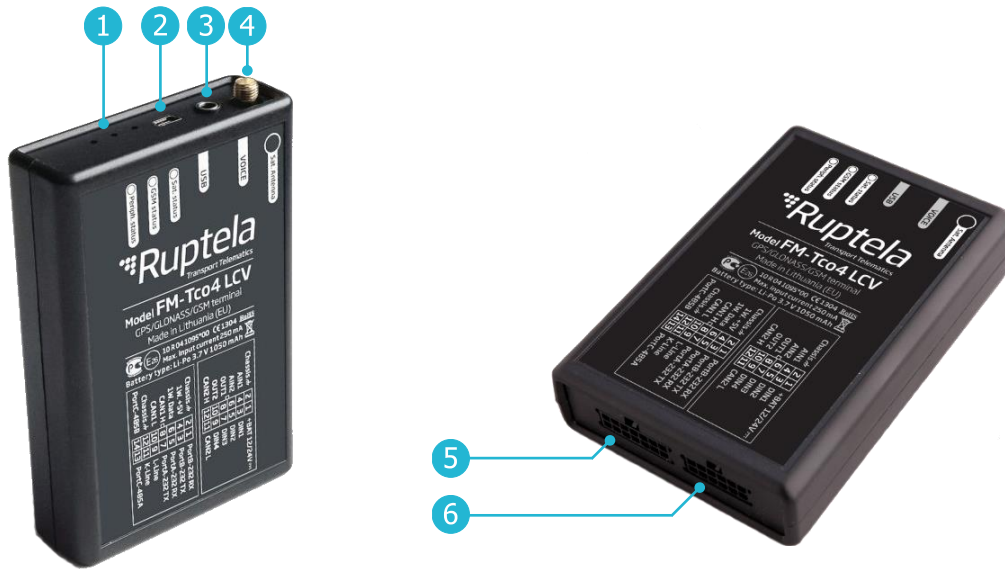


## Make sure that you have:

- An OBD2 standard compatible vehicle
- A computer with Windows 7/8/10
- An internet connection (or a [predownloaded configurator pack](#))
- A USB A to USB mini cable
- An [OBD2 harness](#) (recommended)

## Device overview



- |   |                   |   |               |   |             |
|---|-------------------|---|---------------|---|-------------|
| 1 | Indication LEDs   | 2 | Mini USB port | 3 | Audio jack  |
| 4 | GNSS antenna port | 5 | 14 Pin port   | 6 | 12 Pin port |

## Indication LED patterns

LED	Pattern	Description
GNSS	Once every second	Accurate signal
	Once every 0.4 seconds	No signal
GSM	Once every 4 seconds	Accurate signal
	Once every 0.2 seconds	No signal
	Always on	Link with the server is open
Peripheral	Always off	No devices connected
	Once every 5 seconds	One device connected
	Twice every 5 seconds	Two devices connected
	Three times every 5 seconds	Three devices connected
All	Once every 5 seconds	Sleep/deep sleep mode

## Device pinout

No.	Pin	Wire color	Description
1	+BAT 12/24V	Red	Power supply 12/24 V
2	Chassis	Black	Ground connection
3	DIN1	Pink	Digital input 1
4	AIN1	Grey	Analog input 1
5	DIN2	Blue	Digital input 2
6	AIN2	Green	Analog input 2
7	DIN3	White	Digital input 3
8	DOUT1	Purple	Digital output 1
9	DIN4	Yellow	Digital input 4
10	DOUT2	Orange	Digital output 2
11	CAN2 L	Blue/Red	CAN Low
12	CAN2 H	White/Red	CAN High

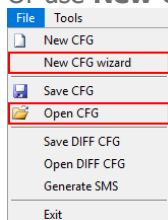
No.	Pin	Wire color	Description
1	PortB-232 RX	Yellow	RS232 RX
2	Chassis	Black	Ground connection
3	PortB-232 TX	Orange	RS232 TX
4	1W. +5V	Red	1-Wire power
5	PortA-232 RX	Purple	RS232 RX
6	1W. Data	Green/Yellow	1-Wire data
7	PortA-232 TX	Pink	RS232 TX
8	CAN1 H	White	CAN High
9	L-Line	Green	CAN L-Line
10	CAN1 L	Blue	CAN Low
11	K-Line	Brown	CAN K-Line
12	Chassis	Black	Ground connection
13	PortC-485 A	White/Red	RS485 line A
14	PortC-485 B	Yellow/Brown	RS485 line B

## Start using in quick 12 steps

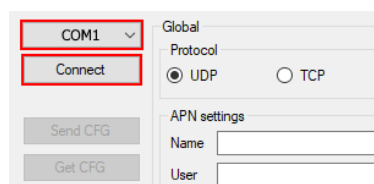
- Download and install the latest [VCOM drivers](#).  
Download the device [configurator](#).



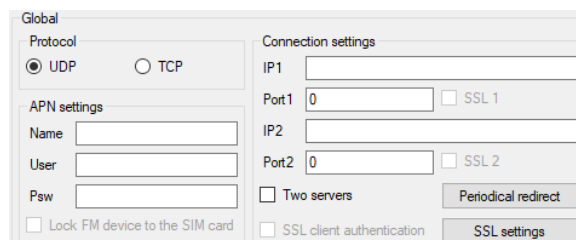
- Download the [sample config file](#).  
Click **File** -> **Open CFG** to load the config file.  
Or use **New CFG wizard** to create a new config.



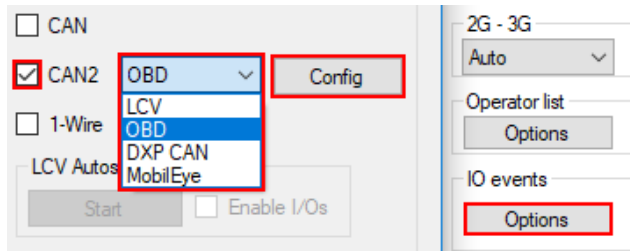
- Connect the device to your computer using a USB cable.  
Start the configurator.  
Select the port you connected your device to.  
Click **Connect** in the configurator.



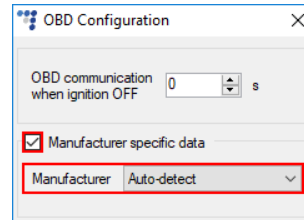
- Configure GSM provider **APN** settings.  
Configure Fleet Management System **Connection** settings.



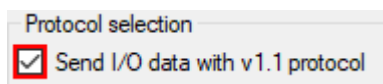
- 5 Click **Options** in **IO events**.  
In **Interfaces**, tick the CAN interface you will connect to (if you have a harness, tick **CAN2**). Select **OBD** in the drop-down list. Click **Config**.



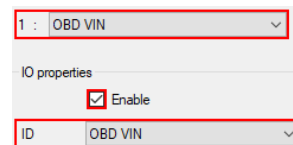
- 6 Tick the **Manufacturer specific data** checkbox.  
Select your vehicle's **Manufacturer** or leave it as *Auto-detect* (will only work if the vehicle's VIN is received).



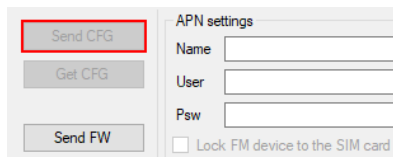
- 7 Enable the v1.1 protocol on the top right side of **IO settings**.



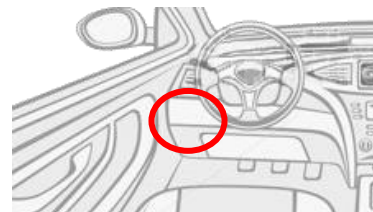
- 8 Select a parameter slot on the top left side of **IO settings**.  
Select an OBD parameter in **ID**.  
Tick the **Enable** checkbox.  
Repeat for all necessary OBD parameters.



- 9 Click **Send CFG** to upload the config to the device.



- 10 Locate the OBD port in your vehicle.  
It is usually located on the driver side underneath a panel, as shown in the image below.



- 11 Install the device in the vehicle using zip-ties.  
**Make sure it is secured tightly.**  
Connect the device using the OBD2 harness (**recommended**).  
Alternatively, connect the device according to the wiring diagram on Page 4.



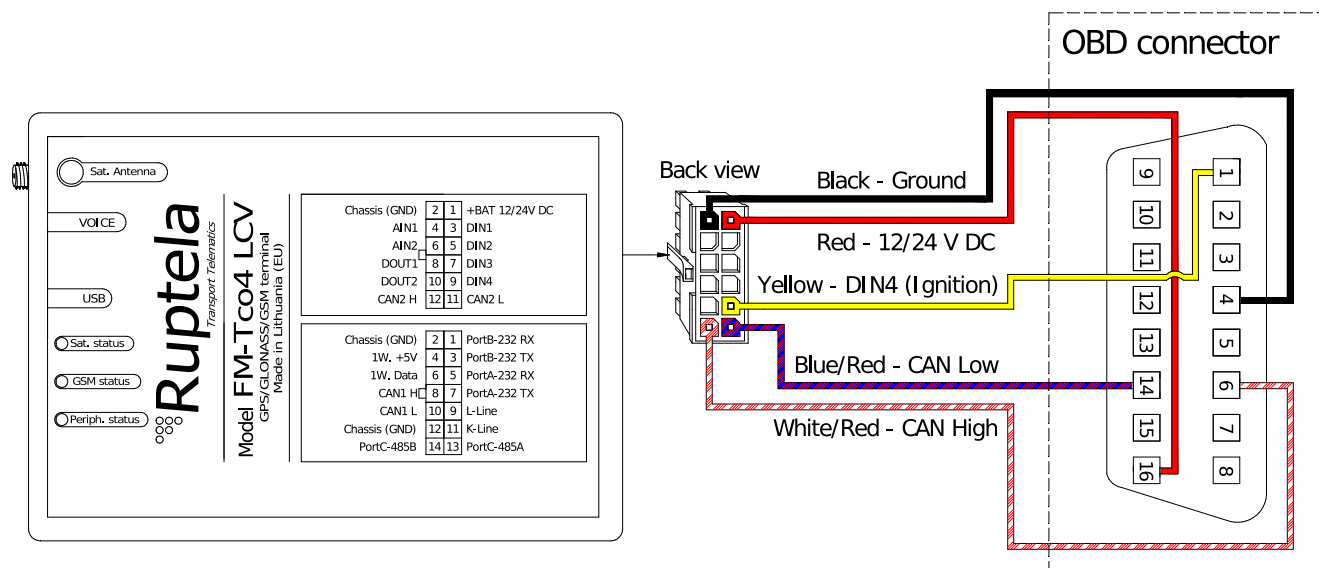
- 12 Install the GNSS antenna directed upwards.  
Follow the recommendations:

- Install behind the dashboard
- Install as close to the window as possible
- Avoid installing near metal surfaces



## Wiring diagram

- Power input 12/24 V DC



## Supported OBD2 parameters list

IO ID	Description	IO ID	Description
93	DTC and MIL status	101	Actual engine – percent torque, %
94	RPM	102	Distance travelled while MIL is activated, km
95	Vehicle speed sensor, km/h	103	Relative accelerator pedal position, %
96	Engine coolant temperature, °C	104-106	VIN code
97	Ambient air temperature, °C	107	Time since engine start, s
98	Fuel level, %	108	DTC counted
99	Type of fuel	642	Fuel level, l
100	Engine fuel rate, l/h	645	Odometer, km
722	Electric vehicle battery level	723	Electric vehicle remaining distance

## Further reading

- Documentation website: <http://doc.ruptela.com>
- List of supported OBD2 vehicles: <https://doc.ruptela.it/display/AB/OBD>
- Datasheet: <https://doc.ruptela.it/pages/viewpage.action?pageId=884777>
- User manual: <https://doc.ruptela.it/pages/viewpage.action?pageId=884777>
- Windows drivers: <https://doc.ruptela.it/display/AB/FM4+drivers>
- Configurator tool: <https://doc.ruptela.it/pages/viewpage.action?pageId=884804>

We highly recommend you to read the user manual before using the device.

## Legal information

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