

# ACCELEROMETER GUARDIAN

Guardian MEMS seismic accelerometer is compact, flexible and reliable with user interface recording software. Guardian is excellent for structural monitoring and Earthquake Early Warning.

Guardian is a compact accelerograph based on MEMS technology, for dynamic vibration measurements on structures in compliance with reference standards UNI 9916, DIN 4150-3, UNI 9614.

The seismic accelerometer Guardian uses flashdrives to store the accelerometer data and it offers several methods of Internet connectivity. It is able to work as FTP client and server, and use standard transmission protocols, such as SeedLink, for real-time data transmission to the most popular software such as Earthworm, Seislog, SeiscomP, etc.; this is thanks to the flexible and easy-to-use web user interface software.

## APPLICATIONS

- Building vibration monitoring
- Modal analysis
- SHM (Structure Health Monitoring)
- EEW (Earthquake Early Warning)



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## ELECTRONIC FEATURES

Power supply	10- 36Vdc, 1.6W power consumption (without WiFi)
Number of channels	3 @ 20bit
Resolution	<0.2mg @ 2G full scale
Noise Density	< 28 mg/√Hz
Sampling	50, 100, 200, 250, 400, 500, 600 Hz
Real Time Clock	Synchronized NTP
Mass storage	internal microSD and USB pen-drives (external)
Data format	GSEcm6, GSEint, SAC, SAF
Data interfaces	Ethernet 10-100 / WiFi (optional with USB dongle)
Triggering	STA/LTA, breadth, IP configuration and scheduled
Connectivity	PSTN, GSM, GPRS, SAT, WAN, LAN, etc., firewall and NAT filters thanks to VPN
Software	Dedicated analysis modules: Desk (for seismology), ESCAP (for engineering), possibility of actuating device control

## SENSORI

Accelerometers	MEMS
Dynamic range	> 80dB (peak to noise threshold)
Band	DC-300Hz (maximum)
Cross axis sensit.	1%
Non linearity	0,1%

## PHYSICAL CHARACTERISTICS

Dimension	115 x 140 x 61 mm
Operating Temperature	-10/+50°C
Case material	Aluminium IP44
Power	AC/DC adapter, solar panels with accumulator
Synchronization	Via NTP (supplied on local network if required)

Contact now your  
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