## **Specification of 13.6GHz Signal Analyzer**

PARAMETER	SPECIFICATION
Frequency Range	9KHz to 13.6GHz or better
Tracking Generator	Tracking generator, 9KHz to 6GHz
Reference frequency aging/year	± 1 x 10E-6 or better
No of Sweep points	1 to 40001 or better
Analysis bandwidth	10MHz and 25MHz upgradable in future
SSB Phase Noise @1GHz	-98 dBc/Hz at 1KHz Offset -106 dBc/Hz at 10KHz Offset -108 dBc/Hz at 100 KHz Offset -130 dBc/Hz at 1MHz Offset or better
Sweep time	Span = 0 Hz : 1 $\mu$ s to 6000 s Span $\geq$ 10 Hz : 1 ms to 4000 s or better
Resolution Bandwidth (-3dB)	1 Hz to 3MHz or better
Video bandwidths	1 Hz to 3MHz or better
Displayed Average Noise Level RF Attenuation = 0 dB, termination = 50ohm	-148 dBm @ 1 GHz -133 dBm @ 6 GHz -139 dBm @ 13.6 GHz or better
Trigger	Free run, line, video, external 1, RF burst, periodic timer
Trace detector	Normal, peak, sample, negative peak, log power average, RMS average & voltage average
Maximum input level	+30dBm (1W), input attenuation≥10dB or better
TOI	+ 11 dB @1GHz +12 dB @6GHz +11dB @13.6GHz
Input RF connector	Type N (F)
Input SWR	<1.9 or better
Vector signal analysis with signal record and playback & Multi Domain analysis with stand alone software	Should measure / display following parameters/graph such as symbol timing errors, filtering errors, DAC overflow, IQ imbalance, Quadrature skew, IQ imbalance, Error vector measurement (EVM), EVM vs Timing, spectrogram, persistence mode for transient capture, Constellation diagram, Bit error rate (BER) measurement for AM,FM, PM, ASK, BPSK, QPSK, QAM, FSK, APSKetc. The software should support standards & amp; modulation types ranging from cellular, IEEE 802 standards, LTE & LTE- Adavnced (FDD, TDD), W-CDMA, GSM/EDGE etc. General purpose: Modulation analysis as AM, FM, PM, BPSK, QPSK, QAM, FSK, APSK, OFDM, even customized IQ mapping signals and more. Signal analysis software should be compatible & supported in different domain instruments. Min 15 user license required
ADC resolution	14bits
Internal sample memory	≥1.5GB
Interface	LAN/GPIB/USB
Operating system	Windows based operating
	0 to 55 degree C

Display	10.6inch or higher
Warranty	3 year onsite Warranty.
Accessories	BNC to N type converter - 02 nos, 18inches cable (SMA) 2 nos
After sales service	OEM shuld have or arrange service & NABL accredited calibration lab in India. Documentary evidence required.