

FLUKE®

Fluke 106/107 Palm-sized Digital Multimeters

Fluke 106 and 107
put measurements in
the palm of your hand

Technical Data

The Fluke 106 and 107 are compact, easy to use tools. These are palm-sized digital multimeters deliver safe, reliable measurements time after time.

The Fluke 106 and 107 are great products made to fit the way you work! These are the only Fluke digital multimeters designed to fit in the palm of your hand and go with you no matter where your job takes you.

Product highlights

- Voltage, resistance, continuity, capacitance
- Input terminal for ac and dc current measurements to 10 A and current
- Data hold
- Backlit display (107 only)
- Diode test, plus frequency and duty cycle measurements (107 only)



Specifications

Electrical 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	
			106	107
AC volts (40 Hz to 500 Hz)¹	6.000 V 60.00 V 600.0 V	0.001 V 0.01 V 0.1 V	1.0 % + 3	1.0 % + 3
DC volts	6.000 V 60.00 V 600.0 V	0.001 V 0.01 V 0.1 V	0.5 % + 3	0.5 % + 3
AC millivolts	600.0 mV	0.1 mV	3.0 % + 3	3.0 % + 3
Diode test²	2.000 V	0.001 V	10 %	
Resistance (ohms)	400.0 Ω	0.1 Ω	0.5 % + 3	0.5 % + 3
	4.000 kΩ	0.001 kΩ	0.5 % + 2	0.5 % + 2
	40.00 kΩ	0.01 kΩ	0.5 % + 2	0.5 % + 2
	400.0 kΩ	0.1 kΩ	0.5 % + 2	0.5 % + 2
	4.000 MΩ	0.001 MΩ	0.5 % + 2	0.5 % + 2
	40.00 MΩ	0.01 MΩ	1.5 % + 3	1.5 % + 3
Capacitance³	50.00 nF	0.01 nF	2 % + 5	2 % + 5
	500.0 nF	0.1 nF	2 % + 5	2 % + 5
	5.000 μF	0.001 μF	5 % + 5	5 % + 5
	50.00 μF	0.01 μF	5 % + 5	5 % + 5
	500.0 μF	0.1 μF	5 % + 5	5 % + 5
	1000 μF	1 μF	5 % + 5	5 % + 5
Frequency⁴ (10 Hz to 100 kHz)	50.00 Hz	0.01 Hz	NA	0.1 % + 3
	500.0 Hz	0.1 Hz		
	5.000 kHz	0.001 kHz		
	50.00 kHz	0.01 kHz		
	100.0 kHz	0.1 kHz		
Duty cycle⁵	0.1 % to 99.9 %	0.1 %	NA	1 % typical ⁴
AC current (40 Hz to 200 Hz)	4.000 A 10.00 A	0.001 A 0.01 A	1.5 % + 3	1.5 % + 3
DC current	4.000 A 10.00 A	0.001 A 0.01 A	1.5 % + 3	1.5 % + 3
Backlight	—	—	No	Yes

¹ All AC, Hz, and duty cycle are specified from 1 % to 100 % of range. Inputs below 1 % of range are not specified.

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

³ Specifications do not include errors due to test lead capacitance and capacitance floor (may be up to 1.5 nF in the 50 nF range).

⁴ All AC, Hz, and duty cycle are specified from 1 % to 100 % of range. Inputs below 1 % of range are not specified.

⁵ Typical 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	600 V ¹	> 10 MΩ < 100 pF ²	> 60 dB at dc, 50 Hz or 60 Hz	—
AC millivolts	600 mV	> 1 MΩ < 100 pF	> 80 dB at 50 Hz or 60 Hz	—
DC volts	600 V ¹	> 10 MΩ < 100 pF	> 100 dB at dc, 50 Hz or 60 Hz	> 45 dB at 50 Hz or 60 Hz

¹ 6 x 105 V Hz Max.

² For mV (AC), input impedance is approximately 1 MΩ.

Ordering information

FLUKE-106 Digital Multimeter
FLUKE-107 Digital Multimeter

Included equipment

- TL75 Test leads
- 2 AAA Batteries (installed)
- User's manual

General specifications

Maximum voltage between any terminal and earth ground	600 V
Display (LCD)	6000 counts, updates 3/sec
Battery type	2 AAA, NEDA 24A, IEC LR03
Battery life	200 hours minimum
Temperature	Operating: 0 °C to 40 °C Storage: -30 °C to 60 °C
Relative humidity	Operating Humidity: Non-condensing when < 10 °C ≤ 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 inputs	11 A, 1000 V Fast Fuse, Fluke specified part only
Size (HxWxL)	142 mm x 69 mm x 28mm
Weight	200 g
IP rating	IEC 60529: IP 40
Safety	IEC 61010-1: 600 V CAT III, Pollution Degree 2
Electromagnetic environment	IEC 61326-1: portable
Electromagnetic compatibility	Applies to use the Korea only. Class A Equipment (Industrial broadcasting and communication equipment) ¹
Warranty	One year

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.

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

Fluke Europe B.V.
PO Box 1186, 5602 BD
Eindhoven, The Netherlands

For more information call:
In the U.S.A. (800) 443-5853 or
Fax (425) 446-5116
In Europe/M-East/Africa +31 (0) 40 2675 200 or
Fax +31 (0) 40 2675 222
In Canada (800)-36-FLUKE or
Fax (905) 890-6866
From other countries +1 (425) 446-5500 or
Fax +1 (425) 446-5116
Web access: <http://www.fluke.com>

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