

NAGMAN

INSTRUMENTS & ELECTRONICS
PRIVATE LIMITED, INDIA



Nagman 15+

- Compact, Light Weight Unit with Holster

- Capability to Measure & Simulate DC Voltages, DC Current & Frequency

- 5 digits display of Measurement & 6 digits display for Simulation

- Dual LCD with white LED for backlight

- Measurement & Simulation of :

DC Voltages :

200 mV, 5 V & 50 V in Measurement Mode

1000 mV & 10 V in Simulation Mode

DC Current :

50 mA in Measurement Mode; 20 mA in Simulation Mode

Frequency :

50 Hz, 5 KHz & 50 KHz in Measurement Mode

100 KHz, 1 KHz & 10 KHz in Simulation Mode

- Capability to perform Continuity Test & provide Loop Supply (24 V) for Transmitters

INPUT FUNCTIONS (Measurement)

Functions	Reference	Ranges	Resolution	Accuracy	Remarks
DC Voltage	200 mV	-20 to 220 mV	10 mV	0.02 + 0.02	Impedance approximately 100 MΩ
	5 V	-0.5 to 5.5 V	0.1 mV	0.02 + 0.01	Impedance approximately 1 MΩ
	50V	-5 to 55 V	1 mV	0.03 + 0.01	
DC mA	50 mA	-4 to 55 mA	1 mA	0.02 + 0.01	Impedance : 5 Ω

Frequenc y	500 Hz	3 to 500 Hz	0.01 Hz	±2 digit	Impedance : 100 kΩ Min.
	5 KHz	3 Hz to 5 KHz	0.1 Hz		Sensitivity : 3 Vp-p min.
	50 KHz	3 Hz to 50 KHz	1 Hz		Duty Cycle : 50%
Continuit y	<250 Ω	Close / open	—	—	Open Circuit Voltage : about 2.5 V

OUTPUT FUNCTIONS (Simulation)

Functions	Reference	Ranges	Resolution	Accuracy	Remarks
DC Voltage	1000 mV	-100 to 1100 mV	10 mV	0.02 + 0.01	Maximum output : 2 mA
	10 V	-1 to 11 V	0.1 mV	0.02 + 0.01	Maximum output : 5 mA
DC Current	20 mA	0 to 22 mA	1 mA	0.02 + 0.02	Simulator Transmitter : 5 to 28 V Power Supply outside; 1 KΩ at 20 mA

Frequenc y	100 Hz	1 to 110 Hz	0.01 Hz	±2 count	Output voltage : 1 to 11 V _{p-p} (zero base waveform); Amplitude Accuracy : ±10% + 0.5 V; Maximum load : >100 KΩ Duty Cycle : 50%
	1 KHz	0.1 to 1.1 KHz	1 Hz		
	10 KHz	1 to 11 KHz	0.1 KHz		
Pulse	100 Hz	1 to 100000 cycles	1 cycle	—	
	1 KHz				
	10 KHz				
Loop	24 V	—	—	±10%	Maximum output current : 25 mA Short circuit protected