LORD APPLICATION NOTE

Industrial Energy Metering

Machine-Level Wireless Energy Monitoring, Management, and Reporting

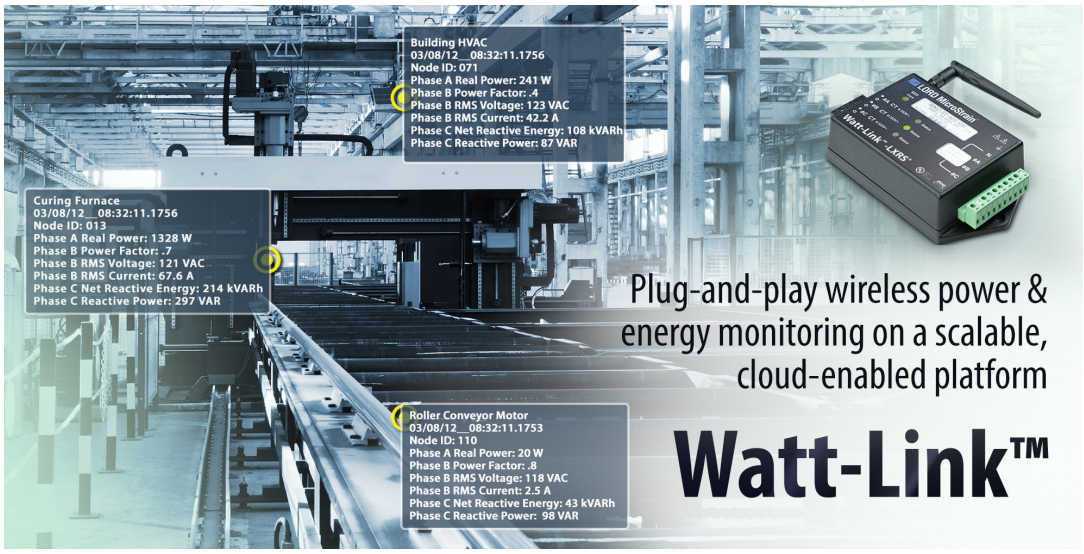
APPLICATION

Industry: Industrial Manufacturing

Field: Energy Metering, Sub-Metering, Power Monitoring, Building Automation

Products: Watt-Link, TC-Link, G-Link, SG-Link, WSDA-1000, WSDA-101

Parameters: Energy, Power, Load, Vibration, Temperature, & Humidity



BENEFITS

- Rapid installation or retrofit without costly wires
- Distributed sub-metering to individual machines
- Proactively monitor power to reduce operating costs and enhance predictive maintenance
- Holistic system synchronizes wireless energy usage with mechanical health
- Correlate power usage to environmental conditions
- Remote condition alerts and reports

Scalable Wireless Energy Metering

The industrial sector consumes more than one-third of all U.S. energy, yet visibility into machine-level energy and power usage remains limited-- despite economic pressure to optimize industrial process efficiency. Decoupling energy monitoring from cumbersome wires provides a scalable, easy to install solution for distributed load control, process allocation, and long-term equipment maintenance.

The LORD MicroStrain® Watt-Link™ wireless energy meter allows facility owners and operators to remotely aggregate real-time energy data for evaluating high-load equipment, individual processes, or discrete production departments. It also allows you to proactively monitor power to reduce operating costs and enhance predictive maintenance. Watt-Link operates within a large, synchronized, wireless network of user-selectable condition sensors (temperature, humidity, vibration, etc), to support better holistic health monitoring and correlate power usage to environmental conditions. As a result, users can quickly implement single-phase or three-phase power meter and sub-metering capabilities to correlate consumption with the mechanical output of a process.

Web-Enabled Remote Monitoring

Combined with SensorCloud™ web-based network monitoring and management, LORD MicroStrain provides sensing solutions that deliver actionable performance information on any web-connected device. SensorCloud remote network management, analytics, and open API allow users to define their key thresholds, and automate real-time condition responses and alerts—from any location.

Operators can easily track power usage, assess machine health, identify deviation in power quality, and program automated systems to respond and report. It has never been easier to track usage, verify maintenance, optimize load, and schedule maintenance for cost-effective industrial processing.

LORD MicroStrain® SENSING SYSTEMS