

# TEMPERATURE CALIBRATOR

MODEL : TCAL 1501 / 300



## INTRODUCTION

“SANSEL” series TCAL 1501 / 300 is a micro controller based precision “DRY BLOCK” temperature calibrators generates true reference temperature. The temperature controller of the calibrators uses a auto tune FUZZY PID controller algorithm. This response closely follows the heating curve of an actual thermal system.

Place the Thermocouples, RTDs - type ( PT 100, K, R, S, B, etc.) to be calibrated in the calibrator. Set the temperature from the 4.3 inch true TFT display with touch screen. Both block and set temperature can be read. When stabilization occurs, Simply read the temperature and re-calibrate the Thermocouples, sensor etc., or comparison with master Thermocouple / RTDs reading.

## Applications

- Energy - Production and Energy - Distribution Sectors
- Glass, Ceramic, Semi Conductor Industries
- Steel Material Processing Industries
- Calibrators laboratories etc.,.

## FEATURES

- ✓ 4.3 inch True TFT DISPLAY with touch screen
- ✓ Portable & Rugged
- ✓ Range from Amb. to 300°C
- ✓ Resolution 0.01°C
- ✓ Micro Controller Based Linearize High Accuracy
- ✓ Radial Uniformity better than  $\pm 0.3^{\circ}\text{C}$
- ✓ Stability  $\pm 0.03^{\circ}\text{C}$
- ✓ Windows based software
- ✓ No liquid, Safe dry calibration
- ✓ Touch screen – easy to use
- ✓ Temperature switch test
- ✓ NABL Traceable Calibration Certificate

## Technical Specifications

Model	TCAL 1501 / 300
Display	4.3 inch True TFT DISPLAY with touch screen
Temperature Range	Amb. to 300°C
Resolution	0.01°C
Stability	$\pm 0.03^{\circ}\text{C}$
Radial Uniformity	Better than $\pm 0.2^{\circ}\text{C}$
Measure inputs	RTD - PT 50, PT 100, PT 500, PT 1000 / TC - J, K, R, S, T, E, B, N / mA / mV / ohms
Switch test	Provide on front panel
Heating time	30 mins (Amb. To 300°C)
Cooling time	40 mins (300 to 100°C)
Stabilization time	15 minutes
Well Dimension(dia. x depth)	30 x 150 mm
Standard well holes in mm	5.2, 6.2, 6.2, 8.1
Power supply	110V or 230V AC 50/60Hz
Power consumption	600 VA
Dimension in mm	285 x 155 x 330 (L x W x H)(Approx.)
Weight	7.5 kg (without well insert) (Approx.)

Note: Due to continuous product improvements, Published specifications may change with out notice

### Standard Delivery

1. Basic Instrument
2. Spare fuses
3. Cable for Thermostat Switch Test
4. Tool for Insertion Tube
5. Instruction manual
6. Mains card
7. Traceable calibration certificate
8. Dry Block Insert Well

### Optional

1. Carrying Case
2. 110V AC 60Hz Power supply
3. Reference Standard Thermocouple
4. NABL Certificate
5. Additional Thermowells / Insertion Tubes (as per customer requirements)



## SANSEL INSTRUMENTS AND CONTROLS SANSEL CALIBRATION LABORATORIES

ISO/IEC 17025 Accredited Calibration Laboratory by NABL CC - 2879

(Thermal, Mechanical, Electro-Technical, Dimension Parameters)

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