

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)
- 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-lit areas
- 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

Features

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



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
28 II Fluke 28 II Rugged IP 67
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
i410 AC/DC Current Clamp
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.**