



Product Description:

This module is the building block for a predictive maintenance system that will help you maintain the health of your mechanical power transmission equipment. The EZLINK module combines the most widely-used mechanical power transmission health indicators -- vibration, temperature, and speed -- in a compact design that fits easily on Allen-Bradley Motors, Dodge bearings, speed reducers, and gear boxes or on your existing equipment. By monitoring vibration, temperature, and speed, EZLINK can be an early warning diagnostic tool to help prevent mechanical failures.

Product Highlights

- Integrated Monitoring of Vibration, Temperature, and Speed
- Internal Power Supply for All Sensors
- Built in DeviceNet Communications
- NEMA 4 Housing (NEMA 4X Optional)
- Software Configurable

Typical Applications

- Belt Conveyors
- Screw Conveyors
- Hammermills
- Bucket Elevators
- Gear Reducers

Theory of Operation

Vibration Monitoring

Vibration is sampled at 4000 Hz once every ten minutes with a single-axis accelerometer mounted perpendicular to the top of the EZLINK module. Vibration signals from 0.000 to 4.000 inches per second (in/s) are stored with a resolution of 0.004 inches per second. The module provides the mean vibration amplitude for alarming/trending and the raw vibration sample for frequency spectrum analysis. The module also provides two programmable over mean vibration alarm limits.

Temperature Monitoring

Temperature is sampled once every 16 milliseconds from a J-Type thermocouple. Temperatures from -50F to 250F are stored with a resolution of 1F. The module provides two programmable over temperature alarm limits.

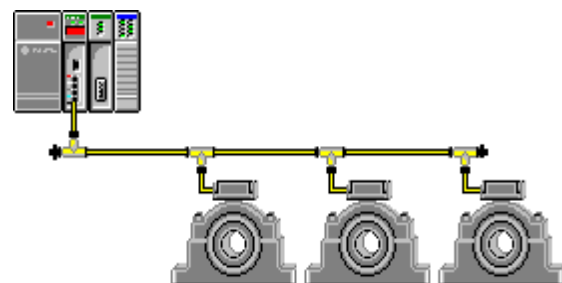
Speed Monitoring

Speed is continuously sampled. Below 225 RPM speed is stored with a resolution of 1 RPM; above 225 RPM the resolution is 5 RPM. The module provides two programmable under speed alarms.

DeviceNet Communication

DeviceNet Poll and Change-Of-State connections are used to communicate data to the network's monitoring and control devices. The regularity of data from the Poll connection allows accurate time-based trending of the data. The high priority and instant transmission of data from Change-of-State connections supports controls systems with essentially zero network scan time.

Typical Configuration



Hardware Specifications

Inputs

| | |
|-----------------------------------|---------|
| Accelerometer (internal) | 12 bits |
| Temperature (internal) | 12 bits |
| Speed Proximity Switch (external) | 16 bits |
| Discrete Inputs | 3 |

Current Draw (via DeviceNet) 110 mA @ 25V
225 mA @ 11V

Dimensions 4.375" x 1.875" x 3.250"

Weight 612 g

Enclosure Rating exceeds NEMA 4

Operational Temperature -40 to 85C

Storage Temperature -55 to 100C

Relative Humidity 95% non-condensing

Communication Specifications

Status Indicator Network/Status

Network Address 00 - 63

Exchange Method:

| | |
|-----------------|-------------------|
| Strobe | No |
| Poll | Yes |
| Change-of-State | Yes (Status only) |
| Cyclic I/O | No |

Messaging Type:

| | |
|--------------|-----|
| Slave Mode | yes |
| Peer-to-Peer | no |

Configuration:

| | |
|---------------|---------------------|
| Data Rate: | Non-Volatile Memory |
| Node Address: | Non-Volatile Memory |
| Parameters: | Non-Volatile Memory |

Physical Connection

EZLINK uses a mini-male connector to connect to a DeviceNet network.

Related Documents

for Catalog Numbers 1204-EZL1 & 1204-EZL2

EZLINK System Overview (pub. 1204-PP002A-EN-P)

EZLINK Monitor Software Product Profile (pub. 1204-PP003A-EN-P)

EZLINK w/PLC Monitor & Control Application Note (pub. 1204-AP001A-EN-P)

EZLINK Modules/Software Monitor Application Note (pub. 1204-AP002A-EN-P)

EZLINK User Manual (pub. 1204-UM001A-EN-P)

For further information, visit us on the World Wide Web at: <http://www.controlmatched.com>

Reach us now at www.rockwellautomation.com

Wherever you need us, Rockwell Automation brings together leading brands in industrial automation including Allen-Bradley controls, Reliance Electric power transmission products, Dodge mechanical power transmission components, and Rockwell Software. Rockwell Automation's unique, flexible approach to helping customers achieve a competitive advantage is supported by thousands of authorized partners, distributors and system integrators around the world.

Americas Headquarters, 1201 South Second Street, Milwaukee, WI 53201-2496, USA, Tel: (1) 414 382-2000, Fax: (1) 414 382-4444
European Headquarters SA/NV, Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific Headquarters, 27/F Citicorp Centre, 18 Whitfield Road, Causeway Bay, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

