secty electronics°

secty lifePatron®

Advanced earthquake warning and security system

Commissioning of the earthquake early warning system for the city of Tiraspol on February 27, 2025



The initial situation of the project

The City of Tiraspol is expecting earthquakes from Romania, about 200 km away. For this reason, the earthquake early warning system with connection to the mobile network was installed on February 27, 2025 and successfully accepted.

For this purpose, a master earthquake detector and two submaster earthquake detectors were installed in the building (photo).



Master in an acustic-protection case



Master in an acustic-protection case

Master in an acustic-protection case

The central panel unit TABD was installed in a server room. The system can be monitored from here.



Central operator panel TABD

Service-Switch

In addition, a maintenance switch has been connected to the system, which shuts down the earthquake early warning system during maintenance work.

Control technology (management and control)

The alarm and information about

- the status of the system, -
- the triggered thresholds (8),
- in the event of a communication problem between the sensors (COM ERROR),
- sensors OK/not OK -
- maintenance switch ON / OFF
- power failure

are now sent via potential-free contacts to the control center/building management system (BMS) via fiber optic cable.



SMS-Alert

Alarm

Only when two of three earthquake detectors report a destructive earthquake does the system send an alarm to the control center and in a fraction of a second 100,000 people are warned via SMS.

The priority for this has been set right at the top!

Important to know: The secty lifePatron system was developed with the

GeoForschungsZentrum Potsdam. In addition, the earthquake early warning system was tested and TÜV-certified according to the European standard TS12884 (Turkish Standards), which in turn is based on the American guideline ASCE 25-06 or ASCE 25-97 (American Society of Civil Engineers Standards).

Further tests were successfully carried out on a so-called shaking table in India and Iran.



Shaking Table India







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