

Specifications: Fluke 1550C 5 kV Digital Insulation Tester

Electrical Specifications

The tester's accuracy is specified for one year after calibration at operating temperatures of 0°C to 35°C. For operating temperatures outside the range (-20°C to 0°C and 35°C to 50°C), add $\pm .25\%$ per °C, except on the 20% bands add $\pm 1\%$ per °C.

Insulation Resistance Measurement

Test voltage (DC)

250 V	Range	< 250 k Ω , 250 k Ω to 5 G Ω 5 G Ω to 50 G Ω > 50 G Ω
	Accuracy (\pm reading)	Unspecified 5% 20% Unspecified
500 V	Range	< 500 k Ω 500 k Ω to 10 G Ω 10 G Ω to 100 G Ω > 100 G Ω
	Accuracy (\pm reading)	Unspecified 5% 20% Unspecified
1000 V	Range	< 1 M Ω 1 M Ω to 20 G Ω 20 G Ω to 200 G Ω > 200 G Ω
	Accuracy (\pm reading)	Unspecified 5% 20% Unspecified

2500 V	Range	< 2.5 M Ω 2.5 M Ω to 50 G Ω 50 G Ω to 500 G Ω > 500 G Ω
	Accuracy (\pm reading)	Unspecified 5% 20% Unspecified
5000 V	Range	< 5 M Ω 5 M Ω to 100 G Ω 100 G Ω to 1 T Ω > 1 T Ω
	Accuracy (\pm reading)	Unspecified 5% 20% Unspecified
Bar graph range	0 to 1 T Ω (1550C) - 0 to 2 T Ω (1555)	
Insulation test voltage accuracy	-0%, +10% at 1 mA load current	
Induced AC mains current rejection	2 mA maximum	
Charging rate for capacitive load	5 seconds per μ F	
Discharge rate for capacitive load	1.5 s/ μ F	
Leakage current measurement	Range	1 nA to 2 mA
	Accuracy	\pm (5% + 2 nA)
Capacitance measurement	Range	0.01 μ F to 15.00 μ F
	Accuracy	\pm (15% rdg + 0.03 μ F)
Timer	Range	0 to 99 minutes

	Resolution setting	1 minute
	Resolution indication	1 second
Live circuit warning	Warning range	30 V to 660 V AC/DC, 50/60 Hz
	Voltage accuracy	$\pm (15\% + 2 \text{ V})$
Software specifications	FlukeView Forms™ basic software requires a PC running Windows XP, Windows Vista , Windows 7 or Windows 8.	

General Specifications

Display	75 x 105 mm
Power	12 V lead-acid rechargeable battery, Yuasa NP2.8-12
Charger Input (AC)	85 V to 250 V AC 50/60 Hz 20 VA

This Class II (double insulated) instrument is supplied with a Class 1 (grounded) power cord. The protective earth terminal (ground pin) is not connected internally. The extra pin is for added plug retention only.

Dimensions	269 x 277 x 160 mm (10.6 x 10.9 x 6.3 in)
Weight	3.7 kg (8.2 lb)
Temperature (operating)	-20°C to 50°C (-4°F to 122°F)
Temperature (storage)	-20°C to 65°C (-4°F to 149°F)
Humidity	80% to 31°C decreasing linearly to 50% at 50°C
Altitude	2000 m
Enclosure sealing	IP40
Input overload protection	1000 V AC
Electromagnetic compatibility	EN 61326
Safety compliance	IEC 61010-1: Overvoltage category II, Pollution Degree 2. IEC 61010-2-030: Measurement 600V CAT IV / 1000V CAT III IEC 61557-1, IEC 61557-2