### **Hot Dry Block Temperature Calibrators (SUD-300)**

Wide Temperature Range (SUD-300) Offer a wide temperature range form 50° C to 300° C

# Lightweight, portable (SUD-300)

Block is ideal for Industrial/ Laboratory field use. It only weights about 5 kg, and it is small enough to carry around

## Accuracy and performance (SUD-300)

is an easily portable unit that also provides excellent calibration accuracy with stability  $\pm 0.07$  °C at 300°C.

#### Speed (SUD-300)

extremely quick to reach various temperatures, i.e. it Heats down to 300 °C in 30 minutes and heats up room temp to 300 °C in 10 minutes. This saves time and increases productivity









Technical Specifications		
Model	SUD-300	
Control Range	50 to 300 °C @ 25°C	
Resolution	0.1 °C	
Control Accuracy	± 0.5°C	
	±0.03°C at 50°C	
Thermal Stability	±0.05°C at 150°C	
	±0.07°C at 300°C	
	±0.05°C at 50°C	
Thermal Uniformity (Radial)	±0.07°C at 150°C	
	±0.09°C at 300°C	
Hysteresis	0.02 °C	
Stabilization Time/settling time	10 minutes after set point is achieved.	
Cooling Time	30 Min ( 300 °C to 50°C) @25°C	
Heating Time	10 Min (50°C to 300 °C ) @25°C	
Power Supply	230 V(AC), (50 Hz)	
Power Consumption	500 Watt	
Display	LCD, °C or °F user-selectable	
Construction Size (H x W x D)	320(H) x 145(W) x 290(D) mm	
Instrument Weight	5 Kg	
Environmental operating conditions	0 °C to 50 °C, 0 % to 90 % RH (non-condensing)	
Immersion (Well) Depth	120 mm	
Insert Length	120 mm	
Insert OD	28mm	
Method of Control	Self tunned PID controller	
Specifications valid in environmental conditions	5°C 25°C	

Note: - Due to Continuous product improvements, Published specifications may change without notice.

ACCESSORIES		
1	Basic Instrument	
2	Spare Glass Fuses (6A)	
3	Power Supply Card	
4	Instrument Cary Box (Optional)	
5	Thermo well Insert Puller Tool	
6	Thermo well Insert Standard 6 mm = 3 Hole & 8 mm = 2 Hole	INTERCHANGABLE INSERT OPTIONS  1/1E loss '4'
7	Thermo well Insert Customised As per Customer Requirement Optional	INTERCHANGABLE INSERT OPTIONS  VIE
8	Traceable Calibration Certificate	Optional As per Quote
9	Warranty Certificate	With The Instrument

Congratulation on purchase of Dry block temperature Calibrator, Model: SUD-300 This instrument is one of the best available in its class.

We have taken enough care in designing and manufacturing to give you trouble free performance for longer period.

Extends high performance to the industrial process environment by maximizing portability, speed, and functionality with little compromise to metrology performance. High precision, better resolution, stability, fast in heating and cooling. More well dia and depth to calibrate more number of temperature sensor at a time with better Stability and uniformity. Offers easy to use portable hot temperature calibrator with temperature range from 50 to 300°C. It is a highly stable standard e for calibrating RTD. This calibrator can be used on site for low to high temperature calibration and also find application in aerospace, oil gas petrochemical, pharmaceutical industry, electric power, automotive and material process industry. The comparison volume is a metallic block of special material, which has a diameter of 28mm and 120mm long. Hot temperature dry block furnace based on thermoelectric cooling circuitry. This model provides special design isothermal enclosure which can calibrate sensor against the calibrator. Temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment.

Our newly designed model SUD-300 offers better esthetic design and performance wise upgraded to next level.

#### **Installation Instructions**

- 1. Keep The Instrument in a well ventilated Area.
- 2. Leveling to be done by Plain Surface.
- 3. Keep The Instrument away from direct sunlight and heat for better performance.
- 4. Do not keep the instrument in a damp place to avoid the risk of electric shock and paint off.

#### Safety

- 1. Don not connect the instrument with the power board or extension board carrying many connections.
- 2. To avoid electric shock, instrument must be grounded.
- 3. Do not insert the power plug with wet hands.
- 4. Do not keep heat generated / heavy objects on Around of the instrument, it affects performance and damages the product.

### **Customer usage Instructions**

- 1. Do not cover the instrument with any external plastic and shrink rapping cover, The heat dissipation is interrupted, which may cause weak cooling.
- 2. Firstly check master and UUC sensor length and OD size, Fixed Match with the Instrument Thermo well Insert.

