

TECHNICAL DATA

Fluke 88V Deluxe Automotive Multimeter



Key features

- Pulse width, duty cycle, Min/Max/Avg recording
- 10 meg ohm input impedance won't damage computer circuits
- Large display and bright backlight for increased visibility

Product overview: Fluke 88V Deluxe Automotive Multimeter

The Fluke 88V meter has measurement functions, troubleshooting features, and accuracy levels needed to solve problems on conventional and hybrid vehicles. The 88V is the most powerful automotive multimeter ever offered by Fluke. In addition to standard multimeter features such as the ability to measure voltage, current, continuity, and resistance, the 88V can perform:

Pulse width

Duty cycle

Min/Max/Average recording

Diode tests

The pulse width function provides millisecond resolution for troubleshooting fuel injectors.



Automotive measurements

The 88V meter can take care of many automotive needs, getting into more of the digital multimeters measurement capabilities - it can measure voltage up to 1000 V AC and DC, current up to 10 A, 20 A for up to 30 seconds and frequency to 200 kHz and % duty cycle. Add those features to RPM measurements with optional inductive pickup and millisecond pulse width measurements for fuel injectors to name a few. The 88V comes packed with the functions you need:

Temperature measurements with optional temperature probe

Analog bar graph to track changing or unstable signals

Min/Max/Average recording with Min/Max Alert to capture variations automatically

Peak Min/Max to record transients as fast as 250 µs

88V multimeter designed for the garage

While working in a garage, the large display digits can help you focus on the vehicle while still being able to read the numbers. Plus, the two-level bright white backlight offers the additional visibility you may need.

An optional magnetic hanger lets you hang the meter from most steel surfaces for easy set-up and viewing. The 88V is designed to be used in high energy environments like those found on hybrid vehicles.

The product is supported by a limited lifetime warranty.

For a complete comparison of specifications, please visit our [selection guide](#) for digital multimeters.



Fluke 88V Deluxe Automotive Multimeter	Fluke 27 II Rugged Digital Multimeter	Fluke 1587 FC Insulation Multimeter	Fluke 233 Remote Display Digital Multimeter	Fluke 3000 FC Series Wireless Multimeter
CAT rating -	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V
True-rms readings -		✓	✓	✓
Voltage AC/DC 1000 V	1000 V	1000 V	1000 V	1000 V
Current AC/DC 10 A	10 A	400 mA	10 A	400 mA
Resistance 50 MΩ	50 MΩ	50 MΩ	40 MΩ	50 MΩ
Capacitance 9,999 µF	9,999 µF	9,999 µF	9,999 µF	9,999 µF
Temperature -200 °C to 1090 °F	-	40 °C to 537 °C	-40 °C to 400 °F	with 13000 FC
Additional measurement capabilities Continuity/diode test, frequency, duty cycle	Conductance (60 ns), continuity/diode test, duty cycle, frequency, microamps, pulse width	Frequency, PVI/DAR, timed ratio tests, motor drive (VFD) measurement, microamps, relative reference	Continuity/diode test, frequency	Frequency, continuity/diode test. Able to connect to three 3000 FC modules.

Specifications: Fluke 88V Deluxe Automotive Multimeter

Technical Specifications

DCV	Maximum voltage	1000 V
	Accuracy	$\pm(0.1\% + 1)$
	Best resolution	0.01 mV
ACV	Maximum voltage	1000 V
	Accuracy	$\pm(0.5\% + 2)$
	AC bandwidth	5 kHz
	Best resolution	0.01 mV
DC current	Maximum amps	10 A
	Amps accuracy	$\pm(0.4\% + 2)$
	Best resolution	0.001 mA
AC current	Maximum amps	10 A
	Amps accuracy	$\pm(1.2\% + 2)$
	Best resolution	0.001 mA
Resistance	Maximum resistance	50 M Ω
	Accuracy	$\pm(0.4\% + 1)$
	Best resolution	0.1 Ω
Capacitance	Maximum capacitance	9,999 μ F
	Accuracy	$\pm(1\% + 2)$
	Best resolution	0.01 nF
Frequency	Maximum frequency	200 KHz
	Accuracy	$\pm(0.005\% + 1)$
	Best resolution	0.01 Hz
Duty cycle	Maximum duty cycle	99.9%
	Accuracy	within 2% per KHz + 0.1%
	Best resolution	0.1%
Temperature measurement	-200.0°C – 1090°C -328.0°F – 1994.0°F, 1.0% excluding probe	
80 BK temperature probe	-40 °C – 260°C -40 °F – 500°F, 2.2°C or 2% whichever is greater	
Conductance	Maximum conductance	60.00 nS
	Accuracy	$\pm(1.0\% + 10)$
	Maximum resolution	0.01 nS
Operating range	Operating temperature	-20°C – 55°C
	Storage temperature	-40°C – 60°C
Physical	5.2 x 9.8x 20.1 cm (2.06 x 3.86 x 7.93 in) 624 g (22 oz.)	

Ordering information



Fluke 88V

Fluke 88V Deluxe Automotive Multimeter

Includes:

- Fluke 88V Deluxe Automotive Multimeter
- High impact protective leather sheath
- Test lead set

Optional accessories

Fluke TLK281 SureGrip™ Automotive Test Lead Kit

Fluke C35 Soft Carrying Case

Fluke 80PK-27 SureGrip™ Industrial Surface Temperature Probe

Fluke TL82 Automotive Pin and Socket Adapter Set

Description

Complete set of test and measurement accessories designed especially for automotive specialists.

Case top opens laterally to allow use of test tool without removing it from the case and includes a strap to secure the test tool.

Type-K thermocouple for surfaces in rugged environment, durable ribbon sensor, measurement range: -127 to 600°C.

An absolute must-have for work on Asian or European vehicles. This collection of male and female adapters allows you to make firm connection to pin and socket connectors.



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

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