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Data Sheet
August 14, 2026

FLUKE

Fluke 87V True Industrial Multimeter

Fluke 87V True-RMS Industrial Digital Multimeter The Fluke 87V isarugged true-RMS industrial handheld DMM rated CAT III 1000 V / CAT IV 600 V with VFD low-pass filtering for motor-drive measurements, built-in thermometer, and capture of intermittents as short as 250 us. Official Fluke product specifications list DC voltage accuracy of ±(0.05% + 1), AC true-RMS to 1000 V, current to 10 A, resistance to 50 MΩ, and frequency to 200 kHz. Industrial electrical troubleshooting on VFD and PWM motor drives, plant automation and power distribution diagnostics, electromechanical equipment service, and temperature checks with the included probe. The Fluke 87V isarugged true-RMS industrial handheld DMM rated CAT III 1000 V / CAT IV 600 V with VFD low-pass filtering for motor-drive measurements, built-in thermometer, and capture of intermittents as short as 250 us. Official Fluke product specifications list DC voltage accuracy of ±(0.05% + 1), AC true-RMS to 1000 V, current to 10 A, resistance to 50 MΩ, and frequency to 200 kHz. Industrial electrical troubleshooting on VFD and PWM motor drives, plant automation and power distribution diagnostics, electromechanical equipment service, and temperature checks with the included probe.

MODEL **Fluke 87V**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **87V**	LISTING **https://aumictechlabs.com/products/87v-2/**

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

This unit

The Fluke 87V True Industrial Multimeter delivers precision diagnostics across motor drives, plant automation, power distribution, and electromechanical systems. Built for electrically noisy

environments and high-altitude operation, it combines true-RMS measurement capability with a low-pass filter and shielding to handle variable frequency drive noise. Peak capture records transient events as fast as 250 µs, enabling rapid isolation of intermittent faults. Technical Specifications Voltage & Current DC Voltage: 1000 V maximum, ±(0.05% + 1) accuracy, 10 µV resolution AC Voltage (True-RMS): 1000 V maximum, ±(0.7% + 2) accuracy to 20 kHz with low-pass filter, 0.1 mV resolution DC Current: 10 A continuous (20 A for 30 seconds maximum), ±(0.2% + 2) accuracy, 0.01 µA or 0.1 µA resolution AC Current (True-RMS): 10 A continuous (20 A for 30 seconds maximum), ±(1.0% + 2) accuracy, 0.1 µA resolution Passive & Frequency Measurements Resistance: 50 MΩ maximum, ±(0.2% + 1) accuracy, 0.1 Ω resolution Capacitance: 10,000 µF maximum, ±(1% + 2) accuracy, 0.001 µF resolution Frequency: 200 kHz maximum, ±(0.005% + 1) accuracy, 0.01 Hz or 0.1 Hz resolution Duty Cycle: 0–99.9% range, ±(0.2% per kHz + 0.1%) accuracy Temperature Range: -200 to 1090 °C, ±1.0% accuracy (excluding probe) Includes built-in thermometer and 80BK thermocouple probe Key Features True-RMS measurement on non-linear AC signals Low-pass filter for adjustable speed drives and noisy electrical environments Peak capture: 250 µs transient detection Min/Max/Average recording Diode and continuity testing with audible beeper Relative mode for low-resistance measurement offset Audible input alert for incorrect test lead placement Large 4-1/2 digit display with two-level white backlight Typical Applications Motor drive troubleshooting, variable frequency drive analysis, plant automation diagnostics, power distribution system testing, electromechanical equipment maintenance. Compatibility & Integration 80BK thermocouple probe included for temperature measurement.

Features & description

From manufacturer datasheet

Built-in thermometer with Type-K probe support

Min/Max/Average recording and Peak Min/Max capture to 250 us Analog bar graph with 6000-count digital display and Hi-Res 19999 mode Technical Specifications DC Voltage Maximum: 1000 V DC Voltage Accuracy: ±(0.05% + 1) DC Voltage Maximum Resolution: 10 uV AC Voltage Maximum: 1000 V AC Voltage Accuracy: ±(0.7% + 2) True RMS AC Bandwidth With Low Pass Filter: 20 kHz; 3 dB at 1 kHz AC Voltage Maximum Resolution: 0.1 mV DC Current Maximum: 10 A (20 A for 30 seconds maximum) DC Current Accuracy: ±(0.2% + 2) DC Current Maximum Resolution: 0.01 uA AC Current Maximum: 10 A (20 A for 30 seconds maximum) AC Current Accuracy: ±(1.0% + 2) True RMS AC Current Maximum Resolution: 0.1 uA Resistance Maximum: 50 MΩ Resistance Accuracy: ±(0.2% + 1) Resistance Maximum Resolution: 0.1 ohm Capacitance Maximum: 9999 uF Capacitance Accuracy: ±(1% + 2) Capacitance Maximum Resolution: 0.01 nF Frequency Maximum: 200 kHz Frequency Accuracy: ±(0.005% + 1) Frequency Maximum Resolution: 0.01 Hz Duty Cycle Maximum: 99.9% Duty Cycle Accuracy: ±(0.2% per kHz + 0.1%) Temperature Measurement Range: -200.0 C to 1090 C excluding probe 80BK Probe Range: -40.0 C to 260 C Conductance Maximum: 60.00 nS Diode Test Range: 3 V

87V Characteristics / Specifications

PARAMETER	VALUE
DC Voltage Maximum	1000 V
DC Voltage Accuracy	±(0.05% + 1)
DC Voltage Maximum Resolution	10 uV
AC Voltage Maximum	1000 V
AC Voltage Accuracy	±(0.7% + 2) True RMS
AC Bandwidth With Low Pass Filter	20 kHz; 3 dB at 1 kHz
AC Voltage Maximum Resolution	0.1 mV
DC Current Maximum	10 A (20 A for 30 seconds maximum)
DC Current Accuracy	±(0.2% + 2)
DC Current Maximum Resolution	0.01 uA
AC Current Maximum	10 A (20 A for 30 seconds maximum)
AC Current Accuracy	±(1.0% + 2) True RMS
AC Current Maximum Resolution	0.1 uA
Resistance Maximum	50 MΩ
Resistance Accuracy	±(0.2% + 1)
Resistance Maximum Resolution	0.1 ohm
Capacitance Maximum	9999 uF
Capacitance Accuracy	±(1% + 2)
Capacitance Maximum Resolution	0.01 nF
Frequency Maximum	200 kHz
Frequency Accuracy	±(0.005% + 1)
Frequency Maximum Resolution	0.01 Hz
Duty Cycle Maximum	99.9%
Duty Cycle Accuracy	±(0.2% per kHz + 0.1%)
Temperature Measurement Range	-200.0 C to 1090 C excluding probe 80BK Probe Range: -40.0 C to 260 C

PARAMETER	VALUE
Conductance Maximum	60.00 nS
Diode Test Range	3 V
Overvoltage Category	EN 61010-1 to 1000 V CAT III, 600 V CAT IV
Size With Holster	201 × 98 × 52 mm
Weight	355 g; 624 g with holster
Display Counts	6000 digital updates 4/sec; Hi-Res frequency 19999 counts
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 of ±(0.05% + 1), AC true-RMS to 1000 V, current to 10 A, resistance to 50 MΩ, and frequency to 200 kHz.

Applications
Industrial electrical troubleshooting on VFD and PWM motor drives, plant automation and power distribution diagnostics, electromechanical equipment service, and temperature checks with the included probe.

Key Features
True-RMS AC voltage and current for non-linear loads
Selectable low-pass filter for accurate VFD voltage measurements
Built-in thermometer with Type-K probe support
Min/Max/Average recording and Peak Min/Max capture to 250 us
Analog bar graph with 6000-count digital display and Hi-Res 19999 mode

Technical Specifications

Technical Specifications

PARAMETER	VALUE
DC Voltage Maximum	1000 V
DC Voltage Accuracy	±(0.05% + 1)
DC Voltage Maximum Resolution	10 uV
AC Voltage Maximum	1000 V
AC Voltage Accuracy	±(0.7% + 2) True RMS
AC Bandwidth With Low Pass Filter	20 kHz; 3 dB at 1 kHz
AC Voltage Maximum Resolution	0.1 mV
DC Current Maximum	10 A (20 A for 30 seconds maximum)
DC Current Accuracy	±(0.2% + 2)
DC Current Maximum Resolution	0.01 uA
AC Current Maximum	10 A (20 A for 30 seconds maximum)
AC Current Accuracy	±(1.0% + 2) True RMS
AC Current Maximum Resolution	0.1 uA
Resistance Maximum	50 MΩ
Resistance Accuracy	±(0.2% + 1)
Resistance Maximum Resolution	0.1 ohm
Capacitance Maximum	9999 uF
Capacitance Accuracy	±(1% + 2)
Capacitance Maximum Resolution	0.01 nF
Frequency Maximum	200 kHz

PARAMETER	VALUE
Frequency Accuracy	±(0.005% + 1)
Frequency Maximum Resolution	0.01 Hz
Duty Cycle Maximum	99.9%
Duty Cycle Accuracy	±(0.2% per kHz + 0.1%)
Temperature Measurement Range	-200.0 C to 1090 C excluding probe

80BK Probe Range: -40.0 C to 260 C

Specifications

PARAMETER	VALUE
Conductance Maximum	60.00 nS
Diode Test Range	3 V
Overvoltage Category	EN 61010-1 to 1000 V CAT III, 600 V CAT IV
Size With Holster	201 x 98 x 52 mm
Weight	355 g; 624 g with holster
Display Counts	6000 digital updates 4/sec; Hi-Res frequency 19999 counts

Notes
Specifications from Fluke 87V TRMS Industrial Multimeter official product page/data sheet. Accuracies are ±(% of reading + counts) for one year at 18 C to 28 C unless otherwise stated.

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

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