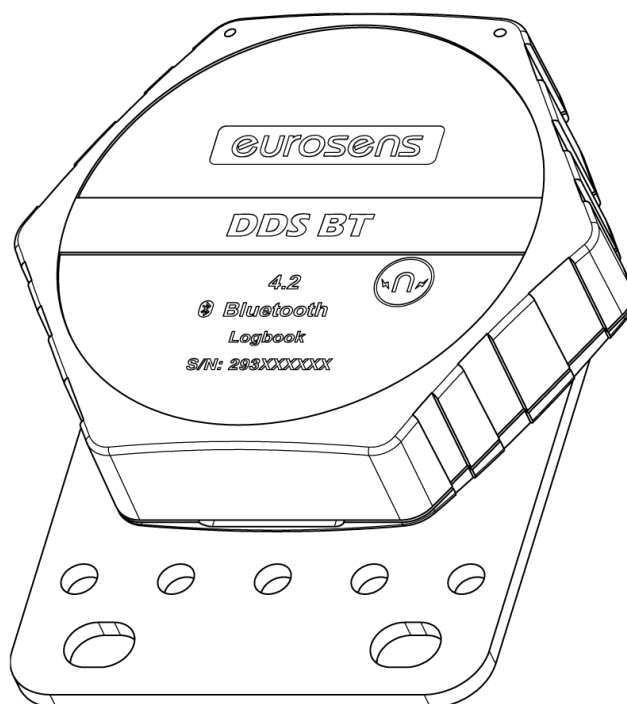


AXLE LOAD SENSOR

eurosens DDS BT



User manual

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1 GENERAL INFORMATION

1.1 APPLICATION

Axle load sensor eurosens DDS BT ([fig. 1.1](#)) is used to determine the displacement of a leaf spring suspension of a vehicle.



fig. 1.1. eurosens DDS BT

1.2 OPERATION

The operation of eurosens DDS BT is based on the conversion of the sensor lever rotation angle into digital data. A magnetoresistive sensing element is used as a transducer.

Data is sent to a GPS tracking unit via Bluetooth connection. Use the adapter [eurosens BT-COM](#) for non-Bluetooth devices. The adapter receives data from multiple transmitters (up to 10 pcs) and sends it via RS-485 (LLS).

The axle load sensor is installed on a vehicle using a mounting kit. After the correct installation, the lever rotation angle changes with the displacement of the leaf spring suspension. The suspension deformation relates to the vehicle axle load.

1.3 DELIVERY SET

eurosens DDS BT delivery set includes:

- eurosens DDS BT axle load sensor;
- specification;
- magnetic key.

Ordered separately:

- mounting kit ([fig. 1.2](#)).



fig. 1.2. eurosens DDS BT mounting kit



The use of the mounting kit does not guarantee that eurosens DDS BT can be installed with bolts on any vehicle. Some vehicles may require welding.

The configuration and calibration of eurosens DDS BT is performed using software “Configurator Dominator BT”.

To configure the sensor, you need:

- a smartphone with Android 9.0 version or above;
- Bluetooth version 4.2 or above.



It is not recommended to delete “Configurator Dominator BT” or “Mechatronics” account as it will lead to the loss of registration data. You will need to repeat the registration process.

All software updates must be installed over the earlier version of “Configurator Dominator BT”.

1.4 CHECKING THE POSSIBILITY OF USING THE SENSOR

As mentioned in section 1.2, the sensor measures the vertical deformation (deflection) of the suspension under load. Therefore, before deciding to install a DDS sensor, it is advisable to check the properties of the leaf spring suspension on a specific vehicle, as these may be unsuitable for this type of sensor.

Check the suspension deflection (the distance from the frame to the road surface) from empty to full in millimeters. If this distance is less than 25 mm, installing the sensor is impractical.

Leaf springs also exhibit hysteresis: after unloading, the suspension does not return to its original position immediately, but may take several hours. Sometimes, the suspension returns to its original position without deflection only while driving in an unloaded state. Leaf spring hysteresis depends on the condition of the leaf springs and the friction between the leaf springs, and affects the quality of the data obtained from the DDS sensor.



Before installing the DDS sensor, we recommend checking the deformation of the suspension under load and the time it takes for the suspension to return to its original state after unloading.

2 SENSOR SPECIFICATION

Table 2.1. Specification of eurosens DDS BT.

Parameter, measurement unit	Value
Power supply, V	3.6
Measured angle range, deg	-40...40
Relative error of rotation angle detection, %	2 and less
Ambient operating temperature, °C	-40...+85
Output interface	Bluetooth 4.2

3 SENSOR INSTALLATION

To install eurosens DDS BT correctly you need to know the suspension travel from a fully-loaded state to an empty one. See the sensor installation diagram in [fig. 3.1.](#)

3.1 INSTALLATION RECOMMENDATIONS

- 1) The sensor should be installed so that its lever rotation angle reaches its maximum during vehicle loading process. Consider road bumps impact on the suspension state.



Place of sensor installation must prevent the excess of rotation angle limit (from -40° to 40°).

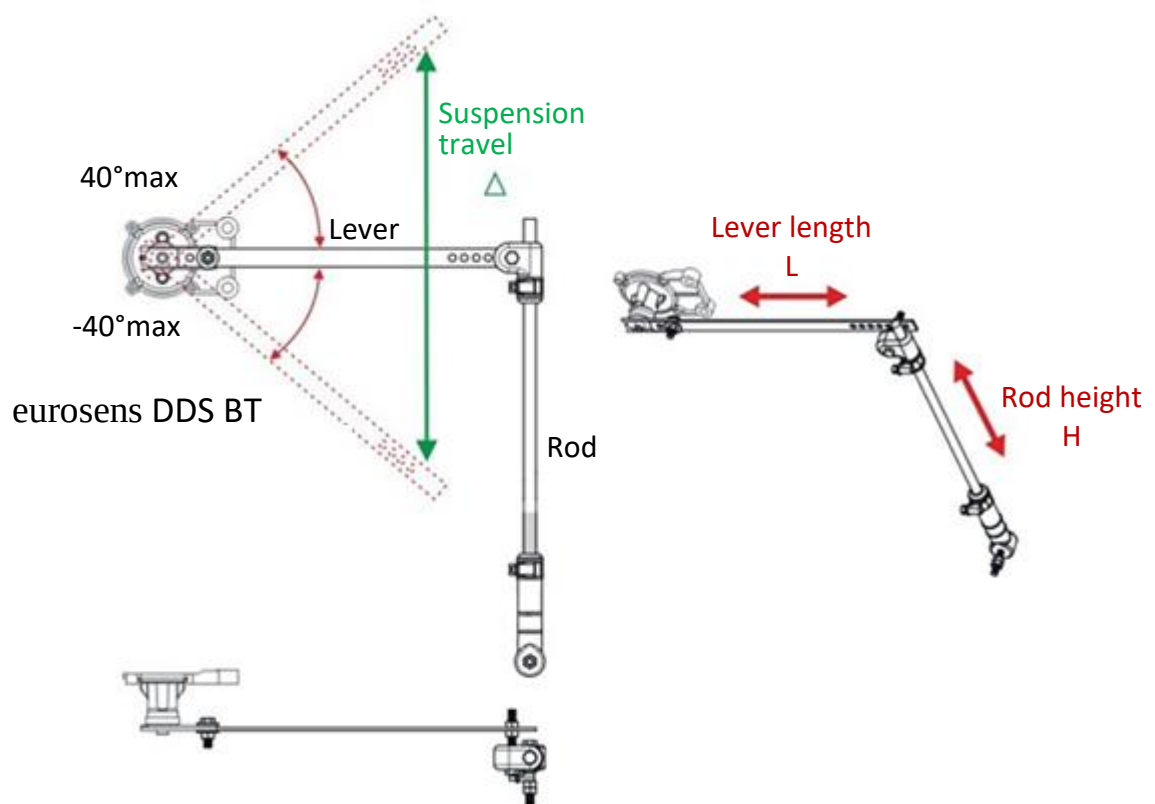


fig. 3.1. eurosens DDS BT installation diagram

- 2) While installing the sensor on a vehicle frame, mount the lower end of the lever to the unsprung element of the bridge axle using brackets from the mounting kit ([fig. 3.2](#)).

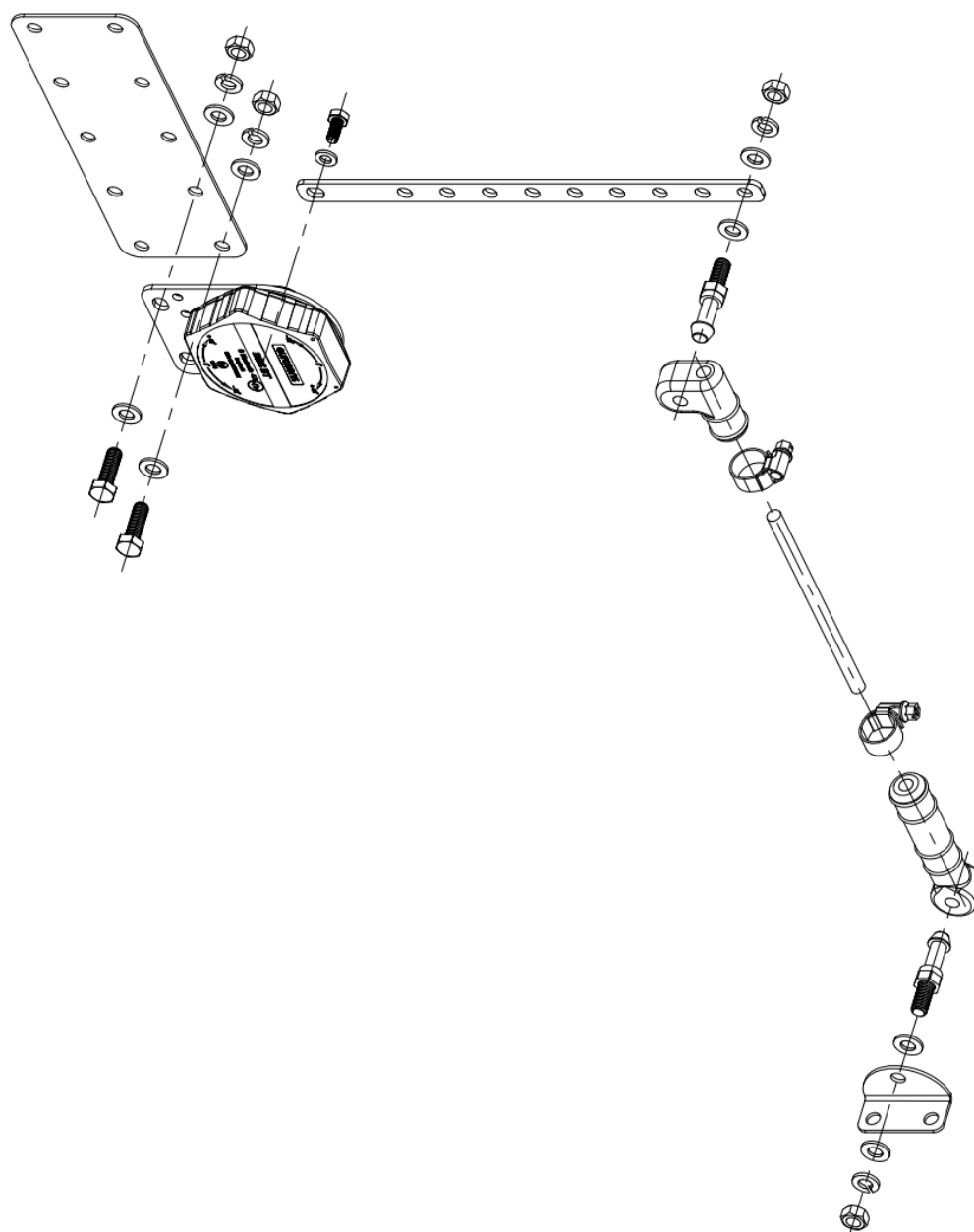


fig. 3.2. Diagram of eurosens DDS BT connecting levers

- 3) Cut the rod and the lever from the mounting kit to a required length if necessary.
- 4) Take off the elastic (flexible) element before cutting the rod and install it back afterwards ([fig. 3.3](#)).

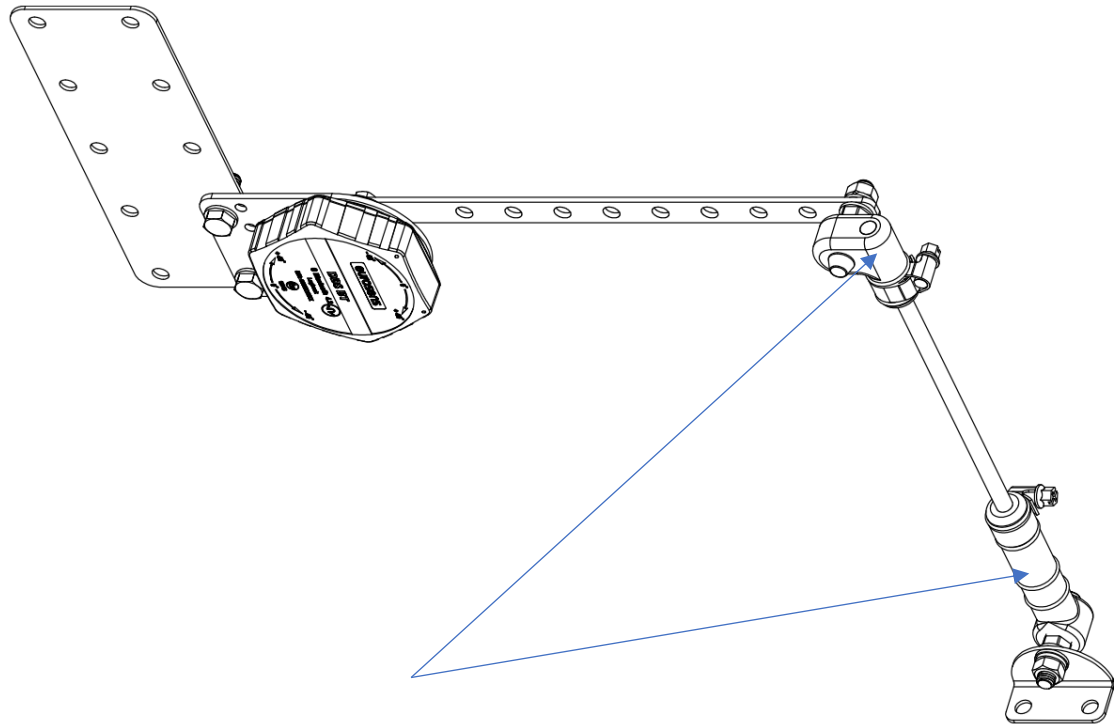


fig. 3.3 eurosens DDS BT with elastic (flexible) rod elements



- The elastic elements must be installed in the rod so that they could move in all directions.
- Do not push the rod too deep into the elastic elements ([fig. 3.4](#)). The rod is fixed with pins through the elastic elements to the attachment point of the unsprung weight and the lever.
- Before the pins are installed in the elastic element, cover them with a thick grease.

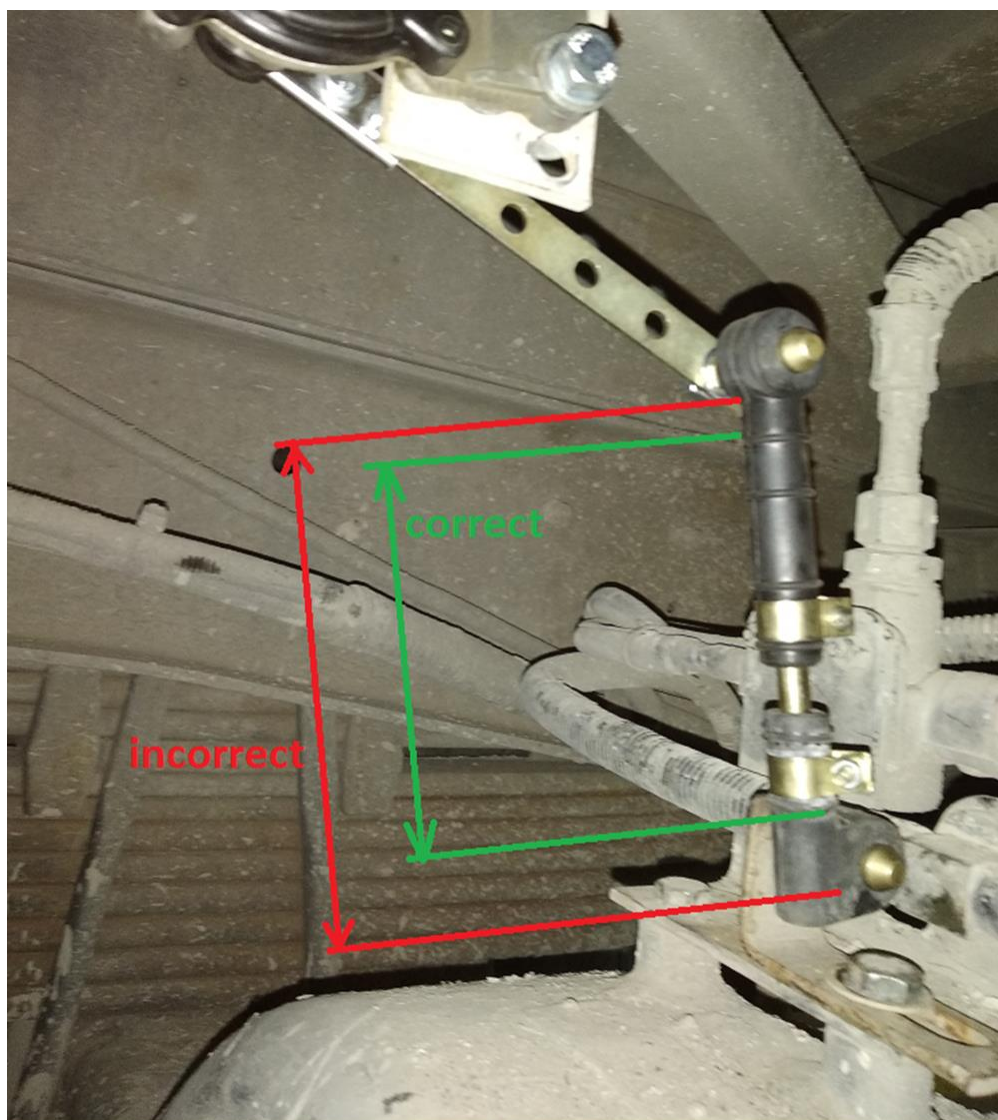


fig. 3.4. Correct and incorrect use of elastic elements

3.2 INSTALLATION ON FRONT AXLE

To install the sensor on the front axle, you need to fix the lower end of the rod in a bump stop. Drill a hole in a bump stop, make an 8 mm diameter thread to install the rod from the mounting kit ([fig. 3.55](#), [fig. 3.66](#), [fig. 3.77](#)).



fig. 3.5. Sensor installation on front axle



fig. 3.6. Sensor installation on front axle

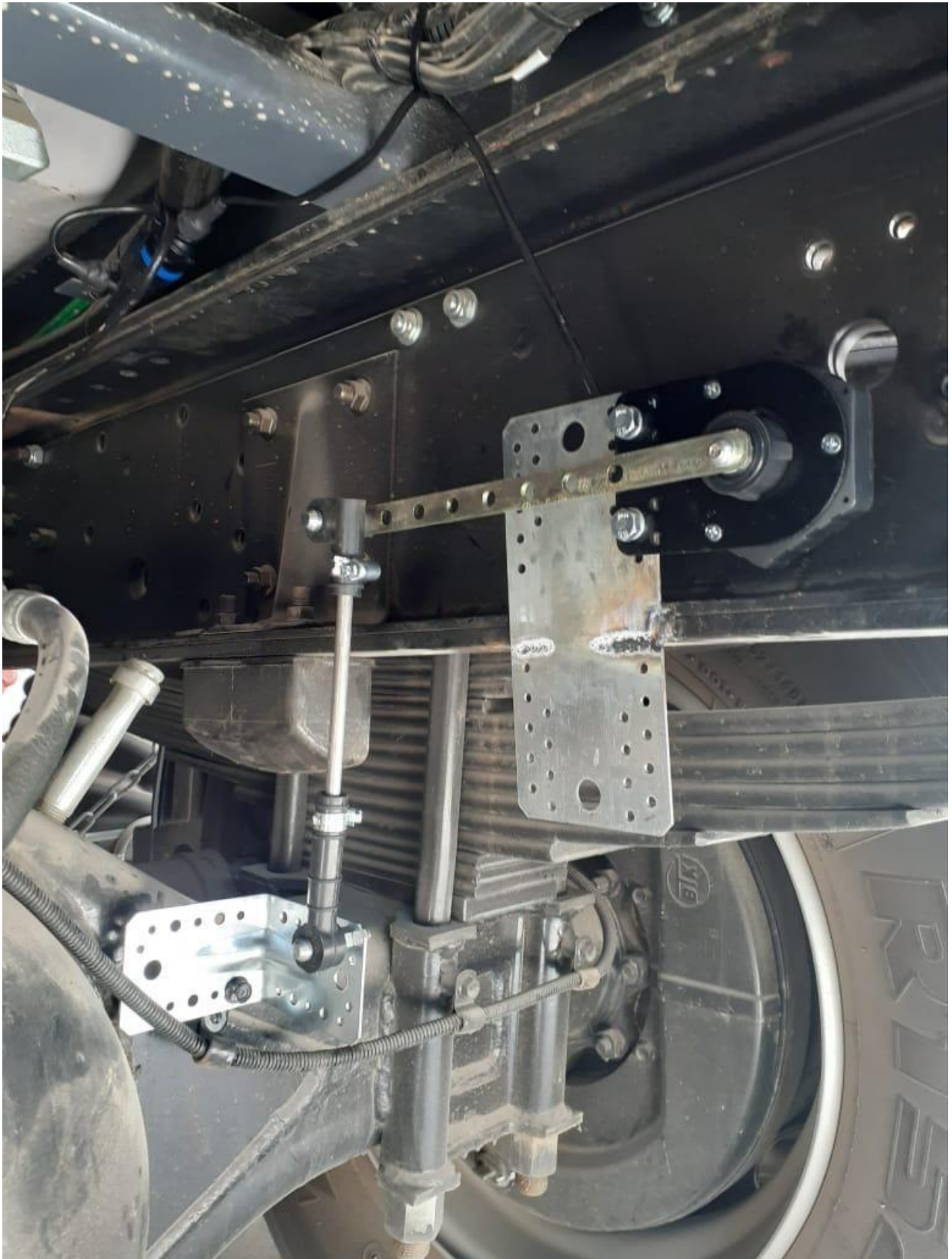


fig. 3.7. Sensor installation on front axle

Sensor calibration process relates sensor output signal to the value of vehicle real axle load (cargo weight). To calibrate the sensor, you need to create a calibration table with the minimal (empty vehicle) and maximal (fully loaded) axle load values.

3.3 CALIBRATION METHODS

There are two calibration methods:

- **Loading a weighted cargo:** the calibration table has the vehicle cargo weight and the output sensor values correspond to the cargo weight. This is possible if you have only 1 axle load sensor or 2 sensors installed on same axle.
- **Calibration using truck scales:** the calibration table contains the axle load and the output sensor values correspond to the axle load.

See Appendix III for more details.

4 CONFIGURATION SOFTWARE “CONFIGURATOR DOMINATOR BT”

For the configurator to work properly, a smartphone should meet the following technical requirements:

- Android 9.0 version or above;
- Bluetooth version 4.2 or above.

4.1 SOFTWARE INSTALLATION

1. Download and install the application “Configurator Dominator BT” from [Play Market](#) ([fig. 4.1](#)).

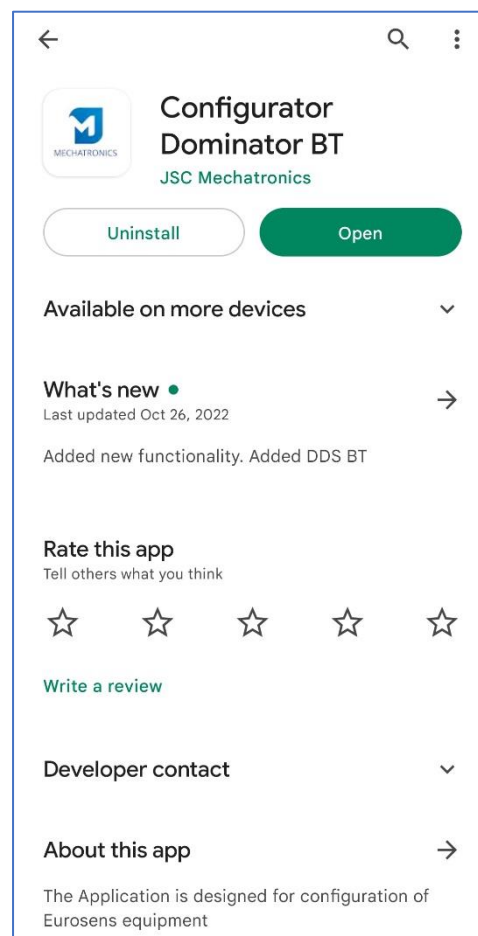


fig. 4.1. Configurator Dominator BT

2. While installing the app:

- provide all the required permissions ([fig. 4.2](#));
- enable Bluetooth access;
- enable geolocation services;
- follow the app instructions;

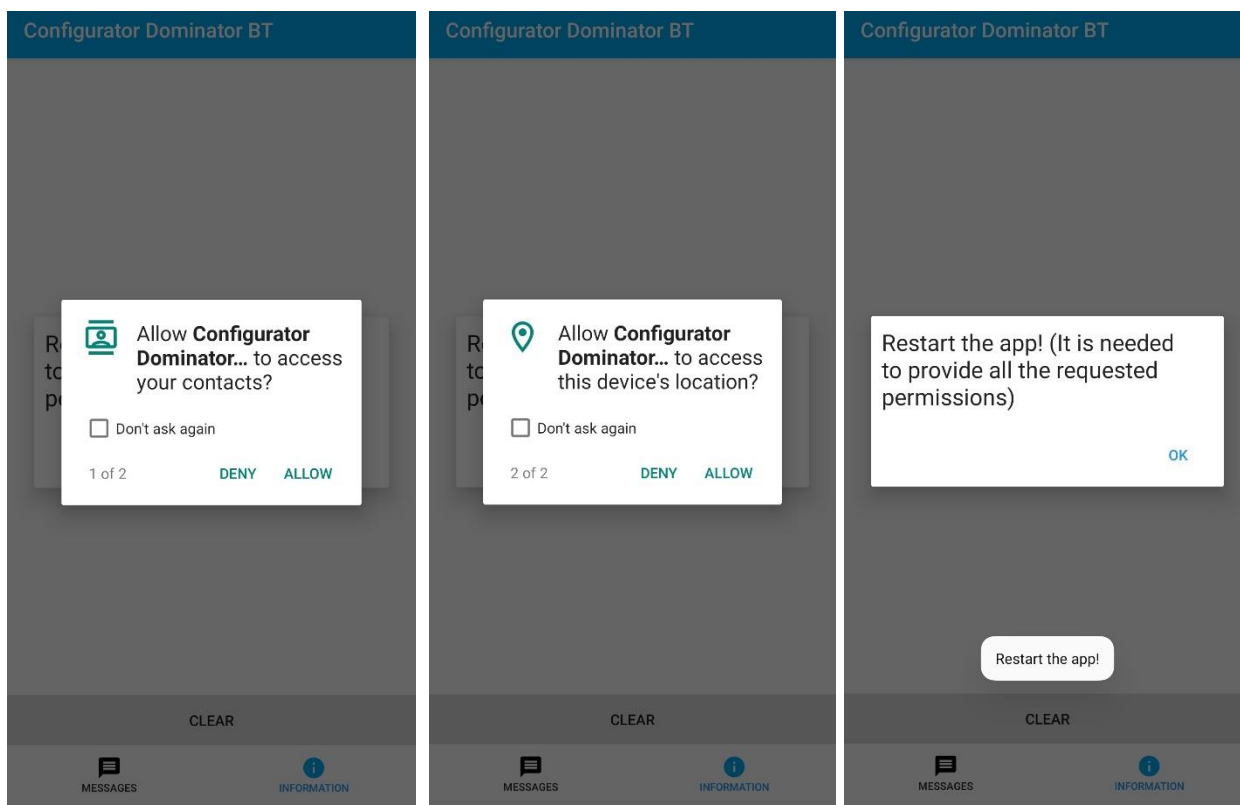


fig. 4.2. App permissions

4.2 APPLICATION REGISTRATION

To work with the application, it must be registered (permission must be obtained).



An Internet connection is required until the registration process is completed (during registration and for permission verification after restarting). After registration, the application can operate offline.

There are several ways to obtain permission to work with the application:

1) Sending a Request to Mechatronics

After downloading and installing the application, a registration form will appear on the screen (Fig. 3.4). Fill in all fields except the “Administrator Code” field and press the “OK” button.

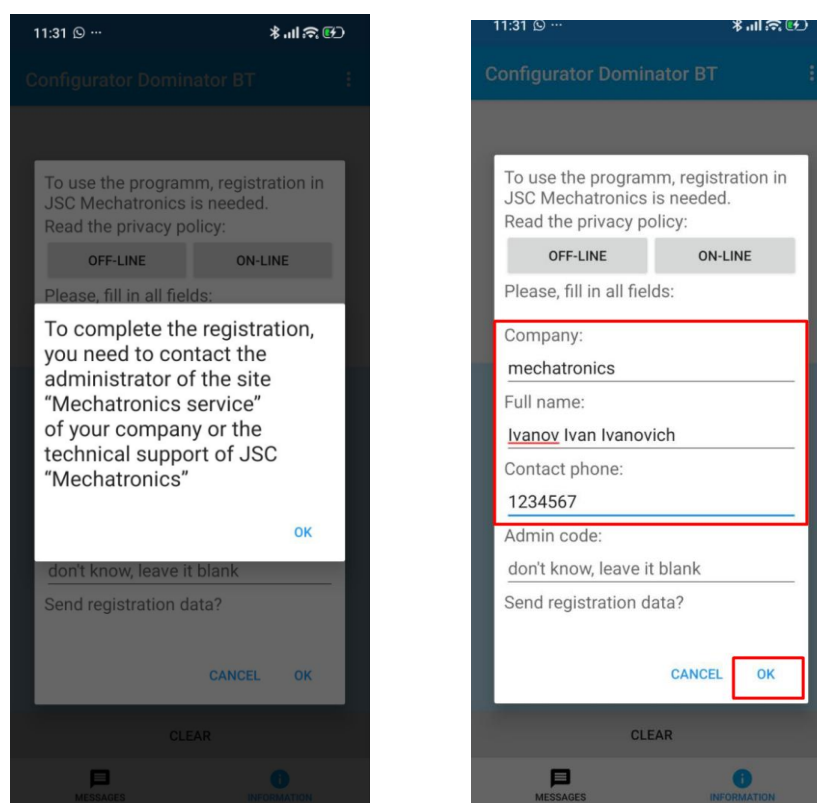


Fig. 4.3 Registration request

The request will be sent to the technical support service of Mechatronics. After verification of the data, permission to use the application will be granted.

2) Authorize yourself on Mechatronics-service.com server



This option is available if an administrator of your company is registered on the server and the company profile has been created. Information on working with the Mechatronics-service.com service is available in its user manual. To obtain the manual, contact Mechatronics CJSC technical support.

Contact your company administrator registered on the server and obtain the administrator code. Enter this code into the “Administrator Code” field in the registration form (fig. 4.5).

Fig. 4.5 Form with administrator code

In this case, the request will be sent to Mechatronics-service.com to your company administrator, who can grant permission without involving Mechatronics technical support.



It is not recommended to delete the application or the Mechatronics account, as this will result in the loss of registration data and the registration procedure will need to be repeated.

All software updates must be installed over the existing configurator application.

5 WORKING WITH THE DOMINATOR BT CONFIGURATOR

After installing and registering the application:

- check application permissions;
- ensure that Bluetooth and geolocation are enabled;
- launch the application.

5.1 «MESSAGES» TAB

The **Messages** tab displays current data transmitted by sensors via the Bluetooth Low Energy interface. Devices Dominator BT, Dottrack, Degree BT, DTS BT, DPS BT, and DDS BT detected within range are also shown.

Pressing the “Clear” button clears the list and restarts the search. ([Fig. 4.1](#)).

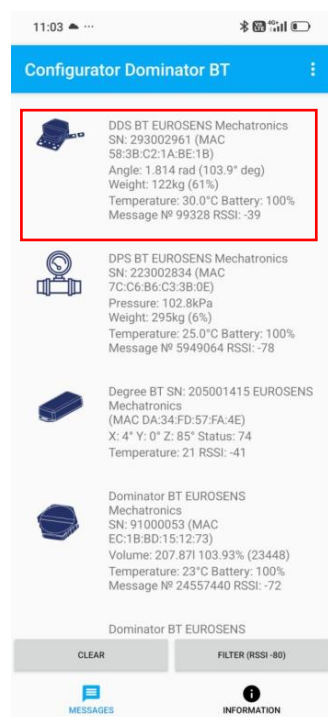


Fig. 5.1 «Messages» tab

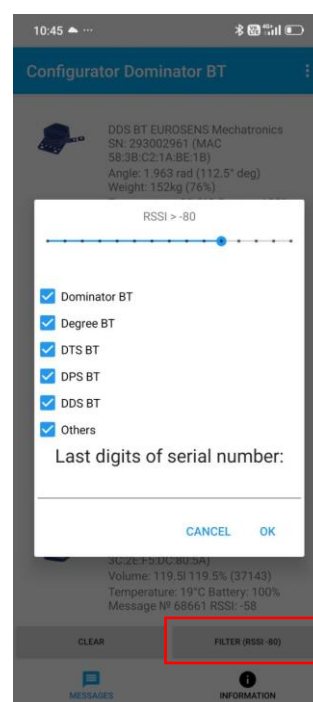


Fig. 5.2 «Filter (RSSI-80)»

The “**Filter**” button allows you to set a message reception filter based on the signal level.

When pressed, a dialog window with filter settings opens (Fig. 5.2).

- Using the slider, you can set the signal level (RSSI) above which messages will be received.
- You can select the types of sensors to be displayed in the messages. To enable or disable the display of a specific sensor type, select or clear the corresponding checkbox next to its name.
- Below is the “Serial number” field, where you can enter a serial number or part of it. Messages from sensors containing the specified number will be displayed.



For convenient monitoring of the displayed parameters, the required device can be added to Favorites.

When you tap a device in the list, a dialog window appears prompting you to add it to Favorites (Fig. 5.3). Select “Add to Favorites”.

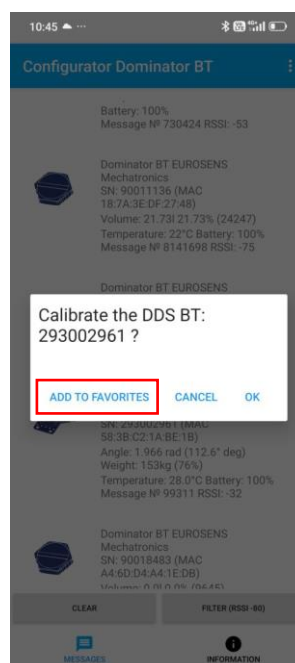
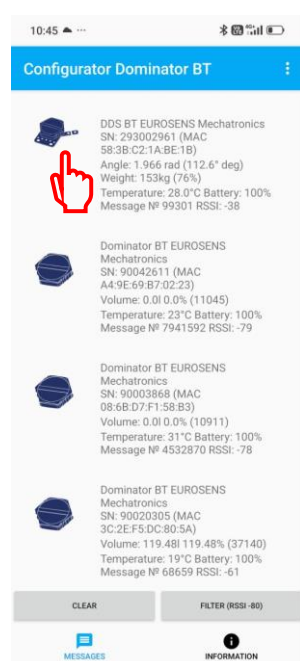


Fig. 5.3 Add to «Favorites»

Sensors added to Favorites are displayed at the top of the list and are marked with the “*” symbol (Fig. 5.4).

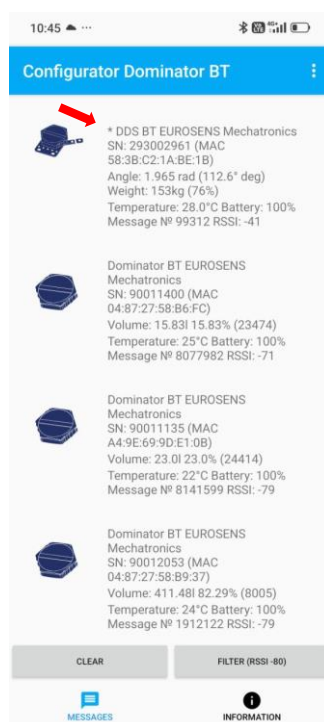


Fig. 5.4 Favorites sensors

To remove a device from Favorites, tap on it. A dialog window will appear (Fig. 5.5). Select “Remove from Favorites”.

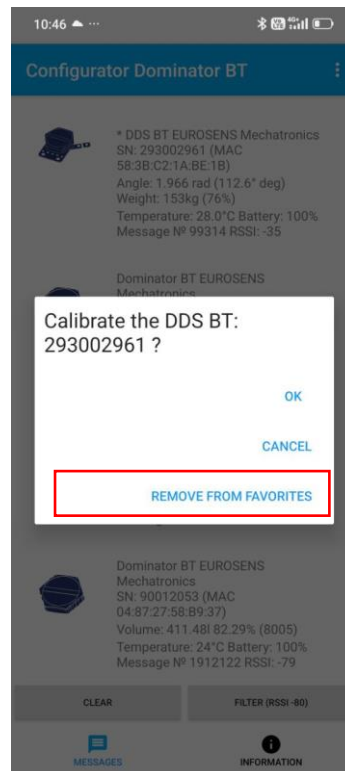


Fig. 5.5. Removing from Favorites

5.2 SENSOR ACTIVATION

Active sensors activated using the magnetic key are displayed in the **“Information”** tab. Here you can select a specific sensor and connect to it. If there are no active sensors yet, the tab will be empty (Fig. 5.6).

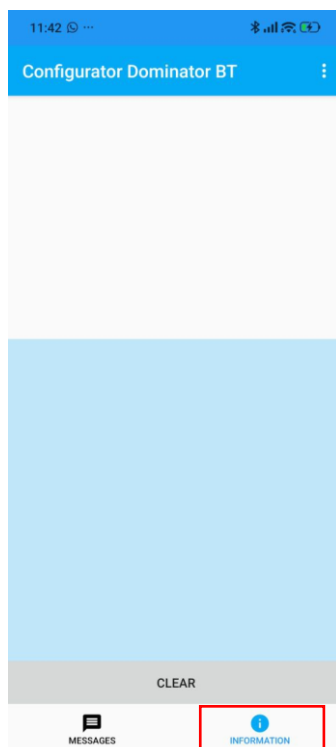


Fig. 5.6 «Information» tab

To activate a sensor, place the magnetic key (included in the delivery set) on the specified area of the sensor and hold it for approximately 2–3 seconds until the sensor appears in the **Information** tab.

It is not necessary to hold the key continuously.



Starting from **firmware version 1.2**, sensor activation is required only for the first connection after purchasing the sensor (waking it from sleep mode). Subsequent activation is not required. The sensor will always be ready for connection.



Fig. 5.7 How to activate the sensor

5.3 CONNECTING TO A SENSOR

After activation, the sensor will appear in the Information tab. Tap the sensor entry to connect to it. (Fig. [5.8](#)).

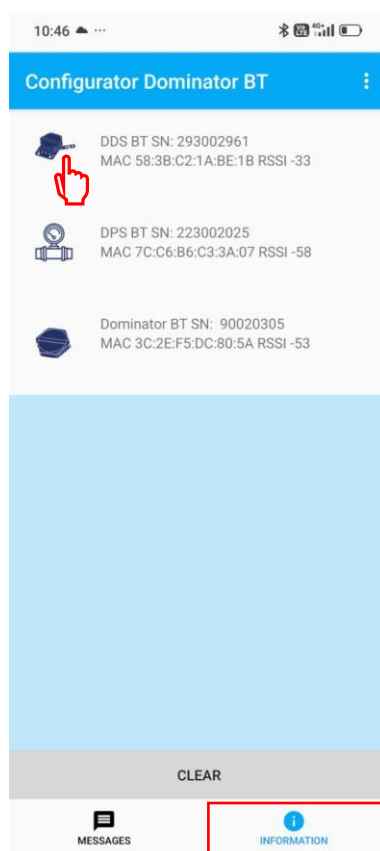


Fig. 5.8 Active sensors

After connection, information such as manufacturer, model, MAC address, serial number, firmware version, production date, battery charge, temperature, and current detector values will be displayed. ([Fig. 5.9](#)).



Fig. 5.9 Sensor information after connection

5.4 SETTING A PASSWORD FOR SENSOR CONNECTION

By default, no password is set on the sensor. To restrict access, a password can be set. Open the additional menu and select "Password Management" (Fig. [5.10](#)).

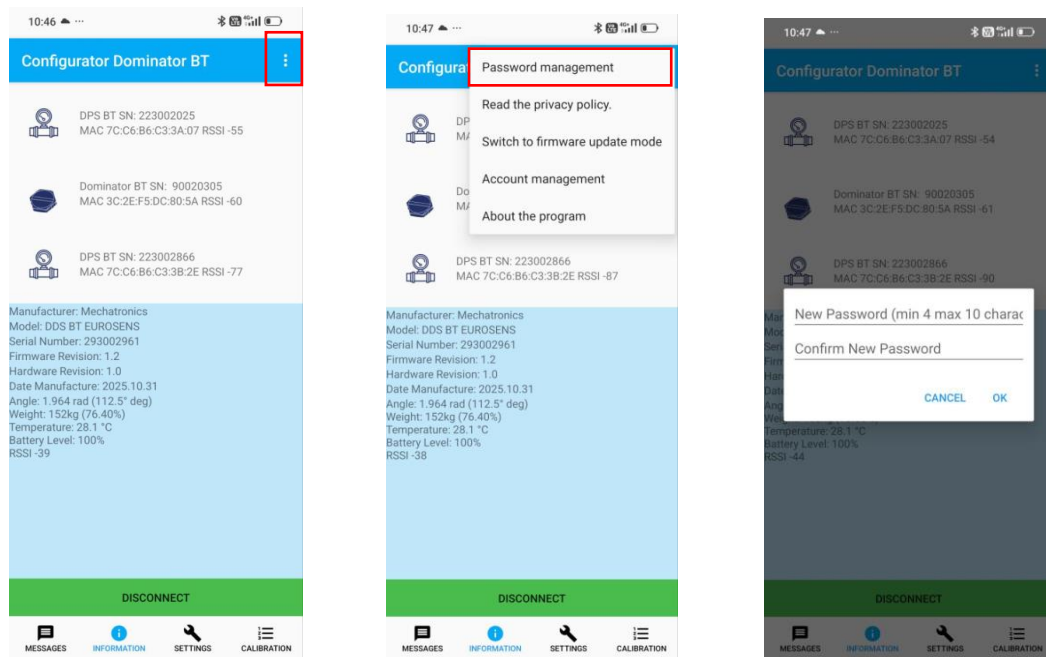


Fig. 5.10 Setting up the password

Set the password and press “OK”.

During the next connection, the system will request the password. ([Fig. 5.11](#)).

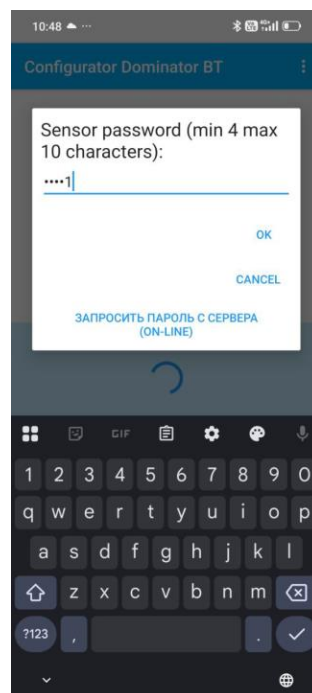


Fig. 5.11 Password request during connection

5.5 RESTORING PASSWORD USING MECHATRONICS-SERVICE.COM

If the sensor connection password is forgotten, it can be requested from the Mechatronics-service.com server. An Internet connection is required. ([Fig. 5.12](#)).

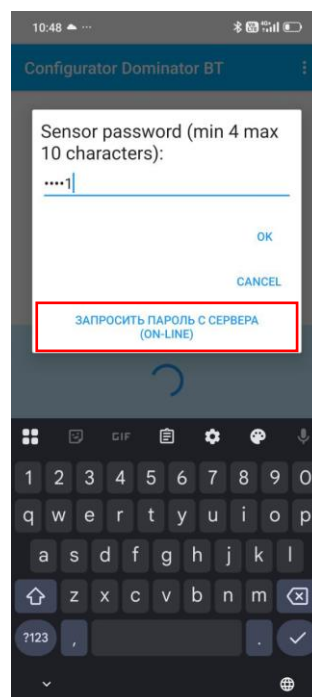


Fig. 5.12 Restoring password



To use this feature :

The user must be registered on the server, a company must be created, the sensor must be registered, and the user must be authorized in the Configurator Dominator BT application. See Mechatronics-service.com manual for more information

5.6 DELETING THE PASSWORD

The password can be removed, after which you will be able to connect to the sensor without a password prompt.

To do this, go to **“Password Management”**, enter your current password in the window that opens, and then select **“Delete Password”**. The password will be removed. (Fig. 5.13).

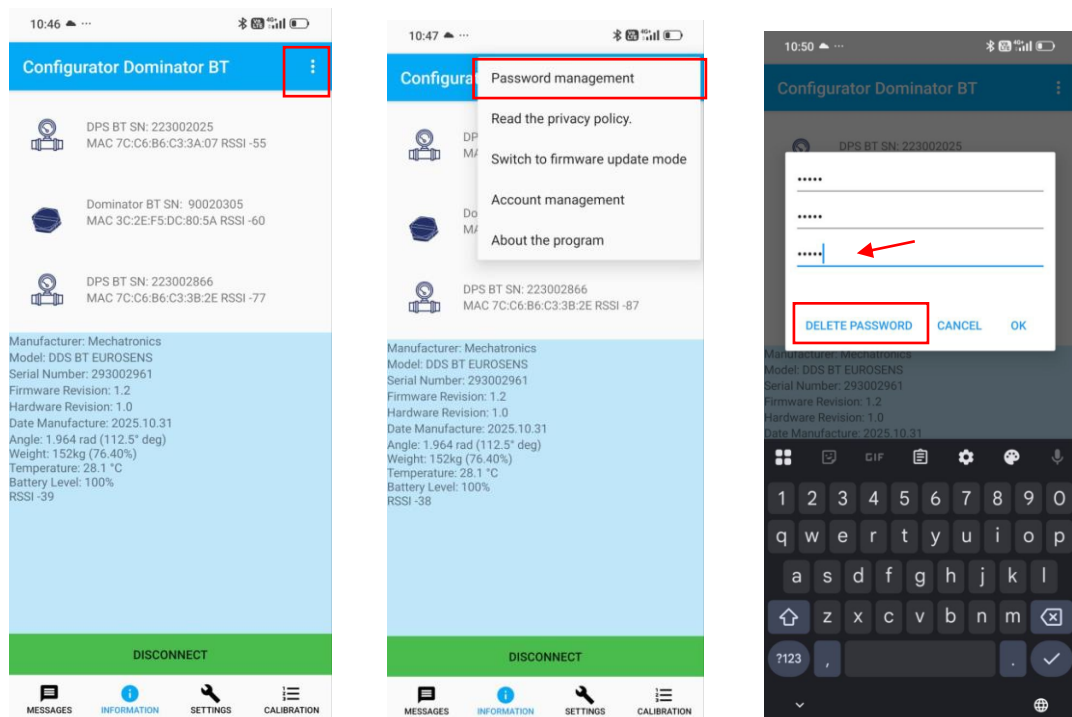


Fig. 5.13 Password removal

6 WORKING WITH DDS BT SENSOR SETTINGS

6.1 «SETTINGS» TAB

In the Settings tab, all parameters required for correct sensor operation can be configured (fig. 6.1).

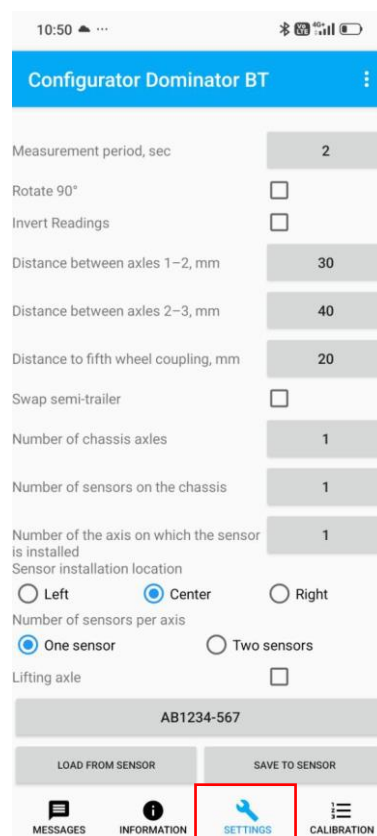


Fig. 6.1 «Settings» tab

You can configure the following parameters:

- Message transmission interval, in seconds.
- Pressure measurement interval, in seconds.
- Rotate the sensor zero position by 90 degrees (see Section 5.2).

- Invert the sensor readings by 180 degrees (see Section 5.3).
- Distance between axles 1–2, in millimeters.
- Distance between axles 2–3, in millimeters.
- Distance to the fifth wheel coupling, in millimeters.
- Removable semi-trailer (select if the sensor is installed on a removable semi-trailer).
- Number of chassis axles:
 - if the sensor is installed on a removable semi-trailer — specify the number of semi-trailer axles;
 - if the sensor is installed on a tractor unit — specify the number of tractor axles.
- Number of sensors on the chassis.
- Axle number on which the sensor is installed.
- Sensor installation position (sensor position on the axle).
- Number of sensors on the axle.
- Lift axle (select if the sensor is installed on a lift axle).
- Identification number (you can enter the vehicle or trailer number on which the sensor is installed). Up to 10 characters are allowed; Latin letters, digits, and certain special characters (“/”, “-”) are permitted.

To read the parameters currently stored in the sensor, click the **“Read from Sensor”** button. All fields will be updated with the current values (Fig. 6.2).

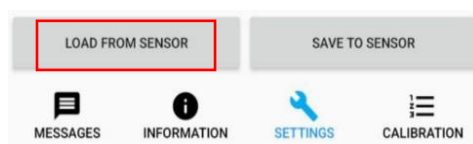


Fig. 6.2 Reading parameters from sensor

After setting all required values, click the **“Write to Sensor”** button (Fig. 6.3). The new parameters will be written to the sensor.



Fig. 6.3 Saving sensor configuration

6.2 ROTATING THE SENSOR ZERO POSITION BY 90 DEGREES

During sensor installation, it is not always possible to mount the sensor in a specific orientation.

The **“Rotate by 90 degrees”** and **“Invert Signal”** settings allow the sensor to be installed in any position with 90-degree increments.

For example, it may be necessary to rotate the sensor scale by 90 degrees (Fig. 6.4).



Fig 6.4

Select the **“Rotate by 90°”** checkbox, then click the **“Write to Sensor”** button. As a result, the scale will be rotated by 90° (Fig. 6.5).

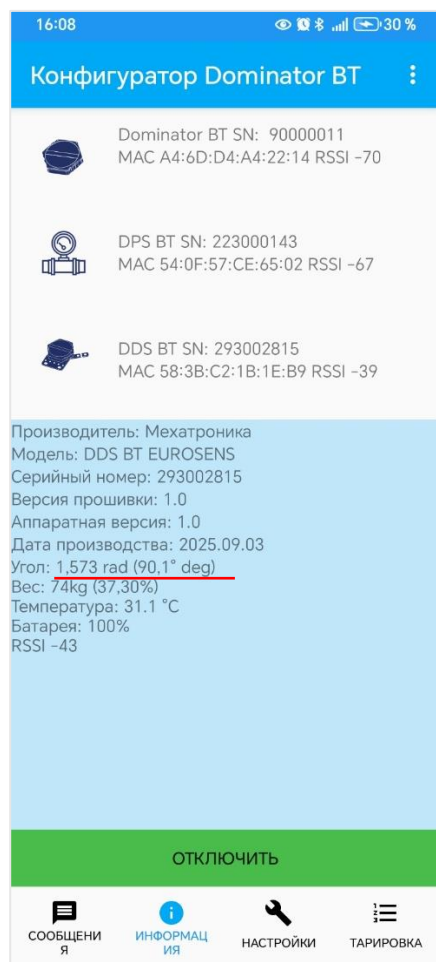


Рис. 6.5

6.3 INVERTING SENSOR READINGS BY 180 DEGREES

During sensor installation and configuration, it may be necessary to change the direction of the scale (Fig. 6.6). To do this, select the **“Invert Signal”** checkbox and click the **“Write to Sensor”** button.



Fig. 6.6 Default scale direction

After writing the settings to the sensor, the direction of the scale will be inverted (Fig. 6.7).

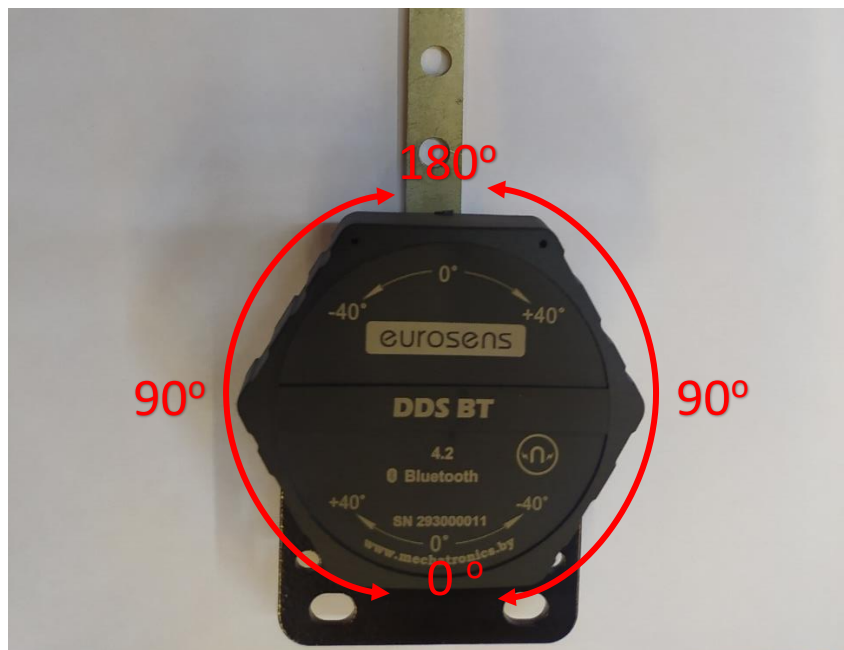


Fig. 6.7

7 CALIBRATION TABLE

7.1 EDITING THE CALIBRATION TABLE

The “**Calibration**” tab contains the calibration table and tools for working with it (Fig. 7.1), where you can create a table with values for an unloaded and a loaded axle. You can also add intermediate points, which improves the accuracy of load level readings.

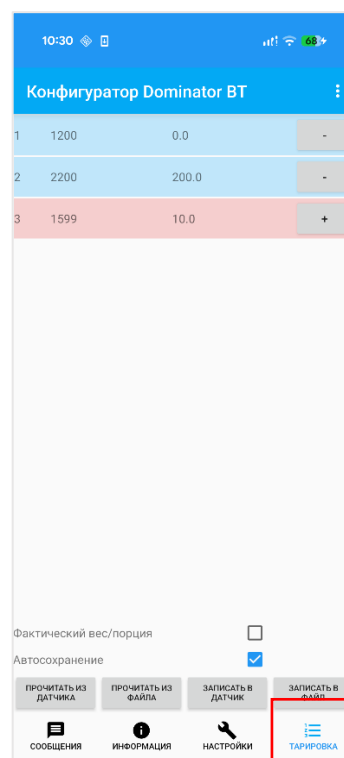


Fig. 7.1 «Calibration» tab

The first column displays the detector value, and the second column displays the axle load or the cargo weight (Fig. 7.2).



	Detector	Volume	
1	1200	0.0	-
2	2200	200.0	-
3	1581	10.0	+

Fig. 7.2 Calibration table

Rows already added to the table are highlighted in blue. The row with the current detector value that has not yet been added to the table is highlighted in red.

After tapping a row, it becomes available for editing, allowing you to change the detector value and the axle load (cargo weight) (Fig. 7.3).

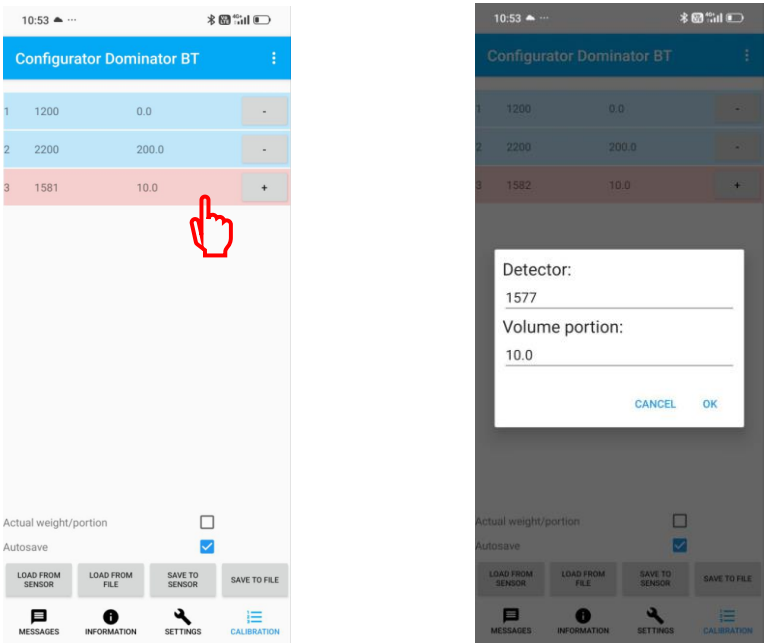


Fig. 7.3 How to edit the record

By pressing the “+” button, a row is added to the table; pressing the “-” button removes it. The tab also contains two options (Fig. 7.4).

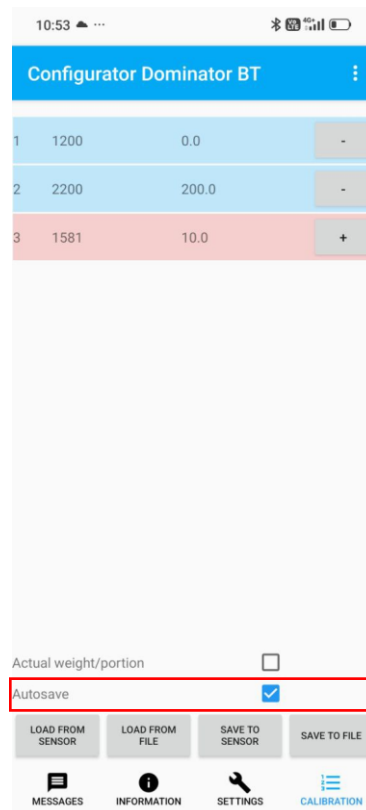


Fig. 7.4 Calibration options

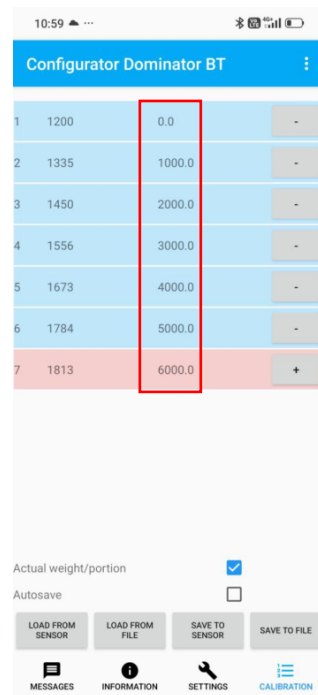
Auto-save:

Each time a row is added to the table, the system will prompt you to save the current calibration table.

Actual weight / portion:

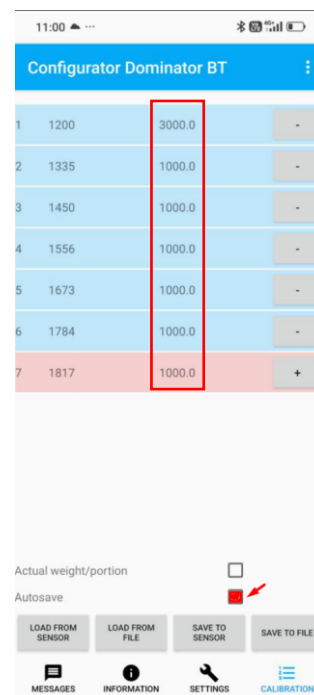
The calibration table can contain either loaded portions or the actual weight measured on scales.

This option allows displaying either the actual weight (Fig. 6.5) or the portion (Fig. 6.6).



ID	Weight	Action
1	0.0	-
2	1000.0	-
3	2000.0	-
4	3000.0	-
5	4000.0	-
6	5000.0	-
7	6000.0	+

Fig. 7.5 Actual weight



ID	Weight	Action
1	3000.0	-
2	1000.0	-
3	1000.0	-
4	1000.0	-
5	1000.0	-
6	1000.0	-
7	1000.0	+

Fig. 7.6 Added portions

7.2 CALIBRATION METHODS

To establish a relationship between the sensor output signal and the weight of the transported cargo, sensor calibration must be performed.

7.2.1 CALIBRATION BY CARGO WEIGHT

For calibration without considering the vehicle weight, the calibration table must have the following format (Fig. 7.7).

The weight of the empty vehicle is set to zero (0.0) and entered in the first row. The weights of the loaded portions are entered in the second and subsequent rows.



The table must contain from **2** to **16** entries.

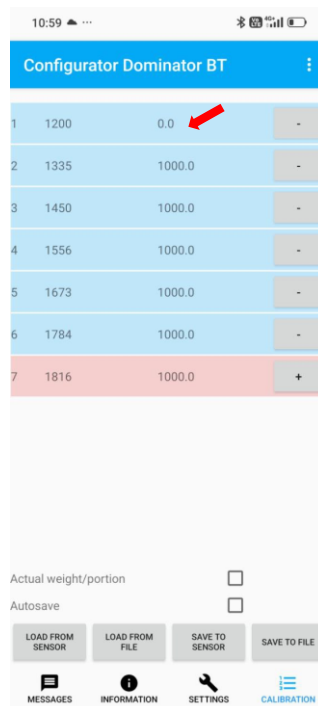


Fig. 7.7 Calibration table based on cargo weight

If it is more convenient to specify the current weight, enable the **“Actual Weight”** option (Fig. 7.8).

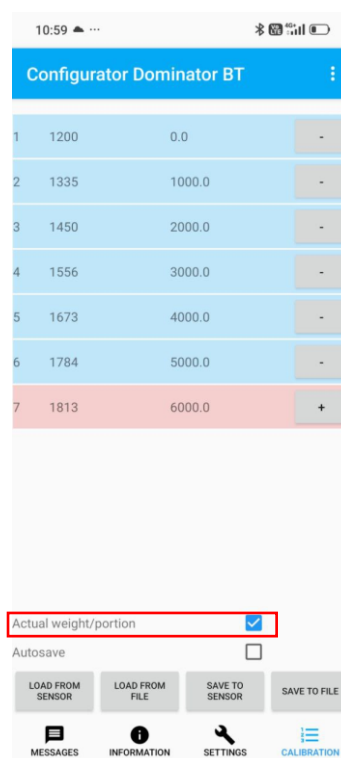


Fig. 7.8 Actual current weight

7.2.2 CALIBRATION BY VEHICLE WEIGHT

For calibration taking the vehicle weight into account, the calibration table must have the following format (Fig. 7.9).

The vehicle weight (or axle load) is entered in the first row. The weights of the loaded portions are entered in the second and subsequent rows.



The table must contain from **2** to **16** entries.

1	1200	3000.0	-
2	1335	1000.0	-
3	1450	1000.0	-
4	1556	1000.0	-
5	1673	1000.0	-
6	1784	1000.0	-
7	1817	1000.0	+

Fig. 7.9 Table based on vehicle weight

If it is more convenient to specify the current weight, enable the “**Actual Weight**” option (Fig. 7.10).

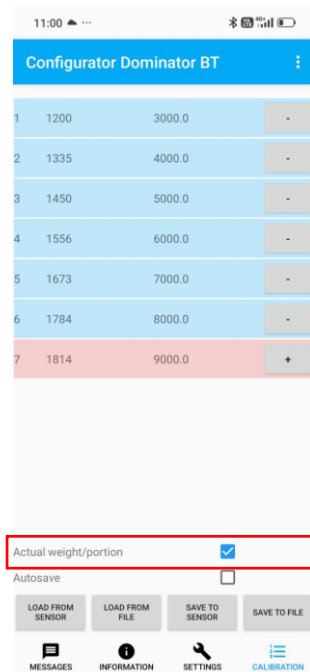


Fig. 7.10. Table with actual vehicle weight (or axle load)

7.3 WRITING THE TABLE TO SENSOR

After completing the table, it must be written to the sensor. To do this, click the **“Write to Sensor”** button. You will be prompted to select the format in which the table will be written (Fig. 7.11).

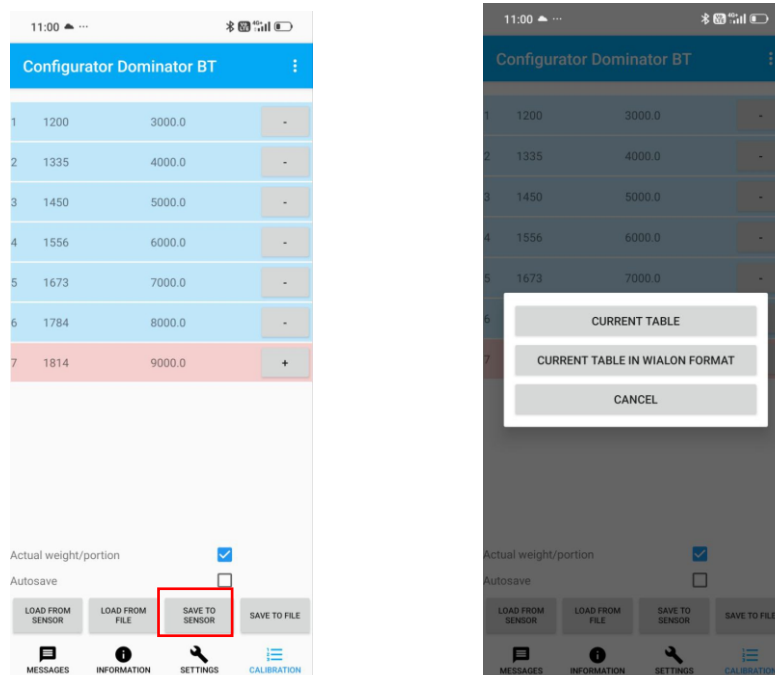


Fig. 7.11 Recording table to sensor

- **“Current Table”** — the table in the form in which it is displayed in the application.
- **“WIALON Format Table”** — for use with WIALON software.

When you select **“Current Table in WIALON Format”**, the application will prompt you to save the calibration table to a file. This step is mandatory.

Only the empty/full calibration will be written to the sensor itself, while the saved file on the device will contain the calibration table in Wialon format. This file must be uploaded to the Wialon software.



Before saving the calibration table to the sensor in Wialon format, it is recommended to save the table to a file in the standard format.



After the calibration procedure in this mode, the sensor output value is proportional to the vehicle weight and varies in the range from 0 to 100. Conversion to weight is performed on the dispatching software side by importing the saved calibration table.

8 CALIBRATION OF A GROUP OF SENSORS

8.1 ADDING SENSORS TO A GROUP

When several sensors are installed on a vehicle, it becomes possible to connect to all of them simultaneously and quickly switch between the corresponding calibration tables.

To add a sensor to a group, go to the **“Messages”** tab, which displays a list of available Bluetooth devices (Fig. 8.1).

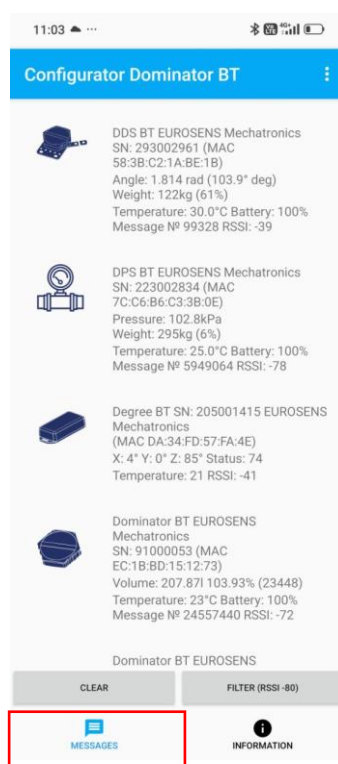


Fig. 8.1 «Messages» tab

Select the required sensor from the list and tap it. A dialog window will appear in which you need to press the **“OK”** button. The sensor is marked as a **Favorite**, and the icon changes to green (Fig. 8.2). Add all required sensors using this method.

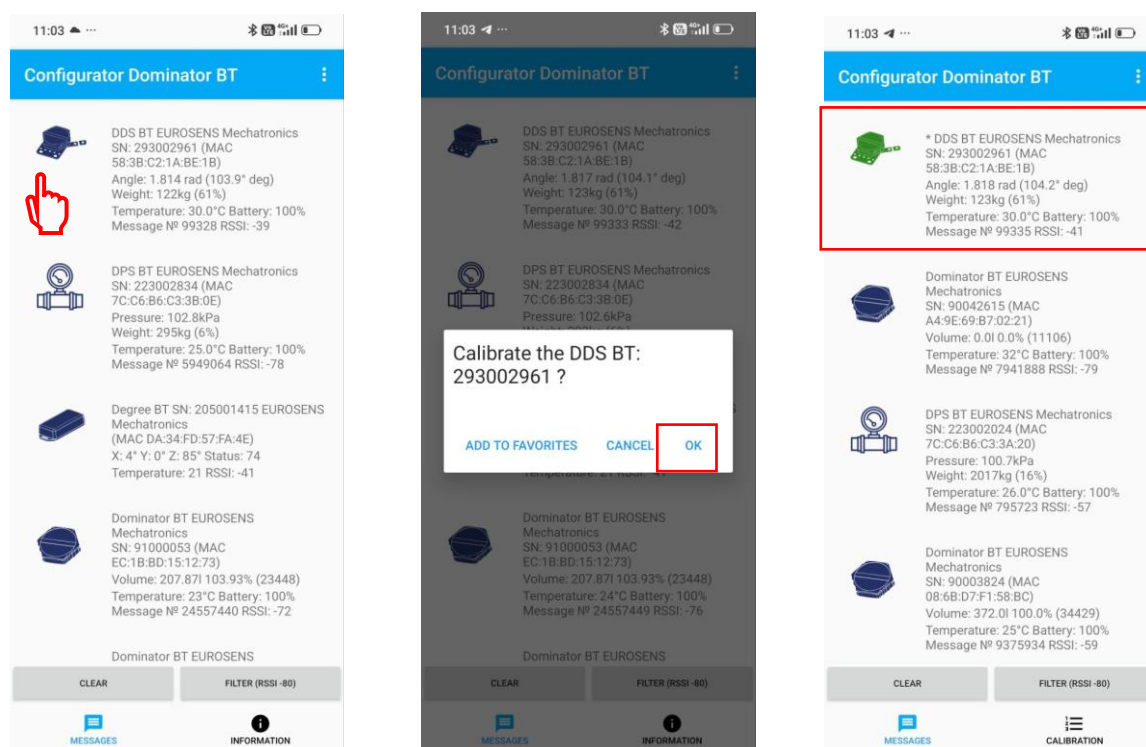


Fig. 8.2 Adding sensor to a group



A maximum of **5 sensors** can be added to a group.

If you accidentally added the wrong sensor, it can be removed from the group. To do this, tap the added sensor and confirm the disconnection by pressing “OK” in the dialog window that appears (Fig. 8.3).

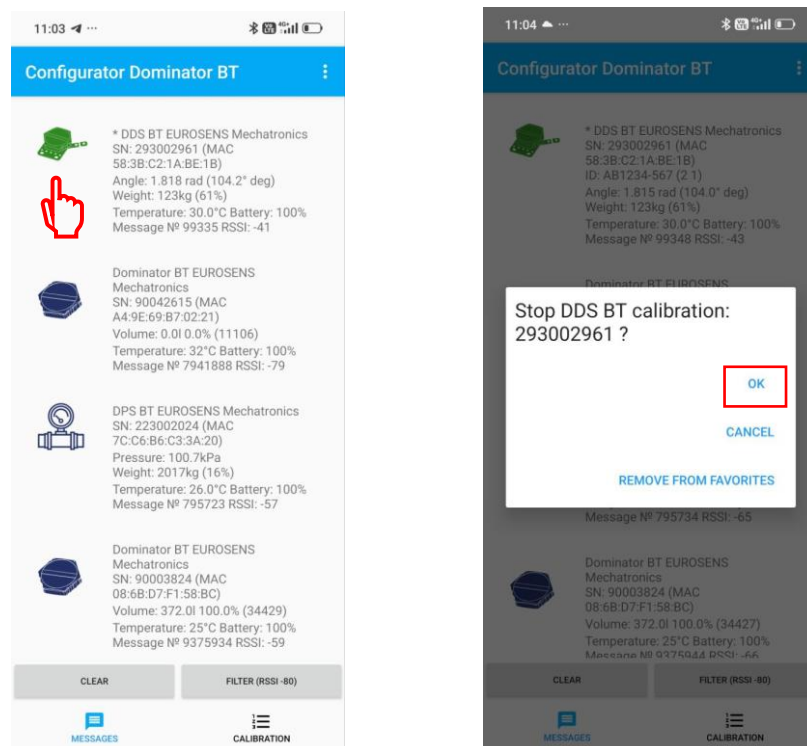


Fig. 8.3 Removing of sensor from group

8.2 CALIBRATION OF SENSORS IN A GROUP

After all required sensors have been added to the group, the **"Calibration"** button will appear next to the **"Messages"** button.

To calibrate the sensors, go to the **"Calibration"** tab by clicking the corresponding button (Fig. 8.4).

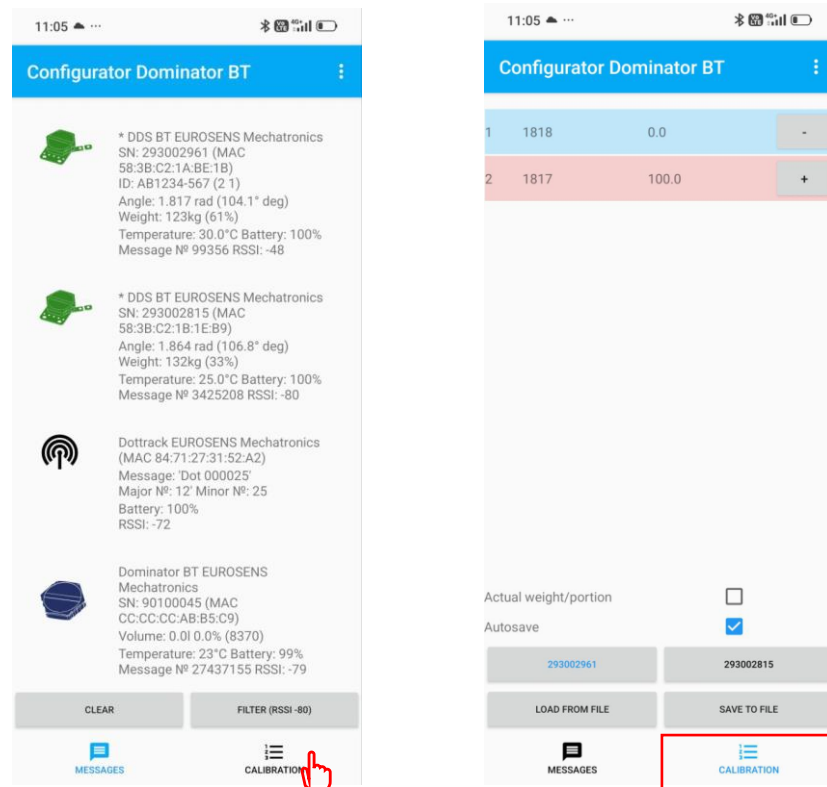


Fig. 8.4 Calibration of sensors in a group

In the **"Calibration"** tab, buttons with the sensors' serial numbers are displayed at the bottom. By clicking these buttons, you can switch between the calibration tables of the corresponding sensors (Fig. 8.5).

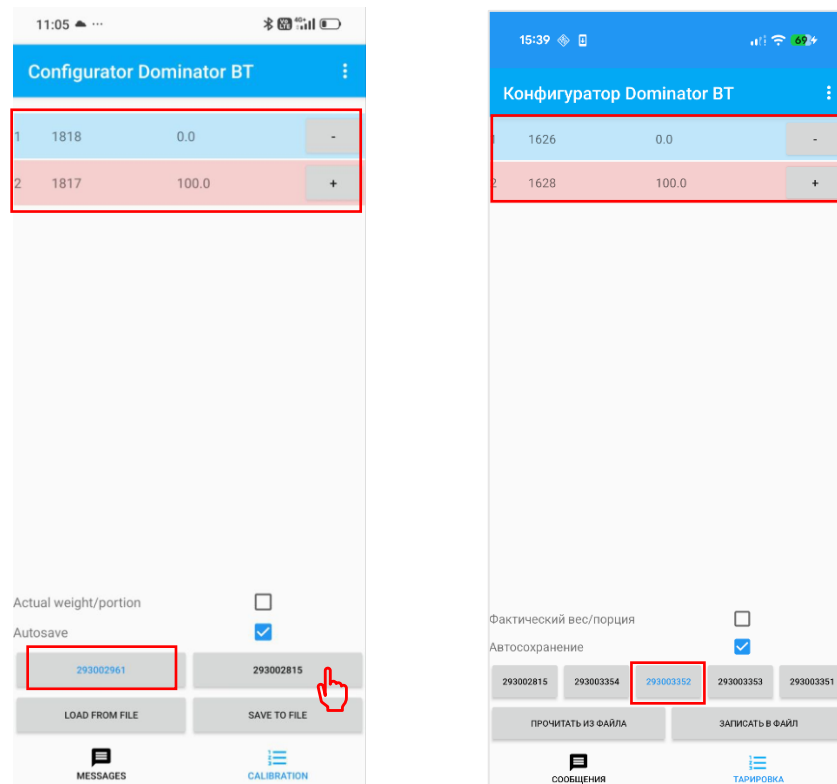


Fig. 8.5 Switching between sensor calibration tables

8.3 SAVING TABLES TO FILES

After completing all calibration tables for the group, you must save each table to a separate file (they will later be uploaded to their respective sensors).

Switch between the tables and click the **“Save to File”** button (Fig. 8.6).

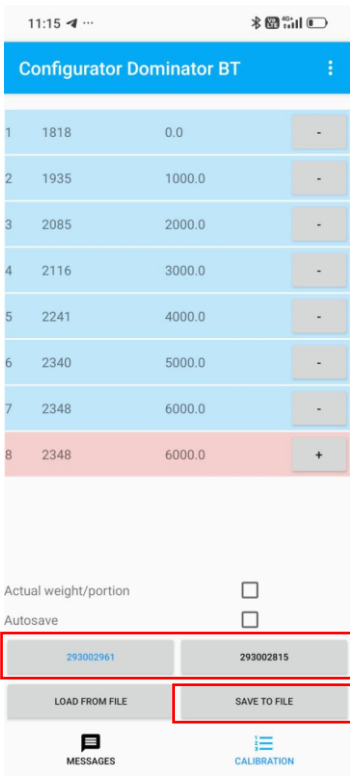


Fig. 8.6 Saving table to file

After all tables have been saved to files, you will be able to upload them to the sensors.

8.4 UPLOADING TABLES TO SENSORS

After saving all files with calibration tables, you must connect to each sensor sequentially and upload the calibration table configured for that sensor.

After connecting to a sensor, go to the **“Calibration”** tab and click the **“Read from File”** button (Fig. 8.7).

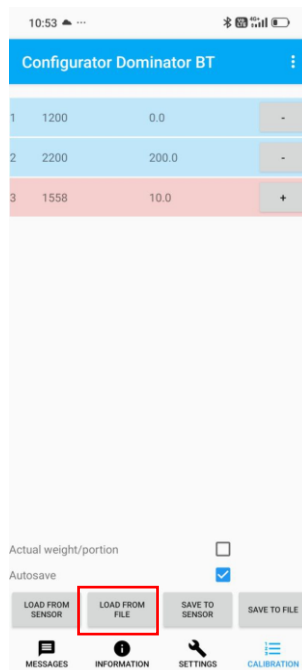


Fig. 8.7 Load table from file

After selecting the required file, a new calibration table will be loaded (Fig. 8.8).

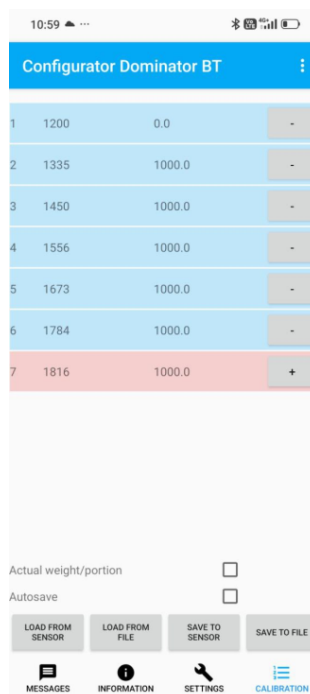


Fig. 8.8 Loaded calibration table

After loading the required table, click the **“Write to Sensor”** button (Fig. 8.9).

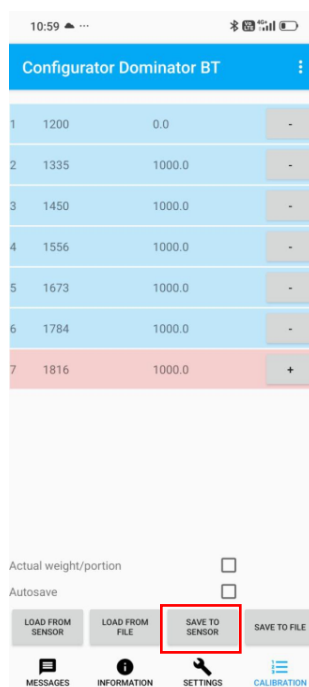


Fig. 9.9 Save to sensor

9 SENSOR FIRMWARE UPDATE

1. To update the sensor firmware, download the **Si Connect** application from the **Play Market**.
2. Download the latest firmware from the manufacturer.
3. Switch the receiver to firmware update mode:

In the **“Configurator Dominator BT”** application, open the **“Information”** tab and tap the additional menu button in the upper-right corner (Fig. 9.1).



Fig. 9.1 Additional menu

4. Select **“Switch to Firmware Update Mode”** and confirm the action (Fig. 9.2).

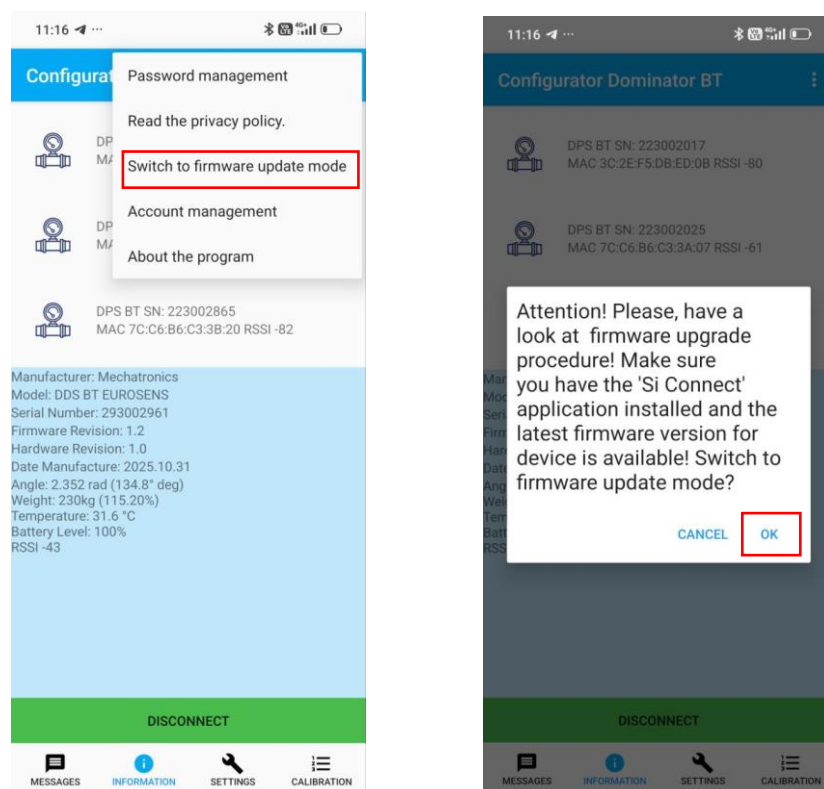


Fig. 9.2. Switch to firmware update mode

5. Run **Si Connect APP** (fig. 9.3).



A list of devices will appear in the window. The device named **“OTA”** is the receiver in firmware update mode. For double-check compare the MAC addresses in the **Configurator Dominator BT** and **Si Connect** applications.

6. Click **“Connect”** to connect to the receiver. The following window will appear (Fig. 9.4).

In this window, click **“OTA Firmware”** in the upper-right corner. In the dialog window that appears, you will be able to select the firmware file (Fig. 9.5).

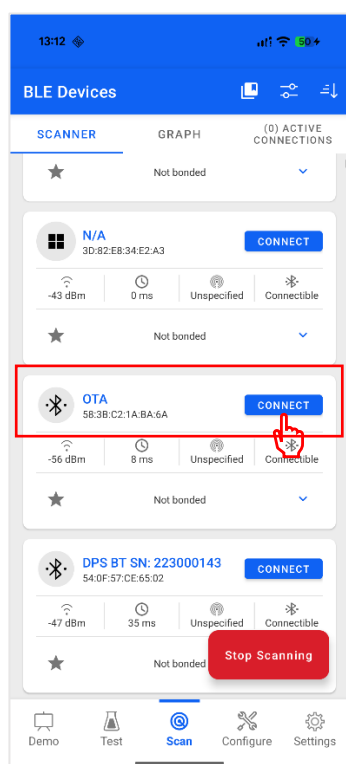


Fig. 9.3 Si Connect

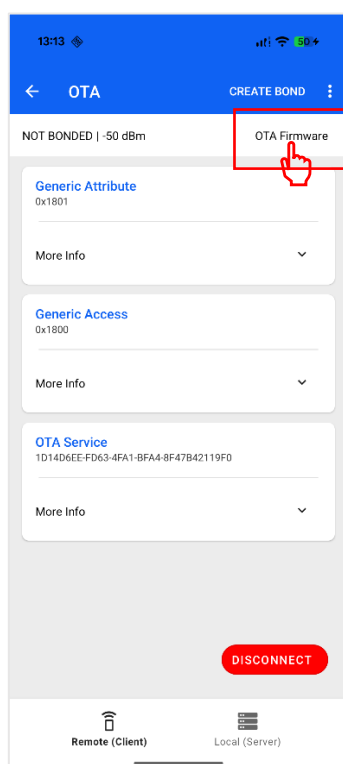


Fig. 9.4 OTA Firmware

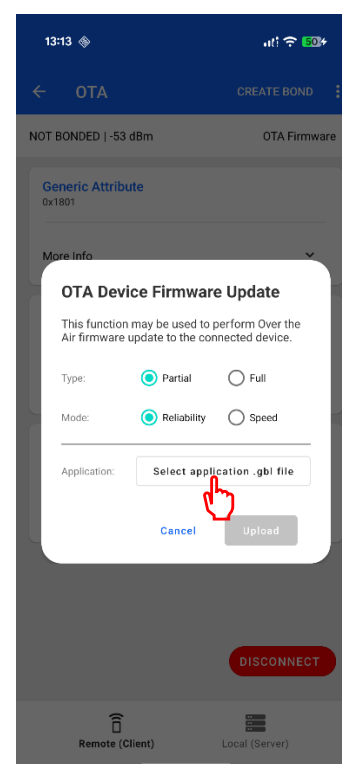


Fig. 9.5 File dialog.

7. Select the firmware file and click **“Upload”** (Fig. 9.6).

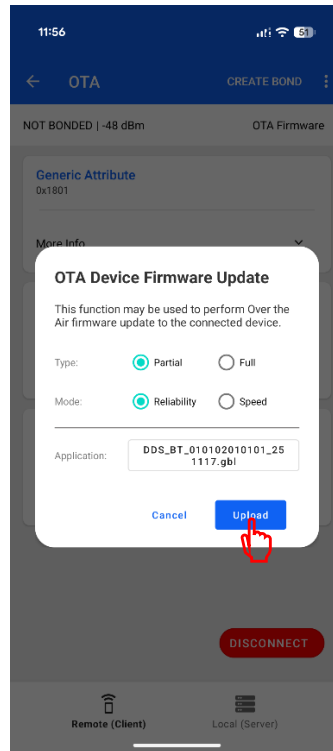


Fig. 9.6 Firmware upload

After the firmware upload process is completed, the sensor will reboot and will be ready for operation.

10 ADDITIONAL INFORMATION

10.1 STORAGE

It is recommended to store axle load sensors eurosens DDS BT in dry enclosed areas.

eurosens DDS BT must be stored in its original packaging at temperature range from -50°C to +40°C and relative humidity up to 100% at +25°C.

Do not store eurosens DDS BT with substances that cause metal corrosion and/or containing aggressive impurities.

The storage period of eurosens DDS BT should not exceed 24 months.

10.2 TRANSPORTATION

eurosens DDS BT must be transported in compartments that protect packages from mechanical damage and precipitation.

Air environment in transportation compartments must not contain acidic, alkaline and other corrosive impurities.

Shipping containers with eurosens DDS BT must be sealed.

10.3 DISPOSAL

eurosens DDS BT does not contain any substances or components that could be hazardous to health and the environment during and after the service life and disposal.

eurosens DDS BT does not contain any precious metals in the amount mandatory for accounting.

10.4 TECHNICAL SUPPORT



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10.5 CONTACTS

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fax: +375 (1771) 24190

E-mail: office@mechatronics.by
eurosenstelematics.com/en

APPENDIX I. MESSAGE FORMAT

Field	Description	Example	Offset, bytes	Length, bytes
48-bit unique identifier (UID)	Constant	0x2FB74FE363	7	5
Serial number		0x1176D372 (dec 293000050)	12	4
Message number	Message Overwrite Count	0x0003E6AA (dec 255658)	16	4
Status*	Status flags	0x00 (dec 0)	20	1
Angle, Rad. (0,001 rad / bit)	Current angle value. Resolution 0,001 rad/bit	0x0637 (dec 1591, rad 1.591 рад)	21	2
Weight, kg. (1 kg/bit)	Current weight. Resolution 0,001 kg/bit	0x004E (dec 78, vol 78 kg)	23	2
Axle load (1 %/bit)	Current axle load. Resolution 0,001 1%/bit	0x27 (dec 39, vol 39%)	25	1
Parameter number**	Cycles from 0 to 8	0x08	26	1
Parameter**	Depends on the value of parameter number	0x0201	27	2
Temperature, °C. (1°C/bit) (-40)	Current temperature. Resolution 1 °C/bit. Offset -40	0x40 (dec 64, t +24°C)	29	1
Battery charge (1 %/bit)	Current battery charge. Resolution 1 %/bit	0x64 (dec 100)	30	1

DDS BT EUROSENS Mechatronics
 SN: 293000050 (MAC B4:E3:F9:09:85:A8)
 ID: AB1234-567 (2 1)
 Angle: 1,591 rad (91,2° deg)
 Weight: 78kg (39%)
 Temperature: 24.0°C Battery: 100%
 Message № 255838 RSSI: -50

RAW DATA

0x0201061BFFFFFFF2FB74FE3631176D37
 20003E6AA000637004E270802014064 [Copy](#)

LEN	TYPE	VALUE
2	0x01	0x06
27	0xFF	0xFFFFF2FB74FE3631176D372000 3E6AA000637004E270802014064

*

Description	Bit number
Sensor locked	0
Reserve	1 - 7

**

Parameter number	Parameter
0	Text identifier 10 bytes, bytes 0, 1
1	Text identifier 10 bytes, bytes 2, 3
2	Text identifier 10 bytes, bytes 4, 5
3	Text identifier 10 bytes, bytes 6, 7
4	Text identifier 10 bytes, bytes 8, 9
5	Distance between axles 1 and 2, mm
6	Distance between axles 2 and 3, mm
7	Distance to SSU (fifth-wheel coupling), mm
8	0 byte – configuration type, 1 byte – installation spot

APPENDIX II. DIMENSIONS

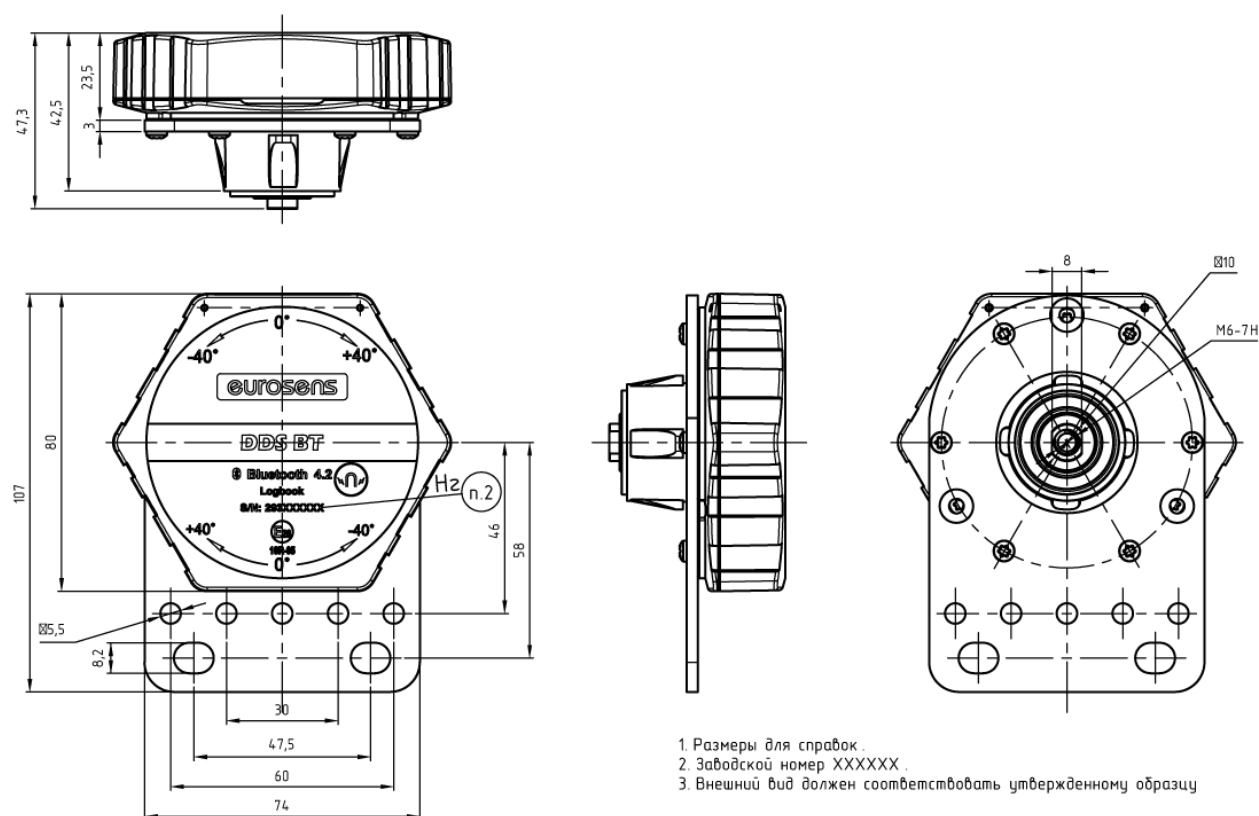


fig. II-1. eurosens DDS BT dimensions



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