

FBG Strain Sensor MS-01&MST-01

Surface mounted FBG strain sensor MS-01&MST-01 can meet the strain measurement needs of various occasions, and can be installed in different monitoring positions such as concrete surfaces or steel surfaces. Mainly used to measure the strain of steel structures and concrete surfaces. The external strain transmits the strain to the internal fiber grating through the sensor mounting base, and the high-precision fiber grating converts the sensed tiny strain into a sensitive optical wavelength, which is analyzed by an FBG interrogator.

Key Features

- High precision, resolution, and stability
- Built-in Temperature Compensation (MST-01)
- Anti-electromagnetic interference
- Long-term zero point stability
- Easy to set up distributed sensor network
- Easy to install and reusable

Applications

- Suitable for strain monitoring of bridges, gas pipelines, etc
- Large steel structures such as transmission line towers, cranes, hoists
- Strain monitoring of rail surface
- Steel structure & concrete surface strain measurement



Specifications

Parameter	Unit	Value	
		MS-01	MST-01
Center Wavelength	nm	1460 ~ 1610	
Range	$\mu\epsilon$	± 1500	
Resolution	$\mu\epsilon$	0.01% F.S.	
Accuracy	$\mu\epsilon$	0.1% F.S.	
Temperature Compensation	--	No	Yes
Material	--	Stainless steel	
Dimension	mm	$\Phi 12 \times 126$	
Installation	--	Welding	
Pigtail Length	m	$\Phi 3\text{mm}$ armored cable, 1m at both ends, or customize	
Optical Connector	--	FC/APC, or customize	
Operating Temperature	$^{\circ}\text{C}$	-20 ~ +80	