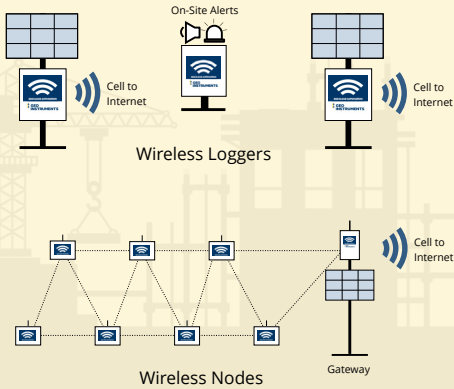


Wireless Data Acquisition



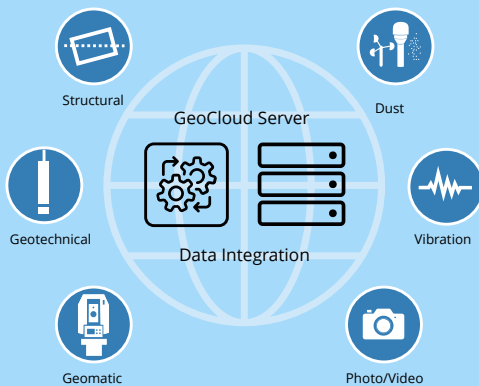
Wireless Data Acquisition

GeoCloud loggers and nodes transmit measurements from the project site to the internet. Self-powered and wireless, loggers and nodes can be distributed across the site, eliminating long runs of power and signal cables, avoiding problems with RF noise and voltage transients, and increasing the overall resilience of the system.

Wireless Loggers perform measurement & control functions to operate complex systems such as automated total stations or real-time warning systems. Loggers are supplied in weatherproof enclosures and equipped with high-capacity batteries, solar panels, stands or towers. They transmit measurements to the internet via a cellular connection.

Wireless Nodes perform simpler measurement functions, typically dedicated to a single type of sensor. Nodes are supplied in compact, weatherproof enclosures and are powered by long-life batteries. They transmit measurements to cellular gateways that relay data to the internet.

Web-Based Data Management



Web-Based Data Management

Central Repository for Data: Measurements from project sites are transmitted to web-based GeoCloud servers and stored in dedicated project databases.

Data Integration: The GeoCloud server can import, process, and store readings from most sensors and systems, eliminating data silos.

Consistent Calculations: The GeoCloud server processes measurements according to instructions stored with the databases, providing consistency and traceability.

Consistent Presentations: The GeoCloud server generates views, plots, and reports that are preconfigured to ensure consistent sensor selections, scales, and labels.

Human Monitored: GEO-Instruments project managers and technicians monitor project dashboards, checking that loggers and nodes are operational and that the processed measurements are within alarm thresholds.

Website Access to Data



Website Access to Data

GeoCloud project websites provide access to data and alerts wherever there is an internet connection - project sites, offices, homes, and on the road. GeoCloud websites work with ordinary browsers on smartphones, tablets, and desktops.

Continuously Updated: Project websites are updated and available 24 hours a day. Everyone sees the most recent data.

Secure Access: Project websites are hosted on secure servers that are backed up daily. Authorized users have password-protected logins and controlled access to advanced features.

Graphs, Reports, and Alerts: Project websites support site-wide views, trend plots, profile plots, contour plots and more. PDF reports are generated automatically on regular schedules. Alerts are posted on project websites and sent by email or SMS to registered users. Real-time, on-site alerts are also available.