

50MHz-2.5GHz Modular Noise Generator

NG-G1S-B3-03-xxxx 50-2500MHz Noise Generator housed in the Genus 1U chassis. Covering frequency range 50MHz to 2.5GHz in a single band, offering flexibility in a compact and lightweight housing. Remotely controllable via webpage through ethernet port or locally controllable using HMI touchscreen.

- Ideal for precision applications
- Optional External Reference
- Compact 1U chassis
- Remote/Local Control
- Test and Measurement

Operating frequency range
50MHz–2.5GHz

Local control & monitoring via HMI high-resolution touchscreen

Attenuation Control Range
Specification 60dB.
Available 85dB

Resilience from dual redundant hot-swap power supplies & field replaceable CPU & HMI

Maximum Output Power
+10dBm (50-2500MHz)
-84dBm/Hz (Noise power spectral Density)

Compact housed in a 1U high chassis with capacity for up to 17 modules

Remote control & monitoring via RJ45 Ethernet port with SNMP & web browser interface

Chassis - Specification

Dimensions / Weight / Colour	1U high x 550mm deep x 19" wide / <10 kg / RAL9003—White (Semi-matte)
Capacity	Total of 17 module slots. Note that 1 slot will be used for fan (if required) and 1 slot will be used for 10 MHz EXT inject module (if required).
Modules per chassis	17 max (dependant upon configuration).
Temperature	Operating: -20°C to +60°C / Storage: -40°C to +90°C
Location / Humidity / Altitude	Indoor use only / 20 to 90% non-condensing / 10,000 feet AMSL (Operational) 30,000 feet AMSL (Storage) <i>Above Mean Sea Level</i>
Control & Monitoring	Local: HMI touch screen Remote: Ethernet via RJ45, 10BaseT/100 BaseTx. TCP/IP, SNMP V3 & HTTPS & Web browser interface HMI and CPU field replaceable. Each module independently monitored and reported.
MTTR	20 minutes (15 minutes to retrieve spare part and 5 mins to replace) Applies to LRUs only and assumed in house stock
AC Input / Consumption	85-264Vac 50/60Hz / 150 W
PSU Redundancy	Dual redundant and alarmed. Hot swappable
Input & Output ports	Reference; SMA or BNC (50 Ohms) Output; SMA or BNC (50 Ohms)



Noise Generator Module - RF Parameters		
Frequency	Min	50 MHz
	Max	2.5 GHz
Number of RF Ports		2
Maximum Output Power	50MHz-2500MHz	10 ± 5 dBm
	Noise Power Spectral Density	-84 ± 5 dBm/Hz
Attenuation Control Range	Specification Control Range	60dB
	Available Control Range	85dB (At attenuation settings > 60dB, the noise output power begins to approach the thermal noise floor of -174 dBm/Hz. At > 60dB attenuation settings Noise Output power specifications may not be met.)
Attenuation Steps		0.25 ± 0.25 dB
Attenuator type		Glitch & Dropout free
Output Power Flatness		±3 dB
Signal Inject Port Loss		20 dB
Output Port Return Loss	Typ	14 dB
	Min	10 dB
Input Port Return Loss	Typ	14 dB
	Min	10 dB
Output Power When Muted		-160 dBm/Hz
Interface		
Control Method		Via chassis
Number of Modules Per Chassis		16
Size		1 slot wide
Output Connector		SMA (F) or BNC(F)
Input Connector (Optional)		SMA (F) or BNC (F)
Maximum Voltage Applied to the Output Connector		50V DC
Environmental Conditions		
Operating Temperature		0 to 50°C
Storage Temperature		-20°C to +75°C
Location		Indoor use only
Humidity		20 to 90% non-condensing
Altitude		10,000ft/3000m AMSL
Physical Dimensions & Parameters		
Weight		TBA kg

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.
 Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.

