

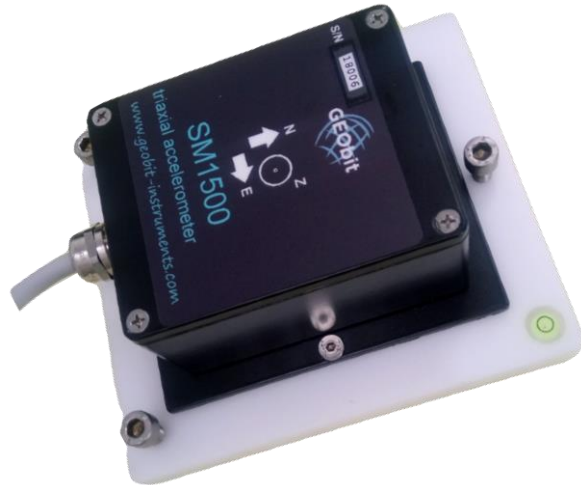


HGS (INDIA) LIMITED



SPECIFICATION SHEET – SM-1500 & 550 Accelerometers

- 3 axis accelerometers Low power consumption
- Surface/wall mount installation
- MEMS-ASIC force balance technology
- Wide input voltage range
- Wide bandwidth DC to 550Hz or 2.4kHz
- Range +/-2g, +/-3g, +/-5g, +/-10g
- Wide dynamic range 102dB or 116dB
- Noise level 6 μ grms/sqrt(Hz) or 0.7 μ grms/sqrt(Hz)
- Operation Range: -20 +70°C



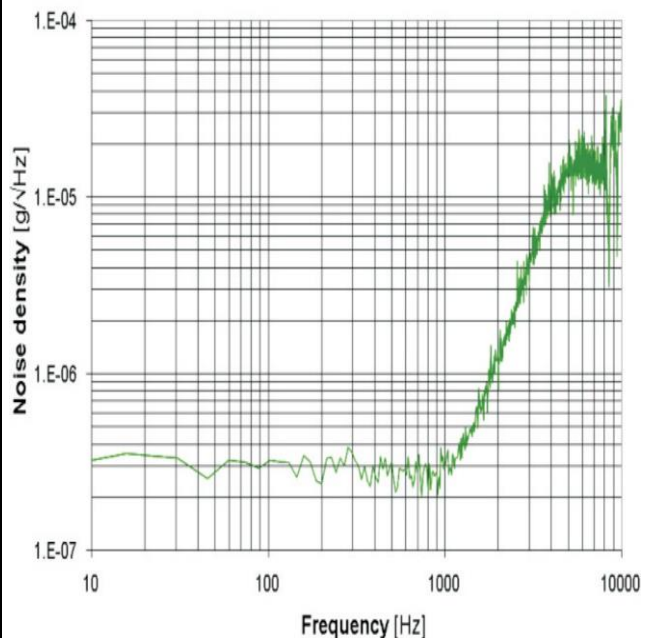
SM-1500

System Features

The SM1500 and SM550 are MEMS type, three-component acceleration sensors. They have wide frequency response. SM1500 model's response is DC to 550Hz and SM550 model's response is DC to 2.4kHz. Default Sensitivity is 2.4V/g for the SM1500 and 0.8V/g for the SM550 and can be adapted according to user's requirements.

Accelerometer is based on a variable capacitor transducer and a feedback circuit that operates in a closed-loop configuration. The feedback force is controlled by an application-specific integrated circuit (ASIC) which provides high reliability and low output noise.

The SM1500 and SM550 sensors operate getting powered from a single +9 to +18Vdc with and the typical power consumption is 28mA@12Vdc. Other power capabilities are available under request. The acceleration output of SM1500 and SM550 sensors can be bipolar or differential, 4-20mA current loop output is also available for both sensors.

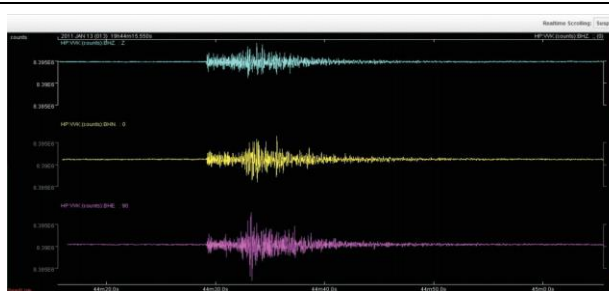


HGS (INDIA) LIMITED
 158, Sector-4, IMT Manesar, Gurugram-122050, Haryana, INDIA
 Tel: +91 (0124) 4681800
 Email: sales@hgsindia.com | Website: www.hgsindia.com



Major Applications:

- Structural monitoring applications
- Earthquake monitoring
- Geophysics
- Homeland and border security
- Vibrations monitoring
- Tilt and inclination monitoring
- Shock measurements

**SM-1500 & 550 Specifications:**

General	SM1500	SM550
Number of channels	3	3
orientation	Vertical, North-South, East-West	Vertical, North-South, East-West
Technology	MEMS-Variable capacitor transducer and feedback circuit with close-loop configuration.	MEMS-Variable capacitor transducer and feedback circuit with close-loop configuration.
Power	+9-18 Vdc, typical power consumption is 28mA@12Vdc	+9-18 Vdc, typical power consumption is 28mA@12Vdc
Bias Level	0V +/-100mV	0V +/-100mV
Features		
Range	+/- 2g, +/- 3g, +/- 5g, +/- 10g	+/- 2g, +/- 4g, +/- 8g
Sensitivity	2.7V/g	2.7V/g
Noise	6µgrms/sqrt(Hz) or 0.7µgrms/sqrt(Hz)	20µgrms/sqrt(Hz)
Physical		
Size	160 x 100mm	160 x 100mm
Weight	0.8kg	0.8kg
Mounting	Floor or wall mounting	Floor or wall mounting
Environmental		
Temperature range	-20 to +70°C	-20 to +70°C
Humidity	100%, IP67 enclosure	100%, IP68 enclosure.

Ordering Information

Item Description	HGS Part No.
SM-550 Strong Motion Acceleration Sensors	MK001592
SM-1500 Strong Motion Acceleration Sensors	MK001593

Version 1.0



HGS (INDIA) LIMITED
 158, Sector-4, IMT Manesar, Gurugram-122050, Haryana, INDIA
 Tel: +91 (0124) 4681800
 Email: sales@hgsindia.com | Website: www.hgsindia.com

