

1523/1524 Reference Thermometers

Measure, graph and record three sensor types with one tool

- High accuracy
- PRTs: up to ± 0.011 °C
- Thermocouples: up to ± 0.24 °C
- Precision thermistors: ± 0.002 °C

Two models

- 1523: Single channel standard model with memory for 25 readings
- 1524: Two channels; memory for logging 15,000 measurements; real-time clock for time and date stamps

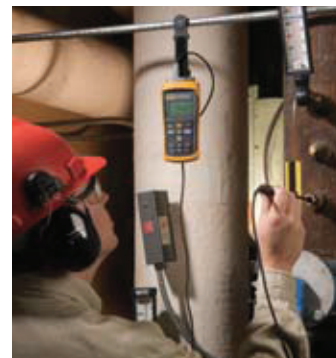


Technical Data

Finally, a reference thermometer as versatile as you are

The new 1523/24 Reference Thermometers from Fluke's Hart Scientific division measure, graph, and record PRTs, thermocouples, and thermistors. These new thermometer readouts deliver high accuracy, wide measurement range, logging, and trending, all in a handheld tool you can take anywhere.

The 1523/24 lets you handle field applications, laboratory measurements, and data logging with ease. And with the dual channel measurement capabilities of the model 1524, you can do twice the work in half the time.



Make accurate, consistent measurement...anywhere

You need accuracy for compliance, product yields, energy savings, and consistent results. The 1523/24 uses current reversal, a technique used in high-end instruments that eliminates thermal EMFs, for precision temperature measurements. Specifications are guaranteed from -10 °C to 60 °C ambient. Special precision resistors and a highly stable reference voltage source keep 1523/24 accuracy virtually insensitive to environmental temperature.

Like all Fluke handheld tools, the 1523/24 Reference Thermometers endure rigorous testing in temperature extremes and under harsh conditions of vibration, so you can take it with confidence anywhere you need to go. An optional magnetic hanger allows you to hang the thermometer for easy viewing while freeing your hands to focus on the job.



Two models let you make the best choice for your application

Monitor trends in the lab or in the field

See trends graphically on the 1523/24 thermometer's 128x64-backlit LCD display. You can change the graph's resolution at the touch of a button. Now it is easy to see when the temperature is stable (without statistics or long delays) or to monitor processes over time to verify correct operation.

Hold readings on the display at the touch of a button, or document up to 25 readings and associated statistics for easy retrieval. Statistics include the average maximum and minimum values, and the standard deviation. View them through the display or by uploading it to a PC via RS-232 connection and 9940 I/O TookKit software, included free. To monitor and log more data over time, use a PC and optional LogWare II software.

RS-232-to-USB adapters are available for those who prefer USB connectors. Battery power lasts at least 20 hours on three AA batteries, or use the dc power adapter for extended periods of measurement. Power saving features can be enabled or disabled for longer battery life or greater convenience.

INFO-CON connectors ensure correct temperature conversion

Inside the INFO-CON, a memory chip keeps calibration information for the attached probe. Simply plugging in the probe uploads the information to the readout. The connector transfers this information to the 1523/24 automatically, ensuring the correct temperature conversion for accurate, hassle-free measurements.

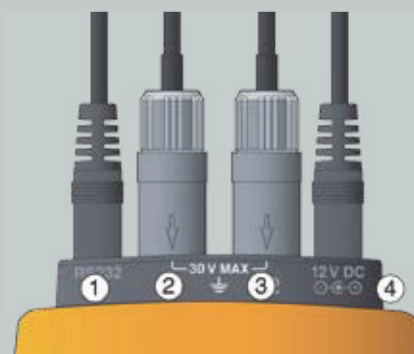
Probes may be locked by password to specific channels and readouts for security or for system calibration traceability. Plug any thermocouple with mini-thermocouple jacks into an optional universal thermocouple adapter for convenient measurement. Each thermocouple adapter or standard connector supports reference junction compensation (RJC) with its own internal precision thermistor.

1523 single-channel thermometer



- 1 External power adapter connection, for continuous use without changing batteries. Alternatively, 3 AA batteries will last more than 20 hours in the field.
- 2 Sensor connector (PRT, thermocouple, or thermistor)
- 4 RS-232 serial interface connector. For PC communications, uploading and downloading data from memory and from the probe INFO-CON connectors.

1524 two-channel thermometer



- 1 External power adapter connection
- 2 Channel 1 sensor connector (PRT, thermocouple, and thermistor)
- 3 Channel 2 sensor connector (PRT, and thermistor)
- 4 RS-232 serial interface connector

The 1523 Reference Thermometers are versatile single-channel thermometers that measure, graph and record three sensor types with one tool. Support for PRTs/RTDs, thermocouples, and thermistors provide flexibility to choose the right probe for the job.

The new 1524 Reference Thermometers help you do twice the work in half the time. Two channels and three sensor types and high-speed measurement make you more productive and make model 1524 the one reference thermometer you need to own. It has all the features of the 1523, and it's a data logger too. A real-time clock and memory for 15,000 time and date stamped measurements mean everything you are going to need is in this package. Log up to three times per second, or once every hour or other options in between. Download the data to a PC for analysis when you need it.