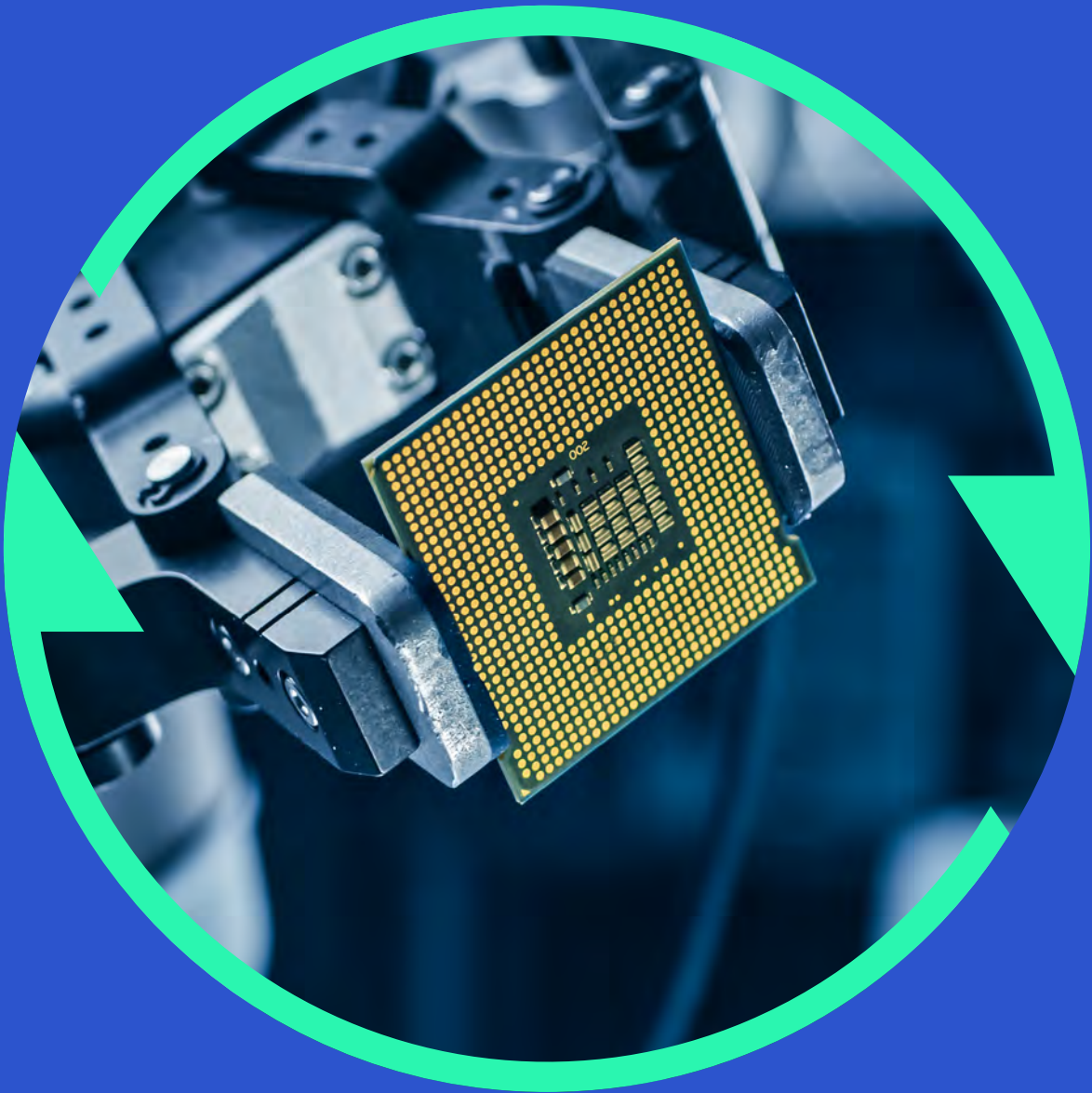


BROCHURE

SimIQ

I/Q Capture & Replay

Your trusted PNT partner



GNSS simulation with I/Q data files

Getting successful products to market demands precise, reliable, and flexible test capabilities. SimIQ enables greater efficiency and consistency throughout the development cycle, delivering the exceptional performance expected from our world-leading signal generation architecture.



Create I/Q data files with configurable sample rates up to 60 Msps, and bit-depths up to 16



Generate high fidelity and accuracy RF signals from I/Q data files using Spirent PNT X and GSS7000 GNSS simulators



Promote collaboration and consistency across businesses with multiple sites, enabled by sharing common I/Q files for testing

Same hardware, greater capability

SimIQ is a software solution that enables Spirent's PNT X and GSS7000 GNSS simulators to capture, replay and share I/Q data files without the need for additional hardware. This capability opens up opportunities for testing receiver algorithms earlier in the development cycle, saving time and money while delivering greater collaborative processes to global teams through simple sharing and consistent playback.

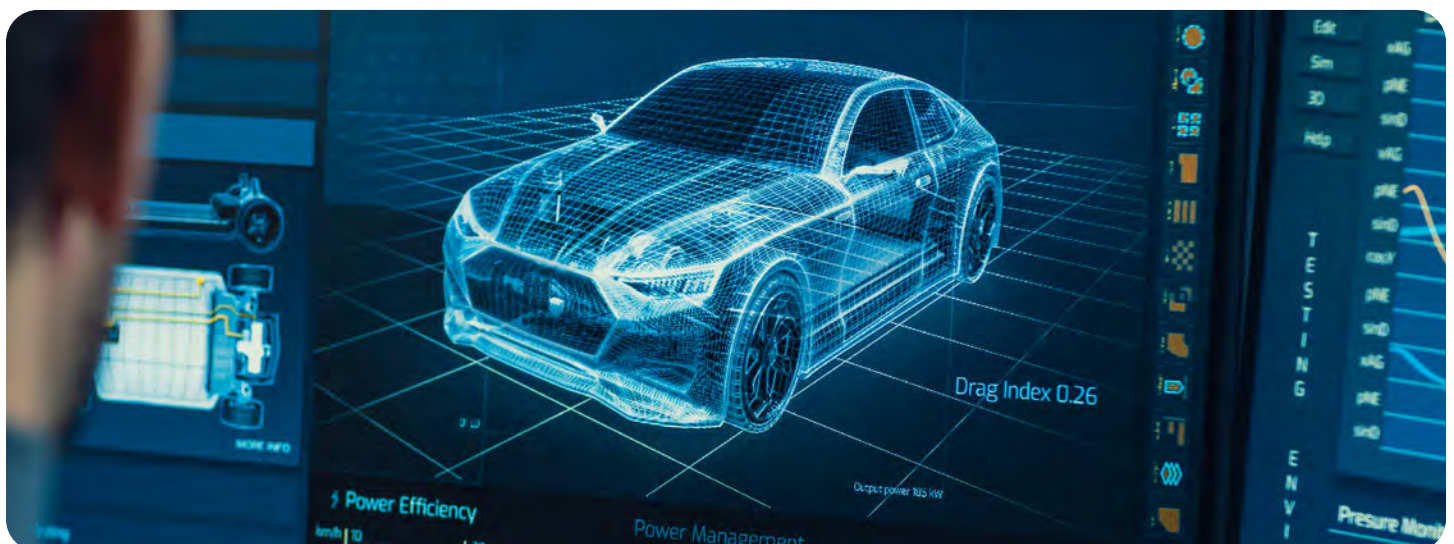
Key applications

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 external 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.

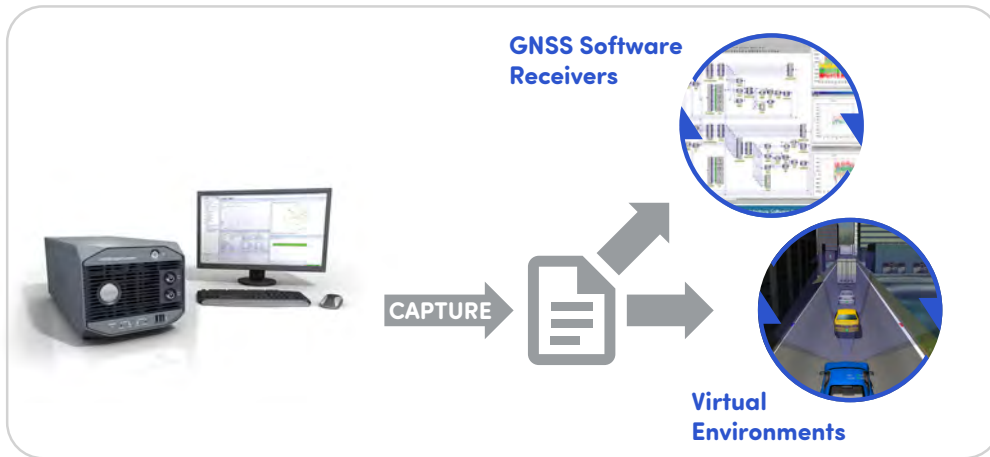


SimIQ Capture

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 60 Msps
- Bit-depths up to 16 bits
- Simultaneous recording of up to three files
- Compatible with both PNT X and GSS7000 GNSS simulators

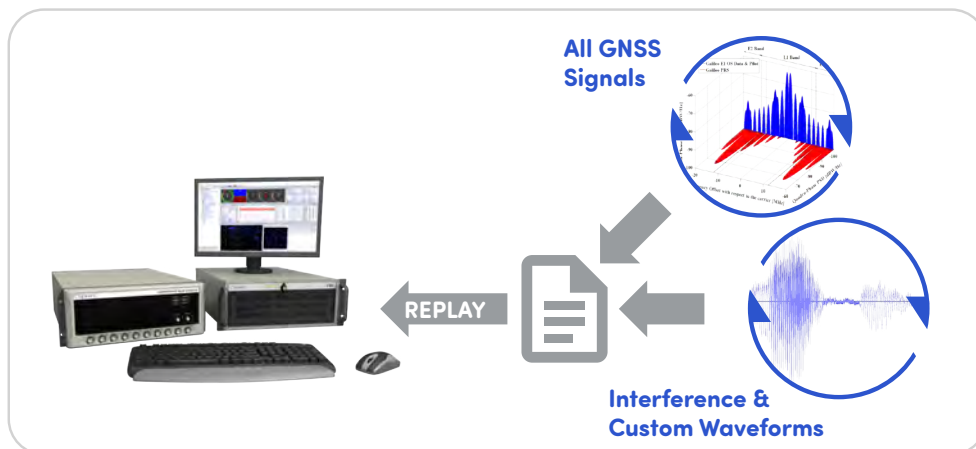
Constellation	Signals
GPS	L1 / L2 / L5
GLONASS	L1 / L2
Galileo	E1 / E5 / E6
BeiDou	B1I / B1C / B2I / B2a / B2B / B3I
QZSS	L1 / L2 / L5 / L6
SBAS	L1 / L5



SimIQ Replay

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

- Configurable sample rates up to 60 Msps
- Bit-depths up to 16 bits
- Simultaneous generation of RF signals from up to 3 I/Q files
- Compatible with both PNT X and GSS7000 GNSS simulators





Americas

Europe

Asia

**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 and assurance solutions, Spirent assures that our clients fulfill that promise.

Why Spirent?

Across five decades Spirent has brought unrivaled 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 customizable SDR technology 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
- Unrivaled investment in customer-focused R&D
- A global customer support network with established experts



About Spirent Communications

Spirent Communications (LSE: SPT) is a global leader with deep expertise and decades of experience in testing, assurance, analytics and security, serving developers, service providers, and enterprise networks. We help bring clarity to increasingly complex technological and business challenges. Spirent’s customers have made a promise to their customers to deliver superior performance. Spirent assures that those promises are fulfilled. For more information visit: www.spirentfederal.com

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