

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/2023-24/002

Date: 13/06/2023

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

Sl. No.	Description of Item	Qty
1	LCR Q Meter (Detailed specifications attached)	01 No.

Terms & 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: Prices should be quoted in INR – F.O.R., IIT Goa basis only.
5. Payment terms: Within 30 days after the delivery and successful installation of items at IIT Goa.
6. Delivery should be made within 4 – 6 weeks of getting a confirmed order.
7. The suppliers shall provide the banking details along with their quote on their letterhead duly signed and stamped.
8. Warranty: – Minimum one year.
9. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the 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.
10. Kindly specify the Country of Origin of goods being offered in your quotation.
11. The bidder must be either OEM or authorized dealers or resellers of the original manufacturer of the proposed equipment in India. Both cannot bid simultaneously for the same item/product in the same tender.
12. 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.
13. The successful bidder must submit a Performance Guarantee Bond for 3% of the Purchase Order value and valid till one year plus sixty 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.
14. IIT Goa reserves the right to accept and/or reject any/all bids without assigning any reason in public interest.
15. For any clarification, you may kindly contact Dr. Sheron Figarado (E-mail: sheron@iitgoa.ac.in) and the Stores & Purchase Section (email: purchase@iitgoa.ac.in) till 26/06/2023.
16. All sealed quotations must be super scribed with the tender enquiry number and should reach to the Deputy Registrar (Stores & Purchase), IIT Goa, at Goa College of Engineering Campus, Farmagudi, Ponda, Goa, 403 401 by 17.00 Hrs on or before 04/07/2023.

Sd/-
Registrar, IIT Goa

Specifications of LCR Q Meter:

Parameters	Required Specifications
Test Frequency	20Hz to 300kHz
Measurement Parameters	L, C, R, Z , Y , X, B, G, D, Q, q, DCR, Vdc-Idc
Display Range:	L : 0.00001 μ H – 99.9999kH
	C : 0.00001pF – 9.99999F
	Z , R, X, DCR : 0.00001W – 99.9999MW
	Y , B, G : 0.00001 μ S – 99.9999S
	D : 0.00001 – 9.99999
	Q : 0.00001 – 99999.9
	ϕ (Deg) : -179.999° – 179.999°
	ϕ (Rad) : -3.14159 – 3.14159
	$\Delta\%$: -999.999% – 999.999%
Transformer Test Parameters	DCR1 (primary, 2 terminal), DCR2 (secondary, 2 terminal), M (mutual inductance),
	N, 1/N, Phase, Lk (Leakage inductance), C (primary, secondary capacitance), balance test
Basic Accuracy	LCR Parameters: 0.05%, Transformer Parameters: 0.1%
Frequency Resolution & Accuracy	10mHz (4 digit), 0.01%
Equivalent Circuit	Serial, Paralle
Ranging Mode	Auto, Hold
Trigger Mode	Internal, Manual, External, BUS
Average Times	1–255
Calibration Function	Open / Short calibration with full frequency or dot frequency, Load
AC Test level	
Voltage range of test signal	10mV – 2Vrms
Min voltage resolution	100 μ V (3 digit)
Voltage Accuracy ALC ON	10% x set voltage + 2mV, ALC OFF: 6% x set voltage + 2mV
Current range of test signal	100 μ A – 20mA
Min current resolution	1 μ A (3 digit)
Current Accuracy ALC ON	10% x set current + 20 μ A, ALC OFF: 6% x set current + 20 μ A
DC Bias Voltage Source	
Voltage & Current range	0V – \pm 5V / 0 mA – \pm 50mA
Resolution	0.5mV / 5 μ A
Voltage accuracy	1% x set voltage + 5mV
ISO ON	For the bias test of inductance & transformer
Source Impedance (AC)	ISO ON: 100W, ISO OFF: 30W , 50W & 100W selectable
Source Impedance (DCR)	30W , 50W & 100W selectable

Measuring time ($\geq 10\text{kHz}$)	Fast : 13ms/time, Med : 67ms/time, Slow : 187ms/time Plus the refresh time of display character
Delay Time Setup	0 –999, minimum resolution: 100 μs
Comparator Function	10 bin sorting, BIN1– BIN9, NG,
	AUX Bin counter
	PASS/FAIL on front panel, LED indication
Parameters Displayed	Value, ΔABS , $\Delta\%\phi$
Parameter display of test page	One set main/ sub parameter, 10 point list seep
List Sweep Function	10 points list sweep Frequency, AC voltage/current, internal/external bias voltage/ current can be swept.
	Each sweep point can be sorted separately
Internal Non-volatile Memory	100 sets of LCRZ setting files, 201 times test results
External USB memory	GIF files LCRZ setting files Test data can be stored via USB memory directly
Interface	USB, HANDLER, RS232C, LAN, USB Host
Calibration	
Warm Up Time	≥ 30 mins.
Ambient Temperature	23 ± 5 C
Test Signal Voltage	0.3Vrms – 1Vrms
Zeroing	After Open or Short
General Information	
Display	4.3" TFT LCD display
Operating conditions	$0^{\circ}\text{C} - 50^{\circ}\text{C}$, $\leq 90\%$ RH
Supply	$230\text{V} \pm 10\%$, 50Hz AC
Power Consumption	80VA
Standard Accessories	4 terminal Kelvin test clip leads , 4 terminal transformer test clip , 4 terminal component test fixture , shorting plate

UNDERTAKING FOR BID SECURITY

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

To,
The Registrar,
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)

(To be printed on letterhead of the bidder)

Bidder's Information

1	Name of the Bidder	
2	Address of the Bidder	
3	PAN No.	
4	GSTIN	
5	E-mail	
6	Contact Person's Name & Designation	
7	Mobile No.	

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 organization 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

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,
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 order value**) and valid till **one year plus sixty days or up to 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.