## 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 Dodge EZLINK module combines the most widely-used mechanical power transmission health indicators -- vibration, temperature, and speed -- in a compact design that fits easily on 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.

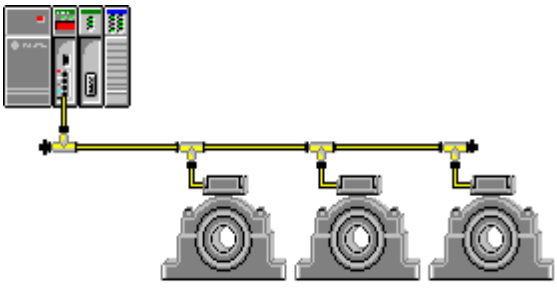
**Speed Monitoring**

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<br>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 |

## Physical Connection

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

## 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 |

## Related Documents

EZLINK Monitor Product Information
EZLINK User’s Manual
DeviceNet In A Box Product Information
Conditions Monitoring Brochure