

FLUKE 117/322 Electricians Multimeter Combo Kit

Technical Data Sheet



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: \pm ([% of reading] + [counts]): 2.0% + 3
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
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 volts ¹ 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 μ s or longer.
Ohms	Range/Resolution:600.0 Ω / 0.1 Ω Range/Resolution:6.000 k Ω / 0.001 k Ω Range/Resolution:60.00 k Ω / 0.01 k Ω Range/Resolution:600.0 k Ω / 0.1 k Ω Range/Resolution:6.000 M Ω / 0.001 M Ω Accuracy: 0.9 % + 1 Range/Resolution:40.00 M Ω / 0.01 M Ω Accuracy: 1.5 % + 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 μ F / 0.01 μ F Range/Resolution:100.0 μ F / 0.1 μ F Range/Resolution:9999 μ F / 1 μ F Range/Resolution:100 μ F to 1000 μ F Accuracy: 1.9% + 2 Range/Resolution:> 1000 μ F Accuracy: 5% + 20%
LoZ capacitance	Range: 1 nF to 500 μ F Accuracy:10% + 2 typical
Temperature2 (Type-K thermocouple)	Range/Resolution:-40 $^{\circ}$ C to 400 $^{\circ}$ C / 0.1 $^{\circ}$ C Accuracy: 1% + 102 Range/Resolution:-40 $^{\circ}$ F to 752 $^{\circ}$ C / 0.2 $^{\circ}$ F Accuracy: 1% + 182
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

Notes:

- 1) All ac voltage ranges are specified from 1 % to 100% of range. Because inputs below 1 % of range are not specified, it is normal for this and other true-rms meters to display non-zero readings when the test leads are disconnected from a circuit or are shorted together. For volts, crest factor of ≤ 3 at 4000 counts, decreasing linearly to 1.5 at full scale. AC volts is ac-coupled. Auto-V LoZ, and ac mV are dc-coupled.
- 2) Frequency is ac coupled, 5 Hz to 50 kHz for ac voltage.

Mechanical & General Specifications	
Size	Height: 27.62 cm (10.875") Length:15.875 cm (6.25") Width: 5.6 cm (2.203")
Weight	0.607 kg (1.34#)
Warranty	3 years

