

FBG-Tiltmeter

Applications

- Buildings
- Dams
- Bridges
- Slopes
- Excavation walls
- Embankments
- Open pits

Features

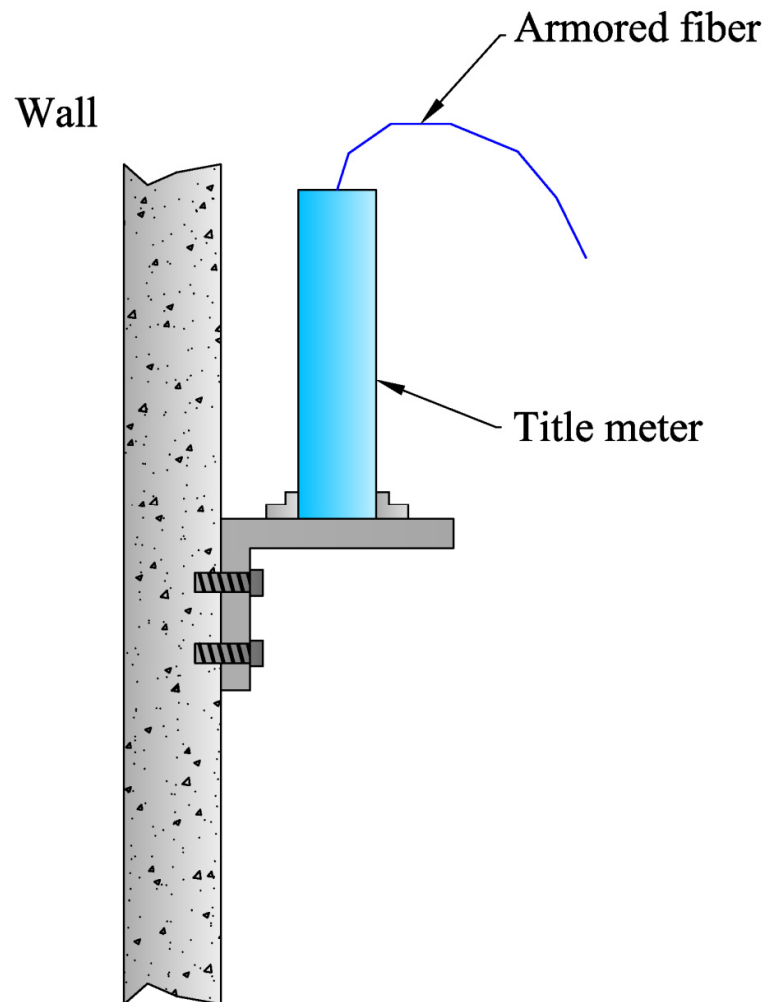
- Immune to EMI and short circuits
- Low noise long distance signal transmission
- Connecting multiple sensors to a common optical fiber



Description

The tiltmeter measures inclination variations against gravity in a single-plane. The housing is made of durable, anodized aluminum tubing. Coupled with a mounting mechanism, the tiltmeter can be fixed to the subject for tilt monitoring. The sensor is temperature compensated, provides stable readings on a long term basis. Bi-plane tilt measurement is possible by simply connecting two tiltmeters and separating them by 90 degrees.

FBG-Tiltmeter



FBG4100 bolted to surface of a wall.

FBG-Tiltmeter

Specifications	FBG-Tiltmeter
Physical Properties	
Operating Temp. Range	0 to 80°C
Angle measurement range	$\pm 10^\circ$, $\pm 20^\circ$, $\pm 30^\circ$
Resolution ¹	<0.05% Full scale range
Accuracy	$\pm 0.5\%$ Full scale range
Connectors	FC/APC, SC/APC, or customer specified
Length	300 mm
Dimensions	$\phi 36\text{mm}$
Weight	~650g
Optical Properties	
Peak Reflectivity (Rmax)	>70%
FWHM (-3dB point)	0.25nm($\pm 0.05\text{nm}$)
Notes:	
1. Dependent on FBG interrogator.	

Ordering Information	FBG4100-1XX-ZZ-15YY
1XX: Cable 1, Length & Connector	YY: FBG Wavelength
1: 1m Standard, Cable Length	Standard: 12, 18, 24, 30, 36, 42, 48, 54, 60, 66,
FC: FC/APC Connector	72, 78, 84
SC: SC/APC Connector	
LC: LC/APC Connector	
ZZ: Angle measurement range	
10: $\pm 10^\circ$	
20: $\pm 20^\circ$	
30: $\pm 30^\circ$	