Ideal Applications
- Condition-Based Maintenance
- Environmental Monitoring
- Flight Test Reporting
- Manufacturing Process Reporting
- Machine Health Monitoring

SensorCloud™
sensorcloud.com

SensorCloud® is a unique web-based, remotely-managed platform for secure sensor data storage, visualization, alerts, and analysis. It leverages powerful cloud-computing technologies to provide excellent data scalability, rapid graphing, and user-programmable analytics.

ACQUIRE
GETTING DATA TO SENSORCLOUD IS SIMPLE.
- Easily upload any data using our Open Data API and CSV Uploader.
- Automatically upload from LORD MicroStrain’s wireless and wired sensors.
- All data transactions are encrypted and secure.

VISUALIZE
VIEW LARGE DATA SETS INSTANTLY WITH FASTGRAPH.
- Run filters on your data to find meaningful information.
- Correlate GPS location with your other data using Google Maps™.
- Visualize massive (1 TB+) datasets with no lag.

MONITOR
SET CUSTOM ALERTS TO MONITOR MISSION-CRITICAL SYSTEMS.
- Customize alerts to stay informed on your data 24/7.
- Receive alerts via email and SMS messaging.
- Add custom information including time, threshold values, and links to the event data.

ANALYZE
HARNESS POWERFUL SCIENTIFIC TOOLS TO REPORT ON DATA.
- Analyze data in new, meaningful ways with MathEngine®.
- Perform common operations such as FFTs, smoothing, filtering, and interpolation.
- Write and deploy custom scripts in the Cloud using IPython and SciPy libraries.
MathEngine
sensorcloud.com/mathengine

MathEngine gives you the tools to get the information you need from your data. With many ways to process, analyze, and monitor your data, as well as a team that will work with you and your needs, MathEngine will take you beyond data collection to an intelligent data solution.

UNLOCK THE POWER OF YOUR DATA.

- Easily process data on the fly.
- Generate FFT plots, filter out frequencies, and smooth out noisy data.
- Use iPython Notebooks to create custom data-processing scripts.
- Utilize the Scipy and Numpy libraries to perform complex mathematics.

Security
All data and transactions occur over Transport Layer Security (TLS). SensorCloud is currently built on top of Amazon Web Services, which provides a world-class secure and trusted platform.

SDK and Open Data API
SensorCloud provides a RESTful API that allows any device or application to upload data to SensorCloud. The API is implemented as a web service using standard HTTP request commands.

Alerts
The SensorCloud Alerts feature allows you to create custom email and SMS text message alerts for monitoring data exceedances and events of interest.

LiveConnect
LORD MicroStrain provides a WSDA® gateway which collects data from MicroStrain sensors and pushes it to SensorCloud directly. LiveConnect allows you to interact with this WSDA gateway and corresponding sensors from anywhere in the world.

Also available from LORD MicroStrain

Wireless Sensing Systems
microstrain.com/wireless

LXRS lossless protocol enables synchronized burst and continuous high-speed sampling from multiple inputs as part of a scalable network. Custom/OEM also available.

Inertial Sensors
microstrain.com/inertial

Miniature sensors for orientation, heading, attitude, position, and velocity. IMU, AHRS, and GPS/INS sensors available, including tactical-grade and ruggedized options.