

FLUKE®

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 95 %.

The accuracy specifications take the form of:
± ([% of Reading] + [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 ± ([% of reading] + [counts]) |
|-------------------------------------|----------|------------|---|
| DC millivolts | 600.0 mV | 0.1 mV | 2.0 % + 3 |
| DC volts | 6.000 V | 0.001 V | |
| | 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 μs or longer. |
| Ohms | 600.0 Ω | 0.1 Ω | 0.9 % + 2 |
| | 6.000 kΩ | 0.001 kΩ | 0.9 % + 1 |
| | 60.00 kΩ | 0.01 kΩ | |
| | 600.0 kΩ | 0.1 kΩ | |
| | 6.000 MΩ | 0.001 MΩ | |
| | 40.00 MΩ | 0.01 MΩ | 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.

² Frequency is ac coupled, 5 Hz to 50 kHz for ac voltage.

Ordering Information

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



Fluke. Keeping your world up and running.

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