

15B+/17B+/18B+

Digital Multimeters

Safety Sheet

Go to www.fluke.com to register your product, download manuals, and find more information.

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

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.

General Specifications

Maximum voltage between any Terminal and Earth Ground: 1000 V

Display (LCD).....4000 counts, updates 3/sec

Battery Type.....2 AA, NEDA 15A, IEC LR6

Battery Life.....500 hours minimum (50 hours in LED Test mode without load. The hours with load depends on the type of LED under test.)

Temperature

Operating.....0 °C to 40 °C

Storage.....-30 °C to 60 °C

Relative Humidity

Operating Humidity.....Non-condensing ≤90 % at 10 °C to 30 °C; ≤75 % at 30 °C to 40 °C

Operating Humidity, 40 MΩ Range≤80 % at 10 °C to 30 °C; ≤70 % at 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 for current inputs440 mA, 1000 V Fast Fuse, Fluke specified part only.
11A, 1000V Fast Fuse, Fluke specified part only.

Size (HxWxL).....183 x 91 x 49.5 (mm)

Weight455 g

IP Rating.....IP 40















Safety.....IEC 61010-1, IEC61010-2-030, 600 V CAT III, 1000 V CAT II, Pollution Degree 2

Electromagnetic EnvironmentIEC 61326-1: Portable

Electromagnetic Compatibility.....Applies to use in Korea only.
Class A Equipment (Industrial Broadcasting & Communication Equipment)^[1]

[1] This product meets requirements for industrial (Class A) electromagnetic wave equipment and seller or user should take notice of it. This equipment is intended for use in business environments and is not to be used in homes.

Table 1. Symbols

	AC (Alternating Current)		Earth Ground
	DC (Direct Current)		Fuse
	Diode		Capacitance
	Hazardous voltage. Risk of electrical shock.		Battery
	Risk of Danger. Important information. See Manual.	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.		Conforms to relevant North American Safety Standards.
	Conforms to relevant South Korean EMC Standards		Conforms to relevant Australian Standards.
	This product complies with the WEEE Directive (2002/96/EC) 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. Go to Fluke's website for recycling information.		

LIMITED WARRANTY AND LIMITATION OF LIABILITY

This Fluke product will be free from defects in material and workmanship for one year 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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