Fiber Optic Grating Acceleration Sensor

PN：FBG-S-A-L-02

Fiber Grating Accelerometer FBG-S-A-L-02 transmits the acceleration changes from the correct encapsulation of the fiber grating to the fiber grating, combined with the fast fiber grating demodulation technology, and calculates the acceleration by measuring the wavelength shift of the fiber grating.The FBG-S-A-L-02 adopts the state-of-the-art fiber grating sensing technology, which has a small size, high sensitivity, high reliability, and can be operated for a long period of time in a harsh environment. Meanwhile, the sensor can be assembled with different structures and designed for 2D and 3D acceleration measurement. It is suitable for vibration monitoring of engines, generator pumps, bridges, roadbeds and other engineering structures.

Features

- High resolution and wide frequency range
- High accuracy, stability and reliability
- Small size, waterproof and moisture-proof
- Fast, simple and repeatable installation

Applications

- Bridge and Dam Health Monitoring
- Vibration monitoring of various projects
- Vibration testing of structures such as bridges and roadbeds
- Frequency measurement of engines, generator pumps

Specifications

Parameters	Unit	Value
Center wavelength	nm	1460 ~ 1610
Scales range	ms^2	LF: +/-1, HF: +/-5
Accurate	ms^2	0.5% F.S.
frequency range	Hz	LF: 0.5 ~ 40, HF: 0.5 ~ 500
package material	--	Metal encapsulated
Dimension	mm	One-dimensional: 78*50*22mm Two-dimensional: 70*65*50mm

		Three-dimensional: 160*128*120mm
Installation method	--	bolt fixing
Fiber Type	m	Φ 3mm armored fiber optic cable, single-ended out fiber 1m (dual fiber), or customized
connector	--	FC/APC, or customized
operating temperature	° C	-20 ~ +80