



## **WIRELESS ELECTRICITY: A REVOLUTION IN POWER DELIVERY**

PowerbyProxi and its customers are leading a revolution that is changing the way electricity is delivered in hostile, dirty, and difficult-to-reach work environments. FORTUNE 100 companies serving a wide variety of industries are incorporating the company's patented wireless power technology into the next generation of heavy machinery, aerospace, defense, marine, and electronics products.

By incorporating high-efficiency wireless power into their design process, these manufacturers are achieving strategic advantage in tomorrow's markets. Whether they are eliminating cables or batteries, PowerbyProxi can provide autonomous and volume recharging solutions and new ways to get power and data wirelessly to sensors and control systems. Through PowerbyProxi technology, a new range of applications for existing products can be achieved.

## **A PIONEER IN DEVELOPMENT OF WIRELESS POWER TECHNOLOGY**

By eliminating the need for a physical or frictional power connection to electronic devices, PowerbyProxi solutions:

- Overcome the operational constraints of power cables and mechanical components.
- Enable the creation of highly differentiated products with unique competitive advantage.
- Solve continuity of delivery and equipment maintenance problems.
- Provide new design options for new and existing products.
- Reduce operations and maintenance costs in wet, dirty work environments and in applications with moving components.



## POWERFUL, CUSTOMIZABLE SOLUTION PLATFORMS

PowerbyProxi offers four solution platforms. Each platform can be modified for specific requirements, including power, voltage, data, transmission distance, physical size and shape.

- **PROXI-RING™** is a frictionless and contact-free slip ring, which can be customized for any power requirements and physical constraints. In this solution, power is transferred from the transmitter to a rotating power receiver without physical connections or frictional rotation.
- **PROXI-POINT™** is a single transmitter that can provide power to one or several receivers through any non-metallic material at ranges up to 12 inches (30cm). This solution can be used in a variety of applications for markets such as security or access control.
- **PROXI-LOOM™** provides power to multiple sensors or peripheral devices from a track loop, without physical contact. This solution can replace complex wiring looms in marine and automotive applications and in continuous production line environments.
- **PROXI-FI™** is the miniaturization of PowerbyProxi wireless receivers onto silicon. This solution provides power to a wide range of electronic devices and electrical equipment.

## FLEXIBLE TECHNOLOGY FOR TURNKEY SOLUTIONS

PowerbyProxi delivers solutions using its patented Proxi-Wave™ technology. Proxi-Wave technology is based on the principle of inductively coupled power transfer (ICPT). This approach enables the rapid development of solutions based on Proxi-Wave™ unique features.

Key capabilities of PowerbyProxi technology include:

- Energy efficiency of more than 90 percent - comparable to many hard-wired solutions.
- Dynamically harmonized power management for variable load applications.
- Robust real world coupling.
- Effective heat management even in hermetically sealed applications.
- Scalable architecture: watts to kilowatts.
- Integrated wireless data that supports CAN-Bus, RS232 and other protocols.
- Soft switched: negligible EMI/EMC issues.
- Transmit power through all non-metallic materials, including liquids and gases.