

MAHARASHTRA STATE ELECTRICITY TRANSMISSION CO. LTD. CIN No. U40109MH2005SGC153646

From,

Executive Engineer, MSETCL EHV O&M Division, Sangli. Office building, Miraj, Tal-Miraj Dist. Sangli-416415 Contact no. - 0233-2305816 (0)0233-2304872 (P) 0233-2304873 (F)

E-mail ID- ee3120@mahatransco.in

Website - www.mahatransco.in Ref. EE/EHV O&M/DN/SGL/

Dtd. 2 2 DEC 2025

 $6^{\sqrt{2025-26}}$

Budgetary offer

(Through MSETCL webpage) TO WHOM SO EVER IT MAY CONCERN

Dear Sir,

The budgetary offers through email/By Hand/By Post are invited Providing of Digital IR Tester at various substations under EHV O&M Division, Sangli as per Schedule A. You are requested to quote your lowest rates for tentative quantities as per Schedule A attached herewith.

SCHEDULE 'A

| Sr No. | Description | Unit | Qty | Ex Work Rate |
|-----------|---|------|-----|--------------|
| 1 | Providing of Digital IR test as per below given specification | EA | 1 | |

Note-The above rates are Exclusive of all taxes and charges.

Specification Of 5KV Digital IR Tester:-

The important Technical Specifications of 5KV Digital Insulation Tester are given below:

| Reno | Particular | Specification | | |
|------|---------------------------------|--|--|--|
| 1 | Max. output voltage | 5kV (250V-500V-IKV-2.5KV-5KV in steps), digital | | |
| | Insulation Resistance | | | |
| 2 | Range | From 1 K Ω to Minimum IT Ω & max a above (Auto ranging & Digital) | | |
| | Display | Digital :- $1k\Omega$ to max a above, analog optional | | |
| | Accuracy | ±(5% of reading +5 digits) | | |
| 3 | Short circuit output Current | 3mA for 132kV & below voltage level S/Stns. 5mA & above for 220kV & above voltage level S/Stns. | | |
| 4 | Current range | 6mA | | |
| 5 | Safety Compliance | The test kit should conform to safety standard 61010-1: 2001 & CAT IV 600 V | | |
| 6 | Environment Condition | | | |
| | Operating temperature | 0°C to 50°C | | |
| | Storage temperature | -10°C to 60°C | | |

| 7 | Test modes | Insulation Resistance(IR), Polarization Index (PI), | | |
|----|----------------------------|---|--|--|
| | | Dielectric Absorption Ratio (DAR) | | |
| 8 | Test voltage | 250 V, 500V, 1000 V, 2500 V, 5000 V | | |
| 9 | Noise rejection | 1mA RMS per kV Test voltage | | |
| 10 | Resistance range | 1KΩ to 15 TΩ @5kV | | |
| 11 | Test voltage accuracy | ±5%, ±10 V nominal test voltage at 1 GΩ load (0°C to 30°C | | |
| 12 | Timer range | Up to 99 Minutes. | | |
| 13 | Guard terminal performance | Guards out parallel leakage resistance down to 250 k Ω with a maximum additional resistance error of 1% with a 100. M Ω load | | |
| 14 | Display | 3 ½ Digit 1999 Digital LCD display with backlight | | |
| 15 | Power supply | It shall work on single phase 230 Volts ±20%, 50Hz ± 5% supply with standard socket & internal Re-chargeable Battery | | |
| | Battery | Battery Internal Re-chargeable Li-ion Battery with inbuilt batterycharging circuit. | | |
| | Battery life | 5-6 hours at 5KV 100MΩ load | | |
| 16 | EMC | Meets the requirements of IEC61326-1:2006 | | |
| 17 | Ingress Protection | IP54 | | |
| 18 | Protection/Control | Against short circuit, Over voltage, improper ground connection over load & transient surges, the kit should have alarm/cutoff features to protect the instrument | | |
| 19 | Weight | Easily portable & should not he more than 5kg. | | |
| 20 | Calibration Certificate | Unit shall be duly calibrated before supply. | | |
| 21 | Humidity | Max. 90% non-condensing | | |
| 22 | Cable insulation rating | More than 10kV DC | | |
| | | | | |

Functional requirement of Digital Insulation Resistance tester should meet following points.

- > The test result should have repeatability, consistency & immunity to electromagnetic interference in live switchyard up to 400kV levels.
- > The instrument should automatically discharge the energy transferred to test specimen at the
- > The instrument should have guard terminal to eliminate the effect of surface leakages etc.
- > The Meter should be such that even at low battery indication the meter gives accurate readings.

Note:-

- 1) Please note that said budgetary offer is only for estimate purpose & not considered for any bidding & no work order will be issued based on this Enquiry.
- 2) All interested bidders are requested to submit their best reasonable budgetary offer for above works on Email ID: ee3120@mahatransco.in/ By Hand/By Post upto 18:00 Hrs on Dtd.30.12.2025

Thanking you,

Yours' faithfully

Executive Engineer EHV O&M Division, Sangli