

# 1587 FC/1587/1577

## Insulation Multimeter

### *Safety Information*


Go to [www.fluke.com](http://www.fluke.com) to register your Product and find more information.

A **Warning** identifies conditions and procedures that are dangerous to the user.
















#### Warnings

To prevent possible electrical shock, fire, or personal injury:

- Read all safety information before you use the Product.
- Examine the case before you use the Product. Look for cracks or missing plastic. Carefully look at the insulation around the terminals.
- Do not use test leads if they are damaged. Examine the test leads for damaged insulation and measure a known voltage.
- Do not use the Meter around explosive gas, vapor, or in damp or wet environments.
- Do not touch voltages >30 V ac rms, 42 V ac peak, or 60 V dc.
- Only use probes, test leads, and accessories that have the same measurement category, voltage, and amperage ratings as the Product.
- Keep fingers behind the finger guards on the probes.
- Do not exceed the Measurement Category (CAT) rating of the lowest rated individual component of a Product, probe, or accessory.

- Use the Product only as specified, or the protection supplied by the Product can be compromised.
- Comply with local and national safety codes. Use personal protective equipment (approved rubber gloves, face protection, and flame-resistant clothes) to prevent shock and arc blast injury where hazardous live conductors are exposed.
- Do not work alone.
- Do not apply more than the rated voltage between the terminals or between each terminal and earth ground.
- Limit operation to the specified measurement category, voltage, or amperage ratings.
- Use Product-approved measurement category (CAT), voltage, and amperage rated accessories (probes, test leads, and adapters) for all measurements.
- Measure a known voltage first to make sure that the Product operates correctly.
- Use the correct terminals, function, and range for measurements.
- Measure for hazardous voltage without the Low-Pass Filter.
- Do not use the Product if it operates incorrectly.
- Replace the battery when the low battery indicator () shows to prevent incorrect measurements.
- Remove the batteries if the Product is not used for an extended period of time, or if stored in temperatures >50 °C. If the batteries are not removed, battery leakage can damage the Product.
- The battery door must be closed and locked before you operate the Product.
- Remove all probes, test leads, and accessories before the battery door is opened.
- Do not use the Product if it is damaged.
- Disable the Product if it is damaged.

## Symbols

Symbol	Description
	WARNING. RISK OF DANGER.
	WARNING. HAZARDOUS VOLTAGE. Risk of electric shock.
	Consult user documentation.
	Double Insulated
	AC (Alternating Current)
	DC (Direct Current)
	Earth
	Fuse
	Battery (Low battery when shown on display.)
<b>CAT II</b>	Measurement Category II is applicable to test and measuring circuits connected directly to utilization points (socket outlets and similar points) of the low-voltage MAINS installation.
<b>CAT III</b>	Measurement Category III is applicable to test and measuring circuits connected to the distribution part of the building's low-voltage MAINS installation.
<b>CAT IV</b>	Measurement Category IV is applicable to test and measuring circuits connected at the source of the building's low-voltage MAINS installation.
	Conforms to European Union directives.
	Certified by CSA Group to North American safety standards.
	Conforms to relevant South Korean EMC standards.
	Conforms to relevant Australian EMC standards.
	Certified by TÜV SÜD Product Service.
	This product complies with the WEEE Directive marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Product Category: With reference to the equipment types in the WEEE Directive Annex I, this product is classed as category 9 "Monitoring and Control Instrumentation" product. Do not dispose of this product as unsorted municipal waste.

# Safety Specifications

Maximum Voltage Applied to any Terminal and Common..... 1000 V

Fuse Protection

for mA Input..... 0.44 A, 1000 V, IR 10 kA

Frequency Overload

Protection .....  $\leq 10^7$  V-Hz

Battery ..... Four AA batteries

(NEDA 15A or IEC LR6)

Operating Temperature ..... -20 °C to +55 °C (-4 °F to +131 °F)

Storage Temperature ..... -40 °C to +60 °C (-40 °F to +140 °F)

Relative Humidity ..... Noncondensing

0 % to 95 % @ 10 °C to 30 °C  
(50 °F to 86 °F)

0 % to 75 % @ 30 °C to 40 °C  
(86 °F to 104 °F)

0 % to 40 % @ 40 °C to 55 °C  
(104 °F to 131 °F)

Altitude

Operating..... 2 000 m

Storage..... 12 000 m

Safety

IEC 61010-1 ..... Pollution Degree 2

IEC 61010-2-033 ..... CAT IV 600 V / CAT III 1000 V

Wireless Radio with Adapter

Frequency Range..... 2402 MHz to 2480 MHz

Output Power ..... <10 mW

Radio Frequency

Certification ..... FCC: T68-FBLE, IC: 6627A-FBLE

Electromagnetic Compatibility (EMC)

International..... IEC 61326-1: Portable Electromagnetic Environment; IEC 61326-2-2

CISPR 11: Group 1, Class A

*Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.*

*Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low-voltage power supply network that supplies buildings used for domestic purposes. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.*

*Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.*

Korea (KCC)..... Class A Equipment (Industrial  
Broadcasting & Communication  
Equipment)

*Class A: Equipment meets requirements for industrial  
electromagnetic wave equipment and the seller or user should  
take notice of it. This equipment is intended for use in business  
environments and not to be used in homes.*

USA (FCC) ..... 47 CFR 15 subpart B. This product is  
considered an exempt device per clause  
15.103.

### **LIMITED WARRANTY AND LIMITATION OF LIABILITY**

This Fluke product will be free from defects in material and workmanship for three years from the date of purchase. This warranty does not cover fuses, disposable batteries, or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke's behalf. To obtain service during the warranty period, contact your nearest Fluke authorized service center to obtain return authorization information, then send the product to that Service Center with a description of the problem.

**THIS WARRANTY IS YOUR ONLY REMEDY. NO OTHER WARRANTIES, SUCH AS FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSED OR IMPLIED. FLUKE IS NOT LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, ARISING FROM ANY CAUSE OR THEORY.** Since some states or countries do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you.

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