

# Leica GR30 & GR50

Versatile solutions for  
today and tomorrow



- when it has to be **right**



# Leica GR30 and GR50 – Continuously evolving

The Leica Geosystems' innovative and industry-leading technology for GNSS reference stations and networks continues to evolve, meeting rapidly changing GNSS technology demands. Exceeding GNSS signal needs today and tomorrow by supplying 555 channels, plus providing industry-leading frequency spectrum analysis, automatic interference detection with notification and interference mitigation makes Leica GR30 and GR50 reference servers the ultimate future-proof investments.

Part of the Leica Geosystems' GNSS solution, Leica GR30 and GR50 provide cutting-edge technology for outstanding performance. Regardless of the application, all new or existing GNSS permanent and semi-permanent network installations can be assured of receiving and delivering highly accurate and reliable data 24/7 for many years to come.

Flexible and adaptable, these reference servers offer multiple solutions for multiple needs. Leica GR30 and GR50 meet the highest demands for reliability and work in the toughest environments. Professionals put them to work on any type of GNSS applications, from campaign and permanent single base stations to RTK networks, from structural monitoring to offshore positioning, or from atmospheric research to seismic studies.

## LEICA SPIDER

The Leica Spider family of products provide all you need for smart solutions, from single base stations to comprehensive infrastructure RTK networks and services.

The Leica reference server is a future proof investment, ensuring consistent high quality data for many years to come.



### SmartTrack+ Up to 555 GNSS channels

Designed for top performance and with the future in mind, the GR30 and GR50 features the ultimate GNSS technology. 555 channels enable simultaneous tracking of all visible satellite signals of the current and planned global and regional navigation satellite system constellations. Upgradable software allows to add support for future signals as they become available. SmartTrack+ resilient signal tracking and interference mitigation technology ensures reliable GNSS multi-frequency operation even in challenging environments.



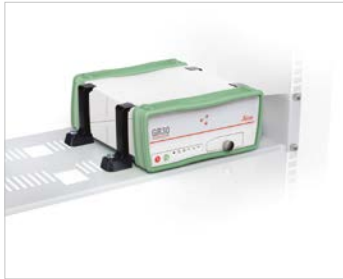
### Smart Server Solution

Just like a data centre server, GR30 and GR50 are designed for reliable operation. With highly redundant communication, power supply and streaming and smart-logging capabilities the GR-series offer more than just a standard reference station receiver. Maximum benefit with minimum interaction is achieved through a comprehensive and easy-to-use web interface, event notification via email, SNMP support, automated firmware updates and plug-and-play connectivity.



### Modular RefWorx Software

The unique onboard RefWorx firmware offers a comprehensive intuitive web interface, providing novice as well as highly experienced professionals complete and easy control. Context sensitive assistance paired with Leica Active Assist facilitate efficient support when needed. Feature-rich with optional onboard tools, such as Leica VADASE and Site Monitor, the RefWorx solutions support a wide range of applications for the diverse GNSS reference station and monitoring needs.



**FLEXIBLE INSTALLATIONS**



**SMART DATA STORAGE**



**SMART COMMUNICATION**



**SMART POWER SOLUTIONS**



**MODULAR REFWORX SOFTWARE**

#### **SMART FOR HIGH SECURITY**

Viewer/manager/administrator user levels and web interface restrictions together with HTTPs and SSL/TLS encryption prevent unauthorised access to the receiver. Integrated firewall and IP address filtering provide additional layers of security.

#### **SMART DATA STORAGE AND CLEAN UP**

- Internal removable SD card memory, up to 32 GB
- FTP server and automated FTP/SFTP file push
- GR50 with external USB hard drive powered directly from the server
- Up to 12 logging sessions using MDB, RINEX and Hatanaka, including zip compression
- Data rates up to 50 Hz
- Smart prioritised clean up & VADASE event based file protection ensures preserving important data

#### **SMART COMMUNICATION**

- Connect the GR server to a network via the ethernet cable
- Add a slot-in device such as radio or cellular modem to ensure server powered communication that is IP68 compliant
- For the GR50 additionally decide for a WLAN or Bluetooth® model
- Up to 20 parallel data streams
- Up to 50 Hz streaming rates
- Multiple TCP client connections
- FULL NTRIP CASTER for unlimited number of mount points, server and client connections via one single port
- Wide range of RTK and raw data formats

#### **SMART MANAGEMENT**

- System backup and restore enable easy distribution of the configuration of one onto other GR servers, and protect against accidental changes
- Automatic firmware updates optimize administration

#### **SMART POWER**

Low power consumption for extended operation time in demanding environments.

- GR30:** Fully automated power management for up to two external power sources.
- GR50:** Intelligent Power Management of four configurable power sources.

- Two external inputs
- Power over Ethernet (PoE)
- Removable and rechargeable internal battery
- Internal charger ensures the battery provides up to 24 hours of power and data backup

#### **SMART POSITIONING**

- Receive correction data in client mode for calculating an RTK fixed position and monitoring the antenna position while continuing to work as a GNSS reference server
- VADASE unique autonomous fast motion detection



### **Redefining customer support to guarantee your satisfaction**

Active Assist is an online support service. Through a secure web service you can request a trained support technician to access the receiver and diagnose issues and perform trouble-shooting. Active Assist works even if the receiver is behind a firewall, ensuring quick and comprehensive support.

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as surveying and engineering, safety and security, building and construction, and power and plant, trust Leica Geosystems to capture, analyse and present smart geospatial data. With the highest-quality instruments, sophisticated software, and trusted services, Leica Geosystems delivers value every day to those shaping the future of our world.

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**Leica GNSS Spider**  
**Leica SpiderWeb**  
**Leica SpiderQC**



**Leica AR20**  
**Leica AR25**  
**Leica AR10**



**Leica CrossCheck**



**Leica VADASE**

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