# ○ TL1-W LABORATORY THERMOMETER



The TL1-W intrinsically safe thermometer

is a modified field version of our successful TL1-A thermometer. It features a rugged frame for reinforcement and is designed for continuous operation, but can be easily powered off if desired.

The TL1-W 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 TL1-W 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" TL1-W 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.

4 Point NIST Traceable Calibration and a one year warranty included.

### FEATURES

- AUTO-OFF AFTER 20 MINUTES TO SAVE BATTERY LIFE
- MINIMUM READING
- MAXIMUM READING
- AVERAGING
- EASY °F TO °C SWITCHING
- DISPLAY ARROWS INDICATE INCREASING OR DECREASING TEMPERATURE ACTIVITY.

ON/OFF BUTTON

- ON / OFF
- BACKLIGHT
- CONTINUOUS OPERATION

## FUNCTION BUTTON

USED TO ACCESS THE FOLLOWING OPERATIONS:

- MIN
- MAXAVERAGE
- AVERAO
- •F < >°C
- RESOLUTION

### 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 Display tenths or hundredths resolution
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) Sturdy Acetal frame surrounding aluminum enclosure Electronics and display in 3.5" x 1.2" anodized Aluminum enclosure Molded Silicone seal. Highly durable display window, graphics and membrane switches.
Weight:	6.5 ounces, 180 grams
Temperature:	Resolution 0.01 Degrees Calibrated Accuracy: ±0.1°F from 14 to 320°F ±0.06°C from -10 to 160°C NIST Traceable Report of Test
Temperature Time Constant:	8 seconds in circulated water bath (63.2% response to temperature change)
Electronics:	Ultra Low Power Microcontroller FLASH Memory 20 bit A/D Converter Recommended Ambient Temperature Range for Best Accuracy 32° to 112°F, 0° to 44°C
Sensor:	100 Ohm, Class A 1/3 DIN RTD Immersion depth 4", 11cm
Battery:	2 AAA Duracell MX2400 Battery Life several hundred hours depending on backlight usage Battery Operating Range -4 to 130°F, -20 to 54°C Note: Battery may not provide adequate power if ambient temperature is below -4°F, -20°C or above 130°F, 54°C

Specifications subject to change

#### TYPICAL APPLICATIONS

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

Laboratory Petroleum Pipeline Pharmaceutical Food

### CERTIFICATIONS

Industries:

