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Data Sheet

August 14, 2026

FLUKE

Fluke 87-5 CAL Industrial True-RMS Multimeter

Fluke Laboratory Measurement Instruments. Voltage: 0–1000 V, Voltage: 0–1000 V RMS, Current: 0–10 A.



MODEL

Fluke 87-5 CAL

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

87-5 CAL

LISTING

<https://aumictechlabs.com/products/87-5-cal-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fluke 87-5 CAL Industrial True-RMS Multimeter is a field instrument engineered for precise electrical measurements across demanding industrial applications. It delivers True-RMS AC voltage and current readings on non-linear signals, with a dual-level backlit display optimized for variable lighting and an integrated thermometer for temperature measurement. Factory calibrated to NIST standards with traceable certification, the 87-5 CAL rapidly isolates faults in motor drives, plant automation, power distribution systems, and electromechanical equipment. Technical Specifications Measurement Ranges DC Voltage: 0–1000 V AC Voltage: 0–1000 V RMS DC Current: 0–10 A AC Current: 0–10 A (20 A for up to 30 seconds) Resistance: 0–50 MΩ Capacitance: 0–10,000 μF Frequency: 0–200 kHz Temperature: Via integrated thermometer Duty Cycle: Percentage measurement Accuracy DC Voltage: ±0.05% True-RMS AC Voltage: ±0.7% + 2 digits DC Current: ±0.2% + 2 digits True-RMS AC Current: ±1% + 2 digits Key Features 3¾ digit display: 6,000 counts; high-resolution mode extends to 19,999 counts Analog bar graph for transient and unstable signal visualization Low-pass filter for VFD voltage and frequency

accuracy Peak capture detects transients at 250 μ s response time Min/Max/Average recording function Touch Hold captures readings without probe contact Relative mode eliminates test lead resistance in low-ohm measurements Auto/manual ranging Input alert audible warning Transient voltage withstand rated to 8000 V spikes Safety: EN 61010-1, CAT III 1000 V, CAT IV 600 V IP30 enclosure rating Dimensions: 7.35 in (L) $\times$ 3.41 in (W) $\times$ 1.25 in (H) 9 V alkaline battery; 400 hours typical runtime without backlight Removable holster with integrated test lead and probe storage Typical Applications Motor drive troubleshooting, plant automation diagnostics, power distribution analysis, electromechanical equipment service. Included Components NIST traceable calibration certificate with data Test lead set (TL75) Temperature probe (80BK) Alligator clip set (AC175) Holster 9 V battery

Features & description

From manufacturer datasheet

Built-in thermometer with Type-K support

Min/Max/Average and Peak Min/Max to 250 us 6000-count display with Hi-Res 19999 mode Technical Specifications DC Voltage Maximum: 1000 V DC Voltage Accuracy: plus or minus (0.05 percent plus 1) DC Voltage Maximum Resolution: 10 uV AC Voltage Maximum: 1000 V AC Voltage Accuracy: plus or minus (0.7 percent plus 2) True RMS AC Bandwidth With Low Pass Filter: 20 kHz; 3 dB at 1 kHz DC Current Maximum: 10 A (20 A for 30 seconds maximum) DC Current Accuracy: plus or minus (0.2 percent plus 2) AC Current Maximum: 10 A (20 A for 30 seconds maximum) AC Current Accuracy: plus or minus (1.0 percent plus 2) True RMS Resistance Maximum: 50 Mohm Resistance Accuracy: plus or minus (0.2 percent plus 1) Capacitance Maximum: 9999 uF Capacitance Accuracy: plus or minus (1 percent plus 2) Frequency Maximum: 200 kHz Frequency Accuracy: plus or minus (0.005 percent plus 1) Duty Cycle Maximum: 99.9 percent Temperature Measurement Range: minus 200.0 C to 1090 C excluding probe Conductance Maximum: 60.00 nS Diode Test Range: 3 V Overvoltage Category: CAT III 1000 V CAT IV 600 V Size With Holster: 201 × 98 × 52 mm Weight: 355 g; 624 g with holster Display Counts: 6000 digital; Hi-Res 19999 counts Battery Life Typical: 400 hours alkaline backlight off

875CAL Characteristics / Specifications

PARAMETER	VALUE
DC Voltage Maximum	1000 V
DC Voltage Accuracy	plus or minus (0.05 percent plus 1)
DC Voltage Maximum Resolution	10 uV
AC Voltage Maximum	1000 V
AC Voltage Accuracy	plus or minus (0.7 percent plus 2) True RMS
AC Bandwidth With Low Pass Filter	20 kHz; 3 dB at 1 kHz
DC Current Maximum	10 A (20 A for 30 seconds maximum)
DC Current Accuracy	plus or minus (0.2 percent plus 2)
AC Current Maximum	10 A (20 A for 30 seconds maximum)
AC Current Accuracy	plus or minus (1.0 percent plus 2) True RMS
Resistance Maximum	50 Mohm
Resistance Accuracy	plus or minus (0.2 percent plus 1)
Capacitance Maximum	9999 uF
Capacitance Accuracy	plus or minus (1 percent plus 2)
Frequency Maximum	200 kHz
Frequency Accuracy	plus or minus (0.005 percent plus 1)
Duty Cycle Maximum	99.9 percent
Temperature Measurement Range	minus 200.0 C to 1090 C excluding probe
Conductance Maximum	60.00 nS
Diode Test Range	3 V
Overvoltage Category	CAT III 1000 V CAT IV 600 V
Size With Holster	201 × 98 × 52 mm
Weight	355 g; 624 g with holster
Display Counts	6000 digital; Hi-Res 19999 counts
Battery Life Typical	400 hours alkaline backlight off

PARAMETER	VALUE
Bandwidth	With Low Pass Filter: 20 kHz; 3 dB at 1 kHz

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 list DC voltage accuracy plus or minus (0.05 percent plus 1), AC true-RMS to 1000 V, current to 10 A, resistance to 50 Mohm, frequency to 200 kHz, VFD low-pass filter, and CAT III 1000 V / CAT IV 600 V ratings.

Applications

Industrial electrical calibration documentation, VFD and motor-drive measurements, plant automation diagnostics, and temperature checks with Type-K probe.

Key Features

True-RMS AC voltage and current

Selectable low-pass filter for VFD measurements

Built-in thermometer with Type-K support

Min/Max/Average and Peak Min/Max to 250 us

6000-count display with Hi-Res 19999 mode

Technical Specifications

Technical Specifications

PARAMETER	VALUE
DC Voltage Maximum	1000 V
DC Voltage Accuracy	plus or minus (0.05 percent plus 1)
DC Voltage Maximum Resolution	10 uV
AC Voltage Maximum	1000 V
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AC Current Maximum	10 A (20 A for 30 seconds maximum)
AC Current Accuracy	plus or minus (1.0 percent plus 2) True RMS
Resistance Maximum	50 Mohm
Resistance Accuracy	plus or minus (0.2 percent plus 1)
Capacitance Maximum	9999 uF
Capacitance Accuracy	plus or minus (1 percent plus 2)
Frequency Maximum	200 kHz
Frequency Accuracy	plus or minus (0.005 percent plus 1)
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Temperature Measurement Range	minus 200.0 C to 1090 C excluding probe
Conductance Maximum	60.00 nS

PARAMETER	VALUE
Diode Test Range	3 V
Overvoltage Category	CAT III 1000 V CAT IV 600 V
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Weight	355 g; 624 g with holster
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Battery Life Typical	400 hours alkaline backlight off

Notes

Alias of fluke-87-5 / 87V shared numeric table from Fluke 87V datasheets for CAL documentation workflows; confirm calibration sticker and option codes 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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.