

DIGITAL D.M.T METER

NAGMAN 251

SALIENT FEATURES

- Function as 3 in 1 : Datalogger + Multimeter + Temperature meter
- Multi-connection (more than one device) supported via mobile app
- The change trend analysis is accessible via special chart mode
- Voice warning supported, which assures measurement safety
- Smart voice-reading accessible
- 4 (1/2) - Digit counterparts
- Smart power-off option extending battery life
- Bluetooth 4.0 version - supports mobile device with Android 4.3 or above / iOS 7.0 or above OS, and equipped with ble 4.0 module
- Offline recording function (only in model with "+")
- True RMS value available



Typical Photo: Final Product look may vary

SPECIFICATIONS

Function		Measurement Range	Resolution/ Frequency Range	Accuracy ± (% of reading + LSB)	
DC Voltage (V)	mV	220mV	0.01 mV	±(0.1%+5dig)	
	V	2.2V	0.1 mV	±(0.1%+2dig)	
		22V	1mV		
		220V	10mV		
		1000V	0.1V	±(0.1%+5dig)	
AC Voltage (V)	mV	220mV	0.01 mV	≤1kHz	±(1.0%+10dig)
	V	2.2V	0.1mV	>1kHz	±(1.5%+50dig)
				≤1kHz	±(0.8%+10dig)
		22V	1mV	>1kHz	±(1.2%+50dig)
				≤1kHz	±(0.8%+10dig)
		220V	10mV	>1kHz	±(1.2%+50dig)
				≤1kHz	±(0.8%+10dig)
		750V (continuity) / 1000V (typical)	0.1V	≤1kHz	±(1.2%+10dig)
DC Current (A)	μA	220μA	0.01μA	±(0.5%+10dig)	
		2200μA	0.1μA		
	mA	22mA	1μA	±(0.8%+10dig)	
		220mA	10μA		
	A	20.00A [1]	1mA	±(2%+25dig)	
AC Current (A)	μA	220μA	0.01 μA	≤1kHz	±(0.8%+10dig)
		2000.0μA	0.1μA	>1kHz	±(1.2%+50dig)
				≤1kHz	±(0.8%+10dig)
	mA	20.000mA	1μA	>1kHz	±(1.2%+50dig)
				≤1kHz	±(1.2%+10dig)
		200.00mA	10μA	>1kHz	±(1.5%+50dig)

	A	10.000A ^[1]	1mA	≤1kHz	±(1.5%+10dig)
				>1kHz	±(2.0%+50dig)
Resistance (Ω)		220Ω	0.01Ω	±(0.5%+10dig)	
		2.2kΩ	0.1Ω		
		22kΩ	1Ω		
		220kΩ	10Ω		
		2.2MΩ	100Ω	±(0.8%+10dig)	
		22MΩ	1kΩ	±(1.5%+10dig)	
		220MΩ	10kΩ	±(5.0%+10dig)	
Capacitance (F)		22nF	1pF	±(3.0%+5dig)	
		220nF	10pF		
		2.2μF	100pF		
		22μF	1nF		
		220μF	10nF	±(4.0%+10dig)	
		2.2mF	100nF		
		>220mF	/	/	
Frequency		22.00Hz	0.01Hz	±(0.1%+4dig)	
		220.0Hz	0.1Hz		
		22.000kHz	1Hz		
		220.00kHz	10Hz		
		2.2000MHz	0.1kHz		
		22.000MHz	1kHz		
		≤220.00MHz	0.01 MHz	/	
Duty Cycle (%)		5.0% - 94.9% (typical value: Vrms=1 V, f=1 kHz)	0.1%	±(1.2%+3dig)	
		0.1%-99.9% (≥ 1 kHz)		±(2.5%+3dig)	
Diode Test		Maximum measurement < 2.4V Minimum resolution < 0.0001V	/	±(1.0%+2dig)	
Temperature (°C/°F)		(- 50 °C) - (400°C)	0.1 °C	±(1.0%+5°C)	
		(- 58 °F) - (752 °F)	0.1 °F	±(1.2%+6 °F)	
Shift Rate(BLE link)	2 times/s				
Update Rate	3 times/s				

Auto ranging	√	Max / Min Value	√
Offline Recording Function	√	Bluetooth Module	√
Record Period	168 hours (7 days)		
Record Length	10,000 points		
True RMS	√	LCD Backlight	√
Diode Test	√	Simulated Chart	√
Audion Test	√	Input Protection	√
Auto Test	√	Input Impedance	10MΩ
On-off Warning	√	LCD Size	69mm x 52mm
Low - Battery Indicator	√	Battery	3V (1.5V x 2) AA
Data Hold	√	Dimension (W x H x D)	85mm x185mmx30mm
Relative Measurement	√	Device Weight	0.32 kg

- [1] When measuring current, for 10A the measuring duration should not be over 2 minutes within 10 minutes, and in this 10 minute, no other current should flow through except within the measuring duration.
- [2] When measuring capacitance, for the 20.00mF range, the measuring duration should be over 30 seconds.
- [3] When measuring frequency, the typical waveform is Square or Sine. The signal meets the following conditions:
- | Frequency | Amplitude(rms) |
|---------------|-------------------|
| 1 Hz – 20 MHz | $\geq 1\text{ V}$ |
- [4] When measuring duty cycle, the typical waveform is Square.

STANDARD INCLUSIONS

- Basic Instrument
- Test Lead
- Multi-Functional Test Socket
- K-Type Thermocouple
- Soft Bag
- Conformance Certificate
- Instruction Manual

OPTIONAL

- Thin-tipped test lead
- Bluetooth USB dongle
- Calibration Certificates are issued in Accordance with our Scope as granted by NABL per ISO/IEC 17025:2017 Standards

Manufactured by



Since 1972

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AN ISO 9001:2015 CERTIFIED COMPANY

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Specifications subject to change owing to continuous development. Contact us for latest Datasheet.

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