

XDM1000 Series Digital Multimeter Technical Specifications

| Function | Range ^[2] | Resolution | Accuracy: ± (% of reading + LSB) |
|------------------------------------|-----------------------------------|---------------|----------------------------------|
| DC Voltage | 50.000 mV | 0.001 mV | 0.1% + 10 |
| | 500.00 mV | 0.01 mV | 0.05% + 5 |
| | 5.0000 V | 0.0001 V | 0.05% + 5 |
| | 50.000 V | 0.001 V | 0.05% + 5 |
| | 500.00 V | 0.01 V | 0.1% + 5 |
| | 1000.0 V ^[3] | 0.1 V | 0.1% + 10 |
| True RMS AC Voltage ^[4] | 500 mV – 750 V | 20 Hz – 45 Hz | 1% + 30 |
| | | 45 Hz – 65 Hz | 0.5% + 30 |
| | | 65 Hz – 1 kHz | 0.7% + 30 |
| DC Current | 500 µA | 0.01 µA | 0.15% + 20 |
| | 5000 µA | 0.1 µA | 0.15% + 10 |
| | 50 mA | 0.001 mA | 0.15% + 20 |
| | 500 mA | 0.01 mA | 0.15% + 10 |
| | 5 A | 0.0001 A | 0.5% + 10 |
| | 10 A ^[5] | 0.001 A | 0.5% + 10 |
| True RMS AC Current ^[6] | 500 µA – 500 mA | / | 0.5% + 20 |
| | 5 A – 10 A | | 1.5% + 20 |
| Resistance ^[7] | 500 Ω | 0.01 Ω | 0.15% + 10 |
| | 5 kΩ | 0.0001 kΩ | 0.15% + 5 |
| | 50 kΩ | 0.001 kΩ | 0.15% + 5 |
| | 500 kΩ | 0.01 kΩ | 0.15% + 5 |
| | 5 MΩ | 0.0001 MΩ | 0.3% + 5 |
| | 50 MΩ | 0.001 MΩ | 1% + 10 |
| Diode | 3.0000 V | 0.0001 V | 1% + 10 |
| Continuity | 1000 Ω | 0.1 Ω | Adjustable threshold |
| Frequency | 10.000 Hz – 60 MHz ^[8] | / | ± (0.2% + 10) |
| Capacitance ^[9] | 50 nF – 500 µF | / | 2.5% + 10 |
| | 5 mF – 50 mF | 0.1 Ω | 5% + 10 |
| Temperature | K type, PT100 | | |
| Display | 55,000 | | |
| Record Interval | 15 mS – 9999.999 S | | |
| Record Length | 1,000 points | | |

[1] Specifications are for 30-minute warm-up, "Low" measurement rate and calibration temperature 18°C - 28°C.

- [2] 10% over range on all ranges, except 1,000 V DCV, 750 ACV, 10 A DCI, 10 A ACI, 50 MΩ resistance, and 50 mF capacitance.
- [3] For each additional volt over ± 500 VDC add 0.02 mV of error.
- [4] Specifications are for amplitude of sine wave input > 5% of range. 0.1% errors will be added when the range of input sine wave is 1% to 5%.
- [5] 30 seconds OFF after 30 seconds ON is recommend for the continuous current that higher than DC 7 A or AC RMS 7 A.
- [6] Specifications are for amplitude of sine wave input > 0.5% of range. For inputs from 1% to 5% of range, add 0.1% of range extra error.
- [7] Specifications are for 2-wire ohms using the relative operation of math. Without relative operation, add ±0.20 Ω additional error in 2-wire ohms function.
- [8] Except for special marks, when frequency ≤ 10M Hz, the specification is applicable to >1V AC input voltage, when frequency > 10 MHz, the specification is applicable to >3V AC input voltage.
- [9] Specifications are for using the relative operation of math. Using of non-film capacitor may generate additional errors. Specifications are for from 5% to 110% on ranges.

General Specifications

| | |
|-----------------------|--|
| Display Screen | 3.7-inch TFT LCD with resolution 480*320 |
| Operating Environment | Full temperature from 0°C to 50°C, 80% RH and 40°C, non-condensing |
| | Storage Temperature: -20°C to 70°C |
| Remote Interface | RS232 or USB Device |
| Programmer Language | Standard SCPI, compatible with commands of main stream multimeters |
| Warm Up Time | 30 minutes |
| Dimension (W×H×D) | 200 x 86.5 x 64 (mm) |
| Weight | 0.45 kg |

V1.0.1



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