

Connection Instructions

FM-Pro4/Tco4 and LLS (RS485 Digital Fuel level Sensor)

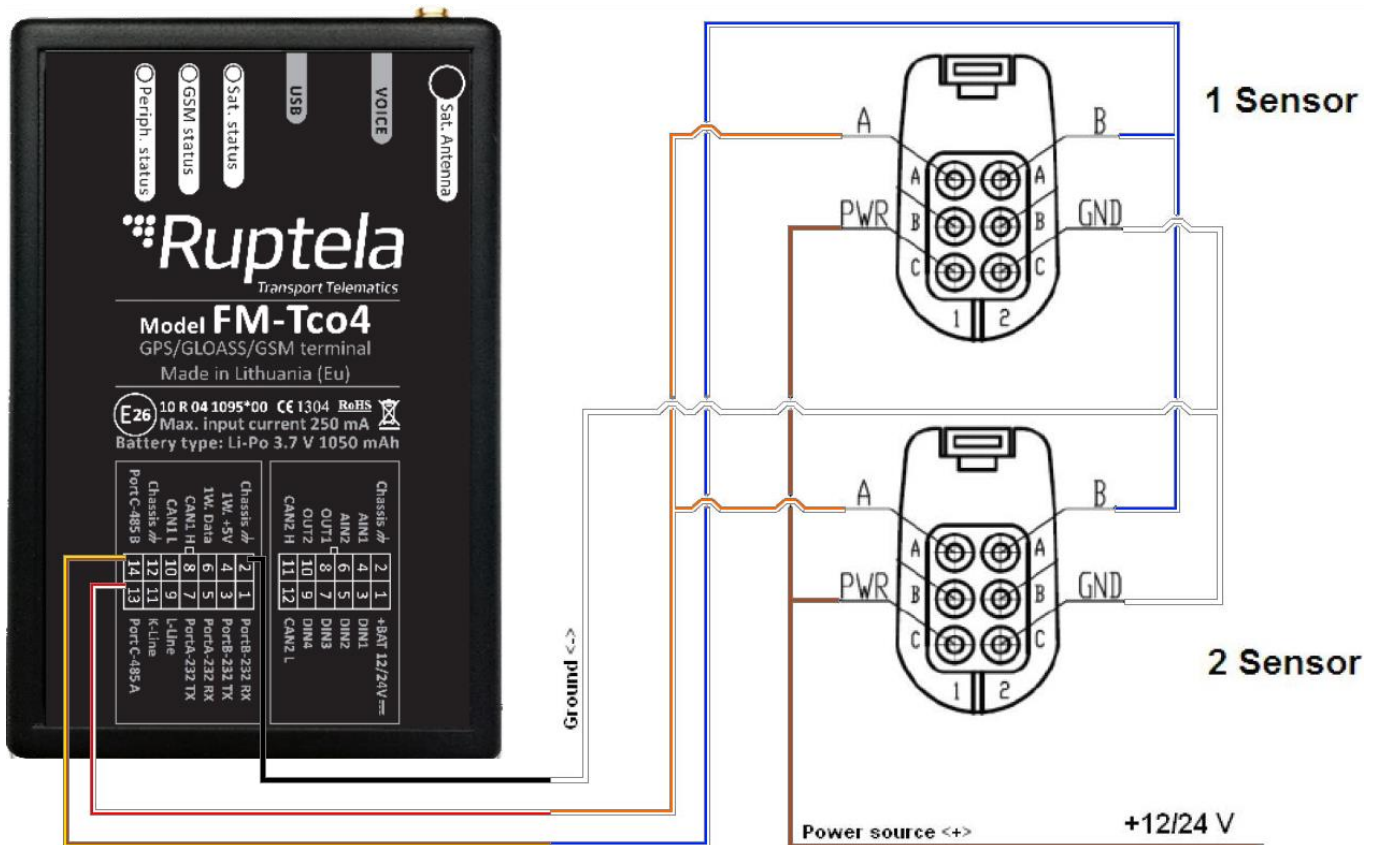
LLS configuration

It is very important to configure your LLS correctly before connecting it to the FM-Pro4/Tco4 Device. Key points for the configuration:

- ❖ The LLS Baud rate value has to be set to 19200.
- ❖ The LLS must be configured to send data only upon request from the FM-Pro4/Tco4 Device.
- ❖ LLS data output should be binary, 10 or 12 bits.

Connecting the LLS to FM-Pro4/Tco4

LLS (20160, RS485) should be connected to the FM-Pro4/Tco4 device 14 pin connection as follows (see the Picture 1 below):



Picture 1. FM-Tco4 and LLS connection scheme (Example given for the Omincomm LLS).



Contacts:

Main Support no.: +370 5 2045030
 Polish Support no.: +48 22 2092532
 Ukrainian Support no.: +380 947 107319

Web: www.ruptela.lt
 Email: support@ruptela.com

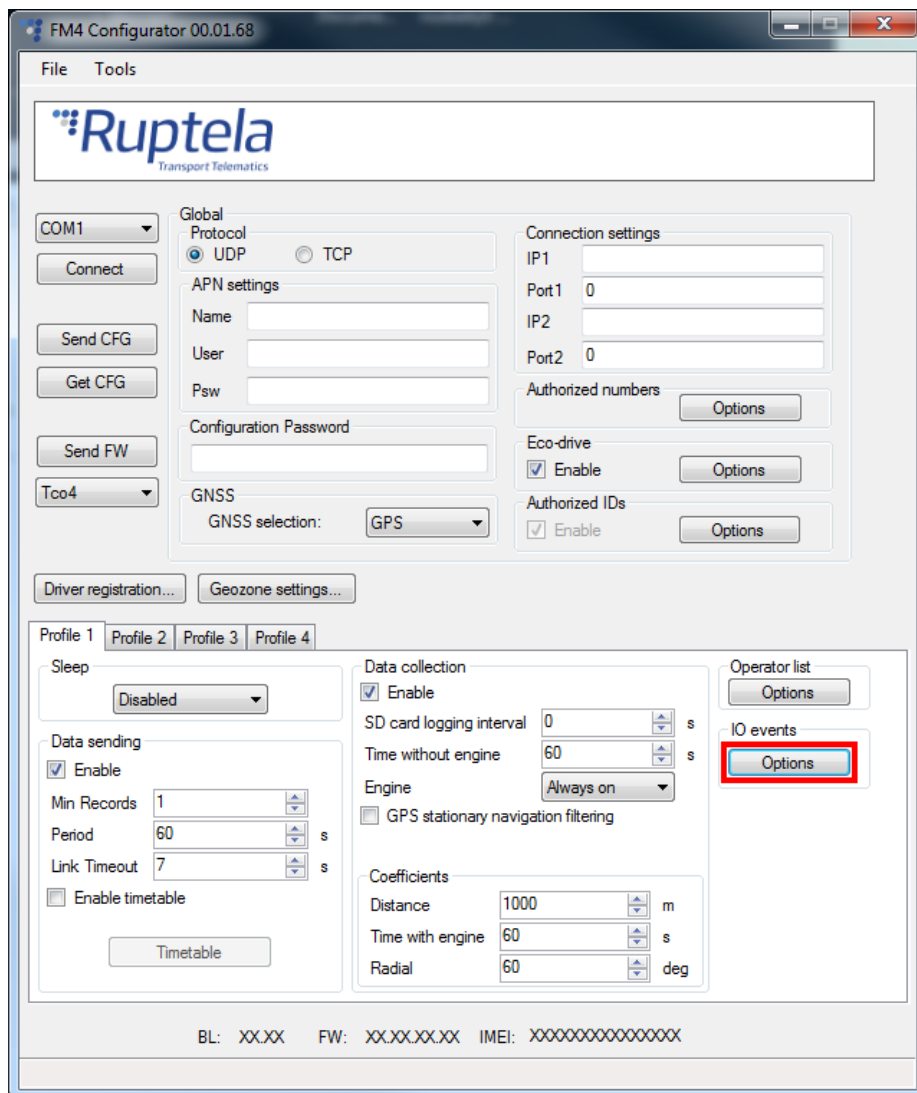
Wire colors:

LLS output wires*	LLS output description*	FM-Pro4/Tco4
Brown (C1)	Power source «+»»	Battery (+12/24V)
White (C2)	Ground «-»»	Pin2 (CHASSIS)
Pink (B1)	RS-232 "Tx"	
Grey (B2)	RS-232 "Rx"	
Orange-White (A1)	EIA-485 "Line A"	Pin13 (PORTC A)
Blue-White (A2)	EIA-485 "Line B"	Pin14 (PORTC B)

*Example given for the Omincomm LLS

LLS configuration settings in FM4 Configurator

- ❖ Open the FM4 Configurator;
- ❖ Click on the "Options" button in the "IO events" section (see the Picture 2 below);



Picture 2. FM4 Configurator IO events.



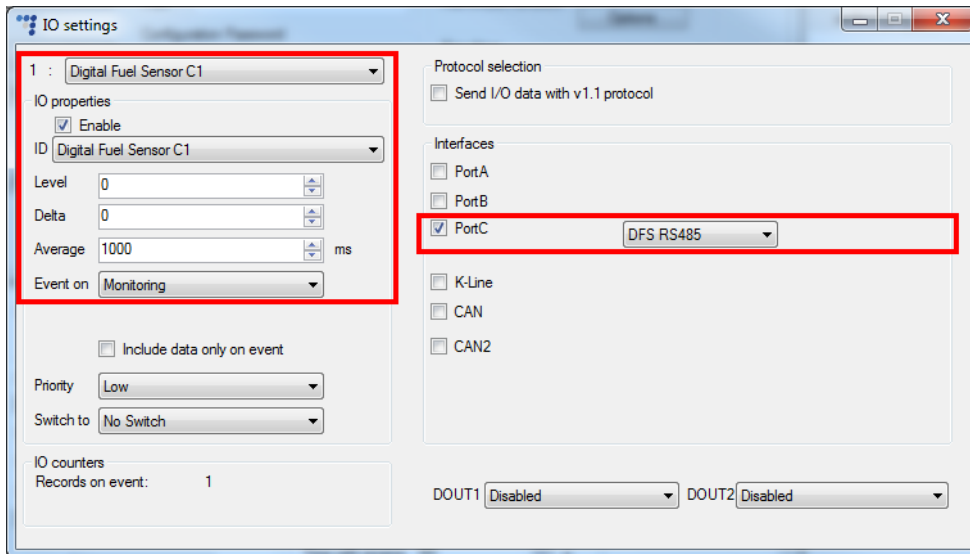
Contacts:

Main Support no.: +370 5 2045030
 Polish Support no.: +48 22 2092532
 Ukrainian Support no.: +380 947 107319

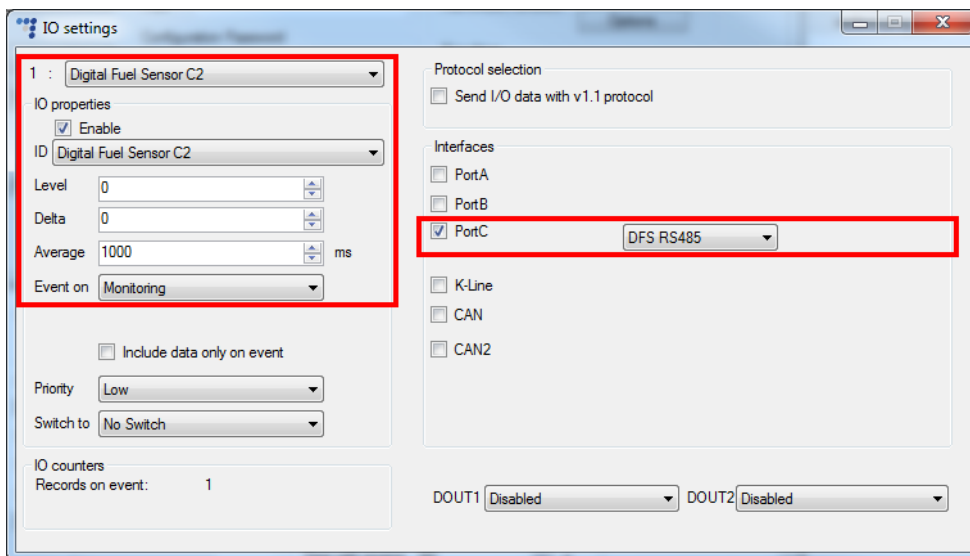
Web: www.ruptela.lt

Email: support@ruptela.com

- ❖ In the Options menu, there should be the following settings, as shown in the Pictures 3 and 4 below.



Picture 3. FM4 Configurator IO settings for 1st LLS.



Picture 4. FM4 Configurator IO settings for 2nd LLS.

After a proper configuration and connection you will be able to get values for two parameters:

- ❖ Fuel level
- ❖ Fuel temperature

Please have in mind that if you connected 2 sensors, you MUST configure only 2 sensors as well. If you configure more or less sensors, none of them will show the fuel level.

Also if you have few sensors connected and one is damaged or broken, others will not show fuel level as well.



Contacts:

Main Support no.: +370 5 2045030
 Polish Support no.: +48 22 2092532
 Ukrainian Support no.: +380 947 107319

Web: www.ruptela.it
 Email: support@ruptela.com