

TECHNICAL DATA

Fluke 87V Digital Multimeter with PRV240 Proving Unit Kit



Key features

- Identify complex electrical problems fast
- Verify proper voltage measurement

Product overview: Fluke 87V Digital Multimeter with PRV240 Proving Unit Kit

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. PRV240 is a portable pocket sized battery powered voltage source to verify proper voltage measurement.

Specifications: Fluke 87V Digital Multimeter with PRV240 Proving Unit Kit

Fluke 87V Digital 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	$\pm(2\% + 1)$

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	

Ordering information



FLUKE-87V/PRV240

Fluke 87V Digital Multimeter with PRV240 Proving Unit Kit

Includes:

- Fluke 87V
- PRV240

Fluke. *Keeping your world up and running.®*

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