

SPECIFICATIONS FOR SIGNAL GENERATOR (40GHz)

SNO.	PARAMETER	Specification
1	Frequency range:	100 MHz - 40 GHz
2	Frequency resolution (CW):	Less than or equal to 1Hz
3	Internal time base reference oscillator aging rate:	Less than 1×10^{-6} per year or better
4	External reference input amplitude: Frequency:	+3 dBm to +10dBm 10MHz
5	Maximum output power level:	Minimum +13 dBm over entire frequency band
6	Minimum settable Power:	Less than or equal to -50 dBm
7	Level accuracy (Worst case values for all levels of O/P in the mentioned frequency band):	Plus, or minus 2dB Maximum over entire Frequency range
8	Power level resolution:	Less than or equal to 0.1dB
9	SSB Phase Noise (20kHz offset from carrier):	Less than or equal to -80 dBc/Hz @1GHz-40GHz
10	Harmonics in dBc (For output level +13dBm):	Less than or equal to -25 dBc over entire frequency band
11	Sub Harmonics in dbc (For output level +13dBm):	Less than or equal to -30dBc over entire frequency band
12	Frequency modulation:	Band Wise Frequency Deviation 100 MHz to 20GHz greater than or equal to 1 MHz 20GHz to 40 GHz greater than or equal to 10 MHz Modulating Signal Bandwidth greater than or equal to 1 MHz
13	Phase modulation:	Band Wise phase Deviation 100MHz to 20GHz greater than or equal to 1 radian 20GHz to 40 GHz greater than or equal to 10 radians Modulating Signal Bandwidth greater than or equal to 1 MHz
14	Sweep operating modes:	Step sweep of frequency or amplitude or both (start to stop) List sweep of frequency or amplitude or both (arbitrary list)
15	Step Sweep Frequency range:	over entire frequency Range
16	Step sweep amp range:	25 dB (min)
17	Step sweep dwell time:	10 MS to 10 s
18	Step sweep triggering:	Auto, external, single
19	Remote interfaces:	GPIB and LAN (with LXI compatibility)
20	RF output connector:	2.92 mm female Connector or with suitable adaptor converting to 2.92mm(f)
21	Power requirements:	230 V + or -10V AC, 50 Hz + or - 3 %
22	Mechanical accessories:	Front handle kit & Rack mount kit to be Provided.
23	Operating temperature range:	+10 to +50°C
24	EMC:	Should meet EN 61326-1 or Equivalent
25	Warranty and calibration	Required for 5years.
26	Standard Periodic Calibration of Equipment as per requirement/ vendor calibration cycle	Periodic Calibration required for 5 Years as per vendor Calibration cycle. Vendor to specify calibration cycle.

		NABL or Equivalent Calibration Certificate to be submitted for each cycle
27	Recalibration for Repair Under warranty	During the warranty, due to repair if any, after completion of repair, Calibration should be carried out and NABL (or Equivalent) calibration certificate to be submitted.
28	Calibration and service support	1) Calibration Facility Should be NABL Accredited or Equivalent 2) Party should indicate the turnaround time. 3) On Call Service support if any, shall be provided 24x7.
29	Maintenance	1) Comprehensive Annual Maintenance Service contract (CAMSC) provision shall exist beyond the warranty period. 2) Maintenance support for at least 5 years (post warranty) shall be ensured. Note: Price Quotations are invited for Product +5 years' warranty only. However, OEM shall provide declaration for maintenance support for at least 5 years beyond the warranty period.
30	Important terms and conditions:	1) Point to point compliance statement to be attached with technical catalogue/data sheet along with page no. Please note that without this, quote is liable to be rejected. 2) Quote should be from OEM (Original Equipment manufacturer) or their valid authorized Indian representative only. Latest Authorization certificate shall be enclosed. 3) All applicable accessories such as power cord (compatible to Indian standard) to be supplied by vendor. Power cord of length 3 meters shall be provided. 4) Data sheet on measurement accuracy/uncertainty values to be provided by supplier. 5) Certificate of Calibration & test data shall be provided along with supply of the system. 6) All the hardware and firmware support required to derive the above specifications should be pre-installed on the equipment and should work on standalone basis. 7) All software upgrade within warranty period from the date of supply should be provided free of cost. 8) Vendor shall quote for the latest model of the equipment. 9) If Repair and Calibration have to be performed at vendor location equivalent Material Bank Guarantee (Cost of the item) has to be provided by the vendor 10) For Repair and Calibration transportation to and from URSC/ISITE Stores to be handled by the vendor against Returnable gate passes through URSC/ISITE Stores.