

TECHNICAL SPECIFICATIONS OF Trms DIGITAL MULTIMETER

Sl. No.	GENERAL DESCRIPTION	Remarks
1	General: Digital multi-meter should be dual display Trms with high accuracy, robust, rugged, double mold casing and easy to use. Digital multi-meter should able to give direct readings of test object automatically and SELECT, RANGE, HOLD, REL, LIGHT, MAX/MIN function should be available.	
2	Measurement Function: Voltage (AC/DC-mV, V), Current (AC/DC-mA, A), resistance, capacitance, frequency, continuity tester with beeps, Diode tester etc.	
3	Display: 4 Digit, 6000-count LCD dual display with white backlit, Readings should easily readable with large character size viewable in direct sunlight and low light level.	
The ranges, resolution, accuracy of the test set for different parameters should be as per the points mentioned below		
4	AC VOLTAGE (50 Hz -500 Hz) Trms : up to 1000V Max ,Resolution up to 600V- 0.1 V, Accuracy : 1.5 % +3 (rdg + digit).	
5	DC VOLATGE: up to 1000 V Max , Resolution up to 600V- 0.1 V, Accuracy : 1.0 % +3 (rdg + digit)	
6	RESISTANCE : Up to 40 M Ω Accuracy: 0.5 % +3 (rdg+ digit) up to 600K Ω	
7	CAPACITANCE: up to 600 μ F. Accuracy: 3 % + 10 (rdg+digit) up to 60.0 μ F	
8	FREQUENCY: up to 500 KHz. Accuracy : 0.5 % +3 (rdg+digit)	
9	AC CURRENT (50 Hz -500 Hz) Trms: up to 600mA, Resolution : 0.1 mA & 10 A max, Resolution : 10 mA, Accuracy : 2.0 % + 10 (rdg+digit)	
10	DC CURRENT: up to 600mA, Resolution : 0.1 mA & 10 A max, Resolution : 10 mA, Accuracy : 1.5 % + 10 (rdg+digit)	
11	Protection: - Fuse protection for μA, mA & 10A current input : Fast Blow type ceramic fuse / better - Over load protection- 440V DC/AC rms - Low battery indication.	
12	Input power supply: 9V Battery type 6F22 or equivalent.	
13	Environmental conditions: Operating Temp.: 0 $^{\circ}$ C to 50 $^{\circ}$ C, Humidity: 0-80% non-condensing, Storage Temp.: 0 $^{\circ}$ C to 50 $^{\circ}$ C and Ambient Temp.: 0 $^{\circ}$ C to 50 $^{\circ}$ C	
14	Safety: - Instruments shall meet all the relevant requirements safety specifications as per applicable standards IEC-61010-1, CAT III(1000V) - IP Rating (dust & water protection)- IP 54	

Signature
07.10.17

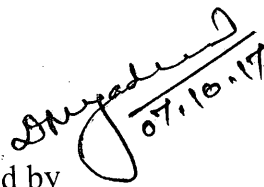
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The Test equipment shall be offered complete with the items mentioned below:

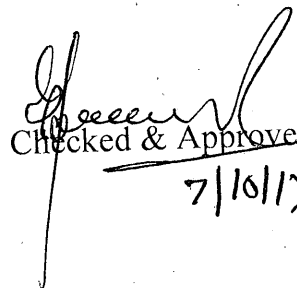
15	Standard Accessory: • Main equipment i.e. Digital Multi-meter with carrying bag • Pairs of test leads • Battery installed • Fuses • Two sets of operating/maintenance manuals in English language.	
16	Calibration Certificate: Two sets of calibration reports from NABL Accredited Lab covering full range of the equipment with following details... Calibration date, periodicity, calibration validity duration & next calibration due date. Traceability details of standard used for calibration. All documents endorsed by authorized signature.	
17	Warranty/Guarantee: The Supplier shall guarantee the product performance for 24 months from the date of successfully commissioning at BHEL Jhansi works and shall provide spares and services during guarantee period to maintain the Meter in working.	
18	Commissioning/Acceptance: Commissioning of the instrument at BHEL work by supplier's representative free of charge. Demonstration of all features of Digital Multi meter for their efficient and effective use. Instruments shall be acceptable only after successful commissioning at BHEL Jhansi works.	
19	Original technical catalog to be included along with technical bid.	
Note: Supplier should submit his technical compliance/comments against each of the above points in above format. Technical bid without complete technical compliance will not be considered for technical evaluation.		

Prepared by



07.10.17

Checked & Approved By



7/10/17