Quantum Spatial’s remote sensing robot platform provides a comprehensive solution for substation monitoring and management.

Our autonomous vehicle collects a variety of data via the latest sensor technology at a scale and sensitivity for virtual inspection and change detection. Analytics derived from LiDAR, thermal, and hyperspectral data produce valuable information about the condition of substation assets. The robot provides the ability to perform frequent scans with the convenience of sitting in your favorite chair!

**Safely**
Reduce driving and make station visits more meaningful
Optimize time on site to repair degrading hardware, rather than reacting to an outage

**Frequently**
Schedule robot for reliable assessments, or perform on-demand inspections
Detect anomalies quickly, craft a consistent monitoring program to build out a system baseline

**Effectively**
Sensor data allows for more analytical inspection
Built for off-road conditions and performs in all weather
Docking station recharges robot after each use and transmits data immediately

Find out more: energy@quantumspatial.com | (503) 505-5308
How it works

Robot Scan
- Follows designated path to scan assets
- Inspects using LiDAR, thermal, and hyperspectral technology
- Uploads data at docking station

Data Analysis
- Analytics assess substation condition, identify potential issues:
  - Rust
  - Over-heating
  - Foreign Objects
  - Open Gates
  - Broken Fences
  - Asset Degradation

System Mgmt
- Access full system information
- View results in map-based web app
- Display 3D models and images
- Know exactly where and what requires maintenance

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