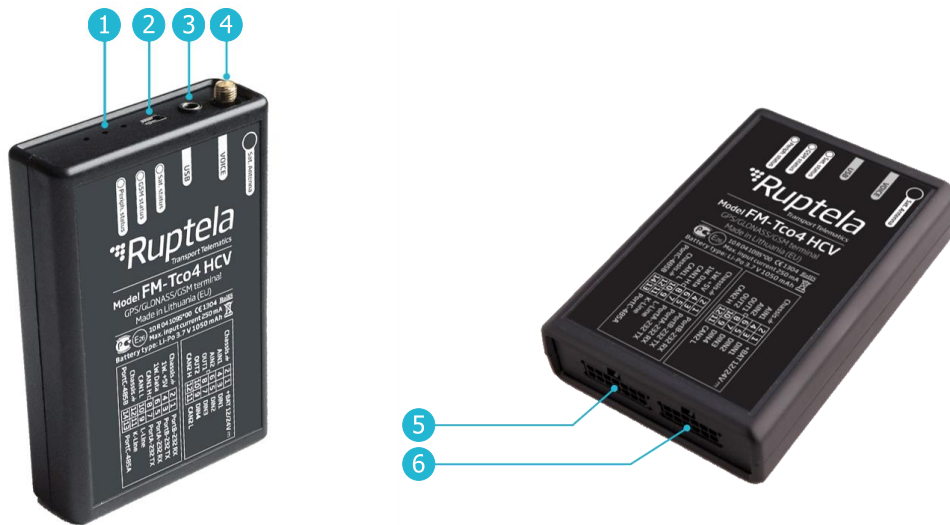


Make sure that you have:

- A computer with Windows 7/8/10
- An internet connection (or a predownloaded configurator pack: [FM-Tco4 HCV](#), [FM-Tco4 LCV](#), [FM-Pro4](#))
- A USB A to USB mini cable
- Tools for installation and wire connection: a screwdriver, a panel removing tool, a wrench, a crimp terminal, zip-ties (or double-sided tape)

Device overview



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

12 Pin cable pinout

Pin	Wire color	Description
+BAT	Red	Power supply 12/24V
GND	Black	Ground connection
DIN1	Pink	Digital input 1
DIN2	Blue	Digital input 2
DIN3	White	Digital input 3
DIN4	Yellow	Digital input 4
AIN1	Grey	Analog input 1
AIN2	Green	Analog input 2
DOUT1	Purple	Digital output 1
DOUT2	Orange	Digital output 2
CAN2 L	Blue/Red	CAN Low
CAN2 H	White/Red	CAN High

14 Pin cable pinout

Pin	Wire color	Description
PortB-232 RX	Yellow	RS232 RX
GND	Black	Ground connection
PortB-232 TX	Orange	RS232 TX
1W +5V	Red	1-Wire power
PortA-232 RX	Purple	RS232 RX
1W Data	Green/Yellow	1-Wire data
PortA-232 TX	Pink	RS232 TX
CAN1 H	White	CAN High
L-Line	Green	CAN L-Line
CAN1 L	Blue	CAN Low
K-Line	Brown	CAN K-Line
GND	Black	Ground connection
PortC-485A	White/Red	RS485 line A
PortC-485B	Yellow/Brown	RS485 line B

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

Configuration

- 1 Insert your SIM card into the device.



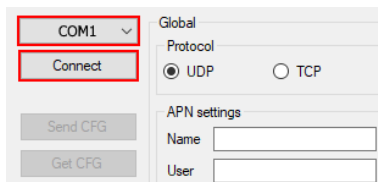
- 2 Download and install the latest [VCOM drivers](#). Download the configurator for your device:

- [FM-Tco4 HCV](#)
- [FM-Tco4 LCV](#)
- [FM-Pro4](#)

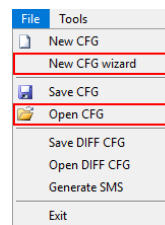
Download the sample config file for your device:

- [FM-Tco4 HCV](#)
- [FM-Tco4 LCV](#)
- [FM-Pro4](#)

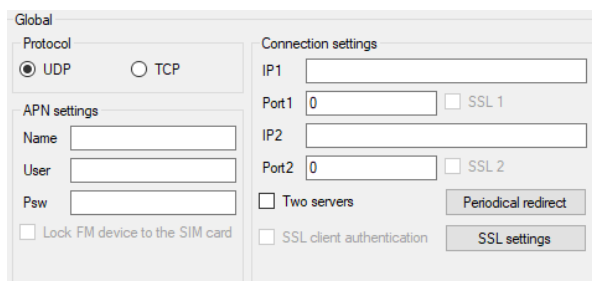
- 3 Connect the device to your computer using a USB cable. Start the configurator. Select the port you connected your device to. Click **Connect** in the configurator.



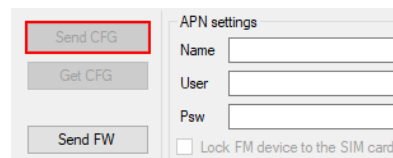
- 4 Click **File -> Open CFG** to load the downloaded sample config file. Or use **New CFG wizard** to create a new config.



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



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



Installation

For faster and easier installation, it is highly recommended to use [installation harnesses](#).

- 1 Install the device directed upwards.
Follow the recommendations:
 - Tilt up to 45 degrees in any axis
 - Install behind the dashboard
 - Install as close to the window as possible
 - Avoid installing near metal surfaces

Fasten the device in the vehicle using zip-ties or double-sided tape.

Make sure it is secured tightly.

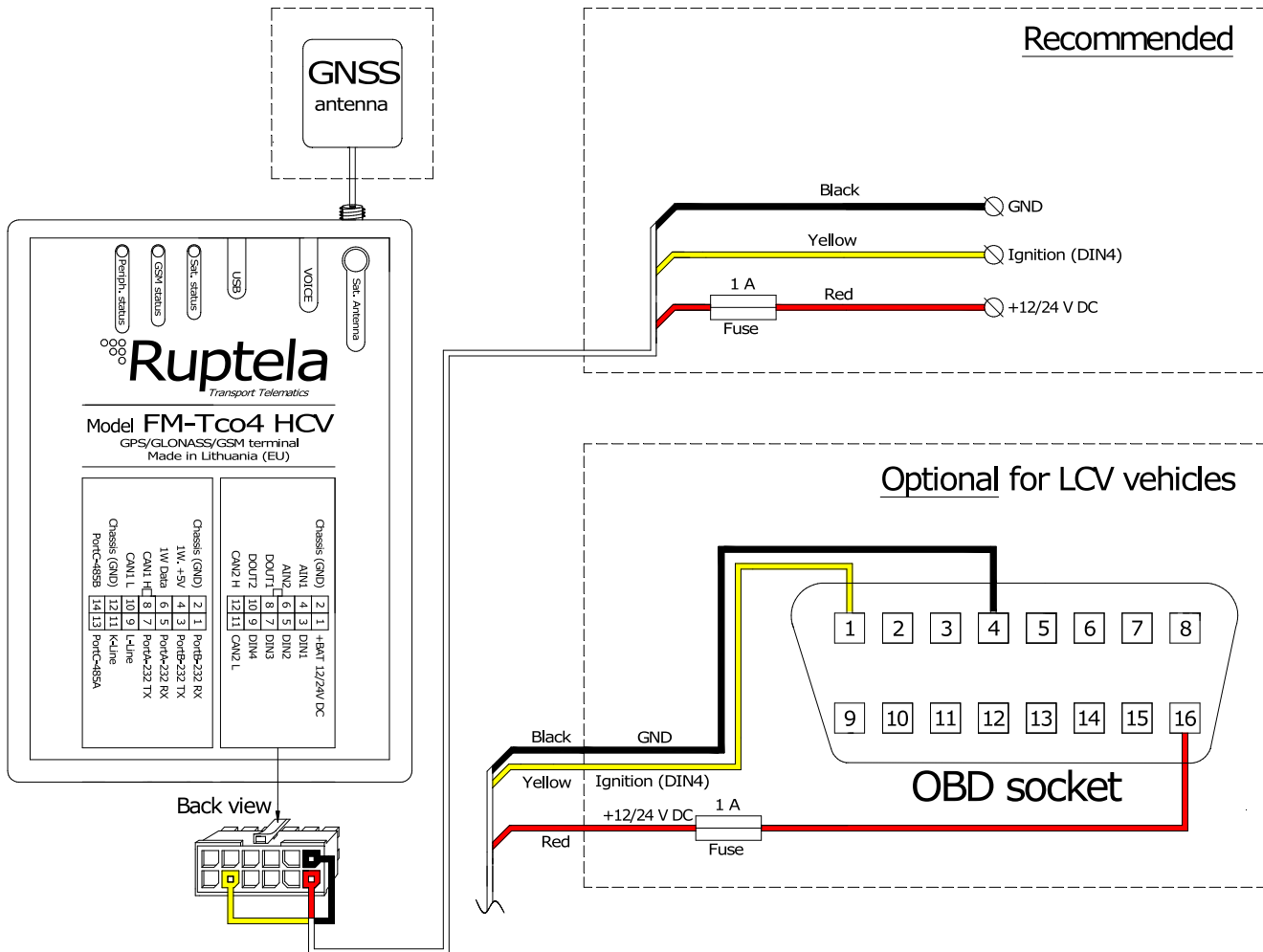
- 2 Install the GNSS antenna directed upwards.



- 3 Connect the device according to the wiring diagram (**on Page 4**).
Turn on the ignition.
Check that the required data is received before finishing the installation.

Wiring diagram

- Power input 12/24 V DC
- Recommended protection fuse 1 A



Further reading

- Documentation website: <http://doc.ruptela.com>
- Datasheet: [FM-Tco4 HCV](#), [FM-Tco4 LCV](#), [FM-Pro4](#)
- User manual: [FM-Tco4 HCV](#), [FM-Tco4 LCV](#), [FM-Pro4](#)
- Windows drivers: <https://doc.ruptela.lt/display/AB/FM4+drivers>
- Configurator tool: [FM-Tco4 HCV](#), [FM-Tco4 LCV](#), [FM-Pro4](#)
- Datasheets and Quick Start guides for harnesses: <https://doc.ruptela.lt/display/AB/Harnesses>

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

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