Fluke insulation testers can now conduct the entire range of test voltages specified in IEEE 43-2000 with a best in class, 3 year warranty and CAT IV 600 V safety rating. With measurement storage and PC interface, the 1555 and 1550C are perfect tools for preventative or predictive maintenance programs designed to identify potential equipment failures before they occur.

**Features include:**

- Test voltages to up 10 kV provides solutions for all applications
- CAT III 1000 V, CAT IV 600 V safety rating
- Warning function alerts the user that line voltage is present and gives the voltage reading up to 600 V ac or dc for increased user safety
- Selectable test voltages in 50 V steps from 250 V to 1000 V, and 100 V steps above 1000 V
- Measurements can be stored in up to 99 memory locations, with each location assigned a unique, user defined, label for easy recall
- Long battery life gives the user over 750 tests between charges
- Automatic calculation of Dielectric Absorption (DAR) and Polarization Index (PI) with no additional setup
- Guard system eliminates the effect of surface leakage current on high-resistance measurements
- Large digital/analog LCD for easy viewing
- Capacitance and leakage current measurement
- Ramp function for breakdown testing
- Resistance measurements up to 2TΩ
- Timer settings up to 99 minutes for timed tests
- 3-year warranty
Specifications

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 ± .25 % per °C, except on the 20 % bands add ± 1 % per °C.

Insulation resistance measurement

<table>
<thead>
<tr>
<th>Test voltage (dc)</th>
<th>Range</th>
<th>Accuracy (± reading)</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 V</td>
<td>&lt; 200 kΩ</td>
<td>unspecified</td>
</tr>
<tr>
<td></td>
<td>200 kΩ to 5 GΩ</td>
<td>5 %</td>
</tr>
<tr>
<td></td>
<td>&gt; 50 GΩ</td>
<td>20 %</td>
</tr>
<tr>
<td>500 V</td>
<td>&lt; 200 kΩ</td>
<td>unspecified</td>
</tr>
<tr>
<td></td>
<td>200 kΩ to 10 GΩ</td>
<td>5 %</td>
</tr>
<tr>
<td></td>
<td>&gt; 100 GΩ</td>
<td>20 %</td>
</tr>
<tr>
<td>1000 V</td>
<td>&lt; 200 kΩ</td>
<td>unspecified</td>
</tr>
<tr>
<td></td>
<td>200 kΩ to 20 GΩ</td>
<td>5 %</td>
</tr>
<tr>
<td></td>
<td>&gt; 200 GΩ</td>
<td>20 %</td>
</tr>
<tr>
<td>2500 V</td>
<td>&lt; 200 kΩ</td>
<td>unspecified</td>
</tr>
<tr>
<td></td>
<td>200 kΩ to 50 GΩ</td>
<td>5 %</td>
</tr>
<tr>
<td></td>
<td>&gt; 50 GΩ</td>
<td>20 %</td>
</tr>
<tr>
<td>5000 V</td>
<td>&lt; 200 kΩ</td>
<td>unspecified</td>
</tr>
<tr>
<td></td>
<td>200 kΩ to 100 GΩ</td>
<td>5 %</td>
</tr>
<tr>
<td></td>
<td>&gt; 1 TΩ</td>
<td>20 %</td>
</tr>
<tr>
<td>10000 V (1555 Only)</td>
<td>&lt; 200 kΩ</td>
<td>unspecified</td>
</tr>
<tr>
<td></td>
<td>200 kΩ to 200 GΩ</td>
<td>5 %</td>
</tr>
<tr>
<td></td>
<td>&gt; 2 TΩ</td>
<td>20 %</td>
</tr>
</tbody>
</table>

Bar graph range 0 to 1 TΩ
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 μF
Discharge rate for capacitive load 1.5 s/μF

Leakage current measurement
Capacitance measurement 0.01 uF to 15.00 μF ± (15 % rdg + 0.03 μF)

Timer Range Resolution
0 to 99 minutes Setting: 1 minute
Indication: 1 second

Live circuit warning
Warning range 30 V to 660 V ac/dc, 50/60 Hz
Voltage accuracy ± (15 % + 2 V)

Software specifications
Fluke ViewForms basic software requires a PC running Windows 2000, Windows XP and Windows Vista.

Included accessories
Test Cables with Alligator Clips (red, black, green)
Infrared adapter with interface cable
FlukeView Forms Basic CD-ROM
AC Power Cord
Quick Reference Card
Software License Agreement
Registration Card
FlukeView Forms Installation Guide
USB-IR Cable Installation Guide
Certificate of Calibration (kit only)
Ruggedized Alligator Clips (kit and 1555 only)

Ordering information

1550C  5 kV Insulation Tester
1555  10 kV Insulation Tester
1550C/Kit  5 kV Insulation Tester Kit
1555/Kit  10 kV Insulation Tester Kit

Optional accessories
TL1550EXT  25 foot extended test lead set

General specifications

Display 75 mm x 105 mm
Power 12 V lead-acid rechargeable battery, Yuasa NP2.8-12
Charger Input [AC] 85 V ac 50/60 Hz 20 VA
This Class II (double insulated) instrument is supplied with a Class I (grounded) power cord. The protective earth terminal (ground pin) is not connected internally. The extra pin is for added plug retention only.
Dimensions 269 mm x 277 mm x 160 mm (10.6 in x 10.9 in 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
Certifications EN 61010, EN 61557 Parts 1 and 2, IEC 61010-1, CAT III 1000 V, CAT IV 600 V
Pollution degree 2

Fluke. Keeping your world up and running.