

NtripS 05 GNSS data server

A professional upgrade for continuous operating GNSS reference stations to Real-Time

Hardware and operating system:

The NtripS 05 GNSS data server is designed for a long term operation on continuous operating GNSS reference stations with Internet access.

The renouncement of mobile construction units (no hard drive or ventilation) allows long term operation stability.

A specially adapted operating system (embedded LINUX) guarantees a maximum security against hacker attacks from the Internet.

Administration and configuration of the NtripS 05 GNSS data server can be done via standard Internet browser or via USB stick.



GNSS-Software:

The implemented EuroRef software takes over the receiver control. GNSS hardware of various manufacturers (Javad, Leica, Ashtech, Novatel, Septentrio, Thales, Topcon or Trimble) are supported.

The receiver raw data can be stored in RINEX or a compressed data format. Additional storage space can be implemented via USB-Stick or USB-Drive.

The logging parameters and the file download are configured through a web-interface. An automatically file upload to a processing centre is supported.

Real-Time GNSS can be transferred via the Ntrip-protocol to an Internet caster. A rental of Internet Caster Space is offered by EuroNik GmbH.

A special software option allows the conversion of real-time GNSS data into the internationally standardized RTCM format (V. 2.x or 3.0).

- Cost-effective Ntrip upgrade for GNSS reference stations
- Turn-Key solution without moving hardware parts
- Specially adapted operating system (embedded LINUX)
- Configuration and file download via web interface
- Raw data storage in RINEX or compressed data format
- Logging of external sensor data (e.g. weather sensor)
- Automatical file upload to a processing center
- Real-Time data transfer to an Internet caster (rental option)
- Conversion of Real-Time raw data into RTCM Version. 2.x or 3.0 (optional)

Technical Specifications:

Details:

- NtripServer and RINEX converter for use on GNSS reference stations
- No hard drive or ventilation (fail-safe)
- Complete configuration and administration via a WebGUI (via Internet Explorer 4.0 or later, or all Firefox versions)
- Easy basic configuration via a USB-Stick

Internet GNSS:

- Up to 4 Ntrip based realtime data streams as a Ntrip-Server to different NtripCasters for every connected GNSS receiver
- Adjustable output for the 4 Ntrip based realtime data streams (RTCM 2.1, 2.2, 2.3 and optional 3.0)
- Automatical RINEX file transmission via internet (FTP, SCP) as a original file, D file, zipped or zipped D file

Data Formats and Output:

- RAW Data, RINEX
- RTCM (optional) Version 2.0, 2.1, 2.3, 3.0

Security features:

- Linux-based operating system designed to be robust against hacking attacks
- Password protected WebGUI access
- Password protected RINEX file transfer

Hardware specifications:

- Size: 23 x 18 x 5 cm (9.1 x 7.1 x 2 in)
- Weight: 1.0 kg (2.20 lb)
- DC 12V-IN with ext. power adapter support
- Power consumption: 25 W (average)

Communication:

- 1 LAN port with RJ45 connector supporting IEEE 802.3u 10/100Based-T specification
- 4 RS232 ports to simultaneously connect 4 devices (e.g. GNSS receivers or weather sensors)
- 3 USB ports allowing the connection of external USB hard drives or memory sticks for local data storage

Supported GNSS receivers:

- Ashtech (GG24, Z-18, ZXII)
- Javad (Legacy)
- Leica (Series 500 and 1200)
- NovAtel (OEM 4, OEM V)
- Septentrio (PolarRx2)
- Thales (Aquarius)
- Topcon (Odyssey)
- Trimble (4000; 5700; NetRS; Pathfinder)

Supported sensors:

- Vaisala Weather sensor
- Locus Loran-C

Remote software update:

- Built-in software updates via Internet (security, updates, etc.)

Data storage:

- Internal memory: 100 MB
- External memory: Support for USB hard drives allowing several hundred GB to be stored, or support for USB memory sticks

