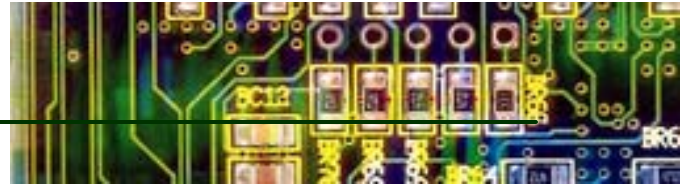


# Fluke 80 TK Thermocouple Module



## Temperature Measurement

### Applications

- Measures Temperature

### Product Description

The Fluke 80TK is a thermocouple converter for use with any K-type thermocouple and a digital multimeter. The 80TK accepts the output of any K-type thermocouple and converts it to 1 millivolt per degree (Celsius or Fahrenheit). A three-position switch acts as a power switch as well as selecting Fahrenheit or Celsius scaling for the output. In addition, the OFF position of the power switch allows you to read the battery condition via the external multimeter. The thermocouple input accepts wire leads or standard mini-thermocouple connectors. Temperature is measured by exposing or attaching the thermocouple to the surface to be measured. The multimeter displays the temperature directly in degrees Fahrenheit or Celsius.



### Highlights

- **Converts any Fluke DMM to a thermometer via standard banana plugs (Not required for Model 51 and 52)**
- **Uses Type-K thermocouples with mini-connectors**
- **Switch selectable for °C or °F**
- **Low-cost, powered by standard 9V battery**
- **Battery test instructions included**

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# Specifications

## Fluke 80TK

<b>Measurement Range</b>	-50°C to 1000°C (-58°F to 1832°F), depending on thermocouple probe used.
<b>Accuracy</b>	<b>-50°C to -20°C:</b> 2.5% ± 2°C <b>-58°F to -4.0°F:</b> 2.5% ± 3.6°F <b>-20°C to 350°C:</b> 0.5% ± 2°C <b>-40°F to 662°F:</b> 0.5% ± 3.6°F <b>350°C to 500°C:</b> 1.75% ± 2°C <b>662°F to 932°F:</b> 1.75% ± 3.6°F <b>500°C to 1000°C:</b> 2% ± 2°C <b>932°F to 1832°F:</b> 2% ± 3.6°F

**Maximum Voltage at Thermocouple Input:** 60V DC, 24VAC

**RF Field:** Exposure to an RF field interferes significantly with this module's capacity to accurately measure temperature with thermocouples. The interference is temporary and the module suffers no harm when exposed to an RF field of 3 V/m. Accurate temperature measurement capability is completely restored when the module is removed from the RF field. Common sources of RF fields are handheld 2-way radios and cellular telephones. If such a source is suspected of interfering with this module, either turn off the transmitter or increase the separation between the transmitter and the module.

**Ambient Operating Range:** 0 to 50°C

**Storage Temperature:** -40 to 60°C/-40 to 140°F

**Humidity:** 0% to 90% (0 to 35°C)  
0% to 70% (35 to 50°C)

**Weight:** 4.5 ounces, 126 grams

**Overall length:** 4 5/8 inches, 11.75 mm

**Battery:** Standard 9V Battery (NEDA #1604, 6F22, 006P)

**Battery Life:** 1600+ hours, 6.5V minimum

**Output:** 3/4 inch spaced banana plugs, 10 megohm minimum load resistance

### Accessories

**80PK-1 (included):** Bead Probe 4 foot K-type thermocouple bead probe, with Teflon tape insulation. Maximum insulation temperature: 260°C. Accuracy: ± 2.2°C or ± 0.75% (whichever is greater) from 0 to 800°C.

**80PK-2A:** Immersion Probe (8" or 20.32 cm from tip to probe handle)

**80PK-3A:** Surface Probe (for flat or curved surfaces)

**80PK-4A:** Air Probe (protected by stainless steel baffle)

**80PK-5A:** Piercing Probe (suitable for food use, liquids and gels)

**80PK-6A:** Exposed Junction Probe (exposed bead attached to 6" sheath)

### Additional Ordering Information

Fluke 80TK DMM Temperature Adapter (no cal cert)

Fluke 80TK DMM Temperature Adapter (w/cal cert)

Fluke 80T-150U DMM Temperature Adapter (no cal cert)

Fluke 80T-150U DMM Temperature Adapter (w/cal cert)

*Specifications subject to change without notice.*

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