NIT-PR - 211975 26.05.2022

Due date for submission of Quotation: 20.06.2022

The Raman Research Institute invites Quotations for supply of **Portable Handheld Spectrum Analyser + Vector Network Analyser** directly from the manufacturers or their authorized agents adhering to the terms and conditions given below:

Portable Handheld Spectrum Analyzer + Vector Network Analyser specifications

SI. No.	Description	
1.	Frequency range	9 kHz to 13.6 GHz
2.	Frequency reference accuracy	<= 1 ppm
3.	Measurement range max.	+ 20 dBm
4.	Resolution bandwidth	10 Hz to 1 MHz
5.	Video bandwidth	10 Hz – 1 MHz
6.	SSB Phase noise @ 1 KHz offset@ 1GHz	<-90 dBc /Hz
7.	Amplitude range: Max. Safe input level	+30 dBm
8	a). Average displayed noise level without preamp b.) Average displayed noise level with preamp	a. <= -130 dBm b. <= -140 dBm
9.	Display range : a) Log scale b) Sweep points	a) 1 to 20 dB in 1 dB steps b) 1001
10.	Marker read out resolution	0.01 dB
11.	Third order intercept	> +6dBm
12.	Second harmonic distortion	< -60 dBc
13.	Standard attenuator range	0 - 40 dB
14.	Standard attenuator step	5 dB
15.	EMI compatible	Class A
16.	Data storage : 1. Internal 2. External	400 traces Memory card
17.	Tracking generator	10 MHz to 6 GHz
18.	Interfaces	USB3 - 2 Nos. Ethernet – 1No.
19.	Input connector	N
20.	Impedance	50 ohms
21	Vector Network analyzer	9 KHz to 13.6 GHz
22	VNA ports & Measurements, impedance, delay measurement capabilities,	2ports, S-parameters with phase measurements
23.	Dyanamic range for VNA	>= 100 dB
24.	Max. levelled power for VNA	5 dBm
25.	Min. leveled power for VNA	< = -50 dBm
26.	Backup time	4 Hrs.
27	CAL kit	Mechanical / ECAL – 3.5 mm
28.	Power Requirements	a) 230V, 50Hz and b) Standby D.C Operated Facility
29.	Weight	<= 5 Kg



ELIGIBILITY

- 1. Bidder should be an Original Equipment Manufacturer (OEM) or should be an Authorized Agent/Partner having Direct Purchase and Support Agreement with the OEM.
 - In case the Bidder is an Authorized System Integration Partner of the Principal Manufacturer (OEM), a Certificate from the Principal Manufacturer (OEM) clearly stating the relationship and level of partnership with the Partner, authorization to the Partner to quote for this Specific quotation Enquiry and back-to-back arrangement with OEM for warranty and support for five (5) years is to be furnished.
- 2. I) As per the Government of India, Ministry of Commerce and Industry and Department for Promotion of Industry and Internal Trade (Public Procurement Section) Order No. P-45021/2/2017-PP (BE-II) dated 04 June 2020
 - a) The Bidder shall produce a certificate whether he/she belong to "Class I' and 'Class II supplier' and Non Local suppliers.
 - b) Class I' and 'Class II supplier' and Non Local suppliers as classified under above mentioned Order are eligible to submit the offer. While finalising the quotation, the instructions given in the above order shall prevail.
 - II) As per the Government of India, Ministry of Finance and Department of Expenditure, Public Procurement Division – Office Memorandum No. F.No.6/18/2019-PPD dated 23.07.2020, the Institute reserves the right by order in writing, impose restrictions, including prior registration and/or screening, on procurement from bidders from a country or countries, or a class of countries, on grounds of defence of India, or matters directly or indirectly related thereto including national security; no procurement shall be made in violation of such restrictions.

EVALUATION OF BIDS:

- The bids conforming to the eligibility criteria will be considered for further evaluation.
- The bids will be shortlisted on the basis of technical parameters, features, standards compliance of all materials and equipments used, etc.
- For Technical evaluation, bidders have to ensure the availability of appropriate expert, along
 with every type of documentation from their organization for interacting with the Institute



OTHER TERMS AND CONDITIONS:

The Institute is eligible to issue Central Excise Duty Exemption Certificate or Customs Duty Concession certificate, GST Concession Certificate.

- 1. The quotation shall be divided into two parts:
 - The first part should be "Technical" Bid containing only detailed specifications for tendered Portable Handheld Spectrum Analyser + Vector Network Analyser. The details include:
 - a) Detailed literature including Data Sheets of quoted products
 - b) Supporting Documents as per the Eligibility Criteria.
 - c) The first part (Technical Bid) shall not contain any financial aspects of the offer. It shall contain only a cross reference to the second part (Financial Bid).
 - II) The Second part (Financial Bid) shall contain detailed financial outlay with List of deliverables / Bill of materials / Bill of Quantities and services, unit price of items as in the technical bid (i.e., First Part).
- The quotations should be complete in all respects and the details specified in this request should be adhered to and submitted upto 2.00 PM on or before 20.06.2022 and the Bid will be opened on 22.06.2022 at 4.00 PM
- 3. Quotations should be valid for 180 days from the due date.
- 4. EMD of <u>Rs.30,000.00</u> should accompany the tender enclosed along with the technical bid (envelope). Payment should be by way of DD / Banker's cheque only, drawn in favour of "Raman Research Institute, Bangalore". No other form of payment will be accepted.
- 5. EMD of successful tenderer will be returned / adjusted on satisfactory completion of order.
- 6. EMD of unsuccessful tenderers will be returned within Thirty working days of opening the tender.
- 7. The Financial Bids will be opened only for those technical bids found suitable and approved by our technical personnel.
- 8. Unit price should be mentioned, which is inclusive of all applicable discounts. Taxes and other levies should be indicated separately.
- 9. The Institute reserves the right to modify the technical specification or the required quantity at any time but within one week before the due date and will be notified in the Institute website
- 10. The Institute reserves the right to reject any or all of the quotations received without assigning any reason. It also reserves the right to accept an offer other than the lowest.
- 11. The final order quantity can be lower or higher than that mentioned in the request.
- 12. The Institute reserves the right to postpone/extend the due date for submission of the quotation without assigning any reason.
- 13. All deliveries should be completed within the stipulated delivery time of the purchase order due date. While the Institute reserves the right not to accept delivery in part or full, beyond the due date of delivery, liquidated damages at 1% per every week of delay will be levied. Exceptions: Force Majeure.
- 14. Delivery of goods should be made at our stores located on campus near Mekhri Circle, Bangalore 560 080, at suppliers cost and risk.
- 15. The Institute reserves the right to call potential suppliers for technical discussions and product demonstrations.
- 16. Any Technical clarification required towards submission of offer may please be mailed to purchase@rri.res.in
- 17. All disputes, arbitration, if any are subject to jurisdiction of courts in Bangalore only.



CHECKLIST

<u>Tender Towards Supply of</u> <u>Portable Handheld Spectrum Analyzer + Vector Network Analyser</u>

SL. NO	CRITERIA / SPECIFICATION / CONDITION		YES / NO
	Bidder should be an Original Equipment Manufacturer (OEM) or should be an Authorized Agent/Partner having Direct Purchase and Support Agreement with the OEM.		
1	In case the Bidder is an Authorized System Integration Partner of the Principal Manufacturer (OEM), a Certificate from the Principal Manufacturer (OEM) clearly stating the relationship and level of partnership with the Partner, authorization to the Partner to quote for this Specific Quotation Enquiry and back-to-back arrangement with OEM for warranty and support for five (5) years is to be furnished.		
2	The bidder must not be blacklisted by Central Government, State Government or any Organization in India. A certificate or undertaking to this effect must be submitted		
3	Quotations should be valid for 180 days from the date of opening.		
4	EMD of Rs.30,000.00 should be enclosed along with the technical bid.		
	I) As per the Government of India, Ministry of Commerce and Industry and Department for Promotion of Industry and Internal Trade (Public Procurement Section) Order No. P-45021/2/2017-PP (BE-II) dated 04 June 2020		
5	 a) The Bidder shall produce a certificate whether he/she belong to "Class – I' and 'Class – II supplier' and Non – Local suppliers. b) Class – I' and 'Class – II supplier' and Non – Local suppliers as classified under above mentioned Order are eligible to submit the offer. While finalising the tender, the instructions given in the above order shall prevail. 		
	II) As per the Government of India, Ministry of Finance and Department of Expenditure, Public Procurement Division – Office Memorandum No. F.No.6/18/2019-PPD dated 23.07.2020, the Institute reserves the right by order in writing, impose restrictions, including prior registration and/or screening, on procurement from bidders from a country or countries, or a class of countries, on grounds of defence of India, or matters directly or indirectly related thereto including national security; no procurement shall be made in violation of such restrictions.		

Signature with Seal

