

# CO30CAN EVALUATION KIT

Contactless Power &  
Data Connectors



*Co30CAN is a contactless connector evaluation kit that provides 30W data and power transmission at a short distance without any physical contact through non-electrically conductive materials.*

Compared to physical interconnect solutions, contactless connectors do not make contact, meaning there is no possibility for damage during the unmating/mating cycle or within high stress environments. The complex mechanics have been removed to avoid deterioration from elements like dust.

Contactless connectors offer unlimited mating cycles due to no contact between the transmitter and the receiver to transmit power and data in the same link. These contactless connectors allow greater freedom and movement while boosting system durability and lifespan.

Radiall designed the Co30CAN contactless connector evaluation kit for testing power and data transmission at different distances.

- *Transmission through various non-electrically conducting materials*
- *Hermetically sealed housing*
- *Unlimited mating cycles*

## FEATURES & BENEFITS

- *Continuous power of 30W*
- *Distance of transmission up to 12 mm  $\pm$ 4 mm*
- *Misalignment tolerance  $\pm$ 2 mm*
- *Bi-directional data transmission*

## APPLICATIONS

- *Smart factory*
- *Industrial connected devices*
- *Renewable energies*
- *Medical equipment*

PART NUMBER	DESCRIPTION
MU344610212400	Contactless Connector 30W CAN 24 VDC Kit
MU324610212300	Contactless Connector 30W CAN 24 VDC Transmitter
MU314610212300	Contactless Connector 30W CAN 24 VDC Receiver



*Easy to use and highly reliable, Radiall's contactless connectivity offers a maintenance-free alternative to traditional connectors. Test the benefits of release systems from cable constraints with this evaluation kit.*

### GENERAL SPECIFICATIONS

TECHNOLOGY	Inductive Couplers
OUTPUT POWER	30W
OPERATING INDICATION	LED Status
TRANSMISSION DISTANCE	8 to 16 mm
MISALIGNMENT X,Y	2 mm
CONNECTION METHOD	 M12, Female (A-Coded)

### ELECTRICAL SPECIFICATIONS

INPUT VOLTAGE (TX)	24 VDC	± 10%
OUTPUT VOLTAGE (RX)	24 VDC	± 5%
INPUT CURRENT	1.66 A	@ Output Power 30W

### DATA SPECIFICATIONS

PROTOCOL	CAN 2.0A CAN 2.0B
DATA RATE	250 kbps

### MECHANICAL SPECIFICATIONS <sup>[1]</sup>

WIDTH	116 mm
HEIGHT	40 mm
DEPTH	58 mm
HOUSING MATERIAL	Aluminum Alloy PET

### ENVIRONMENTAL SPECIFICATIONS

OPERATING TEMPERATURE	-40 to 70 °C
STORAGE TEMPERATURE	-55 to 85 °C
INGRESS PROTECTION	IP67
PROTECTION	Reverse Polarity Protection and Short-Circuit Protection of the Power Output

#### Notes

1. Mechanical specifications for Tx and Rx are the same