

TEMPERATURE CALIBRATOR (TCAL 1500 / 1500)

Exact Temperature Measurement and Monitoring are Must in Applications Crucial to Operational Safety of Machinery and Industrial Installations.

Regular Inspection of the Temperature Sensors Used in these Applications is Absolutely Essential for Economic and Technical - Safety Reasons and is Already Prescribed as Obligatory in Many Sectors.

Applications in

Energy - Production and Energy -Distribution Sectors
Glass, Ceramic, Semi Conductor Industries
Steel Material Processing Industries
Calibrators laboratories etc,
For Calibration of Thermo Couples - Type (K, R, S, B, etc.)

The Temperature Calibrators and Calibration Bath are already a Part of the Standard Equipment of the Technician in the Above Listed Sectors

For Inspection of

Thermometers

Inspection is Performed by Comparison of the Temperature Measured by test Piece and the Block Temperature Indicated by the Calibrator or Compression with master thermocouple reading.

Thermocouples

A separate Temperature Measuring Instruments is Required for Inspection. The Inspection is Performed by Comparison of the Temperature Indicated on the External Measuring Instrument with the Reference Temperature of the Calibrator.

Description

“SANSEL” Series TCAL 1500 / 1500 is a Micro controller Based Precision “Dry Block” Temperature Calibrators Generates True Reference Temperature. The Temperature Controller of the Calibrators Uses a Auto Tune PID Controller Algorithm. This Response Closely Follows the Heating Curve of an Actual Thermal System.

Place the Sensor to be Calibrated in the Calibrator. Set the Temperature from 4.3 inch Touch screen . Both True and set Temperature can be Read. When Stabilization Occurs, Simply Read the Temperature and Re-Calibrate the Process System or sensor. TCAL 1500 / 1500 Calibrator may be Used for Calibration of all Type of temperature sensors above 500°C to 1500°C range - K, R, S, B, etc



Features

- ✍ Range from 500 to 1500°C
- ✍ Resolution 0.1°C
- ✍ Stability to $\pm 0.5^\circ\text{C}$
- ✍ Accuracy better than 0.5% of reading
- ✍ PC Interface RS 485 (optional)
- ✍ No Liquids, Safe dry Calibration
- ✍ ISO/IEC 17025 Traceable Calibration Certificate
- ✍ Semi Portable & Rugged

Technical Data

MODEL	TCAL 1500 / 1500
Temperature Range	500 to 1500 °C
Bath Temperature Control	Digital Temperature Controller with Auto Tune PID Algorithm
Display	4.3 inch True TFT display with touch screen
Resolution	0.1 °C
Stability	$\pm 0.5^\circ\text{C}$
Accuracy	better than $\pm 0.5\%$ of reading
Time to Stabilize	30 mins
Heating Time	3 ½ Hrs (Amb. to 1500 °C)
Well Dia	50mm
Well Hole Depth	240mm
Thermo Well Holes	6,8,10,14 in mm (Approx)
PC Interface	RS 485 (optional)
Power Supply	230V AC 50/60 Hz (optional 110V AC)
Power Consumption	3500VA
Dimension (L x W x H)	250 L X 410 W X 625 + 90(wheel) H (mm)
Instrument Weight (Approx)	57 Kg (Approx.) with well insert

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

Standard Delivery

Basic Instrument Mains Card
Spare Heater - 6nos Traceable Calibration Certificate
Spare Semiconductor Fuses - 1no Instruction Manual
Control thermocouple with Connector

Optional

Carrying Case 110V AC 60Hz Power supply Reference Standard Thermocouple
ISO/IEC 17025 Certificate Additional Thermowells / Insertion Tubes (as per customer requirements)

MARCH 2023

SANSEL INSTRUMENTS AND CONTROLS SANSEL CALIBRATION LABORATORIES

ISO/IEC 17025 Accredited Calibration Laboratory

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

1 / 46 , 3rd Main road, Ganga Nagar, MMDA Colony , Maduravoyal , Chennai - 600 095. INDIA

+91 72999 72091(admin), +91 72999 72085 / 86 / 93(sales), +91 98401 49928(calibration) enquiry@sansel.net