

## TECHNICAL DATA

# Fluke 87V 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 has an industrial-strength outer shell and a removable holster that doubles as test lead storage and a test probe holder for one-handed operation.

## Product highlights

- True-rms ac voltage and current for accurate measurements on non-linear signals
- Measure up to 1,000 V ac and dc
- Measure up to 10 A (20 A for 30 seconds)
- Frequency to 200 kHz
- Built in temperate function conveniently allows you to take temperature readings without having to carry a separate instrument using supplied thermocouple
- Min/Max/Average recording, plus 250  $\mu$ s 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 19,999 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 % + 2    |
| 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                           | 6,000/19,999                                          |                                |
| Capacitance                              | 0.01 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                                | 4 meter (13 feet) drop test                           |                                |
| Dustproof/waterproof                     | Yes, IP 67 rated                                      |                                |
| Warranty                                 | Limited lifetime                                      |                                |
| Size (HxWxL) with holster                | 6.0 cm x 10.1 cm x 21.5 cm (2.4 in x 4.3 in x 8.5 in) |                                |
| Weight with holster                      | 698.5 g (1.54 lb)                                     |                                |

## Ordering information

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

### Included

Removable holster with test lead storage

**TL175 TwistGuard®** test leads

**AC175** Alligator clips

**80BK-A** temperature probe

Three AA batteries (installed)



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up and running.®*