

TECHNICAL DATA

Fluke 15B+ Digital Multimeter



Key features

- 600 V Cat III safety rating
- AC/DC voltage measurement up to 1000V
- AC/DC current measurement up to 10A
- Measures voltage, resistance, continuity, capacitance
- Diode test, data hold
- Large easy-to-read display with bright white backlight

Product overview: Fluke 15B+ Digital Multimeter

Fluke quality is always within your reach

Unlock professional-grade precision, durability, and safety with the Fluke 15B+ Digital Multimeter. The Fluke 15B+ packs all the core functionality you need in a digital multimeter into a portable, rugged form tool that's easy-to-use with one hand, even with gloves on. From AC/DC voltage and current measurements up to 1000V and 10A, to comprehensive capabilities including resistance, capacitance, and frequency checks, the 15B+ is your go-to for troubleshooting a wide array of electrical issues.

The CAT III 600V safety rating provides peace of mind for everything from routine checks on electrical equipment and appliances, to checking voltage levels at power outlets or switches, to diagnosing issues with circuits. Ideal for both DIY enthusiasts and early career electricians looking to streamline their toolkit, the Fluke 15B+ is a reliable and versatile addition to your toolkit.

Specifications: Fluke 15B+ Digital Multimeter

Accuracy Specifications

Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, relative humidity at 0% to 75%. Accuracy specifications take the form of: $\pm(\%$ of Reading + Number of Least Significant Digits).

| Function | Range | Resolution | Accuracy |
|---|--|--|--|
| AC volts (40 Hz to 500Hz) ¹ | 4.000 V 40.00 V 400.0 V 1000 V | 0.001 V 0.01 V 0.1 V 1 V | 1.0% + 3 |
| DC volts | 4.000 V 40.00 V 400.0 V 1000 V | 0.001 V 0.01 V 0.1 V 1 V | 0.5% + 3 |
| AC millivolts | 400.0 mV | 0.1 mV | 3.0% + 3 |
| DC millivolts | 400.0 mV | 0.1 mV | 1.0% + 10 |
| Diode test ² | 2.000 V | 0.001 V | 10% |
| Resistance (Ohms) | 400.0 Ω 4.000 k Ω 40.00 k Ω 400.0 k Ω 4.000 M Ω 40.00 M Ω | 0.1 Ω 0.001 k Ω 0.01 k Ω 0.1 k Ω 0.001 M Ω 0.01 M Ω | 0.5% + 3 0.5% + 2 0.5% + 2 0.5% + 2 0.5% + 2 1.5% + 3 |
| Capacitance ³ | 40.00 nF 400.0 nF 4.000 μ F 40.00 μ F 400.0 μ F 1000 μ F | 0.01 nF 0.1 nF 0.001 μ F 0.01 μ F 0.1 μ F 1 μ F | 2% + 5 2% + 5 5% + 5 5% + 5 5% + 5 5% + 5 |
| AC current μ A (40 Hz to 400 Hz) | 400.0 μ A 4000 μ A | 0.1 μ A 1 μ A | 1.5% + 3 |
| AC current mA (40 Hz to 400 Hz) | 40.00 mA 400.0 mA | 0.01 mA 0.1 mA | 1.5% + 3 |
| AC current A (40 Hz to 400 Hz) | 4.000 A 10.00 A | 0.001 A 0.01 A | 1.5% + 3 |
| DC current μ A | 400.0 μ A 4000 μ A | 0.1 μ A 1 μ A | 1.5% + 3 |
| DC current mA | 40.00 mA 400.0 mA | 0.01 mA 0.1 mA | 1.5% + 3 |
| DC current A | 4.000 A 10.00 A | 0.001 A 0.01 A | 1.5% + 3 |
| Backlight | Yes | | |

¹AC volts are specified from 1% to 100% of range. Inputs below 1% of range are not specified.

²Typically, open circuit test voltage is 2.0 V and short circuit current is <0.6 mA.

³Specifications do not include errors due to test lead capacitance and capacitance floor (may be up to 1.5 nF in the 40 nF range).

| Function | Overload protection | Input impedance (Nominal) | Common mode rejection ratio | Normal mode rejection ratio |
|---|---------------------|--|----------------------------------|-----------------------------|
| AC volts | 1000 V ¹ | >10 MΩ <100 pF | >60 dB at dc, 50 Hz or 60 Hz | - |
| AC millivolts | 400 mV | >1MΩ, <100 pF | >80 dB at 50 Hz or 60 Hz | - |
| DC volts | 1000 V ¹ | >10 MΩ <100 pF | >100 dB at dc, 50 Hz or 60 Hz | >60 dB at 50 Hz or 60 Hz |
| DC millivolts | 400 mV | >1MΩ, <100 pF | >80 dB at 50 Hz or 60 Hz | - |
| ¹ 10 ⁶ V Hz Max | | | | |
| 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 | | |
| Temperature | | | | |
| Operating | | 0 °C to 40 °C | | |
| Storage | | -30 °C to 60 °C | | |
| Relative humidity | | | | |
| Operating humidity | | Non-condensing (<10°C) ≤90% RH at 10 °C to 30 °C; ≤75% RH at 30 °C to 40 °C | | |
| | | 40 MΩ range ≤80% RH at 10 °C to 30 °C; ≤70% RH 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 inputs | | 440 mA, 1000 V Fast Fuse, Fluke specified part only. 11A, 1000V Fast Fuse, Fluke specified part only. | | |
| Size (H x W x L) | | 183 x 91 x 49.5 mm | | |
| Weight | | 455 g | | |
| IP rating | | IP 40 | | |
| Safety | | IEC 61010-1, IEC61010-2-030 CAT III 600 V, Pollution Degree 2 | | |
| Electromagnetic Compatibility | | IEC 61326-1: Portable EMC Environment | | |

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.

Ordering information



Fluke 15B+

Fluke 15B+ Digital Multimeter

Includes:

- TL75 test leads with two caps
 - 2 AA batteries
 - User's manual
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Fluke. *Keeping your world up and running.*®

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