

ANNEXURE TO INDENT NO.: 636220004

PORTABLE DIGITAL MICRO OHM METER

The Micro Ohmmeter shall suitable for measurement of Transformer winding Resistance.

The unit shall equally be suitable for the measurement of any resistance where a large amount of inductance is also present. An integral timer and printer shall also be incorporated to enable precise readings to be recorded at exact and programmed time intervals. The unit shall be practical in use and the instrument should also has safety features to protect both the operator and the instrument from the hazards associated with this type of measurement.

METHOD OF OPERATION

A high test current and unique circuitry should be used to rapidly drive the core into saturation and to eliminate any oscillation of the magnetic field, thus enabling a steady reading to be obtained quickly. A large high intensity LED should be illuminated when the instrument is in the "Read" mode and remains ON when the instrument is switched to "Zero" until any E.M.F., generated in the transformer as the magnetic field collapses, have fallen to a safe level for the leads to be removed.

THE KIT SHOULD BE STRICTLY IN COMPLIANCE WITH THE SPECIFICATIONS AS STATED BELOW:

RANGE	FULL SCALE	RESOLUTION	TEST CURRENT	ACCURACY
100.00 Ω	180.00 Ω	10 mΩ	0.1 Amps	0.1%
10.000 Ω	18.000 Ω	1.0 mΩ	0.5 amps	0.1%
1.0000 Ω	1.8000 Ω	0.1 mΩ	1.0 Amps	0.1%
100.00 mΩ	180.00 mΩ	10 μΩ	5.0 Amps	0.1%
10.000 mΩ	18.000 mΩ	1 μΩ	5.0 Amps	0.1%
1.0000 mΩ	1.8000 mΩ	0.1 μΩ	10 Amps	0.2%

Mains
VA Rating
Accessories

220V, 50Hz AC single phase
500VA
Current Leads 15mtr – 1 pair with suitable clamps/
connectors
Potential Leads 15mtr – 1 pair with suitable clamps/
connectors
Operation Manual
Calibration Certificate
Mains Lead

1. Instrument should be ideal for shop use with light weight, portable and shielded against external charges.
2. One set of complete accessories should be supplied with this unit to extend the testing capability and application of instrument.
3. The instrument along with accessories should fulfill requirement of relevant IEC / ANSI standards.
4. Commissioning of supplied instrument is required at our BHEL Jhansi works.
5. Two sets of Instruction and maintenance manual with detailed circuit diagram should be supplied with the final consignment.
6. Instrument should have protection against incorrect connection, transient surges, output saturation, open ground, zero start interlock, short circuit and overload condition.
7. Similar instrument must be in operational condition for more than seven years in India & performance certificate of the above instrument obtained from the user's end (customer) should be submitted with the technical bid.
8. Offer of recommended spares for five years for smooth operation to be provided along with instrument, should be submitted with the technical bid.
9. Calibration certificate traceable to national/ international standard is required.
10. Inspection at supplier works before commissioning is required.
11. Successful bidder should provide training on operation and handling of the above instrument to Testing personnel during installation.
12. Test and guarantee certificate is required.



S N MANDAL
(Sr. Manager / Trfr. Testing)