

SALIENT FEATURES

- Overload protection up to 1200V DC / AC RMS in the AC/DC Voltage range.
- Overload protection up to 20A DC/AC RMS by fast blow fuse in the AC/DC Current range.
- Overload protection up to 600V DC / AC RMS in the capacitance, Frequency, Temperature, Resistance, Continuity and Diode Test Range.
- The instrument has overload protection up to 20A DC/AC RMS in the Voltage Range and 1000V DC/AC RMS in the Current Range.
- Surge Protection of 8 kV peak IEC 61010
- O Ring Seal body.
- The instrument has IP-67 Protection making the body water proof even if dipped in 1m. deep water for 30 mins.
- Double molded injection body with rubber lining to provide insulation against electrical shocks and anti-slip grip.
- Confirms to EN61010-1, CAT IV 600V, CAT III 1000V.
- Two Years' Warranty against any manufacturing defects

GENERAL SPECIFICATIONS

The instrument complies with : IEC61010-1:2001 and IEC, 61010-031:2002

- Insulation** : Class2, Double insulation.
Overvoltage category : CATIII 1000V, CAT IV 600V.
Display : 4000 counts Backlit 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. 15 minutes of inactivity.
Operating environment : 0°C to 50°C (32°F to 122°F) @ 70% R.H.
Storage temperature : -20°C to 60°C (-4°F to 140°F) @ < 80% R.H.
For inside use, max height : 2000mm
Pollution degree : 2
Power : One 9V battery , NEDA 1604, IEC 6F22.
Dimensions : 182 (H) x 82 (W) x 55 (D) mm
Weight : Approx.: 375g
Data Hold : To freeze the displayed data
Relative measuring facility

TECHNICAL SPECIFICATIONS

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	± 0.5% of rdg + 2 dgts
4.000V	1mV	± 1.2% of rdg + 2 dgts
40.00V	10mV	
400.0V	100mV	
1000V	1V	± 1.5% of rdg + 2 dgts

- Input Impedance** : 7.8MΩ.
Maximum Input : 1200V DC or 1200V AC rms.

*Technical Specifications & Appearance are subject to change without prior notice



AC Voltage (Auto-ranging except 400mV)

Range	Resolution	Accuracy
400.0mV	0.1mV	± 1.5% of rdg + 70 dgts
4.000V	1mV	± 1.2% of rdg + 3 dgts
40.00V	10mV	
400.0V	100mV	± 1.5% of rdg ± 3 dgts
1000V	1V	
		± 2.0% of rdg + 4 dgts

- Input Impedance** : 7.8MΩ.
AC Response : 50 Hz to 400 Hz
Maximum Input : 1200V DC or 1200V AC rms.

DC Current (Auto-ranging for uA and mA)

Range	Resolution	Accuracy
400.0uA	0.1uA	± 1.0% of rdg ± 3 dgts
4000uA	1uA	
40.00mA	10uA	± 1.5% of rdg ± 3 dgts
400.0mA	100uA	
20A	10mA	± 2.5% of rdg + 5 dgts

- Overload Protection** : 0.5A / 1000V and 20A /500V Fuse
Maximum Input : 400mA DC or 400mA AC rms on uA / ma ranges, 20A DC or AC rms on 20A range.

TECHNICAL SPECIFICATIONS

AC Current (Auto-ranging for uA and mA)

Range	Resolution	Accuracy
400.0uA	0.1uA	± 1.5% of rdg + 5 dgts
4000uA	1uA	± 1.8% of rdg + 5 dgts
40.00mA	10uA	
400.0mA	100uA	
20A	10mA	± 3.0% of rdg + 7 dgts

Overload Protection : 0.5A / 1000V and 20A / 500V Fuse
AC Response : 50 Hz to 400 Hz
Maximum Input : 400mA DC or 400mA AC rms on uA / mA ranges, 10A DC or AC rms on 10A range

Resistance (Auto-ranging)

Range	Resolution	Accuracy
400.0Ω	0.1Ω	± 1.2% of rdg + 4 dgts
4.000Ω	1Ω	± 1.0% of rdg + 2 dgts
40.00kΩ	10Ω	± 1.2% of rdg ± 2 dgts
400.0kΩ	100Ω	
4.000MΩ	1kΩ	
40.00MΩ	10kΩ	± 2.0% of rdg + 3 dgts

Input Protection : 600V DC or 600V AC rms

Capacitance (Auto-ranging)

Range	Resolution	Accuracy
4.000nF	1pF	± 5.0% of rdg + 0.2 nF
40.00nF	10pF	± 5.0% of rdg + 7 dgts
400.0nF	0.1nF	± 3.0% of rdg + 5 dgts
4.000uF	1nF	
40.00uF	10nF	
200.0uF	0.1uF	± 5.0% of rdg ± 5 dgts

Input Protection : 600V DC or 600V AC rms

Frequency (Auto-ranging)

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

Sensitivity : > 0.5V RMS while ≤ 1MHz

Sensitivity : > 3V RMS while > 1MHz

Overload protection : 600V 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 : 600V DC or AC rms

Temperature

Range	Resolution	Accuracy
-20°C~+760°C	1°C	±3% of rdg ± 5°C/9°F
-4°F~+1400°F	1°F	

Sensor : Type K Thermocouple

Overload protection : 600V DC or AC rms

Diode Test

Test Current	Resolution	Accuracy
0.3mA typical	1 mV	± 10% of rdg ± 5 dgts

Open circuit voltage : 1.5V dc typical

Overload protection : 600V DC or AC rms

Audible continuity

Audible threshold : Less than 150Ω

Test current : < 0.3 mA

Overload protection : 600V DC or A rms

OPTIONAL ACCESSORIES:

- Infra-red non contact temperature adaptor to measure temperature from -30°C to 550°C with fixed emissivity of 0.95 and distance to sighting ratio of 8:1. Model TS-03
- Clamp on Current Adaptor to measure current up to 1000A. Model CA-1000D
- Clamp on Current Adaptor to measure upto 200A AC. Model CA-01