

GR25 GNSS Reference Server



The Leica GR25 GNSS Reference Server is provided with integrated internal and external device management, multi-user management, high end security, modular and scalable design. It has been developed to grow with users' needs and keep their GNSS applications and networks up to date. The device is designed for permanent and semi-permanent GNSS network installations and monitoring applications including RTK and static networks, single base station, field campaigns, structural monitoring, atmospheric and seismic studies and offshore positioning.

The GR25 is prepared for today and ready for tomorrow, by allowing upgrade of all the key hardware parts, such as tracking, memory, power and communications. The GNSS Reference Server just like a data centre server has many requirements for reliable operation, such as backup power supplies, redundant data communications, security and an easy way to monitor all activities.

Designed to withstand the most demanding environments the Leica GR25 provides a fully ruggedized IP67 housing with no additional multi cables. It allows easy and professional installation, with well-spaced ruggedised connectors, including the Ethernet port. A built-in display and keypad allows configuring and performing basic setups and operations without the need of a controller or PC.

The Leica GR25 provides versatile mounting options including a 19" IT rack kit. It supports a plug and play out of the box setup and configuration over existing DHCP LAN.

Its Intelligent Power Management has four configurable power sources including two external inputs, Power over Ethernet (PoE) and a removable internal battery with charger that can provide up to 20 hours of data logging backup. The integrated slot in communications port and device management allow communication backup without the need of an external UPS for up to 16 hours with GPRS/UMTS.

The Leica RefWorx Onboard Software with a built-in web interface allows the system to be configured via Internet (LAN, WLAN, GPRS, UMTS), USB and Bluetooth. It supports 28 languages and all common web browsers.

The Leica GR25 provides flexible data management with the best choice of storage options. Many years of data can be stored on the removable SD card (up to 32GB) or on an external USB disk. Independently create up to 10 mixed loggings sessions (MDB, RINEXv2 and v3, Hatanaka) and push them to a variety of FTP locations.

Reliability, security, backup and support are the key to providing national GNSS based services.

A built-in Firewall, default closed ports, comprehensive user administration and detailed event log (including communications) allow secure system administration of the GR25 Reference Server and Services.

Due to its open design, the GR25 Reference Server can be used with many Network RTK software suites using either proprietary or standard common formats. Simple Network Management Protocol support allows the GR25 Reference Server to be easily integrated into existing IT service monitoring applications.

GNSS Modernisation is an ongoing process. The modular GNSS tracking engine allows upgrade when new signals structures are finally published. With a exchangeable measurement engine, network providers can keep up-to-date with the latest GNSS signals, without having to exchange the whole server every few years, securing their investment into the long term. The GR25 supports a variety of GNSS signals including L1, L2, L5 and supports Galileo tracking including AltBOC.

The GR25 is designed to be an integral part of the Leica GNSS Spider software solutions for network RTK, monitoring and scientific studies, working seamlessly with GNSS Spider, SpiderWeb, SpiderQC and the Leica CrossCheck Computation and Monitoring Service.

<https://www.gim-international.com/content/news/gr25-gnss-reference-server>
