

Instrumentation & Monitoring



What we do

GEO-Instruments provides geotechnical, structural monitoring services. Our expertise helps owners, operators, and engineers mitigate risk, optimize designs, and document regulatory compliance.



Innovative Solutions

GEO thrives on challenging projects. We have extensive experience in instrumentation and can deploy a wide range of both traditional and advanced sensing technologies.

How we work

GEO-Instruments can partner with the design and construction team or work as an independent consultant. Our work is guided by our values: integrity, collaboration, excellence, and safety.



Automated Wireless Monitoring

GEO specializes in automated monitoring. Our rugged weatherproof systems are powered by solar panels and transmit data to GeoCloud servers on the internet.

Who we are

Established in 2003, GEO-Instruments now works from 12 offices distributed across the US and has an international presence in UK, Germany, France, and Poland. GEO became a Keller company in 2017.



Web Access to Data 24/7

GeoCloud project websites check for alarm conditions, send alerts as needed, and store data for quick access, and display customized data visualizations.

GEO-INSTRUMENTS — EXPERTS IN AUTOMATED MONITORING



Settlement

GEO monitors building settlement, surface and subsurface ground settlement, and settlement of underground utilities.



Structures

GEO monitors renovation and expansion projects, providing early warning of problems and real-time data to guide construction sequences.



Support of Excavation

GEO-Instruments monitors support of excavation to help maintain safe work areas and minimize impacts to adjacent properties.



Walls, Slopes, Embankments

GEO monitors retaining walls, embankments, and slopes, providing data for evaluating the effectiveness of earth retention systems.



Tunnels

GEO monitors tunnels under construction as well as structures, services, and roads along tunnel alignments.



Bridges

GEO monitors bridge approaches, bents, piers, and superstructures during construction and repairs.



Vibration, Dust, Noise

GEO monitors vibration, dust, and noise for exceedances to assist compliance to local codes and maintain relations with neighbors.



Pile Testing Instrumentation

GEO installs and monitors sister bar strain gauges, thermal integrity profile wires, and remote-reading displacement gauges.



Rail Tracks

GEO monitors rail beds and tracks to help maintain operational safety during construction, repairs, and improvements.