

## XDM2041 Digital Multimeter Technical Specifications

Function	Range <sup>[2]</sup>	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 <sup>[3]</sup>	0.1 V	0.1% + 5
True RMS AC Voltage <sup>[4]</sup>	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 $\mu$ A	0.01 $\mu$ A	0.15% + 20
	5000 $\mu$ A	0.1 $\mu$ 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 <sup>[5]</sup>	0.001 A	0.5% + 10
True RMS AC Current <sup>[6]</sup>	500 $\mu$ A – 500 mA	20 Hz – 1 kHz	0.5% + 20
	5 A – 10 A		1.5% + 20
Resistance <sup>[7]</sup>	500 $\Omega$	0.01 $\Omega$	0.1% + 10
	5 k $\Omega$	0.0001 k $\Omega$	0.1% + 5
	50 k $\Omega$	0.001 k $\Omega$	0.1% + 5
	500 k $\Omega$	0.01 k $\Omega$	0.1% + 5
	5 M $\Omega$	0.0001 M $\Omega$	0.25% + 5
	50 M $\Omega$	0.001 M $\Omega$	1% + 10
Four-wire Resistance	500 $\Omega$	0.01 $\Omega$	0.1% + 10
	5 k $\Omega$	0.0001 k $\Omega$	0.1% + 5
	50 k $\Omega$	0.001 k $\Omega$	0.1% + 5
Diode	3.0000 V	0.0001 V	/
Continuity	1000 $\Omega$	0.1 $\Omega$	/
Frequency	10.000 Hz – 60 MHz <sup>[8]</sup>	/	$\pm$ (0.2% + 8)
Capacitance <sup>[9]</sup>	50 nF – 500 $\mu$ 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

<b>Display Screen</b>	3.7-inch TFT LCD with resolution 480*320
<b>Operating Environment</b>	Full temperature from 0°C to 50°C, 80% RH and 40°C, non condensing
	Storage Temperature: -20°C to 70°C
<b>Electromagnetic compatibility</b>	Conforming to EMC (2004/108/EC) and EN 61326-1:2013
<b>Safety</b>	Conforming to EN 61010-1:2010 and low voltage instructions (2006/95/EC)
<b>Remote Interface</b>	RS232
<b>Programmer Language</b>	Standard SCPI, compatible with commands of main stream multimeters
<b>Warm Up Time</b>	30 minutes
<b>Dimension (W×H×D)</b>	235 x 110 x 295 (mm)
<b>Weight</b>	Approx. 2.3 kg

V1.0.2



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