

# Fiber Optic Grating Displacement Sensor

## PN/FBG-S-D-ST-01

Fiber Optic Grating Displacement Sensor FBG-S-D-ST-01 is used for long term measurements of structural beams and large buildings or other concrete, steel structures, building settlements, displacements and landslides. The sensor is mounted with a tie rod/cord for accurate and fast measurement of beam settlement, tunnel structure displacement and deformation, and building contact surfaces. Also, the sensor is internally mounted with a temperature fiber grating for automatic temperature compensation.

### Features

- High precision, high reliability, high stability
- Built-in automatic temperature compensation
- All-optical measurement, intrinsically safe
- Long-term zero stability
- Easy to install



### Applications

- Measurement of displacements at different depths in bridges, dams, tunnels, and various underground works.
- Measurement of ground settlement deformation and slope slippage deformation
- Long-term displacement monitoring of steel structure foundations under force deformation.

### Specifications

Parameters	Unit	Value
Center wavelength	nm	1460 ~ 1610
Scales range	mm	10 ~ 150
Resolution	mm	0.05% F.S.
Accuracy	mm	0.5% F.S.
temperature compensation		internally installed
package material	--	stainless steels

Dimension	mm	Φ 22 x 234
Installation method	--	Mechanical fixation
Fiber Type	m	Φ 3mm armored, single-ended out fiber 1m, or customized
connector	--	FC/APC, or customized
operating temperature	° C	-20 ~ +80