Connecting ID system to UMKa301 trackers

GLONASSsoft technical support:
portal request: http://help.glonasssoft.ru,
e-mail: support@glonasssoft.ru
Tel.: 8-800-700-82-21

Enter these parameters to register on GLONASSsoft:
1. Identifier – IMEI 0000000000000000 (EXAMPLE)
2. Server IP address: 176.9.36.169
3. Port: 15050 (UMKa300/UMKa301)

Enter these parameters to register on Wialon:
1. Identifier – IMEI 0000000000000000 (EXAMPLE)
2. Server IP address: 193.193.165.165
3. Port: 21336 (UMKa300), 21510 (UMKa301)

Connecting ID system

RFID reader can be connected to the tracker via the RS-485 interface. In Figure 1, find an example of reader connection Считыватель может быть подключён к терминалу через интерфейс RS-485. The resistance at the end of the bus is installed to match the impedance and is equal to 120 Ω. For the RS-485 bus, the recommended cable type is a "twisted pair". Together with the RFID reader, the bus may contain some other devices (e.g., fuel level sensor).

RS-485 bus stubs should be as short as possible to match bus impedance. In order to prevent bus collisions, assign each device a unique address in advance.
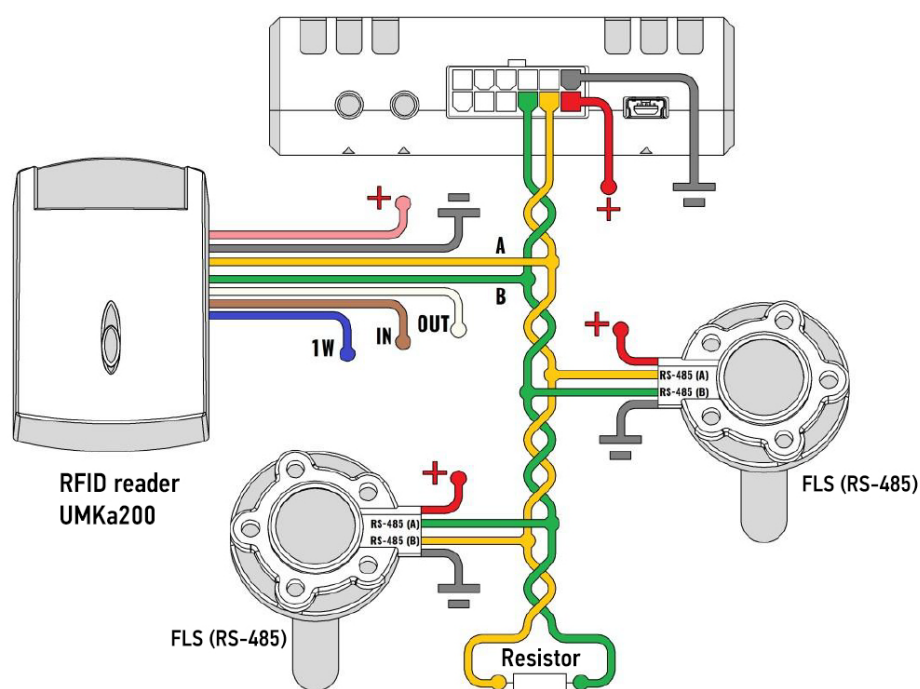
Figure 1 – Connecting RFID reader and FLS to the tracker

Attention! While working with fuel level sensors, one must strictly adhere to the requirements of the relevant maintenance manuals.

In order to work with the reader properly, the tracker should be configured as follows:
- the "Interfaces" tab is used for connecting RS-485 devices to the tracker (Figure 2);
- in the "Interfaces" tab select "RFID" mode from the corresponding dropdown menu (for working only with readers) or "FLS via LLS and RFID" (so then the RS-485 FLS can be connected);

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- and set the interface operating speed in the "Speed" dropdown menu (19200).
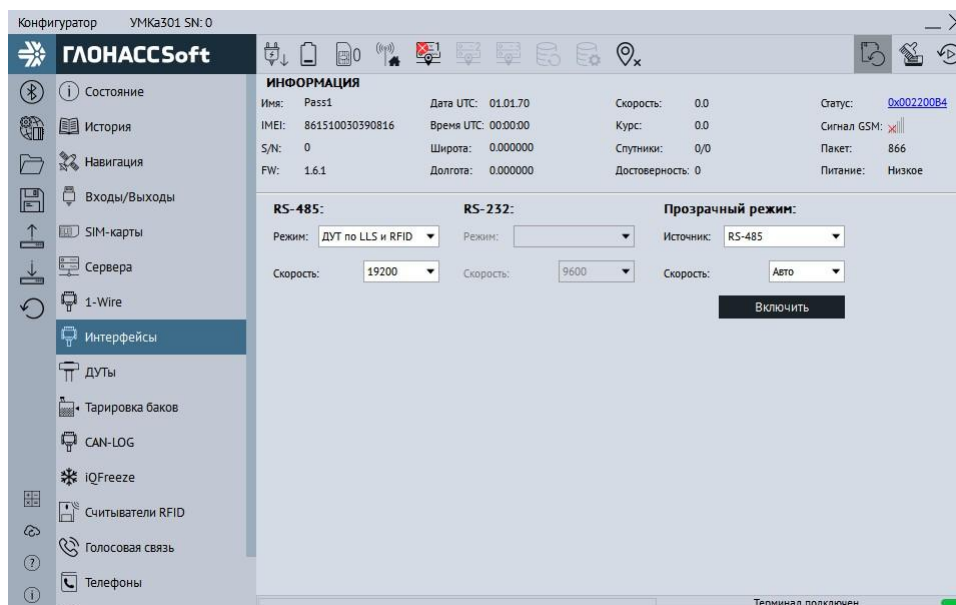

Figure 2 – "Interfaces" tab

In order to configure and obtain the data from the fuel level sensors with RS-485 interface, use "FLSs" tab (Figure 3), assigning addresses to each of the sensors in the corresponding field in advance.

To assign the addresses in the tracker, it takes only to enter them in "RS-485 FLS addresses setting" field and then write the configuration into the tracker. The configurator automatically displays the connected sensors and the parameters they show.
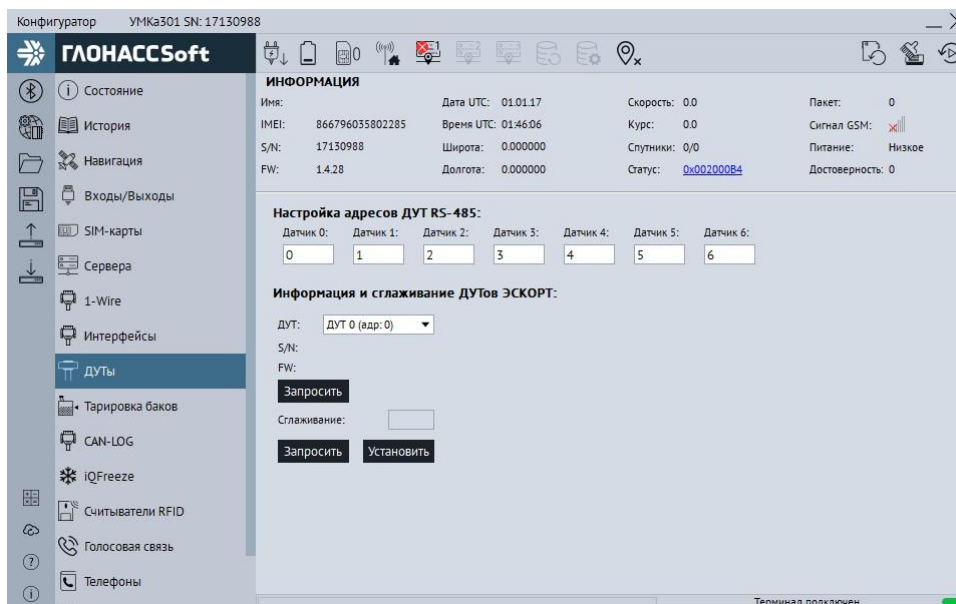

Figure 3 – "FLSs" tab

In order to configure and obtain the data from the RFID cards with RS-485 interface, use "RFID reader" tab (Figure 4). To assign the addresses in the tracker, it takes only to enter them in "RFID addresses setting" field and then write the configuration into the tracker. To transmit temperature data, check the box in line with the reader field.

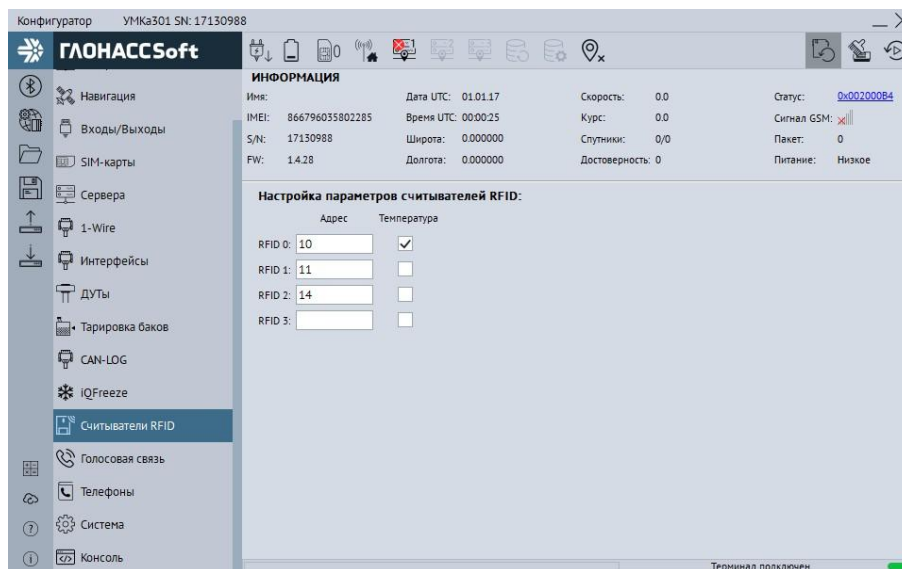> ⚠️ **Attention! Addresses of the RFID readers should differ from the FLS addresses.**

Figure 4 – "RFID reader" tab

In the UMKa200 configurator, you should also set the RFID reader's address and speed in the "RS-485" tab (Figure 5). This address should be the same as you have added to the tracker.
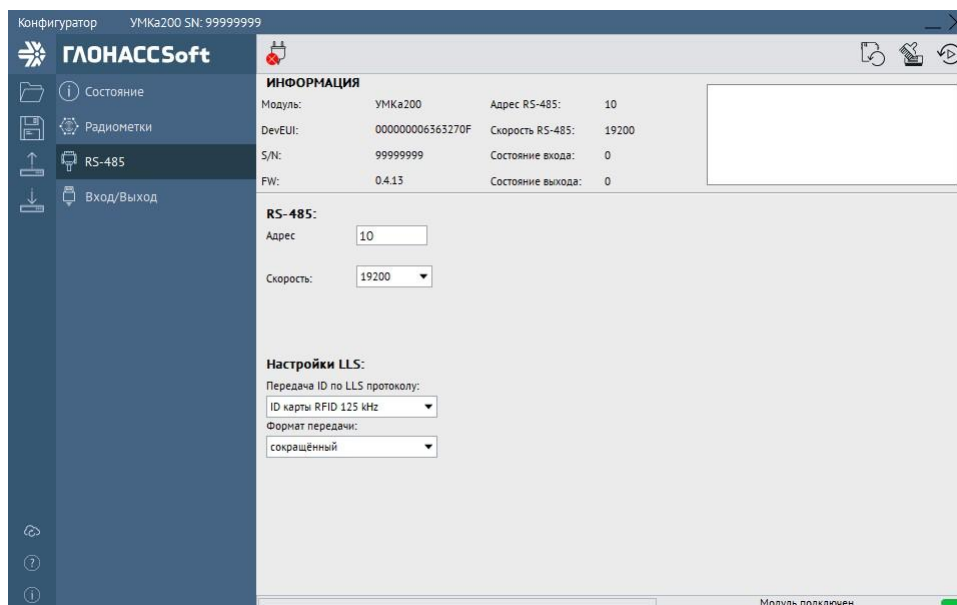

Figure 5 – "RS-485" tab

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