

DM3000 Series Digital Multimeters

Distributed By:

GLOBAL TEST SUPPLY
The Test and Measurement Company



Application

- Manufacturing Test
- High Speed, High Resolution Data Acquisition
- Signal Monitoring
- User Defined Test
- Aging Test

Product Dimensions: Width×Height×Depth=232mm×107mm×291mm Weight: 2.5 kg

1. True 6½ digits resolution (2,400,000-count)
2. 50 K/s maximum sample rate, 2 M points of memory depth
3. Ability to use most sensors
4. 16-Channel Multiplexer Module: Data log, scanning and programmable automatic measurements
5. 256 × 64 pixels LCD display, to support multi-display and screen menu
6. I/O: GPIB, LAN, RS-232 and USB Device
7. Built-in USB Host to support USB flash memory and USB printer

Model	DM3051	DM3052	DM3054	DM3061	DM3062	DM3064
Resolution	5½ digits			6½ digits		
Configuration	RS 232 / USB 2.0	LAN/GPIB	LAN/GPIB and Multiplexer Module	RS 232 / USB 2.0	LAN/GPIB	LAN/GPIB and Multiplexer Module
Pricing	\$ 495	\$ 695	\$ 1,195	\$ 795	\$ 995	\$ 1,595

Performance Characteristics

Range: Or Performance Parameters	Resolution,Or AC Voltage Frequency:	Accuracy: 1 Year± (% of reading + % of range)	Input Current,Or Current Source:	Range: Or Performance Parameters	Resolution,Or AC Voltage Frequency:	Accuracy: 1 Year± (% of reading + % of range)	Input Current,Or Current Source:
DC Voltage			Input Current	AC Current (RMS)			Input Resistance
200.000,0 mV	100 nV	0.0050 + 0.0017	10 MΩ or >10 GΩ	20.000,0 mA	100 nA	0.01 + 0.02 (10-50 kHz)	50 Ω
2.000,000 V	1 μV	0.0040 + 0.0004	10 MΩ or >10 GΩ	200.000 mA	1 μA	0.05 + 0.03 (10-50 kHz)	1 Ω
20.000,00 V	10 μV	0.0035 + 0.0003	10 MΩ or >10 GΩ	1.000,00 A	10 μA	0.05 + 0.03 (10-50 kHz)	1 Ω
200.000,0 V	100 μV	0.0045 + 0.0003	10 MΩ	10.000,0 A	100 μA	0.10 + 0.10 (10-50 kHz)	0.02 Ω
1000.000 V	1 mV	0.0045 + 0.0005	10 MΩ	Resistance (2-wire and 4-wire)			Current Source
DC Current			Input Current	200.000,0 Ω	100 μΩ	0.010 + 0.0020	1 mA
2.000,00 mA	10 nA	0.005 + 0.005	50 Ω	2.000,000 KΩ	1 mΩ	0.010 + 0.0005	1 mA
20.000,0 mA	100 nA	0.005 + 0.002	50 Ω	20.000,00 KΩ	10 mΩ	0.010 + 0.0005	100 μA
200.000 mA	1 μA	0.03 + 0.003	1 Ω	200.000,0 KΩ	100 mΩ	0.010 + 0.0005	10 μA
1.000,00 A	10 μA	0.03 + 0.006	1 Ω	2.000,000 MΩ	1 Ω	0.010 + 0.0005	1 μA
10.000,0 A	100 μA	0.05 + 0.01	0.01 Ω	10.000,00 MΩ	10 Ω	0.040 + 0.0005	200 nA
AC Voltage (RMS)				100.000,0 MΩ	100 Ω	0.080 + 0.0005	200 nA
200.000 mV	3-5 Hz	0.10 + 0.015	1 MΩ	Capacitance			Current Source
	5-10 Hz	0.06 + 0.015	1 MΩ	2.000,0 nF	0.1 pF	0.05 + 0.002	200 nA
	10-20 kHz	0.04 + 0.015	1 MΩ	20.000 nF	1 pF	0.05 + 0.005	1 μA
	20-50 kHz	0.10 + 0.025	1 MΩ	200.00 nF	10 pF	0.01 + 0.005	10 μA
	50-100 kHz	0.55 + 0.04	1 MΩ	2.000,0 μF	100 pF	0.01 + 0.005	100 μA
	100-300 kHz	1.20 + 0.25	1 MΩ	20.000 μF	1 nF	0.01 + 0.005	1 mA
Range from	3-5 Hz	1.00 + 0.01	1 MΩ	200.00 μF-10000 μF	10 nF	0.01 + 0.005	1 mA
2.000,00V	5-10 Hz	0.35 + 0.01	1 MΩ				
to 750.000	10-20 kHz	0.04 + 0.01	1 MΩ				
	20-50 kHz	0.10 + 0.02	1 MΩ				
	50-100 kHz	0.55 + 0.04	1 MΩ				
	100-300 kHz	1.20 + 0.25	1 MΩ				

Other Parameters

Continuity	2 K Ω Range, Threshold Range 1 Ω -2 K Ω
Diodes test	2 V Range, 1mA test current, 2.4 V Max forward voltage drop
Arbitrary Sensor	Support multiple ANSI standard thermocouple and the sensor with voltage, current, and resistance output
Frequency and Period	3 Hz (0.333 s)-300 kHz (3.33 μ s)
Math	Null, Max/Min/Avg, dBm, dB, and Limit Test.
Data Acquisition	Data Record, Inspection, Programmable Auto Measure.
Other Functions	Auto Reading Hold, Ratio Test, Built-in 10 setup storage, 1 M points of memory depth.
High-speed Data Logger	50 K/s (High-speed Data Logger)
Measurement Precision	2,400,000 Count, >6 $\frac{1}{2}$
USB I/O Interface	USB Host to support USB disk and USB printer; USB Device
Other I/O Interfaces	RS232, GPIB (Optional), LAN (Option)
Display	256 \times 64 pixels LCD to support multi-display, menu, multi-language help and waveform display
Data Acquisition and Virtual	Support Microsoft [®] Windows 98/Me, Windows 2000/XP
Max Input	1,000 VDC, 750 VAC _{RMS} , DC&AC max external current 10 A, internal current 2 A double fuses
Shock and Vibration	MIL-T-28800, Type III, Class 5
Power	115/230 V, 45-65 Hz, 20 W Max
Weight	2.5 kg

Multiplexer Module

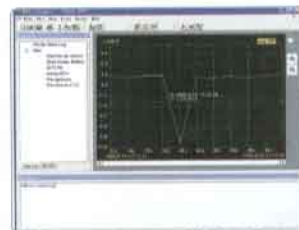
The module provides up to 16 Channels of acquisition. The easy to use software allows the user to scan any or all of the 16 channels and place into memory.



External View of Multiplexer Module



Internal View of Multiplexer Module



Ultralogger Data Acquisition Software Interface

Advanced Features

- Test resolution: 6 $\frac{1}{2}$ digits (2,400,000-count), 5 $\frac{1}{2}$ digits (400,000-count)
- 50 K/s maximum sample rate, 2M points of memory depth
- 256 \times 64 pixels LCD display to support multi-display and screen menu
- 16-Channel Multiplexer Module and Ultralogger software
- 26 test functions: DC voltage and current, AC voltage and current, 2-wire and 4-wire resistance, Capacitance, Continuity Test, Diode Test Frequency, Period, Ratio Test, Temperature, Any Sensor Test High Limit, Low Limit and High/Low Limit
- Math: Max, Min, Avg, Null, dBm, dB
- Data Acquisition: Data Log, Scanning, Programmable Automatic Measurements
- Input resistance > 10 G Ω : DC voltage range up to 48 V (\pm 24 V)
- True RMS AC voltage and current test
- Built in Storage: Store up to 10 setup configurations, 10 data records and 10 sensor setups.
- I/O: GPIB, LAN, RS-232, USB Device
- Integrated USB Host to support USB flash memory and USB printer
- Control software that is both easy and flexible to use