Positioning you for success.
Your trusted PNT partner.
Key applications

Testing GNSS software receivers—To cope with the demands of short product development timelines, developers are including virtual testing in roadmaps. SimIQ enables validation of GNSS software receivers by injecting the generated I/Q data, removing RF real-time constraints and allowing massive parallel simulation.

Validation of receiver algorithms—SimIQ enables developers and testers to validate models before the real hardware is introduced. The efficient sharing of I/Q files means the same realistic scenarios can later be used to validate the hardware front end.

Injection of externals signals—SimIQ Replay generates RF including GNSS signals, custom waveforms, custom noise, and even interference and jamming events, helping users to navigate through growing GNSS vulnerabilities.

Generation of classified signals and codes from I/Q data—Approved users can now alleviate any potential security concerns by replaying confidential I/Q data files with the same hardware used to test civilian signals.
SimIQ Capture

Available via subscription, SimIQ Capture is a non-RF mode of operation where I/Q data files are generated and stored by the GNSS simulator. Features include:

• Configurable sample rates up to 120 Ms/s
• Bit-depths up to 16 bits
• Simultaneous recording of up to three files
• Compatible with both GSS7000 and GSS9000 Series GNSS simulators
• Compatible with SimGEN, SimREPLAYplus and SimTEST

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<thead>
<tr>
<th>Constellation</th>
<th>Signals</th>
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<tbody>
<tr>
<td>GPS</td>
<td>L1 / L2 / L5</td>
</tr>
<tr>
<td>GLONASS</td>
<td>L1 / L2</td>
</tr>
<tr>
<td>Galileo</td>
<td>E1 / E5</td>
</tr>
<tr>
<td>BeiDou</td>
<td>B1I / B1C / B2I / B2a / B3I</td>
</tr>
<tr>
<td>QZSS</td>
<td>L1 / L2 / L5 / L6</td>
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<td>SBAS</td>
<td>L1 / L5</td>
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SimIQ Replay

Also available via subscription, SimIQ Replay reads I/Q data from files and generates the corresponding RF signals using Spirent’s GSS7000 and GSS9000 Series simulators, enabling receiver testing at RF. Features include:

• Configurable sample rates up to 120 Ms/s
• Bit-depths up to 16 bits
• Simultaneous generation of RF signals from up to 3 I/Q files
• Compatible with both GSS7000 and GSS9000 Series GNSS simulators
• Compatible with SimGEN
Why Spirent?

Over five decades Spirent has brought unrivalled power, control and precision to positioning, navigation and timing technology. Spirent is trusted by the leading developers across all segments to consult and deliver on innovative solutions, using the highest quality dedicated hardware and the most flexible and intuitive software on the market.

Spirent delivers

- Ground-breaking features proven to perform
- Flexible and customisable systems for future-proofed test capabilities
- World-leading innovation, redefining industry expectations
- First-to-market with new signals and ICDs
- Signals built from first principles — giving the reliable and precise truth data you need
- Unrivalled investment in customer-focused R&D
- A global customer support network with established experts

About Spirent

Positioning Technology

Spirent enables innovation and development in the GNSS (global navigation satellite system) and additional PNT (positioning, navigation and timing) technologies that are increasingly influencing our lives.

Our clients promise superior performance to their customers. By providing comprehensive and tailored test solutions, Spirent assures that our clients fulfill that promise.