ThermoProbe Inc.

▶TL2-A

USB Data Logging
*Precision Reference
Laboratory Thermometer*

The **TL2-A** is a versatile 2-channel precision bench top thermometer offering a convenient USB interface for data logging. The TL2-A is *two thermometers in one instrument*, with two channels allowing simultaneous temperature measurement in different locations. The TL2-A is well suited for establishing temperature traceability in equipment that requires high accuracy. The TL2-A is also perfect for metrology applications and as a calibration reference thermometer.

The intuitive user interface allows easy configuration of temperature units, display resolution and a relay output. Minimum, maximum and average temperatures are automatically stored to memory for later reference. The interface allows viewing of Highest, Lowest and Average Readings, Zero Offset adjustment for sensor drift and readings in C, F, K and Ohms. The versatile data logging feature can be used to send data to a PC or stored to a USB Flash drive.

The TL2-A is constructed from rugged powder-coated steel and aluminum. The large backlit display is easy to read from a distance. With the provided AC power supply, the TL2-A is ideal for bench top or laboratory applications.

A one year warranty, calibration report, USB cable, Flash drive, interface software and country specific power adaptor are included.

Temperature:
*Resolution: 0.001 Degrees
Accuracy +/-0.05°F (0.03°C)*
         -with standard sensor over factory 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)
Range: -40°F to 572°F (-40°C to 300°C)
         -Note: Standard calibration does not provide full range accuracy
Custom calibration points and ranges available.

Sensor/Probe:
Accepts up to 2 probes
Accepts 100Ω and 200Ω RTD, PRT or SPRT
4 wire with shield, 5 pin male DIN connector
Standard available sensors:
– 100Ω wire-wound platinum RTD
– Stainless steel ¼" sheath 13" long.
– Provided with a standard 5 foot cable and DIN plug.
– Custom sensor configurations available upon request.
– Recommended Minimum Immersion Depth: 4.7" (12cm)
– *Temperature time constant:*
         10 seconds in circulated water bath
         (time response to 63.2% of temp. step change)

Interface Features:
*0.5" (12.7mm) character LCD with backlight
Switchable units °C, °F, °K or* or Ω
*Resolution 0.01, 0.001 or 0.0001 for Ohms
Zero Correction Mode
Temperature triggered SPDT relay output (channel 1)
Stores and displays Average, Lowest & Highest readings.
Arrows indicating increasing/decreasing temperature.*
Data capture to USB Flash drive saved in CSV format (comma delimited)
Data capture to PC via HyperTerminal
Selectable logging intervals and polling mode

Construction:
Rugged powder coated steel enclosure with silicone buttons and a durable polyester graphics window.
Nominal Body Dimensions: 7.25 x 5.25 x 2.25" (18.4 x 13.3 x 5.7cm)
Nominal Weight: 1lb. 10oz (0.74kg)

Power:
90 ~ 264 VAC External power adapter
– Country specific adapters available upon request

TYPICAL APPLICATIONS

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

*Industries: Laboratory
                      Pharmaceutical
                      Food
                      Pour Point Test*