



The SS08 is a portable broad-band triaxial seismometer designed for quick and simple installation, wide temperature range operation and secure transport. Rather than have the traditional separate 3 axis of sensitivity X,Y,Z it use the homogeneous architecture giving axis in U,W,V and then providing the X,Y,Z with a processor matrix. Robust and rugged design with all internal mechanical controls automated by electronic.

Simplicity

The SS08 is compact, reliable and easy to deploy and use. No need for calibration, it comes with calibration certificate with poles and zeroes detail. Wide tilt tolerance allow the unit to work within minutes from deployment.

Flexibility

Differential output with high gain and high dynamic range allow the unit to be used with all kinds of seismic digitizers.

Energy

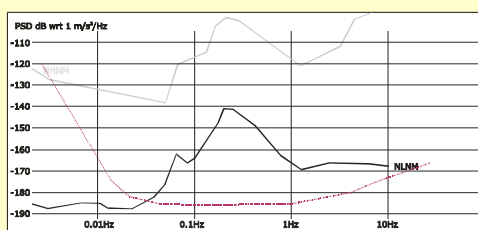
Very low power consumption of less than 0.5W allow the unit to be used in remote installation.

Precision

The SS08's homogeneous architecture assure for each U,W,V element high quality thanks to the standardised production line. Advanced selection of component's materials from aluminum to titanium and special alloys, allows the maximum robustness and thermal stability.

Ultra low-noise

The following diagrams shows the noise floor of a 0.01Hz-40Hz sensors.



Noise level are evaluated using the three channel correlation analysis according to the method explained by R. Sleeman, A. Van Wietum and J. Trampert (Bulletin of Seismological Society of America Vol.96 N1, Febr 2006).

Quality

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: INGV, ENEA, CNR, DPC in Italy and many other institutes and private clients in Switzerland, Germany, Spain, Chile, Argentina, Brazil, Venezuela, and more.

Specifications

Configuration:	U,W,V (output matrix to Z,X,Y)
Principle of operation:	Coil-magnet force feedback with capacitive transducer
Nominal sensitivity:	1500V/m/s (or other to be specified at order)
Velocity output:	selectable X,Y,Z (default) or UVW moe
Pass band:	from 180-120 seconds to 30-100 Hz (frequency range to be specified at order)
Peak output:	+/-20V (differential output)
Output impedance:	2*100 ohm
Mass position output:	+/-10V from UVW signals
Dynamic range:	> 148dB
Parasitic resonance:	higher than 140Hz
Calibration input:	1 with axis selection (U,W or V)
Power supply input:	9-36Vdc isolated (15kV)
Power consumption:	< 0.5W typical (1W maximum) @ 12Vdc
Protection:	reverse-voltage protected and self-resetting fuse
Calibration coil:	33 ohm
Mechanical eigenfreq.:	< 1Hz
Self noise:	< USGS NLNM between 0.025Hz and 25Hz
Levelling:	manual with lockable paddles, integrated level
Maximum allowed tilt:	+/-2° from horizontal
Operating temperature:	-20°C to +70°C
Operation range:	+/-15°C without recentering
Storage temperature:	-40°C to +80°C
Humidity:	0-100% even condensing
Protection grade:	IP68K
Mass centering:	automatic (externally activated)
Mass lock:	electric to be activated before transportation
Maximum shock allowed:	5g half sine
Connector:	26 pin MIL-C-26842 mounted on base
Standard cable length:	standard 3 meters
Digital interface:	RS232 for diagnosis and commands
Dimensions:	maximum diameter 240 mm (excluding connector) max height 275 mm
Weight:	15 kg
Enclosure:	air tight optimized to be insensitive to atmospheric pressure fluctuations, with stainless steel and aluminum treated against corrosion and epoxy painted.
Regulation Compliance:	CE

All specifications are subjected to change without any prior notice!