

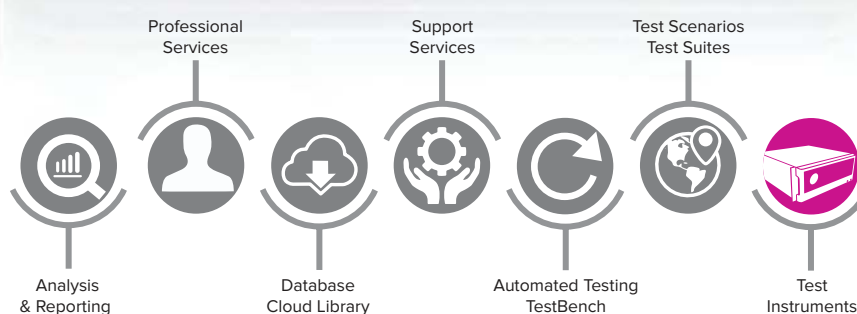


GSS7000 SERIES

MULTI-GNSS CONSTELLATION SIMULATOR SYSTEMS



True Performance at Every Test Stage



GSS7000 SERIES

The GSS7000 Series of Multi-GNSS, Multi-frequency Simulators from Spirent offers simultaneous coherent GPS, GLONASS, BeiDou, Galileo, QZSS and SBAS signals from a single test scenario. Up to 256 channels provides ample signals for a wide range of development, integration and verification tasks. Spirent's GSS7000 series is supported by a selection of software applications to provide true performance at every test stage and every level of test need.



The GSS7000 series of multi-GNSS, multi-frequency simulators from Spirent for GNSS testing which can grow with your evolving needs.

Key Features

- GPS, GLONASS, BeiDou, Galileo, QZSS and SBAS supported
- Up to 256 channels in a system, flexibly allocated across constellations
- Field upgrade minimises downtime as your needs grow
- Portable scenarios facilitate collaboration
- Class leading accuracy, fidelity and reliability
- Save and compare DUT data
- Receiver antenna pattern modelling
- Import motion from logged NMEA
- Selection of scenario generation and simulation control software available
 - SimTEST™: Test control with route-matched trajectory data from Google Maps®
 - SimREPLAY™: Interactive run time control with assistance data extract
 - SimREPLAYplus™: Import remote trajectory, edit time, date and position
 - SimGEN™: Comprehensive constellation, propagation and vehicle modelling with flexible data capture

GSS7000 supports GPS, GLONASS, BeiDou, Galileo, QZSS and SBAS L1/E1/B1, L2/B2 and L5/E5 signals



Users working in the development, integration or verification of multi-GNSS products for consumer device and precision civil PNT applications are able to verify product performance under a range of controlled, repeatable conditions.

The GSS7000 offers exceptional accuracy, fidelity and authentic GNSS signal emulation across the entire series ensuring true performance at every test stage.

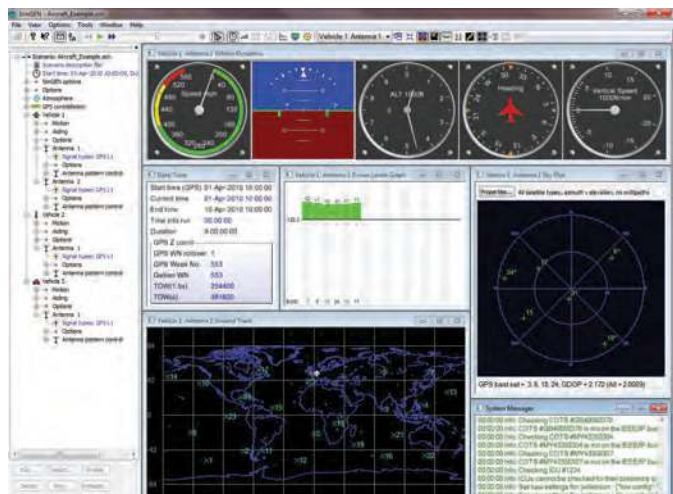
A full range of hardware integration signals are provided including 1PPS in / out, 10MHz in / out and hardware trigger.

The GSS7000 Multi-GNSS Simulator is supported by a range of scenario generation and simulator control software packages including Spirent's feature-rich SimGEN™. Each software package has a range of capabilities from the all-inclusive SimGEN™ to packages more suited to production or integration / verification test processes.

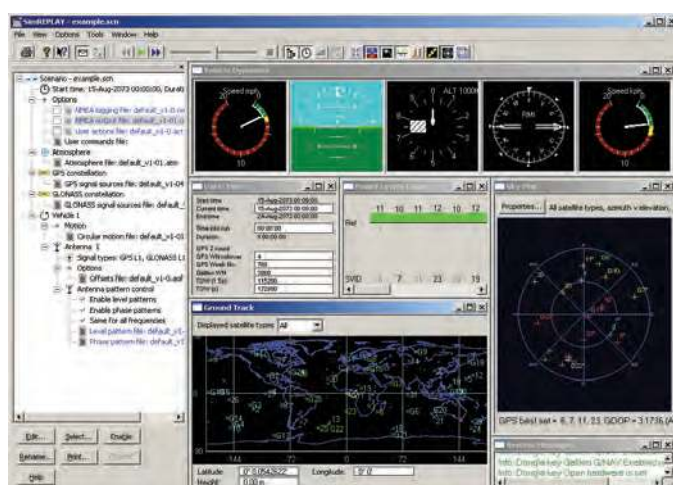
SimGEN™ offers a complete and flexible scenario generation capability including control of the constellations, propagation, terrain obscuration, antenna patterns, multipath, vehicle trajectory and a range of error models.

SimREPLAYplus™ enables the user to define vehicle motion remotely as well as adding the ability to edit the time, date and position. **SimREPLAYplus™** allows users to generate scenarios locally with features comparable to the online tool available to supported **SimREPLAY™** users.

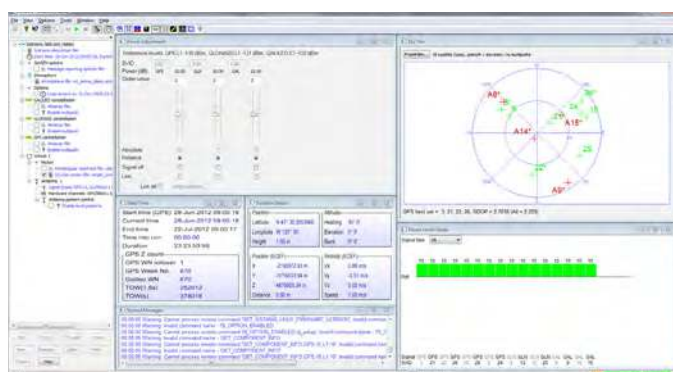
SimREPLAY™ supports operation of the simulator replaying pre-defined scenario and is ideal for repetitive comparative measurements. Scenarios for use with **SimREPLAY™** can be obtained from a number of sources including an online scenario



SimGEN™ allows scenario to be saved for use by SimREPLAY™ and SimREPLAYplus™



SimREPLAYplus™



SimTEST™

generation tool available at no additional charge to customers with a warranty or support contract.

SimTEST™ offers easy to use yet precise capabilities for general testing, including generation of route-matched trajectory data from Google Maps®

SPECIFICATION (Provisional)

Output Frequency

■ GPS L1 C/A	1575.42 MHz
■ GPS L2 C/A	1227.6 MHz
■ GPS L5 I/Q	1176.45 MHz
■ GLONASS L1 C/A	1602 MHz
■ GLONASS L2 C/A	1245.781 MHz
■ GALILEO E1 OS	1575.42 MHz
■ GALILEO E5 a/b	1191.795 MHz
■ BeiDou-2 B1I	1561.098 MHz
■ BeiDou-2 B2I	1207.14 MHz

Signal Accuracy

■ Pseudorange	±0.002m
■ Pseudorange rate	±0.001m/s
■ Interchannel bias	zero

Signal Quality

■ Spurious (Max)	-30dBc
■ Harmonics (Max)	-35dBc
■ Phase Noise (Max)	0.02 rad RMS
■ Frequency Stability	±5 x 10-10

Signal Level

■ GPS/SBAS nominal	-130dBm
■ GLONASS nominal	-131dBm
■ BeiDou nominal	-130dBm
■ Galileo nominal	-128.5dBm
■ Level control range	+15 / -40 dB
■ Level control resolution	0.1dB
■ Level control accuracy	±0.5dB

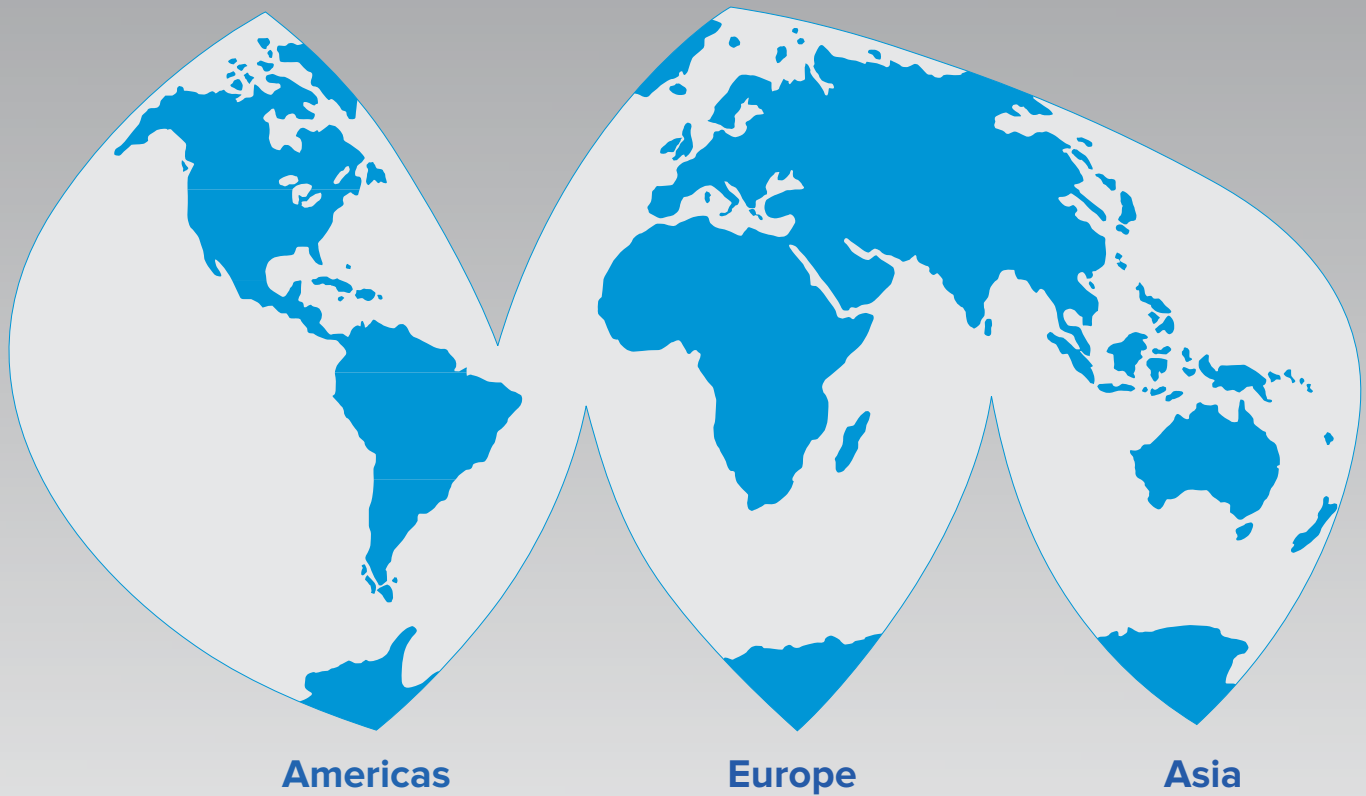
Physical and Electrical (Signal Generator)

■ Size (mm)	238x572x177 (WxDxH)
■ Weight	12 Kg
■ Power	110/240 V AC 50/60Hz



* Specification subject to change.

Global coverage



Documentation and Reference Table

Related Product, Option or System Extension	Brochure Title	Data-sheet / Specification Ref.
GSS7000 series	Datasheet	MS7000
SimAUTO	Brochure	MCD00114
	Datasheet	MS3023
GSS7765	Brochure	MCD00121
	Datasheet	MS3055
SimGEN™	Datasheet	MS3008

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