

## **Preheating Technology Simulation Environment CO2 Incubator**



#### CO2 incubator:

Used in cell culture, microbiology research, pathology and life science fields.

Creating a natural growth of the same simulation environment, adopt chamber heating technology to provide a stable temperature, the professional-grade IR CO2 sensor, more accurately detect CO2 concentration. Equipped with UV sterilization lamp, effectively prevent cross-contamination of cultivation.

# **ALLHEAT™ Chamber Preheating Technology:**

- •ALLHEAT™ Chamber preheating technology is the heating element is evenly distributed in the interior pre-heating of the cavity inner wall, and then through the heat transfer and forced-fan convection, so that the temperature of each cavity can accurately reach and maintain the set value, thus ensuring uniform distribution of the cavity temperature.
- •Chamber of six surface heating, in which the glass door to possession of the heating system to prevent condensation of glass doors.
- •ALLHEAT™ series CO2 Incubator with low energy consumption and heat characteristics not easily lost. Save energy, enabling customers to use the cost reduction.

### **ALLFLOW™ Clean Air Circulation System:**

- •Perfect forced convection ALLFLOW™ of air circulation system to ensure the shortest of temperature recovery after door. With internationally renowned brands with a cooling fan (maintenance, durability), the experimental and the training effect to the extent desired;
- •ALLFLOW™ air circulation system sufficiently to ensure the continuous stability of the temperature of the working chamber. Customer set temperature is reached, given the perfect environment for sample roasting / culture:
- •CO2 inlet valve with a filter device to ensure cleanliness of the cavity gas;
- Equipped with UV sterilization system in the chamber regular basis to eliminate the cavity contaminating microorganisms, effectively prevent the training during the cross-contamination.



# **Technical Parameters:**

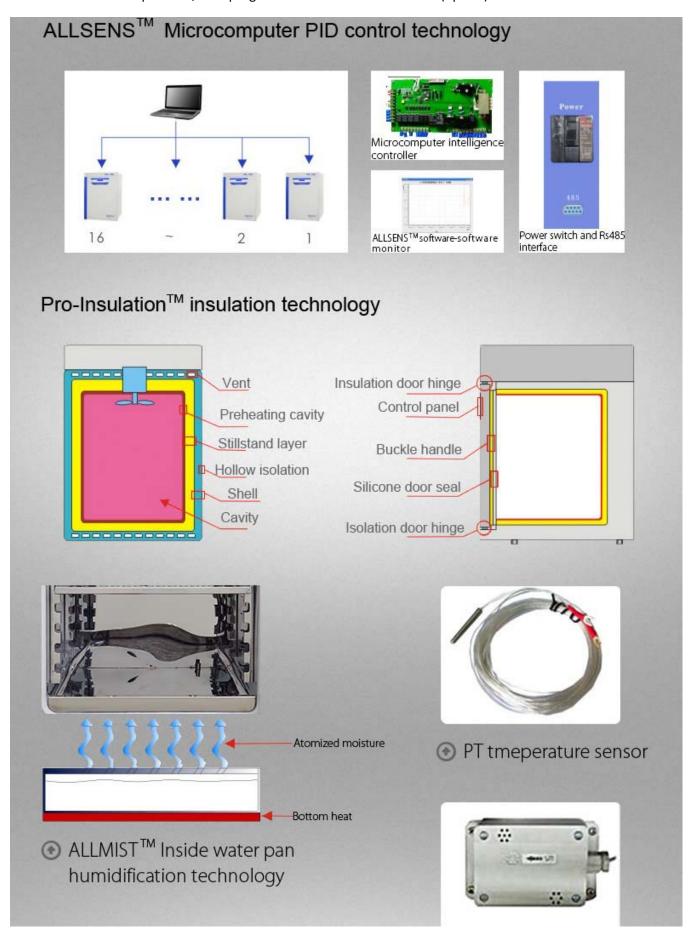
Model	iCR-80	iCR-160
Convection Mode	Forced Convection	
Control System	Microprocessor PID	
Temp. Range	RT+5℃~55℃	
Temp. Accuracy	0.1	
Temp. Fluctuation(37℃)	±0.5	
Temp. Uniformity (37℃)	±0.8	
CO2 Range	0~20%	
CO2 Sensor/Uniformity	IR sensor (±0.1%)	
CO2 Recovery Without overshoot (after 30 seconds door opening to 5%)	≤2 minutes	
Temp. Recovery Without  Overshoot(after 30 seconds door opening to 37°C)	≤8 minutes	
Humidification Method	Humidity Pan $>$ 95%(with Temp. display)	
Working environment	Ambient temperature: $10^{\sim}30^{\circ}\mathrm{C}$ , Humidity <70%	
Insulation materials	Imported environmental protection type material	
External Dimensions(H×W×D)	755×550×547	905×610×687
Internal Dimensions(H×W×D)	500×400×400	650×460×540
Interior Volume(L)	80	160
Interior steel materials	SUS304 stainless steel	
Number of Shelves	2	3
Power supply	Single phase AC220V/50Hz	
Power Consumption (W)	500	650
Net Weight(KG)	35	55
Shipping Weight(KG)	38	58
Shipping Dimensions(H×W×D)	880×630×635	1030×690×695

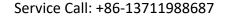
# **ALLSENS™ Programmable PID Controller:**

- •Integrated, dot-matrix LCD display, Chinese and English subtitles, design for the highest operational comfort. Display parameters: Temp. Setting value; Temp. Measuring value, Humidity, CO2 setting value, CO2 measuring value, Heating, Fast input, Sloe input, Sterilization, run/stop.
- •Adaptive PID controller precisely control the temperature and humidity, prevent temperature soaring, keep working room temperature stable and uniformity.
- •User password protection, built-in multifunctional memory menu, connect to multiple devices (up to 16 units), real-time monitoring.



- •Set operations with beep tips.
- ●Remote-controlled operation, with programmable ALLSENS™ software (option).







## **ALLMIST™ Inside Water Pan Humidification Technology:**

- •The original water pan liner integrated humidifier design, that the water quickly atomized.
- •Soft air with water vapor of the water pan out the cavity humidity up and recovery, to ensure that the culture needed to saturated water.

### **Pro-Insulation™ Isolation Insulation Technology:**

- •Inner isolation gate design, take full account of customers in the observation of cavity samples, ensure the consistency of the cavity temperature.
- •Based on the effective use of heat design, complete isolation between the liner and shell to avoid energy loss due to heat transfer.
- •Imports high-density thermal insulation material wrapped liner, insulation well.
- •Good silicone door seal, with the magnet outside the door design, ensure tightness.

## **Excellent Imported Sensor:**

- •Imported industrial sensor PT100, short response time, low self-heating temperature.
- •Imported humidity sensor, aerospace material, no maintenance, precision humidity control level.
- •Imported IR CO2 concentration sensor with automatic temperature compensation allows high humidity (> 98%) long-term use of the environment, high accuracy, low drift, and the CO2 concentration can be fast recovery characteristics.

#### Ergonomic design:

- •Laboratory of classical color design, international fashion design, arc-shaped design, for highest operational comfort.
- •Integrated design that contains original outside handle and LCD screen, ergonomic structure, comfortable viewing angle, convenient to open the outside door and operate interface.
- •Interval and number of mesh shelf can be adjusted according to customer requirements. Maximum capacity to meet customer needs.
- •Vertical cabinet classic design of structural, electrical components located in the upper cabinet to facilitate maintenance.
- •Comfortable vertical structure, maximize work chamber, working room in the upper, convenient to take.
- •Double door design, easy observation samples, keep temperature stability, with bell-type lighting system.
- •With a test hole in the inner door, easy to test.

### **Modern Manufacturing Processes:**

- •Sheet metal parts use laser cutting and CNC bending technology. Cold-rolled sheets use three line of acidification anti-rust technology. Incubator surface use workmanship of spraying plastics.
- •Inner chamber is made of SUS304 stainless steel materials.

## **Easy To Clean:**

- •Internal surface is smooth and less weld, easy cleaning and maintenance.
- Pull multilayer shelf design, less metal accessories, easy to clean.
- •Drainage design of chamber humidification collecting tank. User can discharge water as required to avoid bacteria
- •Water pan drainage design, the user may need to open the valve, put the best water to avoid bacteria.

### **Convenient Maintenance:**

•Liquid crystal micro-computer controller with diagnostic function. Display operating parameters including



historical record, temperature and humidity data.

•Electrical control components and working room are installed separately. installed behind incubator, easy to maintenance.

# **Secure and Efficient Protection Concept:**

- Multiple over temperature protection function, sound and light alarm.
- Automatic double over temperature protection function.
- All electronic components are UL certified.
- •All over temperature protection devices meet Germany standard DIN standard D12880 Class 3.1.

# **Main Application Range:**

