INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

Powai, Mumbai 400076

Ref. PR No. 1000016569 (Rfx No. 6100000498)

Detailed Technical Specifications for Spectrum Analyzer

Sr.No	Parameter	Specifications
1	Frequency Range	10 Hz to 13.5 GHz
2	Frequency Span	0 Hz,10 Hz to 13.5 GHz
	Frequency Resolution	0.01 Hz
3	Aging Rate	1 ppm/yr
4	Temperature Drift (0 to 50 °C)	1ppm
5	No. of Sweep Points	Upto 100001
6	SSB Phase Noise @ 1 GHz	< -90 dBc/Hz at 100 Hz Offset < -115 dBc/Hz at 100 KHz Offset
7	Sweep Time	Span = 0 Hz : 1 µs to 10000 s Span ≥ 10 Hz : 1 ms to 10000s
8	Resolution Bandwidth	1 Hz to 10 MHz
9	Video Bandwidth	1 Hz to 10 MHz
10	Display Range	DANL to +30 dBm
11	Traces	No. of Traces : 06 Detector : Auto Peak(Normal),Sample,RMS,Average,Max Peak,Min Peak Spectrogram Function should be available
12	Maximum Input Level	DC Voltage : 50 V (AC Coupled),0 V (DC Coupled)
		CW RF Power : 30 dBm RF Attenuation ≥ 10 dB
13	1 dB Compression at Input Mixer	+10 dBm nom @ 1 GHz
14	TOI	> 15 dBm @ 13.5 GHz
15	SHI with Preamp Off	70 dBm(nom) @ 7.5 GHz
16	Frequency Response (10 dB RF Attenuation)	< 1.5 dB@13.5 GHz

17	Displayed Average Noise Level(Preamp OFF) 10 MHz to 13.5 GHz	-145 dBm
18	RF INPUT	
	Connector & Impedance	3.5 mm(M),50 Ohm
	Attenuator Range	0 to 75 dB in 10 dB steps
	External Reference Input	Should have provision to input 1 MHz to 100 MHz
	Reference Output	10 MHz
20	Phase Noise Measurement Software	In-built Phase noise measurement application software to be quoted (No external PC software)
21	Interfaces	LAN and USB
22	Display	10 Inch Touch Screen Display
23	Warranty	03 Years
24	Power Supply	220/240 V 50/60 Hz
25	Operating temperature	+0 °C to +50 °C