

TECHNICAL DATA

# Fluke 87 MAX True-rms Digital Multimeter



The 87V MAX contains all the trusted features of the most popular DMM used today, the Fluke 87V, plus much more.

**IP67 RATED**

Fully waterproof and dust proof, to work reliably in all the places that you need to work.

**WITHSTANDS DROPS UP TO 4-METERS (13 FEET)**

Fluke's most rugged digital multimeter. The 87V MAX is built with an industrial strength case and a removable holster. The holster doubles as a test probe holder for one-handed operation.

**WORKS AS LONG AS YOU DO**

The 87V MAX provides double the battery life of the original 87V.

**WITHSTANDS HEAT AND COLD**

The meter has an extended operating temperature range of -40 °C (for up to 20 minutes) to +55 °C.

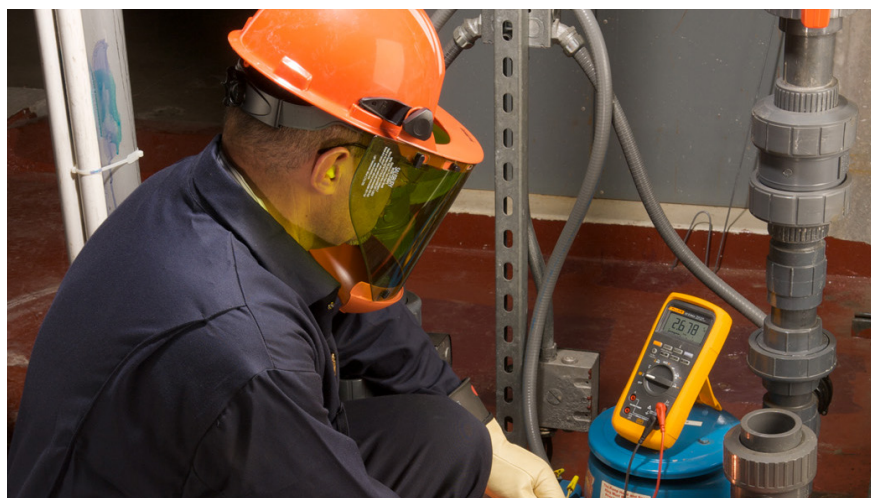
**For use in extreme environments**

The Fluke 87V MAX True-rms Digital Multimeter defines a new standard for operating in extreme conditions with the features and accuracy to troubleshoot most electrical problems. The 87V MAX has an IP 67 (waterproof and dustproof) rating, 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 has been designed and tested to withstand a 4 m (13 ft) drop. The Fluke 87V MAX True-rms Digital Multimeter is built to work in the toughest environments you might face.

The 87V MAX also gives users a rugged case and removable holster that has been drop tested to 4 meters.

**Product highlights**

- True-rms ac voltage and current for accurate measurements on non-linear signals
- Measure up to 1000 V ac and dc
- Measure up to 10 A (20 A for 30 seconds)
- Frequency to 200 kHz
- Built in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument
- Min/Max/Average recording, plus 150 µs Peak min-max to capture variations automatically
- Unique function for accurate voltage and frequency measurements on variable frequency motor drives (VFDs) and other electrically noisy equipment
- Large display digits, 2-level bright white backlight and backlit keypad buttons for increased visibility
- Hi resolution 20,000 count display mode
- Long battery life (800 hours)



## Specifications

| Accuracy                                 |                             |                                |
|--|-----------------------------|--------------------------------|
| DC voltage                               | Max. resolution<br>Accuracy | 0.1 mV to 1000 V<br>0.05 % + 1 |
| AC voltage                               | Max. resolution<br>Accuracy | 0.1 mV to 1000 V<br>0.7 % + 4  |
| DC current                               | Max. resolution<br>Accuracy | 0.1 µA to 10 A<br>0.2 % + 4    |
| AC current                               | Max. resolution<br>Accuracy | 0.1 µA to 10 A<br>1.0 % + 2    |
| Resistance                               | Max. resolution             | 0.1 Ω to 50 MΩ                 |
| Display counts                           | 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<br>(Measurement on VFDs) | Yes                         |                                |
| Safety rating                            | CAT IV 600 V, CAT III 1000V |                                |
| IP rating                                | IP 67                       |                                |
| Power                                    | Three AA batteries          |                                |
| Battery life                             | 800 hours                   |                                |

| Display                      |   |
|------------------------------|---|
| Bar graph/backlight          | Yes/Yes   |
| Data storage                 |   |
| Peak transient capture       | 250 µs  |
| 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                    | 13 feet drop test   |
| Dustproof/waterproof         | Yes, IP 67 rated  |
| Warranty                     | Limited lifetime  |
| Size (HxWxL) with<br>holster | 6.35 cm x 10.0 cm x 19.81 cm (2.5 in x 3.93 in x<br>7.8 in) |
| Weight with holster          | 698.5 g (1.54 lb)   |



## Ordering information

**Fluke 87V MAX True-rms Digital Multimeter**

### Includes

Holster, TL175 TwistGuard® test leads, alligator clips, 80BK-A temperature probe, three AA batteries (installed)

**Fluke.** *Keeping your world up and running.*®

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