Fibre Optic Displacement Sensor YOSC-OFD-M

YOSC-OFD-M fibre optic displacement sensor converts the relative displacement of the component into the wavelength change of FBG. The sensor has the advantages of high measurement accuracy, long service life, safety and reliability, and is suitable for monitoring the relative displacement between various structures or the opening/closing of expansion joints.



+ Features

- Metal sealing design, waterproof, dustproof, etc
- Intrinsic safety, electromagnetic interference and lightning strikes resistance
- Long distance optical signal transmission
- Fibre optic cable with dual outlet, easy to install and connect in series
- Built in temperature compensation sensor, no need for external temperature sensor, good linearity

+ Applications

- Bridge expansion joint, damper expansion displacement monitoring pipe gallery
- Tunnel expansion joint displacement measurement
- Measurement of long-term cracks on the surface of concrete structures in civil and hydraulic engineering

+ Parameters

Items	YOSC-OFD-M1
Range	100mm(customizable)
Resolution	0.03%FS
Accuracy	0.3%FS
Working temperature	-40°C~80°C
Center wavelength	C-band(1525-1565nm)
Peak reflectivity	>90%
External dimension	φ54×287mm
Weight	Approximately 1~5kg
Material	Stainless steel
Fibre optic cable type	Armored optical cable
Fibre optic interface	FC/APC or fusion welding
Installation method	Welding, bolt fixation, etc.