

ICL CALIBRATION LABORATORIES, INC.

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

Setting new standards in calibration excellence!

THERMOPROBE TL-1W

Intrinsically Safe Digital Laboratory Thermometer

+14/320°F (-10/160°C)

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

Resolution: 0.01°



The TL-1W 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:

- Intrinsically safe
- 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-1W is an improved version of the original ThermoProbe model TL1. The TL-1W incorporates glass thermometer simplicity and reliability with the ease of a digital display. Like precision mercury thermometers, the TL-1W has accuracy, repeatability and long-term stability. But unlike those thermometers there will never be problems with mercury separation or hazardous material cleanup. Different from most electronic thermometers, the "Cordless" TL-1W has no wires to get in the way or break. Battery replacement is easily done through a sealed cover. Encoded calibration is unaffected by temperature, vibration, or battery removal. Low battery display, and failure mode indications protect the user from false data.

Specifications:

DISPLAY	LCD with 0.25 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) Standard diameter 1/4" (6.35mm) with reduced diameter tip of 3/16" (4.76mm) Sensor mount acetyl plastic, Electronics and display in 3.5" x 1.2" anodized Aluminum enclosure, Molded Silicone seal. Highly durable display window, graphics and membrane switches.
TEMPERATURE	Resolution 0.01 Degrees
TEMP. RESPONSE	Calibrated Accuracy: $\pm 0.1^\circ\text{F}$ from 14 to 320°F, $\pm 0.06^\circ\text{C}$ from -10 to 160°C 14 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
BATTERY	20mm Coin Size 3V Lithium, Duracell Type CR2032 400 hour service life at 70°F, 21°C Battery Operating Range -4 to 130°F, -20 to 54°C Note: Battery may not provide adequate power below 40°F, 4°C

Catalog No.	Description
TL-1W-08.3111	Model TL-1W with 8 inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 0, 50, 100, 150°C
TL-1W-08.3208	Model TL-1W with 8 inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 32, 110, 212, 300°F
TL-1W-12.3111	Model TL-1W with 12 inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 0, 50, 100, 150°C
TL-1W-12.3208	Model TL-1W with 12 inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 32, 110, 212, 300°F