

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

**Measurement rate:** 250 Hz.

**Repeatability:**  $\pm 0.012"$  ( $\pm 0.3$  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).