

Configurable Sleep

1 Introduction

1.1 About the Functionality

The configurable sleep feature adds flexibility to the tracking device sleep mode configuration. You can select the functionalities that should work in device custom sleep mode and functionalities that should be disabled.

Detailed descriptions of tracking devices and functionalities can be found on our documentation website: doc.ruptela.it

1.2 Legal Information

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1.3 Compatibility

This functionality is compatible with the following devices with the newest firmware version:

- HCV5
- LCV5
- Pro5
- Trace5
- FM-Tco4 HCV
- FM-Tco4 LCV
- FM-Pro4
- FM-Eco4
- FM-Eco4 S/T
- FM-Plug4

1.4 Contact Information

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1.5 Document Changelog

Version	Date	Modification
2.0	2020-07-01	Added: Power consumption increasement. Updated: Manual structure and design.
2.1	2020-07-16	Updated: Compatible device list. Updated: Power consumption.
2.2	2020-08-05	Updated: Power consumption.

1.6 Notations

The following notations are used in this document to highlight important information:

Bold text

Used to indicate user interface elements or for emphasis.

Italic text

Used to indicate items that belong to a list and can be selected, also for identification of examples.

Note



Used to highlight important information or special conditions.

Tip



Suggestions on how to proceed.

2 Description

2.1 Custom Sleep

The configurable sleep feature allows you to select the functionalities, that should work when the device is in custom sleep mode and which functionalities should be disabled.

i All configurable functionalities are disabled in custom sleep mode by default.

Functionalities availability for various devices is shown in the table below:

Functionality	Available options	Compatibility
Modem	<i>Enabled, Sleep, Disabled</i>	All tracking devices
GNSS receiver	<i>Enabled, Disabled</i>	All tracking devices
Battery charge	<i>Enabled, Disabled</i>	All tracking devices
WakeUp when DIN is high	<i>Enabled, Disabled</i>	All tracking devices except Plug4
1-wire	<i>Enabled, Disabled</i>	All tracking devices except Plug4
CAN	<i>Enabled, Disabled</i>	All 5 th and 4 th gen Advanced family devices
Serial PortA	<i>Enabled, Disabled</i>	All 5 th and 4 th gen Advanced family and FM-Eco4 RS T devices
Serial PortB	<i>Enabled, Disabled</i>	All 5 th and 4 th gen Advanced family devices
Serial PortC	<i>Enabled, Disabled</i>	All 5 th and 4 th gen Advanced family devices
K-Line	<i>Enabled, Disabled</i>	Only FM-Tco4 HCV, FM-Tco4 LCV, HCV5, LCV5 devices

i If *Sleep* is selected, the GSM modem will only receive SMS messages. Modems M95 and UG96 will also receive voice calls.

Devices will go into the custom sleep mode after the engine is off and a double sleep timeout period passes, regardless of the link status with the server. This condition is also true when the device is using a constant link feature.

2.2 Power Consumption

Power consumption increases when the following functionalities are activated in custom sleep mode:

- Towing detection
- Impact detection (Accident and/or Rollover)

Power consumption increases when the following IOs are used in selected profile in custom sleep mode:

- *Fuel counter1* and *Fuel counter2*
- *DIN1* through *DIN4 hours counter*

- *DIN1* through *DIN4* hours cumulated

Power consumption will increase when the following peripherals are activated in custom sleep mode:

- Serial port (any)
- CAN bus (any)
- 1-Wire
- K-Line

Increase of the power consumption rates are shown in the table below:

Device	Power consumption increase, mA
Trace5	20
HCV5	20
LCV5	20
Pro5	20
FM-Tco4 HCV	20
FM-Tco4 LCV	20
FM-Pro4	20
FM-Eco4 S	6
FM-Eco4 T	6



The FM-Plug4 device will not have any of the power consumption increases mentioned before.



If you want to decrease the power consumption in custom sleep mode, you can switch off profiles. You cannot have low power consumption rate, while the device's functionalities are enabled.

2.3 Relations between Configurable Sleep and Custom Ignition Options

If you start the device configuration from the configurable sleep options, then you should consider the following:

1. If **GNSS receiver** is set to *Disabled*, then in custom ignition settings the **GPS speed** parameter will be disabled.
2. If **CAN** is set to *Disabled*, then in custom ignition settings the **RPM**, **Wheel based speed**, or **CAN ignition** parameters will be disabled, if they are received through CAN1 or CAN2 interface.

If you start the device configuration from the custom ignition options, then you should consider the following:

1. If **GPS speed** is enabled in the custom ignition settings, then in the custom sleep configuration options it will not be possible to disable **GNSS receiver**.
2. If **RPM** is enabled in the custom ignition settings, then in the custom sleep configuration options it will not be possible to disable the **CAN** interface.
3. If **Wheel based speed** is enabled in the custom ignition settings, then in the custom sleep configuration options it will not be possible to disable the **CAN** interface.
4. If **CAN ignition** is enabled as a condition in custom ignition settings, then in custom sleep configuration options it will not be possible to disable the **CAN** interface.

For more information about functionality compatibilities refer to the matrix below. Features with a NO tag are incompatible and cannot be used together. If one of them is enabled, then the other one will be greyed out in the configurator.

Custom sleep \ Custom ignition	GPS speed	RPM	Wheel based speed	CAN ignition	DIN1	DIN2	DIN3	DIN4	Movement sensor	Power supply voltage
Modem	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
GNSS receiver	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
1-wire	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
CAN	YES	NO	NO	NO	YES	YES	YES	YES	YES	YES
PortA	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
PortB	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
PortC	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
K-Line	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Battery charge	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
WakeUp when DIN is high	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

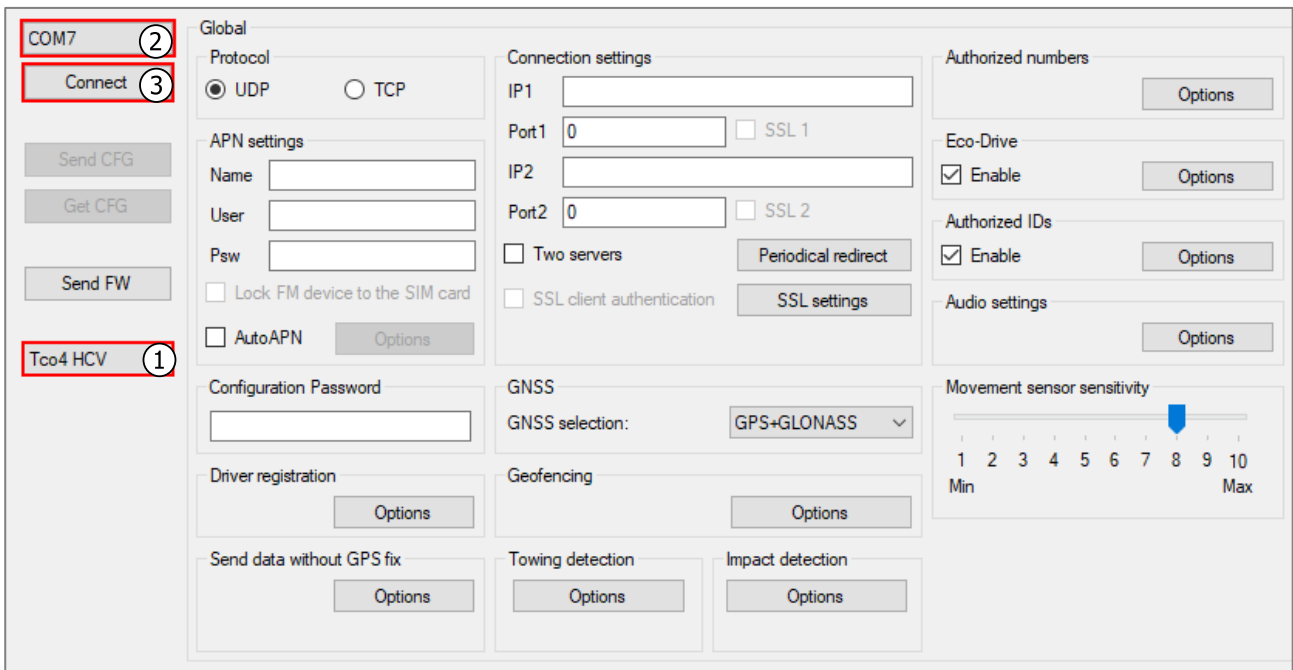
3 Configuration

i These functionalities require the use of the advanced configurator.

3.1 Starting the Configuration

To start the configuration, follow these steps:

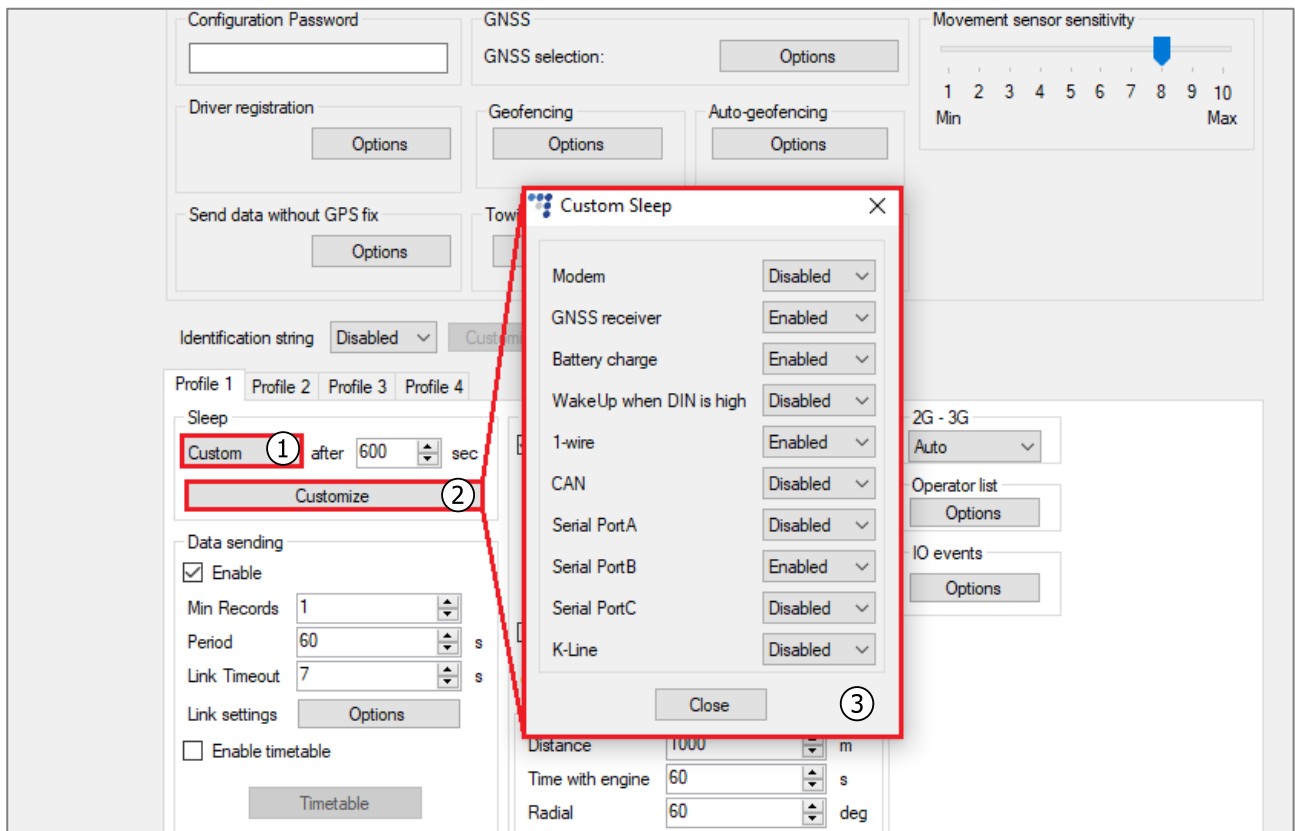
1. Open the advanced configurator. Select your tracking device.
2. Select the COM port to which your device is connected.
3. Click **Connect**.



3.2 Configuring Custom Sleep

Follow these steps to configure custom sleep:

1. Select *Custom* in the **Sleep** section of the **Profile** settings.
2. Click **Customize** to open the **Custom Sleep** window.
3. Select the required functionalities, which have to work in custom sleep mode.



3.3 Finishing the Configuration

To finish the configuration, close the **Custom Sleep** window. Click **Send CFG** to send the configuration to the device.

The screenshot displays the Ruptela configuration software interface. At the top, there is a menu bar with 'File' and 'Tools'. Below it, a 'Configuration file information' section shows details like 'Configuration source: Configurator', 'Target device: n/a', and 'CFG Tag'. The Ruptela logo is in the top right corner. The main area is divided into several panels: 'Global' (with a 'COM8' dropdown and 'Disconnect' button), 'APN settings' (with fields for Name, User, Psw, and checkboxes for 'Lock FM device to the SIM card' and 'AutoAPN'), 'Connection settings' (with IP1, Port1, IP2, Port2 fields, and checkboxes for 'SSL 1', 'SSL 2', 'Two servers', and 'SSL client authentication'), 'GNSS' (with a 'GNSS selection' dropdown set to 'GPS+GLONASS'), and 'Geofencing'. On the right side, there are sections for 'Authorized numbers', 'Eco-Drive' (with an 'Enable' checkbox), 'Authorized IDs' (with an 'Enable' checkbox), 'Audio settings', and 'Movement sensor sensitivity' (with a slider set to 8). A vertical sidebar on the left contains buttons for 'Send CFG' (highlighted with a red box), 'Get CFG', 'Send FW', and a 'Tco4 LCV' dropdown.