SL06 SEISMOGRAPH

The SL06 seismograph is a high performance recorder based on Linux o.s. capable to record the seismic signal at high resolution in standard USB flash pen drives.

It provides several Internet services like SeedLink, FTP client & server to transmit data flow toward the most popular central station recording software like SeiscomP, Earthworm, Seislog, etc..; this is possible thanks to the *SEISMONUX software*, capable to make the instrument VERY easy to use and giving great operability and flexibility in operation.

SL06

This seismograph is a dedicated recorder designed to work for espcially for earthquakes monitoring. It is compact, reliable and flexible, thanks to its recording software, Linux based, SEISMONUX.
Three or six analogue channels with sampling rates from 1 to 600 samples per seconds allow a variety of applications.

Connectivity

The Linux o.s. offer several native protocols and we added also more protocols, among them: TCP, UDP, HTTP, FTP, SSH, Telnet, MODBUS. The unit can be accessed by console port as terminal emulator both by Ethernet and RS232; this allow fully operativity with any data carrier PSTN, GSM, GPRS, SAT, WAN, LAN, etc. VPN guarantee to reach the instrument even behind firewalls and NAT filters.

Energy

The low power consumption allow the SL06 to be used in remote installation and powered with small accumulators and solar panels.

Sinchronization

As all our instruments SL06 is equipped with an embedded GPS receiver to synchronize the data flow with the UTC time worldwide used time in seismology.

Modularity

In our design we always follow a modular approach allowing the instruments to be easily repaired and upgraded. This safeguard your investment and the environement from waste of equipment increasing the duration of the product.

Development

Our softwares are always updated on a free base allowing improvements of functionalities. Development is constantly done in contact with our clients as geophysicists, civil engineers and seismologists.
Among our clients we can list: INGV., Civil Defense Department (DPC), ENEA., C.N.R. (Italia), UNAM (Mexico) and many others; our instruments are operative in: Argentina, Brasil, Chile, Costa Rica, Denmark, Iran, Nicaragua, Germany, Romania, Spain, Sudan, Turkey, and more...

Applications

SL06 is excellent for mobile networks, small local networks, single stations, structure health monitoring. It can accept signals from any velocity or accelerometric sensor and even from Broad Band sensor like our SS08. The three channel version can have embedded sensors named VELBOX and ACEBOX commercial version for the seismograph unit and for the accelerograph unit respectively.

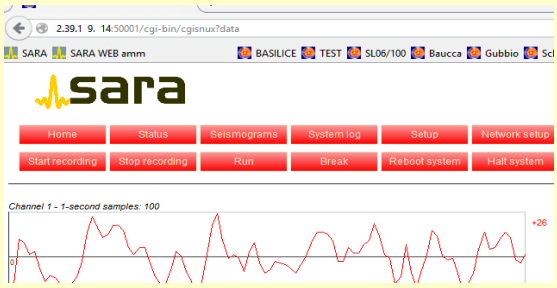
Its Analogue to Digital Converter gives the maximum performances with electrodynamic sensors (geophones) which it can perform background seismic noise measurement providing performance at same and sometime higher level than more expensive instruments.

The robust milled from solid block aluminum case, can resist to high loads in case bulding collapse and then protect the data memory.

With a series of trigger algorythms it can work in network with other SL06 instruments in order to avoid false triggers or don't miss any small signal. A numbers of automation are available inside and allow the automatic send to a data server of all the recorded files to be analised with modules of SEISMOWIN software suite like the DESK (for seismology) or ESCAP module (for engineering). SL06 can be also used for Nakamura (HVSR) surveys.

Thanks to the WEB based management system you can control the SL06 in a very simple and easy manner.

Customization on the unit are possible, on both hardware and software side.



Some technical features

Power :	10-36Vdc, power consumpion less than 2.5W (3 channel with geophones)
Number of channel:	3 or 6 channels 24 bit (ΣΔ) 144dB
Sensitivity:	119nV/count / 238 nV/count (jumper selectable)
Sampling rates:	10,20,50,100,200,250,300,400,480,500,600 Hz
Real Time Clock:	GPS disciplined clock +/- 10ppm -20/+50°C (+/- 40μs to the respect of UTC)
GPS Antenna:	external with coaxial cable of 10 meters and BNC connector
Mass Memory:	USB pen-drives, with EXT2 file system up to 8 Terabytes
Data Format:	GSEcm6, GSEint, SAC, SAF, SEED, miniSEED, SEG2
Data Links:	Ethernet 10-100 and RS232
Triggering:	multimode STA/LTA, amplitude, IP voting and scheduled
Housing:	machined aluminum solid block IP67, wall mounting possible 205x170x107 mm
Operating temperat.:	-20/+70°C option
Sensor connector[#]:	MIL-C 10, MIL-C 18, or MIL-C-26 (for Broad Band sensors)

[#] From 2010 our 10 poles connettors follow the Lennartz-Electronic™ standard. In this way the recorder is compatible with all this sensor series.

SARA Electronic Instruments s.r.l. reserve the right to modify features and prices at any time and without any prior notice.

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