

IDP6500-Single Axis Accelerometer FBG Accelerometer



Feathure

- high sensitivity and linearity
- excellent sensitivity flatness
- very low transverse sensitivity
- intrinsically safe design
- immunity to EMI/RFI
- robust aluminum case design
- IP68 protection class and armor cables
- deal for civil engineering applications

Application

The accelerometer can be used in a large range of monitoring applications, including ambient vibration of civil structures.

Specification

Sensor	
sensitivity	75 pm/g @ 40 Hz(typical)
measurement range 1	± 10 g
frequency range	0 to 50 Hz

resonance frequency	430 Hz (typical)
flatness	< 2%
resolution 2	12.5 $\mu\text{g}/\sqrt{\text{Hz}}$
transverse sensitivity	< 0.1%
Optical	
central wavelength	1510 to 1590 nm
spectral width (FWHM)	< 0.2 nm
reflectivity	> 75%
insertion loss	< 0.1 dB
side lobe suppression	> 10 dB

Inputs/Outputs	
cable type	\varnothing 3 mm Outdoor (armor)
cable length	1 m each side (\pm 3 cm)
connectors	FC/APC
Environmental	
operation temperature	-20 to 80 $^{\circ}\text{C}$
relative humidity	< 90% at 80 $^{\circ}\text{C}$
protection class	IP68
Mechanical	
packaging	aluminum
dimensions	H 73 mm . D 53 mm

weight	250 g
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- 1 range may be customized upon request
 - 2 dynamic, FFT analysis
- Specifications may change without notice