

OBD Device Debugging

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Solution applies for these devices [FMB001](#) [FMC001](#) [FMM001](#) [FMB003](#) [FMC003](#) [FMM003](#) [FMC00A](#) [FMM00A](#)

OBD Data Debugging

Device does not read listed OBD OEM parameters

If you have a vehicle that is listed in the [OBD OEM Supported Vehicle List](#) but OBD OEM is not read - follow the log capturing guide below.

Capturing OBD logs from FMX00X via OEM Reset

1. Update the device to the latest firmware available. Preferably **03.28.03.Rev.97** or newer.
2. Check for the Configuration. On certain vehicles VIN number is not read automatically - Usually it is with EVs. For this matter check [OBD Feature](#)
3. Make sure that the FMX00X is [connected properly](#) to the OBDII Socket.
4. **Start vehicle engine.**
5. Send following **SMS commands** to FMX00X device:
 - If you have set SMS login and password: login pass oemreset
 - If SMS login and password are not set leave two spaces before command: oemreset
 - You can use **OEM Reset** button in **Configurator Tool** as well.
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6. After sending **oemreset** wait up to 2 minutes for the device to acquire OEM file. Vehicle should be **turned on/engine on** and **stationary**.
7. During this time, take photographs of instrument cluster where **Mileage, Fuel Level** and

Battery Level (if it is an EV) is visible.

8. Proceed with log collecting within 1 hour [via Configurator Tool or via FOTA WEB](#)

Requesting for OBD OEM Support / General Problems

If you have a vehicle that is not listed in the [OBD OEM Supported Vehicle List](#) or you are facing problems with OBD OEM in General - follow the log capturing guide below.

Capturing OBD logs from FMX00X with Filters

1. Update the device to the latest firmware available.
2. Make sure that the FMX00X is [connected properly](#) to the OBDII Socket.
3. **Start vehicle engine.**
4. Send following **SMS commands** to FMX00X device:
 - If you have set SMS login and password:login pass log2sdfilterset 0;2;3;4;1
 - If SMS login and password are not set leave two spaces before command:
aa log2sdfilterset 0;2;3;4;1

If command log2sdfilterset was sent correctly you should receive SMS
Response:Enabled Trace Filters:5

5. After the SMS response message OBD log capturing will be started.
6. OBD Function will not work, if vehicle is turned off or not moving - meaning that you need to test drive it for around 10 minutes.
7. During this time, take photographs of instrument cluster where **Mileage, Fuel Level and Battery Level** (if it is an EV) is visible.
8. After the test drive, **turn off** vehicle engine.
9. **Download** captured log files [via Configurator Tool or via FOTA WEB](#)

Log Collecting

Download logs via Teltonika Configurator



Please check [Status info→Maintenance→Log/Dump](#) and download dump
YYYY_MM_DD_HH_MM_SS_FMB1YX_IMEI_Dump.zip.

Download logs via FOTA WEB



Enter FOTA WEB → Press on **Devices** tab → Select your device and press → **Task type** → **Receive internal log** → **From Oldest** → **Count 10** (10 files. Each log size up to 1 MB) →

To start download process at once send following SMS command:

- If you have set SMS login and password: `login pass web_connect`
- If SMS login and password are not set leave two spaces before command:
`web_connect`

If command was sent correctly you should receive SMS Response: `web_connect resp:OK`

To find downloaded log press on **Tasks** tab → Find your device by IMEI and Task type **Received internal log** → Download `IMEI_logs_TIMESTAMP.zip` as showed below:



2. These log (dump) files can be read only with **special software**. Provide these files to your **Teltonika Telematics Sales manager** or **Teltonika Telematics Support team** for further investigation.

Basic OBD OEM Configuration

- You need to make sure that your vehicle is supported with OBD OEM parameters. Compatibility can be checked here: [OBD OEM Supported Vehicle List](#)
- Enable [Codec 8 Extended](#) Protocol

Data Protocol



- Configure **Ignition Settings** according to your vehicle.

If the vehicle is equipped with **Internal Combustion Engine**, it is recommended to keep **Ignition Source settings** with *Power Voltage*. Otherwise, if it is an **EV/HV**, set **Ignition Source settings** as *Accelerometer*.

- Check if **OBD Feature** is *Enabled*

For **Internal Combustion Engine & HV OBD (Auto)** must be Checked. [If it is an EV, use Non-OBD compliant and enter VIN Source Manually.](#)

- Now it is necessary to enable OBD OEM parameters according to the vehicle list



Let's say we have a VW Polo 2016. The list tells that **Mileage** (AVL ID 389), **Fuel Level in Liters** (AVL ID 390) and **Fuel Level in %** (AVL ID 48) is supported.

- Enable the listed parameters



Enabled Fuel Level in % (AVL ID 48) Parameter.



Enabled Mileage (AVL ID 389) and Fuel Level in Liters (AVL ID 390) Parameter.

- After enabling the parameters proceed with installation of FMX00X device into the OBDII port.

Once the device is installed, turn on the Ignition and send SMS command **web_connect**. This will force the device to acquire OBD OEM File from FOTA WEB.

Verify the Status on FOTA WEB

- Open your FOTA WEB account
- Find device by IMEI

Under *Details, OBD* section, you should

see the *VIN* Number of your vehicle:

Under *Tasks*, you can verify if the file is delivered to the device or not:



IMEI:

FMB003



Details

Tasks

Changes

Detailed list of device tasks

2023-04-27	Task type	Status
18:06:04	Transfer OBD configuration file	Completed
2023-04-26		
09:21:42	Receive configuration	Completed
2023-04-25		
08:28:31	Transfer OBD configuration file	Completed

Lastly, check your server for the availability of OBD OEM Data.

OBD Feature

OBD Feature for Vehicles with Internal Combustion Engine



Regular configuration for vehicles with Internal Combustion engines. **OBD Feature** OBD (Auto), **Vin Source** (Auto).



If Auto VIN reading does not work, enter VIN Number manually.

OBD Feature for EVs



Configuration for EVs. **OBD Feature** Non-OBD compliant, **Vin Source** (Manual) - enter VIN Number manually.

Renault & Peugeot Specific FMB003 Information

If you have Renault or Peugeot vehicle and OBD OEM does not work, check if you have the latest FMB003 Hardware.

Verify FMB003 Hardware Status on FOTA WEB

- Open your FOTA WEB account
- Find device by IMEI

OLD HARDWARE NEWER HARDWARE



With this example **FMB0030ENJ01** is an old hardware and **FMB00377NJ01** being a newer one. If Product Code contains - FMB003**0E** consider getting a newer Hardware. Contact your Sales Manager for more information.