

# Spirent **GSS6450**

The world's first highly portable high bit depth RF record & playback system



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The GSS6450 from Spirent takes RF record & playback systems to a whole new level of performance and flexibility. Battery powered and housed in a small and portable case, the GSS6450 can record any RF in the 80MHz-6,000MHz frequency range—including any current GNSS signal, 2.4GHz and 5GHz WiFi, and Cellular. With the capability to record at up to 16 bits 'I' & 16 bits 'Q' and the flexibility to select any band of up to 80MHz within the frequency range, the GSS6450 can be configured to meet your testing requirements—even as they evolve.

## Key Features

- Record up to 4 concurrent signals
- 3 independent RF ports
- Multiple constellations and frequencies
  - GPS, GLONASS, Galileo, BeiDou, QZSS
  - L1, L2, L5, B3, E6
  - WiFi, LTE/Cellular support
- Flexible product structure
  - Entry level—GNSS L1,L2,L5, 50MHz, 2 bit, 2TB SSD
  - Base product—GNSS L1, 10MHz, 4 bit, 2TB SSD
  - Options:
    - Additional frequencies
    - Greater bit depth (8, 16 bits)
    - Increased bandwidth (80MHz)
    - 2TB, 4TB, 7.5TB SSD + RAID support of up to 80TB
- Built-in real-time spectrum analyzer
- Touchscreen, WiFi, web server, or script control
- USB 3.0 supported
- Record/playback up to 4 video streams
- In-built GNSS receiver—to verify performance
- Highly portable—weighing just 2.2kg and measuring 216 x 200 x 76 mm
- Synchronous and asynchronous storage of external data
- OCXO used on record and playback for high frequency stability
- 2 x High Speed CAN + CAN FD Option

**Highly portable**

**High signal quality**

**Record any 4 RF signals simultaneously**

**Unrivalled flexibility**



## A Simple Way to Test Multiple GNSS and other RF Signals

Testing RF signals such as GNSS, WiFi, and Cellular under real world conditions has typically been complex and expensive—but not anymore. With the Spirent GSS6450 Record & Playback System (RPS) it's quick and simple to record real RF signals for playback in your test environment.

The flexibility of the GSS6450 to record multiple RF signals on multiple RF interfaces enables chipset and device developers from a variety of application areas to test comprehensively. Once RF data is captured, the RPS is used in the lab to replay the captured environment repeatedly to the device under test—allowing you to save on project, travel, and engineering costs, whilst improving product performance, quality, and time to market.

## High Fidelity Record & Playback

The GSS6450 is designed to capture complex environments with the fidelity to ensure that playback results in the laboratory are truly representative of captured real world conditions. The flexible structure makes it suitable for everything from commercial application testing to interference and jamming test scenarios. The 4-bit option allows you to keep data storage levels down, whilst the 16-bit system provides 80dB of dynamic range. Selectable recording bandwidth also allows the user to ensure only the bands they are interested in are recorded, saving data space.

## Big Performance from a Small Box

The self-contained unit has everything you need to start testing. Weighing just 2.2kg and supplied with a shoulder strap, the GSS6450 can be either carried or used in a vehicle. Simply connect the supplied antenna and press the one-touch record button to start, and then select the file and press Play to replay at RF. An internal 2TB SSD with the option to add a removable SSD of up to 7.5TB, along with up to 1.5 hours of battery life, allows you to carry out uninterrupted recording in the field. For users requiring more storage, the unit supports larger capacity RAID devices.

The GSS6450 offers true recording flexibility at variable bit depths (2, 4, 8, or 16), and a choice of five bandwidths (10, 30, 50, 60, or 80MHz). What's more, a basic configuration can be easily upgraded to support greater bit depths and more constellations, bandwidths, and RF interfaces—if and when you need them.

Spirent's future-proofed GSS6450 allows you to perfect the next generation of GNSS enabled products.



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