

## Model JSBI-050C : Tabletop Refrigerated Incubator



JSBI-xxC series Tabletop Refrigerated Incubator provides temperature control range from 0 °C to +70 °C for incubation of microorganisms such as bacteria, cell and tissue. Also suitable for BOD test and various QA / QC tests needs constant temperature.

### MAIN FEATURES

#### PERFORMANCE

- Control Temperature Range from +0°C to +70°C
- Forced air circulation for excellent thermal accuracy and uniformity
- Aero-dynamic chamber designed with circulation blower to achieve superior thermal uniformity
- Separate heating compartment located on back wall for contamination free and maintenance free
- Air cooled refrigeration system with hermetically sealed compressor

#### CONSTRUCTION

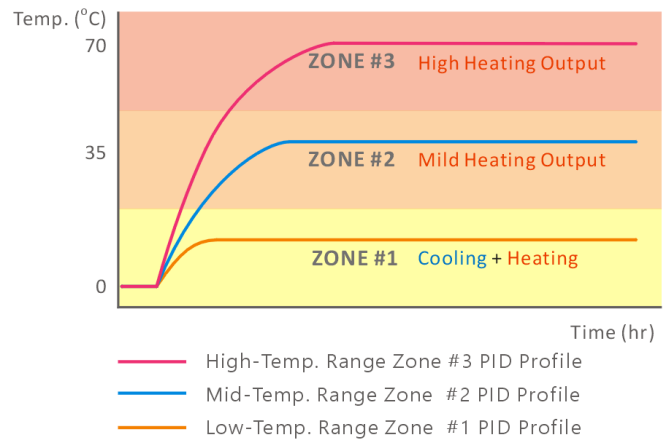
- Durable epoxy powder coated metallic casing
- Corrosion resistant Stainless Steel 304 chamber with seamless round cornered edge allows easy cleaning and prevent leakage
- Tempered safety inner glass door for easy observation of samples

**CONTROLLER HIGHLIGHT**



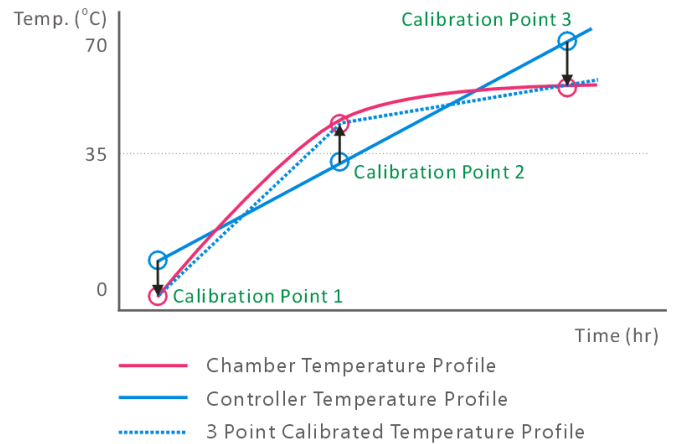
**-3 GROUP ZONE PID ALGORITHM**

Usable temperature range divided into three zones (LOW/MIDDLE/HIGH) and each ZONE has its individual PID parameters optimized to the range, and it provides precise and superior temperature control characteristic to whole temperature range.



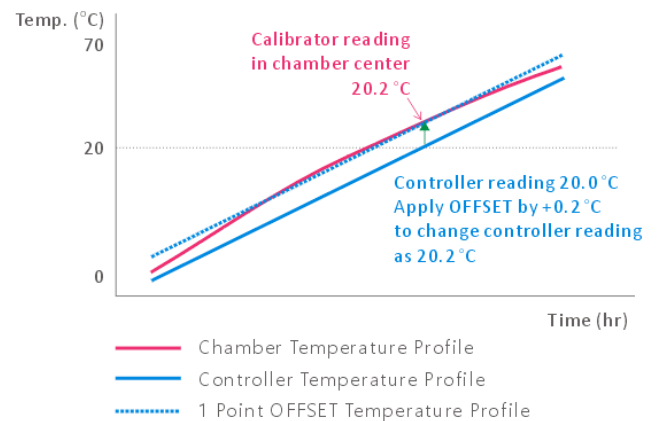
**-3 POINT CALIBRATION FUNCTION**

A perfect calibration tool to calibrate chamber at THREE DIFFERENT TEMPERATURE POINTS to adjust multiple temperature bias to increase the temperature accuracy of WHOLE TEMPERATURE RANGE.



**- 1 POINT OFFSET FUNCTION**

Provides simple and easy calibration tool to calibrate chamber at ONE SPECIFIC TEMPERATURE POINT in frequent use.



## CONTROLLER

### -DIGITAL MICROPROCESSOR PID TEMPERATURE CONTROLLER

Integrated Digital Microprocessor Control System

### -GRAPHIC LCD DISPLAY

Back Light Graphic LCD Display provides user-friendly operating information

### -UV COATED POLYCARBONATE TOUCH PANEL

Equipped with Capacitive LED Lighting Touch Button provides sensitive touching operation and durability

### -ENCODER TYPE JOG DIAL

Push to Start and Stop, Rotary turn to change values provides easy and simple user interface

### -0.1 °C CONTROL RESOLUTION

-Auto-Stop Timer 1 min ~ 99 hour 59 min and alarm

-Auto-Start Timer 1 min ~ 99 hour 59 min and alarm

-Temperature and Timer Memory Function

-3 GROUP ZONE PID ALGORITHM

-3-POINT CALIBRATION

-1-POINT OFFSET CALIBRATION

-POWER and TIMER RESTORE FUNCTION in case electric power outage

-CLASS A PT-100  $\Omega$  Sensor

-Delay starter to protect compressor.

-RS-232C PC COMMUNICATION INTERFACE [OPTION]

## CONVENIENCE

-Outer door with self-adhesive magnetic packing

-Inner glass door with high density silicone gasket and air-tight door lock

-Removable and height adjustable shelf by 25mm spacing

## SAFETY

-PT SENSOR SHORT OR DISCONNECTION AUDIO VISUAL ALARM

-DUAL OVER TEMPERATURE CUT-OFF BY CONTROLLER AND INDEPENDENT THERMOSTAT

Controller cut-off heater, compressor and AUDIO VISUAL ALARMS

ALARM HIGH : +5 °C above set temp.

ALARM LOW : -5 °C below set temp.

Independent analog thermostat cut-off heater above set temperature

-DOOR OPEN AUDIO VISUAL ALARM

-OVER CURRENT CUT-OFF : Electric Circuit Breaker

## SPECIFICATIONS

**MODEL JSBI-050C**

### Dimension Data

Chamber Volume	50 Liters
Inner Dims. (W x D x H mm)	400 x 360 x 350
Outer Dims. (W x D x H mm)	580 x 600 x 770
Inner Glass Door (W x H mm)	461 x 477
No. of Shelf Positions	10 ea by 25mm spacing
No. of Shelf included	2 ea

### Performance Data

Heating System	Forced Air Convection
Cooling System	Hermetically Sealed Air Cooled Compressor
Temp. Range	+0 °C ~ +70 °C
Accuracy	±0.2 °C at +20.0 °C
Uniformity	±0.5 °C at +20.0 °C

### Controller

Processor	Digital Microprocessor PID Temperature Controller
Display	Back Light Graphic LCD Display
Panel	UV Coated Polycarbonate Solid Touch Panel
Button	Capacitive touch LED Lighting Touch Button
Interface	Push and Rotary encoder type Jog Dial
Control Logic	3 Group Zone PID Control
Calibration	1 Point Temperature OFFSET 3 Point Temperature Calibration
Resolution	0.1 °C
Auto-Stop Timer	1 min. ~ 99 hr 59 min
Auto-Start Time	1 min. ~ 99 hr 59 min
Sensor	CLASS A PT-100 Ω Sensor
Power Restoration	Power and Timer Restoration Function in case of power outage
PC Communication Interface	RS-232C PC COMMUNICATION INTERFACE [OPTION]

### Safety Data

Safety Device	Sensor short or disconnection AUDIO VISUAL ALARM
	Controller cut-off heater, compressor and AUDIO VISUAL ALARM
	HI-ALARM : +5 °C above set temp.
	LO-ALARM : -5 °C below set temp.
	Independent analog thermostat cut-off heater above set temperature
	Door Open AUDIO VISUAL ALARM
	Over current cut-off

### Material Data

Body	Epoxy Powder Coated Steel
Chamber	Stainless Steel 304 (AISI304)
Inner Glass Door	Tempered Safety Glass, 5 mm thick

### Electrical Data

Rated voltage	220 ± 10% VAC
Power frequency	50 / 60Hz
Heater Output	700 W
Nominal power	1.3 kW 6.0 amp
Phase	1 Phase
Plug configuration	CEE 7/7 Schuko or BS 1363

### Usable Condition

Temp. & Humidity	5°C - 40 °C, < 80% RH
------------------	-----------------------

### Packaging Data

Shipping Dims. (W x D x H mm )	630 x 650 x 870 mm
Type of packaging	Carton on a wooden palette
Net Weight	50.0 kg
Shipping Weight	60.0 kg

**ORDERING INFORMATION**

Art. No.	Descriptions	Voltage
JSBI-050C	<p><b>Tabletop Refrigerated Incubator, 50 L</b></p> <p>including standard accessories</p> <p>2 ea x PVC Coated Wire Shelf</p> <p>8 ea x Shelf Support</p> <p>1 ea x Instruction Manual</p> <p>1 ea x Warranty Certificate</p>	220 VAC 1~ ph 50/60Hz

**OPTIONAL ACCESSORIES**

Art. No.	Descriptions
PHS-A23	Perforated Shelf, Stainless Steel 304, W370 x D340 mm for JSBI-050C
PHS-C09	PVC Coated Wire Shelf, W370 x D340 mm for JSBI-050C
PHS-A99	Shelf Support, Set of 4 ea

**JS RESEARCH INC.**

Gongju-City, Korea

TEL +82 41 856 3677

FAX +82 41 856 3679

info@jsresearch.co.kr

www.jsr.kr