

## 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  $\mu$ s

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](#)

CAT rating -  
True-rms readings -  
Voltage AC/DC 1000 V  
Current AC/DC 10 A  
Resistance 50 MΩ  
Capacitance 9,999 μF  
Temperature -200 °C to 1090 °F

**Additional measurement capabilities** Continuity/diode test, frequency, duty cycle

[Fluke 27 II Budget Digital Multimeter](#)

CAT III 1000 V  
CAT IV 600 V  
-  
1000 V  
10 A  
50 MΩ  
9,999 μF  
-

Conductance (60 ns), continuity/diode test, duty cycle, frequency, microamps, pulse width

[Fluke 1587 FC Insulation Multimeter](#)

CAT III 1000 V  
CAT IV 600 V  
0  
1000 V  
400 mA  
50 MΩ  
9,999 μF  
-40 °C to 537 °C  
Frequency, IV/DAR, timed ratio tests, motor drive (VFD) measurement, microamps, relative reference

[Fluke 733 Remote Display Digital Multimeter](#)

CAT III 1000 V  
CAT IV 600 V  
0  
1000 V  
10 A  
40 MΩ  
9,999 μF  
-40 °C to 400 °F

Continuity/diode test, frequency

[Fluke 3000 FC Series Wireless Multimeter](#)

CAT III 1000 V  
CAT IV 600 V  
0  
1000 V  
400 mA  
50 MΩ  
9,999 μF  
with 13000 FC

Frequency, continuity/diode test. Able to connect to three 3000 FC modules.

## Specifications: Fluke 88V Deluxe Automotive Multimeter

Technical Specifications		
DCV	<b>Maximum voltage</b>	1000 V
	Accuracy	±(0.1% + 1)
	Best resolution	0.01 mV
ACV	<b>Maximum voltage</b>	1000 V
	Accuracy	±(0.5% + 2)
	AC bandwidth	5 kHz
	Best resolution	0.01 mV
DC current	<b>Maximum amps</b>	10 A
	Amps accuracy	±(0.4 % + 2)
	Best resolution	0.001 mA
AC current	<b>Maximum amps</b>	10 A
	Amps accuracy	±(1.2% + 2)
	Best resolution	0.001 mA
Resistance	<b>Maximum resistance</b>	50 MΩ
	Accuracy	±(0.4% + 1)
	Best resolution	0.1 Ω
Capacitance	<b>Maximum capacitance</b>	9,999 μF
	Accuracy	±(1% + 2)
	Best resolution	0.01 nF

Frequency	<b>Maximum frequency</b>	200 KHz
	Accuracy	$\pm(0.005\% + 1)$
	Best resolution	0.01 Hz
Duty cycle	<b>Maximum duty cycle</b>	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	<b>Maximum conductance</b>	60.00 nS
	Accuracy	$\pm(1.0\% + 10)$
	Maximum resolution	0.01 nS
Operating range	<b>Operating temperature</b>	-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.



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