

Selection table

	51 Series II	52 Series II	53 Series II	54 Series II
Thermocouple Types	J, K, T, E	J, K, T, E	J, K, T, E, N, R, S	J, K, T, E N, R, S
Number of Inputs	Single	Dual	Single	Dual
Time Stamp	Relative Time	Relative Time	Time of Day	Time of Day
Rugged Design with Holster	•	•	•	•
Splash Proof / Dust Resistant	•	•	•	•
Dual Display w/ Backlight	•	•	•	•
MIN / MAX / AVG Recording	•	•	•	•
(T1-T2) True Differential		•		•
Data Logging Up to 500 Points			•	•
IR Data Port for Interface to PC			•	•
Compatible w/ Optional FlukeView Software			•	•

Specifications

Temperature

Measurement accuracy:

Above -100 °C (-148 °F)

J, K, T, E, and N-type** ±[0.05% + 0.3°C (0.5°F)]

R** and S-type** ±[0.05% + 0.4°C (0.7°F)]

Below -100 °C (-148 °F):

J, K, E, and N-types ±[0.20% + 0.3°C (0.5°F)]

T-type ±[0.50% + 0.3°C (0.5°F)]

Display resolution:

0.1°C / °F / K < 1000°

1°C / °F / K ≥ 1000°

Measurement range:

J-type: -210°C to 1200°C (-346°F to 2192°F)

K-type: -200°C to 1372°C (-328°F to 2501°F)

T-type: -250°C to 400°C (-418°F to 752°F)

E-type: -150°C to 1000°C (-238°F to 1832°F)

N-type**: -200°C to 1300°C (-328°F to 2372°F)

R** and S-type**: 0°C to 1767°C (32°F to 3212°F)

Temperature scale: ITS-90

Applicable standards: NIST-175

** Only the Fluke Models 53 and 54 Series II thermometers are capable of measuring N, R, and S-type thermocouples.

Environmental

Operating temperature: -10°C to 50°C (14°F to 122°F)

Storage temperature: -40°C to 60°C (-40°F to 140°F)

Humidity: 0% to 90%; 0°C to 35°C (32°F to 95°F)

0% to 70%; 0°C to 50°C (32°F to 122°F)

General

Unit weight: 400g (14 oz)

Dimensions: 17.3 cm L x 8.6 cm W x 3.8 cm D
(6.8 in L x 3.4 in W x 1.5 in D)

Battery: 3 AA batteries; typical 1000-hour life

Certification: CE, CSA, TÜV (pending)

Safety: CSA C22.2 No. 1010.1 1992; EN 61010 Amendments 1,2