

Sensor Nodes · Gateways · Software

### Applications

- Test & Measurement
- Condition-Based Monitoring
- Structural Health Monitoring
- Environmental Monitoring
- Control Systems



### Measured Parameters

- Torque
- Vibration
- Pressure
- Temperature
- ...more

### System Configuration



## Wireless Sensor Nodes

[microstrain.com/wireless](http://microstrain.com/wireless)

Featuring LXRS® lossless protocol, our wireless nodes enable simultaneous high-speed sensing and data acquisition from multiple inputs as part of a scalable network. They are ideal for condition-based monitoring, structural health monitoring, and test & measurement. A network of wireless nodes can be synchronized to  $\pm 32$  microseconds. Most nodes offer continuous, burst, and event-triggered sampling. The following are just a few of the many nodes LORD MicroStrain offers, along with OEM versions:



### G-Link®-200-LXRS® WIRELESS ACCELEROMETER NODE

- On-board triaxial accelerometer
- User-configured burst sample rates up to 4 kHz



### V-Link®-200-LXRS® 8-CHANNEL ANALOG INPUT NODE

- Four differential & four single-ended analog inputs, plus internal temperature sensor
- User-configured sample rates up to 4 kHz (continuous), 8 kHz (burst)



### Torque-Link®-LXRS® WIRELESS TORQUE SENSOR

- Rugged, custom-fit ABS clamshell housing for easy installation
- User-configured sample rates up to 512 Hz (continuous), 4 kHz (burst)



### G-Link2™-LXRS® RUGGEDIZED WIRELESS ACCELEROMETER NODE

- On-board triaxial or external single axis MEMS accelerometer
- User-configured sample rates up to 512 Hz (continuous)

# Wireless Gateways

[microstrain.com/wireless/gateways](http://microstrain.com/wireless/gateways)

Our wireless gateways coordinate and maintain wireless transmissions across a network of wireless sensor nodes via included Node Commander® software. Most gateways are available with a variety of outputs, including USB, RS-232, CAN, Ethernet, and analog and can easily tie into a PC, PLC, DAQ, or into our SensorCloud™ software. A MIL-STD-810F/461E option is also available.



## WSDA®-1500-LXRS®

### WIRELESS SENSOR DATA AGGREGATOR

- Ethernet and J1939 CAN interfaces, micro SD 4GB data storage
- Configurable for static IP, a DHCP-enabled LAN, or as a local datalogger

## WSDA®-Base-LXRS®

### WIRELESS USB BASE STATION

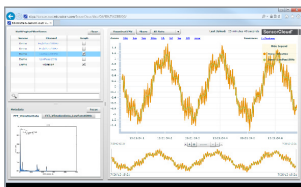
- Communications interface: analog, RS-232, or USB 2.0 @ 921,600 bps
- 1 Hz beacon provides  $\pm 32 \mu\text{sec}$  node-to-node synchronization



# SensorCloud™

[sensorcloud.com](http://sensorcloud.com)

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



## SensorCloud™

### CLOUD-BASED DATA MANAGEMENT

- Securely upload sensor data from any web-based source
- Navigate through massive amounts of data, and quickly zero in on key points
- Create actionable email and SMS alerts
- Configure, view, and record high-speed data streams in real-time

## Also available from LORD Sensing-MicroStrain

### Inertial Sensors

[microstrain.com/inertial](http://microstrain.com/inertial)

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



### Displacement Sensors

[microstrain.com/displacement](http://microstrain.com/displacement)

Contact sensors (sub/microminiature, gauging/non-gauging), non-contact sensors, and signal conditioners for measuring highly precise data where not previously possible.

