

AC 80 NT - Acceleration sensor



General purpose Fiber Bragg Grating based accelerometer. The dual ended accelerometer is optimized to have a high sensitivity combined with a large measurement bandwidth.

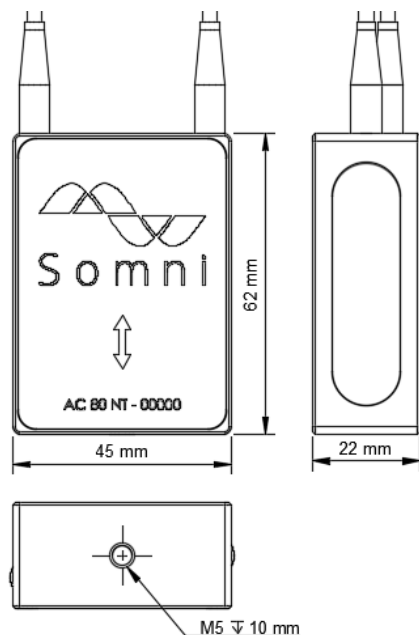
The stainless steel sensor design is ruggedized and robust such that it can be used in a wide variety of indoor and outdoor applications.

- High sensitivity combined with a large Bandwidth
- Double ended
- Robust stainless-steel design for harsh environment



Parameter	Performance
Sensitivity	90 pm/g $\pm$ 10 pm/g
Noise level	1.8 μ g/V Hz
Precision ¹	57 μ g
Frequency range	1 - 1000 Hz
Resonance frequency	> 1300 Hz
Cross axis sensitivity	< -40 dB
Maximum acceleration	$\pm$ 300 m/s ²
Maximum shock	700 m/s ²
Weight	280 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.



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.

