

50MHz-2.5GHz Modular Noise Generator

NG-G1S-B3-03-S5S5 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

Operating frequency range
50MHz–2.5GHz

Local control & monitoring via HMI high-resolution touchscreen

High precision, $\pm 2\text{ppm}$ (23°C) accuracy

Output range
-30dBm to +5dBm

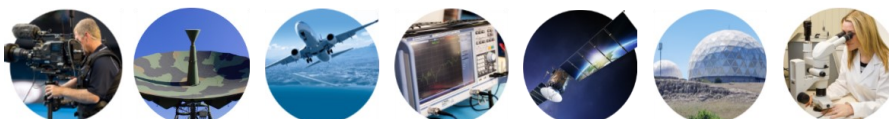
Resilience from dual redundant hot-swap power supplies & field replaceable CPU & HMI

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 Output; SMA



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
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
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.

