

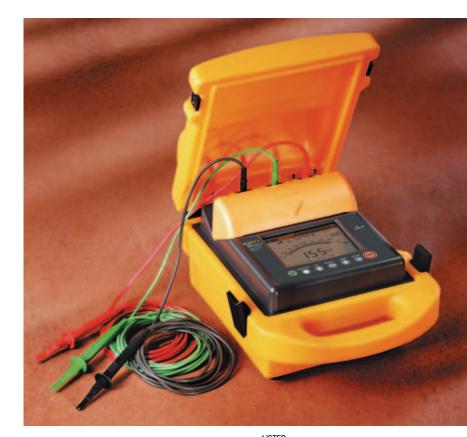
Fluke 1550 MegOhmMeter

Digital insulation testing up to 5000 Volts

Technical Data

The Fluke 1550 is a digital megohmmeter capable of testing switchgear, motors, generators and cables at up to 5000 V dc. It can be used for a wide range of tests: from simple spot checks to timed tests and breakdown tests. Measurement storage and PC interface software make it ideal for preventive maintenance. Heavy-duty leads, probes and alligator clips fit in the custom carrying case, for a rugged field testing kit.

- Test voltages of 500 V, 1000 V, 2500 V, 5000 V
- Measures up to 1 Tera-Ohm
- Warning voltage function alerts the user that line voltage is present and gives the voltage reading up to 600 V ac or dc
- Guard system eliminates the effect of surface leakage current on high-resistance measurements
- Large digital/analog LCD delivers detailed measurement data
- Cable or insulation capacitance
- Leakage current
- Ramp function (0-5000 V DC) for breakdown testing
- Timer for dielectric absorption and polarization index tests
- 99 memory locations store all measurements parameters









- High capacity rechargeable batteries
- Mobile charging adapter for dc charging
- Includes Quicklink 1550
 Software and Optical
 Interface cable for downloading to a Windows PC
- Custom soft case for tester and accessories
- Includes heavy-duty leads, probes and alligator clips
- 2-year warranty



Specifications

Electrical Specifications

All stated accuracy tolerances apply to the temperature range 0 °C to 35 °C (32 °F to 95 °F). For operating temperatures between -20 °C to 0 °C (-4 °F to 32 °F) and 35 °C to 40 °C (95 °F to 104 °F), these tolerances double.

Insulation Resistance Measurement

Test Voltage (dc)	Range	Accuracy (± reading)
500 V	200 kΩ to 10 GΩ 10 GΩ to 100 GΩ	5 % 20 %
1000 V	200 kΩ to 20 GΩ 20 GΩ to 200 GΩ	5 % 20 %
2500 V	200 kΩ to 50 GΩ 50 GΩ to 500 GΩ	5 % 20 %
5000 V	200 kΩ to 100 GΩ 100 GΩ to 1 TΩ	5 % 20 %

Short circuit current	greater than 1 mA and less than 2 mA
Bar graph range	0 to 1 TΩ
Insulation test voltage accuracy	-0 % to +10 % at 1 mA load current
Induced ac mains current rejection	2 mA maximum
Charging rate for capacitive load	5 seconds per μF

	Range	Accuracy
Leakage current	1 nA to 2 mA	± (5 % + 2 nA)
Capacitance measurement	0.01 uF to 15.00 μF	\pm (15 % rdg + 0.03 $\mu F)$
Live circuit indicator	30 V to 600 V ac/dc, 50/60 Hz	± (5 % + 2 V)

Timer	0 to 99 minutes; settable in 1 minute increments; indicated to within 1 second	
Ramp	0 % to 100 % of selected test voltage, or until breakdown	

Mechanical Specifications

Dimensions (L x W x H)	170 mm x 242 mm x 330 mm (6.7 in x 9.5 in x 13.0 in)
Weight (with battery)	4 kg (8.8 lbs)

Power

Battery type	12 volt, lead-acid, rechargeable	
Charger input (AC)	85 to 250 V ac 50/60 Hz 50 VA	
Charger input (DC car adapter)	10 to 15 V dc, 30 VA	
Battery life (typical) Note: At higher temperatures, the battery requires more frequent charging.	Test voltage Number of tests 500 V 3600 1 kV 3200 2.5 kV 2500 5 kV 1500	

Environmental Specifications

Operating temperature	-20 °C to 40 °C (-4 °F to 104 °F)
Storage temperature	-20 °C to 65 °C (-4 °F to 149 °F)
Relative humidity	80 % at 31 °C decreasing linearly to 50 % at 40 °C
Operating altitude	0 to 2000 meters
Enclosure sealing	IP-40
Shock, vibration	MIL-PRF-28800F, CLASS II
EMI immunity	EN 61326
Safety	EN 61010-1, CAT III, 600 V, EN61557, PARTS 1 & 2
Input Overload Protection	600 V ac continuous

Software Specifications

Quicklink 1550 Software requires a PC running Windows® 95, 98, Me, 2000, NT4.0 2-year warranty

Included Accessories

Test leads, 5000 V-rated probes Alligator clips Interface adapter and cable Quicklink 1550 PC software DC (Car) charging adapter Line cord Soft carrying case with waterproof bottom User's manual



Fluke. Keeping your world up and running.

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