Chambers

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 beasties. 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

Model / Parameter	Without humidity control				With humidity control		
	Gentiana MGC-300A	Gentiana MGC-300B MGC-350BP	Gentiana MGC-400B MGC-450BP	Gentiana MGC-800B MGC-800BP	Gentiana MGC-300H MGC-350HP	Gentiana MGC-400H MGC-450HP	Gentiana MGC-800H MGC-850HP
Display Resolution	300L	300L	450L	800L	300L	450L	800L
Temperature Uniformity	220V 50HZ			380V 50HZ	220V 50HZ		380V 50HZ
Shaking Speed Range	1200W	1450W	2000W	3650W	1500W	2050W	4100W 3700W
Temperature Range	With Lighting: 10~50℃ Without lighting: 4~50℃						
Display Resolution	0.1℃						
Temperature Stability	±1℃						
Temperature Uniformity	±2℃						
Ambient Temperature	+5~30℃						
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_2 inlet
- CO_2 controller (imported IR CO_2 sensor)

Plant Growth Chamber

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)

GentianaMGC-250BP-2

Specifications

Parameter \ Model	Gentiana MGC-250BP-2	Gentiana MGC-350BP-2 MGC-450BP-2	Gentiana MGC-350HP-2 MGC-450HP-2	Gentiana MGC-800BP-2 MGC-1000BP-2	Gentiana MGC-800HP-2 MGC-1000HP-2
Chamber Volume	250L	300L/450L		800L/1000L	
Temperature Range	Without Lighting: 0~50℃ , With lighting: 10~50℃				
Display Resolution	0.1℃				
Temperature Stability	±1℃				
Temperature Uniformity	±1.5℃			±2℃	
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℃				
Interior Dimension(W×D×H) mm	580×510×835	520×550×1140/700×550×1140		800×590×1650/1050×590×1650	
ExteriorDimension(W×D×H)mm	725×740×1550	830×850×1850/950×850×1850		1475×890×1780/1410×890×1950	
Shelves	3(PCS)				

Options:

- RS485 connector

- CO₂ inlet
- CO₂ controller (imported IR CO₂ sensor)

Temperature & Humidity Chamber

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 stabilitycheck-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 printerand 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

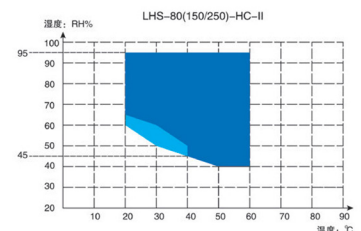| Model	LHS-80HC-I LHS-80HC-II	LHS-150HC-I LHS-150HC-II	LHS-250HC-I LHS-250HC-II	LHS-500HC-I LHS-500HC-II	LHS-800HC-I LHS-800HC-II
Temperature Range	I:-5~80℃　II:-10~70℃				
Display Resolution	0.1℃				
Temperature Stability	High ±0.5℃　Low ±1℃				
Temperature Uniformity	±2℃				
Humidity Range	I:40~85%　II:40~95%				
Humidity Accuracy	±3%RH				
Power Consumption	2000W	2100W	2300W	3850W	8050W
Ambient Temperature	+5~35℃				
Electrical Requirement	220V 50Hz				
Interior Dimension(W×D×H,mm)	400×400×500	550×405×670	600×500×830	670×720×1020	800×590×1650
Exterior Dimension(W×D×H,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

LHS-80(150/250)-HC-II

Temperature & Humidity Chamber

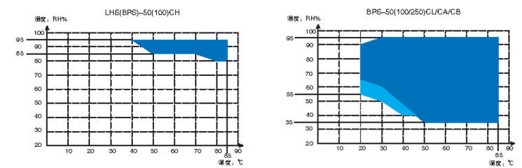## Touch Screen Humidity Chamber

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℃	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 2050W	1700W 2250W 2650W	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 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

Medicine Stability Testing Chamber

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)

GentianaSD/GSD Series

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: GentianaLHH-150SDP/LHH-250SDP/LHH-500SDP
- With temperature , Humidity & Light
  Model: GentianaLHH-150GSP/LHH-250GSP, LHH-SSG
- With temperature & Light
  Model: GentianaLHH-150GP/LHH-250GP

GentianaSDP series

Storage conditions for long-term retention sample stability test

Temperature: +25℃ ±2℃

Humidity: 60±5%RH

Time: 12 months

Storage conditions for accelerated stability test

Temperature: +40℃ ±2℃

Humidity: 70±5%RH

Time: 6 months

Illumination under strong light conditions: 4500±500LX

Above related parameter is for reference only.

GentianaGP series

Top illuminator

GentianaGSP series

Medicine Stability Testing Chamber

Specifications

Model	GentianaLHH-80SD GentianaLHH-150SD GentianaLHH-250SD	GentianaLHH-80SDP GentianaLHH-150SDP GentianaLHH-250SDP	GentianaLHH-150GSD GentianaLHH-250GSD	GentianaLHH-150GSP GentianaLHH-250GSP	GentianaLHH-150GP GentianaLHH-250GP GentianaLHH-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.				

Large Medicine Stability Testing Chamber

GentianaLHH-500 series
GentianaLHH-800 series

GentianaLHH-1000 series
GentianaLHH-1500 series

Specifications

Model	Gentiana LHH-500SD LHH-500SDP	Gentiana LHH-800SD LHH-800SDP	Gentiana LHH-1000SD LHH-1000SDP	Gentiana LHH-1500SD LHH-1500SDP	Gentiana LHH-500GSD LHH-500GSP	Gentiana LHH-800GSD LHH-800GSP	Gentiana 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						

Xenon Test Chamber

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(GentianaB-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.

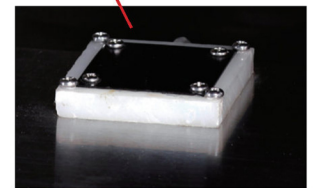### Automatic Blackboard Temperature Monitor and Control
- GentianaB-SUN uses the blackboard temperature sensor monitor the exposure temperature of sample accurately. (Cooling way: air cooling).
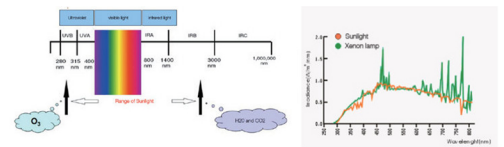
Easily calibrate light sensors
- Irradiance sensors need to be regularly calibrated by the user. The illuminometer must be compatible with the B-SUN.

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	GentianaB-SUN-I	GentianaB-SUN-II
Working chamber Dimension (W×D×H,mm)	320×320×320	
Exterior Dimension (W×D×H,mm)	890×580×590	
Control system	Siemens PLC	
Program function	4 groups standard program built-in and 2 grous program can be set	
Sample area	930cm^2	
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	

UV Test Chamber

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 cycleetc, which can be visually settingand displaying.
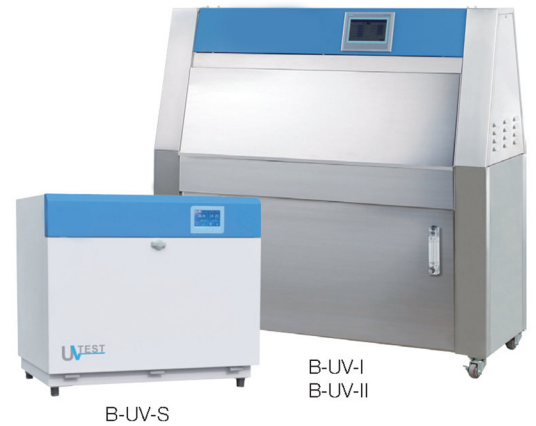
light source

- 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.

B-UV-I
B-UV-II

B-UV-S

Specifications

Model		GentianaB-UV-S(desktop)	GentianaB-UV-I	GentianaB-UV-II
Temperature Range	Light cycle	45℃ -80℃		
	Condensation cycle	40℃ -60℃		
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	-	-