



FLUKE 117

Specifications	
Maximum voltage between any terminal and earth ground	600 V
Surge protection	6 kV peak per IEC 61010-1 600 V CAT III, Pollution Degree 2
Fuse for A input	11 A, 1000 V FAST Fuse (Fluke PN 803293)
Display	Digital: 6,000 counts, updates 4 per second
Bar graph	33 segments, updates 32 per second
Operating Temperature	-10 °C to + 50 °C
Storage Temperature	-40 °C to + 60 °C
Battery type	9 volt Alkaline, NEDA 1604A/ IEC 6LR61
Battery Life	400 hours typical, without backlight
Accuracy Specifications	
DC millivolts	Range: 600.0 mV Resolution: 0.1 mV Accuracy: ± ([% of reading] + [counts]): 0.5% + 2
DC volts	Range/Resolution: 6.000 V / 0.001 V Range/Resolution: 60.00 V / 0.01 V Range/Resolution: 600.00 V / 0.1 V Accuracy: ± ([% of reading] + [counts]): 0.5% + 2
Auto volts	Range: 600.0 V Resolution: 0.1 V Accuracy: 2.0 % + 3 (dc, 45 Hz to 500 Hz) 4.0 % + 3 (500 Hz to 1 kHz)
AC millivolts ¹ true-rms	Range: 600.0 mV Resolution: 0.1 mV

	Accuracy: 1.0 % + 3 (dc, 45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz)
AC volts¹ true-rms	Range/Resolution: 6.000 V / 0.001 V Range/Resolution: 60.00 V / 0.01 V Range/Resolution: 600.0 V / 0.1 V Accuracy: 1.0 % + 3 (dc, 45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz)
Continuity	Range: 600 Ω Resolution: 1 Ω Accuracy: Beeper on < 20 Ω, off > 250 Ω; detects opens or shorts of 500 μs or longer.
Ohms	Range/Resolution: 600.0 Ω / 0.1 Ω Range/Resolution: 6.000 kΩ / 0.001 kΩ Range/Resolution: 60.00 kΩ / 0.01 kΩ Range/Resolution: 600.0 kΩ / 0.1 kΩ Range/Resolution: 6.000 MΩ / 0.001 MΩ Accuracy: 0.9 % + 1 Range/Resolution: 40.00 MΩ / 0.01 MΩ Accuracy: 5 % + 2
Diode Test	Range/Resolution: 2.000 V / 0.001 V Accuracy: 0.9% + 2
Capacitance	Range/Resolution: 1000 nF / 1 nF Range/Resolution: 10.00 μF / 0.01 μF Range/Resolution: 100.0 μF / 0.1 μF Range/Resolution: 9999 μF / 1 μF Range/Resolution: 100 μF to 1000 μF Accuracy: 1.9% + 2 Range/Resolution: > 1000 μF Accuracy: 5% + 20%
LoZ capacitance	Range: 1 nF to 500 μF Accuracy: 10% + 2 typical
AC amps true-rms (45 Hz to 500 Hz)	Range/Resolution: 6.000 A / 0.001 A Range/Resolution: 10.00 A / 0.01 A Accuracy: 1.5% + 3 20 A continuous overload for 30 seconds max
DC amps	Range/Resolution: 6.000 A / 0.001 A Range/Resolution: 10.00 A / 0.01 A Accuracy: 1.0% + 3 20 A continuous overload for 30 seconds max
Hz (V or A input)²	Range/Resolution: 99.99 Hz / 0.01 Hz Range/Resolution: 999.99 Hz / 0.1 Hz

	Range/Resolution: 9.999 Hz / 0.001 Hz Range/Resolution: 50.00 Hz / 0.01 Hz Accuracy: 0.1% + 2
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Notes:

- 1) All ac voltage ranges except Auto-V/LoZ are specified from 1 % to 100 % of range. Auto-V/LoZ is specified from 0.0 V.
- 2) Temperature uncertainty (accuracy) does not include the error of the thermocouple probe.
- 3) Frequency is ac coupled, 5 Hz to 50 kHz for ac voltage. Frequency is dc coupled, 45 Hz to 5 kHz for ac current.
- 4) Temperature Range/Resolution: -40 °F to 752 °F / 0.2 °F

Mechanical & General Specifications	
Size	167 x 84 x 46 mm (6.57" x 3.31" x 1.82")
Weight	550 g