

Specification for Digit Multimeter,Quantity-04

SN	Parameter	Vendor to confirm/specify	Vendor's comments(Specify/confirmed)	Deviation (if any)	Remark
<u>GENERAL FEATURES :</u>					
1	4½ digit or better	Vendor to specify			
2	Multi meter should have LCD Display with backlight.	Vendor to confirm			
3	Auto Power Off	Vendor to confirm			
4	Auto ranging/Manual range selection	Vendor to confirm			
5	Auto polarity	Vendor to confirm			
6	Over load protection in all ranges	Vendor to confirm			
7	Continuity buzzer	Vendor to confirm			
8	Safety standard. CAT III 1000V	Vendor to specify			
9	Hand held	Vendor to confirm			
<u>TECHNICAL FEATURES:</u>					
1	DC Voltage:				
a)	Measurable range: 1mV to 1000Volts or better:	Vendor to specify			
b)	Measurable range should be sub divided into minimum 5 sub –ranges	Vendor to specify each sub-ranges			
c)	Best Resolution: 0.1 mV	Vendor to specify resolution of each sub-range			
d)	Accuracy: 0.2 % of individual sub-range	Vendor to specify accuracy of each sub-range			
2	AC Voltage (True RMS):				
a)	Measurable range: 1mV to 1000Volts or better	Vendor to specify			
b)	Measurable range should be sub divided into minimum 4 sub –ranges	Vendor to specify each sub-ranges			
c)	Best Resolution: 0.1 mV	Vendor to specify resolution of each sub-range			
d)	Accuracy at 50 Hz: 1.5 % of individual sub -range	Vendor to specify accuracy of each sub-range			
3	DC Current				
a)	Measurable range 1 µA to 10 A or better:	Vendor to specify			
b)	Measurable range should be sub divided into minimum 5 sub –ranges	Vendor to specify each sub-ranges			
c)	Best Resolution: 0.1 µA	Vendor to specify resolution of each sub-range			
d)	Accuracy: 1.2 % of individual sub- range	Vendor to specify accuracy of each sub-range			
4	AC Current (True RMS):				
a)	Measurable range 1 µA to 10 A or better:	Vendor to specify			
b)	Measurable range should be sub divided into minimum 5 sub –ranges	Vendor to specify each sub-ranges			
c)	Best Resolution: 0.1 µA	Vendor to specify resolution of each sub-range			
d)	Accuracy: 2 % of individual sub- range	Vendor to specify accuracy of each sub-range			
5	Resistance				
a)	Measurable range :1 Ω to 10 mega Ω or better	Vendor to specify			
b)	Measurable range should be sub divided into minimum 5 sub –ranges	Vendor to specify each sub-ranges			
c)	Best Resolution: 0.1 Ω	Vendor to specify resolution of each sub-range			
d)	Accuracy: 1 % of individual sub- range	Vendor to specify accuracy of each sub-range			
6	Capacitance:				
a)	Measurable range: 1 nF to 10 uF or better	Vendor to specify			
b)	Measurable range should be sub divided into minimum 3 sub –ranges	Vendor to specify each sub-ranges			

c)	Accuracy: 5.2 % of individual sub- range	Vendor to specify accuracy of each sub-range			
7	Facility of temperature measurement of metal surfaces with suitable temperature measuring probe should be provided				
a)	Measurable range :0 to 150°C	Vendor to specify			
b)	Max Permissible error: $\pm 4^{\circ}\text{C}$ in the range 0 to 150°C	Vendor to specify			
8	Diode test: diode check facility shall be available	Vendor to confirm			
9	Frequency measurement				
a)	Measurable range :50 Hz to 10 K Hz	Vendor to specify			
b)	Accuracy: 0.5 % of measured value in the range 50 Hz -10 Khz	Vendor to specify			
10	Operating Temperature: 0 to 40°C	Vendor to specify			
<u>GENERAL REQUIREMENTS:</u>					
1	User manual	Vendor to confirm			
2	Installed Batteries	Vendor to confirm			
3	A pair of good quality test leads/probes	Vendor to confirm			
<u>GUARANTEE/WARRANTY:</u>					
1	Guarantee/ Warranty certificate for 12 months from final acceptance of material at BHEL-HEEP, Haridwar or 18 months from date of despatch whichever is earlier.	Vendor to confirm			