

SR04 DIGITIZER



The SR04 is a high-performance instrument capable to digitize the seismic signal and supply a continuous data flow sampled at selectable rates.

The communication protocol is available and already used by SEISLOG, SEISCOMP and EarthWorm, and of course it is fully supported by our recording software SEISMOWIN.

The instrument is very simple to use and runs on very low power (less than 1W). It is robust and reliable for permanent and portable installations.

Ease of use

The SR04 is compact reliable and ease to use, with the RS232 port and a set of flexible software of the SEISMOWIN suite it can be used for a variety of applications.

It comes ready with all needed accessories to be immediately used.

Connectivity

In its standard configuration it can accept without any additional element both electrodynamic sensors of any manufacturer. Upon request we can supply more than one unit synchronized together with the same unit already equipped with a GPS receiver. Each unit is equipped with two RS232 ports, one for the data output and one for the GPS data output.

Low power

The low power consumption make the SR04 a unit suitable to be used in remote installations with just small solar panel and batteries as power supply.

Synchronization

As all our instruments the SR04 is equipped with a GPS receiver to discipline the internal clock with the coordinated time UTC.

Modularity

In our design we follow always modular architectures allowing upgrades, transport and repair of the equipment. This safeguard your investment and the environment.

We guarantee for the lifetime of the unit all software and firmwares upgrades.

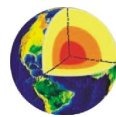
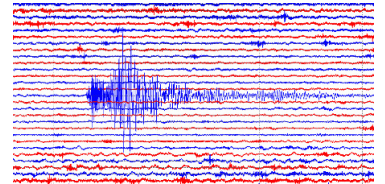
Professionality

We constantly develop our equipment with the feedback of our clients and cooperation with main professionals and institutions in the geophysical and seismological field of application.

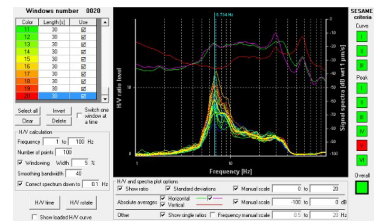
Among our esteemed clients we can count both private and public companies like: INGV, ENEA, ENEL, CNR, UNAM (Mexico), CICESE (Mexico); and we have instrument running in: Chile, Argentina, South-Africa, Tibet, Spain, Sudan, Perú, Nicaragua, Venezuela, China, Korea and many more.

Applications

The SR04 digitizer is a specific unit designed to record very low signal at very low frequencies, it is featured by a very low thermal drift and an excellent signal-to-noise ratio. It is ideal for earthquake recording, microtremor recording, but also from other transducers like magnetometers or microbarometers.



While it is compatible with several seismological recording software it finds its best application using the SEISMOWIN software, for example with its module LOG-MT which allow the SR04 to be used as a powerful microtremor digitizer for HVSR (Nakamura's method) surveys with real time H/V curve evaluation and with other software modules like LOG and SERVER with you can makeup a seismic station capable to generate SeedLINK data flows to other real-time recording software.



Technical features

Power supply:	10-16Vdc
Power consumption:	< 1 W
Numbers of channels:	3, 24 bit (ΣΔ) (Υπον ρεθυεετ 3+3 channels with HR and other 8 with LR)
Dynamic range:	>140dB @ 100SPS in the band 0.1-10Hz
Sampling:	simultaneous on the three channels
Sampling rates:	10,20,25,50,100,200,250,300,400,480,500,600,800,1000,1500
Input impedance:	> 100Kohm for geophones, 8.2Kohm for active sensors
Full scale:	2Vpp for geophones, 4 Vpp for active sensors (customizable)
Real Time Clock:	+/-10ppm (-20/+50°C)
Synchron. of Real Time Clock:	by GPS through modulated PPS
Precision respect to UTC:	<50µs
Antenna GPS:	amplified antenna with 10mt cable and BNC connector
Seismic data interface:	RS232 (Ethernet optional), USB cable supplied with instrument
Data format:	binary SADC20HS proprietary protocol
Communication speed:	115200 baud
GPS data interface:	RS232; NMEA; 4800 baud, n,8,1
Sensor connector:	MIL-C 10 or (MIL-C 26 for broad band sensors)
Case:	Machined solid block aluminum IP68
Working temperature:	-20/+50°C
Dimensions:	205x170x45 mm
Compliance:	CE

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