

# 1662/1663/1664 FC

## Electrical Installation Tester

### *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:**

- Use the Product only as specified, or the protection supplied by the Product can be compromised.
- Carefully read all instructions.
- Read all safety information before you use the Product.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.
- 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 use the Product in distribution systems with voltages >550 V.
- Use Product-approved measurement category (CAT), voltage, and amperage rated accessories (probes, test leads, and adapters) for all measurements.
- The battery door must be closed and locked before you operate 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 touch voltages >30 V ac rms, 42 V ac peak, or 60 V dc.
- Use the correct terminals, function, and range for measurements.
- Do not apply more than the rated voltage between the terminals or between each terminal and earth ground.
- Do not exceed the Measurement Category (CAT) rating of the lowest rated individual component of a Product, probe, or accessory.
- Keep fingers behind the finger guards on the probes.
- Measure a known voltage first to make sure that the Product operates correctly.
- Replace the batteries when the low battery indicator shows to prevent incorrect measurements.
- Remove all probes, test leads, and accessories before the battery door is opened.
- Be sure that the battery polarity is correct to prevent battery leakage.
- Repair the Product before use if the battery leaks.
- Have an approved technician repair the Product.
- Use only specified replacement parts.
- Replace a blown fuse with exact replacement only for continued protection against arc flash.
- Do not operate the Product with covers removed or the case open. Hazardous voltage exposure is possible.
- Disable the Product if it is damaged.
- Do not use the Product if it is damaged.
- Remove the input signals before you clean the Product.
- Use only current probes, test leads, and adapters supplied with the Product.
- Remove test leads from the Product before the case is opened.
- Do not use in CAT III or CAT IV environments without the protective cap installed on test probe. The protective cap decreases the exposed probe metal to <4 mm. This decreases the possibility of arc flash from short circuits.

## Symbols

Symbol	Description
	WARNING. RISK OF DANGER.
	WARNING. HAZARDOUS VOLTAGE. Risk of electric shock.
	Consult user documentation.
	Fuse
	Double Insulated
	Earth
	WARNING. Do not apply >550 Volts.
	Battery Status
<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.
<b>CE</b>	Conforms to European Union directives.
	This product complies with the WEEE Directive and its marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Do not dispose of this product as unsorted municipal waste. For information about take-back and recycling programs available in your country, see the Fluke website.

## Safety Specifications

Fuses.....	T3.15 A, 500 V, IR: 1500 A
Battery .....	6 x AA Alkaline IEC LR6
Operating temperature .....	-10 °C to +40 °C
Storage temperature .....	-10 °C to +60 °C (limited by battery specification) -40 °C for 100 hrs
Relative Humidity .....	80 % 10 °C to 35 °C 70 % 35 °C to 40 °C

### Altitude

Operating.....	2 000 m
Storage.....	12 000 m

### Safety

IEC 61010 .....	Pollution Degree 2
IEC 61010-2-030.....	300 V CAT IV, 500 V CAT III
Maximum voltage between any terminal and earth ground ....	500 V
IEC 61010-031 (Accessories)	
TP165X Remote Probe with cap .....	CAT IV 600 V, CAT III 1000 V, 10 A
TP165X Remote Probe without cap .....	CAT II 1000 V, 10 A
TL-L1, TL-L2, TL-L3	
Test Leads .....	CAT IV 600 V, CAT III 1000 V, 10 A
Test Probes with cap.....	CAT IV 600 V, CAT III 1000 V, 10 A
Test Probes without cap...	CAT II 1000 V, 10 A
AC285 Alligator Clip .....	CAT IV 600 V, CAT III 1000 V, 10 A
Mains Test Cords .....	CAT II 250 V, 1000 V dc

## Electromagnetic Compatibility (EMC)

Some mobile devices (for example, handheld transceivers) that transmit RF energy can transmit levels that exceed 3 V/m and can damage sensitive electronic circuits. To ensure the best performance, do not allow a device that transmits RF energy in >3 V/m to be within 30 cm of the Tester while in use.

International ..... IEC 61326-1: Portable

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.*

### Wireless Radio with Adapter

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

Output Power ..... <10 mW

## 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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