

MSR624

24 bit Integrated battery

Integrated monitor Touch screen display

6 CHANNELS - 24 BIT SEISMOGRAPH



Seismograph for active and passive seismic equipped with 6 channels with 24 bit resolution, extremely compact and simple and intuitive to use. The seismograph is managed by means of a monitor equipped with a touch screen integrated in the instrumentation. MSR624 is ideal for seismic surveys with active or passive single station methodologies such as monitoring of timed or trigger threshold seismic vibrations, non-destructive checks, surveys on structures with three-dimensional sensors and HVSR surveys. In addition to passive methodologies, MSR624 is also indicated for investigations with seismic techniques active on a small scale such as tomographic seismic for structural diagnostics or down-hole and cross-hole. The management software allows you to perform all the management and configuration operations of the acquisition parameters for the different types of seismic prospecting supported. The extremely compact dimensions and its low weight make ST6 particularly suitable for all situations where it is necessary to have a robust and reliable instrumentation but at the same time of reduced dimensions and easily transportable due to difficult or extreme logistical conditions. It is possible to connect single-dimensional (6 channels) or three-dimensional (2 channels) sensors to the MSR624 seismograph, making it particularly suitable for all structural vibration monitoring needs.

Metodologie

Seismic Down-Hole/Cross-Hole

Nakamura Method, HVSR, H/V

Seismic vibration monitoring

General

Number of channels	6
Power supply	internal lithium ion battery pack 11,1V - 10,4Ah/115W
Acquisition medium power consumption	1,5 A
Average autonomy	6 hours
Environmental conditions	Temperature (°C):-20 a 80; Humidity (RH): 0-90%
CPU	ARM quad-core
Connections	USB
Monitor	TFT-LCD capacitive 10" touch-screen
Data storage	SD memory
Data format	Owner data format
GPS	No
Case	Polypropilene, automatic pressure valve, IP67
Dimensions	cm 23,5 × 18,1 × 10,5 cm
Weight	3 kg
HS code	90158011

Acquisition

A/D converter resolution	ADC Delta-Sigma @24 bit (Fc max 50000 Hz)
Dynamic range	128 dB
Maximum distortion	0.0005%
Bandwidth	0-25000Hz / selezionabile Low Pass Filter max.2000Hz
Common mode rejection	110 dB at 60 Hz
Diaphony	-128dB at 20 Hz

General

Amplifier noise treshold	1 μ V
Maximum range of input signal	+/-1.25V
Input impedance	39 KOhm
Anti-alias filter	-3dB, 80% of Nyquist frequency, -80dB
Sampling rate	HVSR: selectable from 60 Hz a 52000 Hz; CROSSHOLE / DOWNHOLE: max 8772Hz; Passive: max 1053Hz
Sampling interval	HVSR: from 900s a 3600s; DOWNHOLE / CROSSHOLE: from 0,25s to 2,00s; Passive: related to memory
Number of samples per event	depending on the sampling frequency and the interval
Trigger	external with configurable threshold
Pre-trigger	Selectable up to 6255 samples
Pre-trigger time	DOWNHOLE / CROSSHOLE: from 10ms to 100ms



