

FBG Earth Load Cell LC-01

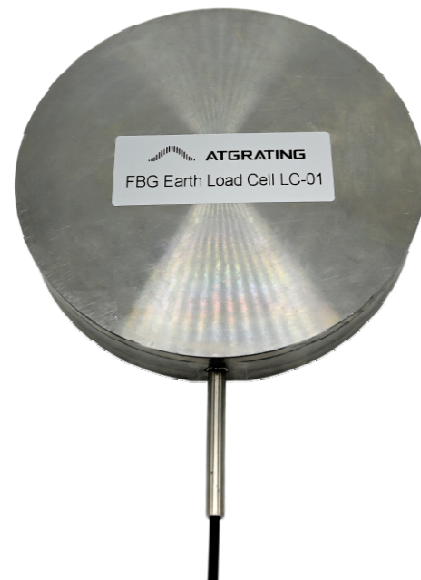
FBG Earth Load Cell LC-01 is a new type of optical earth load gauge developed by using high-quality constant elasticity alloy as the load transmitter, and then utilizing the inherent strain sensing characteristics of fiber grating. The LC-01 is suitable for measuring soil stress in building foundations such as earth-rock dams, breakwaters, revetments, quay walls, high-rise buildings, pipeline foundations, bridge piers, retaining walls, tunnels, subways, airports, highways, railways, and anti-seepage wall structures, as well as the measurement of freezing force in glacier frozen soil. LC-01 has the advantages of good stability, suitable for long-term monitoring, etc., and comes with self temperature compensation.

Key Features

- Anti electromagnetic interference, Intrinsically explosion-proof, and lightning protection
- Excellent temperature, corrosion, aging resistance
- Built-in automatic temperature compensation
- High precision and high resolution
- Integrated package, more stable performance
- Simple to use, quick to install and reusable

Applications

- Measure the total pressure in soil and earthfill works, dams
- Measure the contact pressure of earth walls, piers, pipes, bored piles and tunnel linings
- Measure stress in concrete



Specifications

Parameter	Unit	Value
Center Wavelength	nm	1460 ~ 1610
Range	Kpa	2000
Resolution	Kpa	<0.1% F.S.
Accuracy	Kpa	<0.5% F.S.
Temperature Compensation	--	Built-in
Material	--	Stainless steel
Dimension	mm	Φ156 x 20
Installation	--	Embedded
Pigtail Length	m	Φ3mm armored cable, 1m at single end, or customize
Optical Connector	--	FC/APC, or customize
Operating Temperature	°C	-20 ~ +80