

DESCRIPTION

CALSENS offers single mode fiber (SMF) Fiber Bragg Grating (FBG) strain point sensors prepared to measure and work in real life environments.

Offered in different configurations with multiple custom packaging and protection (both in the sensor and in the fiber) and with different attachment solutions available, the strain sensor can meet multiple user needs and demands. We can help with the design and configuration to assist for a wide number of applications thanks to our extensive know-how in real world measurements and monitoring.

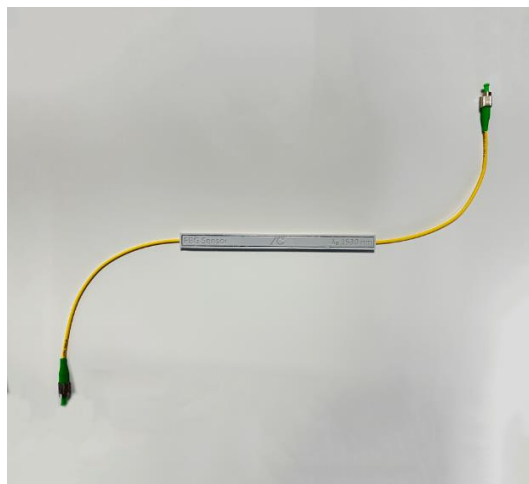
Its high precision design and construction provide excellent wavelength accuracy and stability for its use with any interrogator in the market.

KEY FEATURES

- Highly customizable (both FBG and packaging)
- Multiple possible coating and protective jackets Long-life reliable wavelength response
- High accuracy up to $2\mu\epsilon$
- EM immunity and high strain and fatigue resistance

APPLICATIONS

- Concrete and metal building monitorization
- Transport infrastructure measurements
- Measurements in energy generation structures
- Seismic and geological applications



Optical Parameters

Wavelength	1460-1620 (others options available)	nm
Sensitivity	1.2	pm/ $\mu\epsilon$
Range	+/-5000	$\mu\epsilon$
K-factor	0.8	
Resolution	0.5	$\mu\epsilon$
Temperature cross sensitivity	7.5	$\mu\epsilon/^\circ\text{C}$

Physical Parameters

Sensor size	195x15x5 ¹	mm
Weight	55 ¹	g
Operation temperature	-20 - +80	$^\circ\text{C}$
Operation humidity	<95	%
Fiber Pigtail Length	1 (other values available)	m
Fiber Type	G.652 (other options available)	
Optical Connector	FC/APC (other options available)	
Attachment method	Glue (other options available)	

¹Depend on the packaging and fiber configuration