Tender notification for the procurement of a Vector Network Analyzer at IISc

(Last Date for submission : 10th August 2016)

REF: PH/VS/190/2016-17 21-July-2016

Dear Sir/Madam,

Kindly send your best quotation for the following item on C.I.P. Bangalore basis. Your quotation should clearly indicate the terms of delivery, delivery schedule, E.D., payment terms etc. The tender should be submitted in two separate sealed envelopes - one containing the technical bid and the other containing the commercial bid, both of which should reach us, duly signed on or before 1700 hours 10th August 2016.

Please enclose a compliance statement along with the technical bid.

Technical specifications for the Vector Network Analyzer (VNA):

- 1. 2-port benchtop model having frequency sweep range from 100 kHz 20 GHz.
- 2. Available IF bandwidths from 1 Hz to 1 MHz. Please include all possible upgrades to the IFBW outside the specified range as an optional line item.
- 3. No. of sweep points: 2- 100000
- 4. Frequency resolution =:1 Hz
- 5. Time base aging and temperature drifts (per year) < 1 ppm
- 6. Transmission dynamic range: > 100 dB at lower frequencies and >120 dB at higher frequencies
- 7. Corrected directivity: > 40 dB in low frequency, > 44 dB in high frequency. Please include uncorrected system directivity in the compliance document. Please include manual-/auto-calibration kits used to calibration as a separate optional line item.
- 8. Trace noise: < 0.0008 dB @ 1 kHz IFBW
- 9. Number of trace markers = 10 or more.
- 10. Frequency sweeps: Linear, Segment.
- 11. Measurement speed : < 25 micro-sec per point (includes pre-processing and post-processing. Excluding sampling time.)
- 12. Source power: at least 10 dBm (upper limit) and with at least 30 dB sweep span. Power resolution of 0.01 dB. Please include the option to increase the power sweep span as a separate optional line item.
- 13. Noise base: < -110 dBm/Hz in low frequency range and <-120 dBm/Hz in high frequency range
- 14. LAN/Ethernet, USB ports for remote interfacing and data transfer
- 15. Web-enabled control : Yes
- 16. Built-in programming environment
- 17. External trigger: Input and Output

- 18. Display: Integrated
- 19. 3 years comprehensive warranty
- 20. Service and support: Please indicate if local service and support is available in India
- 21. List of customers: Total 10 and at least 4 in India. Please provide email and phone number.
- 22. The payment terms should be clearly mentioned.
- 23. Delivery time: 8 weeks or less

Optional: Please include these as optional items.

- 1. Time domain analysis upgrade; Time domain reflectometry (TDR) upgrade
- 2. Manual-/Auto- calibration kits require to achieve the directivity specified in item 7
- 3. Receiver frequency offset upgrade
- 4. Power-sensor for power calibration
- 5. Support frames for 19" rack installation
- 6. Additional warranty for 2 years

Sincerely, Dr. Vibhor Singh Assistant Professor Department of Physics Indian Institute of Science Bangalore - 560012, India.