

# 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



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.

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



871A shown smaller than actual size.

## 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.

OCW-3, OMEGACARE<sup>SM</sup> extends standard 1-year warranty to a total of 4 years.