

1-800-GRAINGER (472-4643)

High-Accuracy Thermistor Meters & Probes

- Include NIST certificate of calibration

Meters measure suction- and liquid-line temperatures as well as temperatures across condensing and evaporator coils and ambient temperatures. They feature a backlit display for dark environments, a sealed keypad, and a battery eliminator jack. Use with thermistor probes and different types of sensors for multiple applications.

High-accuracy thermistor meters are commonly used in biological research laboratories and to measure air and room temperatures.

High-accuracy thermistor temperature & humidity meters are commonly used to monitor humidity levels indoors for comfort.



THERMISTOR PROBES

1/4" DIAMETER

8-FT CABLE

2-wire probes measure temperatures as a function of changes in electrical resistance. They provide more accurate readings faster than other types of probes over a smaller range of temperatures.

Flange-mounted probes are commonly fixed to the outer wall of a duct and measure both the temperature and quality of air flowing through the duct.

Threaded probes use a thread-mounted sensor for fixed-position temperature sensing in closed tanks and pipes.



Temp. & Humidity Meter 46F194

Temp. Range (F)	Humidity Range	Res.	Accuracy	Included Probes	No. of Channels	Brand	Item No.
High-Accuracy Handheld Thermistor Temperature & Humidity Meters							
-40° to 300°F	10% to 95%	0.1°/1% RH	±0.3°F or ±0.5% of Reading Whichever is Greater	Model 1075 General Purpose Puncture Probe, Model 4011 Pipe Strap Probe, Model 5028 Humidity Probe	—	Cooper Atkins	46F194
-40° to 300°	10% to 95%	0.1°/1% RH	±0.3°F or ±0.5% of Reading Whichever is Greater	Model 1075 General Purpose Puncture Probe, Model 4011 Pipe Strap Probe, Model 5028 Humidity Probe	3	Cooper Atkins	6T444
High-Accuracy Handheld Thermistor Meters							
-40° to 300°F	—	0.1°	±0.3°F or ±0.5% of Reading Whichever is Greater	Model 1075 General Purpose Puncture Probe, Model 2010 Air Probe, Model 4011 Surface Probe	3	Cooper Atkins	2T618
—	—	0.1°	±0.3°F or ±0.5% of Reading Whichever is Greater	Model 1075 General Purpose Puncture Probe, Model 2010 Air Probe, Model 4011 Surface Probe	—	Cooper Atkins	46F193
-40° to 302°F	—	0.1°	±0.3°F/0.2°C or ±0.5% of Reading Whichever is Greater	Model 1075 General Purpose Probe	3	Cooper Atkins	33HP78
—	—	0.1°	±0.3°F/0.2°C or ±0.5% of Reading Whichever is Greater	1075 General Purpose Probe	—	Cooper Atkins	46F192
-58° to 302°	—	0.1°	±1°C (-30° to 150°C), ±2°C (Otherwise)	Stainless Steel Probe with 18 in Cable	1	Traceable	3KTW9
-58° to 572°	—	0.1°C from -20° to 200°C, 1°C Elsewhere	±1°C	Stainless Steel Probe with 2.6 ft Cable	1	Traceable	3KME4

Mounting Type	Temperature Range	Probe Length	Probe Sheath Material	Resist.	Item No.
Flange-Mounted Duct Thermistor Probes					
Duct Mount	-40° to 302°F/-40° to 150°C	4 in, 6 in, 8 in, 12 in, 18 in	304 Stainless Steel	10,000 ohm	K3058
		4 in, 6 in, 8 in, 12 in, 18 in	304 Stainless Steel	20,000 ohm	K3059
Threaded Thermistor Probes with Conduit Connection					
Duct Mount	-40° to 302°F/-40° to 150°C	4 in, 6 in, 8 in, 12 in, 18 in	304 Stainless Steel	10,000 ohm	K3060
		4 in, 6 in, 8 in, 12 in, 18 in	304 Stainless Steel	20,000 ohm	K3061
Immersion	-40° to 302°F/-40° to 150°C	4 in, 6 in, 8 in, 12 in	304 Stainless Steel	10,000 ohm	K3064
		4 in, 6 in, 8 in, 12 in	304 Stainless Steel	20,000 ohm	K3065
Threaded Thermistor Probes with Terminal Block					
Immersion	-40° to 302°F/-40° to 150°C	4 in, 6 in, 8 in, 12 in	304 Stainless Steel	10,000 ohm	K3062
		4 in, 6 in, 8 in	304 Stainless Steel	20,000 ohm	K3063

Long-Life & High-Accuracy Handheld RTD Meters & Probes



- NIST units include a certificate of calibration

With their wide range and precise accuracy, these handheld meters are used with different RTD probes for specific applications. Commonly used to check and perform calibrations, verify liquid-in-glass, digital and bi-metal thermometers, and to measure the temperature of refrigerators, freezers, incubators, and ovens.

Data-logging meter allows recorded data to be transferred from the thermometer to a PC or Mac with a wired connection.

RTD PROBES

Use a metal sensing element to measure temperatures over a wide operating range. Provide long-term stability compared to other types of probes.

Flex-wire probes have an insulated cable with a beaded junction on the sensing end with the terminal end connected to a meter or receiver.

Threaded probes have thread-mounted sensors for fixed-position temperature measurement of closed vessels like tanks or pipes.

Temp. Range (F)	Res.	Accuracy	Data Output Type	No. of Channels	Brand	STANDARD Item No.	NIST Item No.
Long-Life & High-Accuracy Handheld RTD Meters							
-148 to 572	0.1°F/0.1°C	±0.4°C	None	1	Thermco	—	5ZPF4
-328° to 1166°F, -328° to 1472°F	0.2°F/0.1°C	±0.05% + 0.4°F/0.2°C	None	2	Amprobe	6NZG1	—
	0.2°F/0.1°C	±0.05% + 0.4°F/0.2°C	WiFi	2	Amprobe	6NZG2	—
Data-Logging Long-Life & High-Accuracy Handheld RTD Meters							
-328° to 923°	0.1° to 0.0001°	±0.05°C or ±0.05%	RS-232	1	Control Company	—	38ZC59
Temperature Range	Accuracy	Probe Length	Probe Diameter	RTD Type	Connector Type	Probe Sheath Material	Item No.
Flex-Wire RTD Probes							
Air, Gases							
-328° to 788°F/-200° to 420°C	±0.050°C	12 in	0.25 in	RTD 100 ohm	Info-Con Smart Connector	316 Stainless Steel	4FFJ6
Air, Gases, Liquids							
-328° to 572°F/-200° to 300°C	±0.050°C (0°C), ±0.052°C (200°C), ±0.055°C (300°C), ±0.50°C (196°C)	9 in	0.188 in	4-Wire 100 ohm	Banana Plug	Mineral Insulated	1CXJ2
Appliances, Duct, Food and Beverage, HVAC, Ovens, Packaging, Pharmaceutical							
0° to 392°F/-18° to 200°C	±0.30°C/±0.12 ohm at 0°C	3 in	0.188 in	3-Wire Pt100	Bare Wire	316 Stainless Steel	20XJ90
	±0.15°C/±0.06 ohm at 0°C	12 in	0.188 in	3-Wire Pt100	Bare Wire	316 Stainless Steel	3FWX3
		6 in	0.25 in	3-Wire Pt100	Bare Wire	316 Stainless Steel	5ZY14
		6 in	0.188 in	3-Wire Pt100	Bare Wire	316 Stainless Steel	20XJ91
0° to 900°F/-18° to 482°C	±0.30°C/±0.12 ohm at 0°C	6 in	0.188 in	3-Wire Pt1000	Bare Wire	316 Stainless Steel	3FWX4
0° to 1,200°F/-18° to 650°C		6 in	0.188 in	3-Wire Pt100	Bare Wire	316 Stainless Steel	3FWX5
Threaded RTD Probes with Conduit Connection							
AHU Monitoring, Building Automation, Chiller or Boiler Loops, VAV Temperature Sensing							
-40° to 302°F/-40° to 150°C	±0.15°C, ±0.22°C	4 in	0.25 in	2-Wire 100 ohm	Terminal Block	304 Stainless Steel	6CUD9
		8 in	0.25 in	2-Wire 100 ohm	Terminal Block	304 Stainless Steel	6CUE1
		4 in	0.25 in	2-Wire 1,000 ohm	Terminal Block	304 Stainless Steel	6CUE3
		12 in	0.25 in	2-Wire 1,000 ohm	Terminal Block	304 Stainless Steel	6CUE6
Appliances, Duct, Food and Beverage, HVAC, Ovens, Packaging, Pharmaceutical							
0° to 392°F/-18° to 200°C	±0.15°C/±0.06 ohm at 0°C	6 in	0.25 in	3-Wire Pt100	Connection Head with Terminal Block	316 Stainless Steel	5FYH8
		12 in	0.25 in	3-Wire Pt100	Connection Head with Terminal Block	316 Stainless Steel	5FYH9
		18 in	0.25 in	3-Wire Pt100	Connection Head with Terminal Block	316 Stainless Steel	5FYJ0
		24 in	0.25 in	3-Wire Pt100	Connection Head with Terminal Block	316 Stainless Steel	5FYJ1
Food and Beverage, Pharmaceutical, Process							
-76° to 400°F/-60° to 204°C	±0.15°C	4 in	0.25 in	4-Wire 100 ohm	Bare Wire	316L Stainless Steel	6PEY7
		6 in	0.25 in	4-Wire 100 ohm	Bare Wire	316L Stainless Steel	6PEY8
		12 in	0.25 in	4-Wire 100 ohm	Bare Wire	316L Stainless Steel	6PEY9



5ZPF4