Spirent GSS7725

GNSS Interference Generator

Generate, Understand, and Protect Against RF Interference

Whether you’re designing a global navigation satellite system (GNSS) chipset, or integrating a receiver into a device, RF interference can undermine positioning performance and compromise user experience.

The Spirent GSS7725 is designed to let you quickly playback RF interference signals, under fully repeatable, lab conditions. Combined with a GNSS simulator, it will help you:

• Understand exactly how your product will respond to RF interference
• Test RF interference’s impact on product performance
• Prepare for a positive user experience and product success

RF Interference—a Growing Threat

RF interference—whether naturally occurring in the atmosphere, man-made but accidental, or created deliberately with low-cost RF jamming devices—is a serious and mounting threat to GNSS performance.

And as more products and industries grow to depend on accurate, robust GNSS positioning and timing, its potential to cause damage grows: from driving dissatisfied users to return their mobile devices, to compromising critical infrastructure, and risking network failures.

Introducing GSS7725

The Spirent GSS7725 is a dedicated RF interference generator that turns I/Q files into interference signals.

Combined with a GNSS simulator, the GSS7725 lets you test your chipset or device in a variety of different interference environments, under controlled, repeatable conditions.

Unlike other standalone interference generators, the GSS7725 seamlessly integrates with Spirent GNSS simulators, test packs and automation tool. And with a competitive price point, it’s ideal for commercial enterprises looking for a simpler way to test for GNSS interference—without going over budget.

About Spirent

Spirent has been the leader in providing GNSS test solutions globally for over 30 years. Spirent’s test instruments offer unrivalled fidelity and are the industry benchmark for quality, and our services are relied upon by our customers to ensure critical projects are supported and successfully fulfilled. Spirent’s customers include space agencies, GNSS system authorities, governments and military, OEM receiver manufacturers, and GNSS chipset vendors, as well as developers of applications including transport, precision civil, timing, consumer devices—and much more.
Test a Range of Interference Models

The GSS7725 uses I/Q files to quickly playback RF interference waveforms. These can be loaded into the GSS7725 from various sources:

- The Spirent Vulnerabilities and Threats Test Pack—this contains 33 pre-recorded interference signals, covering a broad spectrum of real-world interference types
- The Spirent GSS200D—you can access interference you have recorded and stored in PT Cloud
- Spirent Professional Services—we can work with you to develop the custom I/Q files you need

Want to test even faster? The GSS7725 works alongside Spirent PT TestBench to support automated testing of RF interference scenarios.

Key Features

- Convert I/Q files into interference signals
- Seamlessly integrate with Spirent GNSS simulators and Test Packs
- Embedded GNSS and interference signal combiner
- Alter interference signal levels in real-time
- A single, dedicated unit for testing real interference.

Specifications

- Centre Frequency Range 0.85 to 2.2 GHz
- Frequency Resolution 100 Hz
- Bandwidth (3dB) Up to 25 MHz
- I/S ratio relative to nominal GPS C/A signal level 0 to +110 dB