TECHNICAL DATA

53 II Temperature Logging Digital Thermometer

Key features

- Single Input digital thermometer with data logging for lab, QA, process calibration, food safety and HVAC
- Logs up to 500 points of data at user adjustable recording intervals
- Measures J, K, T, E, R, S, and N-type thermocouples
- Presents results in °C, °F, or Kelvin (K) on a large backlit display
- Provides a recall function to easily review logged data

Product overview: 53 II Temperature Logging Digital Thermometer

The Fluke 53 II single input digital thermometer delivers fast response with laboratory accuracy (0.05% + 0.3°C). And it logs up to 500 points of temperature data to internal memory. You can use the 53 II to measure contact temperature on motors, insulation, breakers, pipes, corroded connections, liquids, and wires with industrial standard J, K, T, E, N, R, or S-type thermocouple temperature sensors. The user-friendly-front panel and large, backlit display make it easy to view results and recall logged data for further review. 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 a real-time clock that captures the exact event time
- Features an infrared USB communication port to allow data to be exported to optional FlukeView Forms® Temperature PC software for further analysis and graphing

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

Specifications: 53 II Temperature Logging Digital Thermometer

Specifications		
Temperature accuracy	**Above -100°C**	J, K, T, E, and N-type: ±[0.05% + 0.3°C][1]
		R and S-type: ±[0.05% + 0.4°C][1]
	Below -100°C	J, K, E, and N-types: ±[0.20% + 0.3°C][1]
		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 [1]
	R and S-type	0°C to 1767°C [1]
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 Bthermometers 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 53 II
Fluke 53 II Single Input Digital Thermometer with Data Logging

Includes:

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

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08/2023

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