



# USER MANUAL

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## BT Module

Document version: 1.0

Published on: 11 May 2026



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# 1. Device description

Bluetooth Module is a communication device designed for use with EMU Classic engine management systems.

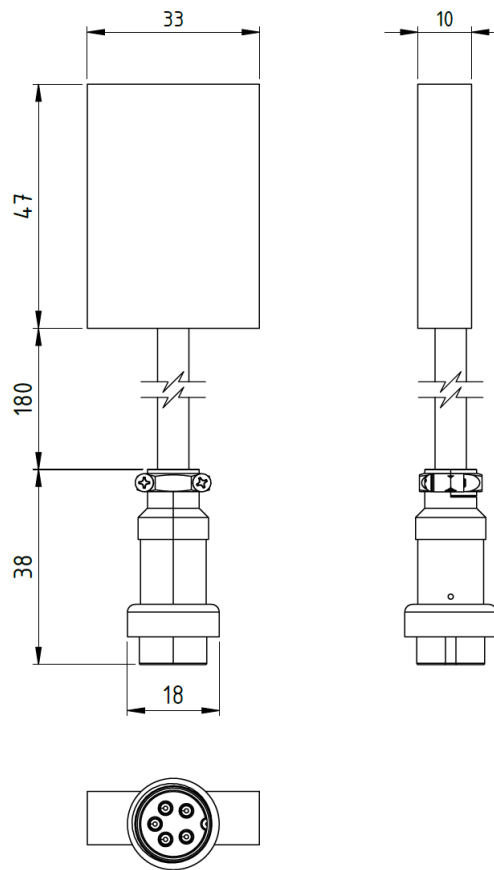
The module enables wireless transmission of ECU runtime data via Bluetooth using the serial communication interface (UART). It provides real-time access to ECU parameters on external Bluetooth-compatible devices.

The device operates as a serial-to-Bluetooth converter and is dedicated to EMU Classic.

# 2. Specification

Specification	
Supply voltage	3.3 V
Operating temperature	-40 to +85 °C
Connector type	ECU extension connector
Dimensions	47 × 33 × 10 mm
Weight	38 g
Status indication	1 x LED
Communication interface (ECU side)	Serial communication (UART)
Wireless communication	BLE
Compatibility	EMU Classic
Data transmission	One-way (ECU → external device)

All dimensions in mm



### 3. Installation

1. Switch OFF the ECU power supply.
2. Connect the Bluetooth Module to the EMU Classic extension port.
3. Ensure the connector is properly seated.
4. Switch ON the ECU power supply.
5. Verify module operation via LED indication:
  - Blinking → module powered, waiting for connection
  - Activity → data transmission in progress

No additional wiring is required.



#### Warning:

The module is designed to operate at 3.3 V supply voltage only.

Pin 5 (+5 V) must not be used.

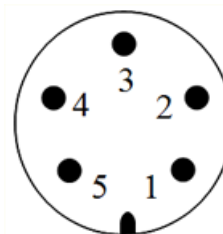
Applying 5 V may result in permanent damage to the device.

Status indication (LED)

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

Module pinout

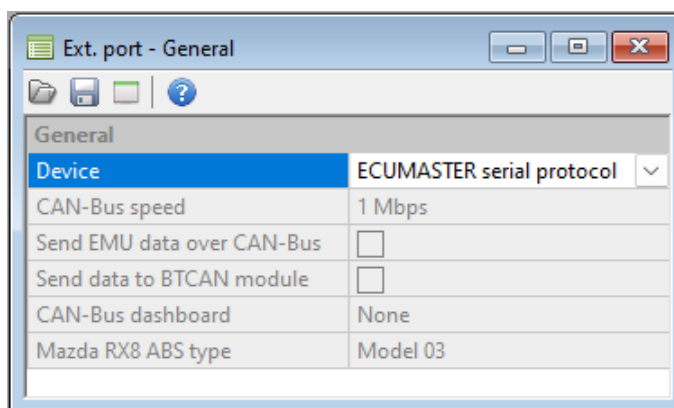
Pin	Description
1	RXD
2	TXD
3	+3,3 V supply
4	Ground
5	+5 V supply (Don't connect)



## 4. EMU settings

For proper communication, the **ECUMASTER serial protocol** must be selected.

1. Open **Ecumaster EMU Classic Client**, then navigate to:  
**Configuration / Ext. port / General.**
2. In the **Device** field, select **ECUMASTER serial protocol**.



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

## 5. Document history

Version	Date	Changes
1.0	2026.05.11	Initial release