

# Fluke 106/107 Palm-sized Digital Multimeters

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





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

Function	Range	Resolution	Acc	Accuracy	
			106	107	
AC volts (40 Hz to 500 Hz) <sup>1</sup>	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 test <sup>2</sup>	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	0.5 % + 3 0.5 % + 2 0.5 % + 2 0.5 % + 2 0.5 % + 2 1.5 % + 3	
Capacitance <sup>3</sup>	50.00 nF 500.0 nF 5.000 μF 50.00 μF 500.0 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	2 % + 5 2 % + 5 5 % + 5 5 % + 5 5 % + 5 5 % + 5	
Frequency <sup>4</sup> (10 Hz to 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	NA	0.1 % + 3	
Duty cycle 5	0.1 % to 99.9 %	0.1%	NA	1% typical4	
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	

 $<sup>^1</sup>$  All AC, Hz, and duty cycle are specified from 1 % to 100 % of range. Inputs below 1 % of range are not

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 imped- ance (nominal)	Common mode rejection ratio	Normal mode rejection ratio
AC volts	600 V <sup>1</sup>	> 10 MΩ < 100 pF <sup>2</sup>	> 60 dB at dc, 50 Hz or 60 Hz	_
AC millivolts	600 mV	>1M <100 pF	> 80 dB at 50 Hz or 60 Hz	_
DC volts	600 V <sup>1</sup>	> 10 MΩ < 100 pF	> 100 dB at dc, 50 Hz or 60 Hz	> 45 dB at 50 Hz or 60 Hz

<sup>&</sup>lt;sup>1</sup>6 x 105 V Hz Max.

 $<sup>^2\,\</sup>text{For mV}$  (AC), input impedance is approximately 1  $M\Omega.$ 





#### **General specifications**

Maximum voltage	600 V	
between any terminal		
and earth ground		
Display (LCD)	6000 counts, updates 3/sec	
Battery type	2 AAA, NEDA 24A, IEC LRO3	
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	0.1 X (specified accuracy)/°C	
coefficient	(< 18 °C or > 28 °C)	
Fuse protection for	11 A, 1000 V Fast Fuse, Fluke	
current inputs	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	IEC 61326-1: portable	
environment	<u>-</u>	
Electromagnetic	Applies to use the Korea only.	
compatibility	Class A Equipment	
	(Industrial broadcasting and	
	communication equipment) <sup>1</sup>	
Warranty	One year	

<sup>&</sup>lt;sup>1</sup> 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-106 Digital Multimeter FLUKE-107 Digital Multimeter

#### **Included equipment**

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

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<sup>&</sup>lt;sup>2</sup>Typically, open circuit test voltage is 2.0 V and short circuit current is < 0.6 mA.
<sup>3</sup>Specifications do not include errors due to test lead capacitance and capacitance floor (may be up to 1.5 nF in the