

# Technoton DUT-E S7 Fuel Level Sensor

## 1 Introduction

### 1.1 About the Functionality

The Technoton DUT-E S7 wireless fuel level sensor can be used to measure the fuel level 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 50 m (open field) range.

### 1.2 Legal Information

Copyright © 2020 Ruptela. All rights reserved. Reproduction, transfer, distribution or storage of parts or all of the contents in this document in any form without the prior written permission of Ruptela is prohibited. Other products and company names mentioned in this document are trademarks or trade names of their respective owners.

### 1.3 Compatibility

Technoton DUT-E S7 fuel level sensors are compatible with the following devices with the newest firmware version:

- HCV5
- LCV5
- Pro5

## 1.4 Contact Information

### General enquiries

Website: [ruptela.com](http://ruptela.com)

E-mail: [info@ruptela.com](mailto:info@ruptela.com)

Phone: +370 5 2045188

### Technical support

E-mail : [support@ruptela.com](mailto:support@ruptela.com)

Phone: +370 5 2045030

## 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

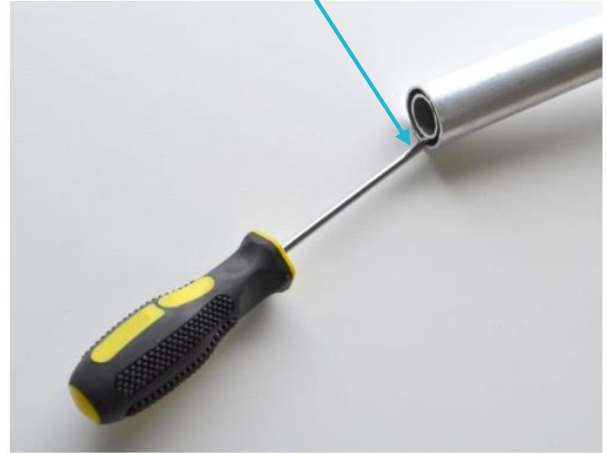
Before configuring the sensor, you have to complete a couple of steps:

1. Activate the sensor using a magnet and screwdriver. Make a short circuit of the measuring probe with a screwdriver and touch the sensor head cap with a magnet for 30-40 seconds.

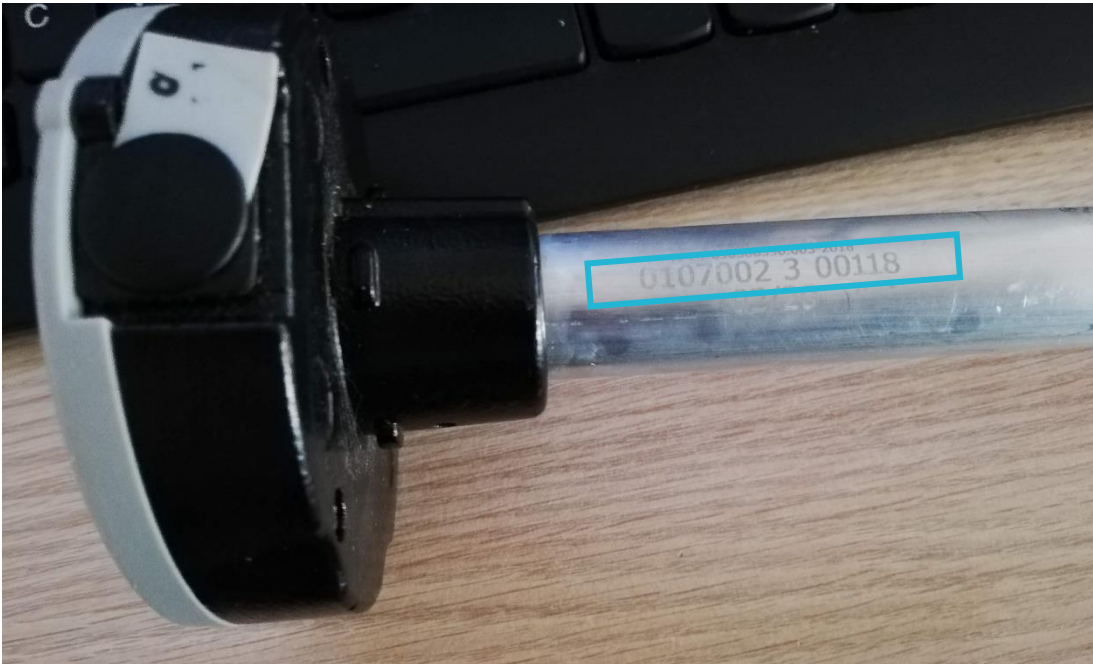
Area, where you should touch with a magnet.



Short circuit example.



2. Find the sensor serial number just below the head of the probe, on the piping.



## 2.2 Configuration through Device Center

Follow these steps to configure the sensor:

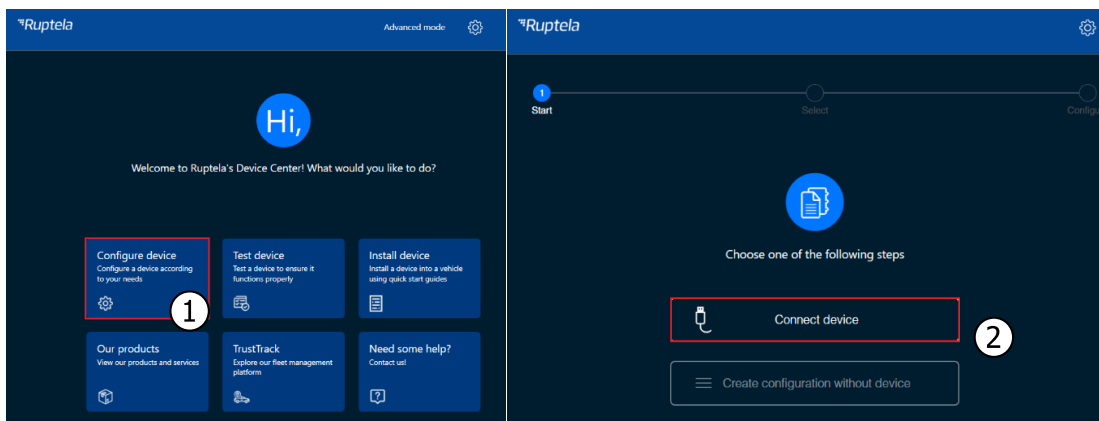
1. Open the Device Center. Click **Configure device**.
2. Click **Connect device**.
3. Select your device.
4. Open **Peripherals and Interfaces** and ensure, that **Bluetooth** is *On*.
5. Click the **Manage accessories** button to open the **Bluetooth accessories** window.
6. Click **Add accessory**.
7. Select a free slot.
8. Select *Technoton DUT-E 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.

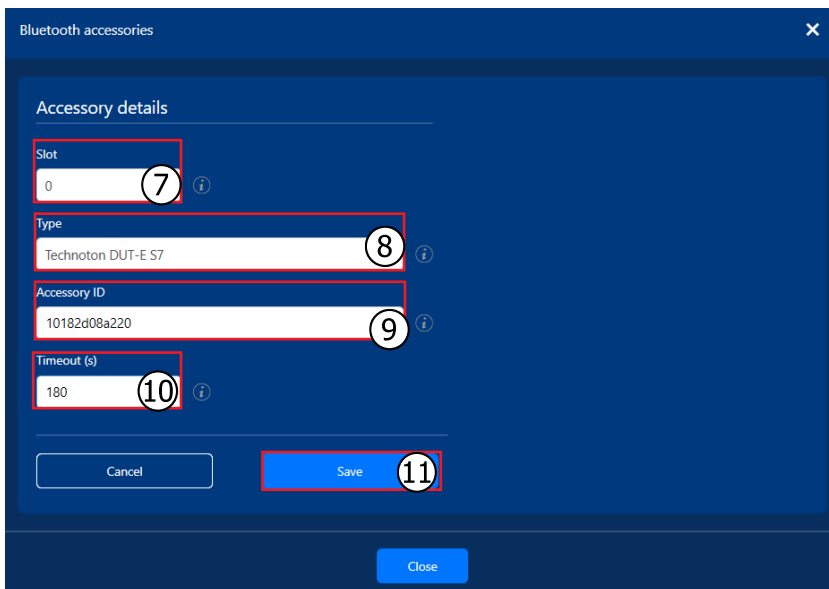
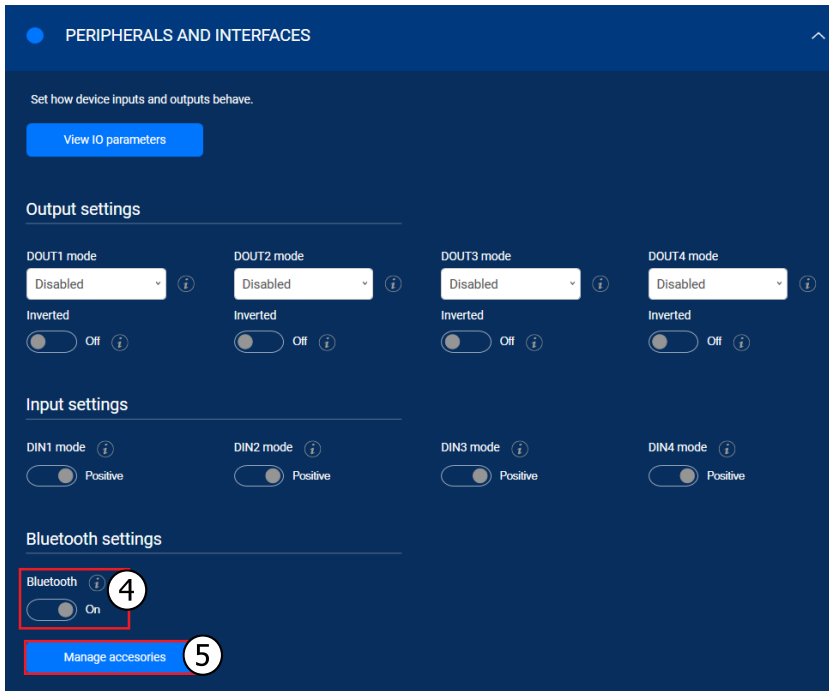
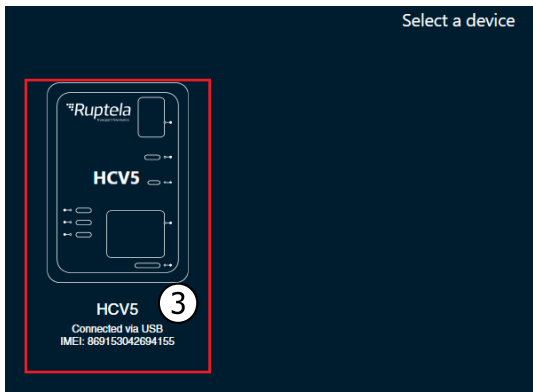


You can convert the serial number using a [HEX calculator](#). Enter the full number without spaces.

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

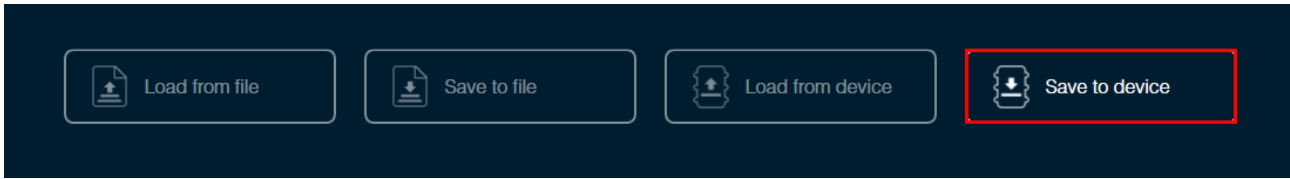
11. Click **Save**.





## 2.2.2 Finishing the Configuration

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

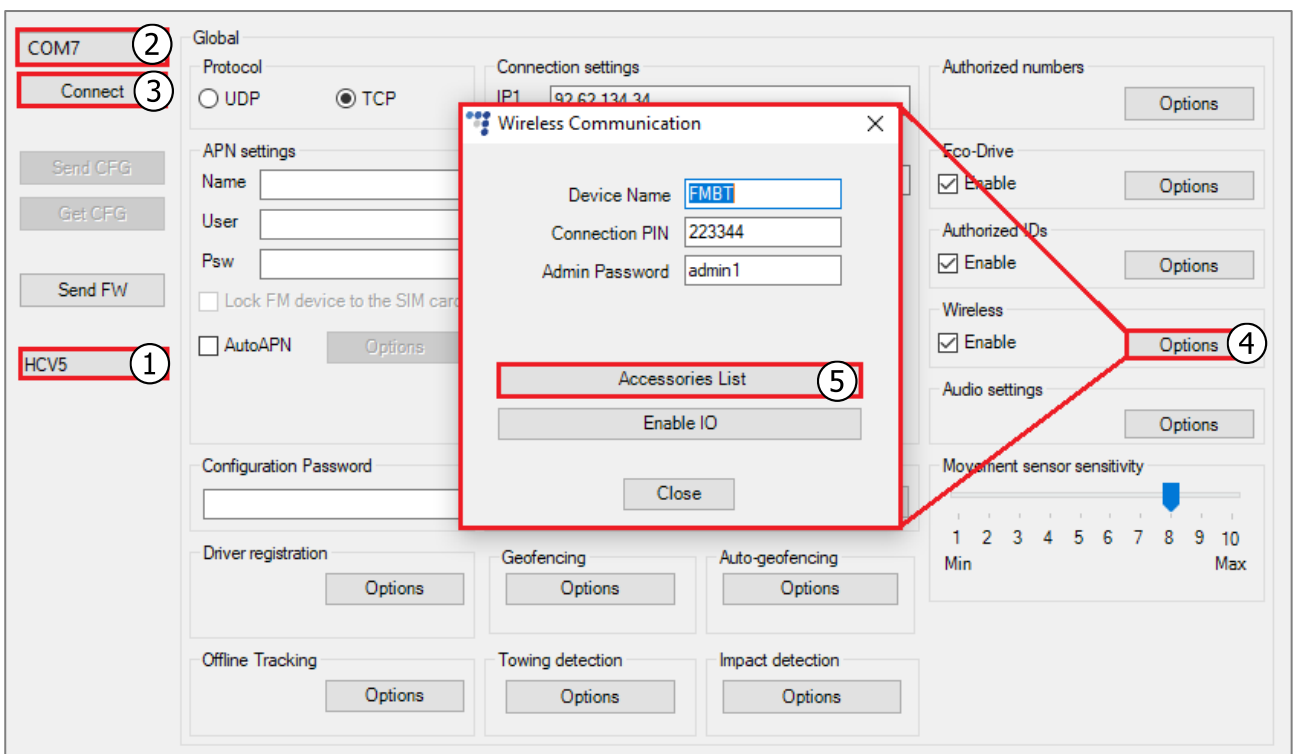


Saving a configuration to a device will overwrite the existing configuration in the device without any confirmation.

## 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.

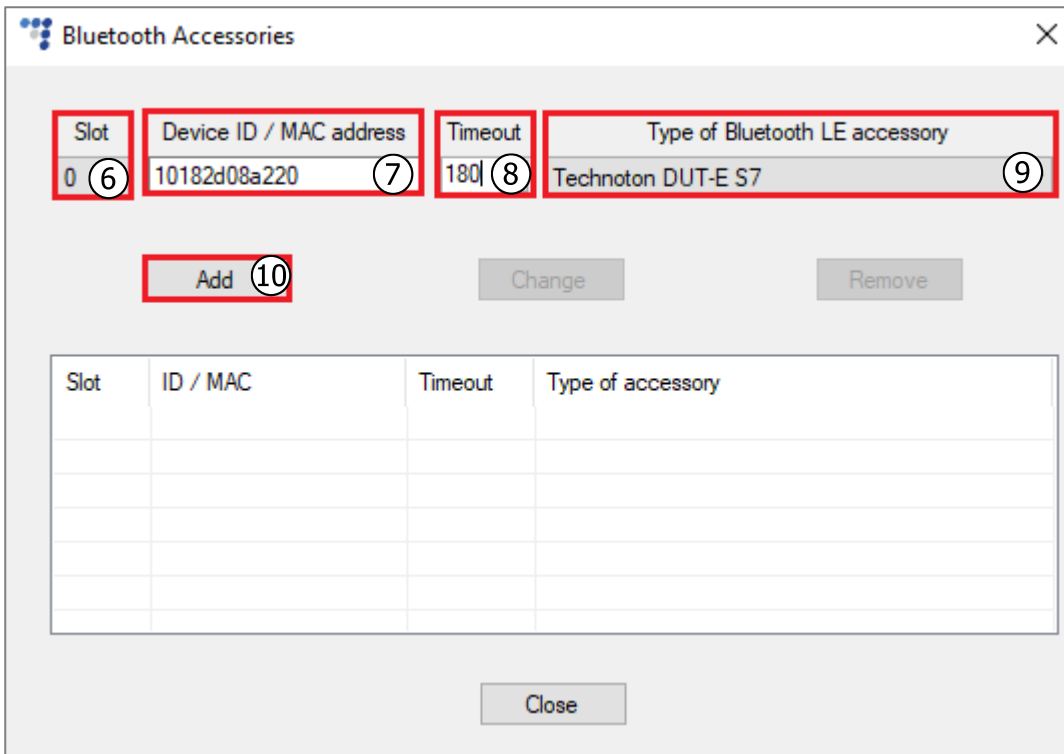


6. Select a free slot for the sensor.
7. Convert serial number to a HEX format and enter this number in lowercase to the **Device ID / MAC address** field. If there are less than 12 symbols, add zeros in front.



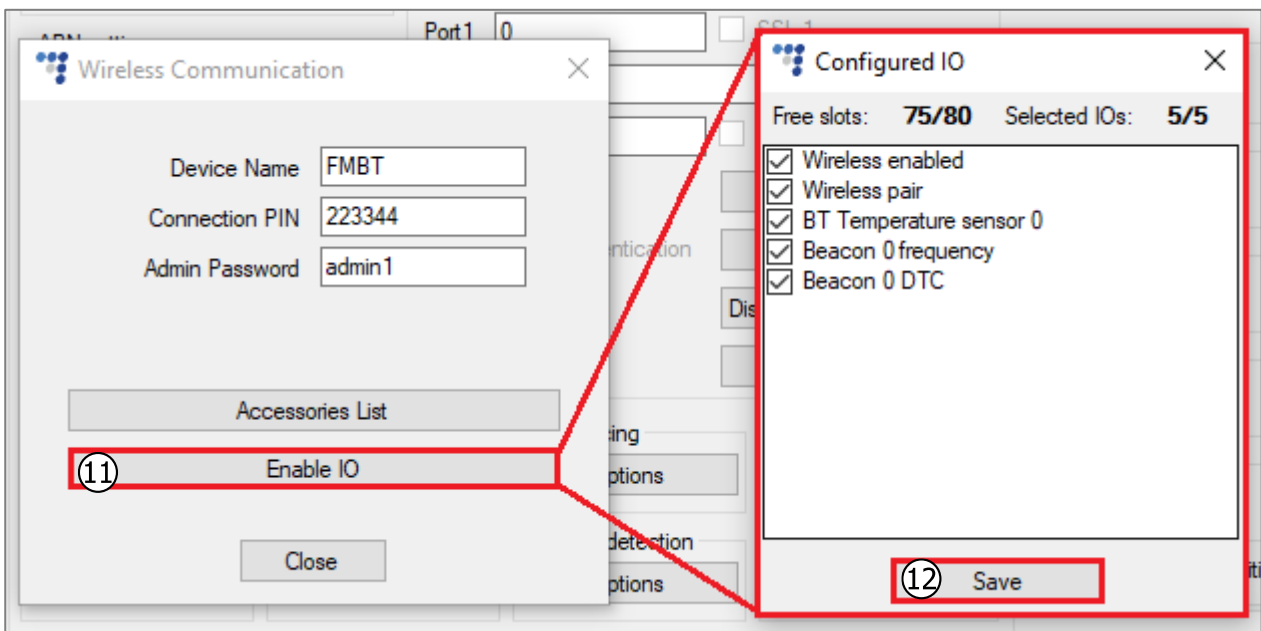
You can convert the serial number using a [HEX calculator](#). Enter the full number without spaces.

8. Increase the **Timeout** value at least to 180 seconds.
9. Select *Technoton DUT-E 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 frequency*, *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 it, a 'Configuration file information' section shows 'Configuration source: Configurator', 'Target device: n/a', 'FM device FW version: n/a', 'CFG Tag: [text box]', and 'Advanced Configurator version: n/a'. The Ruptela logo is in the top right corner. The main interface is divided into several sections: 'Global' (with a 'COM3' 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, checkboxes for 'SSL 1', 'SSL 2', 'Two servers', and 'SSL client authentication', and buttons for 'Periodical redirect' and 'SSL settings'), and 'Authorized numbers' (with 'Eco-Drive' and 'Authorized IDs' sections, each containing an 'Enable' checkbox and an 'Options' button). The 'Send CFG' button is highlighted with a red border. The 'HCV5' dropdown is at the bottom left.

## 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.

