

FBG Tilt Sensor TL-01

FBG Tilt Sensor TL-01 has a linear relationship between the reflection wavelength and the tilt angle. It is suitable for temporary or permanent monitoring. Multiple or other types of fiber grating sensors can be connected in series for real-time monitoring. It is easy to build a distributed sensor network. TL-01 adopt the surface-mounted installation. At the same time, the sensors can also design its structure into a two-axis combination. The sensor has a wide range of tilt monitoring applications, such as: bridge towers, power towers, high-rise buildings, and can also be used for shield tunnel convergence deformation monitoring, landslide monitoring, etc.

Key Features

- All-optical transmission, strong anti-interference ability
- Easy to install, can be used for long-term and short-term measurement and reuse
- High sensitivity and good stability
- Small in size, easy to carry, install and store

Applications

- Inclination measurement of bridges, dams, buildings
- Surface level measurement of oil tanks, hoisting machinery and other structures
- Inclination measurement of power tower, wind tower, wings angle



Specifications

Parameter	Unit	Value
Center Wavelength	nm	1460 ~ 1610
Range	°	±5
Resolution	°	≅ 0.01% F.S.
Accuracy	°	≅ 0.1% F.S.
Material	--	Aluminum alloy(case) Tungsten steel (sensor body)
Dimension	mm	97(L) x 32(W) x 106(H)
Installation	--	Bolted with installation plate
Pigtail Length	m	Φ3mm armored cable, 1m at both ends, or customize
Optical Connector	--	FC/APC, or customize
Operating Temperature	°C	-20 ~ +80