

**INDIAN INSTITUTE OF TECHNOLOGY KANPUR**  
**Department of Electrical Engineering**

Enquiry No.: EE/YSC/2016/13

Opening Date: 24<sup>th</sup> July, 2017

Closing Date/time: 10AM on 8<sup>th</sup> August, 2017

**Sub.: Upgradation of Vector Network Analyzer for Pulsed-RF Measurements**

Our organization is an educational institute of the repute and liable to get education discount from manufacturer. Please send sealed quotation, to undersigned, for the same.

There will be two steps in the tender process:

1. Technical specifications with compliance table should be put in one sealed envelope. SPECIFY company name and component number, and attach detailed technical specification for each part/component. Also attach technical brochure from manufacturer.
2. Financial details i.e. budget quotation should be in a separate sealed envelope. This quotation will not be opened if technical details of the product do not match with our specifications.

**Specifications:**

- Please see technical specifications and compliance table. Mark, whether your system complies or not with the specifications along with details.
- Parent company should be an established company with good number of installations and after sales support in India as well.
- Vendor must provide 3(THREE)-years warranty for all parts/components and servicing.
- Maintenance and training charges should be mentioned separately (if any).

**Technical Specifications and Compliance table:**

<b><u>Feature Enhancement on Existing N5244A Vector Network Analyzer</u></b>			
<b>IIT-K furnished Equipment</b>	<b>Model: N5244A-Installed options: 200, 219, 224, 086, 080</b> <b>Model: N4693A</b> <b>Model: 85133F</b> <b>Make – Keysight</b>		
<b>S. No.</b>	<b>Parameter</b>	<b>Specification</b>	<b>Compliance (Y/N)</b>
<b>1</b>	<b>Bi Directional Pulsed S-parameters</b>	<b>Point-in-pulse Pulse-profile</b>	
a	Pulse Modulator	Should be available on existing both the sources in VNA	
b	Pulse Modulator On/Off Ratio	10 MHz to 3.2 GHz - 64 dB 3.2 GHz to 50 GHz - 80 dB	
c	Minimum Pulse Width	≤ 40ns	
d	Internal Pulse Generators	≥ 4	
e	Pulsed S-Parameter Measurements	System should perform optimization for measurement sensitivity.	

f	Pulse Interface	System should accept external TTL pulse sync input as well as internal pulse generator output should be available to sync with external system	
g	Pulse Input/ Output Interface Connector	SMB (f) and DB15	
<b>2</b>	<b>Intermodulation Distortion Measurements</b>	<b>Two Tone</b>	
a	Swept IMD measurement	Swept Power Swept Carrier Frequencies Swept Carrier Separation	
b	Measurement Parameters	IMD3, IMD5, IMD7, IMD9, TOI, etc.	
c	Intermodulation Distortion Spectrum	Should be available	
<b>3</b>	<b>Accessories</b>	<b>Any accessories in addition to above mentioned required to fulfill above measurements should be quoted</b>	
<b>4</b>	<b>Rack</b>	<b>Rack of different sizes should be quoted separately with this tender. Rack must be manufactured by same OEM.</b>	

**Note:**

1. Your quotation shall contain Authorization Letter from manufacturer specifically for this tender.
2. Quotation must be valid for 90 days.
3. Delivery period should not be more than **10 weeks**.
4. Send complete detail of the product(s) including brochure from manufacturer.
5. Price must include all taxes and charges.

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