

# **Shock Monitoring**

Miniature Embeddable Accelerometers for Monitoring Shock in Critical Shipping Containers







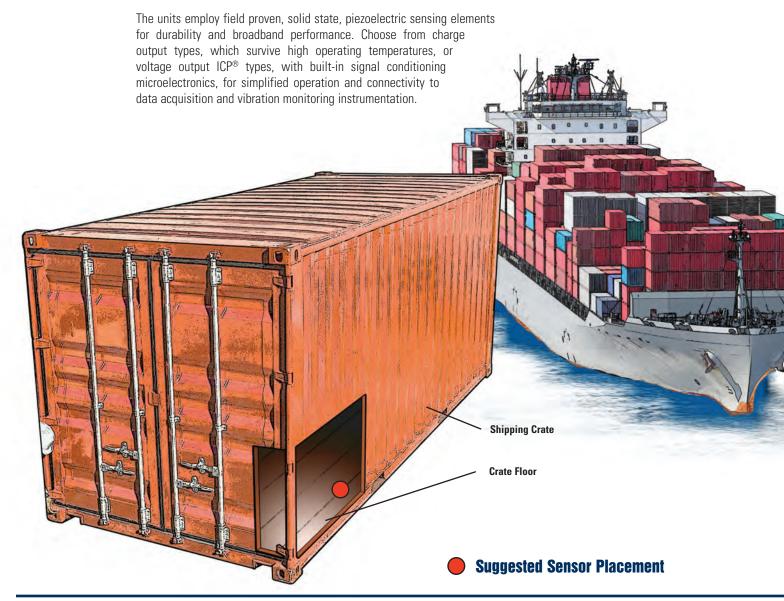
### **Process Monitoring & Protection**

## **Shock Monitoring**

Reusable ocean going shipping containers sometimes carry critical cargo that can be exposed to high shock levels during loading and unloading. It has become necessary to monitor shock and vibration loading to prevent damage and provide a record of these events.

IMI's line of embeddable miniature accelerometers in conjunction with other geographical logging devices provides vibration and shock signals to logging devices creating a dock to dock record of events occurring during the shipment cycle.

Series 660 low cost embeddable accelerometers offer an affordable solution for vibration and shock measurements in high volume and commercial OEM applications. These units are particularly well suited for shock and impact detection of packages or components, as well as bearing and gear mesh vibration measurements in predictive maintenance and condition monitoring requirements. The compact designs may be embedded into machinery at the OEM level to provide value added monitoring protection.





#### Low-power Pellet Accelerometers - Process Monitoring & Protection

- Choice of standard TO-5 or TO-8 transistor style packages
- Variety of sensitivities to accommodate a wide range of applications
- Charge output piezoelectric, voltage output ICP® and 3-wire low-power options
- Mountable via adhesive or soldering and choice of either integral cable or solder pin electrical connections
- Broadband width, high shock survivability, wide operating temperature range, high resolution and large dynamic range



**Embeddable Accelerometer** Low Profile TO-5



**Embeddable Accelerometer** 

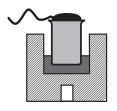


**Embeddable Accelerometer** 

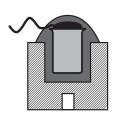


#### **Embeddable Accelerometer Mounting Examples**

IMI's embeddable accelerometers are an excellent choice for monitoring shock and vibration in a very small package. Examples to the right show different options for potting or complete encapsulation into mounting hardware, creating the optimal solution.



**Potted Sensor** Installation



**Encapsulated Sensor** Installation

### Corporate Headquarters - Depew, NY



## **The Global Leader in Sensors & Instrumentation For All Your Industrial Applications!**

- **Motor Vibration**
- **Pumps & Submersible Pumps**
- Paper Machines & Conveyors
- **Combustion Dynamics** Instrumentation
- **Cooling Towers & HVAC**
- **Gearboxes**
- Wind Turbine Condition Monitoring

- Oil & Gas Wells and Pipelines
- **Vibration Screens & Feeders**
- **Reciprocating Machinery**
- **Machine Tool Spindles**
- **Steel Rolling & Annealing**
- **Rotary Screw Compressors**
- **Nuclear Power Instrumentation**
- **Shock Monitoring**

IMI Sensors Platinum Stock Products represent some of our most popular models and can be used in a wide range of applications. As you browse this brochure, you will find Platinum Products indicated with the "Platinum Shield" icon (right).



Our Platinum Products are available with our Lifetime Warranty and fast delivery. If for any reason you are not 100% satisfied with your IMI Sensors Platinum Stock Product, we will repair, replace or exchange the product at no charge. For U.S. customers, all IMI Sensors Platinum Stock Products will ship within 24 hours. IF NOT, YOUR SHIPPING IS FREE!

num Stock Products

Visit www.imi-sensors.com for complete details.



Corporate Headquarters 3425 Walden Avenue Depew, NY 14043-2495 USA **Toll-free in the USA** 800-959-4464 ■ **24-hour SensorLine<sup>SM</sup>** 716-684-0003 Fax 716-684-3823 ■ Email imi@pcb.com ■ Website www.imi-sensors.com

AS9100 CERTIFIED ■ ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

© 2013 PCB Group, Inc. In the interest of constant product improvement, specifications are subject to change without notice. PCB, ECHO, ICP, IMI, Modally Tuned, Spindler, Swiveler and TORKDISC are registered trademarks of PCB Group SoundTrack LXT, Spark and Blaze are registered trademarks of PCB Piezotronics. SensorLine is a service mark of PCB Group. All other trademarks are properties of their respective owners. PCB is an EOE/AAP Employer





IMI-App-Shock-0213

Printed in U.S.A.