

Due date for submission of Quotation: **19.05.2022**

The Raman Research Institute Invites Quotations for supply of **Benchtop Vector Network Analyzer** directly from the manufacturers or their authorized agents adhering to the terms and conditions given below:

<b>Benchtop VNA – 100 KHz – 13.5 GHz - Qty. 1 No.</b> (as per the below specifications)		
<b>SL NO.</b>	<b>SPECIFICATIONS</b>	<b>VALUE</b>
1.	FREQUENCY RANGE	100KHz – 13GHz
2.	NUMBER OF BUILT-IN RF PORTS	4 Ports
3.	PORT IMPEDANCE	50Ω
4.	PORT CONNECTORS	SMA
5.	DYNAMIC RANGE	>= 100dB
6.	TRACE NOISE: a) AMPLITUDE TRACE NOISE b) PHASE TRACE NOISE	<0.002dB rms <0.02 deg rms
7.	FREQUENCY RESOLUTION	<= 10 Hz
8.	MINIMUM NOISE FLOOR LEVEL AT 1 KHZ BANDWIDTH	<-115dBm
9.	MAXIMUM NUMBER OF MEASUREMENT POINTS	>5000
10.	POWER RANGE	-80 dBm to +10dBm
11.	POWER RESOLUTION	0.1dB
12.	HARMONICS SUPPRESSION	>45dBc
13.	ACCURACY OF MEASUREMENT	<0.3dB Magnitude uncertainty <1° Phase uncertainty
14.	DIRECTIVITY	>40 dB
15.	SOURCE MATCH	>30 dB
16.	TRANSMISSION TRACKING	<0.5dB
17.	REFLECTION TRACKING	<0.5dB
18.	LOAD MATCH	>=10dB
19.	USB PORTS	4 or more - USB 3.0
20.	ETHERNET PORT	1 No.
21.	EXTERNAL REFERENCE PORTS	1 No.
22.	FILE FORMATS SUPPORTED	S2p, csv, txt, jpg, png
23.	WEIGHT	Max. 20 Kg
24.	Additional options required with upgrade options: a) Noise figure measurement b) Compression point measurement c) S parameter to z parameter conversion d) Ip3 measurement e) Mixer measurement	Should have feature to Upgrade



## 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:

1. The quotation shall be divided into two parts:
  - I) The first part should be "Technical" Bid containing only detailed specifications for tendered **Benchtop Vector Network Analyzer**. 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).
2. The quotations should be complete in all respects and the details specified in this request should be adhered to and **submitted at 2.00 PM on or before 19.05.2022**.
3. Quotations should be valid for **180** days from the due date.
4. EMD of **Rs.40,000.00** 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](mailto:purchase@rri.res.in)
17. All disputes, arbitration, if any are subject to jurisdiction of courts in Bangalore only.



**CHECKLIST**

**TENDER TOWARDS SUPPLY OF BENCHTOP VECTOR NETWORK ANALYSER**

SL. NO	CRITERIA / SPECIFICATION / CONDITION		YES / NO
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	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 <b>180</b> days from the date of opening.		
4	EMD of <b>Rs.40,000.00</b> should be enclosed along with the technical bid.		
5	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 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**

