

# QUICKSTART GUIDE

## CTM-200 CAN Engine Diagnostics

The CTM-200 includes CAN2.0B Bus Interface support for CAN enabled devices. This quickstart guide provides steps on installation and configuration for CAN engine diagnostics support.

You will require the following setup to support CAN engine diagnostics:

- CTM-200 Gateway loaded with following firmware versions:
  - OpenCTM firmware version R2.0.3.2230 is required
  - Mini-Micro firmware version R103 is required
- Vehicle with OBD2 connector that supports ISO15765-4 protocol, OR
- Vehicle with J1939 connector that supports J1939 protocol

Additional cables are required and are available for purchase from Cypress Solutions:

- CAN cable assembly (P/N 1000.0048)
- J1939 Y-cable assembly (P/N 1000.0044), OR
- OBD2/J1962 Y-cable assembly (P/N 1000.0045)

## Installation



On the CTM-200, the CAN connector port is located on the same side as the RF and GPS antenna ports. Connect the DB9 connector of the OBD2 or J1939 Y-cable assembly to the DB9 connector of the CAN cable assembly.

Connect the CAN connector end of the CAN cable assembly to the CTM-200's CAN bus port.

- Pin 1: RED – CAN High Node
- Pin 2: YELLOW – Common Ground – Optional
- Pin 3: GREEN – CAN Low Node
- Pin 4: BLACK – Chassis Ground – Optional





Connect the connector with RED/GREEN wires to the top row of the CAN port, with RED wire on the left and GREEN wire on the right.

Connect the connector with YELLOW/BLACK wires to the bottom row of the CAN port, with YELLOW wire on the left and BLACK wire on the right. This connector is optional and is not always required.

**For vehicles with OBD2 support:**

Connect the OBD2 connector end of the OBD2 Y-cable assembly to the vehicle's OBD2 connector port.

**For vehicles with J1939 support:**

Connect the J1939 connector end of the J1939 Y-cable assembly to the vehicle's J1939 connector port.

## CTM-200 Configuration

1. From the CTM-200's command line, enter the following commands to enable internal CAN support, set the protocol to ISO15765-4, and set all parameters to be queried:

```
cmd can prot 1
cmd can engparam FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFE
cmd can apply
cmd save
```

Notes:

- o **cmd can engparam** above contains 31 F characters followed by an E character.
- o To set the protocol to J1939, enter the command **cmd can prot 2**

2. Display OBD engine parameters using **cmd obddata**:

**cmd obddata**

```
These OBD engine parameters were updated 000 seconds ago
Timestamp : Thu Jan1 00:08:34 1970
p1=186,p2=3696.0,p3=40,p4=AGV-SIMULATOR 1.5
p5=0,p6=0,p7=50,p8=95
p9=384,p10=128,p12=80,p13=81.92
p37=00
OK
```

3. Configure the CTM-200 to send OBD reports using the reporting type of your choice. For example to send remote OBD reports via UDP to 1.2.3.4 port 1234:

**cmd pobda p1 p2 p3 p4**  
**cmd pobdb p5 p6 p7 p8**  
**cmd pobdc p9 p10 p11 p12**  
**cmd pobdd p13 p14 p15 p16**  
**cmd obdreport 1 1**  
**cmd obdreport 2 2**  
**cmd repaddmes 1 3 80 119 120**  
**cmd repaddmes 2 3 80 121 122**  
**cmd repremip 1 1.2.3.4**  
**cmd repremip 2 1.2.3.4**  
**cmd repremport 1 1234**  
**cmd repremport 2 1234**  
**cmd reptype 1 0 3**  
**cmd reptype 2 0 3**  
**cmd obdcond 1 1 10**  
**cmd obdcond 2 1 10**  
**cmd save**

Please refer to the [CTM-200 online command reference](#) on the Cypress web site for more details on CTM-200 command syntax and parameters.

## Contact

FOR TECHNICAL SUPPORT CONTACT:

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