Technical Specifications for Digital Insulation Tester-1kV

A: SCOPE:

This specification covers Design/Engineering, manufacture, testing & calibration as well as supply & delivery of **Digital Insulation Tester (1 kV)** suitable for measuring insulation resistance, Running Switchyard of different level as per applicable standard & testing procedure. The offer for supply should include all accessories even though not specifically mentioned but which are essential for complete & satisfactory operation. The instrument shall be portable, light weight with internal Rechargeable battery or non-rechargeable battery

B: SPECIFICATION:

1. Insulation Tester should be suitable for application in:
   a. Insulation testing of EHV Power Transformers at charged Switchyard.
   b. Insulation testing of EHV under-ground Power Cables.
   c. Insulation testing of EHV switchgears within charged Switch-yard.
   d. Different kV level charged /running Sub-Stations.
2. Instrument should have rechargeable battery & battery charger. Battery should be rugged, long life & long working hours.
3. Instrument should have programmable time to set Resistance values as T1, T2, T3 up to 10 minutes.
4. Instrument should have direct digital display in the range of Kilo/Mega/Giga Ohms (Max. range 10GΩ) in the product & display should be large enough to read the result with the backlight function.
5. Instrument should have selectable voltage range of 50V, 100V, 250V, 500V, 1000V.
6. Instrument should have rated short-circuit rejection current 1mA with permissible accuracy limit.
7. Instrument should have continuity measurement of protective and equipotential conductors according to EN 61557-4 with the >200mA current.
8. Instrument should have capacitance measurement range up to 9.99µF.
9. Instrument should have leakage current measurement.
10. Instrument should have measurement of AC/DC voltage up to 600V.
11. Instrument should have safety compliance as per IEC61557 CAT_IV or equivalent.
12. Instrument should have ingress protection of IP67.
13. Instrument should have conformity to the following standards:
    a. EMC requirements (immunity for industrial environment) according to standards 61326-1:2006 and EN 61326-2-2:2006
    b. Type of insulation double, EN 61010-1 and IEC 61557 compliant
    c. Quality standard: design, construction and manufacturing are ISO 9001, ISO 14001, PN-N-18001 compliant
14. Instrument should have suitable carrying case for instrument & its complete accessories.
15. Instrument should have case protection rating in accordance with EN 60529: IP67.

C: SERVICE AFTER SALE:

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