

FBG Temperature/Strain Cable

Description

When monitoring high sensing points for temperature/strain, distributed FBG cable will be ideal solution for any applications. The FBG array is embedded in a small diameter fiberglass cable that permits the FBG to expand and contract freely with the temperature/strain variation. The packaging protects the fibre and makes the sensor robust and easy to handle and install. The sensing cables can be provided with standard fibre optics connectors and both standard and armoured pigtails and can be multiplexed together in series and/or parallel to achieve the sensing network required.

Feathure

- Easy to install
- Long lifetime
- Rugged
- High survivability in harsh environments
- Small size
- Resistant to high temperatures

Application

- Roads
- Airport runways and taxiways
- Asphalt pavements
- Concrete pavements

Specification

Diameter	2.0 ±0.1mm
Number of FBG	20 for standard products
FBG spacing	10 m for standard products
FBG wavelength spacing	5 nm for standard products
Maximum tensile strain	10,000 $\mu \epsilon$
Maximum longitudinal load	200 N
Temperature limits	-65 to +250° C
Minimum bend radius	500 mm
Connectors	Standard types available