



Dr.KAVITHA ARUNACHALAM
Assistant Professor

26.05.2015

Specifications for Upgradable Signal Analyser with Noise Figure Measurement

Ref: EDD/DSTX/KAVT/2015-16 – 001

DUE DATE: 10.06.2015

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 Offer and one 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 duly sealed and Super scribed on the envelope with reference no. and due date, should be addressed to the undersigned so as to reach him or before the **due date** stipulated above.
4. Quotations should be valid for 60 days from the date and period of delivery be indicated.
5. Local firms to quote for free delivery to this Institute. If quoted for Ex – Godown delivery charges be indicated separately.
6. Relevant Literature pertaining to the items quoted with full specifications.
7. Sales Tax/General Taxes /ED if applicable and such other taxes legally leviable and intended to be claimed should be distinctly shown along with price quoted. If this not indicated no such claim will be admitted at any stage. The taxes leviable should take into consideration that we are entitled to have concessional sales tax applicable to Non – Government educational institutions run with no profit motive for which a concession is given. Sales Tax certificate will be issued at the time of final settlement of the bill.
8. Goods should be supplied carriage paid and insured.
9. Goods shall not be supplied without an official supply order.
10. Every effort will be made to make payment within 30 days from the date of bill/acceptance of goods whichever is later.
11. The Guarantee period of the item should be indicated clearly.
12. In case of LC. Payment 90% of the payment will be made after completion of the supply. The balance 10 % of the payment will be made after satisfactory installation of the equipment.
13. IIT Madras is exempt for payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demend.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 reject it in full without assigning any reason.
15. The Sealed Quotation to be sent to **Dr.KAVITHA ARUNACHALAM**.

Yours faithfully,


Dr. KAVITHA ARUNACHALAM
Department of Engineering Design
IIT Madras, Chennai - 600 036.



IIT Madras is interested to procure the following item on limited tender basis from the original manufactures or authorized distributors of the item.

**Specifications for Upgradable Signal Analyser with
Noise Figure Measurement**

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Qty. 1

Frequency Range currently required : 10Hz to 7GHz (Same model should be upgradable upto 40GHz for our future requirements)

Freq reference aging rate: 1ppm/year

3dB Resolution BW & Video BW: 1Hz to 3MHz (in 10% steps), 4, 5, 6, 8 MHz

Analysis BW: 25MHz

Preamplifier: 100 KHz to 7GHz

1 dB gain comp w/preamp (1 GHz) : -14dB nominal

Dynamic average noise level with Preamp ON at 7GHz : < -160dBm

Phase Noise (1GHz Carrier frequency & 1MHz offset) : < -135dBc/Hz

Built-in Electronic Attenuator : 0 to 24 dB in 1 dB steps (10 Hz to 3.6 GHz)

Trace Points: 1 to minimum 40,000 points

Auto tuning of frequency with a single button

Upgradable CPU is required to take care of future computing processor requirements

Noise Source: Frequency range 10 to 18GHz, nominal ENR 6dB

Measurement Speed (Sweep Time) Zero Span : <=1 us to >=6000s

Calibration Cycle: 2 Years

Warranty: 3 Years

Training: onsite training after delivery

Payment: net 30 days after training

Remarks: The OEM /Supplier should have supplied similar units to Universities / IITs in the last 3 years and also should demonstrate the working of the same after delivery.

Dr. KAVITHA ARUNACHALAM
Department of Engineering Design
IIT Madras, Chennai - 600 036.