

## TECHNICAL DATA

# Fluke 1555 FC 10 kV Insulation Tester Kit



## Key features

- Quickly configure, start and stop tests on the 1555 remotely, a safe distance away from any operating, energized equipment, using [Fluke Connect®](#) and a smart phone
- Real time trending gives you easy-to-see visual cues, rather than hard to read, rapidly changing values
- Report creation using [Fluke Connect desktop](#) saves time and makes test results easier to understand
- [Fluke Connect](#) saves test results to the cloud for analysis and preventive maintenance

## Product overview: Fluke 1555 FC 10 kV Insulation Tester Kit

### Evaluate the trends, eliminate the doubt

The Fluke 1555 insulation resistance tester kit offers digital insulation testing up to 10 kV in an industrial strength case, with all the heavy duty leads and clips you need. Plus, the Fluke Connect wireless app performs tests and collects data while you stay a safe distance away.

Remote operation lets you spend as little time as possible in potentially hazardous zones. Real-time trending shows a live graph on your phone, rather than a hard-to-read set of changing values. And you can create reports quickly, using pre-designed templates that you can customize with company logos.

[Learn more](#)

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.

**Other useful features:**

- 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
- Selectable test voltages in 50 V steps from 250 V to 1000 V, and 100 V steps above 1000 V
- 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
- 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
- Large digital/analog LCD for easy viewing
- Capacitance and leakage current measurement
- Ramp function for breakdown testing
- Resistance measurements up to 2 TΩ
- Timer settings up to 99 minutes for timed tests
- 3-year warranty

## Specifications: Fluke 1555 FC 10 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  $\pm 0.25\%$  per °C, except on the 20% bands add  $\pm 1\%$  per °C.

### Insulation Resistance Measurement

Test voltage (DC)

250 V	Range	< 250 kΩ, 250 kΩ to 5 GΩ 5 GΩ to 50 GΩ > 50 GΩ
	Accuracy ( $\pm$ reading)	Unspecified 5% 20% Unspecified
500 V	Range	< 500 kΩ 500 kΩ to 10 GΩ 10 GΩ to 100 GΩ > 100 GΩ
	Accuracy ( $\pm$ reading)	Unspecified 5% 20% Unspecified
1000 V	Range	< 1 MΩ 1 MΩ to 20 GΩ 20 GΩ to 200 GΩ > 200 GΩ
	Accuracy ( $\pm$ reading)	Unspecified 5% 20% Unspecified

2500 V	Range	< 2.5 MΩ 2.5 MΩ to 50 GΩ 50 GΩ to 500 GΩ > 500 GΩ
	Accuracy (± reading)	Unspecified 5% 20% Unspecified
5000 V	Range	< 5 MΩ 5 MΩ to 100 GΩ 100 GΩ to 1 TΩ > 1 TΩ
	Accuracy (± reading)	Unspecified 5% 20% Unspecified
10000 V	Range	< 10 MΩ 10 MΩ to 200 GΩ 200 GΩ to 2 TΩ > 2 TΩ
	Accuracy (± reading)	Unspecified 5% 20% Unspecified
Bar graph range	0 to 1 TΩ (1550C) - 0 to 2 TΩ (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 μF	
Discharge rate for capacitive load	1.5 s/μF	
Leakage current measurement	Range	1 nA to 2 mA
	Accuracy	±(5% + 2 nA)
Capacitance measurement	Range	0.01 μF to 15.00 μF
	Accuracy	±(15% rdg + 0.03 μF)
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	±(15% + 2 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

## Ordering information



### **Fluke 1555/Kit – ir3000 FC**

Fluke 1555 10 kV Insulation Tester Kit with ir3000 FC Connector

Includes:

- Test Cables with Alligator Clips (red, black, green)
- Infrared adapter with interface cable
- AC Power Cord
- Quick Reference Card
- USB-IR Cable Installation Guide
- IP67 Hard Case
- Certificate of Calibration
- Heavy Duty Alligator Clip Leads
- Fluke Connect IR to Wireless Connector

### **Fluke 1555**

Fluke 1555 10 kV Insulation Tester

Includes:

- Test cables with alligator clips (red, black, green)
- Infrared adapter with interface cable
- AC power cord
- Soft carrying case
- Quick reference card
- USB-IR cable installation guide
- Heavy duty alligator clip leads

### **Fluke 1555/Kit**

## Fluke 1555 10 kV Insulation Tester Kit

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### Includes:

- Test Cables with Alligator Clips (red, black, green)
  - Infrared adapter with interface cable
  - AC Power Cord
  - Quick Reference Card
  - USB-IR Cable Installation Guide
  - IP67 Hard Case
  - Certificate of Calibration
  - Heavy Duty Alligator Clip Leads
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**Fluke.** *Keeping your world up and running.®*

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11/2022

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