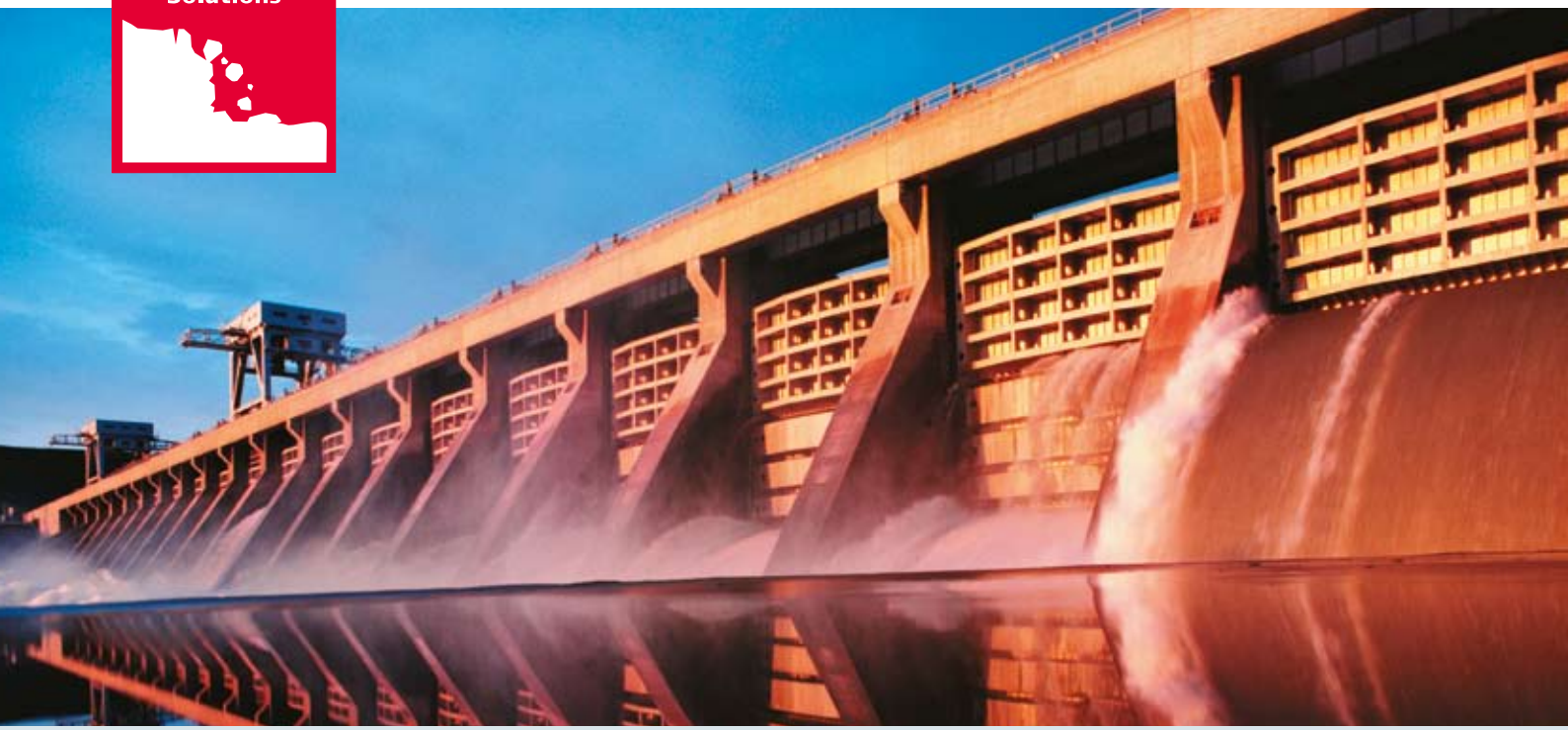
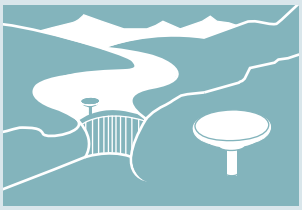
Leica GMX901
Streamlined GPS Monitoring for Critical Structures

Leica Monitoring Solutions



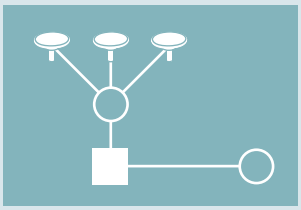
Leica GMX901
GPS Monitoring Receiver

The Leica GMX901 is a compact, robust and precise single frequency receiver designed specifically for monitoring applications. Sensitive structures such as dams, rock slopes, mine walls and buildings can be monitored around the clock for the smallest of movements.



Tailored for Monitoring
- Low power consumption
- Robust
- Designed for continuous measuring operations

Affordable and Precise
- Cost effective long term monitoring
- 12 L1 code and phase channels
- ClearTrack technology for high precision



Integrated
- Integrated antenna with built-in groundplane
- Integrated into Leica GNSS Spider and GeoMoS software
- Simple to setup and configure

- when it has to be **right**

Leica Geosystems

Precise Data Capture

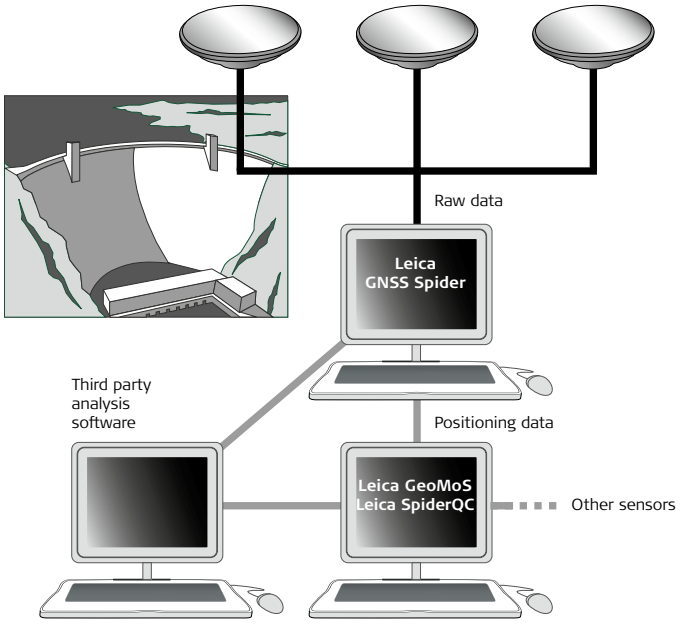
The Leica GMX901 is a high precision GPS receiver specially developed for long term monitoring of sensitive infrastructures.

Focused on the Essentials

Designed with a focus on the essential – low power consumption, high quality measurement, simplicity, durability – the Leica GMX901 is an ideal sensor for monitoring. It has a robust housing that is water, heat, cold and vibration resistant and which can be easily mounted on the infrastructure to be monitored. As soon as power is connected the Leica GMX901 starts streaming data.

Integrated in GNSS Spider and GeoMoS

The Leica GMX901 connects seamlessly to the Leica GNSS Spider advanced GPS processing software for coordinate calculation and raw data storage. The Leica GeoMoS monitoring software can be used to provide integration with other sensors, analysis of movements and calculation of limit checks. Third party analysis software can also be easily integrated via the standard NMEA interface of Leica GNSS Spider.



Technical Data Leica GMX901	
GPS Technology Type, channels	ClearTrack Single frequency, 12 L1, 1 Hz Carrier phase full wave length C/A narrow code
ClearTrack Advanced GPS measurement technology	Time to acquire all satellites after switching on: typically 30 s. Multipath mitigation. Jamming resistant.
Control Software (required)	Leica GNSS Spider. For managing single and multiple receivers, for computing positions, and for creating RINEX files for post-processing.
Data Output	Leica binary (LB2) raw data
Weight	0.7 kg
Size (L x W x D)	18.6 cm x 18.6 cm x 6 cm
Temperature Range Operating Storage	 -40° C to +65° C -40° C to +80° C
Environmental Protection Humidity Rain, dust, sand, wind	 Up to 100 % IP67 – Protection against blowing rain and dust Waterproof to temporary submersion into water (1 m)
Vibration	10 Hz – 500 Hz, ±0.35 mm, 5 g
Shock	40 g, 6 ms
Supply Voltage External power input	Nominal 12 V DC 5 to 28 V DC
Power Consumption	1.7 W
Ports Serial/External power	 1 LEMO-1 connector, 8 pin 4800 – 115'200 baud
Antenna	Integrated Leica AT501 microstrip antenna with built-in groundplane

TQM ISO 9001 / ISO 14001

Total Quality Management –
our commitment to total customer satisfaction.
Ask your local Leica Geosystems dealer for more information about our TQM program.

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