

Voltage / Milliamp

# Nagman Voltage / Milliamp Calibrator

Portable, Handy  
& Sturdy Case with Grip

*Basic Accuracy : ±0.02%*

*Capability to Measure & Simulate  
DC Voltages, DC Current, Frequency, Pulse & Loop*

**Model : Nagman 15 +**

- 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 Liquid Crystal Display with white LED for backlight
- Measurement & Simulation of

DC Voltages :  
50 mV, 500 mV, 5 V & 50 V in Measurement Mode  
100 mV, 1 V & 10 V in Simulation Mode

DC Current :  
50 mA in Measurement Mode  
20 mA in Simulation Mode

Frequency :  
100 Hz, 1 KHz & 10 KHz in Measurement mode  
100 Hz, 1 KHz, 10 KHz & 100 KHz in Simulation Mode

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



## PHYSICAL SPECIFICATIONS`

### MEASURING FUNCTIONS

Function	Reference	Ranges	Resolution	Accuracy	Remarks
DC Voltage	-20 to 220 mV	10 $\mu$ V	0.02+ 0.02	-20 to 220 mV	Input Resistance : approximately 100 M $\Omega$
	-0.5 to 5.5 V	0.1 mV	0.02 + 0.01	-0.5 to 5.5 V	Input Resistance approximately 1 M $\Omega$
	-5 to 55 V	1 mV	0.03 + 0.01	-5 to 55 V	
DC mA	50 mA	-4 to 55 mA	1 $\mu$ A	0.02 + 0.01	Input Resistance : 5 $\Omega$
Frequency	500 Hz	3 to 500 Hz	0.01 Hz	$\pm 2$ count	Input Impedance : 100 k $\Omega$ atleast. Sensitivity : 3 Vp-p min. Duty Cycle : 50%
	5 KHz	3 Hz to 5 KHz	0.1 Hz		
	50 KHz	3 Hz to 50 KHz	1 Hz		
Continuity	<250 $\Omega$ sound	Close / Open	---	---	Open Circuit Voltage : about 2.5 V

### OUTPUT FUNCTIONS

Function	Reference	Ranges	Resolution	Accuracy	Remarks
DC Voltage	1000 mV	-100 to 1100 mV	10 $\mu$ V	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 $\mu$ A	0.02 + 0.02	Simulator Transmitter : 5 to 28 V Power Supply outside; 1 K $\Omega$ at 20 mA
Frequency	100 Hz	1 to 110 Hz	0.01 Hz	$\pm 2$ count	Output voltage : 1 to 11 V (zero base waveform); Amplitude Accuracy : $\pm 10\% + 0.5$ V; Maximum load : >100 K $\Omega$ 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	---	---	$\pm 10\%$	Maximum output current : 25 mA Short circuit protected

#### STANDARD DELIVERY

- Voltage / Milliamp Calibrator – Nagman 15+
- 4 x 1.5 AAA Type Alkaline Batteries
- Operation Manual
- Test Leads
- Test Certificate

#### OPTIONALS

- NABL Traceable Calibration Certificate

Product of

## NAGMAN INSTRUMENTS & ELECTRONICS (P) LTD.

- Comprehensive Calibration Solutions (Standards / Systems / Packages / Software / Services)

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