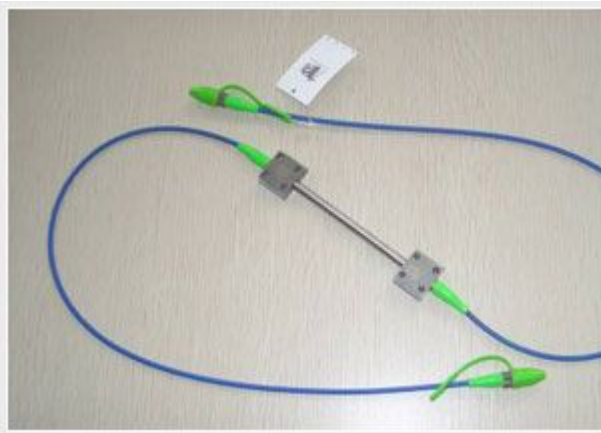


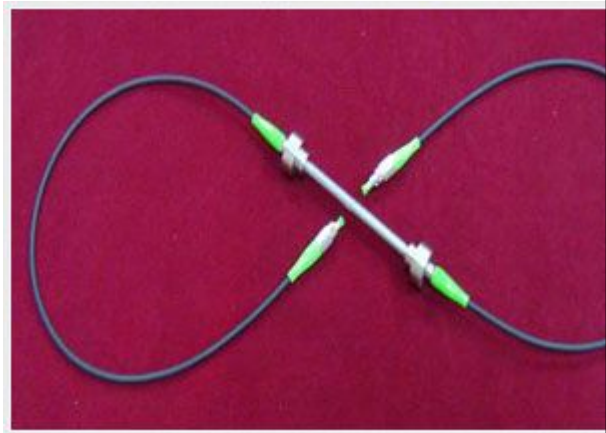
Metal packaged fiber grating strain sensor

Description

The Idealphotonics metal packaged fiber grating strain sensor is a nationally packaged product (Adopt our [metalized fiber](#) technology). High temperature curing adhesive and highly elastic metal is adopted for packaging the fiber grating. Its gauge length can be customized as needed by customers. It has many advantages like simple structure, east setting and high strain testing precision.



FBG-WS-01



FBG-E-01



CB-FBG-SG-01



CB-FBG-E-H100

Specification

Model	FBG-WS-01	FBG-E-01	CB-FBG-SG-01	CB-FBG-E-H100
Range	±1500 $\mu\epsilon$	±1500 $\mu\epsilon$	±1500 $\mu\epsilon$	10000 $\mu\epsilon$ (adjustable)
Accuracy	3 to 5 $\mu\epsilon$ (to be concerned by interrogator)	3 to 5 $\mu\epsilon$ (to be concerned by interrogator)	3 to 5 $\mu\epsilon$ (to be concerned by interrogator)	3 to 5 $\mu\epsilon$ (to be concerned by interrogator)
gauge length	100mm (be customized)	100mm (be customized)		10cm (be customized)
Resolution	1 $\mu\epsilon$ (to be concerned by interrogator)	1 $\mu\epsilon$ (to be concerned by interrogator)	1 $\mu\epsilon$ (to be concerned by interrogator)	2 $\mu\epsilon$ (to be concerned by interrogator)
strain sensitivity (α)	1.15 to 1.25 pm/ $\mu\epsilon$ (by calibration)	1.15 to 1.25 pm/ $\mu\epsilon$ (by calibration)	1.15 to 1.25 pm/ $\mu\epsilon$ (by calibration)	
desensitization coefficient (K)				2.0 (by calibration)
wvl.range	1510nm to 1590nm	1510nm to 1590nm	1510nm to 1590nm	1510nm to 1590nm
Elastic modulus			about 200GPa (be consistent with rebar)	
Reflectivity	≥ 90%	≥ 90%	≥ 90%	≥ 90%
layout methods	Spot welding or screw (be customized)	directly embedding or fixing	directly embedding or butt welding with rebar	directly embedding or fixing
Fiber Pigtail	Armored cable FC/APC(Single or double head can be chosed)	Armored cable FC/APC(Single or double head can be chosed)	Armored cable FC/APC(Single or double head can be chosed)	Armored cable FC/APC
Durability	>5year	>5year	>5year (upon	>20year



			durability of rebar)	
Application	Monitoring mean strain of concrete structure and steel surface	Monitoring mean strain distribution status of concrete internal	Monitoring internal reinforcement of concrete structure	internal high strain test of concrete structure