FLUKE®

Temperature Test Tools

Fluke has the right handheld solution for you.

The new Fluke 50 Series II

Laboratory accuracy in rugged handheld thermometers.

Fluke's rugged new 50 Series II thermometers offer high accuracy with fast response times to quickly capture your measurement and show you trends. Choose from four models to get the functionality, thermocouple support and data logging you need.

All Fluke 50 Series II models offer:

- **Laboratory accuracy: ±[0.05% + 0.3° C]**
- **Large backlit dual display presents all the information you need at a glance.**
- **MIN, MAX, and AVG – with time references – captures major events**
- **Electronic Offset function maximizes overall accuracy by allowing you to compensate for thermocouple errors**
- **Supports a wide range of thermocouple types**
- **Temperatures displayed in °C, °F, or Kelvin (K)**
- **Splash and dust resistant case design**
- **Holster enhances ruggedness Thermometers tested to withstand a one-meter drop**
- **User-friendly front panel that's easy to set-up and operate**
- **Sleep mode to increase battery life – typical 1000-hour life**
- **Battery door allowing easy battery replacement without breaking the calibration seal**

Powerful data logging capabilities

The Fluke 53 and 54 Series II can log up to 500 points of data to internal memory.

- User-adjustable recording intervals
- Real-time clock captures the exact time of day of events
- Recall function allows logged data to be easily reviewed on the meter display
- For further analysis and graphing, data can be exported to optional FlukeView PC software using the thermometers' IR communication port

FlukeView® Forms for Temperature

Documentation and Analysis Software for Fluke 53 and 54 Series II Thermometers

Here's a fast and easy way to document, store and analyze temperature measurements from Fluke's newest digital thermometers.

- Produce professional-looking documents
- In-depth analysis with records, charts, and graphs
- Standard and customizable forms
- Export data to other measurement analysis programs
- Infrared interface between thermometer and PC makes data transfer fast and easy
- Optional IR adapter and cable for PCs without an IR port

Optional Toolpak accessory allows the 50 Series II thermometers to hang from any metal object (with the rare earth magnet) or secure around a pipe (with hook-and-loop straps) for hands-free operation.

Features	54 Series II	53 Series II	52 Series II	51 Series II	50D	50S
Thermocouple Types	K, J, T, E, N, R, S	K, J, T, E, N, R, S	K, J, T, E	K, J, T, E	K, J	K, J
Number of Inputs	Dual	Single	Dual	Single	Dual	Single
Time Stamp	Time of Day	Time of Day	Relative Time	Relative Time		
Rugged Design with Holster	●	●	●	●	●	●
Splash / Dust Resistant	●	●	●	●		
Dual Display with Backlight	●	●	●	●		
MIN / MAX / AVG Recording with Time Stamp	●	●	●	●		
Compatible with optional Toolpak™	●	●	●	●		
Differential (T_1-T_2) Readout	●		●		●	
Data Logging Up to 500 Points	●	●				
IR Data Port for Interface to PC	●	●				
Compatible with Optional FlukeView Software	●	●				

Specifications	Fluke 50 Series II (51, 52, 53, 54)	50S & 50D
Temperature Measurement Accuracy (For temperatures above –100 °C)	Type J, K, T, E, N: ±[0.05% + 0.3 °C (0.5 °F)] Type R & S: ±[0.05% + 0.4 °C (0.7 °F)]	Type K: ±[0.1% + 0.7 °C (1.3 °F)] Type J: ±[0.1% + 0.8 °C (1.4 °F)]
Measurement Range (depending on themocouple type)	–250 °C to 1767 °C (–418 °F to 3212 °F)	–200 °C to 1370 °C (–328 °F to 2498 °F)
Display Resolution	0.1 °C/°F/K < 1000° 1 °C/°F/K ≥ 1000°	0.1 °C over full range
Battery Life (typical)	1000 hours	800 hours
Weight	400g	280g
Size	169 x 79 x 29 mm	179 x 79 x 39 mm
Warranty	3 years	1 year

FLUKE®

Reliable, Fluke-quality contact thermometers at our best value pricing.

Laser Quick. Fluke Tough.

Fluke 50S (Single input)
Here's a basic, single-input thermometer you can rely on.
- Accepts J or K-type thermocouples
- Rugged holster protects thermometer
- Hold mode freezes display for convenient viewing
- Manual Offset calibration pot increases overall accuracy

Fluke 50D (Dual input)
Great for measuring input/output changes and differential trends, the 50D has all the features and functions of the 50S plus:
- Dual channel with differential output (T_1-T_2)
- MIN/MAX recording to capture events
- Scan function continuously scans through measurement sequence (T_1, T_2, T_1-T_2)

Fluke 65
Laser-sighted Infrared Thermometer
When objects are moving, hazardous to touch, hard to reach or easily contaminated, just point and shoot with the Fluke 65 non-contact thermometer.
- Highly repeatable measurements to within 1° in less than one second
- Laser beam provides easy targeting
- Large, backlit display is easy to read
- MIN/MAX function shows variations during measurement
- Temperature memory saves value for later reference
- Holster enhances thermometer's ruggedness
- Extended measurement range: -40 to 500 °C
- 8:1 optical resolution; 0.95 fixed emissivity

Built-in temperature capabilities make these DMMs even more valuable on the job

Fluke 89 Series IV

Data Logging, True-rms Digital Multimeter with temperature capability
This is the ultimate high-performance tool: Fluke's best hand-held DMM can also measure temperature and log data.

- 50,000 count resolution and 100 kHz bandwidth
- Measures temperature in °C or °F with the optional 80AK temperature adapter and thermocouple
- MIN/MAX with real-time stamp
- Fast MIN/MAX to capture peaks as short as 250 µS
- Stand-alone logging of up to 1000 data points to internal memory
- PC download capabilities for analysis and reporting with optional FlukeView® Forms software
- Lifetime warranty

Fluke 16

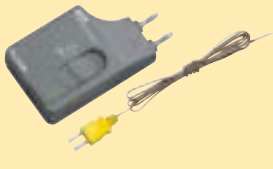
Multimeter with Thermometer
This value-priced digital multimeter is packed with great features for electrical, electronic, and temperature troubleshooting.

- Accurate temperature measurement from -40 to 400 °C
- Auto-Ranging for conve-nience
- MIN/MAX with relative time stamp
- Capacitance up to 10,000 microfarads
- Microamp function for testing flame rectification circuits
- Basic functions include volts ac and dc, ohms, continuity and diode test.

Temperature Accessories for Fluke Digital Multimeters

80T-IR Non-Contact Infrared Temperature Probes
For quick, non-contact temperature measurement in less than one second

- Instantly measures temperatures from –18 °C to 260 °C
- Highly repeatable readings displayed in °C or °F
- Optical resolution 4:1
- Output 1mV/°C or 1mV/°F (switch selectable)



80TK Thermocouple Module
Converts multimeters with a mV range into digital thermometers.

- Converts K-Type thermocouple signals into mV output.
- Connects to DMM via standard bannana plugs
- Switch selectable °C or °F
- Range: -50 °C to 1000 °C

80BK Low-Cost Integrated DMM Probe
Compatible with the Fluke 16 and Fluke 89 Series IV and other DMMs with temperature measurement functions.

- K-Type thermocouple with standard banana jack
- Convenient one-piece construction
- Measurement range: -40 to 260 °C

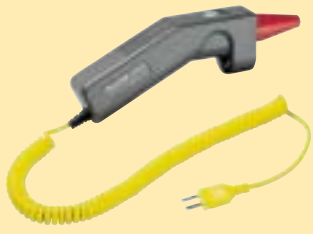
Temperature Probe
For highly accurate measurement of air, surface, and non-corrosive materials.

- Measurement range: -50 °C to 150 °C
- Output: 1mV/°C or 1mV/°F (switch selectable)

80AK Adapter
Adapts K-Type thermocouple mini-connector to dual banana plug inputs

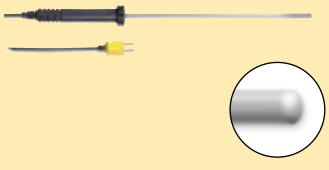
- Allows the Fluke 89 IV or Fluke 16 multimeters to be used with any K-Type thermocouple accessory
- Measurement range and accuracy is not affected by the 80AK adapter

Temperature probes for digital thermometers



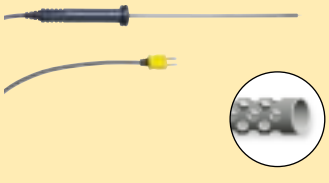
Infrared Temperature Probe - 80PK-IR
Compatible with Fluke 50 Series thermometers and Fluke 16 and 89 IV DMMs, this probe measures the temperature of objects that can't be touched.
- Senses infrared energy emitted by an object
- Instant, highly repeatable readings
- Measurement range: -18 to 260 °C
- Automatic shut-off after 10 minutes extends battery life

General Purpose Bead Probes - 80PK-1 and 80PJ-1
This basic, inexpensive thermocouple offers good accuracy and fast response. (Not suitable for iquid immersion.)
- 80PK-1 is compatible with K-Type thermometers; 80PJ-1 works with J-Type thermometers
- Measurement range: -40 to 260 °C

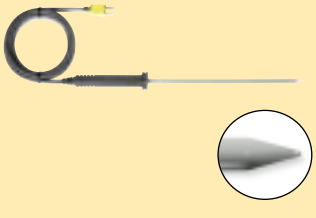


K-Type Immersion Probe - 80PK-2A
Use as a general-purpose probe including liquids and gels.
- Compatible with K-Type temperature measuring instruments
- Measurement range: -40 to 982 °C

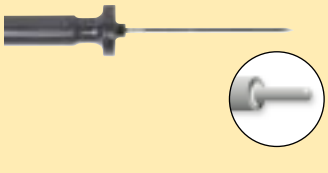
K-Type Flat Surface Probe - 80PK-3A
Designed for measuring the temperature of flat or slightly convex surfaces, this K-Type probe is ideal for hot rollers and plates.
- Exposed junction allows direct contact with the surface being measured
- Measurement range: 0 to 260 °C



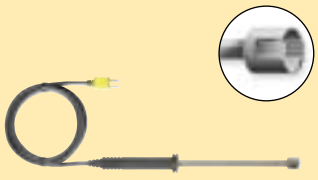
K-Type Air Probe - 80PK-4A
For air and non-caustic gas applications.
- Probe constructed of 304 stainless steel with a perforated baffle around the measurement bead
- Measurement range: -40 to 816 °C



Piercing Probes - 80PK-5A and 80PT-5A
Designed for foods, liquids and gels.
- Probe made of 304 stainless steel
- 80PK-5A is compatible with K-Type instruments; 80PT-5A is designed for use with T-Type thermometers
- Measurement range: -40 to 260 °C

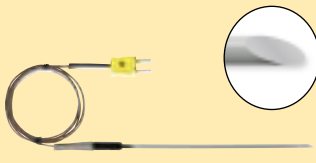


K-Type Exposed Junction Probe - 80PK-6A
Use both as a surface probe and for insertion into air and non-corrosive gases.
- Probe made of 304 stainless steel
- Measurement range: -40 to 816 °C

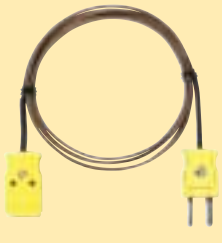


K-Type Industrial / Heavy Duty Surface - Probe - 80PK-7
For flat or slightly curved surfaces.
- Exposed junction allows direct contact with the surface being measured
- Robust design for extended service life
- Measurement range: -127 to 600 °C

K-Type Probe Pipe Clamp Temperature Probe - 80PK-8
Designed for pipe surfaces from 6.4 mm (1/4") diameter to 34.9 mm (1-3/8") diameter.
- Spring-action jaw will not loosen over time, ensuring repeatable measurements
- Robust design for extended service life
- Measurement range: -29 °C to 149 °C
- Repeatability: 0.56 °C (1 °F)



General Purpose Probes - 80PK-9 and 80PJ-9
Use as surface probe and for insertion into air and non-caustic gases.
- Probe constructed of 304 stainless steel
- 80PK-9 is compatible with K-Type thermometers; 80PJ-9 operates with J-Type
- Measurement range: -40 to 260 °C



Extension Wire Kits - 80PK-EXT, 80PJ-EXT and 80PT-EXT
For extending and repairing J, K or T-Type thermocouple wires.
- Kit includes 3 meters of thermocouple wire and 1 pair of male/ female mini-connectors
- Maximum continuous exposure temperature: 260 °C
- 80PK-EXT is compatible with K-Type thermometers; 80PJ-EXT is designed for J-Type thermometers, and 80PT-EXT is designed for T-Type thermometers

Fluke. *Keeping your wor up and running.*

Fluke Corporation
P.O. Box 9090
Everett, WA USA 98206

Fluke Europe B.V.
P.O. Box 1186
5602 BD Eindhoven
The Netherlands

For more information call:
In the U.S.A. (800) 443-5853 or Fax (425) 356-5
In Europe/M-East/Africa +31 (0)40 2 678 200
or Fax +31 (0)40 2 678 222
In Canada (905) 890-7600 or Fax (905) 890-68
From other countries +1 (425) 356-5500
or Fax +1 (425) 356-5116
Web access: http://www.fluke.com

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