

SPECIFICATIONS

The instrument complies with: EN61010-1.

Insulation: Class2, Double insulation.

Overvoltage category: CATII 1000V.

Display: 4000 counts LCD display with function indication.

Polarity: Automatic, (-) negative polarity indication.

Overrange: "OL" mark indication.

Low battery indication: The "BAT" is displayed when the battery voltage drops below the operating level.

Measurement rate: 2 times per second, nominal.

Auto power off: Meter automatically shuts down after approx. 30 minutes of inactivity.

Operating environment: 0 °C to 50 °C (32 °F to 122 °F)
at < 70 % relative humidity.

Storage temperature: -20 °C to 60 °C (-4 °F to 140 °F)
at < 80 % relative humidity.

For inside use, max height: 2000m

Pollution degree: 2

Power: One 9V battery , NEDA 1604, IEC 6F22.

Dimensions: 146 (H) x 66.2 (W) x 41.5 (D) mm

Weight: Approx.: 200g.

Accuracy is given at 18 °C to 28 °C (65 °F to 83 °F),
less than 70 % RH

DC Voltage (Auto-ranging)

Range	Resolution	Accuracy
400.0mV	0.1mV	$\pm 0.5\%$ of rdg ± 2 dgts
4.000V	1mV	$\pm 1.2\%$ of rdg ± 2 dgts
40.00V	10mV	
400.0V	100mV	
1000V	1V	$\pm 1.5\%$ of rdg ± 2 dgts

Input Impedance: 10M Ω .

Maximum Input: 1000V dc or 700V ac rms.

AC Voltage (Auto-ranging)

Range	Resolution	Accuracy
4.000V	1mV	$\pm 1.2\%$ of rdg ± 3 dgts
40.00V	10mV	$\pm 1.5\%$ of rdg ± 3 dgts
400.0V	100mV	
700.0V	1V	$\pm 2.0\%$ of rdg ± 4 dgts

Input Impedance: 10M Ω .

Frequency Range: 50 to 400Hz

Maximum Input: 1000V dc or 700V ac rms.]

DC Current (Auto-ranging for μ A, mA ,A)

Range	Resolution	Accuracy
400.0 μ A	0.1 μ A	$\pm 1.0\%$ of rdg ± 3 dgts
4000 μ A	1 μ A	$\pm 1.5\%$ of rdg ± 3 dgts
40.00mA	10 μ A	
400.0mA	100 μ A	
4A	1mA	$\pm 2.5\%$ of rdg ± 5 dgts
20A	10mA	

Overload Protection: 0.5A / 250V and 20A / 250V Fuse.

Maximum Input: 400mA dc or 400mA ac rms on μ A / mA ranges,
20A dc or ac rms on 4A, 20A range.

AC Current (Auto-ranging for μA , mA, A)

Range	Resolution	Accuracy
400.0 μA	0.1 μA	$\pm 1.5\%$ of rdg ± 5 dgts
4000 μA	1 μA	$\pm 1.8\%$ of rdg ± 5 dgts
40.00mA	10 μA	
400.0mA	100 μA	
4A	1mA	$\pm 3.0\%$ of rdg ± 7 dgts
20A	10mA	

Overload Protection: 0.5A / 250V and 20A / 250V Fuse.

Frequency Range: 50 to 400 Hz

Maximum Input: 400mA dc or 400mA ac rms on μA / mA ranges, 20A dc or ac rms on 4A, 20A range.

Resistance (Auto-ranging)

Range	Resolution	Accuracy
400.0 Ω	0.1 Ω	$\pm 1.2\%$ of rdg ± 4 dgts
4.000k Ω	1 Ω	$\pm 1.0\%$ of rdg ± 2 dgts
40.00k Ω	10 Ω	$\pm 1.2\%$ of rdg ± 2 dgts
400.0k Ω	100 Ω	
4.000M Ω	1k Ω	
40.00M Ω	10k Ω	$\pm 2.0\%$ of rdg ± 3 dgts

Input Protection: 250V dc or 250V ac rms.

Capacitance (Auto-ranging)

Range	Resolution	Accuracy
40.00nF	10pF	$\pm 5.0\%$ of rdg ± 7 dgts
400.0nF	0.1nF	$\pm 3.0\%$ of rdg ± 5 dgts
4.000 μF	1nF	
40.00 μF	10nF	
100.0 μF	0.1 μF	$\pm 5.0\%$ of rdg ± 5 dgts

Input Protection: 250V dc or 250V ac rms.

Frequency (Auto-ranging)

Range	Resolution	Accuracy
9.999Hz	0.001Hz	±1.5% of rdg ± 5 dgts
99.99Hz	0.01Hz	
999.9Hz	0.1Hz	±1.2% of rdg ± 3 dgts
9.999kHz	1Hz	
99.99kHz	10Hz	
999.9kHz	100Hz	
9.999MHz	1kHz	±1.5% of rdg ± 4 dgts

Sensitivity: 0.5V RMS min. while $\leq 1\text{MHz}$;

Sensitivity: >3V RMS while >1MHz ;

Overload protection: 250V dc or ac rms.

Duty Cycle

Range	Resolution	Accuracy
0.1%–99.9%	0.1%	±1.2% of rdg ± 2 dgts

Pulse width: >100us, <100ms;

Frequency width: 5Hz – 150kHz

Sensitivity: >0.5V RMS

Overload protection: 250V dc or ac rms.

Clamp DC Current

Range	Resolution	Accuracy
400A	0.1A	±1.0% of rdg ±3dgts (meter only, Clamp-on Adaptor accuracy not included)

Sensor: Clamp-on Adaptor (Note: not provide)

Overload protection: 250V dc or ac rms..

Clamp AC Current

Range	Resolution	Accuracy
400A	0.1A	±1.5% of rdg ±3dgts (meter only, Clamp-on Adaptor accuracy not included)

Sensor: Clamp-on Adaptor (Note: not provide)

Frequency Range: 50 to 400 Hz

Overload protection: 250V dc or ac rms..

9V Battery test

Range	Resolution	Accuracy
9V	10mV	$\pm 1.0\%$ of rdg ± 3 dgts

Test current : 6mA

Overload protection: 250V dc or ac rms..

Temperature

Range	Resolution	Accuracy
-20 ^o C~+760 ^o C	1 ^o C	$\pm 3\%$ of rdg ± 3 dgts
-4 ^o F~+1400 ^o F	1 ^o F	

Sensor: Type K Thermocouple

Overload protection: 250V dc or ac rms..

Diode Test

Test current	Resolution	Accuracy
0.3mA typical	1 mV	$\pm 10\%$ of rdg ± 5 dgts

Open circuit voltage: 1.5V dc typical

Overload protection: 250V dc or ac rms.

Audible continuity

Audible threshold: Less than 50 Ω Test current: <0.3mA

Overload protection: 250V dc or ac rms.