

Technical Specifications for Digital Multimeter.

A:SPECIFICATION:

Meter should measure:

- DC current measurement and AC current.
- AC/DC voltage measurement up to 1000V.
- Resistance measurement and continuity test:
 - continuity test with acoustic signalling (beeper)
- Temperature measurement (Fahrenheit and Celsius units).
- Frequency measurement.
- Capacitance measurement.
- Diode test.
- Duty cycle.

Additionally:

- auto ranging/manual range selection,
- "DATA HOLD" function, for holding measured values,
- backlit LCD,
- "REL" function,
- "Max/Min" function,
- over range indication,
- Display 4¾ digits (40000 max)
- "AUTO-OFF" function.

AC/DC Current measurement:

Range	Resolution	Accuracy
400.0µA	0.01µA	For DC \pm (1.0% m.v + 3 digits) For AC \pm (1.5% m.v + 30 digits)
4000.0µA	0.1µA	
40.00 mA	0.001 mA	
400.00 mA	0.01mA	
10.00A	0.001A	

Frequency measurement: (Electrical)

Range	Resolution	Accuracy
40.000 Hz to 10.000 KHz	0.01 Hz to 0.001 KHz	\pm 0.5% m.v

Frequency measurement: (Electronic)

Range	Resolution	Accuracy
40.000 Hz	0.001 Hz	$\pm(0.1\% \text{ m.v} + 1 \text{ digit})$
400.00 Hz	0.01 Hz	
4.000 KHz	0.0001 KHz	
40.000KHz	0.001 KHz	
400.00 KHz	0.01 KHz	
4.0000 MHz	0.0001 MHz	
40.000 MHz	0.001 MHz	
100.00 MHz	0.01 MHz	

AC Voltage measurement:

Range	Resolution	Accuracy
400.0mV	0.1mV	$\pm(1\% \text{ m.v} + 40 \text{ digits})$
4.0000V	0.0001V	$\pm(1\% \text{ m.v} + 30 \text{ digits})$
40.00V	0.001V	
400.0V	0.01V	
1000.0V	0.1V	

DC Voltage measurement:

Range	Resolution	Accuracy
400.0mV	0.01mV	$\pm(0.06\% \text{ m.v} + 4 \text{ digits})$
4.0000V	0.0001V	
40.000V	0.001V	
400.00V	0.01V	
1000.0V	0.1 V	$\pm(0.1\% \text{ m.v} + 5 \text{ digits})$

Resistance measurement:

Range	Resolution	Accuracy
400.00Ω	0.01Ω	±(0.3% m.v + 9 digits)
4.0000KΩ	0.0001KΩ	±(0.3% m.v + 4 digits)
40.000KΩ	0.001KΩ	
400.00KΩ	0.01KΩ	
4.0000MΩ	0.0001MΩ	
40.000MΩ	0.001MΩ	±(2.0% m.v + 10 digits)

Capacitance measurement:

Range	Resolution	Accuracy
40.000nF	0.001 nF	± (3.5% m.v. + 40 digits)
400.00nF	0.01 nF	
4.0000μF	0.0001 μF	± (3,5% m.v. + 10 digits)
40.00μF	0.001 μF	
400.00μF	0.01 μF	
4000.0μF	0.1 μF	±(5% m.v + 10 digits)
40.000 mF	0.001 mF	

Temperature measurement:

Range	Resolution	Accuracy
-50.0...+1200.0°C	0.1°C	±(1% m.v + 2.5°C,4.5°F)
-58.0°F+2192.0°F	0.1°F	

Duty Cycle measurement:

Range	Resolution	Accuracy
0.10.....99.9%	0.01%	±(1.2% m.v + 2 digits)

Electric security:

- measurement category
- protection class acc. to EN 60529

CAT III 1000V acc. to EN 61010-1:2004
IP67

Other technical data:

- power supply	9V battery type 6LR61
- display	40000 counts, backlit LCD
- continuity test	$I < 0,35\text{mA}$, sound signal for $R < 35\Omega$
- diode test	$I = 0,9\text{mA}$, $U = 2.8\text{V DC}$
- over range indication	OL displayed
- sampling rate	2 times per second
- input impedance	$10\text{M}\Omega$ (V DC) and $9\text{M}\Omega$ (V AC)
- auto power OFF	15 min.
- dimensions	137 x 81 x 55 mm
- weight	342 g
- accordance with following standards	EN 61010-1:2004 EN 61010-2-032
- quality standard	ISO 9001

Rated operational conditions:

- operating temperature	0...+40°C
- storage temperature	-20...+60°C
- operating humidity	max 80%

B: SERVICE AFTER SALE:

Bidder will have to submit the documentary evidences of having established mechanism for prompt services as & when required.