

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

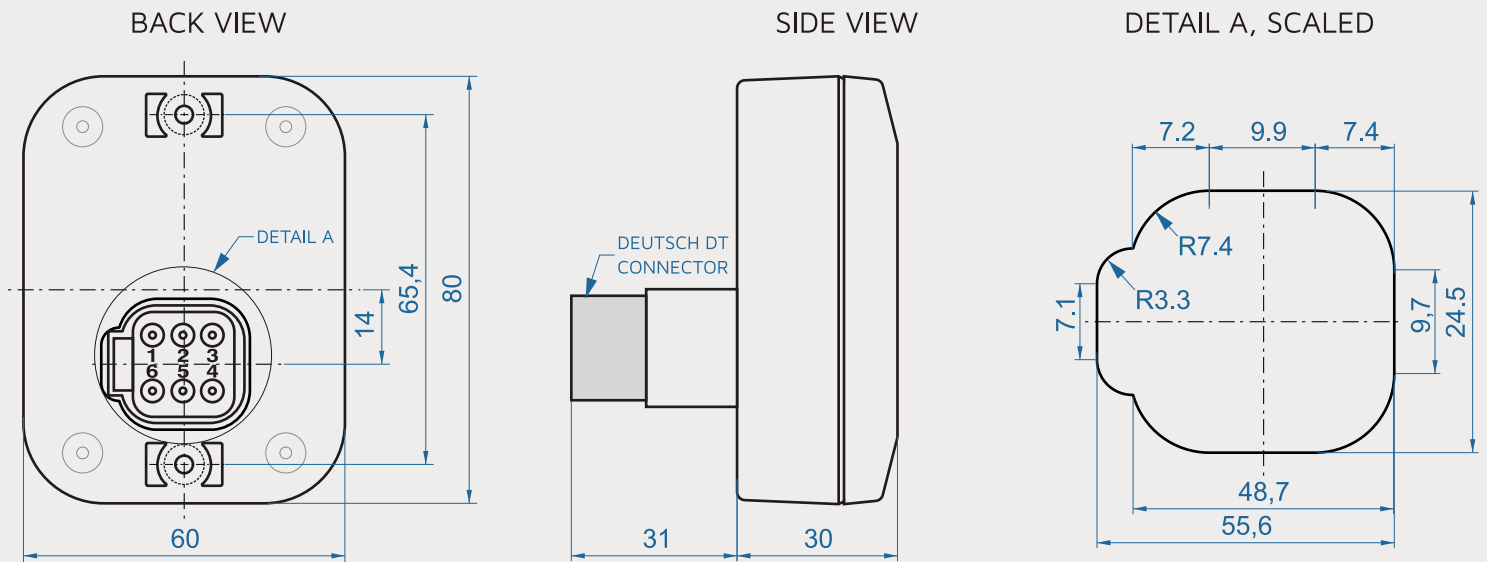
Mating Connector Deutsch DT06-6S and DT06-12S

SIZE & WEIGHT

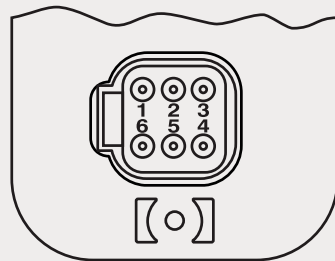
W x H x D 60 x 80 x 30 mm

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.