



Digital Multimeter HDM3000 Series

6 ½ Digit, 35 ppm Basic DCV Accuracy

Digital
Multimeters



Product Features

- 6 ½ digit digital DMM with 0.1 μ V resolution;
- Front and rear input terminals provide ideal connection space for bend and system test;
- Fast reading speed up to 30,000 readings per second;
- Dual display allows clear and quick view of voltage and frequency measurements at the same time;
- Various measurements: ACV, DCV, ACI, DCI, 2-wire and 4-wire resistance, capacitance, frequency, period, diode, continuity, temperature;
- 4.3 inch 64K LCD display;
- True RMS AC (voltage & current) measurement;
- SCPI commands standard;
- Multiple connectivity options: USB2.0, serial interface RS-232/485, and LAN optional, GPIB optional.

Specification

Function	Range/Frequency	Test Current or Burden Voltage	24 Hours Tcal±1°C	90 Days Tcal±5°C	1 Year Tcal±5°C	Temperature Coefficient/°C
DC Voltage	100 mV	-	0.0030+0.0030	0.0040+0.0035	0.0050+0.0035	0.0005+0.0005
	1 V	-	0.0020+0.0006	0.0030+0.0007	0.0040+0.0007	0.0005+0.0001
	10 V	-	0.0015+0.0004	0.0020+0.0005	0.0035+0.0005	0.0005+0.0001
	100 V	-	0.0020+0.0006	0.0035+0.0006	0.0045+0.0006	0.0005+0.0001
	1000 V	-	0.0020+0.0006	0.0035+0.0010	0.0045+0.0010	0.0005+0.0001
True RMS AC Voltage (100mV, 1V, 10V, 100V and 750V ranges)	5 Hz-10 Hz	-	0.35+0.02	0.35+0.03	0.35+0.03	0.35+0.03
	10 Hz-20 KHz	-	0.04+0.02	0.05+0.03	0.06+0.03	0.005+0.003
	20 KHz-50 KHz	-	0.10+0.04	0.11+0.05	0.12+0.05	0.011+0.005
	50 KHz-100 KHz	-	0.55+0.08	0.60+0.08	0.60+0.08	0.060+0.008
	100 KHz-300 KHz	-	4.00+0.50	4.00+0.50	4.00+0.50	0.200+0.020
Resistance	100 Ω	1 mA	0.0030+0.0030	0.008+0.004	0.010+0.004	0.0006+0.0005
	1 KΩ	1 mA	0.0020+0.0005	0.008+0.001	0.010+0.001	0.0006+0.0001
	10 KΩ	100 μA	0.0020+0.0005	0.008+0.001	0.010+0.001	0.0006+0.0001
	100 KΩ	10 μA	0.0020+0.0005	0.008+0.001	0.010+0.001	0.0006+0.0001
	1 MΩ	5 μA	0.002+0.001	0.008+0.001	0.010+0.001	0.0010+0.0002
	10 MΩ	500 nA	0.015+0.001	0.020+0.001	0.040+0.001	0.0030+0.0004
	100 MΩ	500 nA 10 MΩ	0.300+0.010	0.800+0.010	0.800+0.010	0.1500+0.0002
DC Current	100 μA	<0.11 V	0.010+0.020	0.040+0.025	0.050+0.025	0.0020+0.0030
	1 mA	<0.11 V	0.007+0.006	0.030+0.006	0.050+0.006	0.0020+0.0005
	10 mA	<0.05 V	0.007+0.020	0.030+0.020	0.050+0.020	0.0020+0.0020
	100 mA	<0.5 V	0.010+0.004	0.030+0.005	0.050+0.005	0.0020+0.0005
	1 A	<0.7 V	0.050+0.006	0.080+0.010	0.100+0.010	0.0050+0.0010
	3 A	<2.0 V	0.180+0.020	0.200+0.020	0.200+0.020	0.0050+0.0020
	10 A	<0.5 V	0.050+0.010	0.120+0.010	0.120+0.010	0.0050+0.0010
Capacitance	1.0000 nF		0.50+0.50	0.50+0.50	0.50+0.50	0.05+0.05
	10.000 nF, 100.00 nF, 1.0000 μF		0.40+0.10	0.40+0.10	0.40+0.10	0.05+0.01
	100.00 μF		0.40+0.10	0.40+0.10	0.40+0.10	0.05+0.01
True RMS AC Current	100 μA, 1 mA, 10 mA, 100 mA Ranges	3 Hz-5 KHz	<0.011, <0.11	0.10+0.04	0.10+0.04	0.015+0.006
		5 KHz-10 KHz	<0.05, <0.5 V	0.10+0.04	0.10+0.04	0.030+0.006
	1 A Range	3 Hz-5 KHz	<0.7V	0.10+0.04	0.10+0.04	0.015+0.006
		5 KHz-10 KHz	<0.7V	0.10+0.04	0.10+0.04	0.030+0.006
	3 A Range	3 Hz-5 KHz	<5V	0.23+0.04	0.23+0.04	0.015+0.006
		5 KHz-10 KHz	<5V	0.23+0.04	0.23+0.04	0.030+0.006
	10 A Range	3 Hz-5 KHz	<0.5V	0.15+0.04	0.15+0.04	0.015+0.006
		5 KHz-10 KHz	<0.5V	0.15+0.04	0.15+0.04	0.030+0.006
Continuity	1 KΩ	-	0.002+0.030	0.008+0.030	0.010+0.030	0.0010+0.0020
Diode Test	5V	-	0.002+0.030	0.008+0.030	0.010+0.030	0.0010+0.0020
Temperature	PT100 (DIN/IEC751)		Probe accuracy+0.05 °C			
	5 K Ω thermistor		Probe accuracy+0.1 °C			

Model

Model	Digits of Resolution	Basic DCV Accuracy	Max. Reading Rate	Memory	Statistical Graphics	Input Terminals	Computer Interfaces
HDM3055	5 ½	75ppm	30,000 rdgs/s	10,000 readings	Histogram, bar chart, trend graph	Front-panel	USB, RS232/485
HDM3055S	5 ½	75ppm				Rear-panel	USB, RS232/485
HDM3055A	5 ½	75ppm				Front-panel, rear-panel	USB, RS232/485
HDM3055B	5 ½	75ppm				Front-panel, rear-panel	USB, RS232/485, LAN
HDM3055H	5 ½	75ppm				Front-panel, rear-panel	USB, RS232/485, LAN, GPIB
HDM3065	6 ½	35ppm				Front-panel	USB, RS232/485
HDM3065S	6 ½	35ppm				Rear-panel	USB, RS232/485
HDM3065A	6 ½	35ppm				Front-panel, rear-panel	USB, RS232/485
HDM3065B	6 ½	35ppm				Front-panel, rear-panel	USB, RS232/485, LAN
HDM3065H	6 ½	35ppm				Front-panel, rear-panel	USB, RS232/485, LAN, GPIB