JSBI-Series
PROGRAMMABLE
TABLETOP
REFRIGERATED
INCUBATOR
0 °C ~ 70 °C

JSBI-xxCP series Programmable Tabletop Refrigerated Incubator provides 10 Steps of temperature programming or constant temperature operation range from +0 ℃ to +70 ℃ for more versatile use. It gives excellent performance for incubation of microorganisms, BOD (Biological Oxygen Demand) Test and various QA / QC Tests.

JSBI-100CP Programmable Tabletop
Refrigerated Incubator, 100 liter

Features

Performance

Temperature Range   : 0 °C to 70 °C
Temperature Accuracy   : within +/- 0.2 °C
Temperature Uniformity :   within +/- 0.5 °C

Forced air convection for excellent thermal accuracy and uniformity.
Aero-dynamic chamber designed with circulation blower to achieve superior thermal uniformity.
Separated heating and cooling compartment located on the back wall for contamination free and maintenance free.
Hermetically Sealed Air Cooled Compressor

Construction

Durable epoxy powder coated metallic casing.
Corrosion resistant Stainless Steel 304 chamber with seamless round cornered edge allows easy cleaning and prevents leakage.
Tempered Safety Inner Glass Door for easy observation of samples.

Convenience

Outer door with self-adhesive magnetic packing.
Inner Glass Door with high density silicone gasket and air-tight Door Lock.
Removable and adjustable shelf by 25mm spacing.

Safety

DUAL OVER TEMPERATURE CUT-OFF BY CONTROLLER
AND INDEPENDENT THERMOSTAT
HIGH TEMPERATURE CUT-OFF AND AUDIO VISUAL ALARM
LOW TEMPERATURE CUT-OFF AND AUDIO VISUAL ALARM
PT SENSOR SHORT OR DISCONNECTION AUDIO VISUAL ALARM
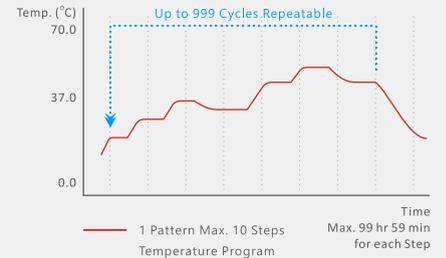OVER CURRENT CUT-OFF

Featured Controller

JIC-CON 5th GEN

3-ZONE PID Algorithm
3-Point Calibration
1-Point Offset
10-Step 999-Cycle Program

Controller Highlights
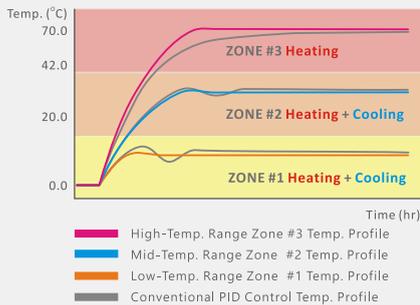
‣ 16-bit Digital Microprocessor PID Controller.

‣ High-fidelity clear back light LCD displays complete
   settings and operating conditions with high readability.

‣ UV Coated Water-Proof Polycarbonate Touch Panel.

‣ Easy-to-use Encoder Type Jog Dial for quick and
   convenient temperature and time setting.

‣ 0.1 °C control resolution.

‣ Turn-On and Turn-Off Timer up to 99 hour 59 min.

‣ Temperature and Timer memory function.

‣ 10 Step, 999 Cycle Program.

‣ Temperature and Timer automatically resume after power restoration.

‣ Class A Pt-100 Ohm Sensor.

‣ RS-232C PC Communication Interface. [OPTION]

10 Step Program

Temp. (°C)
70.0
37.0
0.0

Up to 999 Cycles Repeatable

Time
Max. 99 hr 59 min
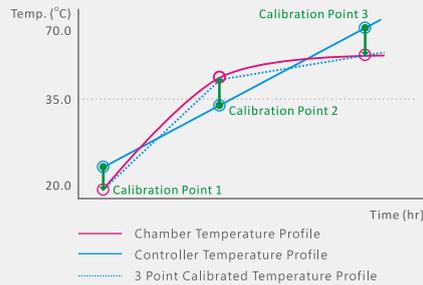for each Step

1 Pattern Max. 10 Steps
Temperature Program

User can create 10 Steps of varying
temperature program and save it
in memory for repeated use.
Program can be repeated up to
Max. 999 Cycles.

3-ZONE PID Algorithm

Temp. (°C)
70.0
42.0
20.0
0.0

ZONE #3 **Heating**
ZONE #2 **Heating** + **Cooling**
ZONE #1 **Heating** + **Cooling**

Time (hr)

High-Temp. Range Zone #3 Temp. Profile
Mid-Temp. Range Zone #2 Temp. Profile
Low-Temp. Range Zone #1 Temp. Profile
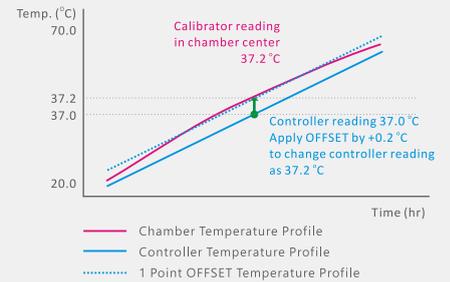Conventional PID Control Temp. Profile

Complete temperature range is divided
into three zones (LOW/MIDDLE/HIGH)
and each ZONE has its individual PID
algorithm to provide precise and superior
temperature control characteristic
of whole temperature range.

3-Point Calibration

Temp. (°C)
70.0
35.0
20.0

Calibration Point 3
Calibration Point 2
Calibration Point 1

Time (hr)

Chamber Temperature Profile
Controller Temperature Profile
3 Point Calibrated Temperature Profile

An excellent calibration tool to calibrate
chamber at THREE DIFFERENT TEMPEATURE
POINTS to adjust multiple temperature
bias to increase temperature accuracy
of WHOLE TEMPERATURE RANGE.

1-Point Offset

Temp. (°C)
70.0
37.2
37.0
20.0

Calibrator reading
in chamber center
37.2 °C

Controller reading 37.0 °C
Apply OFFSET by +0.2 °C
to change controller reading
as 37.2 °C

Time (hr)

Chamber Temperature Profile
Controller Temperature Profile
1 Point OFFSET Temperature Profile

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

www.JSR.kr

20.0 °C
99:59

Specifications

Model	JSBI-050CP	JSBI-100CP
Dimension Data		
Chamber Volume	50 Liters	100 Liters
Inner Dims. (WxDxH) mm	400 x 360 x 350	450 x 450 x 500
Outer Dims. (WxDxH) mm	580 x 600 x 770	630 x 690 x 920
Window Dims. (WxH) mm	461 x 477	461 x 677
No. of Shelf Positions	10 ea	16 ea
No. of Shelf Included	2 ea	2 ea

Performance Data

Heating & Cooling System	Forced Convection with Hermetically Slealed Air Cooled Compressor
Temperature Range	0 $^\circ$C to 70 $^\circ$C, 0.1 $^\circ$C resolution
Temperature Accuracy at 20.0 $^\circ$C	+/- 0.2 $^\circ$C
Temperature Uniformity at 20.0 $^\circ$C	+/- 0.5 $^\circ$C

Controller

Type	Digital Microprocessor PID Temp. Controller with Capacitive Touch Button and Jog Dial
Display	Full Size Digital Back Light Graphic LCD Display
Control Logic	3 Group Zone PID Control
Calibration	1 Point Temperature Offset
	3 Point Temperature Calibration
Temp. Program	1 Pattern, 10 Steps, 1 ~ 999 (Unlimited) Times Repeatable
Auto-Start Timer	Max. 99 hr 59 min by 1 min resolution
Auto-Stop Timer	Max. 99 hr 59 min by 1 min resolution
Sensor	Class A Pt-100 Ohm Sensor
Power Restoration	Power and Timer Restoration Function in case of power outage
Communication Interface	RS-232C Communication Interface [OPTION]

Material Data

Body	Epoxy Powder Coated Steel
Chamber	Stainlss Steel 304 (AISI304)
Inner Glass Door	5.0 mm Thick Tempered Safety Glass Door

Safety Data

Safety Device	Door Open / Over Temperature / Over Cooling / Over Current Protection Audio Visual Alarm

Electrical Data

Power Requirement	220 +/- 10% VAC I 50/60 Hz I 1 Phase	
Power Consumption	1.2 kW 5.5 amp	1.3 kW 6.0 amp
Plug Configuration	CEE 7/7 Schuko or BS 1363	

Usable Condition

Temp. & Humidity	5 $^\circ$C - 40 $^\circ$C, 80% RH Max.

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Ordering Information

JSBI-Series

PROGRAMMABLE
TABLETOP
REFRIGERATED
INCUBATOR
0 °C ~ 70 °C

Art. Number	Descriptions
JSBI-050CP	Programmable Tabletop Refrigerated Incubator 50 Liter 220 VAC 1 ph 50/60Hz
JSBI-100CP	Programmable Tabletop Refrigerated Incubator 100 Liter 220 VAC 1 ph 50/60Hz

Accessories	Shelves
PHS-A23	Perforated Shelf, Stainless Steel 304, for JSBI-050CP W370 x D340 mm
PHS-A24	Perforated Shelf, Stainless Steel 304, for JSBI-100CP W420 x D430 mm
PHS-C09	Wire Shelf, PVC Coated, for JSBI-050CP W370 x D340 mm
PHS-C10	Wire Shelf, PVC Coated, for JSBI-100CP W420 x D430 mm
PHS-A99	Shelf Support, Set of 4 ea

DISTRIBUTOR

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