

Fluke 189II True RMS Multimeter

The 189II has more measurement functionality and troubleshooting features to solve more problems in electronics, plant automation, and electro-mechanical equipment. The 189II is the next generation high performance multimeter with more problem solving power, accuracy, safety, and convenience in a handheld multimeter than ever before.

Equipped with new functionality and accuracy, now all included in one handheld test tool such as:

- Large 50,000 count, 320 x 240 Dot matrix LCD display with white backlight. Multiple sets of measurement information are now available in this easy to read display
- 0.025% Basic DC accuracy
- Logging function with TrendCapture. Useful for characterizing the performance of a design or process or for unattended monitoring while in the field. Using on-board TrendCapture users can then graphically view logged readings without needing a pc. Multiple recording sessions are possible before downloading is necessary. Let the 189II become the key component for documenting the performance of your designs, processes or systems while you work on other projects.
- Real time clock for automatic time stamping of saved readings
- True-rms ac voltage and current for accurate measurements on complex signals or non linear loads. AC bandwidth specified to 100 kHz.
- Measure up to 1000Vdc and 1000Vac.
- Measure up to 10 A (20 A for 30 seconds)
- 100 mF capacitance range
- Temperature function
- Peak capture to record transients as fast as 250 μ s
- Dual rated CAT IV 600V-CAT III 1000V.
- Optically isolated communication port for transferring data to pc (usb cable and software optional)



Specifications		
Voltage DC	Accuracy	0.025 %
	Range and Resolution	50.000 mV, 500.00 mV, 5.0000 V, 50.000 V, 500.00 V, 1000.0V
Voltage AC	Accuracy	0.4 %(true-rms)
	Range and Resolution	50.000 mV, 500.00 mV, 5.0000 V, 50.000 V, 500.00 V, 1000.0V
Current DC	Accuracy	0.06 %
	Range and Resolution	500.00 µA, 5000.0 µA, 50.000 mA, 400.00 mA, 5.0000 A, 10.000 A
Current AC	Accuracy	0.6%(true-rms)
	Range and Resolution	500.00 µA, 5000.0 µA, 50.000 mA, 400.00 mA, 5.0000 A, 10.000 A
Temperature (excluding probe)	Accuracy	1.0 %
	Range and Resolution	-200.0 °C to 1350.0 °C (-328.0 °F to 2462.0 °F)
Resistance	Accuracy	0.05 %
	Range and Resolution	500.00 Ω, 5.0000 kΩ, 50.000 kΩ, 500.00 kΩ, 5.0000 MΩ, 50.00 MΩ, 500.0 MΩ
Capacitance	Accuracy	1.0 %
	Range and Resolution	1.000 nF, 10.00 nF, 100.0 nF, 1.000 µF, 10.00 µF, 100.0 µF, 1000 µF, 10.00 mF, 100.00 mF
Frequency	Accuracy	0.005% + 5
	Range and Resolution	99.999 Hz, 999.99 Hz, 9.9999 kHz, 99.999 kHz, 999.99 kHz
Additional functions/features	Multiple on-screen displays	Yes
	True-rms AC bandwidth	100 kHz
	DBV/dBm	Yes
	Conductance	50.00nS
	Continuity beeper	Yes
	Battery/Fuse access	Battery / Fuse
	Peak	250 µS
	Elapse time clock	Yes
	Time of day clock	Yes
	Min-Max-Avg	Yes
	Duty Cycle	0.01 % to 99.99 %
	Pulse Width	0.025 ms, 0.25 ms, 2.5 ms, 1250.0 ms
	Hold	Yes
	Isolated Optical Interface	Yes
	Auto/Touch Hold	Yes
	Reading memory	Yes
	Log to PC	Yes
	Interval/Event Logging	Yes
	Logging Memory	Up to 10,000 readings
Environmental Specifications		
Operating Temperature	-20 °C to +55 °C	
Storage Temperature	-40 °C to +60 °C	
Relative Humidity	0% to 90% (0 °C - 37 °C)	

	0% to 65% (37 °C - 45 °C), 0 to 45 % (45 °C - 55 °C)
Electromagnetic Compatability	EMC EN6 1326-1
Vibration	Random vibration per MIL-PRF-28800f Class 2
Shock	1 meter drop per IEC/EN 61010-1 2nd edition
Safety Specifications	
Overvoltage category	CAT III 1000 V / CAT IV 600 V safety rated
Agency Approvals	CSA, UL, TÜV, CE
Mechanical & General Specifications	
Maximum voltage between any terminal and earth ground	1000V
Size	(HxWxL 22.2 cm x 10.2 cm x 6 cm (8.75 in x 4.03 in x 2.38 in)
Weight	870.9 g (28 oz)
Battery Life	100 minimum, 200 hours in logging mode
Battery type	6 AA alkaline batteries, NEDA 15A IEC LR6
Included	6 AA Alkaline batteries (installed), TL71 silicone test leads, AC72 alligator clips, User's manual, Service manual, CDRom containing manual set