NOFFZ TECHNOLOGIES

sUTP 5015

GNSS SIMULATOR

PRODUCT

Applications: Production Test Systems, Product Validation, Signal Simulation

SKYDEL

FAST › FLEXIBLE › FOCUSED

sUTP 5015 AT A GLANCE

Our sUTP 5015 turnkey solution consists of a modular Skydel GNSS software simulation combined with high end hardware components for running real-time individual signal simulations.

The integrated Scenario Editor allows free definition of trajectories in up to 6 Degrees of Freedom. It supports differential GNSS and multi-vehicle simulation, GNSS satellite orbit modification, unlimited pseudorange additive ramps and custom fixed positions.

The system can be used as a desktop unit or as 19" rack integration. It is equipped with a 2-port Software Defined Radio (SDR) and can easily extended and cascaded with extension modules to add further synchronized SDR´s.

- Including PC, high end graphic card, Software defined radio ...
- 1000 Hz simulation update rate
- Integrated maps for flexible and intuitive scenario creation
- Import NMEA, KML (Google), or CSV Files
- High dynamics
- Open source remote API for easy automation in multiple programming languages
- Satellite orbit modification and custom fixed position
- Navigation message modification and corruption
- Interference generation and injection in GNSS signals
- File formats: CSV, KML, NMEA, etc.
- Powerful automation & intuitive API (Python, C# and C++ open source client)
- Runs on Linux and Windows

TECHNICAL DATA

	sUTP 5015 GNSS
Mechanics	
Housing	450 x 222 x 495 (W x H x D) 5RU
Weight	14 kg
Power supply	
Input voltage	100 – 240 VAC
Input current	8.0 A (Max.)
Input fuse	RC/CB C16 30 mA
Input / Output Interfaces	
Inputs	IEC Socket 3 x USB 3.0 1 x 1 Gbit Eth. 1 x 10 Gbit Eth. (optional) 2 x RF In (SMA jack, for additional sources) 1 x RF In (SMA jack, GNSS evaluation unit) 1 x USB – JTAG 1 x USRP AUX I/O – 15 Pin 1 x USRP Trigger signal / SMA-f 1 x USRP Reference signal / SMA-f 1 x GPS Antenna / SMA-f
Outputs	1 x HDMI 2 x RF DUT (SMA jack, identical signal) 1 x USRP Reference signal / SMA-f 1 x USRP Trigger signal / SMA-f
Provided signals	
Basic satellite signals	GPS L1 C/A, L1 C, L2 C, L5, P-Code Glonass G1, G1/G2, CDMA Galileo E1, E1/E5/Altboc, E1 OS-NMA, E6 CS Beidou B1, B1/B2, Phase III SBAS, L1, L5
Signal manipulation	Advanced Jamming, Interference / Jamming with CW, Chirp, Pulse, BPSK, BOC, AGWN, Spoofing, Multipath
Further signal options	Multi Instance option Anechoic Chamber multi antenna installation
Simulation possibilities	Single antenna, single vehicle Multi antenna, multi vehicle HIL, RTK

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