

ThermoProbe TL3-R Intrinsically Safe Digital Laboratory Thermometer

-40/400°F (-40/204°C)

Accuracy: $\pm 0.05^\circ\text{F}$ ($\pm 0.03^\circ\text{C}$)

Resolution: 0.001°

The Intrinsically Safe TL3-R is ThermoProbe's highest accuracy hand-held reference Thermometer. The TL3-R has been certified to the latest global standards for hazardous locations (Ex).

Now Bluetooth® connectivity, the TL3-R can be used in applications where extreme accuracy is required. It is powered with 2-AAA batteries providing excellent battery life. A large display and easy to hold design makes the TL3-R convenient for use as a reference in the lab or field. The rugged, weather resistant case and buttons are well suited for use in industrial applications, even with gloves. The TL3-R precision circuitry provides excellent temperature accuracy, battery life and Bluetooth® monitoring.

Versatile software functions allow easy selection of Celsius or Fahrenheit units, Display resolution or Bluetooth® activity. Minimum, maximum and average temperatures are automatically stored to memory for later reference. Low battery display, and failure mode indications protect the user from false data. Encoded Calibration is unaffected by temperature, vibration, or battery removal.

The **TL3-R** uses a precision, 100 Ohm wire wound platinum resistance temperature sensor and attains its high accuracy through our proprietary calibration algorithm.



Specifications:

Interface Features:

- 0.5" (12.7mm) character LCD
- Switchable units °C or °F
- Resolution 0.01 or 0.001
- Bluetooth® Wireless Transmitter
- Low Battery & Fault indication
- Zero Correction Mode
- Continuous operation or Auto Off after 20 minutes.
- Stores and displays Average, Lowest & Highest readings.
- Arrows indicating increasing/decreasing temperature.
- Recommended ambient temperature range: 32°F to 112°F (0°C to 44°C)

Construction:

- Weather Resistant Enclosure
- Stainless steel RTD temperature sensor
 - 100Ω Precision wire wound platinum RTD
 - Standard 8"(20cm) or 12"(30cm) lengths
 - Standard 0.25"(6.35mm) diameter
- Static-dissipative plastic housing with a durable polyester graphics window.
- Nominal body dimensions: 5 x 1.75 x 1.15" (13 x 4.4 x 2.9cm) Nominal weight: 5.5 oz (156 grams)

Battery:

- 2 AAA Duracell MN2400
- Over 450 hours service life at 70°F (21°C)
- Ambient temperature operating range -4°F to 130°F (-20°C to 54°C)
- Note: Battery may not provide adequate power if used outside operating range

Typical Applications

Distillations, temperature baths, melting point tests, flash point tests, reference, thermowells, provers, temperature calibration for flow meters.

Catalog No.

- TL-3R-08.3111 Model TL-3R with **8** inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 0, 50, 100, 150°C
- TL-3R-08.3126 Model TL-3R with **8** inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points -40, 0, 50, 100, 150, 200°C
- TL-3R-08.3208 Model TL-3R with **8** inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 32, 110, 212, 300°F
- TL-3R-08.3226 Model TL-3R with **8** inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points -40, 32, 110, 212, 300, 392°F
- TL-3R-12.3111 Model TL-3R with **12** inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 0, 50, 100, 150°C
- TL-3R-12.3126 Model TL-3R with **12** inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points -40, 0, 50, 100, 150, 200°C
- TL-3R-12.3208 Model TL-3R with **12** inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points 32, 110, 212, 300°F
- TL-3R-12.3226 Model TL-3R with **12** inch sensor. Supplied with NIST traceable, ISO/IEC 17025 accredited report of calibration at test points -40, 32, 110, 212, 300, 392°F