

## 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 approvals (pending), 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  $\mu$ F 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 approval (pending)

### 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                                | Max. resolution | 0.1 mV to 1000 V             |                     |
|                                           | Accuracy        | 0.1 % + 1                    | 0.05 % + 1          |
| AC voltage                                | Max. resolution | 0.1 mV to 1000 V             |                     |
|                                           | Accuracy        | 0.5 % + 3                    | 0.7 % + 4           |
| DC current                                | Max. resolution | 0.1 µA to 10 A               |                     |
|                                           | Accuracy        | 0.2 % + 4                    | 0.2 % + 4           |
| AC current                                | Max. resolution | 0.1 µA to 10 A               |                     |
|                                           | Accuracy        | 1.5 % + 2                    | 1.0 % + 2           |
| Resistance                                | Max. resolution | 0.1 Ω to 50 MΩ               |                     |
| Display counts                            |                 | 6000                         | 6000/19,999         |
| Capacitance                               |                 | 1 nF to 9999 µF              |                     |
| Frequency                                 |                 | 0.5Hz Hz to 199.99 kHz       |                     |
| Temperature                               |                 | —                            | -200 °C to +1090 °C |
| Low pass filter<br>(Measurement on VSD's) |                 | —                            | Yes                 |
| Compliance                                |                 | CAT IV 600 V , CAT III 1000V |                     |
| 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<br>(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



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