

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 - 3000MHz
- Full Range Tuning
- Frequency & Level Control
- USB, Ethernet and RS-232 Interface
- External or Internal (+/-1ppm) Reference
- Non-Volatile Memory
- RoHS Compliant

RF Performance

Frequency Range	25 - 3000MHz			
Frequency Step Size	1Hz			
Output Power Level	+13dBm			
Output Range	+13dBm to -17dBm, 0.5dB Steps (output level set in dBm)			
Internal Reference	100MHz, +/-1ppm over temperature, +/-1ppm per year			
Phase Noise Max (dBc/Hz)	Frequency	1KHz Offset	10KHz Offset	100KHz Offset
	25 - 250MHz	-98	-106	-112
	250 - 1000MHz	-92	-96	-106
	1000 - 3000MHz	-83	-94	-101
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			

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
	USB power used when coaxial power not present

Options:

- OPT01 +20dBm output level (in 19" x 1U)
- OPT02 Rechargeable Battery Powered (not with 19" x 1U)
- OPT03 Portable Bench Instrument – 260 x 150 x 420 mm
- OPT04 Ruggedised Portable Instrument – 380 x 310 x 245mm
- OPT05 Weatherproof ODU – 360 x 210 x 95 mm (remote control only)
- OPT06 ASG Mounting Bracket Pair - Supplied fitted to the unit

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

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.

