

FLUKE®

15B+/17B+/18B+ Digital Multimeter

Safety Information



1-Year Limited Warranty.
See the Users Manual for the full warranty.

PN 4527616 (English)
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Safety Information

A **Warning** identifies hazardous conditions and procedures that are dangerous to the user. A **Caution** identifies conditions and procedures that can cause damage to the Product or the equipment under test.

Warning

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

- Carefully read all instructions.
- Read all safety information before you use the Product.
- Use the Product only as specified, or the protection supplied by the Product can be compromised.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.
- 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 the Product if it is damaged.
- Do not use the Product if it operates incorrectly.
- 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.
- Use only correct measurement category (CAT), voltage, and amperage rated probes, test leads, and adapters for the measurement.
- Do not use test probes in CAT III environments without the protective cap installed. The protective cap decreases the exposed probe metal to <4mm. This decreases the possibility of arc flash from short circuits.
- Measure a known voltage first to make sure that the Product operates correctly.
- Limit operation to the specified measurement category, voltage, or amperage ratings.
- Do not apply more than the rated voltage, between the terminals or between each terminal and earth ground.
- Do not touch voltages >30 V ac rms, 42 V ac peak, or 60 V dc.
- Do not use test leads if they are damaged. Examine the test leads for damaged insulation and measure a known voltage.
- Connect the common test lead before the live test lead and remove the live test lead before the common test lead.
- Keep fingers behind the finger guards on the probes.

- Remove all probes, test leads, and accessories before the battery door is opened.
- Do not exceed the Measurement Category (CAT) rating of the lowest rated individual component of a Product, probe, or accessory.
- Remove the batteries if the Product is not used for an extended period of time, or if stored in temperatures above 50 °C. If the batteries are not removed, battery leakage can damage the Product.
- Replace the batteries when the low battery indicator () shows to prevent incorrect measurements.
- Use the correct terminals, function, and range for measurements.
- Disconnect all test leads from any hazardous voltage before switching to the LED TEST function. Refer to the LED TEST section for proper measurement technique and interpretation of results (for 18B+ only).
- Do not use the HOLD function to measure unknown potentials. When HOLD is turned on, the display does not change when a different potential is measured.
- Disconnect power and discharge all high-voltage capacitors before you measure resistance, continuity, capacitance, or a diode junction.
- Remove circuit power before you connect the Product in the circuit when you measure current. Connect the Product in series with the circuit.
- Remove the input signals before you clean the Product.
- Use only specified replacement fuses.
- Have an approved technician repair the Product.
- Remove the test leads and any input signals before replacing the fuses.
- Install ONLY replacement fuses with the specified amperage, voltage, and interrupt ratings.
- Disconnect test leads before opening the case or the battery door.

For safe operation and maintenance of the Product:

- Repair the Product before use if the batteries leak.
- Batteries contain hazardous chemicals that can cause burns or explode. If exposure to chemicals occurs, clean with water and get medical aid.

Symbols

The table below lists the symbols that can be used on the Product or in this document.

Symbol	Description	Symbol	Description
	Consult user documentation.		WARNING. HAZARDOUS VOLTAGE. Risk of electric shock.
	WARNING. RISK OF DANGER.		Battery
CAT II	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.		
CAT III	Measurement Category III is applicable to test and measuring circuits connected to the distribution part of the building's low-voltage MAINS installation.		
CAT IV	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.		
	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.		

General Specifications

Maximum voltage between any Terminal
and Earth Ground 600 V

Maximum voltage between

V-COM Terminals..... 1000 V

Battery Type..... 2 AA, IEC LR6

Temperature

Operating..... 0 °C to 40 °C

Storage..... -30 °C to 60 °C

Relative Humidity

Operating Humidity 0 % to 90 % (10 °C to 30 °C), 0 % to 75 % (30 °C to 40 °C)

Operating Humidity,

40 MΩ Range 0 % to 80 % (10 °C to 30 °C), 0 % to 70 % (30 °C to 40 °C)

Altitude

Operating..... 2000 m

Storage..... 12 000 m

Temperature Coefficient..... 0.1 X (specified accuracy) /°C (<18 °C or >28 °C)

Fuse Protection

mA or µA inputs 0.44 A, 1000 V, IR 10 kA

A input 11 A, 1000 V, IR 17 kA

IP Rating IEC 60529: IP 40

Safety IEC 61010-1, IEC 61010-2-033, 600 V CAT III, 300 V CAT IV,
Pollution Degree 2

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.

Caution: This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

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.