



The S.S.E. system (SEISMOWIN-SL06-ESCAP) is a turnkey solution for structure seismic monitoring.

This solution puts in action a series of automatic processes capable to evaluate within seconds if a seismic event impacted on a complex structure like dam or high-rise building.

The SL06 recorder and the support software of the SEISMOWIN suite, especially its ESCAP module, allow the signal analysis and quick alert to the engineers who have to take care of the structure status of health (SOH).

Semplicity

A micronetwork of a number of SL06 seismographs (i.e. a three unit system) can be setup in few hours using WiFi access points or already in use cable infrastructure.

Connectivity

The system can work in a variety of communication protocols, TCP/IP and UDP/IP based as well as HTTP, FTP, SSH, Telnet, ModBus. The Android application S.A.R.T.⁵ of our SEISMODROID software suite, can alert the user directly on its mobile terminal under WiFi signal coverage.

With few more integration you can be capable to have a real Earthquake Early Warning (EEW) system in a pocket.



Robustness

The robust casing of SL06, milled out of a solid block of aluminum, can sustain high mechanical loads even in the worst cases of material collapse, protecting the very important recorded data.

Modularity

In our design we always use a modular approach allowing application of upgrades, transport and repair; this helps in safeguarding your investment. Users can benefit of lifetime software upgrades*.

* Except customization.

⁵ S.A.R.T. Seismic Alert for Rescue Team in use by the company Tondin for early warning and seismic monitoring during the safety consolidation of the tower of the Rocca degli Estensi in San Felice sul Panaro (Italy) during the aftershocks of the Emilia earthquake in 2012.



It have been also used during some of the aftershocks after 30 october 2016 in Norcia, (Italy) by the Fire Dept.

ESCAP

The ESCAP module, together with the others modules of SEISMOWIN, allows the real-time analysis of the seismic activity monitored by the SL06 seismographs. As soon a seismic event is detected the SL06 transmits the dataset via FTP to the server folder monitored by ESCAP.

ESCAP performs the instrumental correction and calculates a variety of numbers and seismological indexes (PGA, Arias, etc.) as well as the response spectrum of the recorded signals. This allows to assign a warning degree to the seismic event in order to evaluate the shake influence on the monitored structure.

The response spectrum can be associated to a specific response profile shaped to match the structure vulnerabilities.

The PGA can be plotted on a diagram for a chart useful to monitor the evolution of the seismic sequence to be published on intranet or internet (i.e. on the WEB).

Every earthquake can be analyzed by the operator in velocity, acceleration and displacement with the possibility to replay the particle motion in 3D and evaluate the impact on the structure watching each force vector instant by instant.

For all the remaining time the system can produce virtual *helicorders* very useful to keep observed seismic and microseismic activity at a glance.

Customization are, of course, possible for both hardware and software.

SARA Electronic Instruments s.r.l. reserves the right to apply in any moment modifications and changes to the features and prices of all products without any prior notice.

