ASA electronic instruments

SL06 ACEBOX





ACEBOX

A compact and flexible accelerograph. Reliable and flexible thanks to our recording software SEISMONUX.

Three channels with sampling rates from 1 to 600 samples per seconds allow a variety of applications, from seismic switch to EEW. With the very high dynamic range and low noise it can be used also as seismometer.

The ULTRA FAST SeedLink server allow the lowest latency possible for EEW application, latency can be programmed to balance the used ethernet band up to 0.1 of second.

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. Virtual Private Networking (VPN) also guarantee to reach the instrument even behind firewalls and NAT filters.

Energy

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

Sinchronization

ACEBOX is equipped with a GPS receiver to synchronize the data flow with the UTC time worldwide used time in seismology. Additionally NTP client (Network Time Protocol) is provided allowing synchronization regardless of the availability of GPS signal.

Modularity

In our design we always follow a modular approach allowing the instruments to be easily repaired and upgraded. This also increase the durability of the product safeguarding your investment and the environement.

Development

Hundreds of geophysicists, civil engineers and seismologists are among our clients and we always listen to their comments and needs in order to constantly improve the instrument and develop new firmware versions. The ACEBOX is an high performance accelerograph. It embeds three Force Balance Accelerometers capable to record the seismic signal at high resolution in standard USB flash pen drives.

Several Internet services are provided like FTP Client/Server functions, and seismic protocol like SeedLink for real time data transmission to the most popular recording software like Earthworm, Seislog, SeiscomP, etc..; all this thanks to our proprietary *SEISMONUX software*, flexible and ease to use.

Applications

ACEBOX is excellent for temporary networks, local networks, single seismic stations, structure health monitoring network. ACEBOX is the commercial name of the SL06 with embedded accelerometer. It is especially suitable for strong-motion field of application.

The robust case, milled out from solid block of aluminum, can resist to high loads in case bulding collapse and then protect the data memory. Shutdown battery inside allow correct shutdown in any condition and extreme resistance to power sudden failures.

With a series of automatic recording algorythms it can work in network with other SL06 instruments in order to avoid false triggers or don't miss any small signal. A number of automations are available, allowing 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).

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 feature	25
Power :	10-36V, power consumption less than 3W
Number of channel:	3 channels 24 bit (ΣΔ) 144dB
Sampling rates:	10, 20, 50, 100, 200, 250, 300, 400, 480, 500, 600 Hz
Real Time Clock: GPS Antenna:	GPS disciplined clock +/- 10ppm -20/+70°C (+/- 40 μ s to the respect of UTC) 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, miniSEED, SEG2
Data Links:	Ethernet 10-100 and RS232
Triggering:	multimode STA/LTA, amplitude, IP voting and scheduled
Housing:	machined aluminum solid block IP68, wall mounting possible 205x170x107 mm
Operating temperat.:	-20/+70°C
Sensor	
Accelerometer:	Triaxial Pure Force Balance Design +/-2g (standard); +/-1g or +/-4g (optional)
Dynamic range:	Sensor cell >165dB, system >140dB
Bandwidth:	DC-100 (standard); DC-200Hz (optional)
Cross axis sensit.:	< 0.1%
Noise floor:	< 20 ng/√Hz
If vou ne	ed more information submit your inquiry at: info@sara.pg.it
, , , , , , , , , , , , , , , , , , ,	

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

SARA electronic instruments s.r.l. cap.soc. 100.000,00€ i.v. 06129 – Perugia – Via A.Mercuri, 4 – ITALY Tel. +39 075 5051014 – Fax +39 075 5006315 - www.sara.pg.it - info@sara.pg.it Reg. Trib. Perugia N-5718 – C.C.I.A.A. 109864 - C.F. e P.iva 00380320549 - N.Reg.RAEE: IT0802000001128