

NTP-DM9001R

Digital Multimeter

• High Stability • Industrial Grade • Rack Mount



Features

- Presents the new style **5½-digit display** with a maximum reading capacity of **239,999 counts**
- Equipped with a **4.3-inch TFT graphic LCD** for clear and intuitive visualization
- Delivers excellent **DC voltage basic accuracy of 0.012%**
- **Intelligent A.I. measurement** function automatically recognizes and measures voltage, resistance, diode, and continuity without manual range selection
- Supports over **12 measurement functions**, including AC/DC voltage, AC/DC current, 2-wire and 4-wire resistance, frequency, period, diode, continuity, capacitance, and temperature
- Provides **True RMS measurement capability** for both **AC and combined AC+DC signals**
- **Dual measurement mode** allows two selected parameters to be displayed simultaneously
- Comprehensive **mathematical analysis functions** such as Max/Min, REL/REL#, Compare, Hold, dB, dBm, MX+B, percentage, and reciprocal (1/X)
- Built-in **Digital I/O interface** supporting dual operating modes: standard comparison and user-defined modes
- Standard communication interfaces include **RS-232C and USB device**, with support for **USBCDC and USBTMC protocols**
- Supports **Interface data communication** for measurement data export and integration with external information systems



Technical Specifications

1. All specifications are applicable to the main (1st) display only and warmed up for at least 30 minutes and operated in the slow rate.
2. 20 % overrange on all ranges, except 750 V / 10 A range
3. Accuracy: $\pm$ (% of Reading + Digits)

Range (*2)	Resolution	Input Resistance etc.	Accuracy (*3) 1 Year (23 °C $\pm$ 5 °C)
DC Voltage			
200.000 mV	1 μ V	10 M Ω or > 10 G Ω	0.012 + 8
2.00000 V	10 μ V	10 M Ω or > 10 G Ω	0.012 + 5
20.0000 V	100 μ V	11.1 M Ω	0.012 + 5
200.000 V	1 mV	10.1 M Ω	0.012 + 5
1000.00 V	10 mV	10 M Ω	0.012 + 5
Resistance			
200.000 Ω	1 m Ω	1 mA	0.05 + 8
2.00000 k Ω	10 m Ω	1 mA	0.05 + 5
20.0000 k Ω	100 m Ω	100 μ A	0.05 + 5
200.000 k Ω	1 Ω	10 μ A	0.05 + 5
2.00000 M Ω	10 Ω	1 μ A	0.05 + 5
10.0000 M Ω	100 Ω	0.5 μ A	0.30 + 5
100.000 M Ω	1 k Ω	0.5 μ A // 10 M Ω	3.00 + 8
DC Current			
20.0000 mA	100 nA	1 Ω	0.05 + 15
200.000 mA	1 μ A	1 Ω	0.05 + 5
2.00000 A	10 μ A	0.1 Ω	0.20 + 5
10.0000 A	100 μ A	0.01 Ω	0.20 + 5
Continuity			
2000.00 Ω	10 m Ω	1 mA	0.05 + 5
Diode Test			
6.0000 V	100 μ V	1 mA @ 6 V	0.05 + 15
Capacitance			
10.00 nF	0.01 nF	10 μ A	2.0 + 10
100.0 nF	0.1 nF	10 μ A	2.0 + 4
1.000 μ F	0.001 μ F	100 μ A	2.0 + 4
10.00 μ F	0.01 μ F	1 mA	2.0 + 4
100.0 μ F	0.1 μ F	1 mA	2.0 + 4



True RMS AC (or AC+DC – AC Coupled) Voltage			
200.000 mV	1 μV	20 Hz to 45 Hz	1.0 + 100
		45 Hz to 10 kHz	0.3 + 100
		10 kHz to 30 kHz	1.5 + 300
		30 kHz to 100 kHz	5.0 + 300
2.00000 V	10 μV	20 Hz to 45 Hz	1.0 + 100
		45 Hz to 10 kHz	0.2 + 100
		10 kHz to 30 kHz	1.0 + 100
		30 kHz to 100 kHz	3.0 + 200
20.0000 V	100 μV	20 Hz to 45 Hz	1.0 + 100
		45 Hz to 10 kHz	0.2 + 100
		10 kHz to 30 kHz	1.0 + 100
		30 kHz to 100 kHz	3.0 + 200
200.000 V	1 mV	20 Hz to 45 Hz	1.0 + 100
		45 Hz to 10 kHz	0.2 + 100
		10 kHz to 30 kHz	1.0 + 100
		30 kHz to 100 kHz	3.0 + 200
750.00 V	10 mV	20 Hz to 45 Hz	1.0 + 100
		45 Hz to 10 kHz	0.2 + 100
		10 kHz to 30 kHz	1.0 + 100
		30 kHz to 100 kHz	3.0 + 200
True RMS AC (or AC+DC – AC Coupled) Current			
20.0000 mA	100 nA	20 Hz to 45 Hz	1.5 + 100
		45 Hz to 2 kHz	0.5 + 100
		2 kHz to 10 kHz	2.0 + 200
200.000 mA	1 μA	20 Hz to 45 Hz	1.5 + 100
		45 Hz to 2 kHz	0.5 + 100
		2 kHz to 10 kHz	2.0 + 200
2.00000 A	10 μA	20 Hz to 45 Hz	1.5 + 100
		45 Hz to 2 kHz	0.5 + 100
		2 kHz to 10 kHz	2.0 + 200
10.0000 A	100 μA	20 Hz to 45 Hz	1.5 + 100
		45 Hz to 2 kHz	1.0 + 100
		2 kHz to 10 kHz	----
Frequency			
(Voltage) 10 Hz to 1 MHz	----	----	0.01 + 3
(Current) 20 Hz to 10 kHz			
Temperature (Thermocouple)			
-200 °C to 0 °C	0.01 °C	J / T / K	0.6 °C (typical)
0 °C to +300 °C			0.3 °C (typical)



Display
4.3" TFT Graphic LCD
Interface
RS-232C, USB device (USBCDC & USBTMC), Digital I/O
Power Source
AC 100 V / 120 V / 220 V / 240 V $\pm$ 10 %, 50 Hz to 60 Hz ; Power Consumption Max. 30 VA
Dimensions & Weight
268 (W) mm $\times$ 107 (H) mm $\times$ 302 (D) mm ; Approx. 3.2 kg

