

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

FLUKE

Fluke FLK-87-VMAX CAL Heavy-Duty True-RMS Multimeter

The Fluke 87V MAX True-RMS Digital Multimeter with Calibration Certificate offers peak performance and accuracy for troubleshooting and diagnostics in demanding environments. It features a high-resolution display, extended AC voltage bandwidth, and built-in thermometer. Its rugged design is drop-tested to 4 meters and IP67 rated for dust and water resistance.



MODEL

**Fluke FLK-87-
VMAX CAL**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

FLK-87-VMAX CAL

LISTING

<https://aumictechlabs.com/products/flk-87-vm-ax-cal-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Fluke FLK-87-VMAX CAL is a heavy-duty true-RMS multimeter engineered for precision measurement and diagnostics in industrial environments. It delivers advanced troubleshooting capabilities with CAT III 1000 V / CAT IV 600 V safety ratings, IP67 waterproof/dustproof construction, and 4-meter drop protection. The instrument combines high-resolution measurement accuracy with field-proven durability, making it suitable for maintenance technicians, system integrators, and field engineers working in electrically challenging environments. Technical Specifications Measurement Ranges AC/DC Voltage: Up to 1000 V AC/DC Current: Up to 10 A (20 A for 30 seconds maximum) Frequency: Up to 200 kHz Temperature: Built-in thermometer capability Continuity and diode testing Display and Resolution 19,999 count

digital display (4½-digit resolution) Dual display modes: 6,000 or 20,000 counts Large digits with 2-level bright white backlight Analog bargraph for real-time signal trending Environmental Ratings Operating Temperature: -15 °C to +55 °C (-40 °C for 20-minute intervals) Relative Humidity: Up to 95% IP67 rating: complete dust and water immersion protection Drop rated to 4 meters (13 feet) Power Three AA batteries Battery life: Up to 800 hours Tool-free battery access door (maintains calibration seal)Key Features True-RMS measurement for accurate AC voltage and current on non-linear loads Min/Max/Average recording with 250 µs peak capture window Low-pass filter for VFD and noisy industrial equipment measurements High-frequency noise shielding for clean readings in electromagnetically hostile environments Backlit keypad and bright display for visibility in low-light field conditions Calibration certificate included; accuracy maintained for 2 years post-calibration at 18 °C to 28 °CTypical Applications Motor and drive troubleshooting on variable frequency drives Electrical system diagnostics and preventive maintenance Power quality assessment in industrial facilities Temperature monitoring with integral probe capabilityCompatibility & Integration Supplied with Premium TL175 TwistGuard™ test leads, temperature probe, and alligator clips for immediate field deployment.

Features & description

From manufacturer datasheet

Features

- IP67 waterproof and dustproof • 4 m drop tested with industrial outer shell • 6000-count display; 19999-count high-resolution mode • Built-in low-pass filter for VFD measurements • Peak Min/Max 250 us capture • About 800-hour battery life on three AA cells

Applications

- Industrial True-RMS AC/DC troubleshooting in harsh environments • VFD / low-pass filtered voltage measurements • Temperature checks with supplied Type-K probe • High-energy CAT III 1000 V / CAT IV 600 V field work

FLK87VMAXCAL Characteristics / Specifications

PARAMETER	VALUE
Model	FLK-87-VMAX CAL
Manufacturer	Fluke
Instrument Type	Heavy-Duty True-RMS Digital Multimeter
Alias	87V MAX; Fluke 87V MAX; FLK-87-VMAX; FLK-87-VMAX CAL
DC voltage range	0.1 mV to 1000 V
DC voltage accuracy	+/- (0.05% + 1)
AC voltage range	0.1 mV to 1000 V
AC voltage accuracy	+/- (0.7% + 4) True-RMS
AC bandwidth	20 kHz with low-pass filter; 3 dB at 1 kHz
DC current range	0.1 uA to 10 A; 20 A for 30 seconds maximum
DC current accuracy	+/- (0.2% + 2)
AC current range	0.1 uA to 10 A; 20 A for 30 seconds maximum
AC current accuracy	+/- (1.0% + 2) True-RMS
Resistance range	0.1 ohm to 50 Mohm
Resistance accuracy	+/- (0.2% + 1)
Capacitance range	0.01 nF to 9999 uF
Capacitance accuracy	+/- (1% + 2)
Frequency range	0.5 Hz to 199.99 kHz
Frequency accuracy	+/- (0.005% + 1)
Temperature measurement range	-200.0 to 1090 degC excluding probe
Conductance	60.00 nS maximum
Diode test range	2 V
Display counts	6000; 19999 high-resolution mode
Bar graph	32-33 segments class
Safety rating	CAT III 1000 V; CAT IV 600 V

PARAMETER	VALUE
IP rating	IP67
Battery	three AA; about 800 hours life
Operating temperature	-15 to 55 degC; to -40 degC for 20 minutes from 20 degC
Storage temperature	-55 to 85 degC without battery
Operating altitude	2000 m
Maximum voltage to earth	1000 V RMS
Fuse mA/uA	0.44 A 1000 V IR 10 kA
Fuse A	11 A 1000 V IR 17 kA
Drop rating	4 m
Calibration documentation	Fluke CAL certificate for CAL listing Notes Specs from Fluke 87V MAX product page and users manual. CAL suffix denotes calibration documentation package; confirm certificate date on the unit.
Bandwidth	20 kHz with low-pass filter; 3 dB at 1 kHz

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	55 to 85 degC without battery
Operating temperature	range, and a 4 m drop rating around the trusted 87V measurement set. The FLK-87-VMAX CAL listing denotes a calibrated configuration with Fluke calibration documentation. Removable holster stores leads a
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Model	FLK-87-VMAX CAL
Manufacturer	Fluke
Instrument Type	Heavy-Duty True-RMS Digital Multimeter
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Capacitance accuracy	+/- (1% + 2)
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Frequency accuracy	+/- (0.005% + 1)
Temperature measurement range	-200.0 to 1090 degC excluding probe

PARAMETER	VALUE
Conductance	60.00 nS maximum
Diode test range	2 V
Display counts	6000; 19999 high-resolution mode
Bar graph	32-33 segments class
Safety rating	CAT III 1000 V; CAT IV 600 V
IP rating	IP67
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Operating altitude	2000 m
Maximum voltage to earth	1000 V RMS
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Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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PARAMETER	VALUE
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Operating temperature	-15 to 55 degC; to -40 degC for 20 minutes from 20 degC
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Operating altitude	2000 m
Maximum voltage to earth	1000 V RMS
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Drop rating	4 m
Calibration documentation	Fluke CAL certificate for CAL listing

Notes

Specs from Fluke 87V MAX product page and users manual. CAL suffix denotes calibration documentation package; confirm certificate date on the unit.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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<https://aumictechlabs.com>

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.