

Fluke 114

Electrical Multimeter

Technical Data



Compact true-rms meter for electrical troubleshooting

The Fluke 114 is the troubleshooting tool for “go/no-go” testing. It includes a feature to prevent false readings caused by ghost voltage.

Features include:

- AutoVolt: automatic ac/dc voltage selection
- Large white LED backlight to work in poorly lit areas
- Resistance and continuity
- Min/Max/Average to record signal fluctuations
- CAT III 600 V safety rated

General specifications

Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, with relative humidity at 0 % to 90 %.

The accuracy specifications take the form of:
 $\pm ([\% \text{ of Reading }] + [\text{Counts}])$

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
Display	Digital: 6,000 counts, updates 4/sec
Bar graph	33 segments, updates 32/sec
Operating temperature	-10 °C to + 50 °C
Storage temperature	-40 °C to + 60 °C
Battery	9 volt Alkaline, NEDA 1604A/IEC 6LR61
Battery life	400 hours typical, without backlight

Actual size



Accuracy specifications

Measurement	Range	Resolution	Accuracy $\pm$ ([% of reading] + [counts])
DC millivolts	600.0 mV	0.1 mV	0.5 % + 2
DC volts	6.000 V	0.001 V	0.5 % + 2
	60.00 V	0.01 V	
	600.0 V	0.1 V	
Auto volts	600.0 V	0.1 V	2.0 % + 3 (dc, 45 Hz to 500 Hz) 4.0 % + 3 (500 Hz to 1 kHz)
AC millivolts ¹ true-rms	600.0 mV	0.1 mV	1.0 % + 3 (dc, 45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz)
AC volts ¹ true-rms	6.000 V	0.001 V	1.0 % + 3 (dc, 45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz)
	60.00 V	0.01 V	
	600.0 V	0.1 V	
Continuity	600 Ω	1 Ω	Beeper on < 20 Ω , off > 250 Ω ; detects opens or shorts of 500 μ s or longer.
Ohms	600.0 Ω	0.1 Ω	0.9 % + 2
	6.000 k Ω	0.001 k Ω	0.9 % + 1
	60.00 k Ω	0.01 k Ω	
	600.0 k Ω	0.1 k Ω	
	6.000 M Ω	0.001 M Ω	
	40.00 M Ω	0.01 M Ω	1.5 % + 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.

Ordering Information

Fluke-114 Electrical Multimeter
Included
 TL75 Test leads, holster, User's manual
 and 9 V battery (installed).



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