

CAN-CBX-AIR/2

Wireless CAN-Bridge with USB Interface



Wireless Communication between Nets

- Up to 150 m transmission range
- Linking CAN nets 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

- CANopen profiles acc. to CiA® specification CiA 301, CiA 457
- External antenna included
- InRailBus technology combines high ease of use and proven reliability

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/2 is designed for bridging two different CAN networks via a radio link. It supports data exchange between CAN nets with two different baud rates. This stand-alone mode can be used e.g. 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/2. But beside this - CAN-CBX-AIR/2 enables a PC to communicate CAN data via USB to a distant CAN-CBX-AIR/2 for e.g. service and maintenance (see example 2 below).

CAN Interface

The CAN interface is designed according to ISO11898 with electrical isolation and bit rates up to 1 Mbit/s.

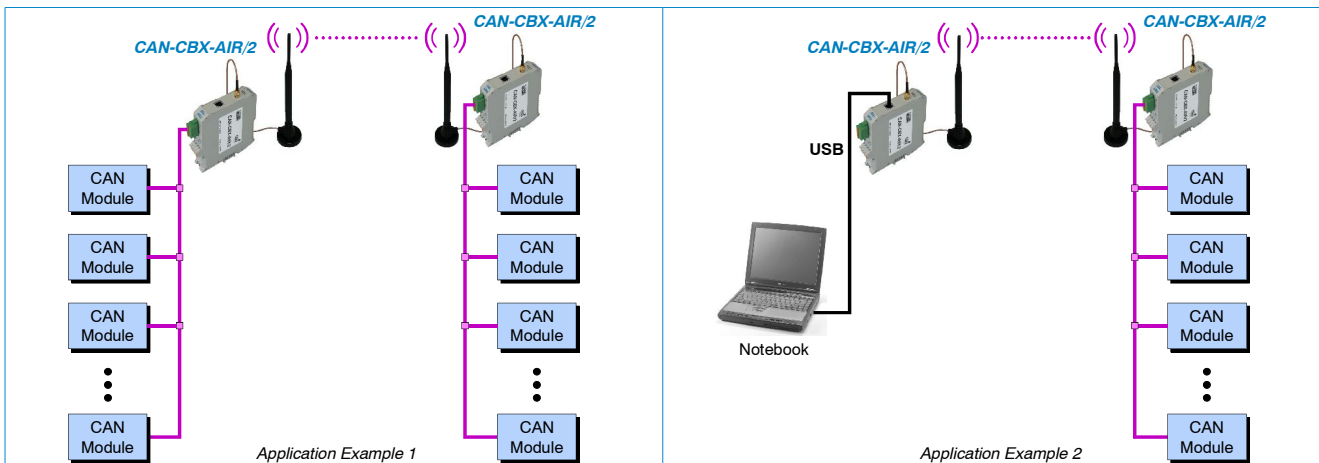
LED Indicator

Four LEDs indicate the state of the module's interfaces.

Software Support

CAN-CBX-AIR/2 comes with an easy to use Windows based configuration tool. All settings will be stored within the device. Access via esd's ntcapi API is supported.

(This product is under development. It will be available Q1 2013.)



Technical Specifications:

Radio Communication:	
Carrier frequency	ISM band, 2.4 GHz
Transceiver	Typical peak output power: 12 dBm, typical Rx sensitivity for BER = 10 ⁻⁴ : - 81 dBm
Antenna type	Impedance: 50 Ohms nominal, antenna gain: 5.0 dBi, connector: coaxial SMA plug (male)
Transmission range	Approx. 150 m line-of-sight (LoS) distance
CAN, Microcontroller:	
Microcontroller	ARM STM32F105, CAN: ISO 11898-1
CAN interface	ISO 11898-2, electrically isolated, bit rate up to 1 Mbit/s
Software	Windows based configuration tool and monitoring tool CANreal

General:	
Supply voltage	$U_{VCC} = 24 \text{ VDC} \pm 20 \%$
Current consumption	typ. 40 mA @ 24 V
Ambient temperature	0 °C ... +55 °C
Relative humidity	Max. 90 % (non-condensing)
Dimensions	22.5 x 99 x 114.5 mm (without connectors and antenna)
Connectors	CAN: 5-pin COMBICON style + InRailBus, USB: type B, Power: 4-pin COMBICON style + InRailBus, Antenna: SMA (female)
Weight	125 g
Order Information:	
Hardware	Order No.
CAN-CBX-AIR/2-Bridge	2x CAN-CBX-AIR/2, Wireless CAN-Bridge, Transmission range approx. 150 m, line-of-sight distance C.3051.04
CAN-CBX-AIR/2	Wireless CAN module C.3051.02