

RE Partner Solution



Vibration Energy Harvesting Generator (VEG)

Solution Summary

The VEG is a first-of-its-kind vibration-based energy harvesting generator that captures the energy from vibrating surfaces to perpetually generate power for wireless sensors monitoring asset health.

Features/Benefits

- Up to 10-year lifetime for wireless sensors
- Best-in-class power generation (20+ mW of power at sub 1g vibration accelerations)
- Cost-effective pricing
- Small profile (52 mm diameter x 24 mm height)
- Designed for 20 Hz, 30 Hz, 50 Hz, 60 Hz, or 70 Hz Frequencies

Diagrams/Graphics



Size Comparison to D-Cell Battery



Target Markets and Applications

- Machine Condition Monitoring & Predictive Maintenance
- Train Condition Monitoring
- Others: Bridges & Infrastructure, Construction/Mining Equipment, Trucks, and More

About Xidas IoT

Xidas IoT leverages its breakthrough patented technologies and multi-disciplinary expertise to design and produce edge solutions that combine intelligence, zero-power (energy harvesting), sensor fusion and integration. With decades of 3D manufacturing and micro engineering breakthroughs and deep expertise on industry, Xidas is a proud partner of the US National Science Foundation for IoT innovation. The company was one of five to testify in front of US Congress on the value of IoT technologies. Our products are first of their kind and shatter the conventional limitations that hold back the potential of a society powered by IoT.



About Xidas

Xidas uses a new multi-patented miniaturization paradigm that combines unique manufacturing technologies, design methodologies, and diverse materials processing called Amalga™ to produce micro-scale solutions for industrial, life-tech and IoT applications that were once impossible.

Many industries today have a need for advanced, ultra-miniaturized products that currently don't exist. Our passion is to provide next generation micro-products that bring our customer's visions to life.