

FLUKE®

Fluke 15B+ Digital Multimeter



• Key features

- 600 V Cat III safety rating
- 50% bigger display with bright white backlight
- Voltage, resistance, continuity, capacitance
- Input terminal for ac and dc current measurements to 10 A current
- Diode test, data hold

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: $\pm(\% \text{ of Reading} + \text{Number of Least Significant Digits})$.



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 kΩ 40.00 kΩ 400.0 kΩ 4.000 MΩ 40.00 MΩ	0.1 Ω 0.001 kΩ 0.01 kΩ 0.1 kΩ 0.001 MΩ 0.01 MΩ	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 μF 40.00 μF 400.0 μF 1000 μF	0.01 nF 0.1 nF 0.001 μF 0.01 μF 0.1 μF 1 μF	2% + 5 2% + 5 5% + 5 5% + 5 5% + 5 5% + 5
AC current μA (40 Hz to 400 Hz)	400.0 μA 4000 μA	0.1 μA 1 μA	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 μA	400.0 μA 4000 μA	0.1 μA 1 μA	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		

¹All ac, Hz, and duty cycle 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	-

¹ 10⁶ 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 (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 (<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, CAT II 1000 V, Pollution Degree 2
Electromagnetic environment	IEC 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.