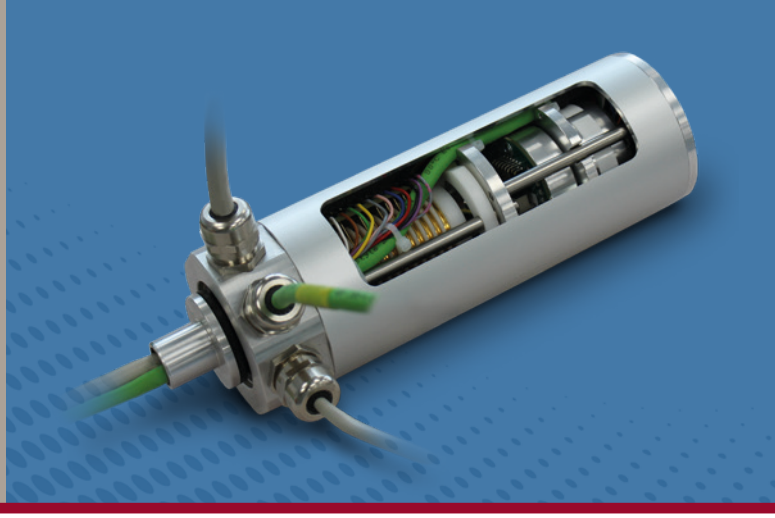
ROTORAY OE1

Optoelectronic transmitter for
Fast Ethernet and Gigabit Ethernet



ROTORAY OE1 provides an addition to our high data-rate transmission series. This design complements the ROTOCAP technology for applications where a free through-bore is not required. The ROTORAY OE1 with its integrated opto-electronical converter provides the benefits of a reliable optical transmission-path combined with electrical customer-ports suited for rugged environment.

Due to the different transmission technologies the combination of ROTORAY OE1 with the proven ROTOCAP technology provides genuine redundancy.

Features:

- Real-time capability
- Non-contacting
- Maintenance-free
- Low latency time (1,5µs)
- Wide range power supply (12-60 V)
- Space-saving unit with compact dimensions
- Onboard diagnostics LED

ADVANTAGES

- Reliable optical transmission for Fast- and Gigabit Ethernet in industrial automation with external copper-wiring
- Supports a wide range of industrial applications like:
  - Rotary tables / trunnions (automotive)
  - Wind turbines (pitch control)
  - Packaging machines
  - Filling machines

Available Interfaces

Interface	Fast-Ethernet/Gigabit-Ethernet
Supported Ethernet-Standard	100BASE-TX (IEEE 802.3, Clause 25) 1000BASE-T (IEEE 802.3, Clause 40)
Realtime Applications	Supported
Supported Protocols	i.e. ProfiNET Class A/B/C, EtherCAT, POWERLINK, Mechatrolink III, SERCOS III, TCP/IP
Bit Error Rate	≤ 1E-12 (equals frame-loss 1E-9 at frame-size 1518 byte)
Additional Information	Auto negotiation is supported, device will determine Fast and Gigabit-Ethernet on its own Delay time 1,5µs (fixed delay without cable) Jumbo frames are supported

Official Regulations

EMC Product Regulations	IEC 61000 6-2 (EMC immunity) IEC 61000 6-4 (EMC radiation)
Environmental Regulations	RoHS (EU directive 2011/65/EU) REACH (EU directive EC 1907/2006)

Mechanical and Connectors

Dimension	On request No inner bore available
Cable Length	Standard < 30 m

All mechanical data and connector-interfaces according to slip ring-assembly

SPECIFICATIONS

TECHNICAL DATA

Power Supply

Power Requirements	Input voltage 9.0 VDC to 60 VDC (nominal voltage 24/48 VDC), power consumption typ. 3,5 W
Alternative Power Supply	230 VAC on request
Overvoltage Protection	Nominal voltage +/- 25% according to IEC 61000-4-29
Reverse Voltage Protection	Included
Additional Information	Power typically supplied within combined slip ring

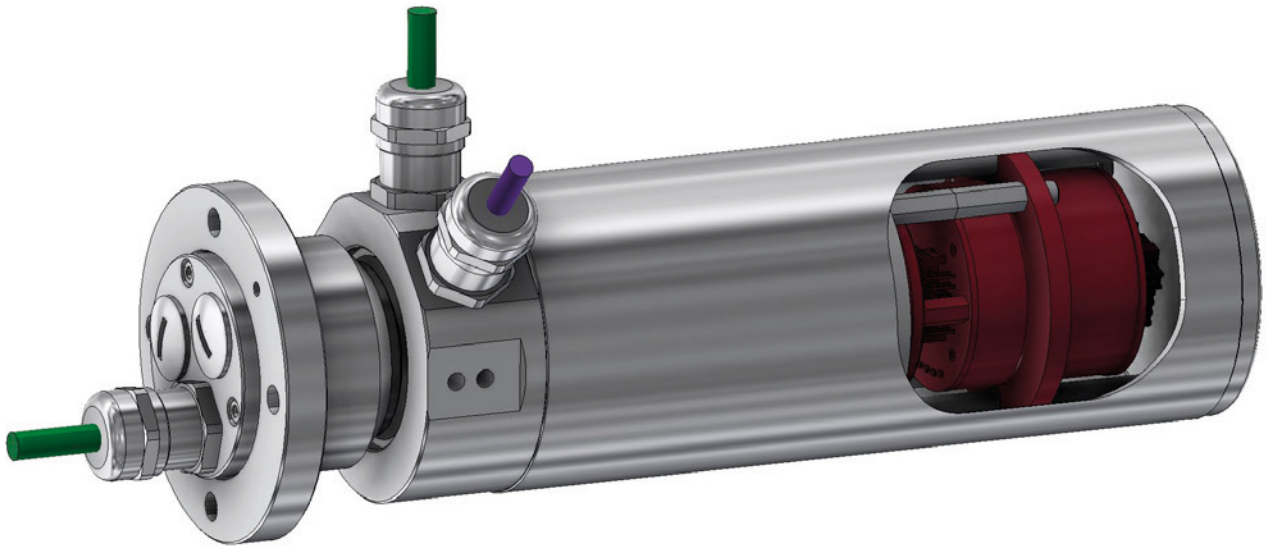
Operational Conditions

Ambient Temperature Range	-40°C to max. 60°C
Relative Humidity	15 – 85%, non condensing
Vibration and Shock	DIN EN 60068-2-6 (sinusoidal oscillation) DIN EN 60068-2-64 (broadband noise) DIN EN 60068-2-27 (shock)

Storage Conditions

Ambient Temperature Range	0°C to 50°C
Relative Humidity	15 – 85%, non condensing

ROTORAY OE1 is only available in combination with slip rings from Moog.



For product information, visit **www.moog.com**
For more information or the office nearest you, contact us online, **rotarysolutions@moog.com**

Moog ROTORAY OE1 Technical Data Sheet
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MOOG