

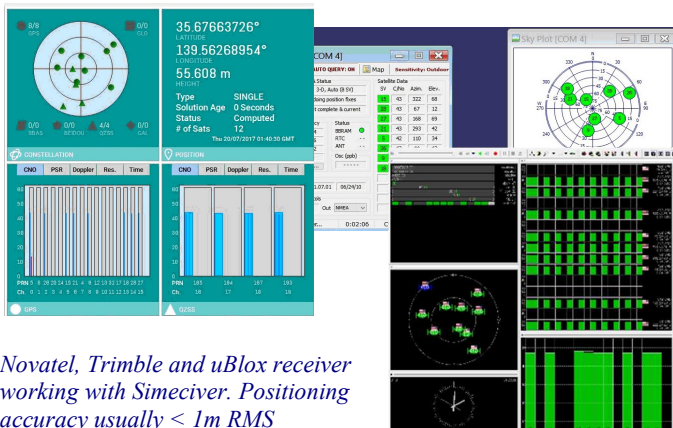


Features

- Real-time simulation of GNSS signals on up to two frequencies at a time, selectable from GUI.
- Record and playback supported signals: all in L-band.
- Simulation supported signals: L-band + NavIC S.
- The signals can be simulated in real-time with state-of-the-art signal simulation software ReGen™ or recorded and played back with Simceiver software.
- Comprehensive simulation models include atmospheric error models, orbits, multipath, dynamic user simulation, 6-DOF, INS etc. (see ReGen datasheet for details).
- Optional signal analysis tool based on ionospheric scintillation monitor.
- Simulated and recorded signals can be stored in digitized format, analysed by a MATLAB software receiver and played back as RF at any time.

Access to source code

ANSI C API allows modification of existing error models and signals or implementation of custom ones.



Novatel, Trimble and uBlox receiver working with Simceiver. Positioning accuracy usually < 1m RMS

Overview

The Simceiver™ is a GNSS simulator for advanced R&D, equipment testing and education. It can also function as a recording, playback and signal analysis instrument.

Components:

- 1) Simceiver™ hardware device,
- 2) ReGen™ control software for real-time simulation,
- 3) Streamer software for recording and playback,
- 4) ARAMIS™ software receiver for signal analysis.

The Simceiver™ is a result of seven years of collaboration with the Japan Aerospace Exploration Agency (JAXA).

User can modify models and even simulated signals with Model and Signal API.

Specification

Power control	
Receiver nominal power level	43 dBHz
Range	20 dB
Resolution	1 dB
Accuracy	
Code phase	Up to ± 1 cm RMS
Carrier phase	Up to ± 5 mm RMS
Miscellaneous	
Number of RF channels	Two. For example, L1+L5, L1+L5
RF channel bandwidth	25 MHz
Bit resolution	Record/playback 3 bit, simulation 10bit
Input sensitivity	Up to -160 dBm or better
Time base	
	OCXO option
Stability	±5 ppb over 0° C to +50° C
Environmental	
Operating temperature	+10 ~40 °C
Dimensions	300×200×70
Weight w/o control PC	~ 1 kg