



FMB001

Easy OBDII tracker

Quick Manual
v1.0

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Know your device

Top view



Bottom view (without cover)

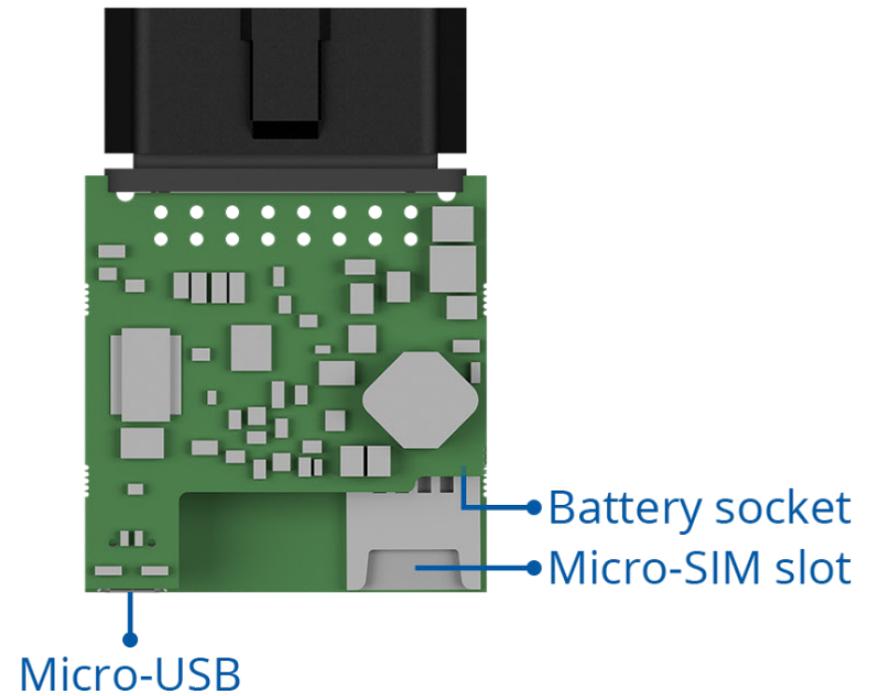


Figure 1 FMB001 device view

Pinout

Table 1 OBDII pinout

PIN NUMBER	PINNAME	DESCRIPTION
1	DIN1	Ignition input
2	PWM_BUS+/VPW	
4	GND (-)	Ground
5	GND (-)	Ground
6	CAN_H	CAN high
7	K-Line	
10	PWM_BUS-	
14	CAN_L	CAN low
15	L-Line	
16	VCC (10 - 30)V DC(+)	Power supply (+10-30 V DC)

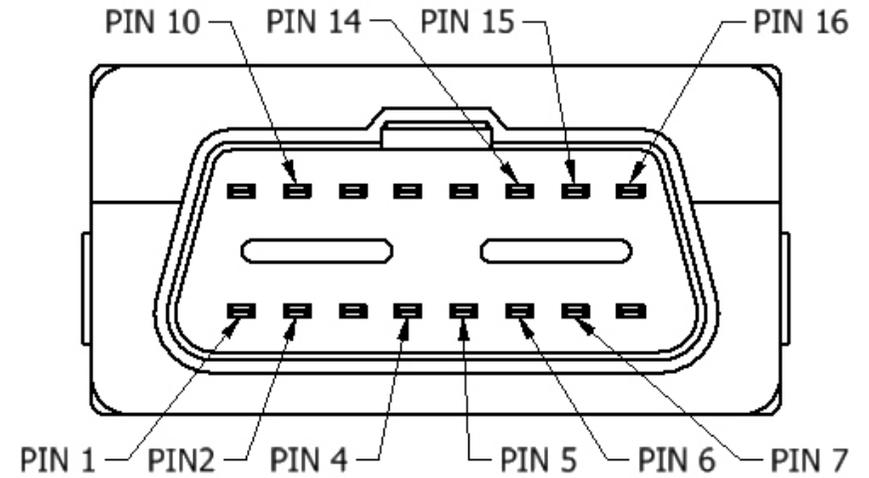


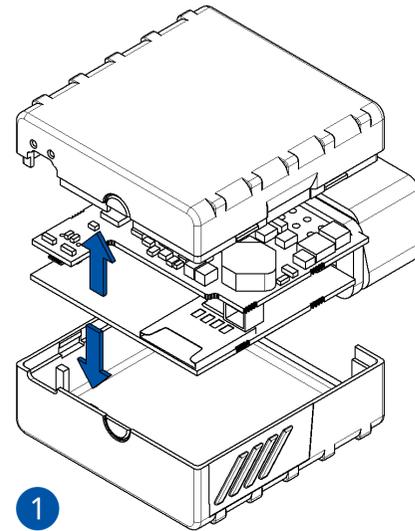
Figure 2 FMB001 OBDII socket pinout

Set up your device

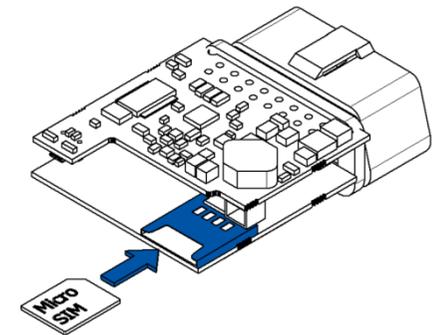
How to insert Micro-SIM card and connect the battery

1. Gently remove FMB001 **cover** using **plastic pry tool** from both sides.
2. Insert **Micro-SIM** card as shown with **PIN request disabled** or read our [Wiki](#) how to enter it later in **Configurator**. Make sure that Micro-SIM card **cut-off corner** is pointing forward to slot.
3. Connect **battery** as shown to device. Position the battery in place where it does not obstruct other components.
4. Attach device **cover** back.

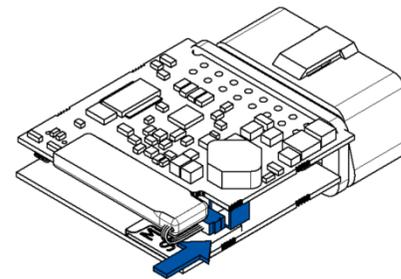
Device is ready to be connected.



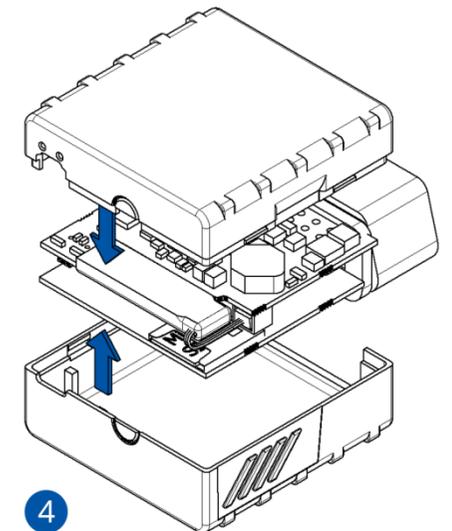
1
Figure 3 Cover removal



2
Figure 4 Micro-SIM card insert



3
Figure 5 Battery connection



4
Figure 6 Attaching cover back

PC Connection (Windows)

1. Power-up FMB001 with **DC voltage (10 – 30 V)** power supply using **supplied power cable**. LED's should start blinking, see "[LED indications](#)".
2. Connect device to computer using **Micro-USB cable** or **Blue-tooth** connection:
 - Using **Micro-USB cable**
 - You will need to install USB drivers, see "[How to install USB drivers \(Windows\)](#)"
 - Using **Blue-tooth**
 - FMB001 Blue-tooth is enabled by default. Turn on **Blue-tooth** on your PC, then select **Add Blue-tooth or other device > Blue-tooth**. Choose your device named – "**FMBxxx_last_7_imei_digits**", without **LE** in the end. Enter default password **5555**, press **Connect** and then select **Done**.
3. You are now ready to use the device on your computer.

How to install USB drivers (Windows)

1. Please download COM port drivers from [here](#).
2. Extract and run **TeltonikaCOMDriver.exe**.
3. Click **Next** in driver installation window.
4. In the following window click **Install** button.

Setup will continue installing the driver and eventually the confirmation window will appear. Click **Finish** to complete the setup.

Configuration (Windows)

At first FMB001 device will have default factory settings set. These settings should be changed according to the user's needs. Main configuration can be performed via **Teltonika Configurator** software. Contact sales manager to get the latest **Configurator** version or download it from [here](#). Configurator operates on **Microsoft Windows OS** and uses prerequisite **MS .NET Framework**. Make sure you have the correct version installed.

Table 2 MS .NET requirements

MS.NET REQUIREMENTS

Operating system	MS .NET Framework version	Version	Links
Windows Vista Windows 7 Windows 8.1 Windows 10	MS .NET Framework 4.6.2	32 and 64 bit	www.microsoft.com

Downloaded **Configurator** will be in compressed archive. Extract it and launch **Configurator.exe**. After launch software language can be changed by clicking  in the right bottom corner ([Figure 7 Language selection](#)).

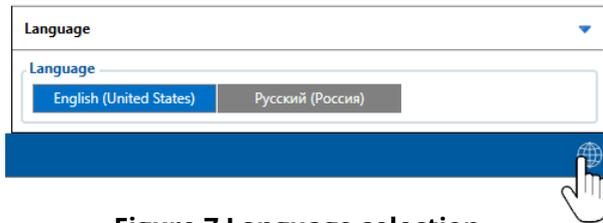


Figure 7 Language selection

Configuration process begins by pressing on connected device (**Figure 8 Device connected via USB**).



Figure 8 Device connected via USB

After connection to Configurator **Status window** will be displayed (**Figure 9 Configurator Status window**).

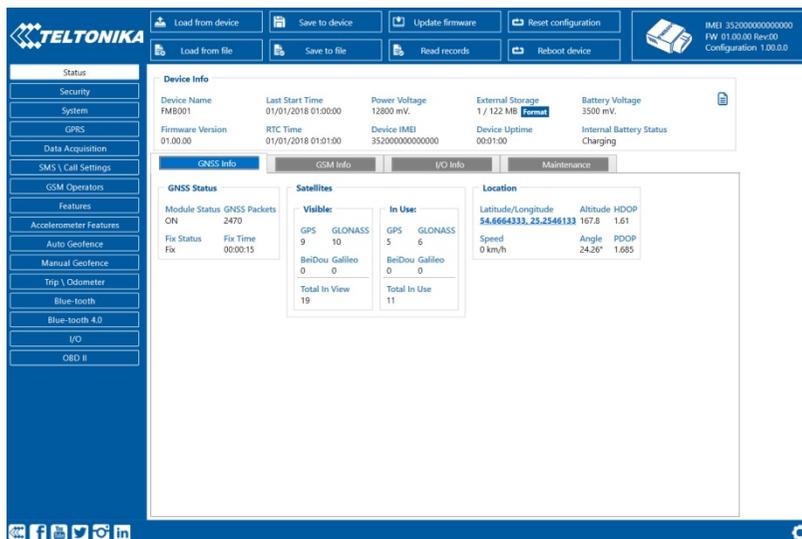


Figure 9 Configurator Status window

Various **Status window** tabs display information about **GNSS**, **GSM**, **I/O**, **Maintenance** and etc. FMB001 has one user editable profile, which can be loaded and saved to the device. After any modification of configuration the changes need to be saved to device using **Save to device** button. Main buttons offer following functionality:

1. **Load from device** – loads configuration from device.
2. **Save to device** – saves configuration to device.
3. **Load from file** – loads configuration from file.
4. **Save to file** – saves configuration to file.
5. **Update firmware** – updates firmware on device.
6. **Read records** – reads records from the device.
7. **Reboot device** – restarts device.
8. **Reset configuration** – sets device configuration to default.

Most important configurator section is **GPRS** – where all your server and **GPRS settings** can be configured and **Data Acquisition** – where data acquiring parameters can be configured. More details about FMB001 configuration using Configurator can be found in our **Wiki**.

LED indications

Table 3 Navigation LED indications

BEHAVIOUR	MEANING
Permanently switched on	GNSS signal is not received
Blinking every second	Normal mode, GNSS is working
Off	GNSS is turned off because: Device is not working or Device is in sleep mode
Blinking fast constantly	Device firmware is being flashed

Table 4 Status LED indications

BEHAVIOUR	MEANING
Blinking every second	Normal mode
Blinking every two seconds	Sleep mode
Blinking fast for a short time	Modem activity
Off	Device is not working or Device is in boot mode

Characteristics

Basic characteristics

Table 5 Basic characteristics

MODULE	
Name	TM2500
Technology	GSM, GPRS, GNSS, BLUE-TOOTH
GNSS	
GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
Receiver	33 channel
Tracking sensitivity	-165 dBm
Accuracy	< 3 m
Hot start	< 1 s
Warm start	< 25 s
Cold start	< 35 s
CELLULAR	
Technology	GSM
2G bands	Quad-band 850 / 900 / 1800 / 1900 MHz
Data transfer	GPRS Multi-Slot Class 12 (up to 240 kbps), GPRS Mobile Station Class B
Data support	SMS (text/data)

POWER

Input voltage range	10 - 30 V DC with overvoltage protection
Power consumption	At 12V < 5 mA (Ultra Deep Sleep)
	At 12V < 7 mA (Deep Sleep)
	At 12V < 7 mA (Online Deep Sleep)
	At 12V < 8 mA (GPS Sleep)
	At 12V < 28 mA (nominal)

BLUE-TOOTH

Specification	4.0 + LE
Supported peripherals	Temperature and Humidity sensor , Headset, OBDII dongle

OBDINTERFACE

Data	K-Line, CAN Bus data
Data reading	Up to 32 vehicle onboard parameters, 10 supported OBD protocols

INTERFACE

Digital Inputs	1
Connection	OBDII socket
GNSS antenna	Internal High Gain
GSM antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	Micro-SIM
Memory	128MB internal flash memory

PHYSICAL SPECIFICATION

Dimensions	50,7 x 49,6 x 25 mm (L x W x H)
Weight	63 g

OPERATING ENVIRONMENT

Operating temperature	-25 °C to +55 °C
Storage temperature	-40 °C to +70 °C
Operating humidity	5% to 95% non-condensing
Ingress Protection Rating	IP41

FEATURES

Sensors	Accelerometer
Scenarios	Green Driving , Over Speeding detection , Jamming detection , GNSS Fuel Counter , Excessive Idling detection , Unplug detection , Towing detection , Crash detection , Auto Geofence , Manual Geofence , Trip
Sleep modes	GPS Sleep , Online Deep Sleep , Deep Sleep , Ultra Deep Sleep
Configuration and firmware update	FOTA Web , FOTA , FMB Configurator (USB, Blue-tooth), FMBT mobile application (Configuration)
SMS	Configuration, Events, Debug
GPRS commands	Configuration, Debug
Time Synchronization	GPS, NITZ, NTP

Safety information

This message contains information on how to operate FMB001 safely. By following these requirements and recommendations, you will avoid dangerous situations. You must read these instructions carefully and follow them strictly before operating the device!

- The device uses SELV limited power source. The nominal voltage is +12 V DC. The allowed voltage range is +10...+30 V DC.
- To avoid mechanical damage, it is advised to transport the device in an impact-proof package. Before usage, the device should be placed so that its LED indicators are visible. They show the status of device operation.
- Before unmounting the device from vehicle, ignition **MUST** be **OFF**.



Do not disassemble the device. If the device is damaged, the power supply cables are not *isolated* or the isolation is damaged, DO NOT touch the device before unplugging the power supply.



All wireless data transferring devices produce interference that may affect other devices which are placed nearby.



Please consult representatives of your vehicle model regarding OBDII location on your vehicle. In case you are not sure about proper connection, please consult qualified personnel.



The programming must be performed using a PC with autonomic power supply.



Installation and/or handling during a lightning storm is prohibited.



The device is susceptible to water and humidity.



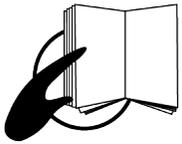
Teltonika is not responsible for any harm caused by wrong cables used for connection between PC and FMB001



WARNING! Do not use FMB00 device if it distracts driver or causes inconvenience due to OBDII placement. Device must not interfere with driver.

Certification and Approvals

- [FMB001 CE / RED](#)
- [FMB001 E-Mark](#)
- [FMB001 EAC](#)
- [FMB001 RoHS](#)
- [FMB001 REACH](#)
- [FMB001 Declaration of IMEI assignment](#)



This sign on the package means that it is necessary to read the User's Manual before your start using the device. Full User's Manual version can be found in our [Wiki](#).



This sign on the package means that all used electronic and electric equipment should not be mixed with general household waste.



Hereby, Teltonika declare under our sole responsibility that the above described product is in conformity with the relevant Community harmonization: European Directive 2014/53/EU (RED).