

Fluke 87V Industrial Multimeter

For industrial productivity



The Fluke 87V has measurement functions, trouble-shooting features, resolution and accuracy to solve problems on motor drives, in-plant automation, power distribution and electro-mechanical equipment.

- Unique function for accurate voltage and frequency measurements on adjustable speed motor drives and electrically noisy equipment (87V and 28 II Ex)
- Large digit display with bright two level backlight makes the 87V significantly easier to read
- Measure 20 A for up to 30 seconds, 10 A continuously
- Optional magnetic hanger for easy setup and viewing while freeing your hands for other tasks (TPAK)
- Expanded capacitance range to 10,000 μ F

Electrical safety

All inputs are protected to CAT III 1000 V and CAT IV 600 V. They can withstand impulses in excess of 8,000 V to help protect you from arc blast resulting from surges and spikes.

Available in intrinsically safe version as the Fluke 28 II Ex.

Also available as 83V average responding multimeter, see below for specifications.



Recommended accessories



TPAK
Magnetic
Meter Hanger
See page 64



TL220
SureGrip™ Industrial
Test Lead Set
See page 57



TL175
TwistGuard™ Test Leads
See page 56



i400
AC Current Clamp
See page 62



C43
Small Soft Case
See page 56



CXT80
Extreme Case
See page 56



AC285
SureGrip™ Alligator
Clips
See page 59



TL224
SureGrip™ Silicone
Insulated Test Leads
See page 59

Recommended kits



Fluke 87V/E2 Industrial Electrician's Combo Kit

- Industrial multimeter
- 1.5 m silicone test leads
- Removable probes with 4 mm of exposed metal for use on industrial circuits
- Retractable long reach alligator clips
- Meter hanging accessory
- Type K temperature probe
- Soft case

Buy Combo Pack and Save

Check price and availability at
www.fluke.com/wtb

Features

Features	28 II Ex	87V	83V
Peak capture to record transients as fast as 250 μ s	•	•	•
Measure up to 1000 V ac and dc	•	•	•
Auto and manual ranging for maximum flexibility	•	•	•
Analog bargraph	•	•	•
Frequency to 200 kHz and % duty cycle	•	•	•
Min/Max and average recording to capture variations automatically	•	•	•
Relative mode to remove test lead resistance from low ohms measurements	•	•	•
Access door for fast battery changes without breaking the calibration seal	•	•	•
Limited lifetime warranty	Three-year	•	•

Specifications

Functions	Range and resolution	Basic accuracy	
		87V	83V
DC volts	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.05 %	0.1 %
AC volts	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.7 % (true-rms)	0.5 %
DC current	600.0 μ A, 6.000 μ A, 60.00 μ A, 600.0 mA, 6.000 A, 10.00 A	0.2 %	0.4 %
AC current	600.0 μ A, 6.000 μ A, 60.00 μ A, 600.0 mA, 6.000 A, 10.00 A	1.0 % (true-rms)	1.2 %
Temperature (excl. probe)	-200 °C to 1090 °C (-328 °F to 1994 °F)	1.0 %	—
80BK Temperature Probe	-40 °C to 260 °C (-40 °F to 500 °F)	2.2 °C or 2 %	—
Resistance	600.0 Ω , 6.000 k Ω , 60.00 k Ω , 600.0 k Ω , 6.000 M Ω , 50.00 M Ω	0.2 %	0.4 %
Capacitance	10.00 nF, 100.0 nF, 1.000 μ F, 10.00 μ F, 100.0 μ F, 9.999 μ F	1.0 %	1.0 %
Frequency	199.99 Hz, 1.9999 kHz, 19.999 kHz, 199.99 kHz	0.005 %	0.005 %

Battery life: 400 hours typical with backlight off. Size (LxWxD): 201 mm x 98 mm x 52 mm (7.9 in x 3.8 in x 2 in). Weight: 355 g (22 oz).

Ordering information

Included accessories	Models	
Test leads, alligator clips, holster, batteries (installed), temperature probe (87V only), users manual on CD, operator's guide.	FLUKE-87-5	Industrial True-rms Multimeter with Temperature
	FLUKE-83-5	Industrial Multimeter
	FLUKE-28 II Ex	Intrinsically Safe True-rms Multimeter
	FLUKE-87-5/E2	Industrial Electrician's Combo Kit