

EMBEDDED ACCELEROMETERS FOR MACHINE HEALTH MONITORING

Driven by an increase in factory automation and the Internet of Things (IoT), demand is rising for critical health monitoring of machinery with sensors. Downtime for these automated machines and factories can be extremely costly to customers and predictive maintenance is crucial to reduce downtime. TE Connectivity (TE) offers embedded Piezoelectric (PE) accelerometer solutions engineered for critical machine health monitoring in harsh environments.

- MACHINE CONDITION MONITORING
- INDUSTRIAL INTERNET OF THINGS (IIoT)
- PREVENTIVE MAINTENANCE
- SYSTEM INTEGRATORS
- PUMP MANUFACTURERS
- DATA LOGGERS


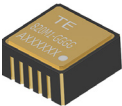
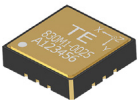
DESIGN QUESTIONS?

- What is the equipment where the sensor needs to be installed to make the measurement?
- What is the frequency response (bandwidth) required for the application?
- What is the RPM (Speed) of the equipment you will be monitoring?
- What is the estimated g-levels that will be measured in the installation?
- What is the operating temperature range in the application?
- Do you need a single axis or triaxial solution?
- What is the preferred mounting of the sensor?

LEARN MORE



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TE Model	Frequency Response	Acceleration Range	Number of Axes	Dimensions/ Mounting	Weight	Excitation Voltage	Operating Current	Sensitivity	FS Output Voltage	Resolution	Operating Temp Range
805M1 	1 - 8,000Hz (±1dB) 0.4 - 12,000Hz (±3dB)	±20g to ±500g	1	Ø0.35 x 0.44H Epoxy or Stud	5 gram	3.0 - 5.5Vdc	800µA	4.0 to 100mV/g (500g to 20g)	±2.0V	1mg ↑	-40°to +125°C
820M1 	6 - 10,000Hz (±1dB) 2 - 15,000Hz (±3dB) ↑	±25g to ±2,000g	1	0.35sq x 0.17H SMT LCC-10	1.2 gram	3.0 - 5.5Vdc	62µA	0.62 to 50mV/g (2,000g to 25g)	±1.25V	6mg	-40°to +125°C
830M1 	6 - 10,000Hz (±1dB) 2 - 15,000Hz (±3dB) ↑	±25g to ±2,000g	3	0.60sq x 0.17H SMT LCC-12	3.3 gram	3.0 - 5.5Vdc	62µA per axis	0.62 to 50mV/g (2,000g to 25g)	±1.25V	6mg	-40°to +125°C

HIGH PERFORMANCE

- Highly stable PE sensing technology
- Superior frequency response
- Measurement resolution
- Long-term stability
- Minimal long-term drift

WIDE BANDWIDTH

- Up to 15kHz

MOUNTING OPTIONS

- SMT, epoxy and stud mount versions

↑ Model Advantage

[te.com/sensors](https://www.te.com/sensors)

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