



HGS (INDIA) LIMITED



HG-5HS Geophone Element



Based on the technology transfer for manufacturing the SM® range of geophones from Sensor® Nederland BV, HGS (India) Limited (erstwhile Geosource India Limited) offers the HG-5HS (High Sensitivity) geophone with low natural frequency compared to conventional geophone. The HG-5HS geophone offers the best in class frequency bandwidth up to 150 Hz at a distortion $\leq 0.1\%$. Ideal as a low frequency single point receiver. HG-5 HS can be supplied for both vertical and horizontal orientation.

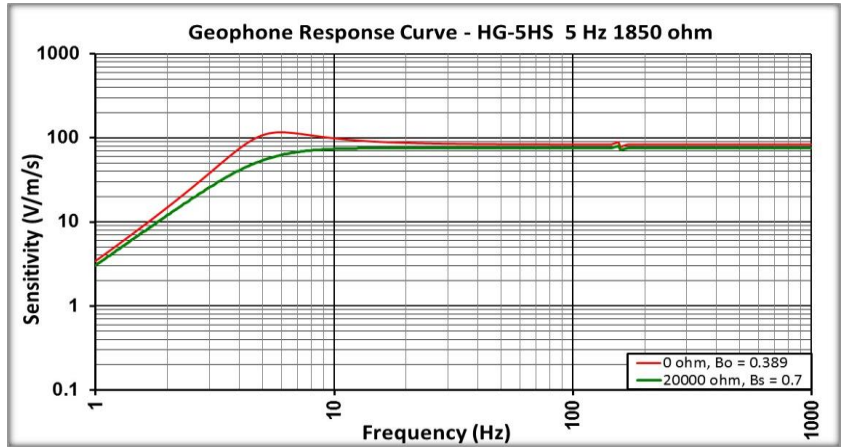
Applications: 2D and 3D seismic exploration with bandwidth from 5 Hz to 150 Hz.

Features:

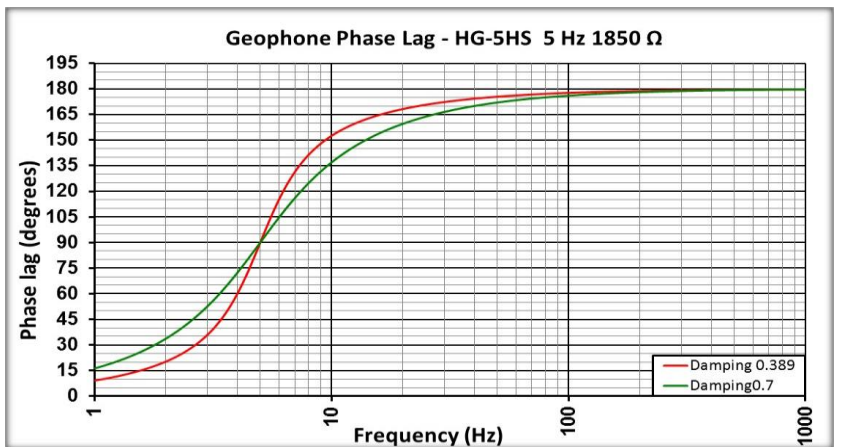
- Low distortion geophone with sensitivity greater than 80 V/m/s
- High Sensitivity geophone used in earthquake monitoring systems and land nodal systems
- Rugged design with rotating-coil contacts
- Horizontal Version available

Specifications - HG-5HS

Frequency	Value
Natural frequency	5 Hz
Tolerance	± 7.5%
Maximum tilt angle for specified Fn	Vertical 10° Horizontal 0°
Spurious frequency	>150Hz
Distortion	
Distortion with 17.78 mm/s p.p. coil-to-case velocity	≤0.1%
Distortion measurement frequency	12 Hz
Maximum tilt angle for distortion specification	Vertical 10° Horizontal 0°



Damping	
Open circuit (typical)	0.389
Tolerance	± 7.5%
Sensitivity	
Sensitivity (open Circuit)	83 V/m/s
Tolerance	± 5%
Moving mass	16 g
Maximum coil excursion p.p.	3 mm



Coil Resistance	
Standard	1850 Ω
Tolerance	± 5%

Physical Characteristics	
Diameter	26.7 mm
Height	39.3 mm
Weight	105 g
Operating temperature range	-40°C to 100°C

Warranty Period*	2 Years
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*Warranty excludes damage caused by high voltage and physical damage to the element case.

All parameters are specified at +20°C in the working position unless stated otherwise.

Ordering information

Description	Part No.	Working position
HG-5HS U 5 Hz 1850 Ohm	SG000430	Upright
HG-5HS H 5 Hz 1850 Ohm	SG000431	Horizontal

Version 1.5

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