

| AC Voltage | | |
|---|--|--|
| Range ¹ / resolution | 600.0 mV / 0.1 mV | 6.000 V / 0.001 V |
| | 60.00 V / 0.01 V | 600.0 V / 0.1 V |
| | 6000.0 V / 1 V | |
| Accuracy ^{2,3,4} | 45 Hz to 500 Hz | 1.0% + 3 |
| | 500 Hz to 1 kHz | 2.0% + 3 |
| 1. AC voltage ranges are specified from 1% of range to 100% of range. | | |
| 2. Crest factor of ≤ 3 at full scale up to 500 V, decreasing linearly to crest factor < 1.5 at 1000 V. | | |
| 3. For non-sinusoidal waveforms, add $\pm (2\% \text{ of reading} + 2\% \text{ full scale})$ typical, for crest factor up to 3. | | |
| 4. Do not exceed 107 V-Hz. | | |
| DC Voltage, Continuity, Resistance, Diode Test and Capacitance | | |
| mV | Range / resolution | 600.0 mV / 0.1 mV |
| | Accuracy | 0.09% + 2 |
| V | Range / resolution | 6.000 V / 0.001 V |
| | | 60.00 V / 0.01 V |
| | | 600.0 V / 0.1 V |
| | | 1000 V / 1 V |
| | Accuracy | 0.09% + 2 |
| | | 0.15% + 2 |
| Ω | Range / resolution | 600 Ω / 1 Ω |
| | Accuracy | Meter beeps at $< 25 \Omega$, beeper detects opens or shorts of 250 μs or longer. |
| Ω | Range / resolution | 600.0 Ω / 0.1 Ω |
| | | 6.000 kΩ / 0.001 kΩ |
| | | 60.00 kΩ / 0.01 kΩ |
| | | 600.0 kΩ / 0.1 kΩ |
| | | 6000.0 kΩ / 0.001 MΩ |
| | | 50.00 MΩ / 0.01 MΩ |
| | Accuracy | 0.5% + 2 |
| | | 0.5% + 1 |
| | | 1.5% + 3 |
| Diode test | Range / resolution | 2.000 V / 0.001 V |
| | Accuracy | 1% + 2 |
| μF | Range / resolution | 1000 nF / 1 nF |
| | | 10.00 μF / 0.01 μF |
| | | 100.0 μF / 0.1 μF |
| | | 9999 μF ¹ / 1 μF |
| | Accuracy | 1.2% + 2 |
| | | 10% typical |
| 1. In the 9999 μF range for measurements to 1000 μF, the measurement accuracy is 1.2% + 2. | | |
| AC and DC Current | | |
| mA AC (45 Hz to 1 kHz) | Range ¹ / resolution | 60.00 mA / 0.01 mA |
| | | 400.0 mA ³ / 0.1 mA |
| | Accuracy | 1.5% + 3 |
| mA DC ² | Range ¹ / resolution | 60.00 mA / 0.01 mA |
| | | 400.0 mA ³ / 0.1 mA |
| | Accuracy | 0.5% + 3 |
| 1. All AC current ranges are specified from 5% of range to 100% of range. | | |
| 2. Input burden voltage (typical): 400 mA input 2 mV/mA. | | |
| 3. 400.0 mA accuracy specified up to 600 mA overload. | | |
| Frequency | | |
| Range / resolution | 99.99 Hz / 0.01 Hz | |
| | 999.9 Hz / 0.1 Hz | |
| | 9.999 kHz / 0.001 kHz | |
| | 99.99 kHz / 0.01 kHz | |
| Accuracy ¹ | 0.1% + 1 | |
| 1. Frequency is specified up to 99.99 kHz in volts and up to 10 kHz in amps. | | |
| Input Characteristics | | |
| ~V | Overload protection | 1100 V RMS |
| | Input impedance (nominal) | > 10 MΩ < 100 pF |
| | Common mode rejection ratio (1 kΩ unbalance) | > 120 dB at DC, 50 Hz or 60 Hz |
| | Normal mode rejection | > 60 dB at 50 Hz or 60 Hz |
| ~V | Overload protection | 1100 V RMS |
| | Input impedance (nominal) | > 10 MΩ < 100 pF |
| | Common mode rejection ratio (1 kΩ unbalance) | > 60 dB, DC to 60 Hz |
| | Normal mode rejection | > 60 dB at 50 Hz or 60 Hz |
| ~mV | Overload protection | 1100 V RMS |
| | Input impedance (nominal) | > 10 MΩ < 100 pF |
| | Common mode rejection ratio (1 kΩ unbalance) | > 120 dB at DC, 50 Hz or 60 Hz |
| | Normal mode rejection | > 60 dB at 50 Hz or 60 Hz |
| Open Circuit Test Voltage | | |
| ±/+ | Overload protection | 1100 V RMS |
| | Input impedance (nominal) | < 2.7 V DC |
| | Full scale voltage to 6 MΩ | < 0.7 V DC |
| | Full scale voltage 50 MΩ | < 0.9 V DC |
| | Typical short circuit current | < 350 mA |
| ±/- | Overload protection | 1100 V RMS |
| | Input impedance (nominal) | < 2.7 V DC |
| | Full scale voltage to 6 MΩ | 2.000 V DC |
| | Full scale voltage 50 MΩ | |
| | Typical short circuit current | < 1.1 mA |
| mA Function | | |
| Overload protection | Fused, 44/100 A, 1000 V FAST Fuse | |
| Overload | 600 mA overload for 2 minutes maximum, 10 minutes rest minimum | |
| MIN/MAX Recording Accuracy | | |
| DC functions | ± 12 counts for changes > 350 mS in duration. | |
| AC functions | ± 40 counts for changes > 900 mS in duration. | |
| General Specifications | | |
| Maximum voltage between any terminal and earth ground | 1000 V DC or AC RMS | |
| Ω fuse protection from A inputs | 0.44 A (44/100 A, 440 mA), 1000 V FAST Fuse, Fluke specified part only | |
| Display (LCD) | Update rate | 4/sec |
| | Volts, amps, ohms | 6000 counts |
| | Frequency | 10,000 counts |
| Capacitance | 1,000 counts | |
| Battery type | Three AA Alkaline batteries, NEDA 15A IEC LR6 | |
| Battery life | 250 hours minimum | |
| RF communications | 2.4 GHz ISM Band | |
| RF communication range | Open air, unobstructed | Up to 20m |
| | Obstructed, sheetrock wall | Up to 6.5m |
| Obstructed, concrete wall, or steel electrical enclosure | Up to 3.5m | |
| Temperature | Operating | -10°C to 50°C |
| | Storage | -40°C to 60°C |
| Temperature coefficient | 0.1 X (specified accuracy) / °C ($< 18^\circ\text{C}$ or $> 28^\circ\text{C}$) | |
| Relative humidity | 0% to 90% (0°C to 35°C) 0% to 75% (35°C to 40°C) 0% to 45% (40°C to 50°C) | |
| Altitude | Operating | 2,000 m |
| | Storage | 12,000 m |
| Electromagnetic compatibility | EN 61326-1:2006, EN 61326-2-2:2006 | |
| EMI, RFI, EMC, RF | ETSI EN 300 328 V1.7.1:2006, ETSI EN 300 489 V1.8.1:2008 | |
| | FCC Part 15 Subpart C Sections 15.207, 15.209, 15.249 | |
| | FCCID : FCC: T68-FDMMBLE IC: 6627A-FDMMBLE | |
| Safety compliance | ANSI / ISA 61010-1 / (82.02.01): 3rd edition | |
| | CAN / CSA-C22.2 No 61010-1-12: 3rd edition | |
| | UL 61010-1: 3rd edition | |
| | IEC / EN 61010-1:2010 | |
| Certifications | | |
| Ingress Protection (IP) rating | IP54 | |
| Pollution Degree | 2 | |
| Size (H x W x L) | 4.75 x 9.3 x 20.7 cm (1.87 x 3.68 x 8.14 in) | |
| Weight | 340 g (12 oz) | |