

WIRELESS CAN BRIDGE

WCB-01



KEY FEATURES

- **Certified 2.4 GHz wireless communication module**
- **License-free operation** in the 2.4 GHz ISM band
- **FCC Part 15** compliant
- **RF output power up to 19.9 dBm EIRP**
- **Wireless range** up to 150 m line of sight
- **Integrated 120 Ω CAN termination**, selectable by DIP switch

The **WCB – Wireless CAN Bridge** is designed to convert CAN messages received from the CAN bus into wireless RF signals, which are then transmitted to another WCB unit mounted on a vehicle or nearby equipment. The system supports bidirectional communication and provides an operating range of up to 150 m line of sight.

The unit uses a certified 2.4 GHz Wi-Fi/Bluetooth wireless module, enabling reliable wireless communication in the license-free 2.4 GHz ISM band.

The WCB is part of the Emitter Electronics MMX product family and can be seamlessly integrated with other MMX devices, such as controllers, displays, keypads, intercom systems and other CAN-based equipment.

The WCB unit is equipped with an internal omnidirectional RF antenna, which radiates the signal in all directions. For optimal wireless performance, the unit should be mounted as high as possible on the vehicle or machine. The installation should provide a clear line of sight between the communicating units to maximize signal strength and reduce the risk of interference or signal attenuation

SPECIFICATIONS

POWER

Supply Voltage	8-32 V DC
Current	max. 30 mA @ 24 V DC max. 50 mA @ 12 V DC
Electrical Protection	overvoltage, transients, reverse polarity, load dump

INTERFACES

CAN	1x CAN, ISO 11898-2, CAN 2.0 A/B up to 250 kbit/s, 500 kbit/s TBD
CAN termination	120 Ohm, DIP switch
RF module	2.4 GHz ISM band
Wi-Fi	Frequency Band(s) 2412 - 2472 MHz, Transmit Power up to 19.9 dBm EIRP
Bluetooth	Frequency Band(s) 2402 - 2480 MHz, Transmit Power up to 10 dBm EIRP

OTHER FEATURES

LED diagnostics	power state, communication status
RF Range	Up to 150 m line of sight The actual wireless range depends on installation position, antenna orientation, vehicle body structure and surrounding RF conditions.

ENVIROMENT

IP Class (IEC529)	IP67
EMC Conformity	EN61000-6-2 noise immunity EN61000-6-4 radiation of interference
Temperature Range	storage -40° to +85°C (-40° to 185°F) operating -40° to +85°C (-40° to 185°F)

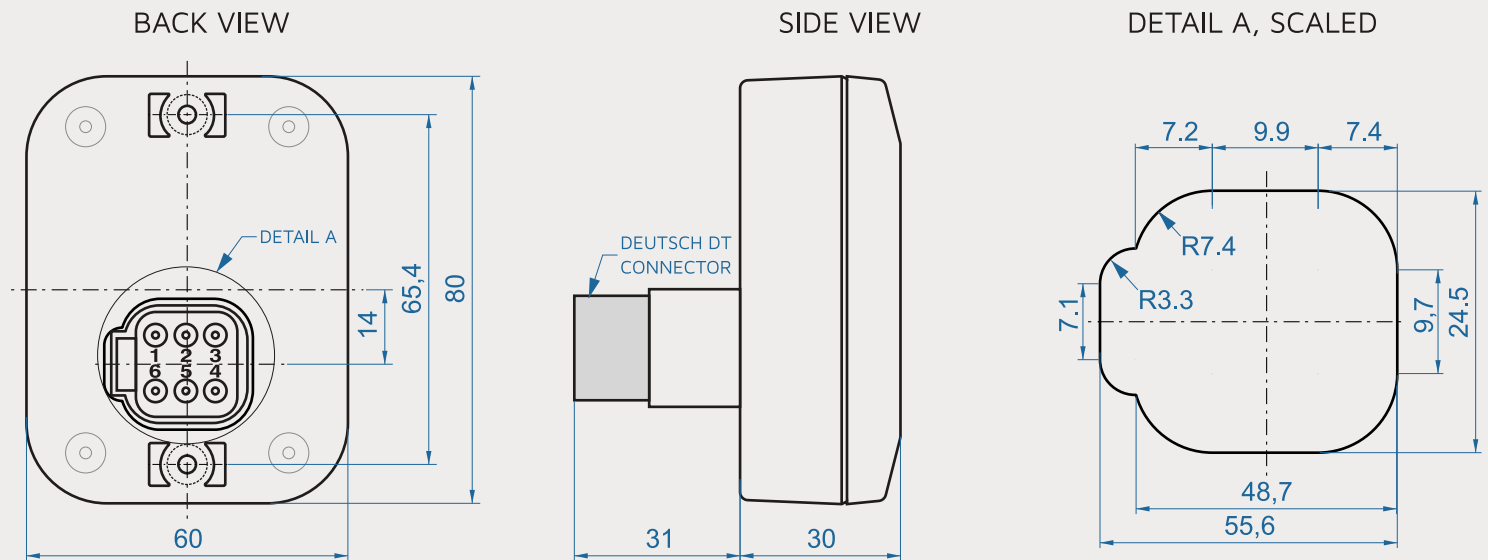
ENCLOSURE

Housing Material	UV-resistant ASA, white -grey
Mounting	with 2 screws max. diameter 3 mm
Mating Connector	Deutsch DT06-6S and DT06-12S

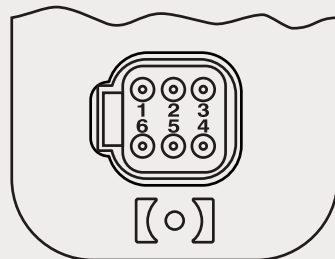
SIZE & WEIGHT

W x H x D	60 x 80 x 30 mm
Weight	75 g with internal antenna

DIMENSIONS



CONNECTIONS



CONNECTION DEUTSCH DT06-6S

PIN	Description
1	BATTERY + ("15")
2	CAN L
3	CAN L, INTERNAL SHORTED TO PIN 2
4	CAN H
5	CAN H, INTERNAL SHORTED TO PIN 4
6	GND (Battery -)

PRODUCT CODE

WBC-01 Wireless CAN Bridge

For more options please contact the supplier.