

TECHNICAL DATA

Fluke 83V Average Responding Industrial Multimeter



Key features

New features for maximum productivity

- Optional magnetic hanger for easy set-up and viewing while freeing your hands for other tasks
- Large digit display with bright, two-level backlight makes the 83V significantly easier to read than older models
- 6000 counts, 3-3/4 digits
- Measure up to 1000 V AC and DC
- Measure up to 10 A, 20 A for up to 30 seconds
- Frequency to 200 kHz and % duty cycle
- Resistance, continuity and diode test
- 10,000 μF capacitance range for components and motor caps
- Min/Max-Average recording with Min/Max Alert to capture variations automatically
- Relative mode to remove test lead interference from low ohms measurements
- Auto and manual ranging for maximum flexibility
- Touch Hold to capture stable readings avoiding noisy signals
- Large display digits and two-level bright white backlight for increased visibility
- Analog bargraph for fast changing or unstable signals
- Input Alert provides audible warning against wrong use of input jacks
- Improved selectable sleep mode for long battery life
- Access door for fast battery changes without breaking the calibration seal
- "Classic" design with new removable holster with built in test lead and probe storage

- Lifetime warranty

Electrical safety

All inputs are updated to the 3rd edition of ANSI/ISA S82.01 and EN61010-1 CAT IV 600 V and CAT III, 1000 V. They can withstand impulses in excess of 8.000 V and reduce risks related to surges and spikes.

- Measure AC current with an optional current clamp accessory

Product overview: Fluke 83V Average Responding Industrial Multimeter

The Best Techs Use the Best Tools

Industrial electricians around the world trust the Fluke 83V Industrial Multimeter from the control room to the plant floor. With its accuracy and troubleshooting capabilities, the Fluke 83V Industrial Multimeter works when you need it, even in loud, high energy, and high altitude locations.

Identify Complex Signal Problems Fast

When productivity is on the line and you need to solve problems fast, the Fluke 83V delivers the accuracy and advanced troubleshooting capabilities you need.

Min/Max allows capture of signal changes

- 6000 count display resolution
- CAT III 1000 V, CAT IV 600 V safety rated
- Designed and built in the U.S.A.
- The most trusted industrial multimeter in the business
- Lifetime warranty

The Fluke 83V – Just One of Fluke's Trusted Tools

Fluke builds the most trusted tools in the world and that means more than just the Fluke 83V. If you work with HVAC equipment, need a small meter for small spaces or work in the electrical installer's and repairman's world, check out the full family of Fluke digital multimeters.

Specifications: Fluke 83V Average Responding Industrial Multimeter

Specifications		
Voltage DC	Maximum voltage	1000 V
	Accuracy	$\pm(0.1\% + 1)$
	Maximum resolution	100 μ V
Voltage AC	Maximum voltage	1000 V
	Accuracy	$\pm(0.5\% + 2)$
	Maximum resolution	0.1 mV

Current DC	Maximum amps	10 A (20 A for 30 seconds maximum)
	Amps accuracy	$\pm(0.4\% + 2)$
	Maximum resolution	0.01 mA
Current AC	Maximum amps	10 A (20 A for 30 seconds maximum)
	Amps accuracy	$\pm(1.2\% + 2)$
	Maximum resolution	0.1 μ A
Resistance	Maximum resistance	50 M Ω
	Accuracy	$\pm(0.4\% + 1)$
	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%
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 $\pm(0.2\% \text{ per kHz} + 0.1\%)$
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	CSA, TÜV	
Mechanical and General Specifications		

Display	Digital	6000 counts updates 4/sec
	Analog	32 segments, updates 40/sec
	Frequency	19,999 counts, updates 3/sec at > 10 Hz
Size	201 x 98 x 52 mm (with holster)	
Weight	355 g	
Weigh with holster and flex-stand	624 g	
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 83V

Fluke 83V Average Responding Industrial Multimeter

Includes:

- TL75 Test Leads
- AC175 Alligator Clips
- Holster
- 9V Battery (Installed)

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

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03/2024

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