

## TECHNICAL DATA

# 54 II B Data Logging Thermometer with Dual Input



## Key features

- Large backlit dual display shows any combination of T1, T2 (52 and 54 only), T1-T2 (52 and 54 only), plus MIN, MAX, or AVG
- Recall function allows logged data to be easily reviewed on the meter display
- Infrared USB communication port allows data to be exported to optional FlukeView Forms® Temperature PC software for further analysis and graphing
- Data Logging up to 500 points of data with user adjustable recording interval
- Relative time clock on MIN, MAX, and AVG provides a time reference for major events
- Electronic Offset function allows compensation of thermocouple errors to maximize overall accuracy
- Measures J, K, T, E, R, S, and N-type thermocouples
- Readout in °C, °F, or Kelvin (K)
- Splash and dust resistant case protected by impact absorbing holster
- User-friendly front panel is easy to set up and operate
- Sleep mode increases battery life; typical 1000-hour battery life
- Battery door allows easy battery replacement without breaking the calibration seal
- Optional ToolPak accessory allows the thermometer 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
- 3 year warranty

## Product overview: 54 II B Data Logging Thermometer with Dual Input

### Laboratory accuracy. Wherever you go

Fluke 54 II B dual input digital thermometer can log up to 500 points of data to internal memory. Fast response and laboratory accuracy ( $0.05\% + 0.3\text{ }^{\circ}\text{C}$ ). Take contact temperature for checking motors, insulation, breakers, pipes, corroded connections, liquids, and wires with industrial standard J, K, T, E, N, R, and S type thermocouple (temperature sensors).

## Specifications: 54 II B Data Logging Thermometer with Dual Input

General 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)
<b>Mechanical and General Specifications</b>	
Size (L x W x D)	173 x 86 x 38 mm
Weight	400 g
Baeries	3 AA baeries; typical 1000-hour life

## Ordering information



### Fluke 54 II

Fluke 54 II Dual Input Digital Thermometer

Includes:

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

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

**Fluke Corporation**  
PO Box 9090, Everett, WA 98206 U.S.A.

**For more information call:**  
In the U.S.A. (800) 443-5853  
In Europe/M-East/Africa  
+31 (0)40 267 5100  
In Canada (800)-36-FLUKE  
From other countries +1 (425) 446-5500  
[www.fluke.com/en-th](http://www.fluke.com/en-th)

©2025 Fluke Corporation. Specifications subject to  
change without notice.  
04/2025

**Modification of this document is not permitted  
without written permission from Fluke  
Corporation.**