Inertial, Wireless & Displacement Sensing Systems
Lord inertial sensors provide orientation reference information for navigation and positioning applications. Our sensors use MEMS and can measure angular velocity and linear acceleration, outputting valuable information such as acceleration, tilt and roll, heading, position, velocity and attitude.

**FEATURES & BENEFITS**
- Unrivaled Dynamic and Thermal Stability Provides Best-in-Class Performance
- Smallest, Light Weight Package Enables Larger Payload and Range
- Auto-Adaptive Extended Kalman Filter (EKF) and Auto-Magnetometer Calibration Increases Performance in Challenging Environments
- Standard Communication Protocol Allows Forward and Backward Compatibility and Interchangability

**TYPICAL APPLICATIONS**
- Antenna-Pointing
- Platform Stabilization
- Auto-Steering
- Terrain Compensation
- Vehicle Stability & Leveling
- Dynamic Incline Detection
- Structural Health Monitoring

**3DM-GQ4 & 3DM-RQ1**
- 5°/h in-run bias, 75-900°/sec Gyro, 5g Accel, Tactical Grade GNSS-Aided

**3DM-GQ4-45**
- Aluminum housing, RS232

**3DM-RQ1-45**
- DO-160G ruggedized enclosure, RS422

**3DM-GX5 SERIES**
- 8°/h in-run bias, 75-900°/sec Gyro, 2-40g Accel, Industrial Grade Package

**3DM-CV5 SERIES**
- 10°/h in-run bias, 125-1000°/sec Gyro, 2-40g Accel, OEM Package

**MV5-AR**
- Full 360° 6-DOF Range, 0.2° inclination accuracy, Ruggedized Package (IP68 / IP69K)
- AMP-SEAL Connector, CANopen, J1939
Wireless sensor networks combine the simplicity of wireless data acquisition with the reliability of hardwired instrumentation. Our line of instrumentation grade sensors enable simultaneous, high-speed data acquisition of voltage, acceleration, strain, temperature and more.

**FEATURES & BENEFITS**

- Lossless, Time-Synchronized, and Scalable Communication Protocol Enables Hardwired Performance
- Open Communication Library Allows Wireless Data Acquisition to be Easily Added to Your Application
- SensorConnect & SensorCloud Software Provide Unrivaled Data Visualization
- Low Power Consumption Eliminates the Hassle of Frequent Battery Replacement
- High-Fidelity Measurement Enables High Levels of Data Analysis

**TYPICAL APPLICATIONS**

- On-Board Vehicle Condition Monitoring
- Production Testing and Validation
- Structural Health Monitoring
- Rotating Machinery

**WIRELESS SIMPLICITY, HARDWIRED RELIABILITY™**

**V-LINK®-200**
Wireless 8-channel analog input node for precise measurement of voltage, strain gages, load cells and pressure transducers.

**TC-LINK®-200**
Wireless 12-channel sensor for precise measurement of thermocouples.

**RTD-LINK-200**
Wireless 6-channel sensor for precise measurement of RTDs and thermistors.

**G-Link®-200**
Wireless 3-axis accelerometer with rugged, weatherproof enclosure. Fully calibrated and low noise. Ideal for vibration, impact and tilt.

**SG-Link®-200**
Wireless 3-channel sensor with a rugged, weatherproof enclosure for precise measurement of strain gages, load cells, pressure transducers, and accelerometers.

**TORQUE-LINK-200**
Wireless node transforms standard driveshafts into wireless torque transducers by application of one strain bridge.

**GATEWAYS**

**WIRELESS SENSOR DATA AGGREGATOR**

**WSDA®-2000**
Network gateway, SensorCloud and LXRS/LXRS+ compatible.

**WSDA®-2000-USB**
USB with internal or external antenna, LXRS/LXRS+ compatible.

**G-LINK-200-OEM**
Wireless 3-axis accelerometer for OEM integration. Fully calibrated and low noise. Ideal for vibration, impact and tilt applications.

**SG-LINK®-200-OEM**
Wireless 2-channel analog input node for OEM integration. Ideal for precise measurement of strain gages, load cells and pressure transducers.

**TC-LINK-200-OEM**
Wireless 1-channel temperature node for OEM integration. On-board CJC and calibration for use with a thermocouple, RTD or thermistor.
SAME GREAT PRODUCT, DIFFERENT NAME

The displacement product line has been rebranded from DVRT to LVDT with zero changes to performance or functionality.

World’s smallest displacement sensors. Ideal for precise micro-position measurements, our miniature linear variable displacement transducers (LVDTs) provide accurate, repeatable measurement. Our sensors operate in harsh environments over millions of cycles without degradation in performance.

FEATURES & BENEFITS

- Unrivaled Stroke to Length Ratio Enables Sensors to Fit Into Challenging Spaces
- Frictionless Design Allows Robust Operation in Harsh Environments with Temperatures up to 170°C
- Full Stroke 100 pt Calibration Results in High Accuracy Up to .05% of Full Scale with Resolution Up to 160,000:1
- Technical Support Experts Available to Assist in Selecting the Proper Displacement System for Specific Applications

TYPICAL APPLICATIONS

- Industrial Automation
- Production Line Monitoring
- Position Control and Actuator Feedback
- Dimensional Gauging in Quality Control Systems
- Measuring Deflection and Strain in Materials and Structures

SIGNAL CONDITIONERS

- **DEMOD-DIGITAL**
  Highest Performance, Single Channel, Digital RS232 and Analog 0-10V outputs.

- **DEMOD-DVRT-2**
  High-performance, expandable LVDT and DVRT signal conditioner. Mounting backplane available for up to four channels.

- **DEMOD-DC**
  Miniature, low cost, LVDT signal conditioning module.

- **LS-LVDT**
  LONG STROKE, 50, 100, 150MM STROKE RANGE
  Ideal for linear control and precision measurement applications, the miniature LS-LVDT provides fast response and rugged packaging.

- **S-LVDT**
  SUBMINIATURE, 4, 8, 24, 38MM STROKE RANGE
  Subminiature Gauging LVDT Subminiature sensor for high-accuracy position measurements up to 38 mm using a spring-loaded, captive actuator.
  Subminiature LVDT Subminiature sensor for high-accuracy position measurements up to 38 mm using a free-sliding actuator.

- **M-LVDT**
  MICROMINIATURE, 3, 6, 9MM STROKE RANGE
  Microminiature Gauging LVDT Microminiature LVDT sensor for high-accuracy position measurements up to 9 mm using a spring-loaded, captive actuator.
  Microminiature LVDT The Microminiature LVDT delivers high performance in a tiny package. Ideal for critical linear displacement measurements.

- **NC-LVDT**
  NON-CONTACT, 1.0 AND 2.5MM RANGE
  Non-contact LVDT sensor for high-accuracy position measurements up to 2.5 mm with no physical wear.
LORD Sensing makes it simple to integrate our sensors into your system by supporting multiple open source and widely used data acquisition environments.

**SensorConnect™**
SensorConnect is PC software for wireless sensor configuration and data collection. Use it to configure nodes, start networks, collect data and analyze data in real-time from our wireless products.
Built-in intelligent data collection and graphing algorithms visualize massive amounts of data instantly without delay.
View points of interest with ease using the available widgets and graphs.

**CONNECTIVITY**
**MSCL™ & APIs**
The MicroStrain Communication Library (MSCL) makes it simple to write code to interact with our sensors. MSCL is our open-sourced API, readily available and fully-documented on GitHub, featuring valuable tools such as full documentation, example code and a quick start guide.
If MSCL does not meet your needs, Data Communication Protocols are available in the Protocols section of our GitHub page.
If cloud data storage is required, SensorCloud provides a REST API allowing data to be uploaded as necessary. For more information, see the SensorCloud section of our GitHub page.

**MIP Monitor™**
MIP Monitor is PC software specifically designed LORD products. Use it to configure inertial nodes, begin sampling, and view your data in real time. MIP packets can also be viewed in their raw form to aid in the development of custom software.

**SensorCloud™**
Use SensorCloud to upload unlimited amounts of Wireless data from anywhere in the world. Analyze the data using MathEngine, which offers the ability to run algorithms and write original and application-specific Python scripts. Take advantage of the plug and play support built into our wireless system ethernet gateways.
Wireless data is automatically uploaded directly to your SensorCloud account. Set email and text alerts on your data to be notified when events occur.
SOLUTIONS THAT MOVE EVERY PERSON IN THE WORLD

LORD Corporation develops highly reliable adhesives, coatings, motion management devices and sensing technologies that significantly reduce risk and improve product performance in industries such as aerospace, automotive, oil & gas and industrial. Our team members collaborate with customers every day to provide innovative solutions — solutions that move every person in the world.