

# Fluke 106/107 Palmsized 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)



## Speci\_cations

### Electrical specifications

Accuracy is specified for 1 year after calibration, at operating tem-peratures of 18 °C to 28 °C, relative humidity at 0 % to 75 %. Accuracy specifications take the form of: ±([% of Reading] + [Number of Least Significant Digits])

Function	Range	Resolution	Accuracy		
			106	107	
AC volts	6.000 V	0.001 V	1.0 % + 3	1.0 % + 3	
(40 Hz to 500 Hz) <sup>1</sup>	60.00 V	0.01 V			
	600.0 V	0.1 V			
DC volts	6.000 V	0.001 V	0.5 % + 3	0.5 % + 3	
	60.00 V	0.01 V			
	600.0 V	0.1 V			
AC millivolts	600.0 mV	0.1 mV	3.0 % + 3	3.0 % + 3	
Diode test 2	2.000 V	0.001 V	10	1 %	
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 ΜΩ	0.5 % + 2	0.5 % + 2	
	40.00 MΩ	0.01 ΜΩ	1.5 % + 3	1.5 % + 3	
Capacitance <sup>3</sup>	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	
Frequency 4	50.00 Hz	0.01 Hz	NA	0.1 % + 3	
(10 Hz to 100 kHz)	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 cycle <sup>5</sup>	0.1 % to	0.1 %	NA	1 % typical4	
	99.9 %				
AC current	4.000 A	0.001 A	1.5 % + 3	1.5 % + 3	
(40 Hz to 200 Hz)	10.00 A	0.01 A			
DC current	4.000 A	0.001 A	1.5 % + 3	1.5 % + 3	
				1	
	10.00 A	0.01 A			

 $<sup>^1</sup>$  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.

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

Function	Overload protection		Common mode rejection ratio	
AC volts	600 V <sup>1</sup>	$> 10 M\Omega$ < 100 pF2	> 60 dB at dc, 50 Hz or 60 Hz	1
AC millivolts	600 mV	>1M <100 pF	> 80 dB at 50 Hz or 60 Hz	ı
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>6</sup> x 105 V Hz Max.

 $<sup>^2</sup>$  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 LR03		
Battery life			
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;		
Alter	≤ 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			
Electromagnetic	Applies to use the Korea only.		
compatibility			
	(Industrial broadcasting and		
	communication equipment) 1		
Warranty	One year		

<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

Fluke. The Most Trusted Tools in the World.



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