

# RoboQUAKE

The advanced solution for seismic monitoring and alarm



**ROBOQUAKE** is an advanced **seismic monitoring and alert system** designed to detect, analyze, and instantly communicate seismic events and their impact on buildings. By combining high-precision sensors, a central data processing unit, and cloud-based software, ROBOQUAKE enables fast, safe, and informed decision-making during and after earthquakes.

Developed for public buildings, industrial sites, schools, hospitals, and critical infrastructure, the system automates emergency alerts, supports evacuation procedures, activates safety devices, and generates detailed post-event reports. With a scalable, plug-and-play architecture and remote access from any device, ROBOQUAKE is the ideal solution for ensuring operational continuity and protecting lives.

## Technical features:

Main Data Unit with built-in 3D accelerometer	-
Advanced Sensors	measures acceleration, velocity, and displacement with spectral analysis (PGA, PGV, PGD)
Sampling Rate	up to 1500 SPS
Ultra-Low Noise	< 10 $\mu\text{G}/\sqrt{\text{Hz}}$
High Precision & Durability	IP67, enclosure, suitable for both indoor and outdoor installations
Software	Local + cloud-based platform Real-time statistics Event logging and reporting Customizable alerts
Automated Damage Assessment with real-time event intensity classification	-
Multiple Communication Protocols	Ethernet, Wi-Fi, and cellular connectivity
Alert Types	Voice alarms SMS Emails Push notifications
Automated Controls	Evacuation alarms Gas and water valve shut-off Elevator halt Fire safety system activation
Backup Battery and Solid-State Data Storage	-
Full Sensor Compatibility	works with all external sensor types
Unlimited Scalability	ideal for complex or multi-building installations

## Accessories:

Main Data Unit with integrated triaxial accelerometer

LED Status & Alarm Indicators:

- **Green:** normal operation
- **Orange:** event triggered
- **Red:** system error

Wireless/IoT Communication Modules:

- Ethernet
- Wi-Fi
- Cellular network

Integrated Thermal Printer for local event reporting

Connection Panel with:

- DC inputs/outputs
- Internet connectivity

**Web-Based Software Access** with a **dedicated dashboard**  
(compatible with high-rise, low-rise, or multi-building environments)

**Mobile App** for remote monitoring and system control

**Quick-Start Installation Manual** with plug-and-play setup

Optional Add-ons:

- External sensors
- Expansion modules
- Subscription packages: Bronze, Silver, Gold