

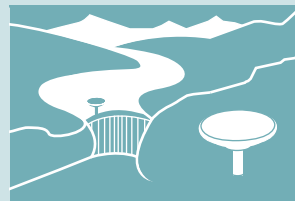
# Leica GMX901 Streamlined GPS Monitoring for Critical Structures

Leica Structural  
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

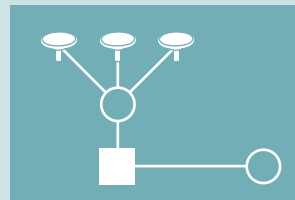
- Low power consumption
- Robust
- Designed for continuous measuring operations



### ClearTrack

### 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 GPS Spider and GeoMoS software
- Simple to setup and configure

- when it has to be **right**

**Leica**  
Geosystems

## Precise Data Capture

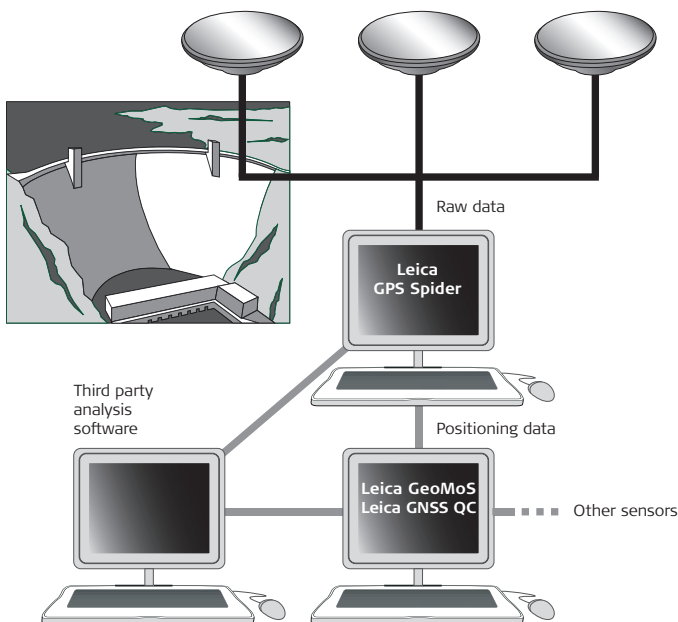
The Leica GMX901 is a high precision GPS receiver specially developed for long term monitoring of sensitive infrastructures.

## 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 GPS Spider and GeoMoS

The Leica GMX901 connects seamlessly to the Leica GPS 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 GPS Spider.



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



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

Illustrations, descriptions and technical data are not binding.  
All rights reserved. Printed in Switzerland.  
Copyright Leica Geosystems AG, Heerbrugg, Switzerland, 2007.  
759674en – V.07 – RDV