

# Specifications: Fluke 1550C FC 5 kV Insulation Tester Kit

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

2500 V	Range	< 2.5 M $\Omega$ 2.5 M $\Omega$ to 50 G $\Omega$ 50 G $\Omega$ to 500 G $\Omega$ > 500 G $\Omega$
	Accuracy ( $\pm$ reading)	Unspecified 5% 20% Unspecified
5000 V	Range	< 5 M $\Omega$ 5 M $\Omega$ to 100 G $\Omega$ 100 G $\Omega$ to 1 T $\Omega$ > 1 T $\Omega$
	Accuracy ( $\pm$ reading)	Unspecified 5% 20% Unspecified
Bar graph range	0 to 1 T $\Omega$ (1550C) - 0 to 2 T $\Omega$ (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 $\mu$ F	
Discharge rate for capacitive load	1.5 s/ $\mu$ F	
Leakage current measurement	Range	1 nA to 2 mA
	Accuracy	$\pm$ (5% + 2 nA)
Capacitance measurement	Range	0.01 $\mu$ F to 15.00 $\mu$ F
	Accuracy	$\pm$ (15% rdg + 0.03 $\mu$ 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.	
<b>General Specifications</b>		
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	