



The digital sensor SR04 GeoBox is a high-performance instrument especially suitable for acquiring signals for seismological and geophysical surveys such as the Horizontal/Vertical Spectral Ratio (HVSR).

The communication protocol is public, software plugins exist for SEISMOWIN, SEISLOG, SEISCOMP and EARTHWORM.

The instrument's features include extreme ease of use, reliability and low power consumption.

Simplicity

The SR04 GeoBox is designed especially for recording ambient seismic noise, but it can also record earthquakes and artificial vibrations. Compact, reliable and simple, it is fully functional within minutes after deployment.

Connectivity

The unit is equipped with 2 serial ports responding to the RS232 standard, one for the GPS output and one for the digital seismic data stream. A USB-RS232 cable is supplied to connect it with new computers not equipped with comm ports.

Energy

Ultra low power consumption and a battery inside make the SR04 suitable for working in the field without any external power supply. The battery provides up to 20 hours of working time.

Synchronization

Like all our instruments, the SR04 can be equipped, on request, with a GPS unit for reliable and accurate UTC synchronization.

Modularity

In our designs we always use a modular approach that make upgrades, repairs, and shipping easier. This protects your investment as well as the environment. We guarantee free lifetime firmware and software upgrades.

Professionality

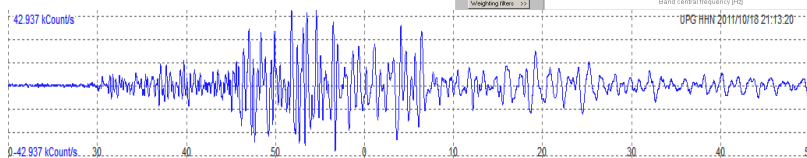
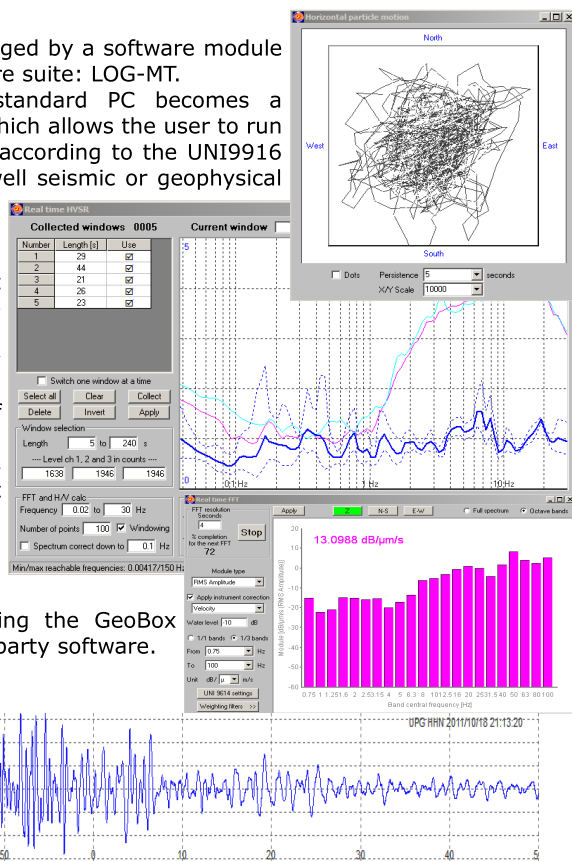
Our instruments are continuously being developed with the cooperation of experts in geophysics and seismology. Our extensive list of clients includes public and private institutions worldwide, such as: NORSAR (Norway), UNAM (Mexico), Geological Survey of Namibia (Namibia), with our instruments operating in: Chile, Argentina, South Africa, Iran, Jordan, Denmark, Tibet, Spain, Sudan, Nicaragua, Panama, Venezuela, and many other countries.

The SR04 GeoBox is managed by a software module of the SEISMOWIN software suite: LOG-MT.

Thanks to LOG-MT, a standard PC becomes a powerful seismic station which allows the user to run vibrational analyses (e.g. according to the UNI9916 and 9614 standards) as well seismic or geophysical surveys.

HVSR surveys can be run in real-time, making it possible to monitor the widest range of situations with maximum efficiency in terms of time and reliability of measurement. You can get HVSR results within seconds right before your eyes.

Data can be saved in standard formats (e.g. SAF / H-V / GSE), making the GeoBox compatible with any third party software.



Technical Features

- Power supply: 10-15Vdc (with power consumption less than 1 W)
- Number of channels: 3 with 24 bit A/D converter ($\Sigma\Delta$)
- Dynamic range: 124dB (144dB, 24 bit of ENOB, between 0.1 and 10Hz)
- Sampling: simultaneous on all three channel (1 a/d per channel)
- Sampling rates: from 10 to 600 Hz
- Real Time Clock: +/-10ppm (-20/+50°C)
- Sync R.Time Clock: GPS based via PPS (on request)
- Precision to UTC time: <50μs
- Data interface: RS232, USB cable supplied
- Data format: SADC20HS binary protocol
- Baud rate: 115200 baud
- GPS data interface: RS232, MEA; 4800 baud, n,8,1
- Case: Solid block of aluminum with IP66 protection grade
- Operating temperature: -20/+60°C
- Dimensions: 155x140x110
- Weight: 3.1 kg With 4.5Hz sensors, 4.4kg with 2Hz sensors
- Conformity declaration: 0)

Sara Electronic Instruments s.r.l. reserve the right to make changes to this brochure or to the instrument without any prior notice.

Quakelogic Headquarters

4010 Foothills Blvd. Suite 103 / 194 Roseville, CA 95747, USA

Phone : +1-916-899-0391

quakelogic.net

For sales: sales@quakelogic.net