AC 8 NT - Acceleration sensor

Fiber Bragg Grating based single axis accelerometer, specifically designed to measure high acceleration values up to 2000 m/s^2 . The ruggedized sensor will survive the utmost harsh conditions and is able to cope with shocks up to 5000 m/s^2 . With a broad flat frequency response and an unprecedented sensitivity this sensor can be used in a wide variety of applications.

- Robust stainless-steel design for harsh environment
- Double ended
- Shock proof up to 5000 m/s^2
- Large frequency bandwidth
- High sensitivity

Parameter	Performance
Sensitivity	12 pm/g ± 2 pm/g
Noise level	13 µg/√ Hz
Precision[1]	411 µg
Frequency range	1 - 2000 Hz
Resonance frequency	> 2700 Hz
Cross axis sensitivity	< -40 dB
Maximum acceleration	± 2000 m/s^2
Maximum shock	5000 m/s^2
Weight	100 grams
Material	1.4462 (Duplex)
Operational temperature range[2]	-65 to +80 °C
Protection	IP 67
FWHM	< 0.5 nm
Reflectivity	> 50 %
Insertion loss	< 0.1 dB
FBGs	1
Connector options	FC/APC, LC/APC, open end[3]

1. Measurement bandwidth 1kHz.
2. On request sensors can be adapted to operate at temperatures up to 300 °C.
3. Other connector options available on request.

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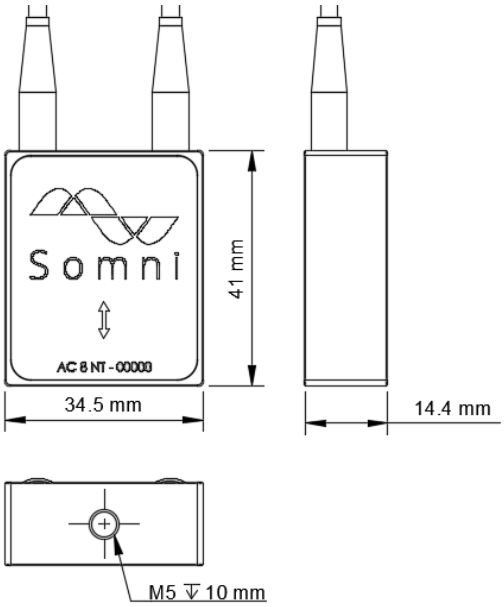

Mounting instructions

It is recommended to fasten the sensor on a flat surface using an M5 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.