

HAND TOOLS MULTIMETERS

➤ **The Fluke 87V Industrial Multimeter**

The Fluke 87V Industrial Multimeter provides the resolution and accuracy to efficiently troubleshoot motor drives, plant automation, power distribution, and electromechanical equipment - even in loud, high-energy, and high-altitude locations. The 87V is designed so you can work more efficiently.

1. Fluke 87V Industrial Multimeter



➤ Key Features

- Identify complex signal problems fast
- Supports accurate measurements on VFDs using a low-pass filter
- Captures intermittents as fast as 250 μ S with Peak Capture

Specifications

Voltage DC	Maximum voltage	1000 V
	Accuracy	$\pm(0.05\% + 1)$
	Maximum resolution	10 μ V
Voltage AC	Maximum voltage	1000 V
	Accuracy	$\pm(0.7\% + 2)$ True RMS
	AC bandwidth	20 kHz with low pass filter; 3 dB @ 1 kHz
	Maximum resolution	0.1 mV
Current DC	Maximum amps	10 A (20 A for 30 seconds maximum)

	Amps accuracy	$\pm(0.2\% + 2)$
	Maximum resolution	0.01 μ A
Current AC	Maximum amps	10 A (20 A for 30 seconds maximum)
	Amps accuracy	$\pm(1.0\% + 2)$ True RMS
	Maximum resolution	0.1 μ A
Resistance	Maximum resistance	50 M Ω
	Accuracy	$\pm(0.2\% + 1)$
	Maximum resolution	0.1 Ω
Capacitance	Maximum capacitance	9,999 μ F
	accuracy	$\pm(1\% + 2)$
	Maximum resolution	0.01 nF
Frequency	Maximum frequency	200 kHz
	Accuracy	$\pm(0.005\% + 1)$
	Maximum resolution	0.01 Hz
Duty cycle	Maximum duty cycle	99.9%
	Accuracy	$\pm(0.2\% \text{ per kHz} + 0.1\%)$
	Maximum resolution	0.1%
Temperature measurement	-200.0 $^{\circ}$ C – 1090 $^{\circ}$ C -328.0 $^{\circ}$ F – 1994.0 $^{\circ}$ F excluding probe	

80 BK temperature probe	–40.0 °C – 260 °C –40.0 °F – 500 °F, 2.2 °C or 2% whichever is greater	
Conductance	Maximum conductance	60.00 nS
	Accuracy	±(1.0% + 10)
	Maximum resolution	0.01 nS
Diode	Range	3 V
	Resolution	1 mV
	Accuracy	±(2% + 1)
Duty cycle range	Accuracy	Within ±(0.2% per kHz + 0.1%)
Environmental Specifications		
Operating temperature	–20 °C to + 55 °C	
Storage temperature	–40 °C to + 60 °C	
Humidity (without condensation)	0% – 90% (0 °C – 35 °C) 0% – 70% (35 °C – 55 °C)	
Operating Altitude	2000 m	
Safety Specifications		
Overvoltage category	EN 61010–1 to 1000 V CAT III, 600V CAT IV	
Agency approvals	CE, CSA, RCM	
Mechanical and General Specifications		
Size	201 x 98 x 52 mm (with holster)	

Weight	355 g 624 g – with holster	
Display	Digital	6000 counts updates 4/sec. 19,999 counts in high-resolution mode
	Analog	32 segments, updates 40/sec
	Frequency	19,999 counts, updates 3/sec at > 10 Hz
Warranty	Lifetime	
Battery Life	Alkaline	~400 hours typical, without backlight
Shock	1 Meter drop per IEC 61010–1:2001	
Vibration	Per MIL–PRF–28800 for a Class 2 instrument	