

**TECHNICAL DATA**

# Fluke 52 II Dual Probe Digital Thermometer



## Key features

- Dual-input digital thermometer for lab, QA, process calibration, food safety and HVAC
- Shows any combination of T1, T2, T1-T2, plus MIN, MAX, or AVG on the large backlit dual display
- Features fast response and laboratory accuracy (0.05% + 0.3°C)
- Includes a relative time clock on MIN, MAX, and AVG to provide a time reference for major events

## Product overview: Fluke 52 II Dual Probe Digital Thermometer

The Fluke 52 II dual-input digital thermometer delivers fast response with laboratory accuracy (0.05% + 0.3°C). You can use the 52 II to measure two contact temperature inputs simultaneously on motors, insulation, breakers, pipes, corroded connections, liquids, and wires with industrial standard J, K, T, or E-type thermocouple temperature sensors. The user friendly-front panel and large, backlit display make it easy to view results from both inputs in multiple ways. And the sleep mode feature preserves battery life to give you a typical thousand hours of operation.

### Other useful features:

- Easy-to-access battery door that allows replacing the battery without breaking the calibration seal
- Comes with splash- and dust-resistant case protected by an impact-absorbing holster and a three-year warranty
- Powered by three, standard AA batteries -30-
- Features an electronic offset function that compensates for thermocouple errors to maximize overall accuracy
- Measures J, K, T, and E-type thermocouples
- Handles temperatures up to 900°C (1600°F)
- Presents results in °C, °F, or Kelvin (K)
- Provides a user-friendly front panel that is easy to set up and operate

- Offers sleep mode to increase battery life; 1000-hour battery life typical
- Offers optional ToolPak accessory to hang the thermometer from any metal object (with the rare earth magnet) or secure around a pipe (with hook-and-loop straps) for hands-free operation

## Specifications: Fluke 52 II Dual Probe Digital Thermometer

| Specifications                                                                                                     |                                                    |                                                       |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------|
| Temperature accuracy                                                                                               | Above -100°C                                       | J, K, T, E, and N-type: ±[0.05% + 0.3°C] <sup>1</sup> |
|                                                                                                                    |                                                    | R and S-type: ±[0.05% + 0.4°C] <sup>1</sup>           |
|                                                                                                                    | Below -100°C                                       | J, K, E, and N-types: ±[0.20% + 0.3°C] <sup>1</sup>   |
|                                                                                                                    |                                                    | T-type: ±[0.50% + 0.3°C]                              |
| Temperature                                                                                                        | J-type                                             | -210°C to 1200°C                                      |
|                                                                                                                    | K-type                                             | -200°C to 1372°C                                      |
|                                                                                                                    | T-type                                             | -250°C to 400°C                                       |
|                                                                                                                    | E-type                                             | -150°C to 1000°C                                      |
|                                                                                                                    | N-type                                             | -200°C to 1300°C <sup>1</sup>                         |
|                                                                                                                    | R and S-type                                       | 0°C to 1767°C <sup>1</sup>                            |
| Temperature scale                                                                                                  | ITS-90                                             |                                                       |
| Applicable standards                                                                                               | NIST-175                                           |                                                       |
| Display resolution                                                                                                 | 0.1°C, 0.1 K < 1000                                |                                                       |
|                                                                                                                    | 1°C, 1 K ≥ 1000                                    |                                                       |
| 1. Only the Fluke Models 53 II B and 54 II B thermometers are capable of measuring N, R, and S-type thermocouples. |                                                    |                                                       |
| Environmental Specifications                                                                                       |                                                    |                                                       |
| Operating temperature                                                                                              | -10°C to 50°C                                      |                                                       |
| Storage temperature                                                                                                | -40°C to 60°C                                      |                                                       |
| Humidity (without condensation)                                                                                    | 0% to 90%; 0°C to 35°C                             |                                                       |
|                                                                                                                    | 0% to 70%; 0°C to 50°C                             |                                                       |
| Safety Specifications                                                                                              |                                                    |                                                       |
| Overvoltage category                                                                                               | CSA C22.2 No. 1010.1 1992; EN 61010 Amendments 1,2 |                                                       |
| Agency approvals                                                                                                   | CE, CSA, TÜV (pending)                             |                                                       |
| Mechanical and General Specifications                                                                              |                                                    |                                                       |
| Size (L x W x D)                                                                                                   | 173 x 86 x 38 mm                                   |                                                       |
| Weight                                                                                                             | 400 g                                              |                                                       |
| Batteries                                                                                                          | 3 AA batteries; typical 1000-hour life             |                                                       |

## Ordering information



### **Fluke 52 II**

Fluke 52 II Dual Input Digital Thermometer

Includes:

- Impact absorbing holster
- Two 80PK-1 beaded probe thermocouples

### **Fluke 52 II CAL**

Fluke 52 II Dual Probe Digital Thermometer, with a traceable certificate of calibration with data from Fluke

Includes:

- Impact absorbing holster
- Two 80PK-1 beaded probe thermocouples
- A traceable certificate of calibration with data from Fluke

### **R-FLUKE-52-2 60HZ**

Fluke 52 II Dual Probe Digital Thermometer, fully reconditioned to original factory specifications. Includes Fluke's 3 year product warranty.

**Fluke.** *Keeping your world up and running.®*

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