

## ThermoProbe Digital Laboratory Thermometer TL-1W



**The TL-1W is a modified field version of our successful TL-1 thermometer. It features a rugged frame for reinforcement and is designed for continuous operation but can be easily powered off if desired.**

The TL-1W thermometer is intended to be used anywhere a precision glass stem thermometer or other type thermometer may be used. 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 precision 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:

<b>DISPLAY</b>	LCD with 0.25 inch characters Trend Indicating Arrows Low Battery & Fault indication
<b>USER FUNCTIONS</b>	Auto Off after 20 minutes or continuous operation Lowest Reading, Highest Reading, Average Reading Switchable in Units of °F or °C
<b>CONSTRUCTION</b>	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.
<b>TEMPERATURE</b>	Resolution 0.01 Degrees Calibrated Accuracy: ±0.1°F from 14 to 320°F ±0.06°C from -10 to 160°C
<b>TEMP. RESPONSE</b>	14 seconds in water bath.
<b>ELECTRONICS</b>	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
<b>BATTERY</b>	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

**NEW FEATURES exclusive to the TL-1W include; auto-off after 20 minutes to save battery life, minimum reading, maximum reading, averaging, easier °F to °C switching and an optional serial output. In addition, the new display constantly indicates temperature increasing or decreasing activity.**



#### Catalog No.

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