Indian Institute of Technology, Kanpur Design Program

Enquiry Letter for "Supplying Impedance Analyzer" Enquiry No.: SB/DESP/2017-18/07

Impedance Analyzer Specifications

Date: 11/12/2017

Frequency	20 Hz to 30 MHz
Resolution	1 MHz or better
Impedance parameters	Z , θz, Y , θy, Cp, Cs, Lp, Ls, Rp, Rs, D, Q, R, X, G, B,Complex Z, Complex Y
Level Monitor	Vac, Iac, Vdc, Idc
Voltage Range & Resolution	minimum 5 mVrms to 1 Vrms with 1 mV resolution
Current Range & Resolution	200 μArms or less to 20 mArms or more with 20 μA resolution or better
DC voltage bias Range & Resolution	0 to \pm 40 V & 1mV or more & minimum 1mV or better
DC Current bias Range & Resolution	$0 \text{ to} \pm 100 \text{ mA}$ or more & 40 μA minimum
Sweep Parameters	Frequency, signal voltage, signal current, DC bias voltage, DC bias current
Sweep type	Linear frequency, log frequency, OSC level (voltage, current), DC bias (Voltage, current), log DC bias (voltage, current)
Number of measurement points	min.2 to 1601 points or more
Segment Sweep	More than 200 segments.
Traces	4 data trace & 4 memory trace per channel
Markers	min. 10 markers with reference & delta marker
Marker Search	Maximum value, minimum value, multi-peak, multi-target, peak, peak left, peak right, target, target left, target right, and width parameters with user defined bandwidth values.
Interface	GPIB, LAN, USB, VGA
Dielectric Test Fixture	Dielectric Test Fixture should be supplied for measuring Capacitance (C), dissipation factor (D), and dielectric constant (ϵ r', ϵ r") with material under test thickness is thickness: ≤ 10 mm and Diameter is 10 to 56 mm for the frequency range $\leq 30 \mathrm{MHz}$
Frequency and test fixtures upgradability	The Same System should be upgradable for future applications upto 120MHz and large number of test fixtures such as liquid
Display type	10" color LCD TFT Display or better
Warranty	3 Year Standard Warranty
Manufacturer should have NABL accredited Cal Lab and service center in India.	

Terms & conditions:

- 1. All Quotation must reach undersigned by 21st December 2017, at 2:00PM.
- 2. Supplier/ Vendors should submit technical and financial bid together in separately sealed envelopes.
- 3. Only manufacturer/ Authorized Suppliers may quote.
- 4. Evaluation will be on the basis of technical specification format provided as per our tender notice.
- 5. Financial bid will be open only for those, who meet T&C and tender technical specification.
- 6. The format for specification is same as provided in tender sheet for supplier/vendors for submitting technical specification in their cover letter heads.
- 7. Please do mention tender number clearly on envelope.
- 8. Please send the name and contact details of the person to whom company had supplied similar systems. Committee may ask for the feedback
- 09. The supplier must have supplied systems to institution of national and/or international repute.
- 10. Normal payment terms for the institute will be applicable (90% on delivery of the items and remaining 10% after satisfactory installation/inspection)
- 11. Warranty/Guarantee should be clearly mentioned. The warranty must start from the date of installation at IITK.
- 12. Quotation should carry proper authorization certificate from manufacturer.
- 13. Validity of Quotation should be at least for 30 days.
- 14. Maximum educational discounts should be applied.

Kindly send the quotation in sealed envelope latest by dated 21/12/2017 to the following address:

To,

Dr. Shantanu Bhattacharya Professor & Head Design Program Northern Lab –II, 115 Department of Mechanical Engineering Indian Institute of Technology, Kanpur- 208016 (UP)

Phone: +91-512-2596056(Office)

Fax: +91-512-2597408 Email: bhattacs@iitk.ac.in