

GNOM DP/DDE S7 Axle Load Sensor

1 Introduction

1.1 About the Functionality

The GNOM DP/DDE S7 wireless axle load sensor can be used to measure axle and cargo load in a van/heavy duty vehicle. The collected data is then transmitted to the tracking device.

The sensor operates with a 1% accuracy with a 20 m (open field) range and it can work for 5 years without replacing the battery.

1.2 Legal Information

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1.3 Compatibility

GNOM DP/DDE S7 axle load sensors are compatible with the following devices with the newest firmware version:

- HCV5
- LCV5
- Pro5

1.4 Contact Information

General enquiries

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1.5 Document Changelog

Version	Date	Modification
1.0	2020-12-18	Initial draft.

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.

Note



Used to highlight important information or special conditions.

Tip



Suggestions on how to proceed.

Caution



Used to mark actions that require caution when handling the product.

2 Configuration

2.1 Preparation of Sensor

Before configuring the sensor, you have to complete a couple of steps:

1. Activate the sensor using by touching the sensor head cap with a magnet for 30-40 seconds.



2. Find the sensor serial number on the head of the probe.



2.2 Configuration through Device Center

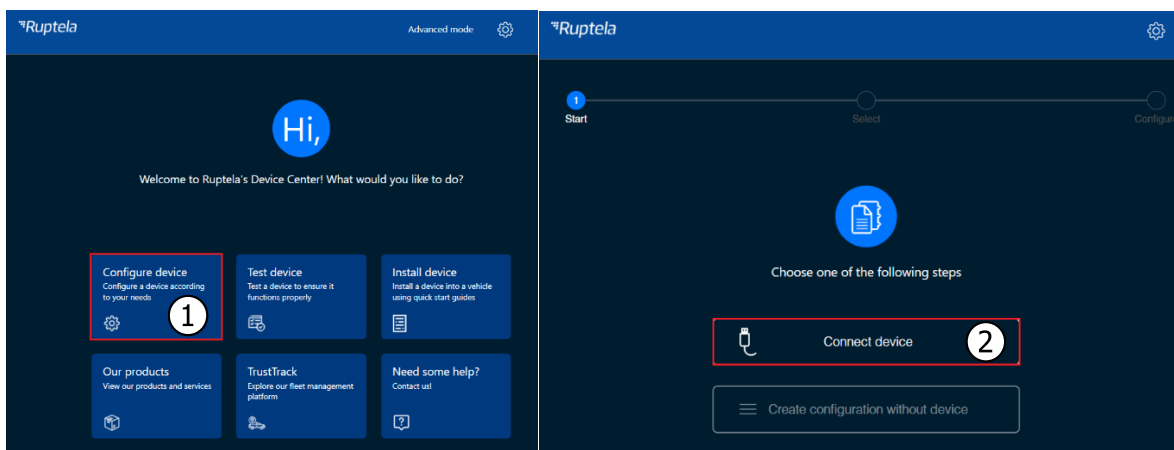
Follow these steps to configure the sensor:

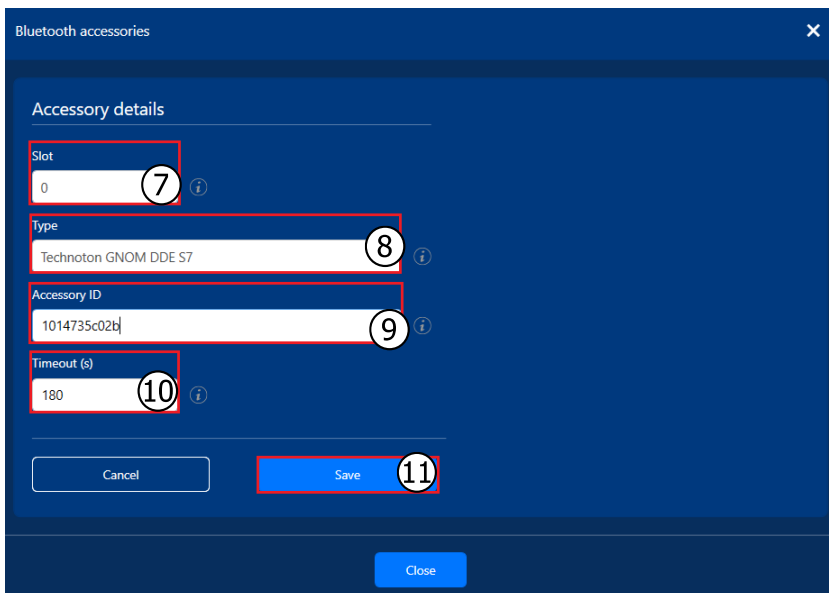
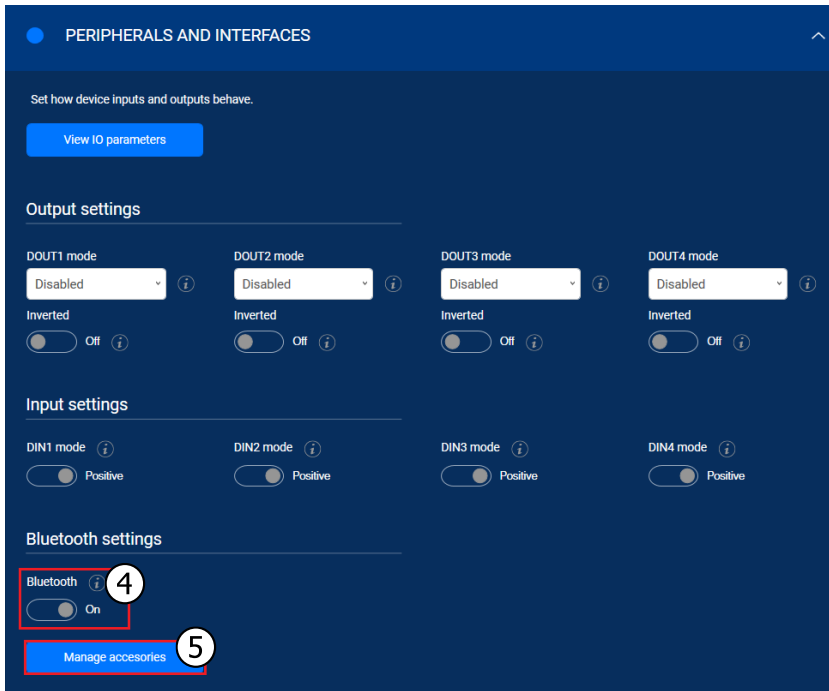
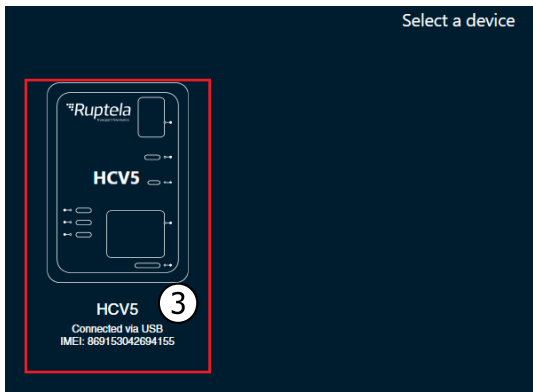
1. Open the Device Center. Click **Configure device**.
2. Click **Connect device**.
3. Select your device.
4. Open **Peripherals and Interfaces** and ensure, that **Bluetooth** is *On*.
5. Click the **Manage accessories** button to open the **Bluetooth accessories** window.
6. Click **Add accessory**.
7. Select a free slot.
8. Select *Technoton GNOM DDE S7* or *Technoton GNOM DP S7* from drop-down list.
9. Convert serial number to a HEX format and enter this number in lowercase to the **Accessory ID** field. If there are less than 12 symbols, add zeros in front.



You can convert serial number using [HEX calculator](#). Enter the full number without spaces.

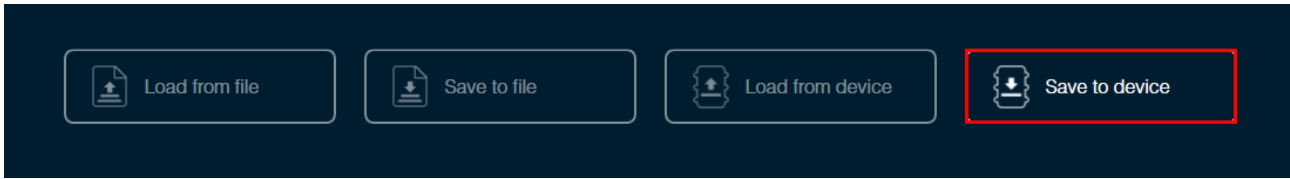
10. Increase the **Timeout (s)** value at least to 180 seconds.
11. Click **Save**.





2.2.2 Finishing the Configuration

Save the configuration to device by clicking the **Save to device** button.

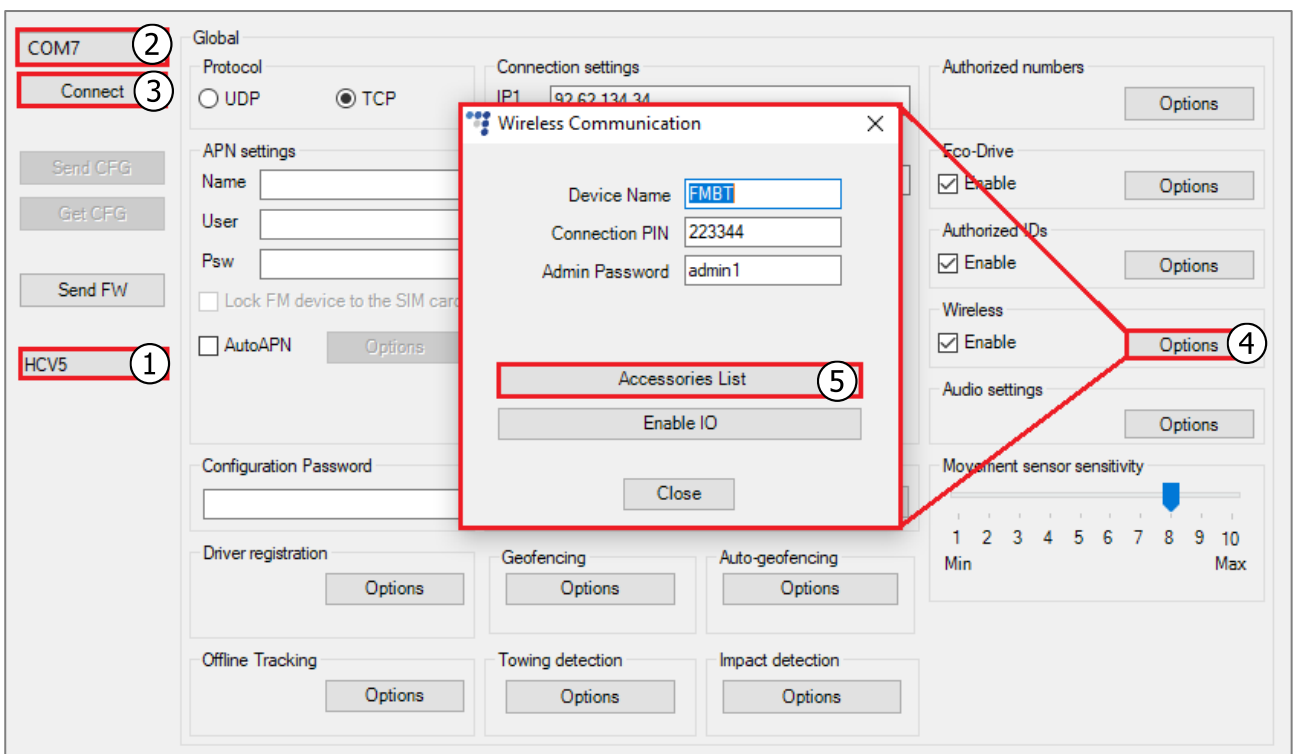


Saving a configuration to a device will overwrite the existing configuration in the device without any confirmation.

2.3 Configuration through the Advanced Configurator

Follow these steps to configure the sensor:

1. Open the advanced configurator. Select your tracking device.
2. Select the COM port to which your device is connected.
3. Click **Connect**.
4. Click **Options** in the **Wireless** section to open the **Wireless Communication** window.
5. Click **Accessories List** to open the **Bluetooth Accessories** window.

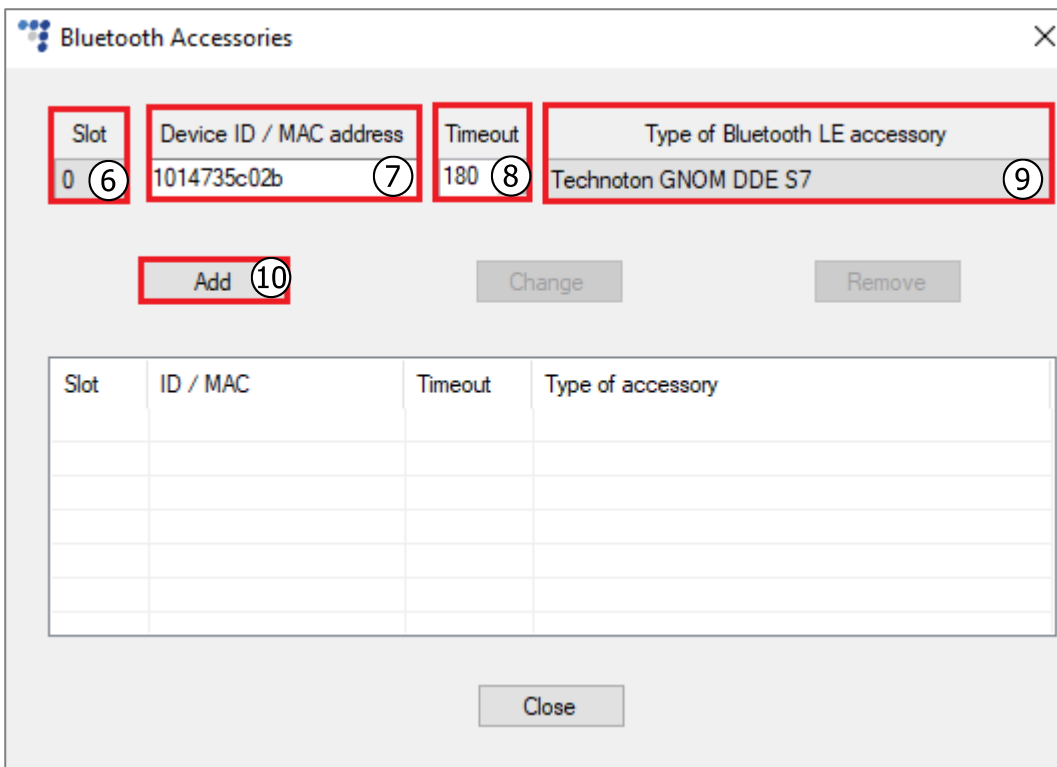


6. Select a free slot for the sensor.
7. Convert serial number to a HEX format and enter this number in lowercase to the **Device ID / MAC address** field. If there are less than 12 symbols, add zeros in front.



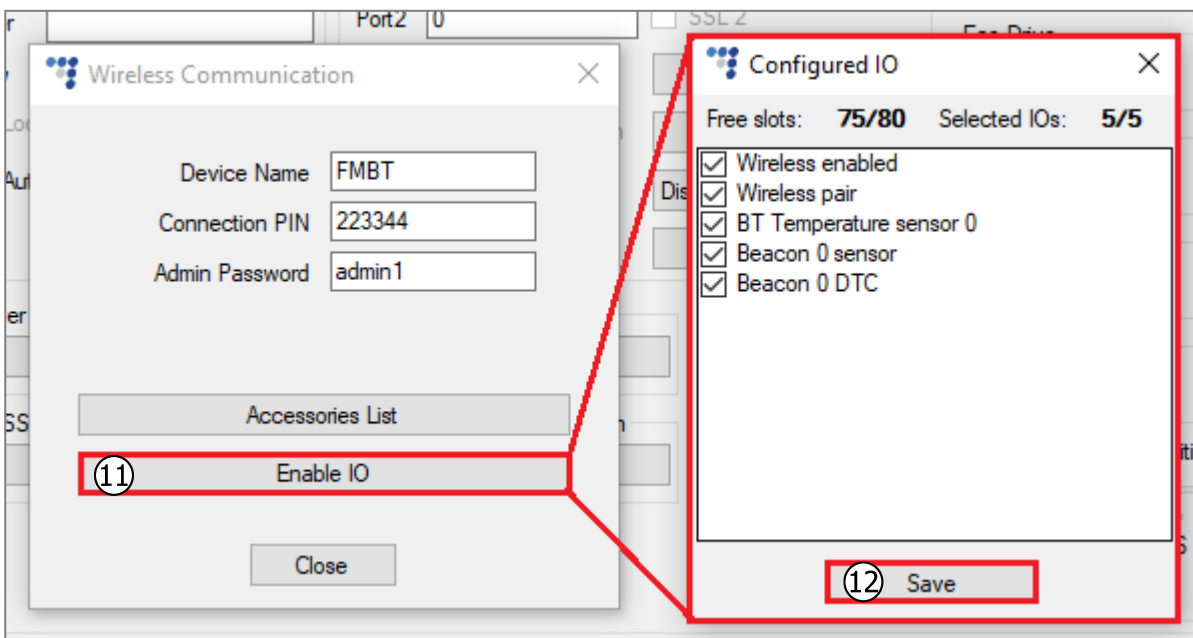
You can convert the serial number using a [HEX converter](#). Enter the full number without spaces.

8. Increase the **Timeout** value at least to 180 seconds.
9. Select *Technoton GNOM DDE S7* or *Technoton GNOM DP S7* from drop-down list.
10. Click **Add**.



11. Close the **Bluetooth Accessories** window and click **Enable IO** to open the **Configured IO** window. Select *BT Temperature sensor x* and/or *Beacon x sensor*, *Beacon x DTC* (where *x* – is the slot number from the accessories table).

12. Click **Save**.



2.3.1 Finishing the Configuration

To finish the configuration, close the **Wireless Communication** window. Click **Send CFG** to send the configuration to the device.

The screenshot displays the Ruptela Configurator software interface. At the top, there is a menu bar with 'File' and 'Tools'. Below the menu bar, a 'Configuration file information' section shows details such as 'Configuration source: Configurator', 'Target device: n/a', 'FM device FW version: n/a', 'CFG Tag: [text input]', and 'Advanced Configurator version: n/a'. The Ruptela logo is visible in the top right corner.

The main interface is divided into several sections:

- Global:** Includes a dropdown menu for 'COM3', a 'Disconnect' button, and a 'Send CFG' button (highlighted with a red border). Other buttons include 'Get CFG', 'Send FW', and a dropdown for 'HCV5'.
- Protocol:** Features radio buttons for 'UDP' (selected) and 'TCP'.
- APN settings:** Contains input fields for 'Name', 'User', and 'Psw', along with checkboxes for 'Lock FM device to the SIM card' and 'AutoAPN' (with an 'Options' button).
- Connection settings:** Includes input fields for 'IP1', 'Port1', 'IP2', and 'Port2', checkboxes for 'SSL 1' and 'SSL 2', and buttons for 'Periodical redirect' and 'SSL settings'.
- Authorized numbers:** Features an 'Options' button.
- Eco-Drive:** Includes a checked 'Enable' checkbox and an 'Options' button.
- Authorized IDs:** Includes a checked 'Enable' checkbox and an 'Options' button.
- Wireless:** Includes a checked 'Enable' checkbox and an 'Options' button.
- Audio settings:** Features an 'Options' button.

2.4 Testing the Sensor

You can test if your data is coming successfully from the sensor via the Device Center installation assistant tool. Follow these steps:

1. Open the Device Center.
2. Click **Test Device**.
3. Select your device by clicking on it.
4. Click **Details** in the **GNSS & Network** section.

If the **Bluetooth** status is green, the tracking device is receiving data from the sensors and other Bluetooth accessories.

