

FLUKE®

Fluke 87V Industrial Multimeter



Specifications: Fluke 87V Industrial Multimeter

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 $^{\circ}$ C – 260 $^{\circ}$ C -40.0 $^{\circ}$ F – 500 $^{\circ}$ F, 2.2 $^{\circ}$ C or 2% whichever is greater	
Conductance	Maximum conductance	60.00 nS
	Accuracy	$\pm(1.0\% + 10)$



	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	

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