

Fluke 1587/1577 Insulation Multimeters

Specifications

Voltage DC	Maximum Voltage: 1000 V Accuracy: 1577: $\pm(0.2\%+2)$ 1587: $\pm(0.09\%+2)$ Maximum Resolution: 0.001V
Voltage AC	Maximum Voltage: 1000 V Accuracy: 1577: $\pm(2\%+3)$ 1587: $\pm(2\%+3)$ AC Bandwidth: 1587: 5kHz* *with low pass filter, 3db @ 800 Hz Maximum Resolution: 0.1 mV
Current DC	Maximum Amps: 400mA Amps Accuracy: 1577: $\pm(1.0\%+2)$ 1587: $\pm(0.2\%+2)$ Maximum Resolution: 0.01 mA
Current AC	Maximum Amps: 400mA Amps Accuracy: 1577: $\pm(2.0\%+2)^*$ 1587: $\pm(1.5\%+2)^*$ * 1kHz bandwidth Maximum Resolution: 0.01 mA
Resistance	Maximum Resistance: 50 M Ω Accuracy: 1577: $\pm(1.2\%+2)$ 1587: $\pm(0.9\%+2)$ Maximum Resolution: 0.1 Ω
Capacitance(1587 only)	Maximum Capacitance: 9,999 μ F Accuracy: $\pm(1.2\%+2)$ Maximum Resolution: 1 nF
Frequency (1587 only)	Maximum Frequency: 100 kHz Accuracy: $\pm(0.1\%+1)$ Maximum Resolution: 0.01 Hz
Temperature Measurement (1587 only)	-40.0 °C to 537 °C -40.0 °F to 998 °F excluding probe
Diode Test (1587 only)	Range: 6 V Resolution: 1 mV Accuracy: $\pm(2\% + 1)$

Insulation Test

Minimum Test Current @ 1kΩ/V:	1mA
Test Voltages:	1577: 500, 1000 V 1587: 50, 100, 250, 500, 1000 V
Maximum Resistance per Test Voltage:	50V: 100V: 250V: 500V: 1000V: 1577: 600 MΩ 1587: 2 GΩ
Maximum Resolution per Test Voltage:	50V: 0.01 MΩ 100V: 0.01 MΩ 250V: 0.1 MΩ 500V: 0.1 MΩ 1000V: 0.1 MΩ
Accuracy per Test Voltage:	50V: ±(3 % + 5) 100V: ±(3 % + 5) 250V: ±(1.5 % + 5) 500V: 1577: ±(2.0 % + 5) 1587: ±(1.5 % + 5) 1000V: 1577: ±(2.0 % + 5) 1587: ±(1.5 % + 5) to 600 MΩ, ±(10 % + 3) above 600 MΩ

Environmental Specifications

Operating temperature	-20 °C to +55 °C
Storage temperature	-40°C to +60°C
Humidity (Without Condensation)	0% - 95% (10 °C – 30 °C) 0% - 75% (30 °C – 40 °C) 0% - 40% (40 °C – 55 °C)
Operating Altitude	2000 m

Safety Specifications

Overvoltage category	Complies with ANSI/ISA 82.02.01 (61010-1) 2004, CAN/CSA-C22.2 NO. 61010-1-04, and IEC/EN 61010-1 2nd Edition for measurement CAT III 1000 V and CAT IV 600 V
Agency Approvals	2000 m CAT III 1000 V, CAT IV 600 V; 3000 m CAT II 1000 V, CAT III 600 V

Mechanical & General Specifications

Size	203 x 100 x 50 mm (with holster)
Weight	624 g
Warranty	3 years
Battery life Alkaline	Meter use: 1000 hours Insulation test use: Meter can perform at least 1000 insulation tests with fresh alkaline batteries at room temperature. These are standard tests of 1000 V into 1 MΩ with a duty cycle of 5 seconds on and 25 seconds off.
IP Rating	IP40