



ThermoProbe Inc.



Intrinsically Safe
Precision Reference
Thermometer
for Field and Laboratory

TL3-R

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).

Available with 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.

Through numerous distributors equipped for calibration and repair, the TL3-R can be supported in many locations throughout the world.

A one year warranty, protective case and NIST traceable 5 point calibration report are included.

CERTIFICATIONS



Ex ia IIC T4 Ga
ITS19ATEX205407X
II 1 G IECEx ETL 19.0075X

Temperature:

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

-over standard calibrated range

Standard 5 point calibration: -4°F (-20°C), 32°F (0°C), 120°F (49°C), 199°F (93°C) & 300°F (149°C)

Resolution: 0.001 Degrees

Range: -40°F to 400°F (-40°C to 204°C)

-Note: Standard calibration does not provide full range accuracy

Custom calibration points and ranges available.

Temperature time constant:

10 seconds in circulated water bath

(time response to 63.2% of temp. step change)

Recommended minimum immersion depth: 4" (10.2cm)

Interface Features:

0.5" (12.7mm) character LCD

Switchable units $^{\circ}\text{C}$ or $^{\circ}\text{F}$

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

- 100 Ω 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.

Industries:

Laboratory
Petroleum
Pipeline
Pharmaceutical
Food

