

Technical Specifications for Digital Multimeter.

A:SPECIFICATION:

Meter should measure:

- DC current measurement and AC current.
- AC/DC voltage measurement up to 600V.
- 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,
- over range indication,
- Display 3 $\frac{7}{8}$ digits(5000 max)
- "AUTO-OFF" function.

AC Current measurement:

Range	Resolution	Accuracy
400.0 μ A	0.1 μ A	$\pm(1.5\% \text{ m.v} + 5 \text{ digits})$
4.000 μ A	1 μ A	$\pm(1.8\% \text{ m.v} + 5 \text{ digits})$
40.00 mA	0.01 mA	
400.00 mA	0.1mA	
4.000A	0.001A	$\pm(3.0\% \text{ m.v} + 7 \text{ digits})$
10.00A	0.01A	

DC Current measurement:

Range	Resolution	Accuracy
400.0 μ A	0.1 μ A	$\pm(1.0\% \text{ m.v} + 3 \text{ digits})$
4.000 μ A	1 μ A	$\pm(1.5\% \text{ m.v} + 3 \text{ digits})$
40.00 mA	0.01 mA	
400.00 mA	0.1mA	
4.000A	0.001A	$\pm(2.5\% \text{ m.v} + 5 \text{ digits})$
10.00A	0.01A	

Frequency measurement:

Range	Resolution	Accuracy
5.000 Hz	0.001 Hz	±(1.5% m.v + 5 digits)
50.00 Hz	0.01 Hz	
500.0 Hz	0.1 Hz	±(1.2% m.v + 3 digits)
5.000 KHz	0.001 KHz	
50.00 KHz	0.01 KHz	
500.0 KHz	0.1 KHz	±(1.5% m.v + 4 digits)
5.000 MHz	0.001 MHz	
10.00 MHz	0.01 MHz	

AC Voltage measurement:

Range	Resolution	Accuracy
400.0mV	0.1mV	±(1.5% m.v + 70 digits)
4.000V	0.001V	±(1.2% m.v + 3 digits)
40.00V	0.01V	±(1.5% m.v + 3 digits)
400.0V	0.1V	
600.0V	1V	±(2% m.v + 4 digits)

DC Voltage measurement:

Range	Resolution	Accuracy
400.0mV	0.1mV	±(0.5% m.v + 2 digits)
4.000V	0.001V	±(1.2% m.v + 2 digits)
40.00V	0.01V	
400.0V	0.1V	
600.0V	1V	±(1.5% m.v + 2 digits)

Resistance measurement:

Range	Resolution	Accuracy
400.0Ω	0.1Ω	±(1.2% m.v + 4 digits)
4.000KΩ	0.001KΩ	±(1.0% m.v + 2 digits)
40.00KΩ	0.01KΩ	±(1.2% m.v + 2 digits)
400.0KΩ	0.1KΩ	
4.000MΩ	0.001MΩ	
40.00MΩ	0.01MΩ	±(2.0% m.v + 3 digits)

Capacitance measurement:

Range	Resolution	Accuracy
40.00nF	0.01 nF	±(5% m.v + 7 digits)
400.0nF	0.1 nF	±(3% m.v + 5 digits)
4.000μF	0.001 μF	
40.00μF	0.01 μF	
100.0μF	0.1 μF	±(5% m.v + 5 digits)

Temperature measurement:

Range	Resolution	Accuracy
-20.0...760.0°C	1°C	±(3% m.v + 5°C)
-4.0....1400°F	1°F	±(3% m.v + 5°F)

Duty Cycle measurement:

Range	Resolution	Accuracy
0.1.....99.9%	0.1%	±(1.2% m.v + 2 digits)

Electric security:

- measurement category
- protection class acc. to EN 60529

CAT II 600V acc. to EN 61010-1:2004
IP40

Other technical data:

- power supply
- display
- continuity test
- diode test
- over range indication
- sampling rate
- input impedance
- auto power OFF
- dimensions
- weight
- accordance with following standards
- quality standard

9V battery type 6LR61
5000 counts, backlit LCD
 $I < 0,3\text{mA}$, sound signal for $R < 50\Omega$
 $I = 0,3\text{mA}$, $U = 1,5\text{V DC}$ 0
0L displayed
2 times per second
7.8M Ω (V DC and V AC)
approx. 30 min.
138 x 68 x 37 mm
210 g
EN 61010-1:2004 EN 61010-2-032
ISO 9001

Rated operational conditions:

- operating temperature
- storage temperature
- operating humidity

0...+50°C
-20...+60°C
max 80%

B: SERVICE AFTER SALE:

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