**OMNICOMM** 

# Fuel Volume Indicator Omnicomm LLD-HD

User manual 23.01.2019

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# Fuel Volume Indicator Omnicomm LLD-HD

### General information

Omnicomm LLD-HD fuel volume indicator is intended to display fuel volume of remaining fuel in the tanks of the vehicles, diesel generators and fuel storages.

In addition, Omnicomm LLD-HD fuel volume indicator enables control over one of the following parameters:

- volume of fuel filled in the tank during refueling, vehicle speed (with Omnicomm terminals only);
- volume of fuel dispensed by fuel tanker truck (with Omnicomm Profi terminals only);
- value from Omnicomm terminal universal input.

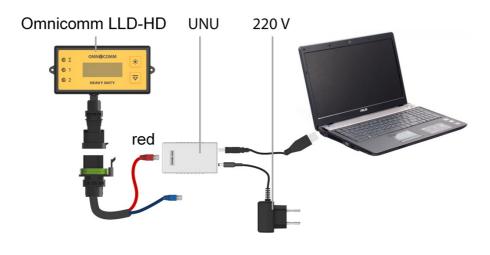
Omnicomm LLD-HD indicator shall only be used with Omnicomm LLS-HD fuel level sensors through RS-485 interface.

While installing this device, you should observe the safety precautions and measures, as well as meet the requirements of the regulatory documentation for this type of works.

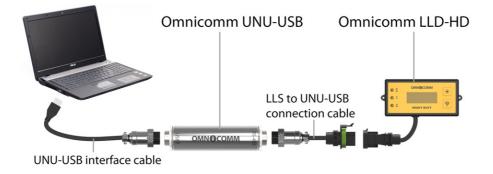
#### Setting up

### Setting up

Connect the Omnicomm LLD-HD indicator to the PC according to the scheme:



or



#### Setting up

#### Launch Omnicomm Configurator:

Omnicomm Configurator 5.0.6.5	
Indicator Operation mode Service Help	
🔏 Settings	😘 Calibration 🖵 🗖
Indicator parameters	
Indicator type	LLD 2.0.1.1
Firmware version	2.0.1.
Configurable parameters	
Baud rate (bit/s)	19200 -
No. of sensors	1
1st sensor address	1 -
2nd sensor address	
Brightness level of the indicator display	Minimum
Indication mode upon switching on	Fuel volume
Additional parameter	Not in use
The last change made to parameters	
5.0.6.5, 07:35:01 12.04.2017 UTC	
	C Update
Attention! The	calibration tables will be downloaded into LLD indicator from the "Calibration" section
LD 2.0.1.1	ConnectedCOM4, 19200 Bit/sec

In the menu, click "Tools" / "Settings" / "Connection" and specify the connection port and speed for the Omnicomm LLD-HD indicator when connected via the UNU-USB (or UNU) adjusting tool.

In the "Settings" section:

- 1. Specify the rate for data exchange via the EIA-485 interface. For firmware update, set the data exchange rate to the value of 19200 bit/sec.
- 2. Specify the number of sensors connected to the Omnicomm LLD-HD indicator.
- 3. Specify the network addresses that are set in the Omnicomm LLS-HD fuel level sensors.
- 4. Set the brightness level for the indicator at startup. The following options are available: maximum, minimum, off. The minimum brightness level is set by default.
- 5. If necessary, set one of the additional parameters (<u>Displaying an additional</u> <u>parameter</u>).
- 6. Click on the "Save in the indicator" button.

In the "Calibration" section, fill out the calibration table for each Omnicomm LLS-HD

#### Installation and connection

fuel level sensor, or download it from the previously saved file by clicking "Import" and selecting the "From the calibration file (.ctb)" option:

	peration mode Service Help	
Calibration		A Monitor
Add a row	Delete the row Add a sensor Delete the sensor Export 👻	
nterval betw	een the calibration points, litres 20 Start/continue the calibration Fi	ish the calibration
	Manual editing of the table is per	mitted
Litres	Sensor 1	
)	0.0	
20	1037.0	
40	2055.0	

Click on the "Export" button and select the "Into the indicator" option. To save the calibration table, click "Export" and select the "Into the calibration file (.ctb)" option.

### Installation and connection

While installing the Omnicomm LLD-HD fuel volume indicator with the help of screws, drill two 3.2 mm diameter fixation holes according to the installation dimensions:



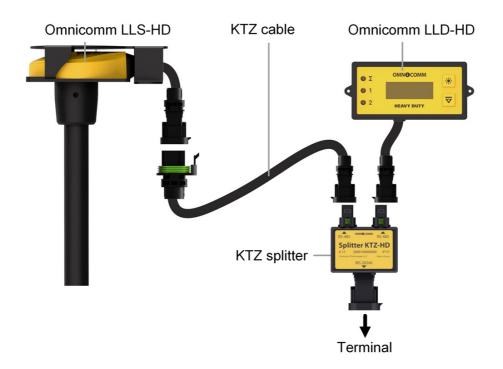
On the back side of a place of installation (e.g.dashboard, mounting plate etc.) install a

#### Installation and connection

washer and a nut, which are both included in the delivery set.

While installing the Omnicomm LLD-HD fuel volume indicator with the help of selftapping screws, drill two 2.5 mm diameter fixation holes according to the installation dimensions.

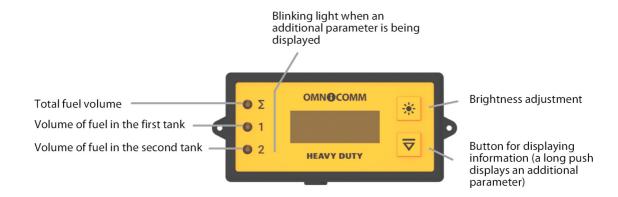
Connection of Omnicomm LLD-HD display with Omnicomm LLS-HD sensor shall performed in accordance with the diagram:



Purposes and colours of the wires in the cable of the Omnicomm LLD-HD indicator when connecting without a connector:

Name of signal	Colour of wire
EIA-485 A	Orange-white
EIA-485 B	White-blue
Positive supply	Brown
Ground (negative) supply	White

### Purpose of the indicator lights and touch buttons



### Displaying fuel volume

The LLD-HD indicator displays the value of fuel volume in the tank.

Shortly pushing the 😴 button will allow you to go to the next value viewed on the display:

- total volume read from both sensors (the Σ LED emits light);
- fuel volume read from the 1st LLS sensor (the 1 LED emits light);
- fuel volume read from the 2nd LLS sensor (the 2 LED emits light).

### Displaying an additional parameter

Displaying an additional parameter and returning to the default information is

enabled by long-pushing (i.e. longer than 3 s) the  $\overline{\nabla}$  button.

If necessary, you can set up one of the additional parameters:

1. Displaying the volume of fuel added during the refuelling operation.

This parameter allows you to monitor both the total volume of fuel added to the tank, and the volume of fuel in each tank.

In Omnicomm Configurator, in the "Settings" section, in the "Additional parameter» field, select the "Volume of fuel added during the refueling operation" option.

Before starting the refuelling operation, please, switch to the mode of displaying the

#### Purpose of the indicator lights and touch buttons

additional parameter by long-pushing the  $\overline{\bigtriangledown}$  button. Start the refuelling operation.

The Omnicomm LLD-HD indicator will display the volume of fuel being added to the tank.

Short-pushing the rightarrow button will allow you to go to the next value viewed on the display:

- total volume of fuel added (the Σ LED blinking light);
- volume of fuel added according to the 1st Omnicomm LLS sensor's readings (the 1 LED blinking light);
- volume of fuel added according to the 2nd Omnicomm LLS sensor's readings (the 2 LED blinking light).

2. Displaying the value of vehicle speed transmitted from the Terminal.

This parameter allows you to monitor the vehicle speed.

In Omnicomm Configurator, in the "Settings" section, in the "Additional parameter" field, select the "Terminal's data" option.

Enable the feature of displaying the speed by long-pushing the  $\overline{\Box}$  button.

3. Displaying the value read from the Terminal's universal input.

This parameter allows you to monitor the Terminal's universal input status or value, depending on the type of the connected auxiliary equipment.

In Omnicomm Configurator, in the "Settings" section, in the "Additional parameter" field, select the "Terminal's data" option.

Enable the feature of displaying the parameter by long-pushing the  $\overline{\nabla}$  button.

4. Displaying the volume of fuel dispensed from a fuel tanker truck.

This parameter is only available for the Omnicomm Profi 2.0 Terminal, which is provided with the connected signal pickup device (USS).

In Omnicomm Configurator, in the "Settings" section, in the "Additional parameter" field, select the "Terminal's data" option.

Before starting the fuel dispensing operation, please switch to the mode of displaying

the additional parameter by long-pushing the 😴 button. Start the fuel dispensing

operation. The Omnicomm LLD-HD indicator will display the volume of fuel being

#### **Technical specifications**

dispensed through the dispensing nozzle.

Short-pushing the 😴 button resets the displayed value.

The additional parameter can be displayed by default upon switching the Omnicomm LLD-HD indicator on. For this purpose, in Omnicomm Configurator, in the "Settings" section, in "The display mode at startup" field, select the "Additional parameter" option.

To display the vehicle speed, the values read from the universal input and the volume of fuel dispensed, it is necessary to edit the appropriate settings of the Omnicomm Terminal.

Specification	Value
Supply voltage	From + 8 to + 45 V
Network interface	RS-485
Data exchange rate via RS-485 interface by defaul	19 200 bit/sec
Calibration table	56 rows
Number of the connectable Omnicomm LLS-HD sensors	2
Ambient operating temperature	From - 40 to + 70 °C
Overall dimensions	137x61x23 mm

### OMNICOMM

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