# Cbeing [ INCUBATOR ]



The cooling incubator has both cooling and heating functions, the lowest temperature can reach -10°C, the temperature stabilization time is short, and the temperature control precision is high. For the storage of culture media, serum, medicines, microbial culture, environmental testing, etc., it is environmental protection, sanitation and epidemic prevention, drug testing, farm animals, water Ideal thermostatic equipment for research institutes.

### 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

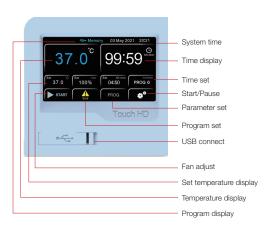
- Tested and manufactured using the international DIN-12880-2007 standard.
- Provide professional temperature control, high temperature control accuracy and small temperature uniformity error.
- The sample can be viewed through the internal glass door without affecting the temperature inside the box (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.

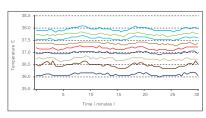


### Colorful intelligent touch screen



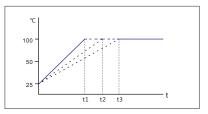


### Precise temperature control

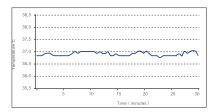


The uniformity of the temperature inside the incubator chamber is  $\leq \pm 1.0^{\circ}\text{C}$ , so that all samples are heated evenly.

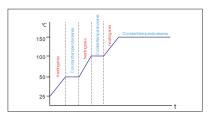
Note: The stability and uniformity are the result under steady state.



Program control mode, linear temperature rise control.



Temperature fluctuation inside the incubator chamber is  $\pm 0.2^{\circ}\text{C}$  , which ensures the stability of the experiment.



Program control mode, Step heating control.



## Cooling Incubator (BC/BJ series)



### Professional LCD Controller (L Series)

- Intelligent program control with high brightness LCD screen, button operation and real-time display of parameters
- Quick setting of temperature, time and other parameters can be carried out.
- 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.



### Advanced Color Intelligent Touch Screen Control

- 5.0 inch touch screen, intelligent touch control, real-time display of parameters, simple and convenient operation.
- Quick setting of temperature, time and other parameters can be carried out. 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.
- With touch screen automatic locking function to prevent non-related personnel from disoperation.



### 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.



### Refrigeration system

- International brand compressors, with high refrigeration efficiency and low noise, shorten cooling time by 40% compared with traditional cryogenic equipment, save energy and protect environment.
- $\bullet$  Minimum temperature up to 10°C , with refrigeration and heating functions.
- Automatic switching of refrigeration and heating, high control accuracy and fast temperature stability.

### No overturning system

• Wire shelves with no overturning system to always operate safely.



### 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.



### Reserved 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.







### Humanized design

- With casters, flexible and convenient to move.
- With reservation and timing functions, there is no need to wait, which effectively improves the efficiency of the experiment.
- Available in Chinese and English menus to meet different language needs, with °C / °F conversion.

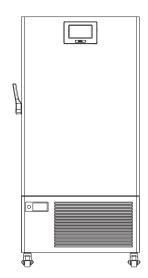
### Saftv

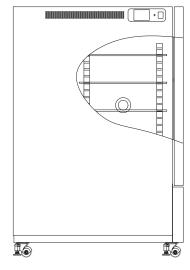
- Protection on instruments: Comply international standard secondary temp limiting alarm system. When the heating is out of
  control or exceeds the maximum limit temperature, the heating is automatically cut off with sound and light alarm, ensure
  operating is safe without any accident.
- Protection 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 shown on the screen to help operator clearly check.

### 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.

### Cooling incubator Structure diagram





- 1. Touch screen
- 2. The cabinet
- 3. Door Handle
- 4. Wind impeller
- 5、On/off switch
- 6. Outside door
- 7、Spacer
- 8, Shelves
- 9、Test hole
- 10、Interior chamber
- 11、Casters

## **Cooling Incubator**

### **Technical parameters**

Touch Screen	BC-60	BJ-60	BC-120	BJ-120	BC-250	BJ-250	BC-500	BJ-500	BC-800	BJ-800
LCD controller	BC-60L	BJ-60L	BC-120L	BJ-120L	BC-250L	BJ-250L	BC-500L	BJ-500L	BC-800L	BJ-800L
Capacity (L)	68L		120L		252L		495L		752L	
Temp Range	-10 - 80℃									
Display Resolution	0.1℃									
Uniformity	±1.0°C									
Timing Range	1 - 5999mins									
Max number of shelves	2(10)		3(14)		3(16)		4(16)		4(20)	
Max load per shelf	20Kg									
NW	85Kg		100Kg		120Kg		220Kg		250Kg	
Interior Dimension W×D×H(mm)	400×380×450		500×400×600		550×600×750		670×725×1020		700×860×1250	
Exterior Dimension W×D×H(mm)	545×670×1000		645×690×1150		695×890×1300		850×1095×1935		950×1225×2000	
Electrical Requirement	AC220V/50Hz									
Power Consumption	1300W		1500W		1700W		2250W		2800W	
UV lamp	option	standard	option	standard	option	standard	option	standard	option	standard

BC series Cooling incubator

BJ series Cooling incubator with UV lamp

## **Heating Incubator**



### Professional LCD Controller (L Series)

- Intelligent program control with high brightness LCD screen, button operation and real-time display of parameters
- Quick setting of temperature, time and other parameters can be carried out.
- 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.



### Advanced Color Intelligent Touch Screen Control

- 4.3 inch touch screen, intelligent touch control, real-time display of parameters, simple and convenient operation.
- Quick setting of temperature, time and other parameters can be carried out.
- 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.
- With touch screen automatic locking function to prevent non-related personnel from disoperation.



### No overturning system

• Wire shelves with no overturning system to always operate safely.



### 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.



### 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.

### Stainless steel inner liner

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



### 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.



### 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.







### 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 foot 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.

### Saftv

- 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 shown on the screen to help operator clearly check.



### Technical parameters (Natural Convection)

Touch Screen	BI-35T	BI-55T	BI-120T	BI-200T		
LCD controller	BI-35TL	BI-55TL	BI-120TL	BI-200TL		
Capacity (L)	34L	54L	124L	222L		
Temp Range		RT+5 - 80℃				
Stability	±0.2°C					
Uniformity(at 37℃)	±0.8°C					
Display Resolution	0.1℃					
Max number of shelves	2(5)	2(6)	2(10)	2(16)		
Max load per shelf	20Kg					
NW	44Kg	53Kg	79Kg	108Kg		
Timing Range	1 - 5999mins					
Interior Dimension W×D×H(mm)	320×340×320	400×360×415	520×480×490	650×540×650		
Exterior Dimension W×D×H(mm)	610×520×580	690×468×640	810×588×755	0×588×755 940×658×910		
Electrical Requirement	AC220V,50Hz					
Power Consumption	250W	300W	550W	700W		

### **Technical parameters (Air Forced)**

Touch Screen	BI-35F	BI-55F	BI-120F	BI-200F	BI-400F			
LCD controller	BI-35FL	BI-55FL	BI-120FL	BI-200FL	BI-400FL			
Capacity (L)	35L	67L	146L	253L	420L			
Temp Range	RT+5 - 80℃							
Stability	±0.2°C							
Uniformity(at 37°C)	±0.8°C							
Display Resolution	0.1℃							
Max number of shelves	2(5)	2(9)	2(12)	2(16)	2(23)			
Max load per shelf			20Kg					
NW	48Kg	56Kg	82Kg	119Kg	160Kg			
Timing Range			1 - 5999mins					
Interior Dimension W×D×H(mm)	320×390×320	400×395×415	520×510×530	650×600×650	1000×530×800			
Exterior Dimension W×D×H(mm)	610×550×545	690×560×640	810×685×755	940×755×875	75 1285×750×980			
Electrical Requirement	AC220V,50Hz							
Power Consumption	300W	350W	600W	700W	700W 1000W			

X The outer dimensions do not include hinges, handles, gauges, wires, etc., and the internal dimensions do not include the duct section.

X All test data are tested in a 25°C environment.