Wireless Communication between Networks
- Up to 200 m transmission range
- Linking CAN networks with different bit rates
- CAN-telegram filtering
- Configuration and diagnostics via USB interface with Windows® based configuration tool

Wireless CAN Bridge with extendable InRailBus Technology
- External antenna included
- InRailBus technology combines high ease of use and proven reliability
- DIN-EN carrier rail mounting (TS 35)

Minimum Connection Time and Latency
- Significant reduction of connection setup time and latency of the CAN transmission compared to WLAN or Bluetooth®

Wireless CAN Bridge
The CAN-CBX-AIR/3 is designed for bridging two different CAN networks via a radio link.

It supports data exchange between CAN networks with two different baud rates. This stand-alone mode can be used for example to get access to CAN modules installed at turning machine parts via a point-to-point connection (see example 1 below).

Wireless PC-Interface
Today’s most common PC interface USB is used to configure CAN-CBX-AIR/3. But beside this - CAN-CBX-AIR/3 enables a PC to communicate CAN data via USB to a distant CAN-CBX-AIR/3, e.g. for service and maintenance (see example 2 below).

Radio Communication:
Carrier frequency: ISM band, 2.4 GHz
Transceiver: Typical peak output power: 10 dBm, typical Rx sensitivity for BER = 10^-6: - 81 dBm
Standard: ETSI EN 300 328 V.2.0.20 (RED)
Antenna type: Impedance: 50 Ohms nominal, Antenna gain: 2.0 dBi, Connector: coaxial RP-SMA plug (male)
Transmission range: Approx. 200 m line-of-sight (LoS) distance
CAN, Microcontroller:
Microcontroller: ARM STM32F105, CAN: ISO 11898-1
CAN interface: According to ISO 11898-2, electrically isolated, bit rate up to 1 Mbit/s
Software: Windows based configuration tool and additional esd CAN tools, e.g. monitoring tool CANreal

Technical Specifications:
Relative humidity: Max. 90 % (non-condensing)
Dimensions: 22.5 x 99 x 114.5 mm (without connectors and antenna)
Housing: Plastic housing (ME MAX) for carrier rail mounting NS 35/7.5 DIN EN 60715
Connectors: CAN: Phoenix MC 1,5/5-G2.51 BK + InRailBus USB: Phoenix MSTBO 2,5/4 G11 BK + InRailBus Antenna: RP-SMA (female)
Weight: 225 g

CAN Interface
The CAN interface is designed according to ISO1188 with electrical isolation and bit rates up to 1 Mbit/s.

InRailBus
The CAN-CBX-AIR/3 features the possibility to connect the power supply and the CAN bus signals via the InRailBus connector (CAN-CBX-TBUS connector), integrated in the mounting rail. Individual modules can therefore be removed from the InRailBus without interrupting the bus signals.

Software Support
CAN-CBX-AIR/3 comes with an easy to use Windows based configuration tool. All settings will be stored within the device. Access via esd’s ntcan API is supported.

Additional free-of-charge esd CAN tools for Windows are downloadable from our website. The tools offer efficient setup and analysis of CAN applications and networks.

(This product is under development. It will be available Q3 2018.)