

अभियांत्रिकी अभिकल्प विभाग, भारतीय प्रौद्योगिकी संस्थान मद्रास, चेन्नै

Department of Engineering Design, Indian Institute of Technology Madras

Limited Tender Reference No.: DEPT/ED/2018-19/07/002 Date: 12 July 2018, Due Date: 24 July 2018 @ 4.00 PM.
Subject: INVITATION FOR QUOTATIONS FOR SUPPLY OF REAL TIME SPECTRUM ANALYZER (Quantity: 3 Nos)

Dear Sir/ Madam,


1. Quotations are invited in duplicated for the various item shown below over leaf/enclosed list.
2. The quotations are to be two parts – **One Technical and Commercial offer:** The two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in separate envelopes must be enclosed in the bigger envelope duly sealed and super scribed with reference number and date and due date must be addressed to the under signed so as to reach him on or before the due date stipulated above.
3. The Quotations should be valid for 60 days from the due date and the period of delivery required should also be clearly indicated.
4. **Local Firms:** Quotations should be for free delivery to this Institute. If quoted for Ex – Godown delivery charges be indicated separately.
5. **Firms outside Chennai:** Quotations should be for F.O.R Chennai / F.O.B. Chennai / CIF Chennai (Including Insurance and Freight Charges). If Ex-Works, Packing, forwarding and freight charges must be indicated.
6. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the quotations, wherever applicable.
7. The rates of Goods and Service Tax (GST) and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for GST will be admitted at any stage and on any ground whatsoever. **The taxes leviable should take into consideration that we are entitled to have concessional Goods and Service Tax applicable to educational institutions run with no profit motive for which a concession.**
8. Goods should be supplied carriage paid and insured.
9. Goods shall not be supplied without an official supply order.
10. **Payment:** Every short effort will be made to make payment within 30 days from the date of bill/acceptance of goods whichever is later.
11. The Warranty of the item should be at least 12 months.
12. The Guarantee period of the item may be indicated clearly.
13. IIT Madras is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport /Seaport. Hence the price should not include the above charges.
14. **Acceptance and Rejection:** - IITM has the right to accept the whole or any part of the Tender or portion of the quantity offered or rejects it in full without assigning any reason.
15. Any quotations received after the deadline prescribed above will not be accepted. The quotation (duly signed hard-copy) should be sent to the following address.

The Head
Dept of Engineering Design
IIT Madras
Chennai-36
Ph.No: 044 2257 4740 & 044 2257 5630

Real time spectrum analyzer technical specifications:

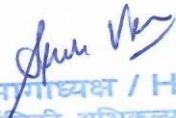
- 1) RF input frequency range: 9 kHz - 6.2 GHz
- 2) Frequency reference accuracy
 - Initial: ± 3 ppm + aging (18 °C to 28 °C ambient, after 20 minute warm up)
 - ± 20 ppm + aging (-10 °C to 55 °C ambient, after 20 minute warm up), typical
 - Aging (typical): ± 3 ppm (1st year), ± 1 ppm/year thereafter
- 3) External frequency reference input
 - Input frequency range: 10 MHz ± 10 Hz
 - Input level range: -10 dBm to +10 dBm sinusoid
 - Impedance: 50 Ω
- 4) Center frequency resolution
 - Block IQ samples: 1 Hz
 - Streamed ADC samples: 500 kHz
- 5) RF input Impedance: 50 Ω
- 6) RF input VSWR: $\leq 1.8:1$ (10MHz to 6200MHz, reference level $\geq +10$ dBm)
- 7) Maximum RF input level without damage
 - DC Voltage: $\pm 40V_{DC}$
 - Reference level ≥ -10 dBm: +23dBm (Continuous or peak)
 - Reference level < -10 dBm: +15dBm (Continuous or peak)
- 8) Maximum RF input operating level
 - Center frequency < 22 MHz (lower frequency path): +15dBm
 - Center frequency ≥ 22 MHz (RF path): +20dBm
- 9) Computer interface: USB 3.0
- 10) Internal DC block
- 11) Internal preamp
- 12) Support for EMI/EMC testing


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Chennai - 600 036.


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आई आई टी मद्रास, चेन्नै-६०० ०३६
IIT Madras, Chennai-600 036.

Additional Requirements:

- 1) Proprietary certificate from manufacturer
- 2) Quantity: 3 No's
- 3) 3 years warranty mandatory
- 4) Device installation and testing upon delivery
- 5) Service must be provided for the device after installation
- 6) Provide a proof copy of P.O. along with contact information of the concerned scientist/faculty in centrally funded technical institute to whom this device/equipment has been supplied.
- 7) Shortlisted vendor based on technical specification must demonstrate the device/equipment functionality on requested date.
- 8) Technical & budgetary quotation to be provided separately in sealed cover
- 9) Quotation validity should be 60 days.


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