

XDM2041 Digital Multimeter Technical Specifications

Function	Range ^[2]	Resolution	Accuracy: \pm (% of reading + LSB)
DC Voltage	50.000 mV	0.001 mV	0.1% + 10
	500.00 mV	0.01 mV	0.025% + 5
	5.0000 V	0.0001 V	0.025% + 5
	50.000 V	0.001 V	0.03% + 5
	500.00 V	0.01 V	0.1% + 5
	1000.0 V ^[3]	0.1 V	0.1% + 5
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 μ A	0.01 μ A	0.15% + 20
	5000 μ A	0.1 μ A	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 μ A – 500 mA	20 Hz – 1 kHz	0.5% + 20
	5 A – 10 A		1.5% + 20
Resistance ^[7]	500 Ω	0.01 Ω	0.1% + 10
	5 k Ω	0.0001 k Ω	0.1% + 5
	50 k Ω	0.001 k Ω	0.1% + 5
	500 k Ω	0.01 k Ω	0.1% + 5
	5 M Ω	0.0001 M Ω	0.25% + 5
	50 M Ω	0.001 M Ω	1% + 10
Four-wire Resistance	500 Ω	0.01 Ω	0.1% + 10
	5 k Ω	0.0001 k Ω	0.1% + 5
	50 k Ω	0.001 k Ω	0.1% + 5
Diode	3.0000 V	0.0001 V	/
Continuity	1000 Ω	0.1 Ω	/
Frequency	10.000 Hz – 60 MHz ^[8]	/	\pm (0.2% + 8)
Capacitance ^[9]	50 nF – 500 μ F	/	2.5% + 5
	5 mF – 50 mF		5% + 8
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 4-wire ohms function or 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
Electromagnetic compatibility	Conforming to EMC (2004/108/EC) and EN 61326-1:2013
Safety	Conforming to EN 61010-1:2010 and low voltage instructions (2006/95/EC)
Remote Interface	RS232
Programmer Language	Standard SCPI, compatible with commands of main stream multimeters
Warm Up Time	30 minutes
Dimension (W×H×D)	235 x 110 x 295 (mm)
Weight	Approx. 2.3 kg

V1.0.2



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