

AC 100 NTVR

Vacuum Compatible and Radiation Hard Acceleration sensor

The AC 100 NT-VR is a highly sensitive, vacuum compatible and radiation hard, fiber optic accelerometer. The accelerometer is designed specifically for the ITER nuclear fusion plant application and can withstand temperatures up to 250°C.

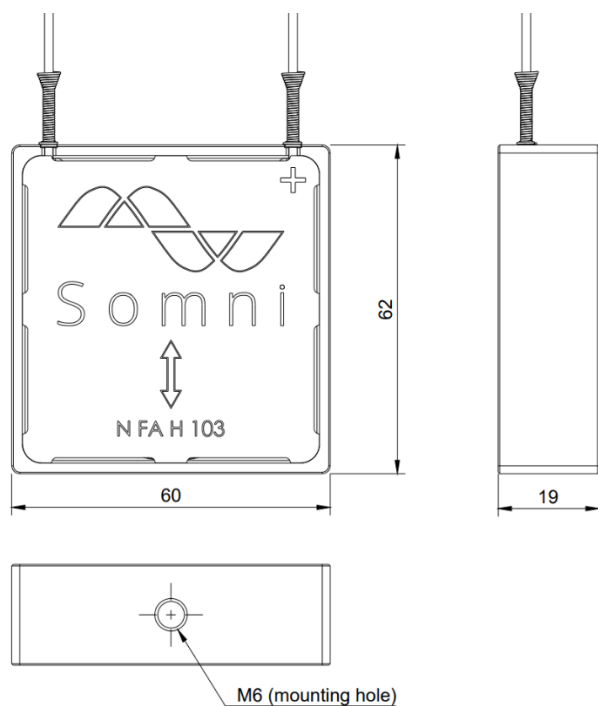
- High operational temperature
- Vacuum compatible and radiation hard sensor
- High sensitivity combined with a large bandwidth
- Double ended



Parameter	Performance
Sensitivity	100 pm/g ± 15 pm/g
Frequency range	1 - 500 Hz
Resonance frequency	> 1300 Hz
Cross axis sensitivity	< -40 dB
Maximum acceleration	± 300 m/s ²
Maximum shock	700 m/s ²
Weight	350 grams
Material	1.4462 (Duplex)
Operational temperature range	-65 to +250 °C
Environmental	Vacuum compatible & Radiation hard (20 MGy for Gamma and 3·10 ¹⁷ n/cm ² fast neutrons >0.1 MeV)
FWHM	< 0.5 nm
Reflectivity	> 40 %
Insertion loss	< 0.1 dB
FBGs	1
Connector options	Unterminated or high temperature FC/APC (max 170°C),
Cabling	Square Locked Tube (Stainless Steel 304)

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Mounting instructions

It is recommended to fasten the sensor on a flat surface using an M6 bolt as indicated.

Maximum torque to apply is 5 Nm.

Calibration

All sensors are individually tested and calibrated after manufacturing. Each sensor is shipped with a detailed calibration sheet.

The graph shows a typical response of the sensor.

