

LIQUID TEMPERATURE CALIBRATION BATH

MODEL : TCAL 1501 / - 80



Applications

- ☐ Food industries
- ☐ Pharmaceutical Industries
- ☐ R & D laboratories
- ☐ Automobiles industries
- ☐ Calibrators laboratories etc.,.

Introduction

SANSEL series TCAL 1501/- 80 is a micro controller based precision “ULTRA LOW TEMPERATURE LIQUID BATH” generates true reference temperature with high resolution and stability. The temperature controller of the bath uses a auto tune FUZZY PID controller algorithm. This fast response closing follows the cooling curve of an actual thermal system.

Place the thermometers, thermocouple & RTDs to be calibrated in the bath. Set the temperature from the 4.3 inch true TFT display with touch screen . Both liquid and set temperature can be read. When stabilization occurs, simply read the temperature and re-calibrate the thermometer, sensor etc., or comparison with master RTDs reading.

Features

- ✓ 4.3 inch True TFT display with touch screen
- ✓ Range from – 80 to - 40°C
- ✓ Micro controller based Linearize
- ✓ Stable to $\pm 0.03^{\circ}\text{C}$
- ✓ Uniformity $\pm 0.2^{\circ}\text{C}$
- ✓ High Accuracy
- ✓ Multi hole provision for different type of sensors, Thermometer calibration.
- ✓ NABL Calibration Certificate

Technical Specifications

Model	TCAL 1501/ - 80
Working Range	-80 to -40°C @ 25°C
Resolution	0.01°C
Stability	± 0.03°C
Uniformity	± 0.2°C
Display	4.3 inch True TFT display with touch screen
Bath temperature cool	Digital temperature controller with FUZZY PID
Cooling time	3½ hrs (Amb.(25°C) to -80°C) @ 25°C
Stabilization time	10 mins
Multi hole well	Provided for different type of sensors , sensor with indicators & Thermometer calibrations
Cooling medium	ISO - Propyl alcohol(CH ₃) ₃ CHOH Purity 99%(highly flammable) for range from -80 to -40°C
Liquid capacity	8 Liters (Approx.)
Power supply	230V AC ±10% / 50Hz (step-up transformer required for 110V)
Power consumption	1500 VA
Testing area	100mm W x 100mm H x 150mm D
Overall Dimension	805mm L x 505mm W x 975mm H (including motor height)
Weight	80 kg (Approx.)

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

Standard Delivery

1. Basic Instrument
2. Top multi hole PP chamber cover
3. Top SS Dummy cover
4. Spare Fuses
5. Instruction Manual
6. Test Certificate
7. Mains Card

Optional

1. Master SSPRT sensor
2. ISO/IEC 17025 Accredited calibration certificate



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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