

TECHNICAL DATA

Fluke 114 Electrical Multimeter



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

- 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

SAFETY RATING CAT III 600 V

BUILT TO LAST Three-year warranty

IDEAL FOR ELECTRICIANS AND CONTRACTORS

- Simple one-handed operation
- Automatic ac/dc voltage selection
- Holster with probe holders for easy test lead storage
- Large white LED backlit displaywarranty

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 ([% of reading] + [counts])

| General specifications | | | | |
|--|-------------|---|---|--|
| Maximum voltage (between any terminal and earth ground) | | 600 V | | |
| Safety | | IEC 61010-1: Pollution Degree 2 IEC 61010-2-033: CAT III 600 V | | |
| 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, IEC 6LR61 | | |
| Battery life | | 400 hours typical, without backlight | | |
| Accuracy specifications | | | | |
| | Measurement | Range | Resolution | Accuracy ± ([% of reading] + [counts]) |
| DC millivolts | | 600.0 mV | 0.1 mV | 0.5 % + 2 |
| DC volts | | 6.000 V 60.00 V 600.0 V | 0.001 V 0.01 V 0.1 V | 0.5 % + 2 |
| 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 V | 0.1 V | 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 60.00 V 600.0 V | 0.001 V 0.01 V 0.1 V | 1.0 % + 3 (45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz) |
| 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 6.000 kΩ 60.00 kΩ 600.0 kΩ 6.000 MΩ 40.00 MΩ | 0.1 Ω 0.001 kΩ 0.01 kΩ 0.1 kΩ 0.001 MΩ 0.01 MΩ | 0.9 % + 2 0.9 % + 1 0.9 % + 1 0.9 % + 1 0.9 % + 1 1.5 % + 2 |

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. 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

9 V battery (installed)