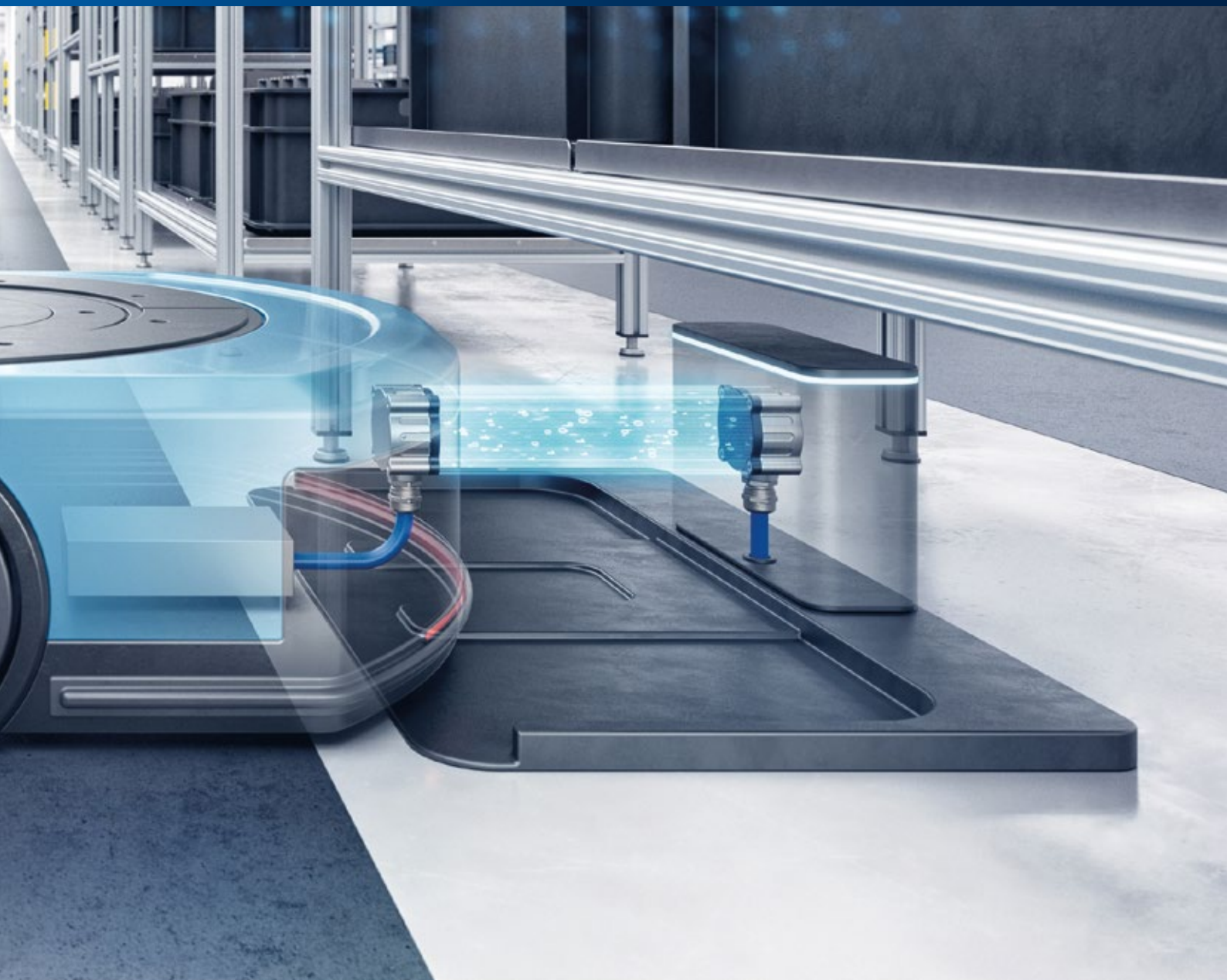
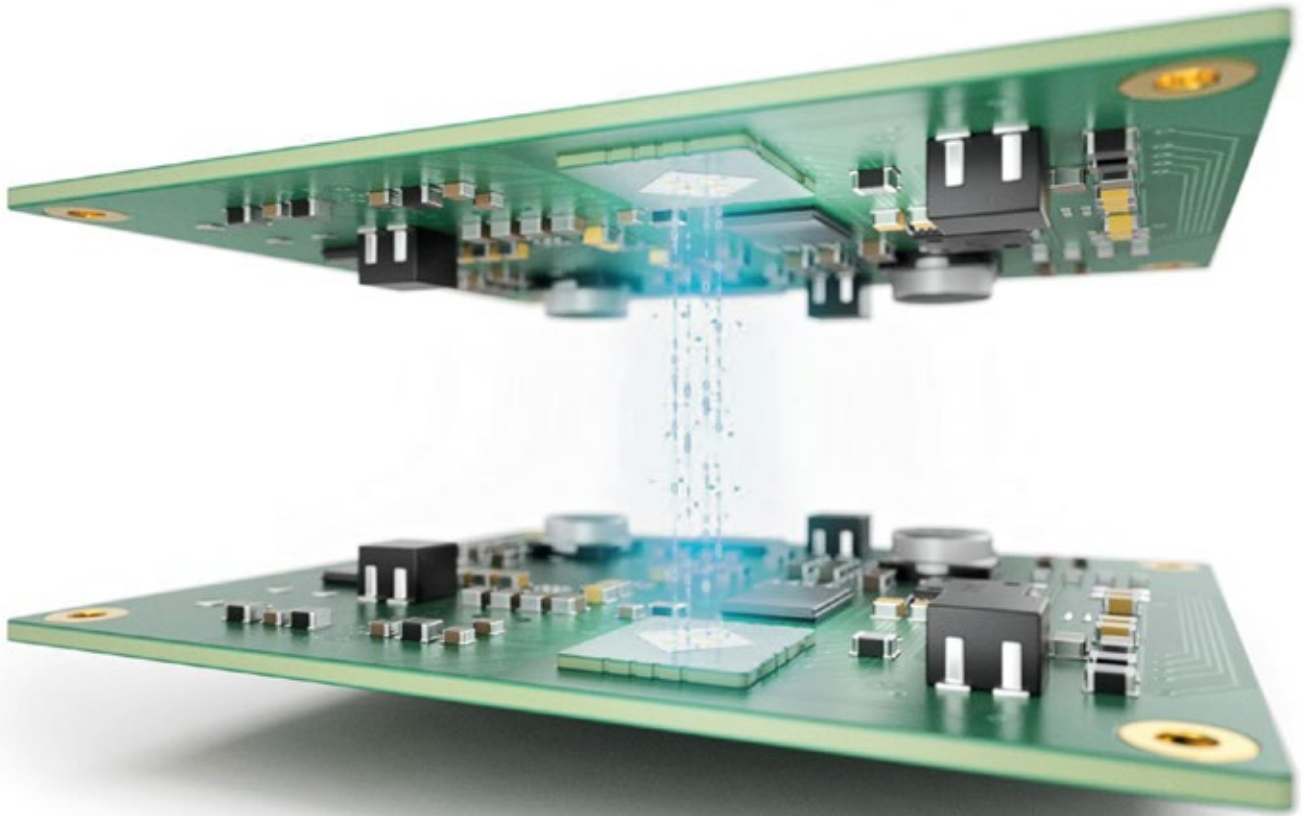


Contactless High-Speed Data and Power Transmission

## RoProxCon®

### INTERCONNECT





## Data and Power Transmission – Without Physical Connection

RoProxCon® transmits data and power contactless over distances of up to 20 mm. Data transmission utilizes radio technology with a 60 GHz carrier frequency, enabling high data rates of 3.125 Gbps with extremely low latency. The robust connectors can withstand high vibration loads and transmit 30 W of electrical power via inductive coupling. This opens up entirely new communication possibilities.

### Benefits

- **Wear-free:** Reliable contactless connection even under vibration
- **Unlimited rotation:** Stable full-duplex transmission with 360° rotation
- **Flexible mounting:** High level of options
- **Reliable even in motion:** No cable breakage, ideal for dynamic applications
- **High data rates and efficient power transmission:** Powerful with a small form factor
- **Robust:** Operates reliably despite dust, dirt and moisture



### RoProxCon® System-on-Module (SoM)

- Full duplex data transmission up to 3.125 Gbps based on ST60
- High tolerance against radial and axial misalignment
- No influence of 360° rotation
- Small form factor: 14,2 x 12,5 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 (for example EtherCat and ProfiNet)
- Transmission from device to device or to „other“ RoProxCon® through closed housings
- Hermetically sealed
- Foreign object detection (FOD)



### RoProxCon® Data

- Full duplex transmission during 360° rotation to each other
- Gigabit-Ethernet transmission for Industrial Ethernet integrated (for example EtherCat and ProfiNet)
- Individual localization and integration
- Transmission from device to device or to „other“ RoProxCon® through closed housings
- Hermetically sealed



## Fast Validation for New Developments

The development of new technologies places high demands on functionality, performance limits, and system compatibility. In order to ensure that a product meets these requirements, a reliable test platform is crucial.

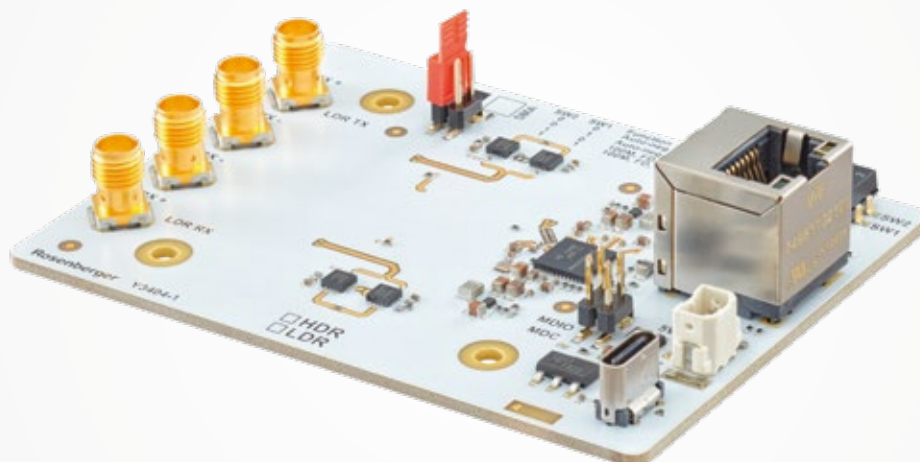
## The Solution: RoProxCon® Evaluation Board

The RoProxCon® Evaluation Board enables comprehensive testing in the field of contactless data transmission, providing developers with a flexible and reliable platform for validating designs, testing innovations, and optimizing solutions. It supports both Ethernet and custom protocols, making it ideal for a wide range of applications.

# RoProxCon® Evaluation Board

## Benefits:

- **Simple setup:** Quick commissioning for efficient testing
- **High flexibility:** Adaptable to individual requirements
- **Accelerated development:** Precise and reliable test results







## RoProxCon® in Applications

In many industrial applications, conventional connectors reach their limits – especially in scenarios involving frequent mating and unmating, such as tool changes on robots. Their service life is therefore limited, as the contacts can wear out due to contamination or deformation.

### RoProxCon® Makes the Difference

- **Robotics:** Maximum mobility
- **Machinery and plant engineering:** The hollow shaft itself serves as the carrier of the data transmission system, providing a reliable alternative to slip rings.
- **Tool changer:** Infinite mating cycles, resistant to dirt, dust and vibration



## Website

For more information refer to our website:  
[www.rosenberger.com/contactless](http://www.rosenberger.com/contactless)

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Certified by IATF 16949 · DIN EN 9100 · ISO 9001 · ISO 14001 · ISO 45001 · ISO 50001

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