350HP	MGC-400H MGC-450HP	MGC-800H MGC-850HP
Chamber Volume	300L	300L	450L	800L	300L	450L	800L
Electrical Requirement	220V 50HZ			380V 50HZ	220V 50HZ		380V 50HZ
Power Consumption	1200W	1450W	2000W	3650W	1500W	2050W	4100W 3700W
Temperature Range	With Lighting: 10~50°C Without lighting: 4~50°C						
Display Resolution	0.1°C						
Temperature Stability	±1°C						
Temperature Uniformity	±2°C						
Ambient Temperature	+5~30°C						
Humidity Range	-				50~90%RH		
Humidity Accuracy	-				±5~7%RH		
Continuous Working Time	No less than 180h				No less than 180h		
Lighting Intensity	0~15000LX Six-grade adjustable	0~20000LX Six-grade adjustable	0~25000LX Six-grade adjustable	0~30000LX Six-grade adjustable	0~20000LX Six-grade adjustable	0~25000LX Six-grade adjustable	0~30000LX Six-grade adjustable
Lighting Type	Two surface illumination	Three surface illumination		Shelves illumination (two Shelves)	Three surface illumination		Shelves illumination (two Shelves)
Interior Dimension (W×D×H)mm	520×550×1140		700×550×1140	965×580×1430	520×550×1140	700×550×1140	965×580×1430
Exterio Dimension (W×D×H)mm	830×850×1850		950×850×1850	1475×890×1780	830×850×1850	950×850×1850	1475×890×1780
Shelves	3(PCS)						

"P":programming

## Options:

- RS485 connector



- CO<sub>2</sub> inlet
- CO<sub>2</sub> controller (imported IR CO<sub>2</sub> sensor)



## Microprocessor controller (with timing function)

### Features:

- Microprocessor controller for temperature and humidity and light intensity, 30 programs
- Large LCD screen
- Simulate changing temperature and light in day/night
- Polished stainless-steel chamber, semicircular arcs at corners for easy cleaning, and the space between the shelves in the chamber is adjustable.
- R134a refrigerant, two imported compressors, continuous running time
- Independent temperature-limiting alarm system ensures experiments run safely.(option)
- RS485 connector is option which can connect computer to record the parameters and the variations of temperature.(option)



MGC-250BP-2

## Specifications

Parameter	Model	MGC-250BP-2	MGC-350BP-2 MGC-450BP-2	MGC-350HP-2 MGC-450HP-2	MGC-800BP-2 MGC-1000BP-2	MGC-800HP-2 MGC-1000HP-2
Chamber Volume		250L	300L/450L		800L/1000L	
Temperature Range		Without Lighting: 0~50°C , With lighting: 10~50°C				
Display Resolution		0.1°C				
Temperature Stability		±1°C				
Temperature Uniformity		±1.5°C			±2°C	
Humidity Range		-	50~90%RH		-	50~90%RH
Humidity Accuracy		-	±5~7%RH		-	±5~7%RH
Lighting Intensity		0~12000LX Six -grade adjustable	0~20000LX 0~25000LX Six -grade adjustable		0~30000LX 0~35000LX Six -grade adjustable	
Lighting Type		One surface illumination (front door)	Three surface illumination		Shelves illumination(two Shelves)	
Programmer Function		Temperature, humidity, light intensity, can be set separately, and 30 programmers Time range is 1-99 hours 59mins for each programmer				
Power Consumption		1700W	1700W/2000W	1700W/2050W	3700W/4800W	3800W/5000W
Electrical Requirement		220V 50HZ			380V 50HZ	
Ambient Temperature		RT+5~30°C				
Interior Dimension(WxDxH) mm		580×510×835	520×550×1140/700×550×1140		800×590×1650/1050×590×1650	
ExteriorDimension(WxDxH)mm		725×740×1550	830×850×1850/950×850×1850		1475×890×1780/1410×890×1950	
Shelves		3(PCS)				

### Options:

- RS485 connector



- CO<sub>2</sub> inlet
- CO<sub>2</sub> controller (imported IR CO<sub>2</sub> sensor)

# Circulating Bath

## 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-100H	RT+5~100°C	±0.2	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	13L	2300W
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

## Features

- High precision temperature controller.



## Specifications

Model	Temperature Range	Precision	Peristome Dimension (WxDxH)	Chamber volume	Pump(flux)	Power
MPE-20C	-20~100°C	±0.02	240×170×200	13L	15L/min	2850W
MPE-30C	-30~100°C					
MPE-40C	-40~100°C					

# Heating Oil Bath

Corrosion resistant stainless steel with microprocessor controller heating oil bath, provides you best security and stability, and easy to operate.

## Features

- PID controller with timing function ensures precise and reliable control.
- Stainless steel working chamber and shell, anti-corrosion and easy to clean.
- Audible and visible alarm for temperature ensures experiments run safely.
- Magnetic stirring oil bath with microcomputer servo control of stirring speed, to ensure the constant speed in the case of constantly changing stirring viscosity.
- Magnetic stirring output torque is large, making the temperature in the oil bath more accurate and uniform.

## Option

Intelligent programmable LCD temperature controller  
RS485 connector



## Specifications

Model	Electrical Requirement	Power	Temperature Range	Temperature Stability	Deviation Alarm	Volume	Interior Dimension (W×H×D,mm)	Timer Range
DU-20	AC220V 50HZ	1000W	RT+20~200°C	±0.5°C	±2°C	12L	250×250×200	0~9999
DU-30		1600W				20L	400×250×200	
DU-30G		1000W						

# Shaking Water Bath/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+5~100℃			10~100℃
Display Resolution	0.1℃			
Temperature Uniformity	±1℃			
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	440×300×250
Exterior Dimension(W×D×H)mm	643×350×353		823×350×355	710×410×710

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

Options : Intelligent programmable temperature controller

## 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-12/27



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+5~100℃					RT+5~100℃ RT+5~80℃	
Temperature Stability	±0.3℃					±0.2℃	
Temp Alarm	±2℃					0.1℃	
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	IT-09B15	IT-09C10	IT-09C15
Stirring capacity (H <sub>2</sub> O)	3L	5L	12L	3L	5L	15	10	20
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%					±15°C		/
Plate dimension(mm)	130×130	180×180	180×180	130×130	180×180	180×180	180×180	180×180
Exterior dimension (W×H×D)mm	150×110×249	210×130×330	210×129×330	150×110×249	210×129×330	210×330×130	210×330×130	210×330×130
POWER(AC Hz)	220V/50							
Heating power Input power (Max. W)	400/500	550/600	650/750	400/500	550/600	650/750	-/50	-/50
Weight(KG)	4	5	5	3.5	4.5	4.5	4.0	4.0

### Specifications

Model	IT-08A3	IT-08B3	IT-08C5
Stirring capacity (H <sub>2</sub> O)	3L		5L
Speed rang(rpm)	200~2000		
Power	600W		50W
Liquid temp range	RT+5 ~ 200°C	—	—
Working plate temp range	—	RT+5 ~ 320°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	