

TECHNICAL DATA

Fluke 17B+ Digital Multimeter



Key features

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

Product overview: Fluke 17B+ Digital Multimeter

Fluke quality is always within your reach

Your job requires that you have a rugged, reliable and accurate digital multimeter. The Fluke 17B+ digital multimeter does all that and more. Common basic electrical measurements plus temperature, frequency and duty cycle. Easy to use with one hand, even with gloves on, the Fluke 17B+ offers everything you need.

Specifications: Fluke 17B+ 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 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
Frequency ¹ Hz (10 Hz – 100 kHz)	50.00 Hz 500.0 Hz 5.000 kHz 50.00 kHz 100.0 kHz	0.01 Hz 0.1 Hz 0.001 kHz 0.01 kHz 0.1 kHz	0.1% + 3
Duty Cycle ¹	1% to 99%	0.1%	1% typical ⁴
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
Temperature	50 °C- 400 °C 0 °C- 50 °C -55 °C- 0 °C	0.1C	2% \pm 1 °C \pm 2 °C 9% \pm 2 °C
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).

⁴Typical means when the frequency is at 50 Hz or 60 Hz and the duty cycle is between 10% and 90%.

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 (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 and 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.	

Fluke. *Keeping your world up and running.®*

Fluke Corporation

PO Box 9090, Everett, WA 98206 U.S.A.

For more information call:

In the U.S.A. (800) 443-5853

In Europe/M-East/Africa

+31 (0)40 267 5100

In Canada (905) 890-7600

From other countries +1 (425) 446-5500

Representative office of Fluke South East Asia Pte Ltd

C/O Danaher Vietnam

Green Power Tower, 11th Floor Unit 2

35 Ton Duch Thang Street, District 1

Ho Chi Minh City

Vietnam

Tel: +84-8-2220-5371 (ext 103)

Email: info.asean@fluke.com

www.fluke.com/vn-vi

©2022 Fluke Corporation. Specifications subject to change without notice.

12/2022

Modification of this document is not permitted without written permission from Fluke Corporation.