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# INCUBATOR

## Heating Incubator

**Cooling Incubator** 





## being Introduction

BEING is a high-end brand of Yiheng Instruments, specializing in the provision of laboratory routine equipment, providing highperformance drying ovens, vacuum drying ovens, incubators, cooling incubators, heating incubator, Special equipment such as constant temperature and humidity chamber, stability test chamber, shaker. Committed to providing users with intelligent, professional and humanized laboratory equipment to meet the needs of modern laboratories requirements.

### **Cooling 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.

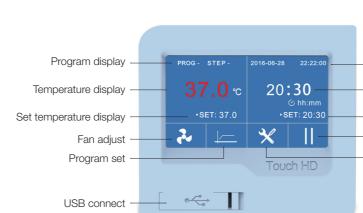
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### specialization

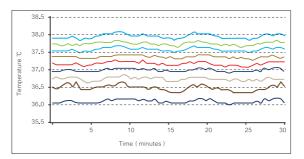
- Tested and manufactured using the international DIN-12880-2007 standard.
- Provide professional temperature control, high temperature control accuracy and small temperature uniformity error.
- The sample can be viewed through the internal glass door without affecting the temperature inside the box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

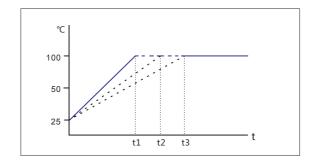


## Precise temperature control



The uniformity of the temperature inside the incubator chamber is  $\leq \pm 1.0$  °C , so that all samples are heated evenly. Note: The stability and uniformity are the result under steady state.



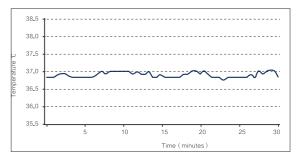


Program control mode, linear temperature rise control

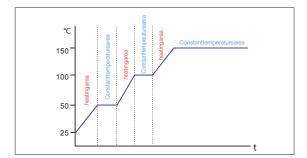
## Colorful intelligent touch screen (Advanced)

- System time
- Time display
- Time set
- · Start/Pause
- Parameter set





temperature fluctuation inside the incubator chamber is  $\pm 0.2\,^\circ\!C$  , 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

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



### Professional anti-skid and anti-overturning shelf design

so as to avoid the loss caused by the direct slide of the shelf.

### 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.

### Refrigeration system

- equipment, save energy and protect environment.
- fast temperature stability.

### Reserved test hole

accurate and reliable.

• Shelf has anti-inclination function to avoid falling off when shelf is pulled out. • Shelf has anti-lock function, the shelf will be locked when it is pulled out half,





• International brand compressors, with high refrigeration efficiency and low noise, shorten cooling time by 40% compared with traditional cryogenic

• Minimum temperature up to - 10 C, with refrigeration and heating functions. • Automatic switching of refrigeration and heating, high control accuracy and



• 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





# **Cooling Incubator**

### 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.

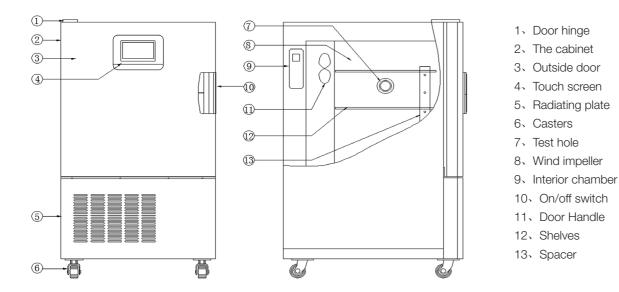
### Safty

- 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



# **Cooling Incubator**

### **Technical parameters**

Model	BC-60 BC-60L	BJ-60 BJ-60L	BC-120 BC-120L	BJ-120 BJ-120L	BC-250 BC-250L	BJ-250 BJ-250L	BC-500 BC-500L	BJ-500 BJ-500L
Capacity (L)	68	3L	12	:0L	25	52L	49	15L
Temp range	-10~80℃							
Display Resolution	0.1°C							
Uniformity	±1.0°C							
Timing Range	1~5999mins							
Max number of shelves	2(10)		3(14)		3(16)		4(16)	
Max load per shelf	20Kg							
NW	85Kg		100Kg		120Kg		220Kg	
Interior Dimension W×D×H(mm)	400×380×450 500×400×600		550×600×750		670×725×1020			
Exterior Dimension W×D×H(mm)	545×67	545×670×1000 645×690×1150		0×1150	695×890×1300		850×1095×1935	
Electrical Requirement	AC220V/50Hz							
Power Consumption	1300W		1500W		1700W		2250W	
UV lamp	option	standard	option	standard	option	standard	option	standard

BC/BJ series touch screen controller BC series Cooling incubator BC/BJ-L series LCD controller BJ series Cooling incubator with uv lamp

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# **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.



### Professional anti-skid and anti-overturning shelf design

- Shelf has anti-inclination function to avoid falling off when shelf is pulled out.
- Shelf has anti-lock function, the shelf will be locked when it is pulled out half, so as to avoid the loss caused by the direct slide of the shelf.



### Professional duct design

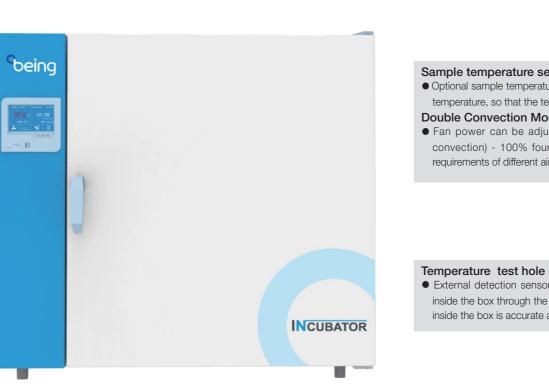
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- With a unique duct design, the use of large impeller fans, fast temperature rise and fall, stable temperature control, good temperature uniformity.
- The circulating fan has adjustable speed, middle and low grades, so as to avoid the volatilization 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

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.

## 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.



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





• External detection sensor can real-time detect the temperature inside the box through the test hole to ensure that the temperature





# **Heating Incubator**

### 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.

### Safty

- 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)**

Model	Model BI-35T BI-35TL		BI-120T BI-120TL	BI-200T BI-200TL			
Capacity (L)	34L	54L	124L	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(5)	2(9)	2(12)	2(16)			
Max load per shelf	20Kg						
NW	44Kg	53Kg	79Kg	108Kg			
Timing Range	1~5999mins						
Interior Dimension W×D×H(mm)	320×300×320	400×330×380	520×450×490	650×500×650			
Exterior Dimension W×D×H(mm)	610×520×580	690×468×640	810×588×755	940×658×910			
Electrical Requirement	AC220V,50Hz						
Power Consumption	250W	300W	550W	700W			

BI-T series touch screen controller

BI-TL series LCD controller

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

Model	BI-35F BI-35FL	BI-55F BI-55FL	
Capacity (L)	35L	67L	
Temp range			
Stability			
Uniformity(at 37°C )			
Display Resolution			
Max number of shelves	2(5)	2(6)	
Max load per shelf			
NW	48Kg	56Kg	
Timing Range			
Interior Dimension W×D×H(mm)	320×300×320	400×305×415	
Exterior Dimension W×D×H(mm)	610×550×545	690×560×640	
Electrical Requirement			
Power Consumption	300W	350W	

### BI-F series touch screen controller BI-FL series LCD controller

\* 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℃ environment.

 $\times$  If the maximum temperature is to reach 300  $^\circ\!{\rm C}$  , please note in advance before ordering.

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BI-400F

### BI-200FL BI-120FL BI-400FL 146L 253L 420L RT+5~80℃ ±0.2°C ±0.8°C 0.1℃ 2(10) 23 2(16) 20Kg 119Kg 160Kg 82Kg 1~5999mins 520×430×530 650×500×650 1000×800×530 810×685×755 940×755×875 1285×980×750 AC220V.50Hz 600W 700W 1000W

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BI-200F

BI-120F