

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

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| | 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 |