भारतीय प्रौद्योगिकी संस्थान गोवा
गोवा अभियांत्रिकी महाविद्यालय परिसर, फार्मागुड़ी, फ़ोंडा – 403401, गोवा

Indian Institute of Technology Goa
Goa College of Engineering Campus, Farmagudi, Ponda – 403401, Goa

IIT Goa

OFFICE OF THE DoRD

GSTIN: 30AABAI1653D2ZE PAN: AABAI1653D TAN: BLRI08261B

Enquiry No: IITGOA/R&D/2023-24/006 **Date:** 27/09/2023

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

Sl. No.	Description of Item	Qty.
1	Surface Volume Resistivity Meter (**Detailed specifications attached as Annexure-A**)	01

Terms & Conditions: -

1. The GSTIN should invariably be mentioned in your offer.
2. Kindly attach a compliance certificate along with the technical quote.
3. Prices: Prices should be quoted in INR – F.O.R., IIT Goa basis only.
4. Payment terms: Within 30 days after the delivery and successful installation of item at IIT Goa.
5. The suppliers shall provide the banking details along with their quote on their letterhead duly signed and stamped.
6. The Institute is following and abide with the revised Public Procurement (Preference to Make in India), Order 2017 P-45021/2/2017 – B. E. -II dated 16.09.20 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India & subsequent amendments/instructions of Ministry. Accordingly, preference will be given to the make in India products while evaluating the bids. However, it is sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India along with respective documentary evidence in the technical bid itself.
7. The successful bidder has to submit a Performance Guarantee Bond for 3% of the Purchase Order value and valid till one year plus 60 days OR up-to warranty period whichever is later from the date of issue of Purchase Order. Performance Guarantee Bond may be submitted within 15 (Fifteen) days from the date of order acknowledgment as a successful bidder.
8. **Delivery and Installation**: Within 4-6 weeks of getting a confirmed order.
9. **Warranty:**(a) On-site comprehensive warranty (parts + labor + support) of minimum one years. The warranty period shall begin from the date of successful installation of the equipment at IIT Goa.
10. **Quotations shall be submitted in two parts.**
    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”
    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.
11. IIT Goa reserves the right to accept and/or reject any/all bids without assigning any reason in public interest.
12. For any clarification, you may kindly contact Dr. Shakthi Prasad D.(shakthi@iitgoa.ac.in) and Research & Development office (purchase_r.d@iitgoa.ac.in) until 07.10.2023
13. All sealed quotations must be super scribed with the tender enquiry number and should reach to the Senior Superintendent (Research & Development), IIT Goa, at Goa College of Engineering Campus, Farmagudi, Ponda, Goa, 403401 by 17.00 Hrs. on or before 19.10.2023.

14. Validity of bids: Bids shall be valid for minimum 180 days from the date of submission. A bid valid for a shorter period shall stand rejected.
15. The bidder is required to furnish clause by clause compliance of technical specifications bringing out clearly the deviations from the specification, if any. The compliance certificate should be produced in the following format.

Sr. No. of the component given in the technical specifications	Specification of the component as per tender enquiry	Specification of the component offered	Compliance (YES/NO)	In case of noncompliance, deviation to be specified in unambiguous terms

Non-compliance with above shall be treated as incomplete/ambiguous and the bid may be ignored without giving an opportunity to the bidder for further clarification/negotiation etc. Mere copying of our specifications in the quotation shall not make the technical bid eligible for consideration. A bid should be supported with a catalogue, duly signed and stamped, of the quoted model, and the same must be sent along with the technical bid.

16. Bidder should be registered under GST Act with concerned State Sales Tax Authorities. The bidder should furnish, along with the bid document, the relevant GST Registration Document and PAN / TAN copies.
17. The bidder should never have been "Banned/Blacklisted" by any organization.
18. If any of the equipment supplied by the bidder is found to be substandard, refurbished, unmerchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the bidder with 18% interest if the payment for such equipment has already been made. All damaged or unapproved goods shall be returned at suppliers' cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms and conditions, IIT Goa, may consider "Banning/Blacklisting" the supplier.
19. IIT Goa has the right to accept the whole or any part of the tender or portion of the quantity offered or reject it in full without assigning any reason in public interest.
20. Delivery and Transportation: Place for supply and installation is 'Indian Institute of Technology Goa, At Goa College of Engineering Campus, Farmagudi, Ponda 403401,Goa.
21. Any bidder proposes to bid for the tendered item which is from a country which shares a land border with India will be eligible to bid only if the bidder is registered with the Competent Authority. The Competent Authority for the purpose of registration shall be Registration Committee constituted by Department for Promotion of Industry and Internal Trade (DPIIT). This is also applicable for bidders bidding for finished goods procured directly/indirectly from the vendors from the countries sharing land border with India.

Sd/-
Registrar (I/c)
IIT Goa

Annexure- A

SPECIFICATION FOR SURFACE VOLUME RESISTIVITY METER

Sr. No.	Parameter	Sub Parameter	Specifications
1.	Voltage measurement	Voltage Input	From 1µV to 200V
		NMRR	2V and 20V ranges >60dB, 200V range >55dB. 50Hz or 60Hz.
		CMRR	>120dB at DC, 50Hz or 60Hz.
		Input Impedance	>200TΩ in parallel with 20pF, <2pF guarded (1MΩ with zero check on).
		Programmable voltage measurement ranges	Range 1: Upto 2V Accuracy (18 °C-28 °C) ≥ +(0.025%rdg+40 µV) Resolution: 1µV Temp co-eff/°C≤+(0.003%rdg+20µV) Range 2: Upto 20V Accuracy (18 °C-28 °C) ≥ +(0.025%rdg+300 µV) Resolution: 10µV Temp co-eff/°C≤+(0.002%rdg+100 µV) Range 3: Upto 200V Accuracy (18 °C-28 °C) ≥ +(0.06%rdg+3mv) Resolution: 100µV Temp co-eff/°C≤+(0.002%rdg+1mv)
2.	Current measurement	Current Input	From less than 100aA to 20mA
		Input Bias Current	<3fA at T_{CAL}. Temp. co. = 0.5fA/°C, 20pA range.

		Current measurement ranges	Range 1: Upto 20pA Accuracy (18 ºC-28 ºC) ≥ +(1%rdg+3fA) Resolution: 10aA Temp co-eff/ºC≤+(0.1%rdg+500aA) Range 2: Upto 200pA Accuracy (18 ºC-28 ºC) ≥ +(1%rdg+5fA) Resolution: 100aA Temp co-eff/ºC≤+(0.1%rdg+1fA) Range 3: Upto 2nA Accuracy (18 ºC-28 ºC) ≥ +(0.2%rdg+300fA) Resolution: 1fA Temp co-eff/ºC≤+(0.1%rdg+20fA) Range 4: Upto 20nA Accuracy (18 ºC-28 ºC) ≥ +(0.2%rdg+500fA) Resolution: 10fA Temp co-eff/ºC≤+(0.03%rdg+100fA) Proportional specifications in following current ranges: upto 200nA, upto 2uA, upto 20uA, upto200uA, upto 2mA and upto 20mA

		Input Bias Current Noise	<750aA p-p (capped input), 0.1Hz to 10Hz bandwidth, damping on. Digital filter = 40 readings, 20pA range
		Preamp Settling Time (to 10% of finalvalue)	0.5s (damping off), 2.0 s (damping on) on pA ranges. 15ms on nA ranges damping off, 1ms on µA ranges damping off. 500µs on mA ranges damping off.(Typical)
		NMRR	>60dB on all ranges at 50Hz or 60Hz
3.	Resistance measurement	Resistance measurement (manual mode)	Manual mode of test voltage selection up to 1000V, instrument should able to measure resistance up to 10^{18} ohms. Should support alternating polarity voltage sourcing and measurement method for high resistance measurements

		Resistance measurementranges (Auto mode: voltage upto 400V)	Range 1: Upto 200TΩ Resolution: 100MΩ Accuracy (18 ºC-28 ºC) ≥ +(1.15%rdg+1GΩ) Temp co-eff/ºC≤+(0.125%rdg+1GΩ) Auto Voltage Source:400V, Amp. Range:20pA Range 2: Upto 20TΩ Resolution: 10MΩ Accuracy (18ºC-28ºC) ≥ +(1.025%rdg+100MΩ) Temp co-eff/ºC≤+(0.105%rdg+100MΩ) Auto Voltage Source:400V, Amp. Range:200pA Range 3: Upto 2TΩ Resolution: 1MΩ Accuracy (18ºC-28ºC) ≥ +(0.35%rdg+10MΩ) Temp co-eff/ºC≤+(0.110%rdg+10MΩ) Auto Voltage Source:400V, Amp. Range:2nA Range 4: Upto 200GΩ Resolution: 100kΩ Accuracy (18ºC-28ºC) ≥ +(0.35%rdg+1MΩ) Temp co-eff/ºC≤+(0.110%rdg+1MΩ) Auto Voltage Source:40V, Amp. Range:2nA Range 5: Upto 20GΩ Resolution: 10kΩ Accuracy (18ºC-28ºC) ≥ +(0.225%rdg+100kΩ) Temp co-eff/ºC≤+(0.035%rdg+100kΩ) Auto Voltage Source:40V, Amp. Range:20nA Proportional specifications in following resistance ranges: Upto 2GΩ, Upto 200MΩ, Upto 20MΩ,Upto 2MΩ
4.	High Voltage Source	Voltage Outputranges	Range 1: Upto 1000V Resolution: 5mV Accuracy (18 ºC-28 ºC) ≥ +(0.15%setting+10mV) Temp co-eff/ºC≤+(0.005%setting+10mV) Max. Output Current @: ±1mA, hardware short circuitprotection at <1.4mA. Settling Time: <50ms @ 1000V range to rated accuracyNoise: <2.9mV rms

			Range 2: Upto 100V Resolution: 5mV Accuracy (18 °C-28 °C) ≥ ±(0.15%setting+10mV) Temp co-eff/°C≤±(0.005%setting+1mV) Max. Output Current: ±10mA, hardware short circuit protection at <14mA. Settling Time: <8ms to rated accuracy Noise: <2.6mV rms
5.	Charge Measurement	Input Bias Current	<4fA at TCAL. Temp. co. = 0.5fA/°C, 2nC range.
		Charge InputRange	Range 1: Upto 2nC Resolution: 1fC Accuracy (18 °C-28 °C) ≥ ±(0.4%rdg+50 fC) Temp co-eff/°C≤±(0.04%rdg+30fC) Range 2: Upto 20nC Resolution: 10fC Accuracy (18 °C-28 °C) ≥ ±(0.4%rdg+500fC) Temp co-eff/°C≤±(0.04%rdg+1pC) Range 3: Upto 200nC Resolution: 100fC Accuracy (18 °C-28 °C) ≥ ±(0.4%rdg+5pC) Temp co-eff/°C≤±(0.04%rdg+1pC) Range 4: Upto 2uC Resolution: 1pC Accuracy (18 °C-28 °C) ≥ ±(0.4%rdg+50pC) Temp co-eff/°C≤±(0.04%rdg+10pC)
6.	Temperature Measurement	Thermocouple	K Type
		Range	-25°–150°C
		Accuracy	±(0.3%rdg+1.5°C)

Other important parameters

Sr. No	Parameter	Specifications
1.	Display	6½-digit vacuum fluorescent multiline
2.	Over range Indication	Display reads “OVERFLOW” for readings >105% of range. The display reads “OUT OF LIMIT” for excessive over range conditions.
3.	Conversion Time	Selectable 0.01 PLC to 10 PLC
4.	Input Connector	Three lug triaxial on rear panel
5.	Isolation	$>10^{10}\Omega$, <500pF(Meter COMMON to chassis)

6.	2V Analog Output	2V for full range input, Non-inverting in Volts mode, inverting when measuring Amps, Ohms, or Coulombs. Output impedance 10kΩ.
7.	Ranging	Automatic or Manual with over range indication
8.	Maximum i/p	250V peak, DC to 60Hz sine wave; 10sec per minute maximum on mA ranges
9.	Max. Common Mode Voltage i/p	Electrometer, 500V peak; V Source, 750V peak(DC to 60Hz sine wave)
10.	External Interface	RS232, IEEE488
11.	Reading Storage	50,000
12.	Reading Rates	To Internal Buffer: 425 readings/second 1. To IEEE-488 Bus: 400 readings/second 1, 2. Bus Transfer: 3300 readings/second 2. 1. 0.01PLC, digital filters off, front panel off, temperature + RH off, Line Sync off. Binary transfer mode
13.	Operating Environment	0°–50°C; relative humidity 70% non-condensing, up to 35°C
14.	Storage Temp.	–25° to +65°C
15.	EMC	Conforms to European Union Directive 89/336/EEC, EN 61326-1 or equivalent
16.	Safety Standard	Conforms to European Union Directive 73/23/EEC, EN 61010-1 or equivalent
17.	Power	User selectable 100, 120, 220, 240VAC ±10%; 50/60Hz, 100VA max
18.	Dimensions	Rack mountable /Benchtop
19.	Standard Accessories to be Supplied along with the instrument	**i.** 2m long low noise input cable with 3slot triax to alligator clips **ii.** Safety High Voltage Dual Test Leads and Power cable **iii.** Safety interlock connector **iv.** Thermocouple Bead Probe User manual/Instruction manual

Annexure-B

UNDERTAKING FOR BID SECURITY

(To be issued by the bidder on company's letterhead in lieu of EMD)

To,
The Director,
Indian Institute of Technology Goa,
At GEC Campus, Farmagudi, Ponda – Goa

We, M/s ..... (Name of the firm), with ref. to enquiry no.

..... dtd …… hereby undertake that:

1) We accept all the terms and conditions of the tender document.

2) We accept that, we will not modify our bid during the bid validity period, submit performance guarantee within the stipulated period and honor the contract after award of contract.

3) In the event of any modification to our bid by us or failure on our part to honor the contract after final award or failure to submit performance guarantee, our firm may be debarred from participation in any tender/contract notified by Indian Institute of Technology, Goa for a period of one year.

Yours faithfully,

(Signature of the bidder with date and seal)

DECLARATION OF COUNTRY OF ORIGIN AND LOCAL CONTENT

(To be given on company letter head - For tender value below Rs.10 crores)
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 crores)

Date: _____

To,
The Director,
Indian Institute of Technology Goa,
At GEC Campus, Farmagudi, Ponda ,Goa

Sub: Declaration of country of origin and local content

We, M/s ..... (Name of the firm), with ref. to enquiry no. ……. are bidding for tendered item (***strike which is not applicable***)

1. which is from a country which shares a land border with India (***enclosed DPIIT registration certificate***)
2. which is from a country which does not a land border with India

Country of Origin of Goods being offered: _____ We hereby declare that an item offered has % local content. _____

"Local Content" means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

We understand that as per Office Memorandum dated 04/03/2021 issued by Ministry of Commerce and Industry, services such as transportation, insurance, installation, commissioning, training and after sales support like AMC/CMC etc. are not considered as local value addition.

"*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law."

Yours faithfully,

(Signature of the Bidder, with Official Seal)

Annexure-D

PRICE BID FORMAT

(To be printed on letterhead of the bidder)

S.No.	Item description	Qty.	Rate	Currency	Total
A	Surface Volume Resistivity Meter (Detailed specifications attached as Annexure-A)				
B	GST _____ % of (A) HSN Code/ SAC Code _____				
	Grand Total(A+B)				

Amount in Words_____
_____
only.

#HSN Code: "Harmonized System of Nomenclature Code No." and SAC Code: "Service Accounting Codes Code No."

Signature.....
Name .....
Place: Company Name & Address: .....

Date: Affix Rubber Stamp: .....

Note: Price Bid should be submitted in given format only. For additional information items above format may be typed and used.

Annexure-E

REASONABILITY OF PRICES

Please quote best minimum prices applicable for a premier Educational and Research Institution. The party must give details of at least two purchase orders identical or similar equipment, supplied to any IITS/Research Institutions/ other organisation as per below Format (to be enclosed in Financial Bid) along with the final price paid and details are mandatory.

Previous Supply Orders

Name of the Firm _____

S.No.	PO No. & Date	Description & Quantity of ordered equipment	Value of Order	Date of completion of delivery as per contract	Remarks indicating reasons for late delivery, if any and justification of price difference of their supply order & those quoted to us	Has the equipment being installed satisfactorily (attach a certificate from the Purchaser/ Consigner)	Contact Person along with Telephone no., Fax No. and e-mail address

Place:_____

Date: _____ Signature and Seal of the Manufacturer / Bidder

(To be printed on letterhead of the bidder)

Bidders Information

1	Name of the Bidder	
2	Address of the Bidder	
3	PAN No. (***Enclosed copy***)	
4	GST No. (***Enclosed copy***)	
5	E-mail	
6	Contact Person's Name & Designation	
7	Mobile No	

Annexure-G

FORMAT FOR PERFORMANCE GUARANTEE BOND

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT GOA OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT GOA OR ANY SCHEDULED BANK SITUATED AT GOA. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.

To,
The Registrar (I/c),
Indian Institute of Technology, Goa
Farmagudi, Ponda,
Goa – 403401

LETTER OF GUARANTEE

WHEREAS Indian Institute of Technology, Goa (Buyer) have invited Tenders vide Tender No..... Dt. ..... for purchase of .....
AND
WHEREAS the said tender document requires that any eligible successful tenderer (seller) wishing to supply the equipment / machinery, etc. in response thereto shall establish an irrevocable Performance Guarantee Bond in favour of **"Registrar, Indian Institute of Technology, Goa"** in the form of Bank Guarantee for Rs ..... (**3% (three percent) of the purchase value**) and valid till **one year or upto warranty period whichever is later** from the date of issue of Performance Guarantee Bond may be submitted within 15 (Fifteen) days from the date of Order Acknowledgment as a successful bidder.

NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document / purchase order / performance of the equipment / machinery, etc. this Bank shall pay to Indian Institute of Technology, Goa on demand and without protest or demur Rs..... (Rupees.....).

This Bank further agrees that the decision of Indian Institute of Technology, Goa (Buyer) as to whether the said Tenderer (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.

We, ... (name of the Bank & branch) hereby further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the Tenderer (Seller) and/ or Indian Institute of Technology, Goa (Buyer).

Notwithstanding anything contained herein:

1. Our liability under this Bank Guarantee shall not exceed Rs. .....…… .
   (Indian Rupees ..... only).
2. This Bank Guarantee shall be valid up to .....(date) and
3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if IIT Goa serve upon us a written claim or demand on or before ..... (date).
4. This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at ..... situated at ..... (Address of local branch).

Date:

Yours truly,
Signature and seal of the Guarantor:
Name of Bank:

Instruction to Bank: Bank should note that on expiry of Bond Period, the Original Bond will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period