

# Fluke 27 II and 28 II:

# Rugged IP 67 Industrial Multimeters

## **Technical Data**

The NEW Fluke 27 II and 28 II digital multimeters define a new standard for operating in harsh conditions with the features and accuracy to troubleshoot most electrical problems. Both meters have IP 67 (waterproof and dustproof) rating, MSHA approval, extended operating temperature range of -15 °C to +55 °C (5 °F to 131 °F, -40 °C for up to 20 minutes) and 95 % humidity, and have been designed and tested to withstand a 3 m (10 ft) drop. The new Fluke 20 Series Multimeters are built to work in the toughest environments.

- Measure up to 1000 V ac and dc
- Measure up to 10 A (20 A for 30 seconds)
- 10,000 µF capacitance range
- Frequency to 200 kHz
- Extended ac voltage bandwidth-15 Hz to 20 kHz (28 II), 40 Hz to 30 kHz (27 II)
- Built in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument (28 II)
- Resistance, continuity and diode test
- Min/Max and average recording to capture variations automatically
- Peak min-max (28 II)
- Unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (28 II)

#### **Features**

- New IP 67 waterproof & dustproof protection, completely sealed for use in harsh environments
- Designed to withstand 3 meter drop (with holster)

- Hi resolution 20,000 count display mode (28 II)
- True-rms ac voltage and current for accurate measurements on non linear signals (28 II)
- Average responding voltage and current for measurements (27 II)
- **New** Backlit keypad buttons allow for easy visibility in low-
- Large display digits and 2 level bright white backlight for increased visibility
- Reversible holster for added protection when not in use
- Withstands hazardous 8,000 volt spikes caused by load switching and faults on industrial circuits and complies with second edition IEC and ANSI electrical safety standards
- Long battery life (800 hours)
- Relative mode to remove test lead resistance from low ohms measurements
- Auto and manual ranging for maximum flexibility
- Optional magnetic hanger for easy setup and viewing while freeing your hands for other tasks
- MSHA approved















#### **Accuracy specifications**

Specification		27 II	28 II
DC voltage	Range	0.1 mV to 1000 V	
	Accuracy	0.1 % +1	0.05 % + 1
AC voltage	Range	0.1 mV to 1000 V	
	Accuracy	0.5 % +3	0.7 % +4
DC current	Range	0.1 μA to 10 A	
	Accuracy	0.2 % + 4	0.2 % + 4
AC current	Range	0.1 μA to 10 A	
	Accuracy	1.5 % + 2	1.0 % + 2
Resistance	Range	0.1 Ω to 50 MΩ	
Display counts		6000	6000/19,999
Capacitance		1 nF to 9999 μF	
Frequency		0.5 Hz to 199.99 kHz	
Temperature		_	-200 °C to +1090 °C
Low pass filter (Measurement on VSD's)		_	Yes
Compliance		CAT IV 600 V , CAT III 1000 V	
IP rating		IP 67	IP 67
Power		Three AA batteries	
Battery life		800 hours	

#### **General specifications**

Display			
Bar graph/backlight	Yes/Yes		
Data storage			
Peak transient capture	250 μS (28 II)		
Min/Max/Avg	Yes		
Reading hold	Yes		
Other features			
Relative readings (zero)	Yes		
Battery type	Three AA batteries		
Warranty and protection			
Safety rating	CAT IV 600 V/CAT III 1000 V		
External protection	Rubber holster		
Drop test	10 feet drop test		
Dustproof/waterproof	Yes, IP 67 rated		
Warranty	Limited lifetime		
Size (HxWxL) with holster	6.35 cm x 10.0 cm x 19.81 cm (2.5 in x 3.93 in x 7.8 in)		
Weight with holster	698.5 g (1.54 lb)		

## **Ordering information**

27 II Fluke 27 II Rugged IP 67 Avg. Responding Multimeter

Fluke 28 II Rugged IP 67 28 II True-rms Multimeter

Includes: Holster, test leads, alligator clips, 80BK-A temperature probe (28 II), manual, CD-ROM, and three AA batteries (installed)

#### **Optional accessories**

PV 350 Pressure Vacuum Module i200 **AC Current Clamp** AC/DC Current Clamp i410 80K-6 High Voltage Probe



Fluke. Keeping your world up and running.®

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

©2009-2010 Fluke Corporation. Specifications subject to change without notice. Printed in U.S.A. 11/2010 3476770C D-EN-N

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