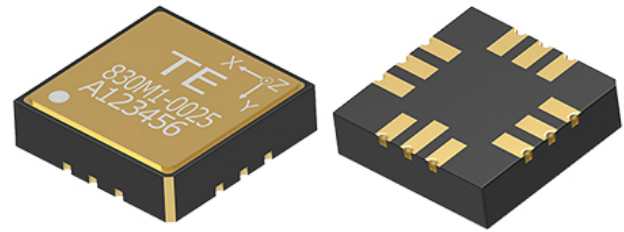


## INTRODUCING

# 830M1 TRIAXIAL ACCELEROMETER

- Utilize triaxial design to measure acceleration in three axis (X, Y, Z)
- Offer excellent measurement bandwidth with a wide frequency response up to 15 kHz



Factories are becoming more autonomous and downtime of these automated machines can be costly. Sensors are being used to capture critical performance data for improved efficiency, lower costs, and better equipment utilization of factory machinery. The triaxial embedded 830M1 accelerometer from TE Connectivity (TE) offers advanced acceleration sensing for machine health monitoring where wide bandwidth, small size, low power, and robust performance are essential.

Optimized for critical machine health monitoring the 830M1 offers an outstanding measurement bandwidth (up to 15 kHz), superior resolution and is designed with highly stable Piezoelectric (PE) sensing technology, to provide long-term, reliable, stable and accurate performance for condition monitoring applications in harsh environments.

### TARGET MARKETS

- Industrial

### APPLICATIONS

- Condition Monitoring
- Predictive Maintenance Installations
- Embedded Vibration Monitoring
- Impact & Shock Monitoring
- Data Loggers
- Bearing & Shaft Monitoring
- Security Monitoring

### KEY BENEFITS

- Provide superior resolution with early detection and better quality of measurement for improved predictive maintenance
- Ensure long-term stability and minimal long-term drift with highly stable piezoelectric sensing crystals technology
- Enable protection against harsh environments with highly reliable sensor suitable for condition monitoring
- Allow ease of installation with fully hermetic LCC (Leadless Chip Carrier) package
- Include Ni1000 nickel thin film RTD temperature sensor for combination sensing from a single package

### PERFORMANCE SPECIFICATIONS:

- G Range:  $\pm 25g$  to  $\pm 2,000g$
- Number of Axes: 3
- Frequency Response: 2 to 15kHz ( $\pm 3db$ )
- Cross Axis Sensitivity:  $< 5\%$
- Power Supply: 3.0 to 5.5 VDC
- Operating Temperature:  $-40$  to  $+125^{\circ}C$
- Output Signal Format: Amplified Analog
- Package Type: LCC-12
- IP Rating: Hermetic (IP68)

### LEARN MORE

[830M1 Model Detail Page](#)

[830M1 Datasheet](#)

[830M1 Product Overview Video](#)

[830M1 How It's Made Video](#)

[830M1 Infographic](#)

[Solution Guide: Embedded Accelerometers for Machine Health Monitoring](#)

[White Paper: Wide Bandwidth Accelerometer for Condition Monitoring](#)

[White Paper: Predictive Maintenance with Vibration Sensors](#)