

FEATURES

- Vertical or horizontal operation
- Excellent stability
- Proven performance with over 4500 units installed

The Geotech Model S-13 is a high resolution, premium seismometer capable of meeting the noise and stability requirements of the most exacting studies. It features adjustable period from 0.75 to 1.1 Hz and sensitivity of 629 V-sec/m, with the standard 3600 ohm coil.

The S-13 external mass lock, spring tension and operational adjustments are all fitted with seals that enable the instrument to be submerged to 100 feet without leakage.

A major attribute of the S-13 is a mechanical design that lends itself to field repairs by unskilled persons using minimal spares. This quality plus 30 years of outstanding performance in the field, qualify the S-13 to be the short-period seismometer standard by which others are compared.

Model GS-13 has a stronger magnet resulting in about 10 dB lower self noise, being the lowest self noise short period seismometer in the world.

SHORT-PERIOD SEISMOMETER

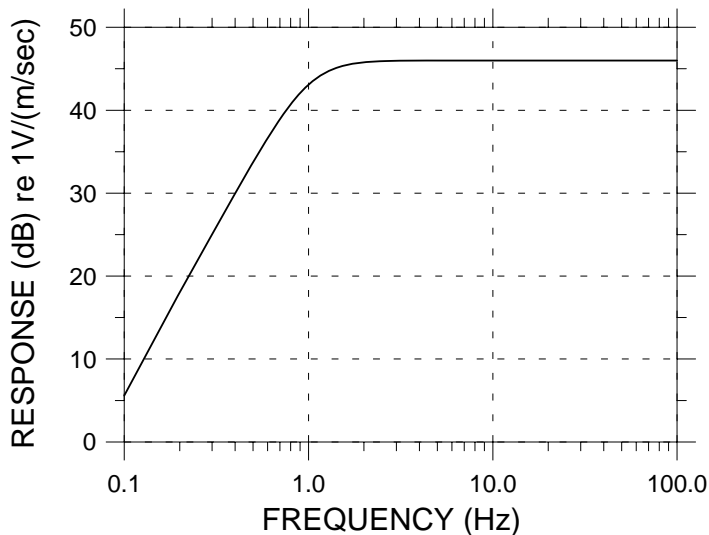
MODEL S-13 and GS-13



SHORT-PERIOD SEISMOMETER MODEL S-13 and GS-13 SPECIFICATIONS

OPERATING CHARACTERISTICS

Mode of Operation	Convertible - vertical and horizontal
Natural Frequency	Adjustable 0.75 to 1.1 Hz
Tilt	Operates within 4° of vertical at 0.8 Hz natural frequency
Inertial Mass	5 kg (11.0 lbs.) nominal
Temperature Range	-51° to +60°C (-60° to +140°F)
Transducer	
Type	Moving coil (velocity)
Damping	Electromagnetic
Generator Constant	629 V/(m/sec) / 2180 V/(m/sec)
Coil Resistance*	3600 ohms ±10% @ 25°C / 9100 ohms ± 700 ohms @ 25°C
Maximum Mass Travel	6.00 mm (0.24 in.) peak-to-peak
Calibration Coil	
Motor Constant	0.1975 ±0.002N/A / 4.5 ±0.29N/A
Resistance	23 ohms ± 3 ohms @ 25°C (77°F) CDR is 6525 ohms @ 1Hz / 29 ohms ± 2 ohms @ 25°C (77°F) CDR is 83 kohms @ 1 Hz
Allowable Current	
Peak Instantaneous	100 mA
Sustained	10 mA



PHYSICAL CHARACTERISTICS

Dimensions (nominal)

Basic Dimensions

Height	38.1 cm (15 in.)
Diameter	16.8 cm (6.625 in.)

Net Weight 10.4 kg (23 lbs.)

Shipping Data

Weight	13.6 kg (30 lbs.)
Volume	0.036 m ³ (1.3 ft ³)

Seismometer Bulk Specific gravity 1.6 - 1.8

Connectors

Receptacle	MS3102C-14S-6P
Mating Plug	MS3108B-14S-6S

*Alternate transducer coils for S-13 are available on special order. Please consult factory for details.

