



## NATURAL CONVECTION INCUBATOR BIGP-6304

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## HEATING INCUBATOR

### Heating Incubator - natural convection:

The heating incubator provides stable and controllable temperature environment through precise temperature control. It adopts natural convection mode, stable airflow and small temperature fluctuation. It is widely used in bacterial culture, fermentation, breeding, constant temperature culture and other tests.

### Heating Incubator - forced convection:

The heating incubator provides stable and controllable temperature environment through precise temperature control. It adopts forced convection mode, full airflow exchange, good temperature uniformity and small fluctuation. It is widely used in bacterial culture, fermentation, breeding, constant temperature culture and other tests.



### Intelligent:

It provides two options: colorful touch screen controller and LCD controller. It is easy to operate. (Professional type LCD controller)

With preset power on, standby and shutdown functions.

Parameters such as multi-stage temperature, circulating wind speed, time and heating rate can be set and programmed at the same time, simplifying the complicated test process and realizing automatic control and operation.

### Specialization:

Tested and manufactured using the international DIN-12880-2007 standard.

Provide professional temperature control, high temperature control accuracy and small temperature uniformity error.

The sample can be viewed through the internal glass door without affecting the t

## SPECIFICATIONS

Model	BIGP-6304
Type	LCD Controller
Capacity (L)	222L
Temp Range	RT+5 - 80°C
Stability	±0.2°C
Uniformity (at 37°C)	±0.8°C
Display Resolution	0.1°C
Max number of shelves	2(16)
Max load per shelf	20Kg
NW	108Kg
Timing Range	1 - 5999mins
Interior Dimension WxDxH (mm)	650x540x650
Exterior Dimension WxDxH (mm)	940x658x910
Electrical Requirement	AC220V/50Hz
Power Consumption	700W
Alt Name	Heating Natural convection Incubator

## FEATURES

### Intelligent:

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### Specialization:

Tested and manufactured using the international DIN-12880-2007 standard.

Provide professional temperature control, high temperature control accuracy and small temperature uniformity error.  
The sample can be viewed through the internal glass door without affecting the temperature inside the box (option)  
Stackable to save lab space.  
Flexible shelf design for efficient use of interior space.

#### Safety:

Protection of equipment: The second set of temperature limit alarm system conforms to international standards. When the heating is out of control or exceeds the maximum limit temperature, the heating is automatically cut off, and the sound and light alarm reminds the operator. Ensure that the equipment operates safely without accidents.

Protection of key components: The key electrical components are equipped with over-current, over-temperature, overload and other safety protection to prevent accidental equipment.

Protection of the sample: When the temperature inside the box is higher or lower than the set temperature, the alarm will start to cut off the heater, and the sound and light will remind the operator to protect the sample from normal test without accident.

Protection for users: The cabinet and door are specially insulated to make the surface temperature of the cabinet low, ensuring the operator's safety and no accidents.

Provide fault information: When the device fails, the display will display fault information to ensure that the fault information is clear at a glance.

#### Humanized design:

Adopting direct heating system, the heating speed is fast and the control precision is high.

PID control technology, high control precision and small temperature fluctuation.

Available in Chinese and English menus to meet different language needs, with °C/°F conversion.

The height of the shelf is adjustable to meet different cultivation needs.

Professional stacking: Tool design, the machine can be stacked, saving lab space and improving the use efficiency (same specification).

#### Convenient data processing:

The touch screen type standard with a USB Interface, which can record the change status of the temperature parameters. The LCD screen is option for USB Interface.

It can be equipped with RS232 data Interface, which can realize remote control of the machine through software (option). RS-232 and USB can be selected one of them.

#### Safety:

Protection on Instruments: Comply International standard secondary temp limiting alarm system. When the heating is out of control or exceeds the maximum limit temperature, the heating is automatically cut off with sound and light alarm, ensure operating is safe without any accident.

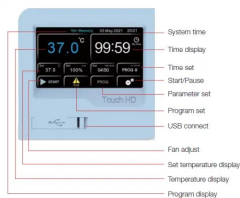
Protection on key components: Key components are equipped with over-current, over-temperature, overload and other safety protection to prevent accident.

Protection on samples: When the temperature inside the box is higher or lower than the set temperature, the alarm will start to cut off the heater, with sound and light alarm to remind the operator to protect the sample from normal test without accident.

Protection on operator: The cabinet and door are specially insulated to make the surface temperature of the cabinet low, ensuring the operator's safety and no accidents.

Breakdown message provided: When the instrument breakdown, the message will show on the screen to help operator clearly check.

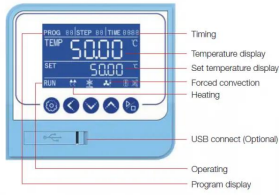
#### Colorful intelligent touch screen:



#### Advanced Color Intelligent Touch Screen Control

1. 4.3 inch touch screen, intelligent touch control, real-time display of parameters, simple and convenient operation.
2. Quick setting of temperature, time and other parameters can be carried out.
3. It has the function of program setting. It can be programmed in 7 segments, 63 steps, 9 steps and 1-99 hours and 59 minutes per segment.

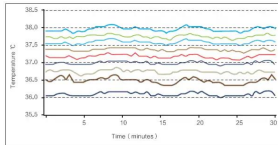
4. With touch screen automatic locking function to prevent non-related personnel from disoperation.



**Professional LCD Controller**

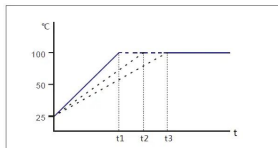
1. Intelligent program control with high brightness LCD screen, button operation and real-time display of parameters.
2. Quick setting of temperature, time and other parameters can be carried out.
3. It has the function of program setting. It can be programmed in 7segments, 63 steps, 9 steps and 1-99 hours and 59 minutes per segment.

**Precise temperature control:**

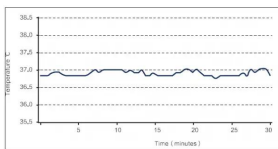


The uniformity of the temperature inside the incubator chamber is  $\leq \pm 10$  degree , so that all samples are heated evenly.

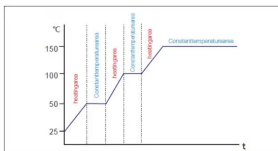
Note: The stability and uniformity are the result under steady state.



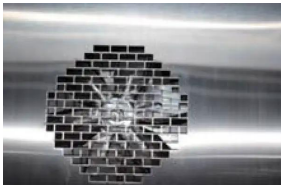
Program control mode, linear temperature rise control.



Temperature fluctuation inside the incubator chamber is  $\pm 0.2$  degree, which ensures the stability of the experiment.



Program control mode, Step heating control.



**Professional duct design:**

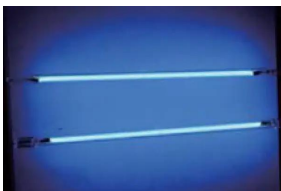
With a unique duct design, the use of large impeller fans, fast temperature rise and fall, stable temperature control, good temperature uniformity.

The circulating fan has adjustable speed, middle and low grades, so as to avoid the volatilization of samples due to excessive air flow during the test.

Famous brand fan, high efficiency, low noise, energy saving and environmental protection.



**Stainless steel inner liner:**  
304 stainless steel, mirror polishing, strong anti-corruption ability.  
Large arc angle design, no dead angle, easy cleaning and maintenance.



**Ultraviolet sterilization system (option)**  
Ultraviolet lamp is located on the upper wall of the box body. It can disinfect the box body regularly and kill the plankton bacteria in the circulating air of the box body effectively so as to prevent the pollution during cell culture.



**No overturning system:**  
Wire shelves with no overturning system to always operate safely.



**Temperature test hole:**  
External detection sensor can real-time detect the temperature inside the box through the test hole to ensure that the temperature inside the box is accurate and reliable.



**Temperature limit alarm system:**  
When the temperature control system is out of control and the temperature exceeds the limit temperature, the heating is automatically interrupted to ensure the safety of testing.



**Sample temperature sensor (optional):**  
Optional sample temperature sensor, real-time detection of sample temperature, so that the temperature is more real and reliable.

Double Convection Model:

Fan power can be adjusted from 0% (equivalent to natural convection) - 100% four gears, which can meet the training requirements of different airflow.



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