

File No.: Ess. 5628/24

Date: 28/11/2024

Notice Inviting Tender / e-Tender / Quotation

Thrissur Corporation Electricity Department invites sealed quotation / open tenders / e-Tenders from eligible applicants, who fulfill the qualification criteria as stipulated in the Store Purchase Manual Kerala, Kerala PWD Code & LGSD Tender regulations for the Supply / Work mentioned in the below-tabulation sheet.

The details of the Tender are as per following :

Approximate Cost of Supply / Work	:	Rs. 295000/- (incl. GST)
Supply / Work Description	:	Supply of 200 ADC Contact Resistance meter with a range of 199.9 mΩ, 1999 mΩ and 19.99 mΩ and a resolution of 0.1 mΩ, 1 mΩ and 10 mΩ respectively (Details attached)
Tender Security / EMD / Amt.	:	3000/-
Cost of Tender Form	:	672/- (incl. GST)
Tender Document on Sale	:	
A.S. approved by	:	Council Resolution no-5 dt 7/11/24
T.S. approved by	:	
Last Date & Time of issuing Tender Form	:	19/12/2024 2 pm
Last Date & Time of Submitting Tender	:	19/12/2024 2.30 pm
Date & Time of Opening Tender	:	19/12/2024 3.30 pm
Authority & Place for submit of Tender	:	Electricity Department, Thrissur Corporation - 680001

- \* Sale of Tender form available only after 2. P.M. everyday once tender floated.
- \* Applicants must have GST Registration
- \* Quoted rate should be inclusive of relevant Taxes
- \* Tender inviting officer shall have every right to revoke tender / quotation at any time without any reason
- \* Those who participate in work tender should own concerned electrical contract licensee.

എൻ.കെ. കൃഷ്ണകുമാർ / N.K. KRISHNAKUMAR M.A., LL.M.  
 സെക്രട്ടറി സെക്ഷൻ / ASSISTANT SECRETARY  
 വൈദ്യുതി വിഭാഗം / ELECTRICITY DEPARTMENT  
 തൃശ്ശൂർ കോർപ്പറേഷൻ / THRISSUR CORPORATION  
 ഫോൺ നമ്പർ / Pen No: 743648  
 ഫോൺ / Phone-0487 2422470  
 മൊബൈൽ / Mobile-8921037758  
 ഇമെയിൽ / Email : electricitydepartment@yahoo.co.in  
 പിൻ / PIN : 680 001

*[Signature]*  
 Assistant Secretary

## Technical Specifications of AC as well as Battery Operated Digital Contact Resistance Meter

A Digital Micro-ohm Meter can measure contact resistance of HV/EHV circuit breakers, isolators, Busbar joints, welded joints etc., under live EHV switchyard conditions.

1. The instrument should inject 200A DC into contacts, from an inbuilt source to ensure reliable measurement in accordance with IEC 62271 / IS 13118
2. The instrument should be capable of measuring contact resistance of  $0.1\mu\Omega$  to  $19.99m\Omega$  in three selectable ranges. Lower range have resolution of  $0.1\mu\Omega$
3. The instrument should have 2 nos. of  $4\frac{1}{2}$  digit LCD displays, to display the measured value of resistance in microohms along with the injected test current in Ampere simultaneously.
4. The instrument should work accurately and reliably in hostile electrostatic noise found in live EHV switchyards without need of earthing the test object. e.g. breaker from any side
5. The instrument should use classical Kelvin 4-wire method to measure contact resistance so that need of lead resistance compensation is eliminated
6. Accuracy : Measured Value  $\pm 1\% \pm 1$  Digit
7. Weight should be less than 10 kg
8. The instrument should be housed in a sturdy aluminium case for better compatibility with EMI / EMC requirements and is portable for easy transportation
9. The instrument should be supplied with a rugged calibrated test lead set of 15 meters length suitable for 4-wire measurement. It makes use of special "CK" clamps for true implementation of 4-wire measurement method
10. The instrument should not have a duty cycle of some 'ON' time period and some 'OFF' time period i.e. it offers continuous measurements one after the other saving the idle time spent during the 'OFF' duty cycle
11. The instrument should be designed in such a way that internal temperature of the instrument is not allowed to rise even after long usage. Thus the instrument is always available for taking measurements
12. Power supply: 230V AC  $\pm 15\%$ , 50Hz  $\pm 5\%$  as well as on rechargeable batteries. It has an in-built charger. Thus it is operated both on AC mains as well as Battery
13. Its power consumption should not be more than 30VA
14. It should operate reliably for temperature from  $0^{\circ}\text{C}$  to  $50^{\circ}\text{C}$  and up to 95% RH (non-condensing)
15. Kit should be suitably type tested for Environmental Tests as per relevant IS/IEC standards in NABL accredited lab. Copy of Type test report shall be submitted along-with the bid.

### Standard Accessories:

- Calibrated Test Cables 15 m long, with Ck clamps of 75 mm opening – 1 Set
- Calibrated Test Cables 5 m long, with Ck clamps of 75 mm opening for  $19.99\text{ m}\Omega$  range – 1 Set
- Master Earthing Cable, 7m long - 1 Set
- Mains Cord, 3 m long – 1 No
- Spare Fuses – 1 No
- Carrying Case for Test Lead Set – 1 Set

  
JOSE T.S  
Electrical Engineer  
Electricity Department  
Thiruvananthapuram Corporation  
Tel: 2485558

## TERMS & CONDITIONS FOR THE PROCUREMENT OF CONTACT RESISTANCE METER

1. The interested bidder should be a Manufacturer/authorized dealer distributor or supplier of Contact Resistance Meters. If the tenderer is authorized distributor/dealer, he should furnish Authorization letter/certificate from the manufacturer.
2. The successful bidder will have to supply the new and freshly manufactured unit which should not be older than 2 months from the date of Supply/Purchase Order.
3. The instruction manual and calibration certificate should have traceability to NPL and should be supplied along with the instrument Warranty / Guarantee : 18 months from the date of delivery or 12 months from the date of successful & complete commissioning at end user sub-station, whichever is earlier. All the materials, including accessories, cables etc. are to be covered under warranty / guarantee. If the kit needs to be shifted to supplier's works for repairs within warranty / guarantee period, suppliers will have to bear the cost of repairs, spares and transportation of kit for repair at service center / works.
4. Unit shall be duly calibrated before supply and the date of calibration shall not be older than two months from the date of inspection/supply of the kit.
5. Training: Supplier shall have to ensure that the kit is made user friendly. During the detailed demonstration at site, the supplier shall also have to arrange necessary training to end user engineers
6. Successful bidder will have to commission the instrument to the satisfaction of end users.
7. Bidder will have to submit the documentary evidence of having established mechanism in India for prompt services.
8. Approved Make: Megger/Scope/Flir/Metravi only.

Stamp

  
Director  
Industrial Development  
Lokesh Corporation  
Tel: 2411500