



Department of Electrical Engineering
Indian Institute of Technology, Delhi
Hauz Khas, New Delhi 110016

NIQ no. IITD/EE/RP02235/vna

Due Date: 7.4.2014, 5 PM

Notice inviting quotations for
a 20 GHz vector network analyzer

Sealed quotations are invited for a 20 GHz vector network analyzer. The required specifications are given below. The purchase will be made through a two part bidding process. Technical and Financial bids have to be made separately. Complete technical information should be provided along with the Technical bid. Please refer to the last page on Terms and Conditions for details on how and when to submit Technical and Financial bids.

Required Specifications

1. Frequency range, at most from 300 kHz, to at least 20 GHz.
2. Directivity of at least 40 dB from 30 kHz to 20 GHz.
3. The output range of the test port should be from -30 dBm to at least 10 dBm.
4. The crosstalk between the two ports should be at most -108 dBm.
5. The noise floor of the test port should be lower than -110 dBm over a 1 Hz bandwidth.
6. The VNA should have two ports, with 3.5 mm connectors.
7. Calibration kit for the 3.5 mm connectors should be provided.
8. The source and load matching should be better than 38 dB and 40 dB respectively.
9. Reflection and transmission tracking should be better than ± 0.05 dB.
10. The unit should be LXI compatible. SCPI command-set should be provided.
11. The form factor of the instrument should be bench-top. Hand-held instruments are not going to be evaluated.
12. Bias-tee should be provided.
13. Two ruggedized flexible 50 Ω 3.5-mm cables should be provided.
14. Warranty of 3 years.

Terms and Conditions

1. Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as “Technical Bid” and “Financial Bid” respectively. Both the sealed envelopes should be sent in a single sealed envelope, clearly marked as “Quotation for a 20 GHz vector network analyzer”. The quote should reach the following address on or before **7.4.2014, 5 PM**.

Dr. S. Chatterjee, IV-201
Department of Electrical Engineering
IIT Delhi, Hauz Khas
New Delhi, 110016
2. Please quote prices for FOB and CIF, New Delhi, inclusive of all taxes and duties.
3. Quote should be in Indian Rupees for agents of Indian manufacturers, or in foreign currency, for agents of foreign manufacturers, and needs to be valid for at least three months.
4. Attach all the technical literature and a list of similar installations done in India.
5. If the quote is being submitted by a representative of the manufacturer, a valid agency-ship or dealership certificate authorizing the agent to quote to IIT Delhi on behalf of the manufacturers should be enclosed.
6. Either the Indian agent on behalf of the principal/OEM, or the principal/OEM can bid, but both cannot bid simultaneously.
7. Complete set of manuals for the operation of the equipment should be given.
8. Clearly specify the installation requirements - such as space, power, frequency, environment etc.
9. If the item quoted is proprietary in nature, please enclose proprietary certificate from the principals stating, “Certified that _____ is a proprietary item of M/s _____ and no other manufacturer makes this item.”
10. Please attach a signed and stamped compliance chart for the specifications. The format of the compliance chart is attached to this document.
11. Please specify all of your terms and conditions clearly, including delivery period.
12. Mode of payment for purchases in foreign currency are through irrevocable letter of credit, or preferably, **through wire transfer on delivery**. Only bank charges within India are payable by IIT Delhi, all bank charges outside India are the responsibility of the seller. For purchases in INR, payment is on delivery.
13. The Institute reserves the right to accept or reject any or all quotations without assigning any reasons thereof.

Prof. B. Bhaumik
(Chairperson, purchase committee)