
Agilent E2307A Thermocouple Bead Probe

Agilent E2308A Thermistor Probe

Agilent E2307A Thermocouple Bead Temperature Probe

- Exposed welded thermocouple junction with Teflon[®]/Neoflon[®] insulation wire, 36 inches (0.9 m) long, terminated in a 0.75 inch dual-banana plug.
- *Thermocouple type:* #24 gage ANSI-K type calibration.
- *Accuracy:*

-260°C to -110°C	(-436°F to -200°F)	2% of reading
-110°C to 260°C	(-200°F to 500°F)	±2.2°C (±4°F)
- *Maximum temperature:* 260°C (500°F)
- *For use with:* Agilent 973A or any other device that accepts type-K thermocouples and a dual-banana plug.

Agilent E2308A Thermistor Temperature Probe

- Stainless steel encapsulated thermistor (5000Ω @ 25°C), 36 inch (0.9 m) leads, terminated in a 0.75 inch dual-banana plug.
- *Accuracy:*

-80°C to -40°C	(-112°F to -40°F)	±1°C (2°F)
-40°C to 0°C	(-40°F to 32°F)	±0.4°C (0.8°F)
0°C to 70°C	(32°F to 158°F)	±0.2°C (0.4°F)
70°C to 100°C	(158°F to 212°F)	±0.3°C (0.6°F)
100°C to 150°C	(212°F to 302°F)	±1°C (2°F)
- *Maximum temperature:* 150°C (302°F)
- *Time constant:* 3 seconds typical in well-stirred water
- *Isolation:* 42 volts peak max
- *Stability (for 10 months):*

25°C	<0.01°C
100°C	<0.2°C
150°C	<1.5°C
- *Stainless Steel Probe:* 1.5 in. L x 0.125 in. dia. (38 mm L x 3.2 mm dia.)
- *For use with:* Agilent 971A/972A/973A/974A and Agilent 3458A.
Can also be used with the Agilent 34401A with application software.

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Combined Instrument and Temperature Probe Specification

When using the Agilent E2307A and Agilent E2308A temperature probes, you must add the specifications of the instrument to the specifications of the probe. The specifications are shown below for the Agilent E2307A and E2308A probes when used with Agilent 970-Series Handheld Multimeters.

Agilent E2307A Thermocouple Probe

	Agilent 973A
Measurement Range	-50°C to 260°C, -58°F to 500°F
Resolution	1°C, 1°F
Accuracy \pm (% reading + no. of degrees)	2% + 4°C (8°F)

Note: Specifications apply only when the probe is used without any extension wire.

Agilent E2308A Thermistor Probe

Measurement Range	-80°C to -40°C -112°F to -40°F	-40°C to 0°C -40°F to 32°F	0°C to 70°C 32°F to 158°F	70°C to 100°C 158°F to 212°F	100°C to 150°C 212°F to 302°F
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Agilent 971A

Resolution	0.1°C, 0.2°F				
Accuracy	\pm 1.5°C, 3°F	\pm 0.9°C, 1.8°F	\pm 0.7°C, 1.4°F	\pm 0.8°C, 1.6°F	\pm 1.5°C, 3°F

Agilent 972A/973A

Resolution	0.1°C, 0.2°F				
Accuracy	\pm 1.3°C, 2.5°F	\pm 0.7°C, 1.3°F	\pm 0.5°C, 0.9°F	\pm 0.6°C, 1.1°F	\pm 1.3°C, 2.5°F

Agilent 974A

Resolution	0.1°C, 0.1°F				
Accuracy	\pm 1.2°C, 2.4°F	\pm 0.6°C, 1.2°F	\pm 0.4°C, 0.8°F	\pm 0.5°C, 1°F	\pm 1.2°C, 2.4°F

Other temperature probes suitable for the Agilent multimeters are available for almost any application. Type-K thermocouples may be used with the Agilent 973A. Some probes may require an adapter to properly connect the probe to the instrument's dual-banana termination.

Thermistor temperature probes, 5000 Ω @ 25°C with a 25°C/125°C ratio of 29.26, are suitable for the Agilent 971A/972A/973A/974A.