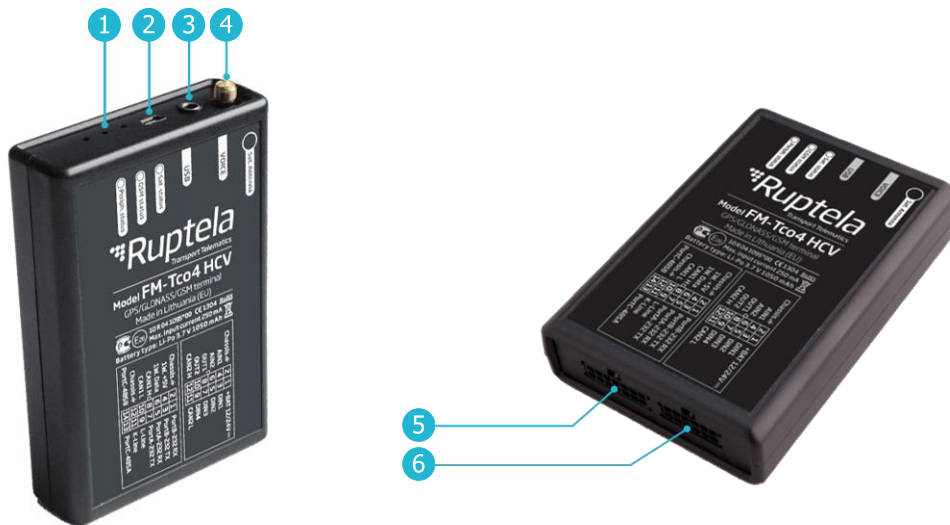


Make sure that you have:

- A computer with Windows 7/8/10
- An internet connection (or a predownloaded [Device Center](#))
- A USB A to USB mini (Type B) 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 USB mini (Type B) 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	L-Line
CAN1 L	Blue	CAN Low
K-Line	Brown	K-Line
GND	Black	Ground connection
PortC-485A	White/Red	RS485 line A
PortC-485B	Yellow/Brown	RS485 line B

Indication LED patterns

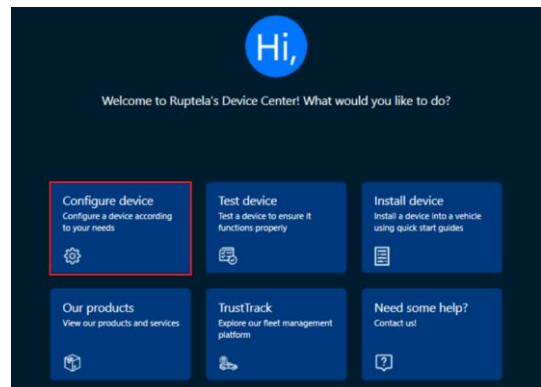
LED	Pattern	Description
GNSS	Once every second	Accurate signal
	Once every 0.4 seconds	No signal
GSM	Once every 4 seconds	Accurate signal
	Once every 0.2 seconds	No signal
	Always on	Link with the server is open
Peripheral	Always off	No devices connected
	Once every 5 seconds	One device connected
	Twice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

Configuration

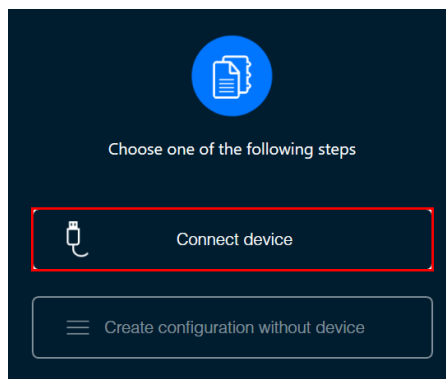
- 1 Insert your SIM card into the device.



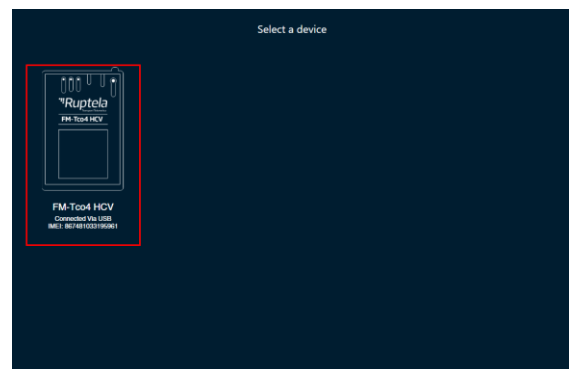
- 2 Download and launch the [Device Center](#). Install device drivers if prompted. Click **Configure device** in the main menu.



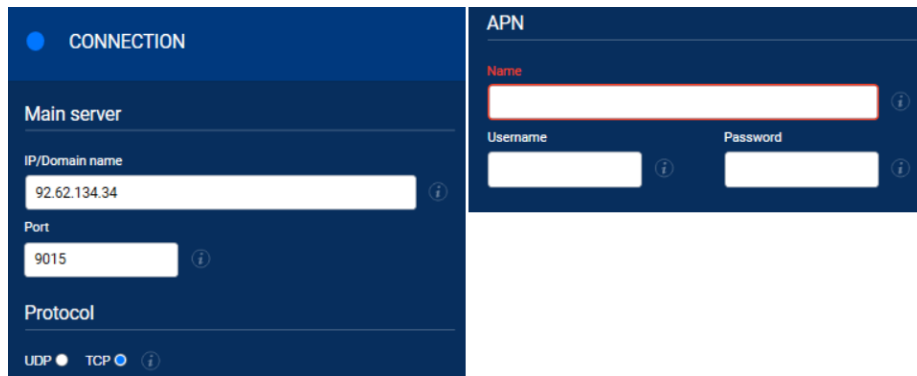
- 3 Connect the device to your computer using a USB cable. Click **Connect device**.



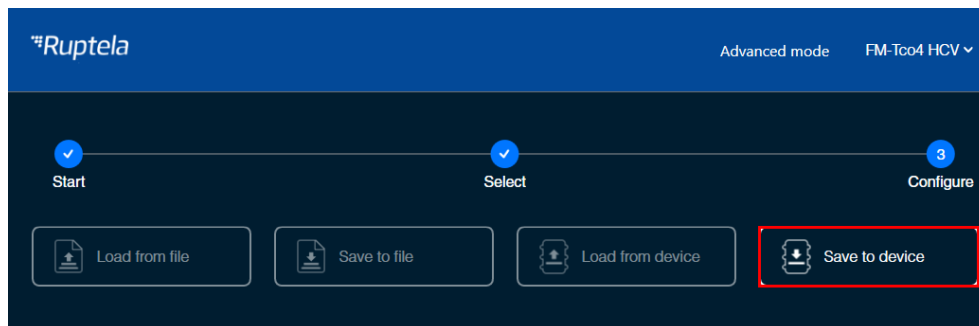
- 4 Select your device.



- Open the **Connection** settings.
Configure Fleet Management System **Main Server** settings (TrustTrack server settings are entered by default).
Configure GSM provider **APN** settings.



- Click **Save to device** to upload the config to the device.



Installation

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

- Install the device, make sure the label is facing towards the sky and is not covered by metal.
Follow the recommendations:
 - It is allowed to tilt up to 45 degrees in any axis, but the top surface in all cases must be facing up
 - Install behind the dashboard
 - Install as close to the windshield 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.

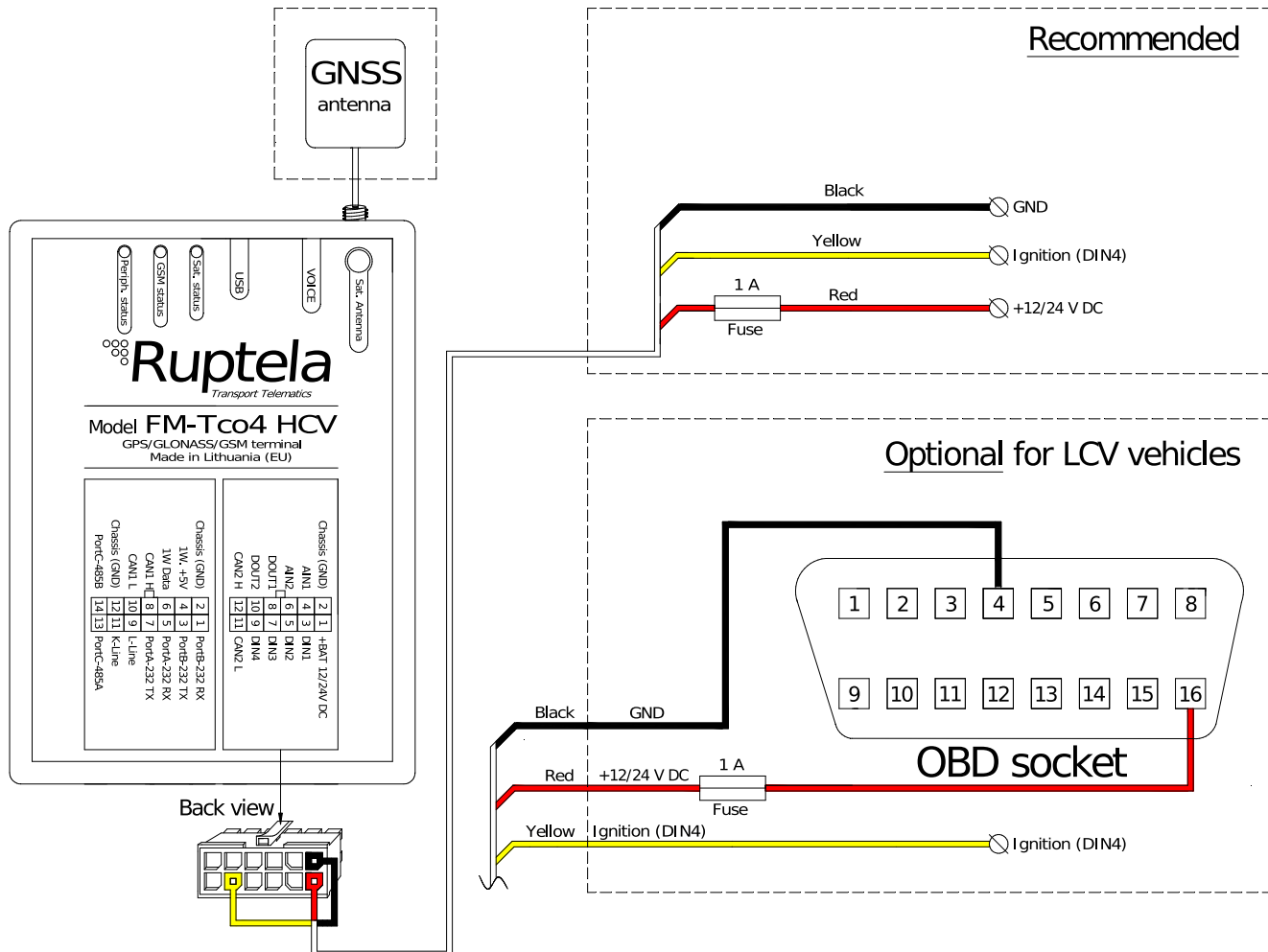
- Install the GNSS antenna facing towards the sky.



- 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: <https://doc.ruptela.it/>
- Datasheet: [FM-Tco4 HCV](#), [FM-Tco4 LCV](#), [FM-Pro4](#)
- User manual: [FM-Tco4 HCV](#), [FM-Tco4 LCV](#), [FM-Pro4](#)
- Device Center: <https://doc.ruptela.it/display/AB/Device+Center>
- Datasheets and Quick Start guides for harnesses: <https://doc.ruptela.it/display/AB/Harnesses>

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

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