

ICL CALIBRATION LABORATORIES, INC.

ISO/IEC 17025 & ANSI-NCSL Z-540-1 Accredited

Setting new standards in calibration excellence!

THERMOPROBE TL-3

REFERENCE THERMOMETER FOR FIELD AND LABORATORY

IDEAL FOR VERIFICATION CHECKS OF PET THERMOMETERS PER API CHAPTER 7 SPECIFICATIONS

+14/320°F (-10/160°C)

Accuracy: $\pm 0.1^\circ\text{F}$ ($\pm 0.06^\circ\text{C}$)

Resolution: 0.01°

The TL-3 thermometer is intended to be used anywhere a precision glass stem thermometer or other type thermometer may be used.

Application:

- Replacing Mercury in Glass thermometers
- Pipeline temperature measurement
- Prover Calibration
- Meter Proving
- PET Verification
- As a reference instrument for checking production

Features:

- High measuring accuracy, $\pm 0.1^\circ\text{F}$ (0.06°C)
- Customizable probe lengths from 4" to 36"
- Recording maximum, minimum, hold and average values
- Trend Indicating Arrows
- Low Battery & Fault indication



The TL-3 thermometer is an ergonomically advanced version of our proven TL-1A, which is the preferred temperature measurement tool used by hundreds of companies in the pipeline, pharmaceutical and food industries. The TL-3 incorporates a larger display and an easier to hold shape with the same specifications for high accuracy and long term stability established by the TL-1A. The tough enclosure is designed to withstand constant use in the field, factory or lab. One year warrant and protective case is provided

Specifications:

DISPLAY

LCD with 0.5 inch characters
Trend Indicating Arrows
Low Battery & Fault indication

USER FUNCTIONS

Auto Off after 20 minutes or continuous operation
Lowest Reading, Highest Reading, Average Reading
Switchable in Units of °F or °C

CONSTRUCTION

Stainless Steel temperature sensor; Standard Sensor length 8" (20cm) or 12" (30cm)
Standard diameter 1/4" (6.35mm) with reduced diameter tip of 3/16" (4.76mm)
Enclosure of glass filled nylon with highly durable display PVC window, graphics and silicone button switches.

TEMPERATURE

Resolution 0.01 Degrees

Calibrated Accuracy: $\pm 0.1^\circ\text{F}$ from 14 to 320°F, $\pm 0.06^\circ\text{C}$ from -10 to 160°C

TEMP. RESPONSE

8 seconds in water bath.

ELECTRONICS

Ultra Low Power Microcontroller, FLASH Memory, 20 bit A/D Converter
Recommended Temperature Range For Best Accuracy 32 to 112 °F, 0 to 44°C
100 Ohm, Class A 1/3 DIN RTD Immersion depth 4", 11cm
20mm Coin Size 3V Lithium, Duracell Type CR2032 100 hour service life at 70°F, 21°C
Battery Operating Range -4 to 130°F, -20 to 54°C

BATTERY

Note: Battery may not provide adequate power below 40°F, 4°C

Catalog No.	Description
TL-3-08.3111	Model TL-3 with 8 inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 0, 50, 100, 150°C
TL-3-08.3208	Model TL-3 with 8 inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 32, 110, 212, 300°F
TL-3-12.3111	Model TL-3 with 12 inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 0, 50, 100, 150°C
TL-3-12.3208	Model TL-3 with 12 inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 32, 110, 212, 300°F