

RoProxCon

High-Speed and Power-Efficient Contactless Transmission

INTERCONNECT





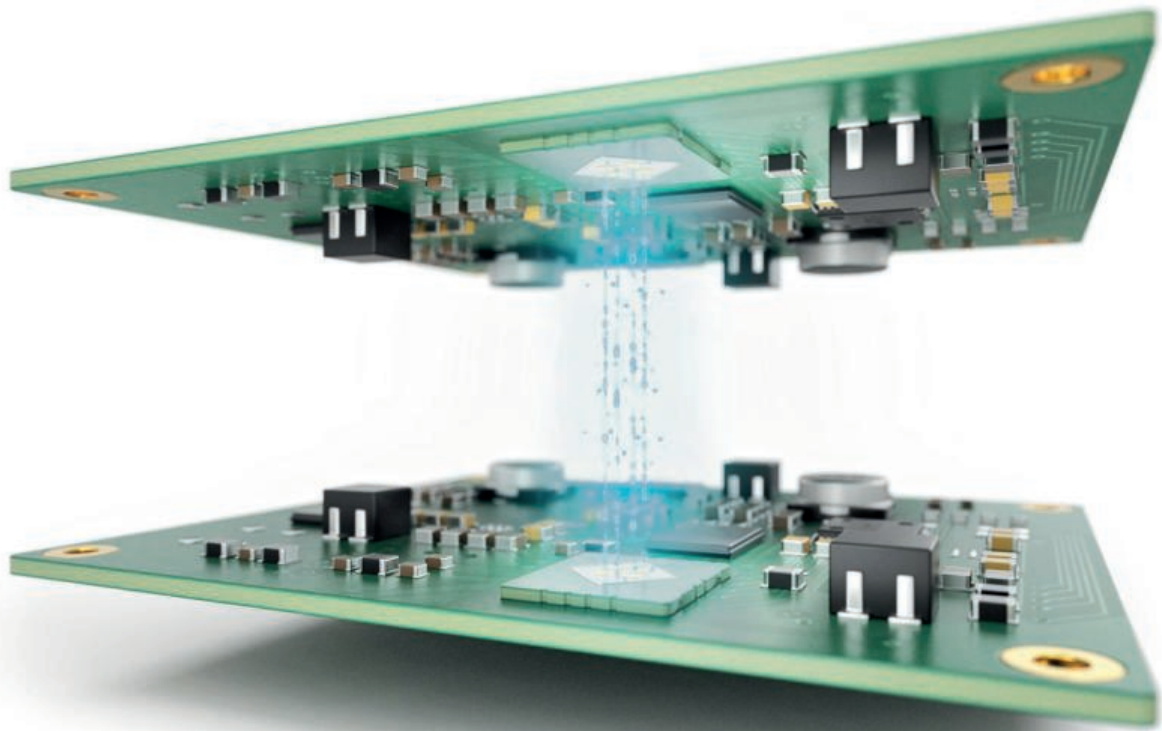
Contactless Connectivity

RoProxCon – High-Speed and Power-Efficient Contactless Transmission

RoProxCon is an innovative connection system which can be applied to create contactless connections over a short distance. The data transmission at the RoProxCon is based on radio transmission at a carrier frequency of 60 GHz. Due to this frequency in the mm wave range high data rates can be achieved without complex modulation effort in the transmitter and receiver. The application of RoProxCon contactless system is suitable when conventional connectivity solutions reach their limits – e.g. due to movement, rotation or lifetime.

A high number of electromechanical systems used in industrial plants are being connected to one another. Cable assemblies and connector contacts are often under considerable stress, causing cables to deteriorate or even break, and overused connector contacts to fail, resulting in machine downtime.

The advantage of contactless transmission is that inflexible electromechanical couplings are no longer required while the radio technology offers a high degree of additional flexibility.



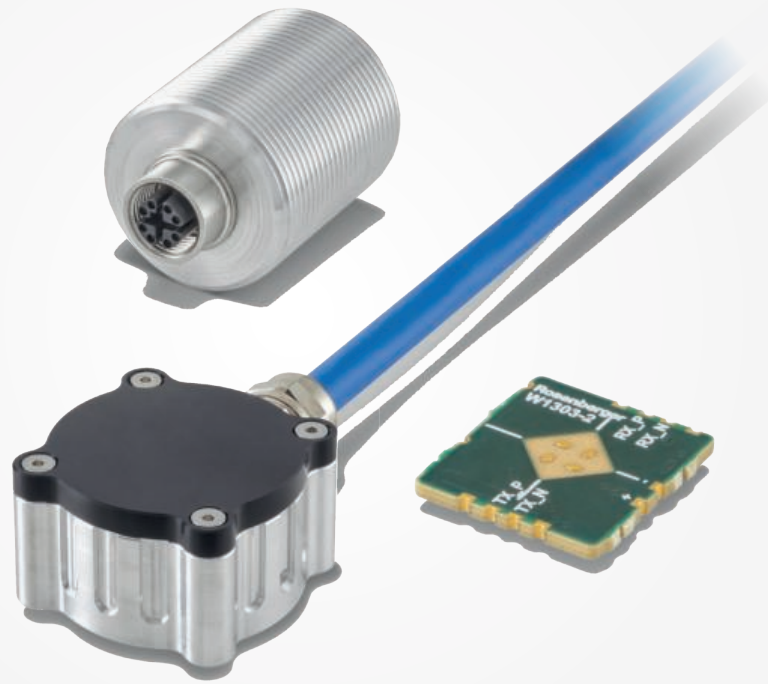
RoProxCon Portfolio

Product Features

- Full duplex data transmission in real time
- Radio transmission at a carrier frequency of 60 GHz
- Transmission up to 3.125 Gbps
- Hermetically sealed housings
- Transmission despite rotation

Advantages

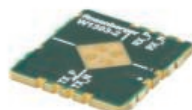
- Freedom of movement due to mechanical decoupling
- Extremely robust, low maintenance, no wear and tear
- Unlimited mating cycles
- Protocol independence
- Transmission through a wide variety of materials
- Independent interface - mechanical compatibility not necessary



RoProxCon Portfolio

RoProxCon – System-on-Module (SoM)

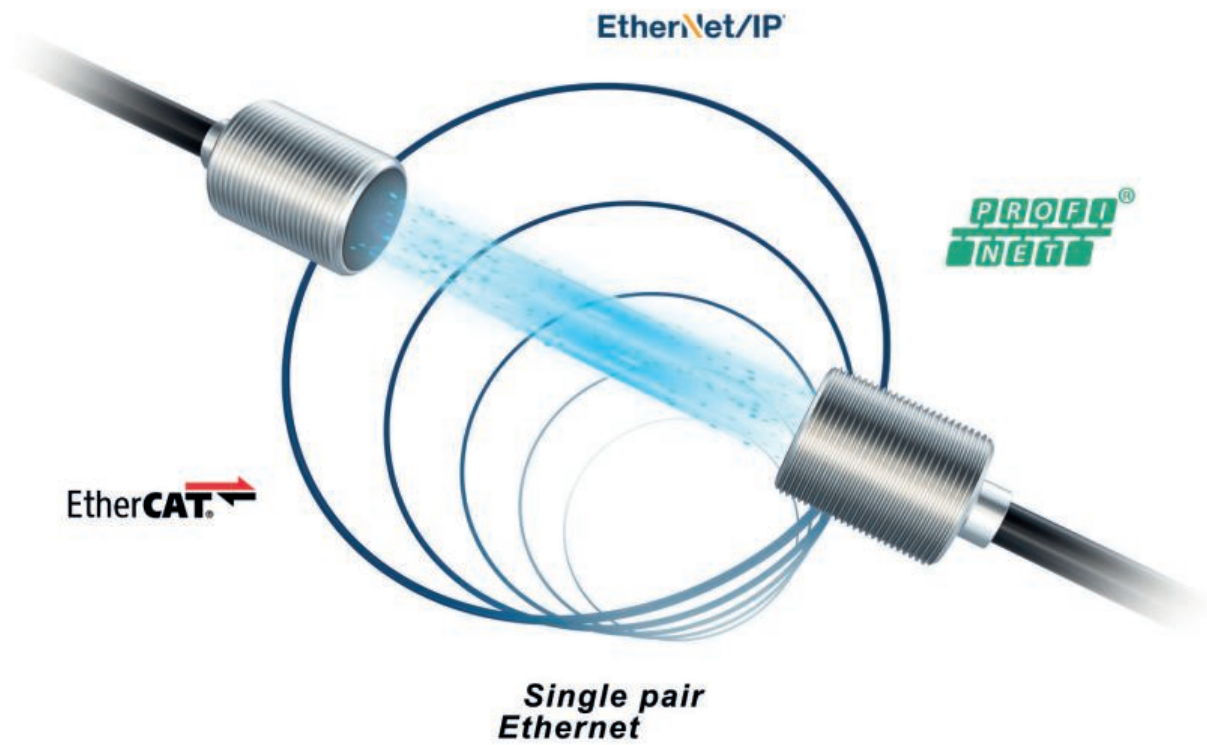
- Full duplex transmission during 360° rotation to each other
- Data transmission up to 3.125 Gbps based on ST60
- Radio transmission at a carrier frequency of 60 GHz
- Individual localization and integration
- High tolerance against radial and axial misalignment
- Small form factor: 14,2x12,5 mm
- Low latency down to 7 ns
- Transmission through a wide variety of materials



RoProxCon – Hybrid

- Power transmission up to 30 W
- Full duplex transmission during 360° rotation to each other
- Gigabit-Ethernet transmission for Industrial Ethernet integrated
- Radio transmission at a carrier frequency of 60 GHz
- Individual localization and integration
- Transmission from device to device or to “other” RoProxCon through closed housings
- High tolerance against radial and axial misalignment
- Small form factor: approx. 60x60x35 mm
- Hermetic seal
- Extreme robust, low maintenance, no wear and tear
- Foreign object detection (FOD)
- Unlimited mating cycles
- Low idle power





RoProxCon Protocols / Applications

Protocols – Basis for Electronic Data Transmission

RoProxCon enables data transmission in full duplex mode of up to 3.125 Gbps regardless of the protocol used. Real-time capability is guaranteed, use in time-critical applications, e. g. in industrial automation technology, is possible without restrictions.

- 10 / 100 / 1000BASE-T1
- EtherNet/IP
- PROFINET
- EtherCAT
- Others

Applications

- Smart factory
- Medical technology
- Safety
- Connected devices
- Intelligent home
- Office equipment
- Conveyer technology
- Renewable energies



Website

For more information refer to our website:
www.rosenberger.com/contactless

Rosenberger

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Certified by IATF 16949 · DIN EN 9100 · ISO 9001 · ISO 14001 · ISO 50001

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