

INDIAN INSTITUTE OF TECHNOLOGY GOA

At Goa Engineering College Campus

Farmagudi, Ponda, Goa 403401

E-mail: purchase@iitgoa.ac.in

GSTIN: 30AABAI1653D1ZF

PAN: AABAI1653D

TAN: BLRI08261B

Enquiry No: IITGOA/2019-20/027

Date: 24/10/2019

IIT Goa invites sealed quotations in two bid form for the supply of below mentioned item.

Sl. No.	Description of Item	Qty
1	High Speed, High Voltage Electrostatic Voltmeter (Detailed Specifications Attached)	01 No.

Terms and conditions:

1. Quotation must be valid for at least 90 days.
2. The GSTIN should invariably be mentioned in your offer.
3. Kindly attach a compliance certificate along with the technical quote.
4. Prices:
 - I) **For Import Supplies:**
 - a) It is mandatory to quote prices in FOB basis only.
 - b) In case of multiple options of same product, bidders are requested to quote only one best option and not multiple options.
 - c) Payment terms: 90% payment by letter of credit and balance 10% will be paid by wire transfer after satisfactory installation and commissioning.
 - II) **For Indigenous Supplies:**
 - a) In case of multiple options of same product, bidders are requested to quote only one best option and not multiple options.
 - b) Payment terms: Within 30 days after the delivery and installation of the item at IIT GOA.
5. Delivery and installation should be made within 6 weeks of getting a confirmed order.
6. The suppliers shall provide the banking details along with their quote on their letterhead duly signed and stamped.

7. Quotations shall be submitted in two parts;
- 1) **Part – I (Technical)** should contain all the technical details and specification of the product. It should contain unpriced bid along with terms and conditions, compliance certificates, proprietary certificates (if applicable), any other certificates/details etc. This envelope should be marked as “Technical Bid”
 - 2) **Part -II (Financial)** The financial bid of the above item should be in a sealed envelope marked as “Financial Bid” and should contain financial terms and conditions.
8. For any clarification, you may kindly contact Dr. Shakthi Prasad D. (E-mail: shakthi@iitgoa.ac.in and Stores & Purchase Department (email: purchase@iitgoa.ac.in) till 01/11/2019.
9. All sealed quotations must reach to the Assistant Registrar (Stores & Purchase), IIT Goa, at Goa College of Engineering Campus, Farmagudi, Ponda, Goa, 403 401 by 17.00 Hrs on or before 14/11/2019.

Sd/-
Asst. Registrar (S&P)

Specifications for a High-Speed, High-Voltage Electrostatic Voltmeter and associated probe:

1. DC-stable, precision electrostatic voltmeter for making non-contacting surface voltage measurements.
2. Precision voltage monitor output.
3. Monitor to provide a low voltage replica of the measured electrostatic potential for monitoring purposes or for use as a feedback signal in a closed loop system.
4. Easy-to-read LED display
5. Can be operated on a bench top, or with optional hardware, in a standard 19-inch rack
6. NIST-traceable Certificate of Calibration to be provided with unit
7. employs a field-nulling technique that achieves DC stability and high accuracy even if the probe-to surface spacing changes. (This permits measurements of either stationary or moving surfaces without the need to establish fixed spacing to maintain accuracy).
8. special probe design that eliminates the need for close tolerance components which significantly improves noise and drift under conditions of high humidity and wide temperature ranges.
9. Measurement Range: 0 to ± 20 kV DC or peak AC
10. Measurement Accuracy: Better than $\pm 0.1\%$ of full scale, referred to the voltage monitor
11. Speed of Response (10% to 90%): Less than 200 μ s for 1 kV step. Less than 5 ms for 20 kV step change
12. Full Signal Bandwidth: DC to better than 25 Hz
13. Stability: Drift with Time Less than 100 ppm/hour, noncumulative.
14. Drift with Temperature Less than 100 ppm/ $^{\circ}$ C
15. Voltage monitor Output: A buffered output provides a low-voltage replica of the measured voltage
16. Ratio 1/1000th of the measured voltage
17. Output Noise Less than 20 mV rms
18. Output Impedance Less than 0.1 ohm
19. Voltage Display 4 $\frac{1}{2}$ digit LED display
20. Range 0 to V ± 19.99 k
21. Resolution 1 V
22. Zero Offset ± 2 counts, referred to the voltage monitor
23. Sampling Rate 3 readings per second
24. High Voltage ON-OFF: Two-position toggle switch that turns on and off the high-voltage power supply inside the instrument
25. Zero Control: A 10-turn control to null offsets or other zero errors that occur within the system
26. Probe-to-Surface Separation: 3 mm ± 1 mm (recommended)
27. Voltage Monitor Output Connector: BNC connector
28. Optional side view or end viewing type of probes must be available. Further option of a high temperature or probe suitable for vacuum applications may be available.

Other requirements:

Essentials

- a. Quotation for AMC after warranty period.
 - b. User list and contact number from IITs/IISERs/IISc etc. of same quoted model.
 - c. Installation report with important specs.
 - d. Optional accessory should be quoted separately.
 - e. OEM must have annual turnover above 10 cr.
 - f. Globally reputed brand indicated by publications.
 - g. Condition of purchase: successful demonstration of specs during site installation.
1. Warranty:
 - a) The complete instrument and accessories excluding consumables should be under warranty for a period of one year from the date of installation.
 - b) In case of breakdown during the warranty period, service engineer of the supplier should make as many visits as are necessary to rectify the problem and replace the faulty parts. Supplier should provide all spares required for making the instrument operational.
 2. Maintenance and Repair:
 - a) Vendor should be easily accessible and available on demand within 24 hours of any problem in the instrument.
 - b) One compulsory visit per year for maintenance must be included apart from the installation visit.
 - c) Annual Maintenance Contract (AMC): Financial involvement for two years on site AMC after the expiry of warranty period should be provided.
 3. Installation and Training:
 - a) Vendor should provide training on operation and application for each of the equipment mentioned in the tender at IIT Goa after installation. The training event needs to be performed once a year for three years.
 4. Spares:

The supplier of the instrument must confirm in writing that the spares for the entire instrument will be available for a period of at least ten years after the installation of the instrument.
 5. Manual:

One set of operating manual and service manual (in English) should be provided with the instrument. The manual should be presented in both, hard and soft copy.
 6. Pre-installation requirements
All the necessary pre-installation requisites required for the complete installation of the system.