# KU/DNST/SMU-e-tender-1/2023

# Department of Nanoscience and Nanotechnology University of Kerala, Kariavattom, Thiruvananthapuram, Kerala, India - 695 581, Ph: 9447220563

Date: 09.11.2023

# E-Tender Notice

Department of Nanoscience and Nanotechnology, University of Kerala, Thiruvananthapuram invites open tenders through e-Procurement (in two bid system) for the purchase of **Precision Source measure unit.** 

Last date and time for submission of tender online	
Date and time of opening of tender	
Hard copies of the sealed tenders to be submitted to the office of	The Registrar, University of Kerala, Senate House campus, Palayam Trivandrum- 695 034, Kerala Tel: +91-471-2305631, 2386202 (O) e-mail: regrku@gmail.com
For technical details contact	Dr. I. Hubert Joe., Head, Department of Nanoscience and Nanotechnology, University of Kerala, Thiruvananthapuram, Ph. No. 9447220563  E-Mail: hubertjoe@gmail.com

For further details logon to www.etenders.kerala.gov.in

# Technical specifications of the required item

1.	Source	Vol	tage
1.	Source	V UI	La Z

20mV - 200V Range with minimum 500nV resolution

#### 2. Source Current

10nA to 1A Range with 500fA resolution

#### 3. Signal source types

Fixed, Sweep (Linear, Logarithmic, Linear Dual, Logarithmic Dual)

# 4. Basic Accuracy

0.012%

#### 5. Max. Source Power

20W, four-quadrant source or sink operation.

#### 6. Measure Voltage

20mV to 200V Range with 10nV or better resolution

#### 7. Measure Current

10nA to 1A Range with 10fA or better resolution

#### 8. Resistance

 $2\Omega$  to  $200M\Omega$  Range with  $10\mu\Omega$  or better resolution

#### 9. Display

5" or higher inbuilt Graphical Touch screen display

#### 10. Memory internal

2,50,000 or higher inbuilt reading storage

#### 11. Data Display

Table, Graph, Histogram or better

#### 12. Signal connection

Banana connectors on front and Triax connectors on rear panel (banana to triax adapters will not be preferred)

#### 13. Measurement method

2 probe/4 Probe with Guard

## 14. Connectivity

GPIB, LAN, USB and trigger link connectivity, Digital IO, TSP LINK dual

#### 15. Safety

Safety interlock connector should be available

# 16. Warranty

1 year standard

17. Items to be supplied with instrument
1 pair of Banana to hook cable, USB Cable, LAN cable, Safety Interlock connector, Calibration certificate, additional set of banana cable

SI No.	Specifications required	Specification of the bidder	Remarks (Yes/No)
1	Source Voltage: 20mV - 200V Range with minimum 500nV resolution		
2	Source Current: 10nA to 1A Range with 500fA resolution		
3	Signal source types: Fixed, Sweep (Linear, Logarithmic, Linear Dual, Logarithmic Dual)		
4	Basic Accuracy: 0.012%		
5	Max. Source Power: 20W, four-quadrant source or sink operation.		
6	Measure Voltage: 20mV to 200V Range with 10nV or better resolution		
7	Measure Current 10nA to 1A Range with 10fA or better resolution		
8	Resistance: $2\Omega$ to $200M\Omega$ Range with $10\mu\Omega$ or better resolution		
9	Display: 5" or higher inbuilt Graphical Touch screen display		
10	Memory internal: 2,50,000 or higher inbuilt reading storage		
11	Data Display: Table, Graph, Histogram or better		
12	Signal connection: Banana connectors on front and Triax connectors on rear panel (banana to triax adapters will not be preferred)	1	
13	Measurement method: 2 probe/4 Probe with Guard		(9)
14	Connectivity: GPIB, LAN, USB and trigger link connectivity, Digital IO, TSP LINK dual		
15	Safety: Safety interlock connector should be available		
16	Warranty: 1 year standard		

#### General Conditions:

- 1. Every tenderer should submit Tender fee of Rs. 2,500/-
- 2. Every tenderer should submit Earnest Money Deposit (EMD) of Rs. 8,000/-
- The tender shall be submitted in the two bids viz. Technical Bid and Financial Bid. Only those
  qualified in technical bid will be eligible for participating in financial bid. A presentation regarding the
  technical specification and item to be supplied shall be done before the technical evaluation committee
  if requested.
- 4. The bidder should be a manufacturer or their dealer specifically authorized by the manufacturer to quote on their behalf for this tender as per Manufacturer Authorization Form and Indian agents of foreign principals, if any, who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the "Technical Specification". Such equipment must be of the most recent series/models incorporating the latest improvements in design. The models should be in successful operation for at least one year as on date of Bid Opening.
- 5. Compliance Statement: Along with the technical details provide a tabular column indicating whether the equipment quoted by you meets the specifications by indicating 'YES' or 'NO'. If 'YES', support the claim by providing original brochures. Venders should provide clear brochures/data sheets about the equipment and its working. Also include adequate proof for the claim regarding the performance.
- 6. Reference: Names of Institutes with contact person and telephone/ email where similar equipment supplied by you in India [Preferably South India] shall be mentioned in the bid.
- Incomplete & conditional tenders and tenders received after the due date will be summarily rejected without assigning any reasons thereof.
- 8. The price should be inclusive of all taxes, duties, transportation, insurance, installation etc. Nothing extra will be paid in addition to the quoted rate. Any amount in Indian rupees for installation, commission, labour, spares, service etc shall be entered in item 2 of BoQ.
- Payment Terms: 90% payment shall be made through irrevocable LC on presentation of complete and clear shipping documents and balance 10% of the amount shall be released after the receipt, installation commissioning and acceptance of the equipment.

- 10. Validity of tender: Tender submitted shall remain valid at least for 120 days from the date of opening the tender. Validity beyond 120 days, from the date of opening of the tender shall be by mutual consent.
- 11. Delivery and installation: Proposed delivery schedule should be mentioned clearly. Delivery and installation and training (one week) should be made at the Department of Nanoscience and Nanotechnology, University of Kerala, Kariavattom campus, Trivandrum without extra cost (inclusive of documentation, demurrage, customs duty, clearance and transportation charges). University of Kerala will provide customs duty exemption certificates if required.
- 12. Service facility: Supplier should mention their details of service setup and manpower in Thiruvananthapuram who are responsible for after sales support.
- 13. The model number, make, and a printed literature of the product shall submit positively.
- 14. In case of any dispute, the decision of the University authority shall be final and binding on the bidders.
- 15. The undersigned reserves the right to reject any or all of the tenders received without assigning any reason thereof.
- 16. The quoted item should be under comprehensive warranty for 1 year or more.
- 17. If any component is found to be defective during the warranty period, the vendor has to replace the defective item immediately at their own cost.

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18. For any queries please contact, Dr. I Hubert Joe, Head, Department of Nanoscience and Nanotechnology, University of Kerala, Thiruvananthapuram, Ph. No. 9447220563 E-Mail: hubertjoe@gmail.com/hubertjoe@keralauniversity.ac.in

# 19. Documents to be Uploaded

- 1 Signed Compliance Matrix
- 2. Detailed Technical Brochure
- 3. Under taking of support for next 10 Years
- 4. BoQ
- 5. Detailed Financial Bid
- 6. Hard copy of Bank Guarantee if opted

The Registrar, University of Kerala, Senate House campus, Palayam Trivandrum- 695 034, Kerala. Dept. of Nanoscience & Nanotechniclogy University of Kerata Kariavatiom - 695 St.)