

Model JSOF-400T Upright Forced Convection Oven



Upright Forced Convection Ovens provides a big volume of chamber for large scale laboratory or industrial purpose. Nevertheless its large volume, dual heating system on upper and lower compartment with two separate heating elements and blowers provide better air circulation throughout the chamber to achieve excellent temperature uniformity and faster heat up time.

MAIN FEATURES

PERFORMANCE

- Control Temperature Range from ambient +10 °C to 250 °C
- Forced air convection for fast drying application
- Aero-dynamic chamber designed with circulation blower to achieve superior thermal uniformity
- Separate heating compartment located on side wall for contamination free and maintenance free
- 50mm thick high thermal efficiency mineral wool with woven aluminum barrier sheet saves energy and less dust

CONSTRUCTION

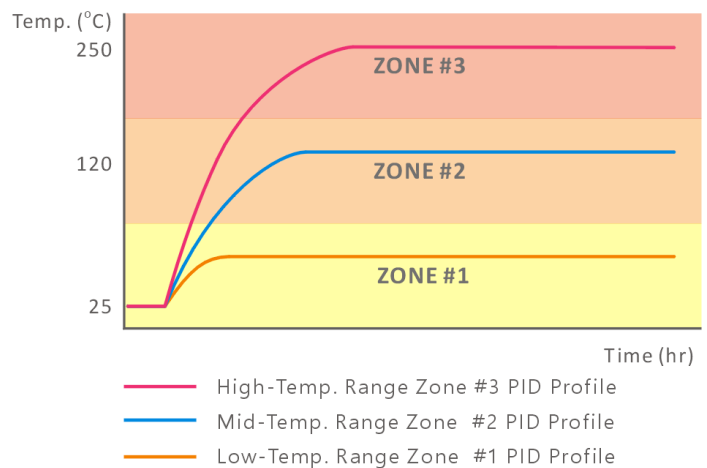
- Durable epoxy powder coated metallic casing
- Corrosion resistant Stainless Steel 304 chamber with seamless round cornered edge allows easy cleaning and prevent leakage
- Double layered glass window for easy observation of samples
- Ventilation damper

CONTROLLER HIGHLIGHT



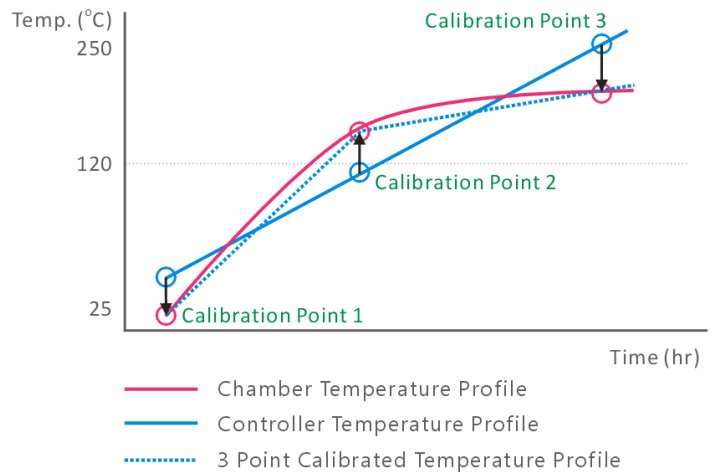
-3 ZONE PID ALGORITHM

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.



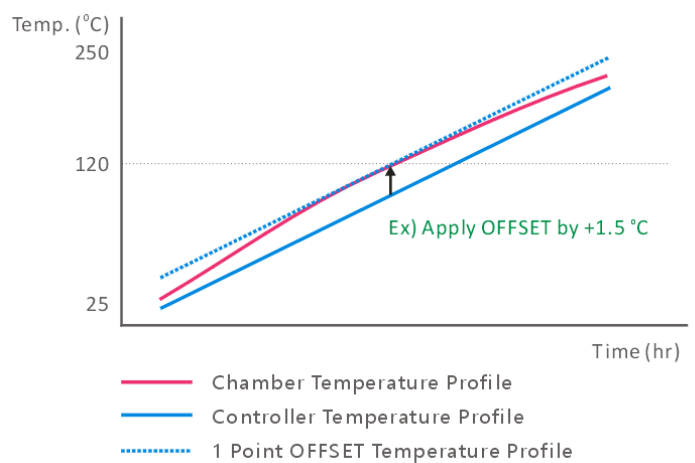
-3 POINT CALIBRATION FUNCTION

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
- Auto-Start Timer 1 min ~ 99 hour 59 min
- Temperature and Timer Memory Function
- 3-ZONE PID ALGORITHM
- 3-POINT CALIBRATION
- 1-POINT OFFSET CALIBRATION
- Operating temperature and remaining timer resume in case power outage and restoration
- CLASS A PT-100 Ω Sensor
- RS-232C PC COMMUNICATION INTERFACE [OPTION]

CONVENIENCE

- Double layered tempered safety glass window for easy observation of samples
- Stainless Steel 304 Chamber with seamless round cornered edge allows easy cleaning and prevent leakage
- Removable and height adjustable shelf by 25mm spacing
- Easy-to-open and air-tight one touch door latch
- Opening size adjustable ventilation damper
- Door switch cut-off heater and blower to protect user from exposure to hot air

SAFETY

- PT SENSOR SHORT OR DISCONNECTION AUDIO VISUAL ALARM
- DUAL OVER TEMPERATURE CUT-OFF BY CONTROLLER AND INDEPENDENT THERMOSTAT
 - Controller cut-off heater and AUDIO VISUAL ALARMS
 - ALARM HIGH : +10 °C above set temp.
 - ALARM LOW : -10 °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

Art. No. JSOF-400T

Dimension Data

Chamber Volume	372 Liters
Inner Dims. (W x D x H mm)	610 x 610 x 1000
Outer Dims. (W x D x H mm)	1005 x 785 x 1360
Window Dims. (W x H mm)	150 x 460
No. of Shelf Positions	36 ea
No. of Shelf included	4 ea
No. of Ventilation Damper	1 ea

Performance Data

Heating System	Forced Air Convection
Temp. Range	Amb. +10 °C ~ +250 °C
Accuracy at 120 °C	±0.3 °C
Uniformity at 120 °C	±2.0 °C
Heat up time to 120 °C	15 min.

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 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 and AUDIO VISUAL ALARM
 HI-ALARM : +10 °C above set temp.
 LO-ALARM : -10 °C below set temp.
 Independent analog thermostat cut-off heater above set temperature
 Door sensor Cut-Off heater and fan AUDIO VISUAL ALARM
 Over Current Cut-Off

Material Data

Body Epoxy Powder Coated Steel
 Chamber Stainless Steel 304 (AISI304)
 Insulation 50 mm Woven Mineral Wool

Electrical Data

Rated voltage 220 ± 10% VAC
 Power frequency 50 / 60Hz
 Heater Output 3.4 kW (1.7 kW x 2)
 Nominal power 3.5 kW 16.0 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

Type of packaging Wooden Crating
 Shipping Dims. (W x D x H mm) 1150 x 920 x 1510
 Net Weight 150.0 kg
 Shipping Weight 200.0 kg

ORDERING INFORMATION

Art. No.	Descriptions	Voltage
JSOF-400T	Upright Forced Convection Oven, 372 L	220 VAC 1~ ph 50/60Hz

OPTIONAL ACCESSORIES

Art No.		
PHS-A11	Perforated Shelf, Stainless Steel 304 for JSOF-400T	W580 x D590 mm
PHS-B11	Wire Shelf, Stainless Steel 304 for JSOF-400T	W580 x D590 mm
PHS-A99	Shelf Support, Set of 4	

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