

GNSS Fundamental Test Audit & Report Service

The Challenges of Testing

Performing even the most fundamental GNSS performance tests can become onerous - especially where multiple tests are needed in order to perform a true stastical analysis. In practice, it is not recommended that testing is limited to one or two discrete tests. Multiple runs with many combinations of the test parameters are required. If performed manually this can lead to errors and will be time consuming.

This service could be for you if:

- You need analytical test results to help you choose the best receiver(s) for your specific application
- You are experiencing issues with GPS/GNSS and want to improve your system's performance
- You operate safety-related or commercially sensitive applications with some level of reliance on GPS or multi-GNSS systems and want to audit your risks to fundamental GNSS issues.

GNSS Fundamentals Audit & Report Services: What is it?

Spirent has designed a test suite to enable engineers to characterize performance of any GNSS-enabled system. This service utilises this test suite in conjunction with Spirent's GNSS test equipment at one of its Services Labs to assess the performance of your GPS or multi-GNSS receiver. Spirent can also offer this service at the customer site.

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Service Description

The GPS/GNSS fundamentals audit typically takes place at one of Spirent's proof of concept labs. Using the latest multi-GNSS simulation equipment, Spirent will subject your receiver or system to the variety of tests cases. These include:

Time To First Fix (TTFF): the time taken by receiver to have a position lock from power up

Acquisition sensitivity: the minimum received power level at which the receiver can obtain a fix

Tracking sensitivity: the minimum power level at which the receiver can maintain lock

Reacquisition time: time taken to reacquire the signal after passing through an obstacle

Static navigation accuracy: taking into account the many internal and external variables that can affect receiver performance

Dynamic navigation accuracy: accuracy while the receiver is in motion on one, two or three axes

The Audit Report will summarise all results and findings of the testing. The report will include clear descriptions of the tests undertaken. Areas of concern will be highlighted, as well as the areas that may require further investigation.

The data and analysis in the report provides the framework within which to make informed decisions on receiver selection and integration.

Why Spirent?

With experience gained over more than 30 years of supporting GNSS development, our systems offer the proven performance and reliability our customers demand. They have been successfully deployed globally in over 50 countries and approved by all major GNSS design authorities

Spirent offers:

- Comprehensive features as standard
- Highly extensible and future-proofed solutions
- Ongoing investment in cutting edge developments and continuous improvements
- Quality systems backed up by a global support network
- Tailored Solutions capability to support special applications and configurations
- Large team dedicated to implementing new signals and ICDs



Contact Us

For more information, call your Spirent sales representative or visit us on the web at www.spirent.com/ContactSpirent.

www.spirent.com

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