

Spirent **SimAUTO**™

In-Vehicle Navigation System (IVNS) Solution Option for Spirent GNSS simulation systems

Key Features

- Simultaneous emulation of multiple DR sensors co-ordinated with GPS satellite RF
- Heading and wheel count sensor outputs
- Single-axis rate table drive for stimulation of heading sensors
- User-defined vehicle geometry
- Real-time scenario editing
- Remote operation driven from file (logged data) or vehicle simulator
- Data streaming output allows modelled vehicle motion to be shared with other applications
- CAN messages consistent with modelled sensors available as an optional extra

SimAUTO is a powerful upgrade for Spirent's multi-channel simulators to provide lab test support for today's multi-sensor In-Vehicle Navigation Systems (IVNS).

SimAUTO provides a turnkey solution to testing integrated navigation systems comprising GNSS and dead reckoning (DR) sensors. Coherent GNSS and DR sensor emulation facilitates rapid and comprehensive system testing, accelerating time to market whilst improving demonstrated system resilience to real-life challenges such as multipath interference and signal obscuration.

Fully integrated with Spirent's SimGEN™ software suite, SimAUTO allows parameters such as wheel track, wheel base, wheel diameter, odometer pulse rate & dead band to be set and saved to a vehicle personality file for future use.

Emulated dead-reckoning sensor outputs are precisely co-ordinated with the RF GNSS signals to provide a complete test environment for integrated navigation systems. Additionally, single-axis turntable drive is provided to allow the direct stimulation of heading or heading rate sensors if this is appropriate or preferred.

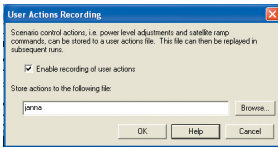
The emulated sensor outputs and rate table drive are generated by cards installed into the controller PC running SimGEN™. Specify a rackmount PC to ensure sufficient PCI slots.

Vehicle trajectory can be generated using SimGEN™, delivered from an external source or from a file using Spirent's SimREMOTE mode of operation.

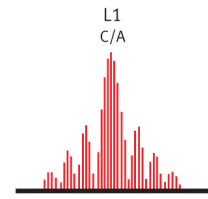
A conversion utility allows NMEA data logged during field trials to be captured as a motion file. An identical journey can thus be reproduced as many times as required without leaving the lab.



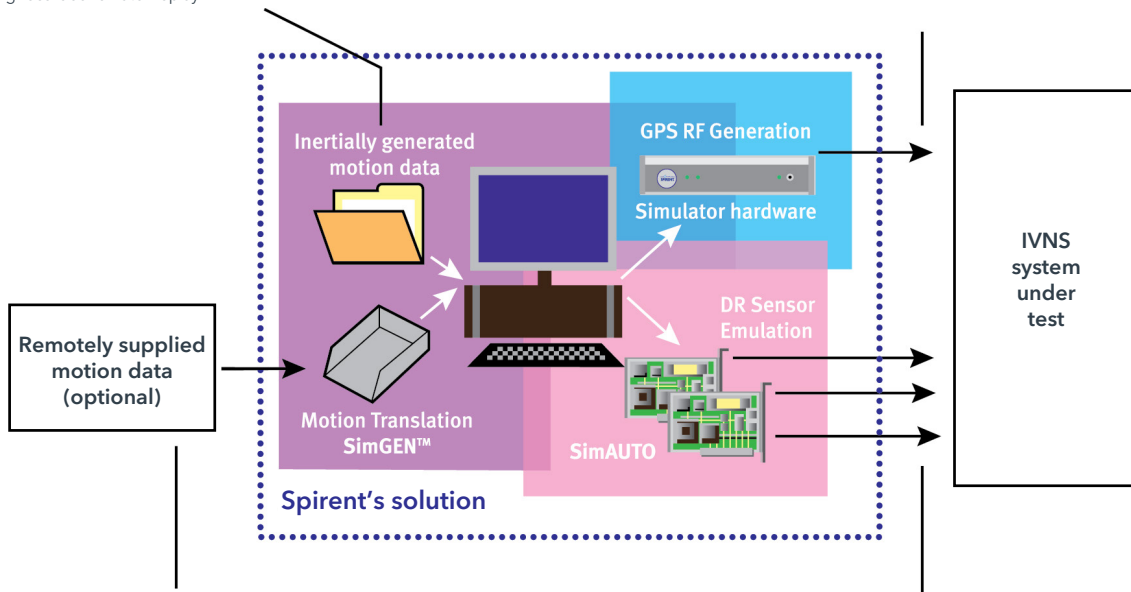
IVNS Test System:
Spirent GSS7000
with SimAUTO



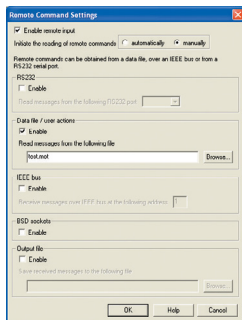
Spirent's unique "user actions" capability allows scenario adjustment "live" during run time with changes being recorded for later replay



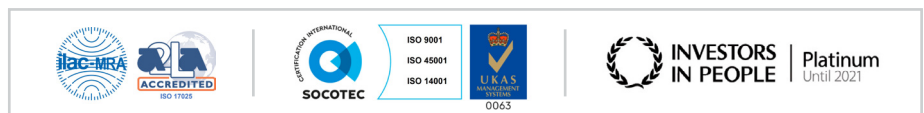
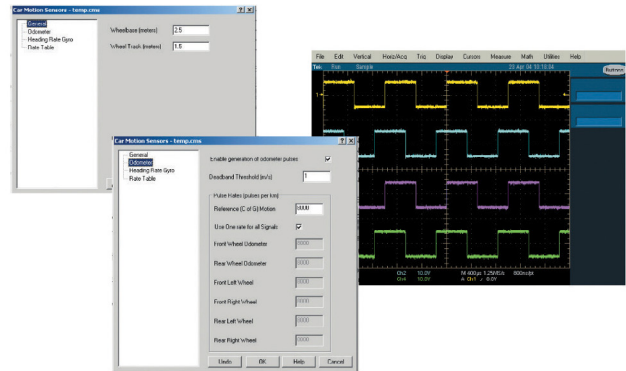
Comprehensive satellite signal generation includes all of Spirent's proven signal quality, stability and reliability.



Real time or logged vehicle position data may be provided as an alternative to internally generated motion data



User-specified sensor outputs (such as wheel ticks, odometer, direction etc) and turntable drive.



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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