



The SS45 and SS20 consists in three velocitymeter sensors (electrodynamic sensors) with high gain and eigenfrequency respectively of 4.5 and 2Hz.

This kind of sensors represent a good alternative to sensor of 1Hz or less. They can be used to record earthquakes, volcano activity, microtremor surveys and or reflection and refraction studies.

They can be integrated in SRxx and Slxx instruments.

Simplicity

The SS45 and SS20 are compact, reliable and easy deployment and use. You have no pain to apply the proper damping. They comes from our labs with the calibration certificate and the their transfer function expressed in poles and zeroes either in GSE or SEISMORESP format for instant use with SEISMOWIN or other restitution softwares.

Flexibility

Three differential output with high gain allow them to be used with our digitizers as well with thirty party digitizers.

Energy

Electrodynamic sensors don't use any power so they do not impact on the power requirements of the seismic station where they are installed.

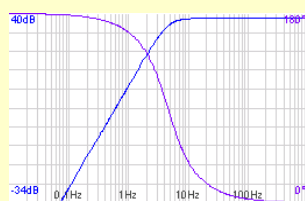
Precision

The SSxx sensors uses electrodynamic element with high reliability and stability made in USA. Assembly in our case with specific sensor holder guarantees the perfect alignment and levelling especially requested for the 2Hz sensors.

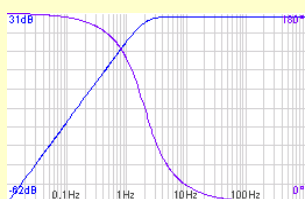
Bode-plot

The following diagrams shows the standard amplitude and fase of the sensors.

4.5Hz sensor



2Hz sensor



SS-45 specifications

Number of channels:	3
Assembly:	Z,Y,X (Z vertical, Y north-south, X east-west)
Orthogonality error:	< 0.01%
Levelling:	manual with lockable paddles
Eigenfrequency:	4.5Hz
Useable band*:	0.2-1000Hz
Damping:	0.5--0.7 (specified in the calibration certificate)
Inertial mass weight:	24 g
Nominal sensitivity:	80 V/m/s
Maximum allowed tilt:	Vertical: +/-8° Horizontal: +/-2°
Mass movement:	0.2mm p-p
Dimensions:	180x170x90mm
Weight:	1500g
Cable length:	standard 3 meters
Connector:	MIL-C 10 pin connectors [#]
Certifications:	CE (EN55022, EN55011)
Protection grade:	IP54 (IP67 upon request)

SS-20 specifications

Number of channels:	3
Configuration:	Z,Y,X (Z vertical, X north-south, Y east-west)
Orthogonality error:	< 0.01%
Levelling:	manual with lockable paddles
Eigenfrequency:	2.0Hz
Useable band*:	0.1-250Hz
Damping:	0.5--0.7 (specified in the calibration certificate)
Inertial mass:	25 g
Nominal sensitivity:	60 V/m/s
Maximum allowed tilt:	Vertical: +/-4° Horizontal: +/-0.5°
Mass movement:	0.5mm p-p
Dimensions:	190x180x90mm
Weight:	2500g
Cable length:	standard 3 meters
Connector:	MIL-C 10 pin connectors [#]
Certifications:	CE (EN55022, EN55011)
Protection grade:	IP54 (IP67 upon request)

* For useable band we means the capability of the sensor to resolve useful signal within the Peterson (USGS-NLNM) curves when used with seismograph SR04, SL06, SL07. They could be used with a wider band with digitizers with better features of noise and sensitivity; they could not give acceptable results with digitizers with a lower sensitivity and resolution.

[#] From 2010 our connector standard matches the popular Lennartz™ sensor pinout; sensors, cables and digitizers are now directly compatible with Lennartz™ equipments.

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