



Proxi-Ring powered wireless slip ring solutions provide:

- Friction-free circuits.
- Fast, accurate response to load variations within a 1% tolerance.
- Power channels: maximum output current 10A (total across all channels) at 24VDC.
- Communication channels: fully integrated 250 Kbps wireless CAN-Bus.
- Energy efficiency: 90%, which is comparable to hard-wired electrical solutions.

Ideal Solutions for Wind Turbine Vendors, Operators and Maintenance Providers.

The Proxi-Ring 750 is available as a plug-and-play modular system, which can be used to upgrade existing slip rings in new or existing equipment.

Key benefits:

- Cost-effective, maintenance free alternatives to traditional mechanical slip rings.
- Include no moving parts or frictional components that can fail or cause false resets.
- Provide unlimited and continuous rotation speeds.
- Highly corrosion-resistant and waterproof (immersion rating of IP68).
- Compatible with existing power supplies and the CAN bus communication protocol.
- Eliminate friction or heating between rotating and stationary circuit contacts.

The Proxi-Ring 750 has also been incorporated in a world first hybrid slip ring in partnership with United Equipment Accessories Inc to provide a complete replacement for wind turbines using electric pitch control systems. In the Hybrid solution the Proxi-Ring™ 750 is used to provide more reliable low power channels and data connections.

ABOUT POWERBYPROXI

PowerbyProxi is the global leader in high-efficiency, wireless power solutions. PowerbyProxi's patented Prox-Wave™ technology overcomes the constraints of power cables and mechanical components, which can stifle design innovation and increase maintenance costs in wet, dirty environments and in applications with moving parts.

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Proxi-Ring™ 750

First Contactless Slip Rings to Meet the Total Requirements of Wind Turbine Hydraulic Pitch Control Systems



Proxi-Ring 750

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DESCRIPTION

The PowerbyProxi Proxi-Ring™ 750 is a next-generation solution designed to provide wireless power to hydraulic pitch control systems in wind turbines. A reliable and maintenance-free alternative to mechanical slip rings, the Proxi-Ring 750 does not require friction-based metal or carbon brush contacts to enable power and data transfer.

PowerbyProxi offers the first contactless slip ring that provides power and data wirelessly to pitch control systems in wind turbines. Proxi-Ring 750 is a standalone electrical device that enables transfer of power and data across an electrical rotary joint (also referred to as an electric swivel), rotary electrical interface, commutator or a collector.

PowerbyProxi's Proxi-Ring 750 solutions eliminate friction or heating between rotating and stationary circuit contacts and provide a cost-effective alternative to mechanical slip rings. Unlike conventional slip ring applications, typical contaminants such as oil or brake dust in the nasal do not affect the operation of the Proxi-Ring 750. Proxi-Ring wind turbine solutions are highly corrosion-resistant, waterproof (immersion rating of IP68) and compatible with existing power supplies and a range of communication protocols.

PowerbyProxi's Proxi-Wave™ technology is unique in its ability to cater for the demands of variable load operating environments and overcomes the limitations of earlier generations of Inductive Power solutions that suffered from excessive heat generation. The Proxi-Ring™ 750 input power is transferred inductively. A standard 24-volt power supply can be used to provide power to the power transmitter, and up to 31.25-amps can be drawn from the power receiver. The output voltage is held within a tight 1-percent tolerance.

ELECTRICAL SPECIFICATIONS

VOLTAGE:	24 VDC
NUMBER OF POWER CIRCUITS:	CUSTOMIZABLE, UP TO A TOTAL OF 31.25 A ACROSS ALL CHANNELS
CURRENT RATING:	31.25 A TOTAL (CUSTOMIZABLE)
EFFICIENCY OF POWER TRANSFER:	90%
LEAD SIZE / TYPE:	18AWG (24/34)

MECHANICAL SPECIFICATIONS

OPERATING SPEED:	200 RPM +
LEAD LENGTH:	4FT/1220MM (TO POWER TRANSMITTER), 2FT/610MM (FROM POWER RECEIVER)
TOTAL WEIGHT:	10LB / 4.5KGL
HOUSING:	ALUMINUM WITH ACETYL CAP

*ALTERNATIVES TO THESE SPECIFICATIONS ARE AVAILABLE. FOR MORE INFORMATION ABOUT SPECIFIC REQUIREMENTS AND SITUATIONS, CONTACT POWERBYPROXI.

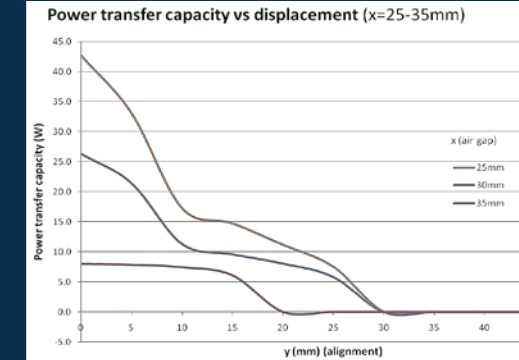
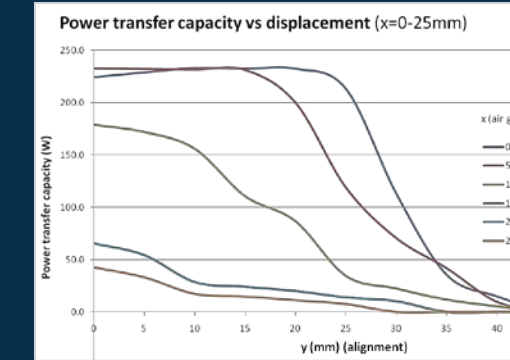
ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE:	-40°F TO +185°F, -40°C TO +105°C
IP PROTECTION CLASS:	68
OPERATING SHOCK:	50G (11MS HALF-SINE PULSE)
VIBRATION:	25G (5-2000Hz)

DATA COMMUNICATIONS

PROTOCOL:	CAN BUS / ETHERNET, RS485, PLC 4-20mA
DATA RATE / NO. OF DATA:	UP TO 4MBPS (CUSTOMIZABLE UP TO A TOTAL OF 4MBPS ACROSS ALL CHANNELS)

POWER TRANSFER PERFORMANCE



EFFICIENCY PERFORMANCE

