

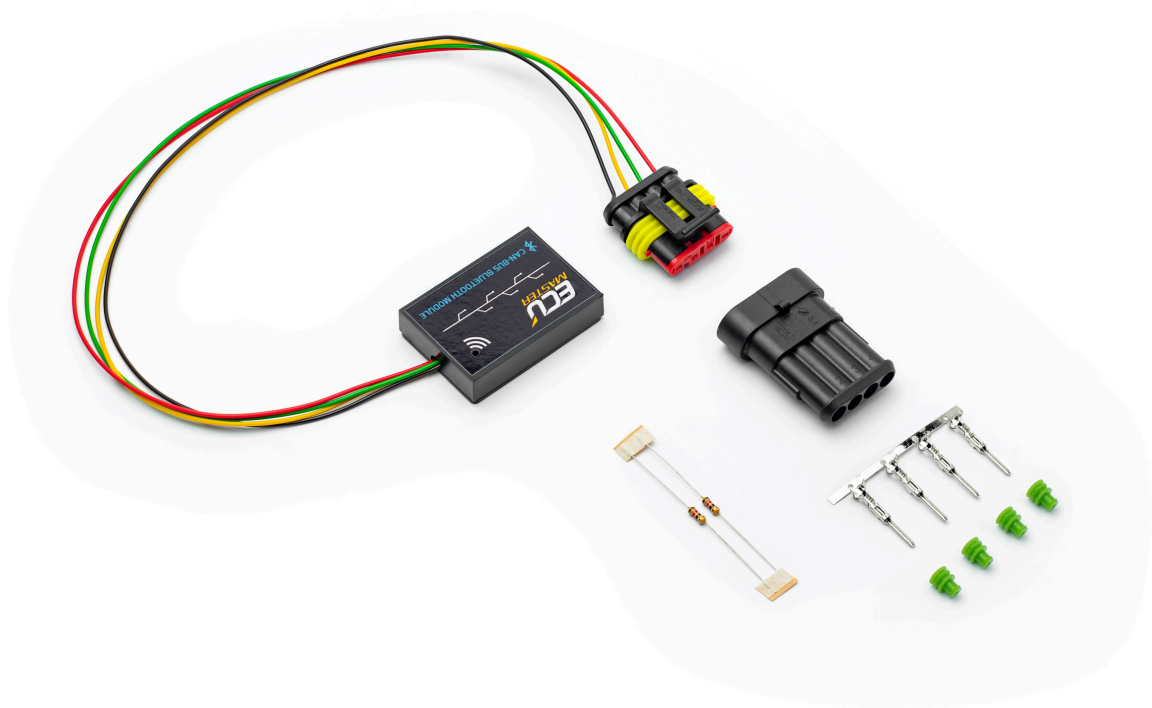


# USER MANUAL

## BT CAN

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# 1. Device description

BT CAN Module is a communication device designed for Ecumaster engine management systems with CAN bus support.

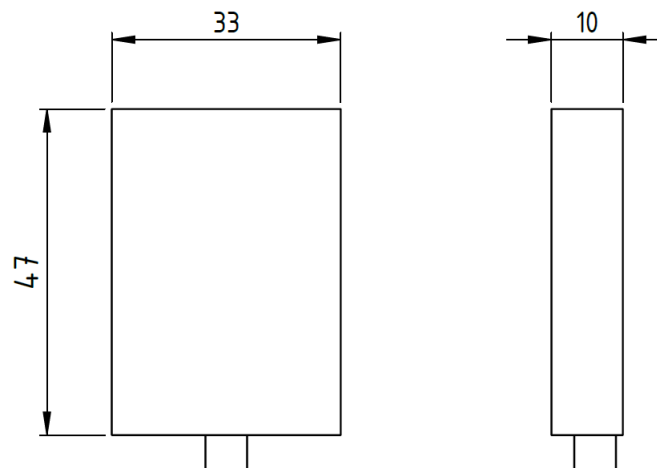
The module receives ECU runtime data via CAN bus and transmits it wirelessly via Bluetooth to external devices. Direct CAN connection is used for EMU Black and EMU PRO, while EMU Classic requires a CAN BUS Module connected to the ECU extension port.

The device operates as a CAN-to-Bluetooth interface for real-time monitoring of ECU parameters.

# 2. Specification

Specification	
Supply voltage	5–12 V
Current consumption	10 mA
Operating temperature	-40 to +85 °C
Connector type	Superseal 4-pin ohw-4
Terminals	282109-1 (Superseal terminal)
Dimensions	47 × 33 × 10 mm
Weight	28 g
Status indication	1 x LED
Communication interface (ECU side)	CAN bus (CAN 2.0B)
Wireless communication	BLE
Data transmission	One-way (CAN → external device)
Data type	CAN data frames

All dimensions in mm



### 3. Installation

#### Pinout

Wire	Description
Red	Power supply (5–12 V)
Black	Ground
Green	CAN High (CAN H)
Yellow	CAN Low (CAN L)

#### Connection

To power and communicate, connect the BT CAN Module to:

- Power: 5–12 V supply
- Ground: vehicle ground
- Communication: CAN High (CAN H) and CAN Low (CAN L)



#### Important:

Ensure proper CAN bus termination (120 Ω resistors must be present at both ends of the CAN bus between CAN H and CAN L).



#### Important:

In **EMU PRO**, CAN 1 operates at a fixed 1 Mbps and cannot be used for BT CAN communication, therefore the module must be connected to **CAN 2**.

**Status indication (LED)**

LED state	Description
Blinking	Module waits for communication
On (solid)	Module connected
Off	No power supply

**EMU Classic connection**

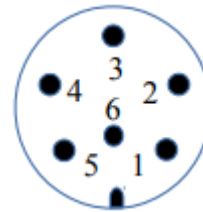
EMU Classic requires CAN BUS Module for BT CAN operation.

Connect CAN BUS Module to the EMU Classic extension port (5-pin).

The module provides CAN bus interface via 6-pin connector.

**CAN BUS Module (6-pin connector)**

Pin	Description
1	<b>CAN Low (CAN L)</b>
2	EXT Analog 1
3	EXT Analog 2
4	EXT Analog 3
5	<b>CAN High (CAN H)</b>
6	EXT Analog 4



Connect **BT CAN Module** to:

Green → CAN H (pin 5)

Yellow → CAN L (pin 1)

## 4. EMU settings

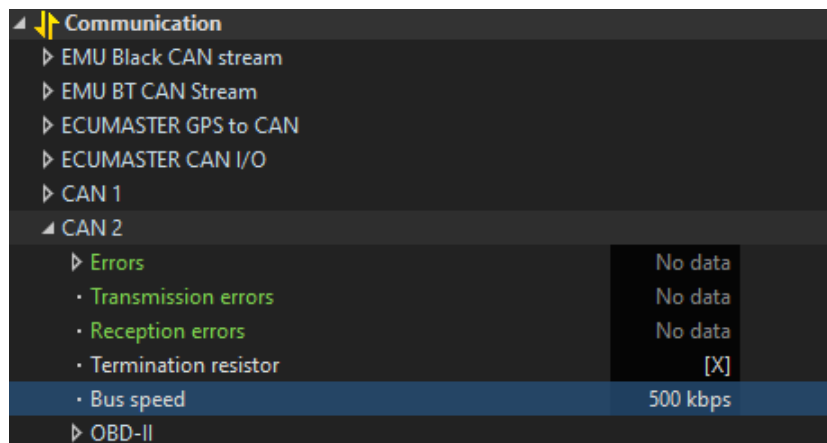
For proper communication, CAN bus transmission to the **BT CAN module** must be enabled. CAN speed for BT CAN operation is **500 kbps**.

### EMU PRO

1. CAN 1 operates at a fixed 1 Mbps. Therefore, the BT CAN Module must be connected to **CAN 2**.

Set the correct CAN 2 speed in:

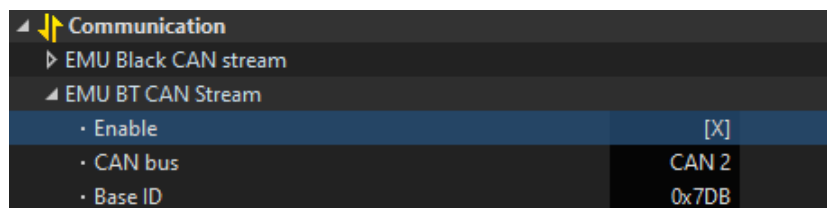
**Communication / CAN 2 / Bus speed**



2. Open **EMU PRO Client** and navigate to:

**Communication / EMU BT CAN Stream**

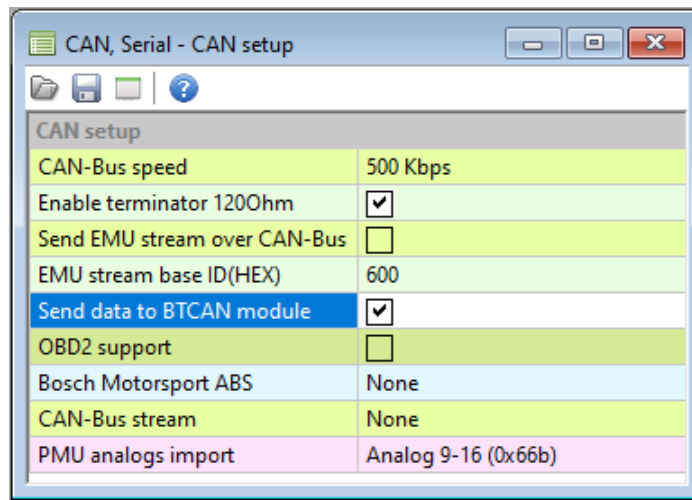
3. Enable **EMU BT CAN Stream**



4. Save changes by pressing **F2** or clicking the *Make permanent* icon on the toolbar.

### EMU Black

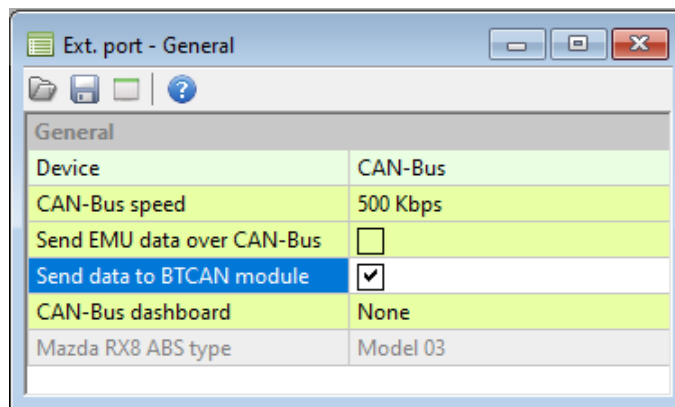
1. Open **EMU Black Client** and navigate to:  
**CAN, Serial / CAN setup.**
2. Set **CAN-Bus speed** to: **500 kbps**  
Enable **Send data to BTCAN module**



3. Save changes by pressing **F2** or clicking the *Make permanent* icon on the toolbar.

### EMU Classic (with CAN BUS Module)

1. Open **Ecumaster EMU Classic Client**, then navigate to:  
**Configuration / Ext. port / General.**
2. In the **Device** field, select: **CAN-Bus**  
Set **CAN-Bus speed** to: **500 kbps**  
Enable **Send data to BTCAN module**



3. Save changes by pressing **F2** or clicking the *Make permanent* icon on the toolbar.

## 5. Document history

Version	Date	Changes
1.0	2026.05.11	Initial release