

Thermocouple Thermometer with Dual Inputs

Model 871A



Standard
No Points

- ✓ Certificate Stating NIST-Traceability (No Points) Included
- ✓ Type K Thermocouple
- ✓ Heavy-Duty Construction
- ✓ 0.1° and 1° Resolution
- ✓ °C/°F Switchable
- ✓ 0.25% Accuracy
- ✓ Linearized Analog Output

Specifications

Accuracy: $\pm(0.25\%$ of rdg + 1.8°F) for 1 year, 18 to 28°C (64 to 82°F) ambient; includes NIST conformity (no data points), cold junction compensation and repeatability errors; excludes thermocouple errors

Repeatability: $\pm 0.2^\circ\text{C}$ typical for 1 week at constant ambient temperature

Temperature Coefficient: 18 to 28°C (64 to 82°F); included in accuracy specification; 0 to 18°C (32 to 64°F) and 20 to 50°C (82 to 122°F); less than $\pm(0.025\%$ of reading) + 0.1°C/°C

Linearization: Multislope A/D with 11 piece-wise linear segments from -40 to 1370°C (-40 to 1999°F)

Display: 3½ digit LCD, 15 mm (0.6") height, polarity, decimal point, open sensor, overrange and open thermocouple indication

Reading Rate: 2.5 per second

Free Thermocouples Included!

871A includes 2 free 1 m (40") Type K insulated beaded wire thermocouples with subminiature connector and wire spool caddy (1 per channel).
Order Two Spares!
Model No. SC-GG-K-30-36

KTSS-HH 6" Type K thermocouple probe (sold separately).

Temperature Settings

200°F:

Range: -40.0 to 199.9°F
Resolution: 0.1°F
Accuracy: $(\pm 0.25\%$ rdg + 1.8°F)

2000°F:

Range: -40 to 1999°F
Resolution: 1°F
Accuracy: $(\pm 0.25\%$ rdg + 1.8°F)

200°C:

Range: -40.0 to 199.9°C
Resolution: 0.1°C
Accuracy: $(\pm 0.25\%$ rdg + 1°C)

1370°C:

Range: -40 to 1370°C
Resolution: 1°C
Accuracy: $(\pm 0.25\%$ rdg + 1°C)

Battery Life: 100 hours typical, with 9V alkaline battery (included)

Battery Indicator: Display reads "BAT" when less than 10% of life remains

Analog Output: 1 mV/°C (5/9 mV/°F) on 200° ranges; 0.1 mV/°C (5/90°F) on other ranges

Analog Output Accuracy: $\pm 3\% \pm 1$ mV on 200° ranges; $\pm 3\% \pm 0.1$ mV on other ranges ($\pm 5\%$ for 872A)

Environmental Limits:

Operating: 0 to 50°C (32 to 122°F)

Storage: -35 to 60°C (-31 to 140°F)

Max Common Mode Voltage: 500V

Dimensions:

178 H x 78 W x 42 mm D
(7 x 3.1 x 1.6")

Net Weight: 300 g (10.6 oz)

Accessories Supplied: 9V battery, operator's manual, thermocouple, TAS adaptor



than actual size.
871A shown smaller

To Order

Model No.	Description
871A	Thermocouple thermometer with dual inputs

Accessories

Model No.	Description
SC-GG-K-30-36	Thermocouple sensors (supplied with unit)
SC-800	Soft carrying case
SMP-K-F	Miniature thermocouple connector (female)
SMP-K-M	Miniature thermocouple connector (male)
KTSS-HH	General purpose miniature probe for handheld meters (shown above)
MN1604	9V alkaline battery
OT-201-2	2 ounce jar of high thermal conductivity paste for fast surface measurements
CAL-3-HH	NIST-traceable calibration with points

Comes complete with 9V battery, NIST certificate (no points), operator's manual, two thermocouples, TAS adaptor.

Ordering Examples: 871A, Type K dual input thermometer, and KTSS-HH, Type K meter probe.