Technical Specification

RF Phase Noise Analyzer

ELIGIBILITY CRIETERIA:

1. They should have at least 10 users in the south region of India in the last 5 years. Necessary document proof should be submitted along with minimum 3 performance certificates from the south region purchases (Purchase order copies should be attached).

2. There should be a minimum of 5 users of the quoted model. (Necessary purchase order copies should be attached

Sl.No.	**Performance Parameters**	**Specifications**
1	General	USB based Phase Noise Analyzer with controller
2	Input Frequency Range	10MHz to 26GHz
3	Input Measurement Level	-5 to +20dBm
4	Input Damage Level	+22dBm
5	Input impedance	50 Ohm
6	VSWR 10 MHz to 20 GHz 20 GHz to 40 GHz	 < 2.0:1 < 2.5:1
7	Data processing	The following Data can be Processed in the form of Report. 1. SSB phase noise [dBc/Hz] 2. Spurious noise [dBc] 3. Jitter (sec)
8	Phase Noise Sensitivity	
	Freq. 10 MHz; @ Offset 1Hz:	-90dBc
	Freq. 10 MHz; @ Offset 100 Hz:	-146dBc
	Freq. 10 MHz; @ Offset 1 kHz	-161dBc
	Freq. 10 MHz; @ Offset 1 MHz	-179dBc
	Freq. 100 MHz; @ Offset 1 Hz	-70dBc
	Freq. 100 MHz; @ Offset 100 Hz	-130dBc
	Freq. 100 MHz; @ Offset 1 kHz:	-152dBc
	Freq. 100 MHz; @ Offset 1 MHz:	-175dBc
	Freq. 1 GHz; @ Offset 1 Hz:	-51dBc
	Freq. 1 GHz; @ Offset 100 Hz	-110dBc
	Freq. 1 GHz; @ Offset 1 kHz	-134dBc
	Freq. 1 GHz; @ Offset 1MHz	-159dBc
	Freq. 6GHz; @ Offset 1 Hz:	-35dBc
	Freq. 6GHz; @ Offset 100 Hz:	-99dBc
	Freq. 6GHz; @ Offset 1 kHz:	-114dBc
	Freq. 6GHz; @ Offset 1 MHz:	-143dBc
9	Phase Noise Uncertainty @1KHz to 100MHz offset (Absolute Measurements)	+/-2dB
10	No. of Baseband Inputs Required	2 (Min.)
11	Baseband Frequency Range	0.1 Hz to 100 MHz

12	Baseband Power Level Range	± 1 Vdc
13	Measurement Bandwidth AM Measurements PM Measurements	 0.1MHz to 1MHz 0.1MHz to 100MHz
14	Minimum no. of LOs Required	2 or more
15	LO Frequency Range	10MHz to 6GHz
16	LO Input Power Level	+3 dBm to +13 dBm
17	LO Input Damage Level	>+16dbm
18	LO Output Frequency Range	10MHz to 6GHz
19	LO Output Power Range	0dBm to +10dBm
20	Display functions	Smooth Trace, Reference Trace, Frequency and Level Markers, change of Measurement types of jitter/Offsets, Limit Testing functions & number of Correlations.
21	Report Generation	Automated report generation tool to be provided with ability to save / export data plots
22	Communication Interface	USB Communication
23	Remote Control Application	GUI should be available for remote access of the Instrument and Storing /Retrieving of Plots
24	Input Connector	Super SMA Connector Preferred For connector other than SMA, necessary adapter to be provided.
25	Reference Output & Input	10MHz
26	Reference Connector Type	Super SMA, 50 ohms
27	Controller	Controller to be supplied with minimum i5 processor, 4GB RAM, 500GB HDD, 14-inch display.
28	Operating temperature range	+10 Deg C to 40 Deg C
29	Calibration certificate	Calibration Certificate to be provided
30	AC Input Power	90-250VAC, 50-60Hz. Indian Standard Power Cord should be Provided.
31	Warranty	3 Years
32	Mechanical Dimensions	1U high, rack mountable form factor fan-less design to eliminate the potential for microphonics.