

187/189 Digital Multimeters

The smartest meters

True-rms



The 180 Series are the only choice for users who simply want the best meter available. The two top models 187 and 189, with integrated holsters, are the smartest meters when it comes down to performance, features and more. Extremely fast readings, extended ranges, the highest bandwidth, accuracy and resolution are the basis for their performance. Features like a dual display with bargraph and backlight, true-rms AC/AC+DC measurements and a PC interface make them suitable for the most demanding applications. In addition, the

189 has a readings memory for up to 100 readings and a unique stand-alone logging function to measure hard to find intermittent problems.

Safety Conformance

All inputs are protected to EN61010-1 CAT III 1000V/CAT IV 600V, UL, CSA, VDE and TÜV listed.

Features

	187	189
True-rms measurements	AC, AC+DC	AC, AC+DC
Bandwidth (voltage/current)	100 kHz / 100 kHz	100 kHz / 100 kHz
Digital display counts (default/selectable)	50000 / 5000	50000 / 5000
Multiple display with large digits and backlight, updates 4 times per second	●	●
Analog bargraph segments, updates 40 times per second	51-segments	51-segments
Min-Max-Average recording with relative time stamp	●	●
Fast Min-Max recording	250 µsec	250 µsec
Touch Hold® and Relative modes for reference and offset measurements	●	●
Temperature readings using optional K-type thermocouple and adapter	●	●
Audible continuity and diode test	●	●
Duty cycle and pulse width measurements	●	●
PC interface for data exchange and closed case calibration	●	●
Memory for storing up to 3 days of continues stand-alone logging		●
Readings memory (memory locations)		100
Easy battery and fuse exchange without opening the complete case	●	●
Ergonomic case with integrated protective holster	●	●

Specifications

Functions	Maximum	Max. resolution	187 and 189*
Voltage DC	1000 V	1 µV	±(0.025%+5)
Voltage AC	1000 V	1 µV	±(0.4%+40)
Current DC	10 A	0.01 µA	±(0.15%+2)
Current AC	10 A	0.01 µA	±(0.75%+5)
Resistance	500 MΩ	0.01 Ω	±(0.05%+2)
Conductance	500 nS	0.01 nS	±(1.0%+10)
Capacitance	50000 µF	0.001 nF	±(1.0%+5)
Frequency	1 MHz	0.01 Hz	±(0.005%+1)
Temperature	-200°C/+1350°C	0.1°C	±(1%+1°C)
dBm and dBV	-52/+60 dB	0.01 dB	± 0.1 dB

Accuracies are best accuracies for each function.
** 187 and 189 accuracy and resolution are stated for 50,000 counts.

Battery Life : 72 hours typical (alkaline)
Size (HxWxD) : 203 mm x 100 mm x 50 mm
Weight : 0.545 kg
Lifetime Warranty



Accessories and Ordering Information

Included Accessories:

TL71 silicone test leads, probe holder, two AC70A alligator clips, 4 AA batteries (installed), user manual, calibration certificate with measurement data.

Ordering information:

Fluke 187 True rms Multimeter
Fluke 189 True rms Multimeter
FVF-SC2 FlukeView Forms software 1.6 including interface cable.