



GEO-LX Extensometer

Applications

The GEO-LX extensometer is an accurate, field-ready laser device suitable for both real-time distance measurements and monitoring over a period of time. Typical applications include:

- Assistance for positioning structural components.
- Monitoring pillars, bridge decks, retaining walls, tunnel profiles for deformation.
- Monitoring structural movements at sites that are difficult or dangerous to access.

Installation

The GEO-LX is typically supplied in a weatherproof enclosure with an adjustable bracket that allows the user to set the appropriate geometry for the specific application.

Multiple Geo-LXs can be deployed on the same data bus.

Operation

The GEO-LX units can be controlled by a data logger, such as a Campbell Scientific CR800. The logger can cycle the power and control the reading rate of the unit. Readings are typically forwarded to a web site for processing and display.

Accessories

- Variety of mounting brackets, cables, and power supplies.
- Integrated heater for extended low temperature operation.
- NEMA 4 stainless steel, windowed enclosure.



Advantages

Remote measurements: The GEO-LX performs its measurements at a distance. It does not interfere with construction activities.

Cost-Effective: The GEO-LX easy to install, requires almost no maintenance, and is surprisingly affordable.

Accurate: Few instruments can match the ± 1 mm accuracy offered by the GEO-LX.

Remote measurements: The GEO-LX performs its measurements at a distance. It does not interfere with construction activities.

Specifications

Measuring range: Up to 328' (100 m) on natural surfaces. Up to 1600' (500 m) with a special reflective target.

Laser type: Class II, Phase shift.

Accuracy: $\pm 0.04"$ (± 1 mm), independent of distance, operating temperature and target.

Measurement rate: 250 Hz.

Repeatability: $\pm 0.012"$ (± 0.3 mm) at the same distance, same ambient temperature, and same target.

Operating temperature: -40 to 60 °C.

Power: 12 to 30 Vdc, 0.5 A.

Serial interface: RS-232, RS-422, SSI or Profibus. Up to 10 devices can be controlled on a single bus.

Analog output: 4 – 20mA for easy integration with control systems.

Status display: Four LEDss.

Case: Aluminum, IP65.

Weight: 0.8 lb (350 g).