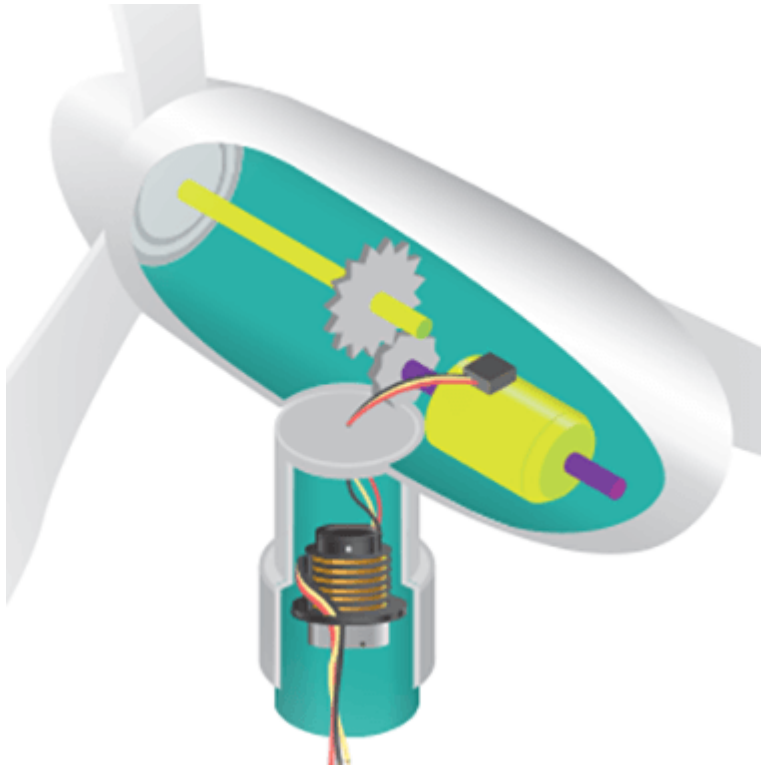# Solutions | Slip Ring |Slip ring for Wind Turbines

In this particular case, the energy generated by the small size and low voltage wind turbines from the electric generator (aboard the rotating pod) need to be transferred to the land.Slip ring are the best solution in order to avoid any cable twist while passing through the pylon.

In this way, the pod, located on the top of the pylon that holds it, can freely rotate depending on which way the wind is blowing.

OurSlip ring can transfer power from a few hundreds Watts to several dozens of Kilowatt, combining reliability and low-cost technology. Alongside to these power circuits, some control signals can be transferred to gather information (field bus, motor encoder) or power supply other electronics equipment.

Cost-effective solutions are available for small domestic wind turbines but advanced rugged designs made out of stainless steel with integrated anti-condensation heater can be proposed for more complex projects.

Electrical Features

- Motor power and control through standard or proprietary cables
- Automation component supply and signals (I/Os, EtherCAT, Ethernet, Profinet, CANOpen, etc.)
- Sensors (RF, digital)
- Transfer power up to 60kW (low contact impedance)

Mechanical Features

- Low friction torque
- Various mounting options
- Compact size

Interesting Options

- IP65 and stainless steel design for harsh environment
- Integrated proprietary cables
- Integrated anti-condensation system

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Advantages

Benefits

- Long lifetime without maintenance
- Reliable continuous rotation
- Special proprietary cable integration
- Rugged design options

- Low maintenance
- Increase equipment reliability
- Competitive product range

Facts & Figures

- With a **medium speed of 5 rpm** a slip ring (multi-wire brushes design) can operate at least **20 years** without being replaced
- **Power signals** and **sensors or control signals** (Field bus, motor encoder, etc.) can be embedded in the **same slip ring**