

Fluke 80 Series III Digital Multimeters Features

Features at a Glance:



The following features are on all models unless otherwise noted. See chart below for more details.

- Digital Display
 - 83 III, 85 III - 4,000 count
 - 87 III, 87/E - 4,000 count, 20,000 count in high-resolution mode
 - Analog Display
 - 83 III, 85 III - 43 Seg Bar Graph
 - 87 III, 87/E - 32 Seg Pointer
 - True-rms (85 III, 87 III and 87/E only)
 - Touch Hold,
 - Fused Current Inputs
-
- Continuity
 - MIN/MAX Mode
 - Peak MIN/MAX - 250 μ Sec (87 III and 87/E only)
 - Relative Mode
 - Diode Test
 - Sleep Mode - 30 minutes
 - IEC 61010 Rating - CATIII-1000V
 - Battery access door that enables changing batteries without breaking the calibration seal.

Fluke 80 Series III	83/III	85/III	87/III	87/E
True-rms ac readings to deliver the correct measurement, even when harmonics are present.		•	•	•
Large, high-contrast, easy-to-read digital display with an analog pointer.			•	•
Large, high-contrast, easy-to-read digital display with an analog bar graph.	•	•		
Backlit display with on/off controls for easy viewing in all light conditions.	•	•	•	•
Automatic Touch Hold® automatically triggers the meter to capture stable non-zero readings, freeing you to focus on the test probes.	•	•	•	•
Meets IEC 61010 safety standards for CAT III 1000V. Protected from overvoltage transients to 8 kV per IEC 61010-1.	•	•	•	•
250 μ S Peak MIN/MAX for capturing fast transients.			•	•
4½-digit mode, 20,000-count display for high-resolution readings.			•	•

DCV	Maximum Voltage: 1000V Accuracy: Fluke 83 III: $\pm(0.1\%+1)$ Fluke 85 III: $\pm(0.08\%+1)$ Fluke 87 III: $\pm(0.05\%+1)$ Fluke 87/E: $\pm(0.05\%+1)$ Maximum Resolution: 0.1 mV
ACV	Maximum Voltage: 1000V Accuracy: Fluke 83 III: $\pm(0.5\%+2)$ Fluke 85 III: $\pm(0.7\%+2)$ Fluke 87 III: $\pm(0.7\%+2)$ Fluke 87/E: $\pm(0.7\%+2)$ Maximum Resolution: 0.1 mV
DC Current	Maximum Amps: 10A Amps Accuracy: Fluke 83 III: $\pm(0.4\%+2)$ Fluke 85 III: $\pm(0.2\%+2)$ Fluke 87 III: $\pm(0.2\%+2)$ Fluke 87/E: $\pm(0.2\%+2)$ Maximum Resolution: Fluke 83 III: 0.01 mA Fluke 85 III: 0.1 μ A Fluke 87 III: 0.1 μ A Fluke 87/E: 0.1 μ A
AC Current	Maximum Amps: 10A Amps Accuracy: Fluke 83 III: $\pm(1.2\%+2)$ Fluke 85 III: $\pm(1.0\%+2)$ Fluke 87 III: $\pm(1.0\%+2)$ Fluke 87/E: $\pm(1.0\%+2)$ Maximum Resolution: 0.1 μ A
Resistance	Max Resistance: 40 M Ω Accuracy: Fluke 83 III: $\pm(0.4\%+1)$ Fluke 85 III: $\pm(0.2\%+1)$ Fluke 87 III: $\pm(0.2\%+1)$ Fluke 87/E: $\pm(0.2\%+1)$ Maximum Resolution: 0.1 Ω
Capacitance	1 nF-5 μ F
Frequency	0.5 Hz to 200 kHz