

# DM305X series 5 $\frac{3}{4}$ Digital Multimeter

True 5 $\frac{3}{4}$  digits resolution  
50 K rdgs/s Sample Rate  
2M rdgs of Volatile Memory



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

## ► Application Areas

- Manufacturing Test
- Signal Monitoring
- High Speed, High Resolution Data Acquisition
- Aging Test
- User Defined Test (Support most sensors)

## ► Features and Benefits

1. True 5 $\frac{3}{4}$  digits resolution (480,000-count)
2. Up to 50 K rdgs/s Sample Rate, 512K rdgs of Non-volatile Memory and 2M rdgs of Volatile Memory
3. Patented Any Sensor test capability
4. Up to 32 Channels Multiplexer Module: Data acquisition, scanning and programmable automatic measurements
5. 256×64 pixels LCD display, to support multi-display and screen menu
6. Connectivity: RS-232, USB Host, USB Device, GPIB (optional), LAN (optional)

Model	DM3051	DM3052	DM3054
Reading Resolution	5 $\frac{3}{4}$ digits		
Connectivity	RS-232, USB Host, USB Device	Plus LAN and GPIB	Plus LAN, GPIB and Multiplexer Module

## ► Specifications

Measurement Function	Range	Frequency Range/Test Current	Accuracy: 1 Year $\pm$ (% of reading + % range)
DC Voltage	400 mV~1000 V	10Hz~100 kHz	0.025+0.006
AC Voltage (True RMS)	200 mV~750 V		0.20 + 0.1
DC Current	2 mA~10 A	10Hz~10 kHz	0.050+0.008
AC Current (True RMS)	20 mA~10 A		0.5+0.1

Measurement Function	Range	Frequency Range/ Test Current	Accuracy: 1 Year $\pm$ (% of reading + % range)
Resistance (2-wire and 4-wire)	400 $\Omega$ ~100 M $\Omega$		0.015+0.006
Capacitor	4 nF~200 uF		1+0.5
Diode	2.4 V	1mA	0.05 + 0.010
Continuity	2000 $\Omega$	1 mA	0.05 + 0.010
Frequency,Period Accuracy $\pm$ (% of reading)	200 mV ~ 750 V	3 Hz~300 kHz	0.02
	20 mA ~10 A	3 Hz~10 kHz	0.02

Note: All the indicators are the typical value under standard test situation

## ► Other Parameters

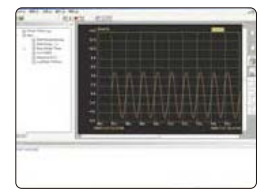
24 Measurement Functions	DC voltage and current, AC voltage and current, 2-wire and 4-wire Resistance, Capacitance, Continuity Test, Diode Test, Frequency, Period, Ratio Test and Any Sensor Test
Other Functions	Math Functions: Max, Min, Avg, Histogram, High Limit, Low Limit, dBm, dB, Null Data acquisition: data logging, scanning Built-in memories: Store up to 10 Setups, 10 Data records and 10 Sensor descriptions True RMS AC voltage and current Input impedance >10 G $\Omega$ DC voltage range up to 48 V ( $\pm$ 24 V)
Application Software	UltraLogger: For scan measurement and data acquisition control UltraSensor: For any sensors measurement
Maximum Input Safety	DC voltage 1,000 VDC, AC voltage 750 Vrms AC, DC and AC max external current 10 A, internal 12 A double fuses Measurement of CAT II 300V, CAT I 1000V, Pollution level 1
Shock and Vibration	MIL-T-28800, type III, class 5 (only sine)
Power Supply	AC: 100V-240V $\pm$ 10%, 45Hz-65Hz, 20VA Max

## ► Multiplexer Module

The module provides up to 32 channels of acquisition. The easy to use software allows the user to scan any or all of the 32 channels and place the data into the memory.



Multiplexer Module



UltraLogger Software Interface