

Indian Institute of Technology Kanpur Samtel Centre for Display Technologies

Enquiry No.: SCDT/FlexE/2016-17/15

Opening Date: 12/08/2016 Closing Date: 22/08/2016

Subject: Purchase of precision source-meter and LCR meter

Technical and commercial tenders (in separate envelops) are invited for purchase of precision 2-channel source meter and LCR meter (20Hz to 2MHz) as per specifications given below.

- Vendors may submit technical and commercial bids for both (source meter and LCR meter) together or separately. Commercial bids will be compared (if technical bids are found to meet our specifications) separately for source meter and LCR meter.
- Please include technical specifications and compliance table in your technical bid. Mark, for each line item whether the system quoted by you complies or not.
- Parent company should be an established company with good number of installations and after sales support in India as well: Attach details.
- Vendor must provide 3 (THREE) years onsite warranty for all parts/components and servicing.
- Installation and training charges should be included in the commercial bid.
- Units must include calibration certificate and user manuals.
- Academic discount should be added and mentioned in commercial bid.

Source Meter

Integrated Voltage/Current 4-Quadrant source measure unit for quick, easy and accurate I/V measurements

1. No. of Channels:

2. Voltage Source range and resolution:

3. Voltage Measure range and resolution:

4. Current Source range and resolution:

5. Current Measure range and resolution:

6. Resistance measure range and resolution:

- 7. Connectors type:
- 8. Source/Output Mode:
- 9. Minimum programmable pulse width and resolution:
- 10. Minimum programmable value to create list sweep waveform:
- 11. Common Mode Isolation:
- 12. Input/Output Connectivity:
- 13. Display:
- 14. Safety and Certification:
- 15. Storage:

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 $\pm 200 \text{mV} - 200 \text{V} (100 \text{nV} - 100 \mu \text{V})$

 $\pm 200 \text{mV} - 200 \text{V} (100 \text{nV} - 100 \mu \text{V})$

 $\pm 10 \text{nA} - 3 \text{A} (10 \text{fA} - 10 \mu \text{A})$

 ± 10 nA - 3A (10fA - 10 μ A)

 $2\Omega-200M\Omega\left(1\mu\Omega-100\Omega\right)$

Banana Input standard

Banana to Triax/Coax optional

Pulse Mode, Linear or Logarithmic or

List, Fixed DC level

 $50\mu s (1\mu s)$

 $10 \, \mu s \, (1 \mu s)$

 $>1G\Omega$

GP-IB, USB, LXI

Graphic and alpha-numeric with \$\frac{1}{2}-\$

digit measurement resolution

Unit must have CE certification and comply to international safety norms

Should allow for setup files and data

storage directly on USB

16. Software: Software (windows OS based) for

different modes of operation such as quick I/V, wide range of multi-terminal devices etc. and

data analysis.

17. Accessories: All required accessories must be

included in price quote, additional accessories

must be quoted as optional.

18. Power Source: 90 VAC - 264 VAC (47 Hz - 63 Hz)

LCR Meter

Frequency Range: 20Hz to 2MHz
DC bias signal level: 0V, 1.5V, 2.0V
Test signal level: 0 to 2Vrms

4. Measurement parameters: Cp-D, Cp-Q, Cp-G, Cp-Rp

Cs-D, Cs-Q, Cs-Rs

Lp-D, Lp-Q, Lp-G, Lp-Rp, Lp-Rdc

Ls-D, Ls-Q, Ls-Rs, Ls-Rdc

R-X Z-θd, Z-θr G-B Y-θd, Y-θr Vdc-Idc Required

5. Test signal level monitor: Required6. Automatic level control: Required

7. Basic accuracy(Freq. range): 0.05% (100Hz to 2MHz)

8. Measurement accuracy: $\pm 0.01\%$

9. Input/Output connectivity: GPIB, USB, LAN, LXI

10. Power Source: 90 VAC - 264 VAC (47 Hz - 63 Hz)

11. Higher DC bias option: Yes, to be included

12. Accessories: All required accessories must be

included in price quote, additional accessories

must be quoted as optional.

Note:

- 1. Please mention tender notice number on top of envelop.
- 2. Your quotation shall contain Authorization Letter from manufacturer.
- 3. Quotation must be valid for 90 days.
- 4. Delivery period should not be more than **8 weeks** and delivery should be at IIT Kanpur.
- 5. Send complete detail of the product(s).
- 6. Payments terms: 90% on installation and 10% satisfactory report.
- 7. IITK is exempted for partial custom duty (CD applicable to IIT Kanpur is 5.15%) and exempted from payment of excise duty under notification No. 10/97.
- 8. Price must include all taxes and charges.
- 9. All prices are to be FOR IIT Kanpur.
- 10. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.

Your quotation must reach to us by 5:00PM on closing date.

Dr. Anshu Gaur Samtel Centre for Display Technologies National Centre for Flexible Electronics, IIT Kanpur Kanpur, U.P. – 208016, India

Email: agaur@iitk.ac.in