

FBG Displacement Sensor DST-01

FBG Displacement Sensor DST-01 is used for long-term measurement of structural beams and large buildings or other concrete, steel structures, building settlements, displacements and landslides. The sensor is installed by pulling rope, which can accurately and quickly measure the beam settlement, the displacement and deformation of the tunnel structure and the contact surface of the building. At the same time, a temperature FBG is installed inside the sensor, which can perform automatic temperature compensation.

Key Features

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

Applications

- Measure the displacement of different depths in bridges, dams, tunnels and various underground works
- Measurement of land subsidence deformation, slope slip deformation
- Long-term displacement monitoring of steel structure base under force and deformation



Specifications

Parameter	Unit	Value
Center Wavelength	nm	1460 ~ 1610
Range	mm	10 ~ 150
Resolution	mm	0.05% F.S.
Accuracy	mm	0.5% F.S.
Temperature Compensation	--	Built-in
Material	--	Stainless steel
Dimension	mm	Φ22 x 234
Installation	--	Mechanical fixation
Pigtail Length	m	Φ3mm armored cable, 1m at single end, or customize
Optical Connector	--	FC/APC, or customize
Operating Temperature	°C	-20 ~ +80