## Fluke 51 II Handheld Digital Probe Thermometer



### **Key features**

- Single Input digital thermometer for lab, QA, process calibration, food safety and HVAC
- Measures J, K, T, and E-type thermocouples
- Presents results in °C, °F, or Kelvin (K) on a large backlit display
- Includes a relative time clock on MIN, MAX, and AVG to provide a time reference for major events

## Product overview: Fluke 51 II Handheld Digital Probe Thermometer

The Fluke 51 II single input digital thermometer delivers fast response with laboratory accuracy (0.05% + 0.3°C). You can use the 51 II to measure contact temperature 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. 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-
- Includes an electronic offset function that compensates for thermocouple errors to maximize overall accuracy
- Handles temperatures up to 900°C (1600°F)
- 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

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around a pipe (with hook-and-loop straps) for hands-free operation

### Specifications: Fluke 51 II Handheld Digital Probe Thermometer

#### **Specifications**

Above 100°C         N.K.T.E.and Neyes: #[0.05% + 0.4°C]4           Hernorean Construction         N.K.E.and Neyes: #[0.05% + 0.4°C]4           Hernorean Construction         N.K.E.and Neyes: #[0.05% + 0.4°C]4           Hernorean Construction         N.K.E.and Neyes: #[0.05% + 0.4°C]4           Hernorean Construction         Newes: #[0.05% + 0.4°C]4           Anyon         Order Construction           Hernorean Construction         Order Construction           Hernorean Construction         Newes: #[0.5% + 0.4°C]4           Anyon         Order Construction           Order Construction	opeomodiona			
Temperature accuracy     Below -100°C     J, K, E, and N-types: ±[0.20% + 0.3°C] <sup>1</sup> Febore -100°C     J, K, E, and N-types: ±[0.20% + 0.3°C] <sup>1</sup> T-type: ±[0.50% + 0.3°C] <sup>1</sup> T-type: ±[0.50% + 0.3°C] <sup>1</sup> Febpre -100°C     210°C to 1200°C       Febpre -100°C     200°C to 1372°C       Febpre -100°C     250°C to 400°C       Febpre -100°C     400°C       Febpre -100°C     -200°C to 1372°C       Febpre -100°C     -200°C to 130°C <sup>1</sup> Febre -100°C     -200°C to 130°C <sup>1</sup> Febre -100°C     -10°C to 50°C       Febre -100°C     -10°C to 50°C       Febre -100°C to 50°C     -200°C to 35°C       Febre -100°C to 50°C     -200°C to 50°C       Storage temperature     -40°C to 60°C       Febre -100°C to 50°C     -200°C to 50°C       Storage temperature     -200°C to 50°C </td <td rowspan="4">Temperature accuracy</td> <td>Above -100°C</td> <td>J, K, T, E, and N-type: ±[0.05% + 0.3°C]<sup>1</sup></td>	Temperature accuracy	Above -100°C	J, K, T, E, and N-type: ±[0.05% + 0.3°C] <sup>1</sup>	
Below -100°C     JK, E, and N-types: ±[0.20% + 0.3°C]       T-type: ±[0.50% + 0.3°C]     T-type: ±[0.50% + 0.3°C]       Append     210°C to 1200°C       K-type     200°C to 1372°C       T-type:     250°C to 400°C       Flype     260°C to 35°C       Flype     10°C to 175°C       Flype     10°C to 50°C			R and S-type: ±[0.05% + 0.4°C] <sup>1</sup>	
Image: Provide a state of the stat		Below -100°C	J, K, E, and N-types: ±[0.20% + 0.3°C] <sup>1</sup>	
Frameward     -00°C to 1372°C       F-type     -200°C to 1372°C       F-type     -250°C to 400°C       E-type     -150°C to 1000°C       E-type     -150°C to 1300°C'       Rand S-type     0°C to 1300°C'       Observation     Rand S-type       Applicable standards     NIST-175       Display resolution     0.1°C, 0.1 K < 1000			T-type: ±[0.50% + 0.3°C]	
Frameward Properties     - 250°C to 400°C       Frype     -250°C to 400°C       E-type     -150°C to 100°C       N-type     -200°C to 130°C'       Rand S-type     0°C to 1767°C'       Temperature scale     ITS-90       Applicable standards     NIST-175       Display resolution     01°C to 1K < 1000	Temperature	J-type	-210°C to 1200°C	
Temperature     Fit ype     -150°C to 1000°C       Etype     -150°C to 1000°C       Ntype     -200°C to 1300°C'       Rand S-type     0°C to 1767°C'       Temperature scale     ITS-90       Applicable standards     NIST-175       Dapha Pasolution     0.1°C, 0.1 K < 1000		K-type	-200°C to 1372°C	
E-type     -150°C to 1000°C       N-type     -200°C to 1300°C'       Rand S-type     0°C to 1767°C'       Temperature scale     ITS-90       Applicable standards     NIST-175       D19apa resolution     01°C, 0.1 K < 1000		T-type	-250°C to 400°C	
R and S-type0°C to 1767°C1Temperature scaleITS-90Applicable standardsNIST-175Display resolution0.1°C, 0.1 K < 1000		E-type	-150°C to 1000°C	
Temperature scale     ITS-90       Applicable standards     NIST-175       Display resolution     0.1°C, 0.1 K < 1000		N-type	-200°C to 1300°C <sup>1</sup>	
Applicable standardsNIST-175Applicable standards0.1°C, 0.1 K < 1000		R and S-type	0°C to 1767°C <sup>1</sup>	
Display resolution0.1°C, 0.1 K < 10001°C, 1 K ≥ 10001. Only the Fluke Models 53 II B and 54 II b-mometers are capable of measuring N, R, and S-type thermocouples. <b>Environmental Specifications</b> 0perating temperature-10°C to 50°CStorage temperature-40°C to 60°C $Humidity$ (without condensation)0% to 90%; 0°C to 35°C <b>Safety Specifications</b> 0% to 70%; 0°C to 50°COvervoltage categoryCSA C22.2 No. 1010.1 1992; EN 61010 Amendments 1,2Overvoltage categoryCSA C22.2 No. 1010.1 1992; EN 61010 Amendments 1,2Agency approvalsT3 x 86 x 38 mmSize (L x W x D)173 x 86 x 38 mmWeight400 g	Temperature scale	ITS-90		
Display resolution   1°C, 1 K ≥ 1000     1. Only the Fluke Models 53 II B and 54 II Bthermometers are capable of measuring N, R, and S-type thermocouples. <b>Environmental Specifications</b> 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     Øvervoltage category   0% to 70%; 0°C to 50°C     Storage temperature   -20°C to 50°C <b>Stefty Specifications</b> 0% to 70%; 0°C to 50°C     Øvervoltage category   CSA C22.2 No. 1010.1 1992; EN 61010 Amendments 1,2     Agency approvals   CE, CSA, TÜV (pending)     Size (L × W × D)   173 × 86 × 38 mm     Weight   400 g	Applicable standards	NIST-175		
1°C, 1 K ≥ 10001. Only the Fluke Models 53 II B and 54 II B-remometers are capable of measuring N, R, and S-type thermocouples.Environmental SpecificationsOperating temperature-10°C to 50°CStorage temperature-40°C to 60°C $Humidity (without condensation)0% to 90%; 0°C to 35°CO% to 90%; 0°C to 50°CO% to 70%; 0°C to 50°CSafety SpecificationsCSA C22.2 No. 1010.1 1992; EN 61010 Amendments 1,2Overvoltage categoryCSA C22.2 No. 1010.1 1992; EN 61010 Amendments 1,2Agency approvalsCE, CSA, TÜV (pending)Size (L x W x D)173 x 86 x 38 mmWeight400 g$	Display resolution	0.1°C, 0.1 K < 1000		
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Size (L x W x D)     173 x 86 x 38 mm       Weight     400 g	Agency approvals	CE, CSA, TÜV (pending)		
Weight 400 g	Mechanical and General Specification	ns		
	Size (L x W x D)	173 x 86 x 38 mm		
Batteries 3 AA batteries; typical 1000-hour life	Weight	400 g	400 g	
	Batteries	3 AA batteries; typical 1	000-hour life	

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#### **Ordering information**



#### Fluke 51 II

Fluke 51 II Single Input Digital Thermometer

Includes:

- Impact absorbing holster
- One 80PK-1 bead probe thermocouple

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