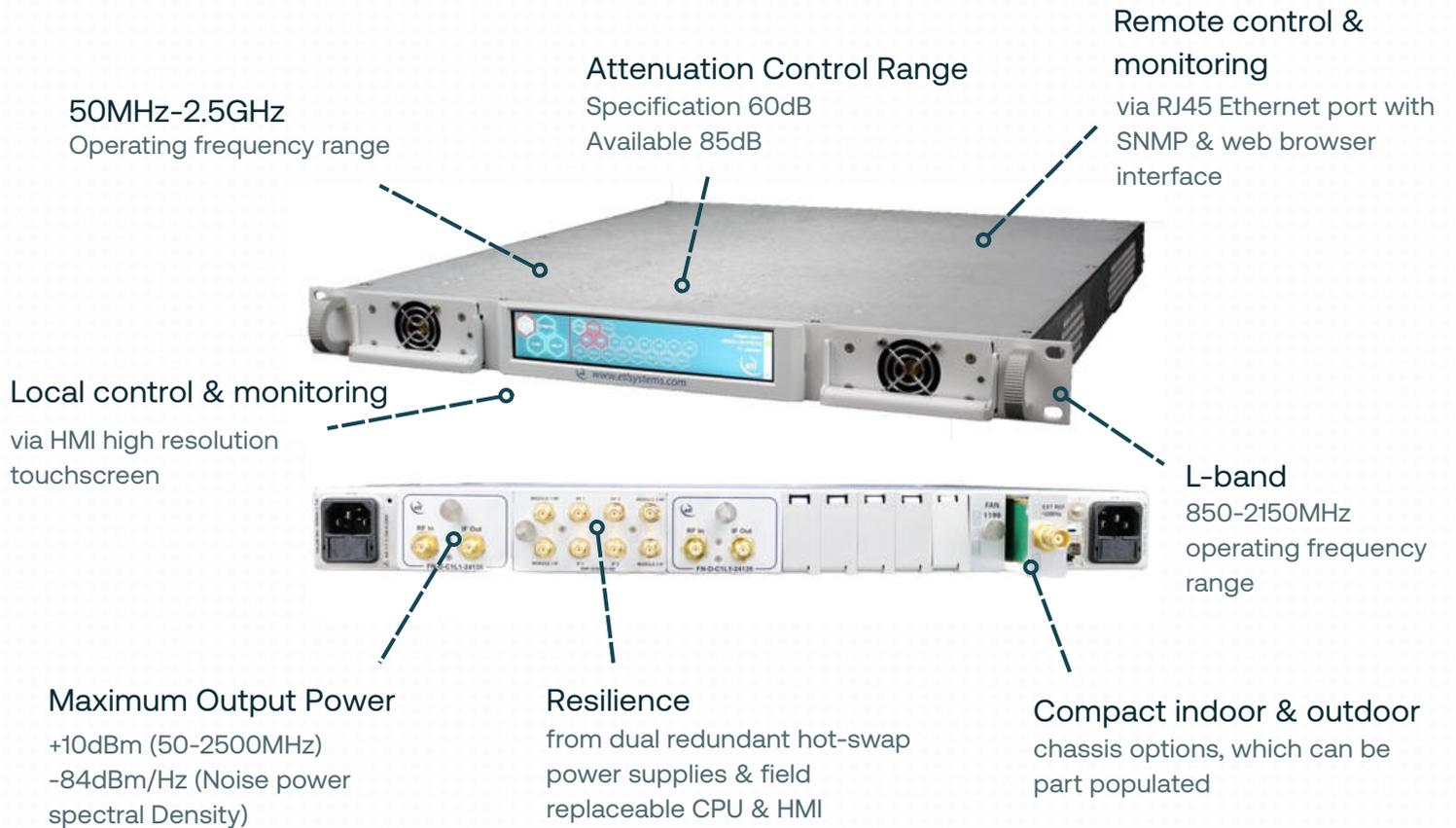


# 25MHz-3000MHz Signal Generator

SG-G1S-B3-01-S5 a Signal Generator Module operating over the frequency range of 25MHz-3GHz in 100Hz steps. The module utilises 4 slots in a Genus 1U Chassis or Instrumentation Benchtop Chassis offering flexibility in a compact and lightweight housing. Remote control & monitor via web browser interface or local control & monitor via HMI touchscreen if fitted.



Chassis Specification	
Dimensions/Weight/Colour	1U high x 550mm deep x 19" wide / <10kg / RAL9003 - white (semi-matte)
Capacity	17 module slots. Note: Actual modules may require >1 slot. Refer to required module spec table.
Temperature	Operating: 0°C to +45°C Storage: -20°C to +75°C
Location/Humidity/Altitude	Indoor use only / 20 to 90% non-condensing / 2,000m AMSL (Operational) 8,000m AMSL (Storage) Above Mean Sea Level
Control & Monitoring	Local: HMI, capacitive touch screen Remote: Ethernet via RJ45, 10BaseT/100 BaseTx. ETL TCP/IP, SNMPv2/3, HTTPS & built-in web server. HMI and CPU field replaceable.
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 / 275W max. consumption at steady state
PSU Redundancy	Dual redundant and alarmed. Diode OR. Hot swappable.
Input & Output Ports	Dependant upon module fitted



Signal Generator Module - RF Parameters		
Frequency Range	Min	25 MHz
	Max	3000 MHz
Frequency Step Size		100 Hz
Output Power	Max	+13 dBm
	Min	-15 dBm
Output power adjustment steps		0.5dB ± 0.2dB
Internal reference stability		± 1 x 10 <sup>-6</sup>
Spurs in-band (non-carrier related)		<-60dBm
Carrier related		<-50dBc
Harmonics (@ +10dBm output power)		<-20dBc
Lock time		<50ms
RF connector		SMA female
Reference connector		SMA female
Reference input		10MHz
Reference output		100MHz
Power selection		Automatic switching
Phase Noise (typical)		
Offset Frequency (Hz)		25MHz-1000MHz
1K		-98 dBc/Hz
10K		-96 dBc/Hz
100K		-106 dBc/Hz
Offset Frequency (Hz)		1000MHz-3000MHz
1K		-92 dBc/Hz
10K		-94 dBc/Hz
Interface		
Control Method		Via chassis (Local & remote provided by the chassis)
Number of Modules Per Chassis		4 (Each module 4 slots wide)
Maximum Voltage Applied to the Output Connector		50V DC
Environmental		
Operating Temperature		-20°C to +50°C
Storage Temperature		-40°C to +85°C
Location		Indoor use only
Humidity		20 to 90% non-condensing
Altitude		10,000ft / 3,000m above mean sea level
Physical Dimensions & Parameters		
Dimensions		114 x 70 x 20mm
Weight		0.35kg

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.