Complete GNSS Monitoring Solution

With its integrated communication solution and on-board tools, the Leica GM10 is the right choice for a broad range of monitoring applications. Whether monitoring man-made structures or natural hazards, high performance and secure long-term operation are ensured.

Modular GNSS Sensor
- Single or dual frequency
- Multi-constellation support
- Plug and play setup in terms of hardware & software
- Fully ruggedized with various mounting options

Computation and storage on board
- Onboard data logging up to 50Hz
- FTP server and push
- Onboard real-time processing

Sensor-to-Web
- Built-in communication module slot
- Modern ruggedized Ethernet connection
- Dynamic DNS support
- Sensor configuration via Web interface

Leica GM10
All-in-one GNSS Sensor for Monitoring

- when it has to be right
Technical data Leica GM10

**GNSS technology**
- Leica patented SmartTrack+ technology:
  - Very low noise GNSS carrier phase measurements with <0.2 mm (rms) precision
  - Excellent low elevation tracking
  - Fast acquisition time
  - Jamming resistant
  - 50 Hz Data rate

**GNSS Signals**
- Flexible configuration with up to 60 Satellites, 7 Signals per Satellite 1*, 120 channels
  - GPS: L1 C/A, L2P, L2C, L5 / carrier phase full wave length
  - GLONASS: L1 C/A, L2P, L2C / carrier phase full wave length
  - Galileo: E1, E5a, E5b, AltBOC
  - BeiDou: B1, B2
  - QZSS: L1, L2C, L5
  - SBAS: WAAS, EGNOS, GAGAN, MSAS
  
  1* Fully independent carrier phase tracking with full wavelength, and Code

**Web & FTP Services**
- Full control and configuration of the receiver over a web browser through Ethernet, mobile internet or USB.
- Secure access using HTTPS, SSL certificates, access management and port blocking.
- FTP Server and FTP Client (push), Email notification and SNMP support.

**Data Logging**
- Removable SD card up to 32 GB.
- 12 parallel logging sessions.

**Data Streaming**
- Up to 20 parallel data streams with multiple connections. Data rates up to 50Hz. Supports Leica, Leica 4G, CMR, CMR+, RTCM, BINEX, NMEA 0183 V 2.20 and proprietary formats via serial, USB and TCP/IP. Supports Ntrip Server / Caster / Client

**Communication Slot**
- Exchangeable Radio / GSM / GPS L1 / L1R / L2R devices supported.

**Ports and Connectors**
- 1 × ruggedized RJ45 Ethernet
- 1 × serial RS232 Lemo
- 1 × USB client
- 1 × external oscillator
- 1 × UART serial & USB

**Power input and management**
- Nominal 12 V DC, range 10.5 – 28 V DC.
- Two external power inputs.
- Power consumption: 3.5 W typically, 24 V@150 mA

**Temperature range**
- Compliance with ISO9022-10-08, ISO9022-11-special, MIL STD 810F – S02.4-II, MIL STD 810F – S01.4-II
- Operating: ~40°C to +65°C
- Storage: ~40°C to +80°C

**Humidity**
- 100%, compliance with ISO9022-13-06, ISO9022-12-04 and MIL STD 810F – S07.4-I

**Weight**
- 1.67 kg

**Dimensions**
- 220 mm × 200 mm × 94 mm (including removable rubber bumpers)

**Proof against: water, sand and dust**
- IP67 according IEC60529 and MIL STD 810F – 506.4-I
- MIL STD 810F – 510.4-I
- MIL STD 810F – 514.4-I
- Protected against blowing rain, sand and dust and temporary submersion into water (max. depth 1 m)

**Vibration**
- Withstands strong vibration during operating, compliance with ISO9022-26-08 and MIL STD 810F – 514.5-Cat.24