

- ◇ **FBG acceleration sensor**
- ◇ **110g (400 ms⁻²) range**
- ◇ **Zero power, EMI immune, intrinsically safe**
- ◇ **Dense multiplexing capability**
- ◇ **Multiple km signal integrity for highly remote measurements**
- ◇ **Suitable for rotating machine condition monitoring**



SmartAccel-100g sensor



SmartAccel-100g 3 axis

SmartAccel-100g is a single axis FBG acceleration sensor, suitable for high frequency measurement of large amplitude vibrations. Ideal for the measurement of rotating machines, the sensor output can offer early warning of drivetrain mechanical degradation. Numerous SmartAccel-100g sensors can be multiplexed with our range of other fibreoptic sensors to form an integrated condition monitoring system. SmartAccel-100g is designed and manufactured by Micron Optics Inc. Where lower amplitude or lower frequency vibrations are present, for instance in civil structures, our SmartAccel-2g sensor is recommended.

For each of our SmartAccel products, tri-axis acceleration modules are available.

SmartAccel-100g specifications (typ):

	Unit	
Measurement Range	g	+/- 0 to 100
Bandwidth	Hz	0 to 350 (resonance ~ 700 Hz)
Sensitivity	pm/g	typ 16 (@ 80 Hz)
Operating Temperature Range	°C	-40 to +80
Dimensions	mm	38 x 9 x 19
Weight	gr	28
Typical FBG Type	Wavelengths (nm): 1530 – 1570 Apodised profile R>80% FWHM<0.8nm SLSR >10 dB	
Fibre Type	Single Mode SMF-28, 9/125µm	