

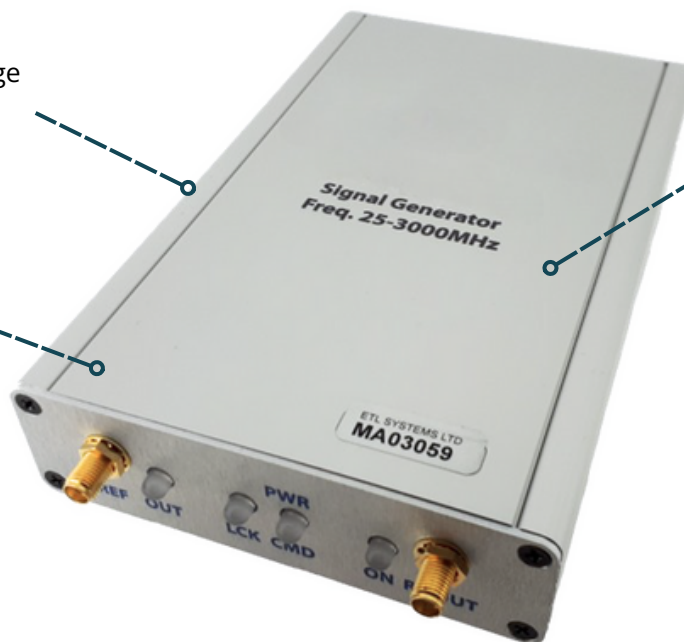
## Miniature Signal Generators SG Series

The SG series of Miniature Signal Generators are supplied with control software, USB to mini USB cable and AC power supply adaptor.

### 25 - 6000MHz

Operating frequency range

External or Internal  
(+/-1ppm) Reference



### High Output

+13dBm up to 3GHz  
+10dBm between 3-6GHz

- Full Range Tuning
- Frequency & Level Control
- Non-Volatile Memory
- RoHS Compliant

\* Image Representative of Range

USB, Ethernet and  
RS-232 Interface



RF Performance				
Frequency Range	25 - 6000 MHz			
Frequency Step Size	1 Hz			
Output Power Level	+13dBm, < 3GHz      +10dBm, 3-6GHz			
Output Range	+13dBm to -17dBm, 0.5dB Steps (output level set in dBm), < 3GHz +10dBm to -17dBm, 0.5dB Steps (output level set in dBm), 3-6GHz			
Internal Reference	100MHz, $\pm 20$ ppm over temperature, $\pm 1$ ppm per year ( $\pm 3$ ppm in 1st year)			
Phase Noise Max (dBc/Hz)	Frequency	1KHz	10KHz Offset	100KHz Offset
	25 - 250MHz	Offset	-106	-112
	250 - 1000MHz	-98	-96	-106
	1000 - 3000MHz	-92	-94	-101
	3000 - 6000MHz	-83	-85	-92
Spurious	Maximum: < -50dBc, Typical: < -70dBc			
Harmonics	Maximum: -20dBc, Typical: -25dBc			
RF Output connector	SMA Female			
Reference Connector	SMA Female Reference Input / Output autodetect and switch 100MHz Output Selectable 10 or 100MHz input (software programmable frequency) @ -4 to +12dBm			

Interface	
Control Interface	USB: Virtual COM port RS-232: 9-pin male D-sub connector Ethernet: RJ45 connector
Output Modes	Continuous Sweep On/Off via external trigger
External Trigger	Pin 4 of RS-232 connector: Pulse TTL/RS232 levels, 50ms min. pulse width Manual trigger via GUI
Status Indicators	Power Lock RF Output Reference Out
PC User Interfaces	Third-part terminal application (e.g. HyperTerm): • ASCII commands Graphical User Interface Executable File: • Adjust frequency and output power level • Set reference frequency • Select operation mode • Set power-on defaults • Adjust sweep configuration • Change device network settings • Control multiple units
Internal Memory	Non-volatile, automatically stores most recent settings

Power	
Power Input	9 - 28V DC 12V, 3.0A AC adaptor with 1.20m lead included Current consumption: 300mA typ. at 12V Can be powered also via USB3.0, current consumption: 860mA typ. at 5V
Power Selection	Automatic Switching Coaxial Power jack selected by default USB power used when coaxial power not present

Environmental	
Operating Temperature	-20 to +50C
Storage Temperature	-40 to +85C

Mechanical	
Dimensions	163mm x 103mm x 30.5mm
Weight	350g
Material	Aluminium extrusion Aluminium endplates with black legend Rubber Feet

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.

Options: Optional product OPT06 is a Mounting Bracket Pair - Supplied fitted to the unit.