OMNICOMM

Omnicomm OKO Video Terminal

User Manual

22.06.2021

Contents

Omnicomm OKO Video Terminal

General Information

Omnicomm OKO video terminal – vehicle equipment designed to collect information on the vehicle condition, record video to the removable media devices and transmit data to Omnicomm Online cloud service or a third-party software.

Main functions:

- video recording from the connected IP cameras
- data generation and transmission on events requiring video recording
- determination of location, speed and movement direction of the vehicle
- reading and filtering values from fuel level sensors and a wide range of connected equipment
- remote control of connected auxiliary equipment
- data storage in non-volatile memory
- data transmission to Omnicomm Online or a third-party software

Two SIM cards are required to work with the video terminal: SIM1 - for telemetric data transmission, SIM2 - for video files transmission.

After the ignition is switched off, recording and video transmission continues for 30 minutes. Contact the maintenance service to change the recording shutdown interval.

Video recording starts 50-70 seconds after the ignition is turned on, depending on the number of cameras connected.

Attention

While carrying out installation, observe the safety rules and regulatory requirements for this type of work.

Technical Specifications

	Omnicomm OKO
Communication	
Satellite Navigation Systems	GLONASS/GPS
Data transmission channel	GSM / GPRS UMTS / HSPA
Number of SIM cards	2
Video	
Number of connected IP video cameras	From 1 to 4
Video compression format	*.h264
Video encryption	Yes
Video volume from one camera	6 Mb/min
Record quality	1024 kbit/s
Video resolution	720p (1280×720)
Frames per second	15
Power source	
Power supply voltage, V	10…36

Technical Specifications

	Omnicomm OKO
Communication	
Overvoltage protection	Yes
External sensor power supply	Yes
Backup battery capacity, mAh	1400
Data collection and transmission	
Data collection period, s	15…240
Non-volatile memory capacity, events	150 000
Support of SD cards	2 × 512 Gb
Inputs and outputs	
Ignition key input	Yes
Panic button input	Yes
RPM sensor input	Yes
GSM call button input	Yes
Number of universal inputs	4+2 4+2 (Input 5, Input 6 for pulse signals only)
Number of digital outputs	2
A/V OUT	Yes

Technical Specifications

	Omnicomm OKO
Communication	
Interfaces	
CAN interface	Yes
RS-485 interface	1
RS-232 interface	1
USB interface	Yes
Voice communication connection	Yes
1-wire interface	Yes
Ethernet	Yes
Built-in accelerometer	Yes
Design	
Dimensions, mm	225 × 180 × 48 mm
Working temperature range, °C	– 40…+85
Body tampering sensor	Yes
Antenna design	External
Capabilities	

Technical Specifications

	Omnicomm OKO
Communication	
Fuel level sensors connections	6
Support of 2 mobile network operators	Yes
Number of servers for data transmission	2
Remote control through GPRS	Yes
SIM card heating	Yes
Driver identification	Yes
Event photo registration	Yes
1-Wire temperature sensors connection	Yes
Passenger sensors support	Yes
Data output via external indicator	Yes
SMS notifications	Yes

Maximum recording time depending on the number of cameras and SD card capacity

	128 Gb	256 Gb	512 Gb

Technical Specifications

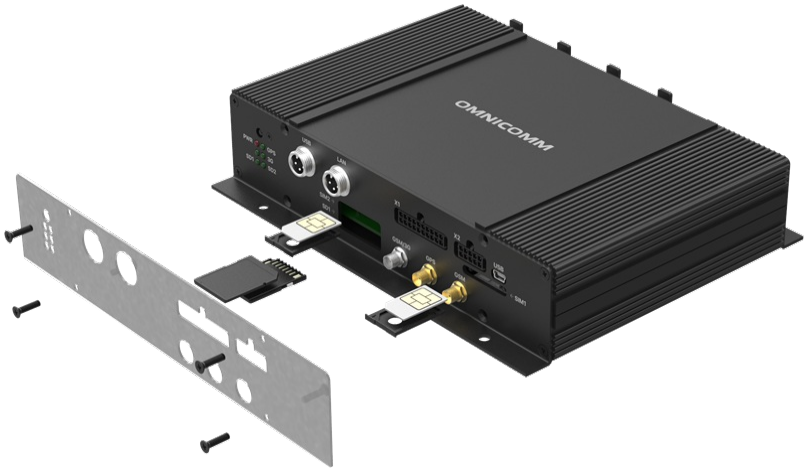
	128 Gb	256 Gb	512 Gb
1 camera	360 hours	720 hours	1440 hours
2 cameras	180 hours	360 hours	720 hours
3 cameras	120 hours	240 hours	480 hours
4 cameras	90 hours	180 hours	360 hours

Installation

SIM Card and SD Card Inserting

Before SIM card inserting disable PIN request at activation. For this end insert the card in any cell phone and disable PIN request, according to the cell phone operating instruction.

1. Unscrew four safety screws.



2. Using a sharp-pointed object press the button at the SIM1 or SIM2 connector side. The SIM card holder will eject

3. Remove the SIM card holder from the connector slots and insert the SIM card into it with contact pieces up

4. Insert the SIM card holder in the connector slots:

5. Insert the SD cards in the respective SD1 and SD2 slots

When installing the SD cards, the Omnicomm OKO power must be switched off.

Omnicomm OKO video terminal supports SD cards up to 512 Gb.

A list of recommended SD cards:

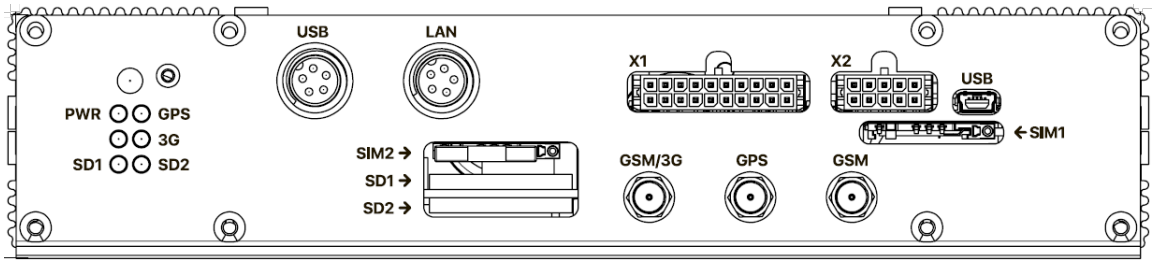
Installation

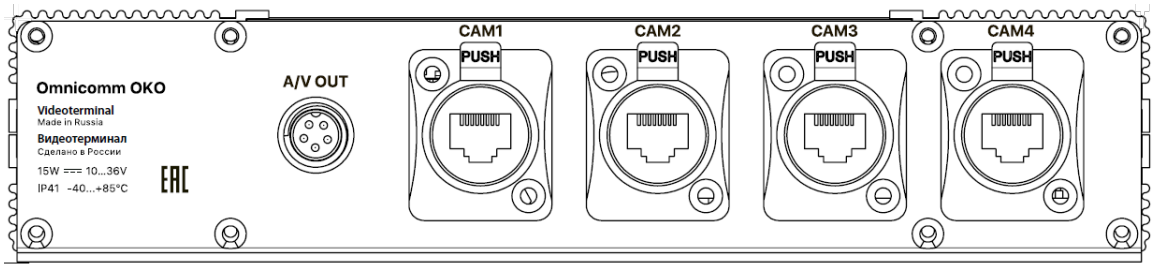
- Kingston SDR/128GB SDXC A1, V30, UHS-I Class 3 , Class 10
- Kingston SDR/256GB SDXC A1, V30, UHS-I Class 3 , Class 10
- Transcend TS128GSDXC10U1 SDXC/SDHC Class 10 UHS-I 600x (Ultimate)

6. Fix the protective cover with four screws

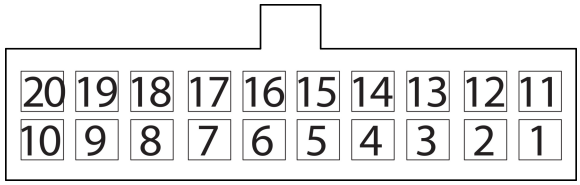
Connector Pin Assignment

Omnicomm OKO Terminal





Connector X1:



No. of pin	Nameof signal	Designation	Wire color in cable
1	Vehicle power supply voltage	Power	Red

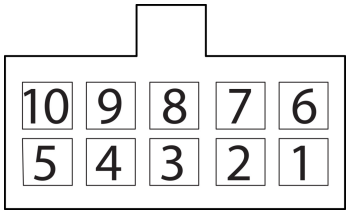
Installation

No. of pin	Nameof signal	Designation	Wire color in cable
2	Ground for power –	Ground (power)	White
3	Output 1	Output 1	Yellow-red
4	Universal input 5	Input 5	Green
5	Universal input 2	Input 2	Black-white
6	Panic button	Panic button	White-red
7	Line B RS-485 LLS	B RS-485	White-blue
8	CAN L	CAN L	Purple-white
9	Speaker -	Speaker -	Grey-yellow
10	Microphone -	Microphone -	Green-yellow
11	Vehicle power supply voltage	Power	Red
12	Ground for power –	Ground (signal)	White
13	RPM input	Tachometer	Blue
14	Ignition key	IGN	Yellow
15	Universal input 1	Input 1	Black
16	GSM activation button	GSM	Green-black
17	Line A RS-485 LLS	A RS-485	Orange-white

Installation

No. of pin	Nameof signal	Designation	Wire color in cable
18	CAN H	CAN H	Purple-orange
19	Speaker +	Speaker +	Grey-red
20	Microphone +	Microphone +	Green-red

Connector X2:

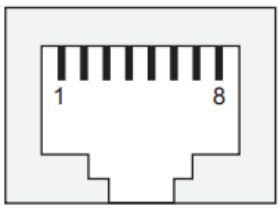


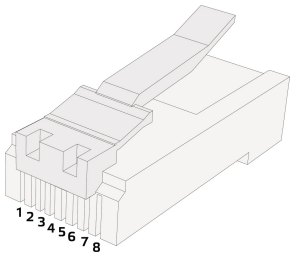
No. of pin	Name of signal	Designation	Wire colour in cable
1	iButton-	iButton-	Pink-blue
2	Line RS-232 Rx	Rx RS-232	Pink
3	Universal input 4	Input 4	Black-yellow
4	Output 2	Output 2	Yellow-blue
5	External sensor power supply –	Ground LLS	White
6	iButton+	iButton+	Pink-red
7	Line RS-232 Tx	Tx RS-232	Grey

No. of pin	Name of signal	Designation	Wire colour in cable
8	Universal input 3	Input 3	Black-red
9	Universal input 6	Input 6	Purple
10	External sensor power supply +	Power LLS	Brown

Installation

Connectors CAM1, CAM2, CAM3, CAM4:

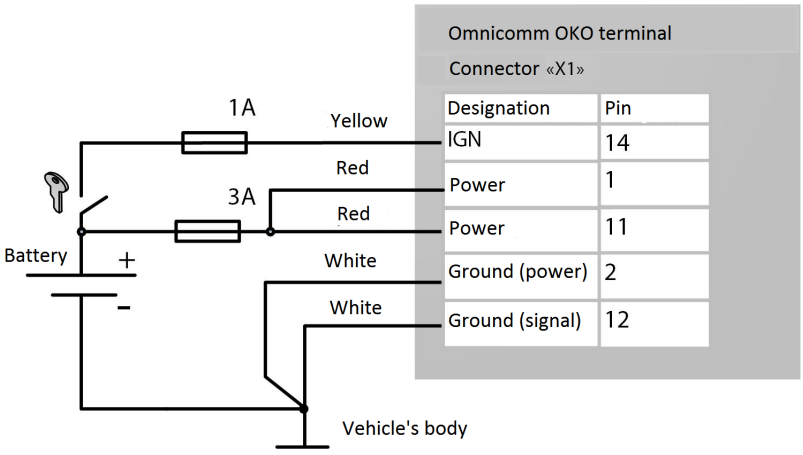




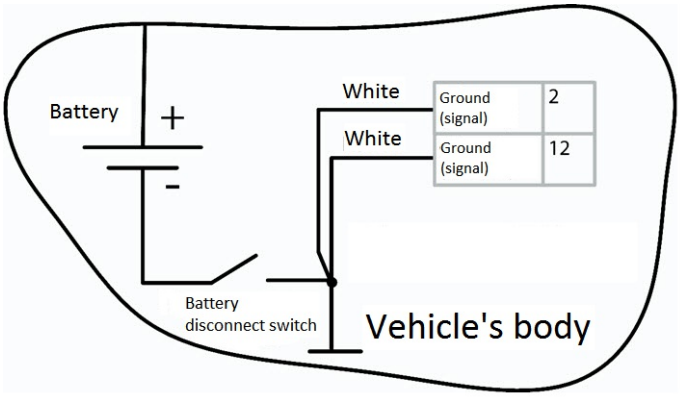
No. of pin	Name of signal	Colour of wire
1	RX+	White-green
2	RX-	Green
3	TX+	White-orange
4	DC+	Blue
5	DC+	White-blue
6	TX-	Orange
7	DC-	White-brown
8	DC-	Brown

Power Supply and Ignition Key

Connect Omnicomm OKO video terminals as per diagrams without a ground disconnect switch:



after the ground disconnect switch:

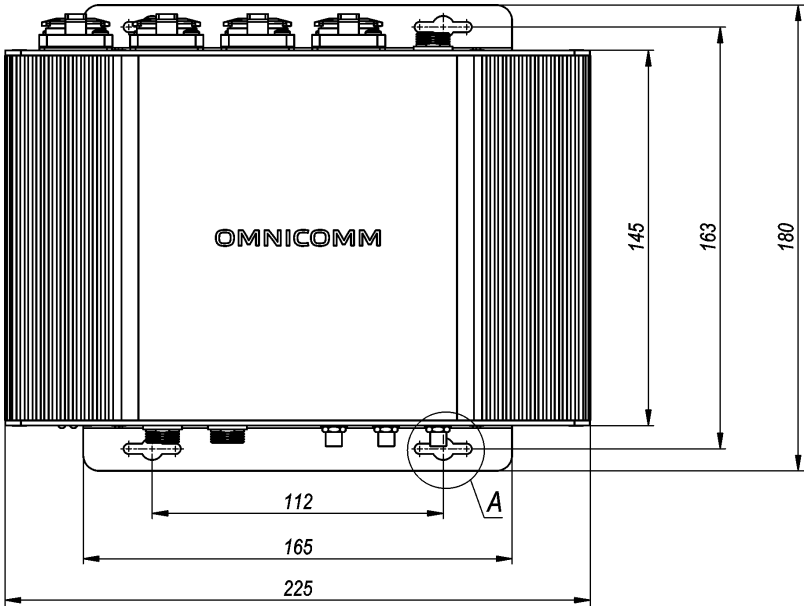


Do not connect the terminal before the ground disconnect switch.

Terminal

Omnicomm terminal shall be installed inside the vehicle cabin or in specially equipped electrics boxes on the vehicle protected from atmospheric precipitation.

Drill 4 mounting holes Ø5.5 mm.



Install the video terminal and fix with self-tapping screws.

Antennas

Choose the installation site of antennas based on the antenna cable length.

Antennas should be installed inside the vehicle cabin on a flat surface.

> Distance from antennas to any metal surface (except for the installation surface) should be not less than 50 mm.

We recommend installing antennas on the windshield or on the horizontal surface of the instrument panel in a place providing a good radio pick-up range of the sky.

1. Degrease the installation site surface
2. Remove protective film from the double adhesive tape on the surface of antenna
3. Attach the antenna with the adhesive side to the installation site
4. Fix the antenna while the adhesive is setting

Setting Overview

Omnicomm OKO video terminals may be configured in two ways:

1. In Omnicomm Configurator when the video terminal is connected to a PC
2. In the Remote Configuration Server (RCS) – remotely

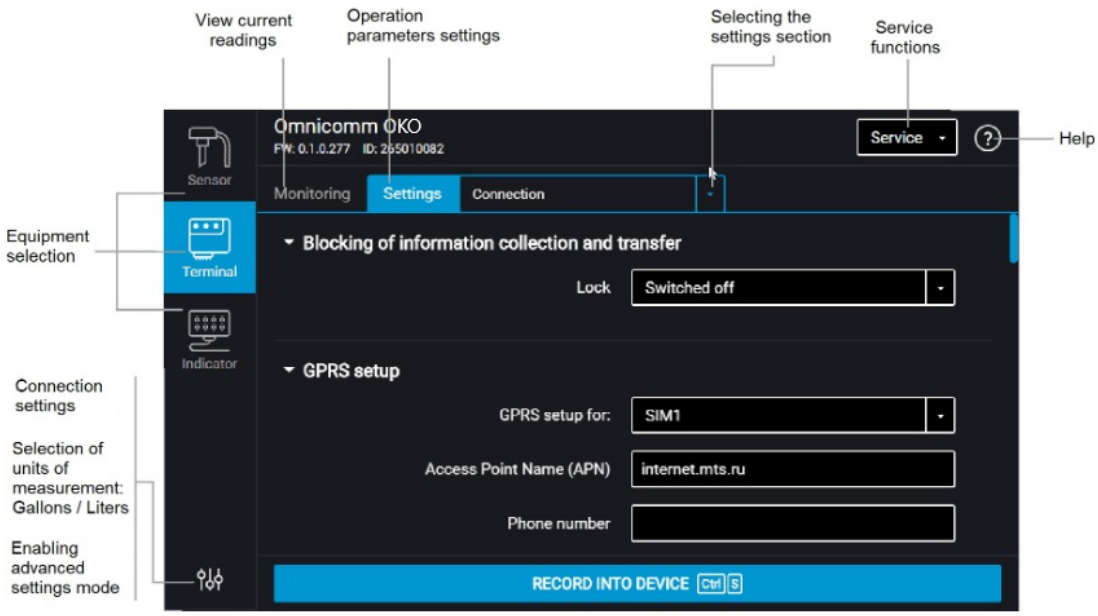
> Initial video terminal setting shall be carried out in Omnicomm Configurator.

Omnicomm Configurator

1. Connect the video terminal to a PC using a Mini USB - USB cable

2. Install and run Omnicomm Configurator. A window will open:

Setting Overview

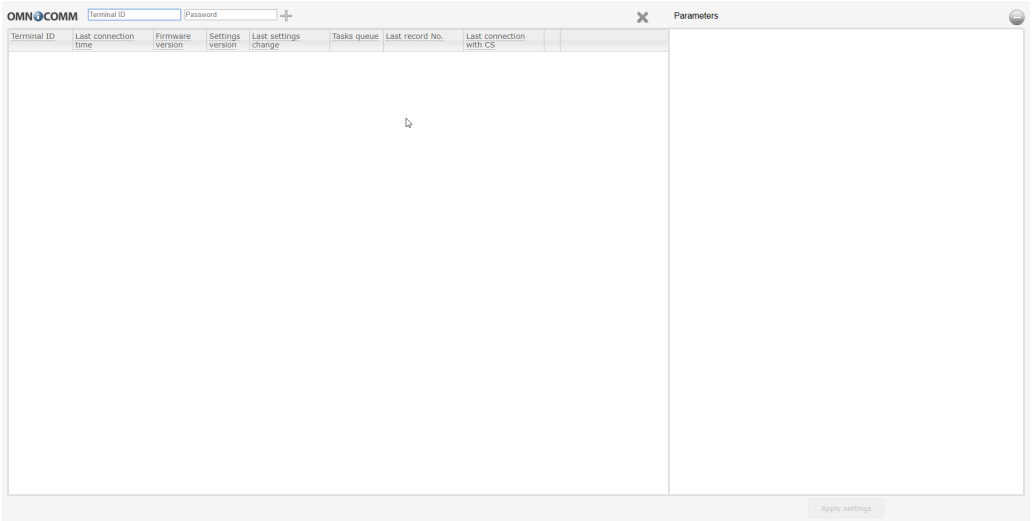


3. Select equipment – “Terminal”.

Restart the Omnicomm OKO video terminal after the setting up completion.

Remote Configuration Server (RCS)

To connect to the configuration server, open the browser and in its address bar enter the address http://config.omnicomm.ru:9911/#en. A window will open:



To add video terminals:

Setting Overview

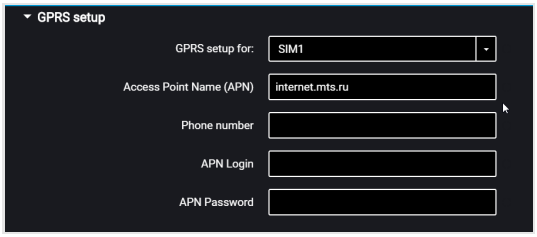
1. In the “Terminal ID” field enter the video terminal identification number
2. In the “Password” field enter the password set in the video terminal during its setting using Omnicomm Configurator
3. Press the “+” button

Operation Parameters Setting

GPRS connection

In the **«Settings»** tab select the **«Connection»** section from the list.

In the **«GPRS Setup»** section:



“Access Point Name (APN)” – enter the GPRS access point name

- “VimpelCom” (Beeline) – internet.beeline.ru
- “MTS” – internet.mts.ru
- “MegaFon” – internet

For GPRS access point names of other operators, refer to the mobile network operator, whose SIM card is inserted in the terminal.

“Phone number” – number of the SIM card inserted in the terminal.

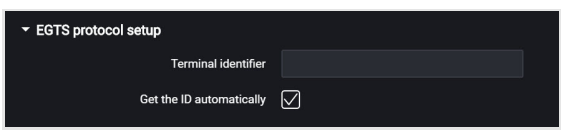
“APN Login” and “APN Password” – if necessary, enter login and password for APN access point. Login and password are provided with the SIM card of a number of mobile network operators.

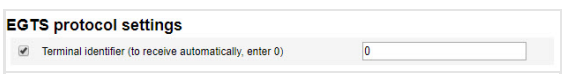
Connection to Communication Servers

Terminals support data transmission to two Communication Servers (CS) through Omnicomm and EGTS protocols.

In the **“Settings”** tab select the **“Connection”** section from the list.

In the **“EGTS Protocol setup”** section:



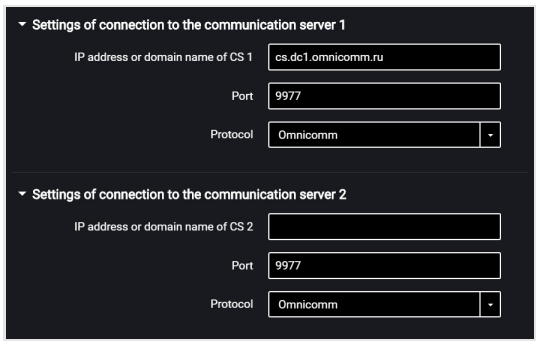


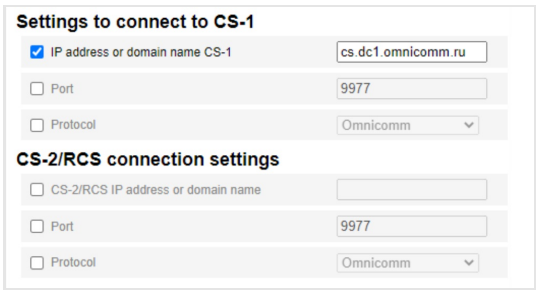
When setting up EGTS data transmission, you must use the TID terminal identification.

Operation Parameters Setting

If the settings are not configured, when transmitting data through EGTS protocol ID Omnicomm will be used for terminal identification.

In the **"Settings of connection to the communication server"** sections:





"IP address or domain name of CS" – enter IP address or domain name of the communication server: cs.dc1.omnicomm.ru.

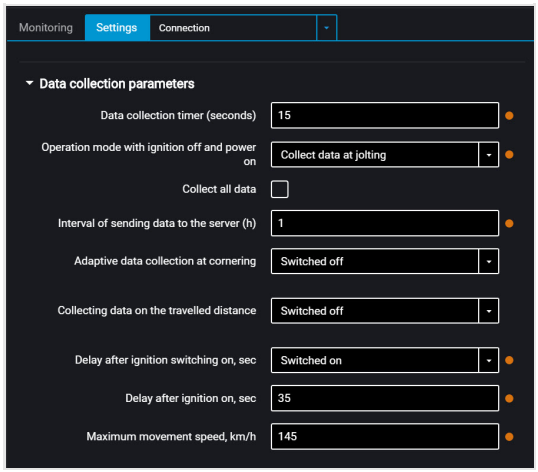
"Port" – enter port to be used by terminal to connect to the communication server: 9977

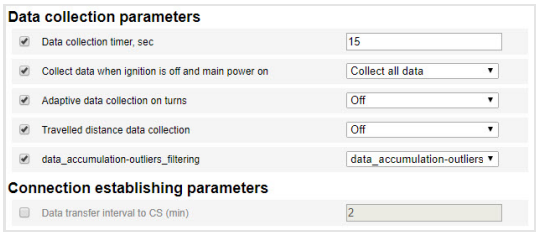
"Protocol" – select data transmission protocol to the CS. Possible options: Omnicomm or EGTS.

Data Collection

In the **"Settings"** tab select the **"Connection"** section from the list.

In the **"Data collection parameters"** section:





"Collection timer" – set the value of the period of Terminal requesting modules and external devices connected to it. Range of values – from 15 to 240 seconds.

"Operation with ignition off and power on" select:

Operation Parameters Setting

- "Collect all data" – data collection and transmission same as with ignition turned on.
- "Collect all except GPS" – collection and transmission of data selected during configuration of the terminal, except for the GPS module data
- "Collect data during pounding" – monitoring the status of the panic button and accelerometer. If the accelerometer reading changes by more than 0.2 g or the panic button is pressed, the terminal switches to the "Collect all data" and performs data transmission to the Communication Server in 5 minutes

When selecting "Collect data during pounding" set the following configuration:

- "Collect all data" – when this parameter is enabled, the terminal upon expiration of the time specified in the "Period of data sending to Server" switches to the "Collect all data" mode and performs data collection and transmission to the communication server. After the data transmission the terminal switches to the "Collect data during pounding" mode.

- "Period of data submission to server" – the time interval between the terminal connections to CS. Possible values: from 1 to 6 hours, at intervals of 1 hour.

Depending on the set mode, the data are acquired from the particular modules and external devices.

"Adaptive data collection on turns" – enable/disable adaptive data collection on turns, which allows increasing the accuracy of displaying turns on the map by additional data collection from the GPS module more frequently than set in the "Data collection" parameter.

"Data collection over the distance traveled" – allows increasing the accuracy of displaying the vehicle location on the map by additional data acquisition from the GPS module over the distance traveled between the events with registered coordinates.

"Distance traveled" – enter the mileage traveled from the moment of the last registered event with coordinates, upon achieving which the data will be acquired. Possible values: from 10 to 1000 meters. Default value – 100 meters.

"Coordinate drift filtering" – enable to eliminate runout of coordinates during the "Track" report generation.

When enabling the "Coordinate drift filtering" the following settings are available:

- "Delay after ignition on, sec". Default value – 35 sec. Possible values: from 0 to 900.

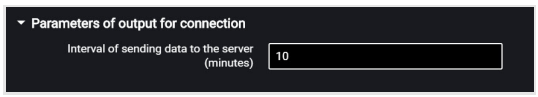
- "Maximum movement speed, km/h". Default value – 180 km/h. Possible values: from 5 to 360.

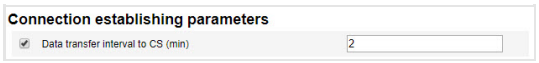
The default values allow elimination of drift for most cases and do not require correction.

Data Transmission to a Communication Server

In the **“Settings”** tab select the **“Connection”** section from the list.

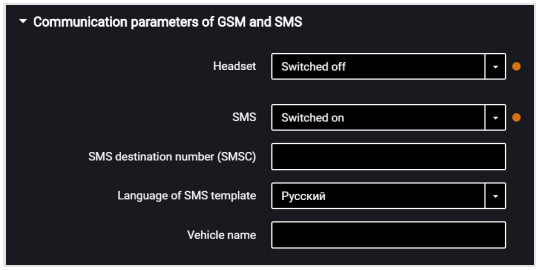
In the **“Parameters of output for connection”** section:

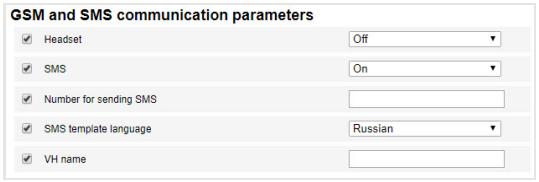




“Interval of sending data to the server” – enter the number of minutes, upon expiration of which the terminal must establish connection with the communication server, while being in the mobile operator's home network. Recommended value – 10 minutes.

In the **“Communication parameters of GSM and SMS”** section:





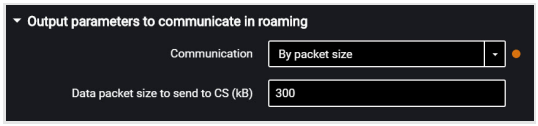
“SMS” – enable/disable the commands reception via SMS and sending the information messages by the Terminal.

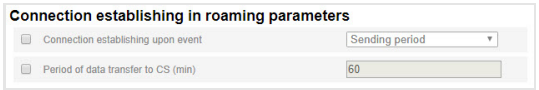
“SMS destination number” – enter the phone number, to which the SMS will be sent with information about the status of the Terminal and the vehicle.

“SMS template language” – select the language of the SMS template. Possible options: Russian, English, Portuguese, Spanish.

“Vehicle Name” – enter the name of the vehicle. The “Vehicle Name” field is mandatory.

In the **“Output parameters to communicate in roaming”**section:





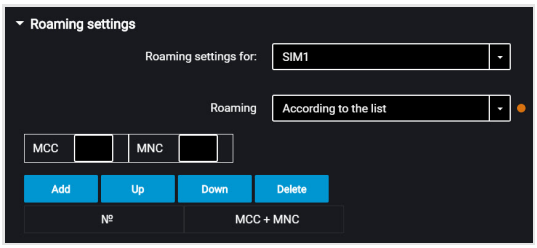
Select the criterion for the terminal connection to the CS: “By time period” or “By packet size”.

“Interval of sending data to the CS” – enter the number of minutes, upon expiration of which the terminal must establish connection with the communication server, while being in roaming. Recommended value – 180 minutes.

Operation Parameters Setting

"Data packet size to send to CS" – enter the data batch size, upon achieving which the terminal must establish connection with the communication server, while being in roaming. Recommended value – 100 Kb.

In the **"Roaming settings"** section:



"Roaming" – select the option of SIM card using while in roaming. Possible options: "Permitted", "Forbidden" or "According to the List".

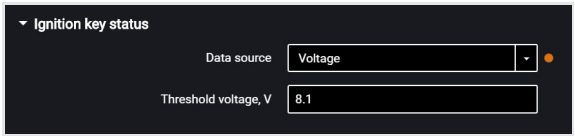
- "Permitted" – the terminal will transmit data via available cellular networks
- "Forbidden" – the terminal will not transmit data, while being in roaming * «В роуминге как дома»
- "Always in a home network" – the terminal will transmit data as set up for connection to the CS in a home network
- "According to the List" – the terminal will only transmit data via the cellular networks provided in the list. Enter the MCC and MNC of required cellular networks in the table.

When the terminal is operating in roaming, the data are only transmitted to communication server No. 1. To transmit data to two communication servers, select "Always in a home network".

Selection of Ignition Source

In the **"Settings"** tab select the **"Inputs"** section from the list.

In the **"Ignition key status"** section:



"Data source" – select the data to register ignition on/off. Possible options:

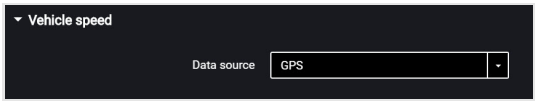
"Ignition key" – the ignition on/off is registered on the position of the key upon direct connection to the ignition key.

"Onboard voltage" – the ignition on is registered upon reaching the vehicle network power supply threshold voltage. Specify the value "Threshold voltage, V" – the value of the vehicle network power supply voltage, upon reaching which the ignition on will be registered. Ignition off is registered, when the voltage drops to 0.5 V below the threshold.

Selection of Speed Source

In the **"Settings"** tab select the **"Inputs"** section from the list.

In the **"Vehicle speed"** section:



"Data source" – select the data to process the speed values. Possible options: "GPS", "CAN bus"

Engine RPM

In the **"Settings"** tab select the **"Inputs"** section from the list.

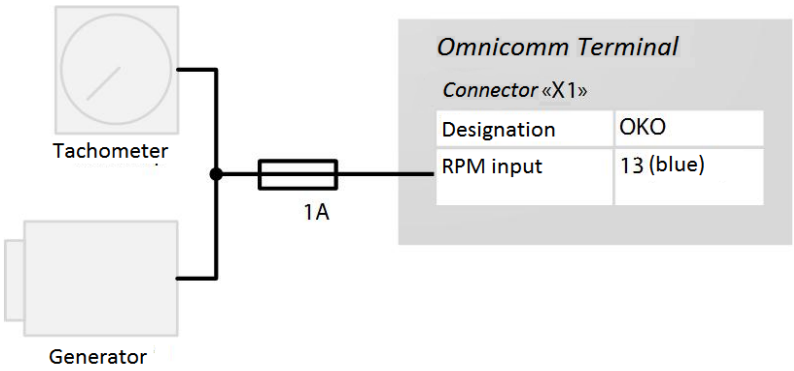
In the **"The engine revolutions"** section:

"Data source" – select the signal type. Possible values:

- «Disabled»
- «Ignition key»
- «CAN bus»
- «RPM input»

Connect the tachometer to the Terminals according to the diagram:

Operation Parameters Setting



The place of connection to the tachometer shall be the point in the vehicle electric network, in which the pulse signal frequency is proportional to the engine RPM.

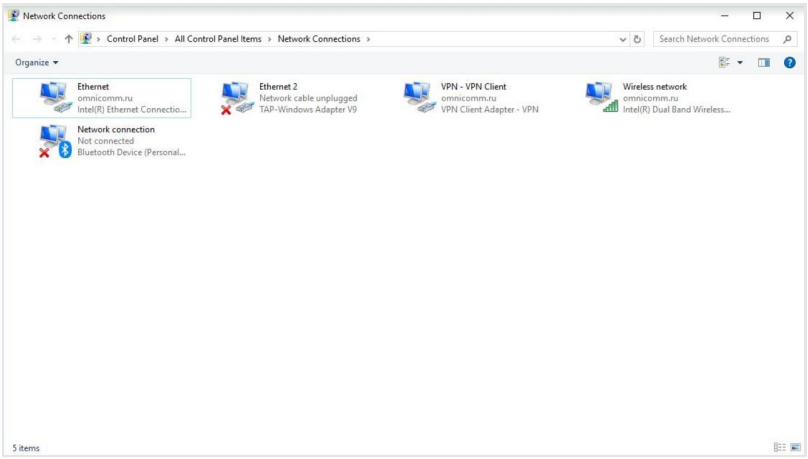
Video Camera

Network connection setting on the PC

1. Switch on the Omnicomm OKO video terminal power

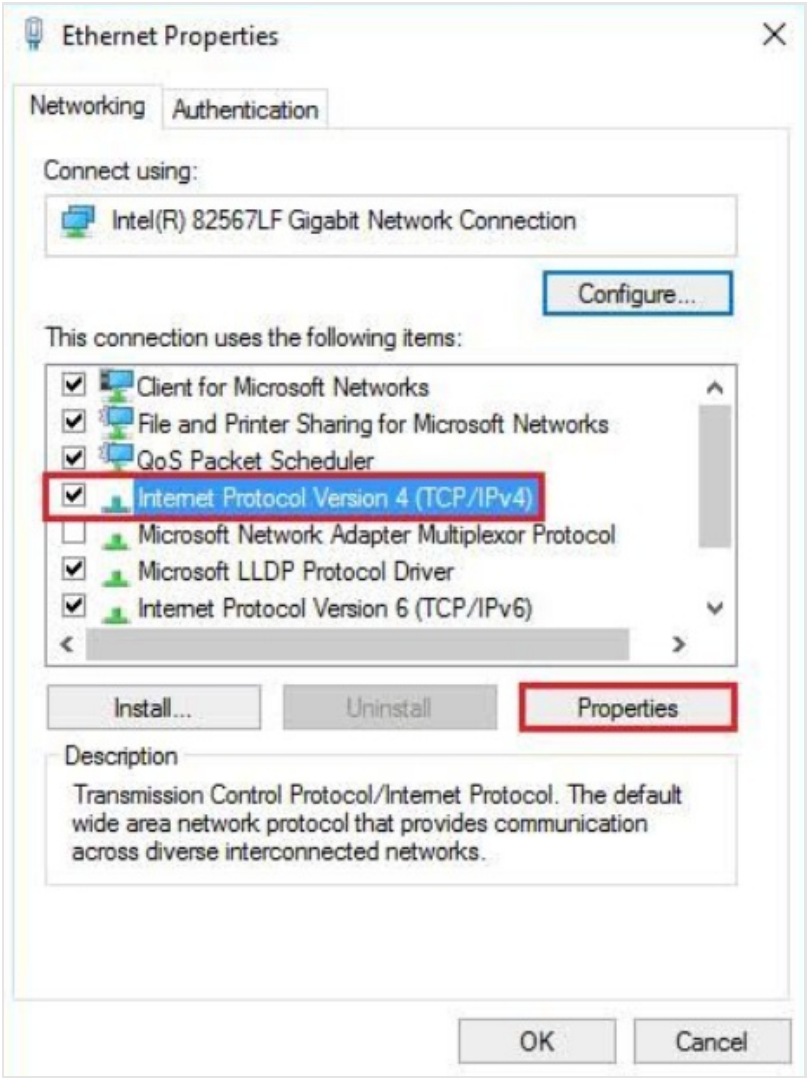
2. Connect the video terminal to a PC via Ethernet interface using a LAN adapter and a patch cord delivered with the video terminal

3. Open the adapter network settings window by running “Control Panel / Network and Internet / Network Connections”:



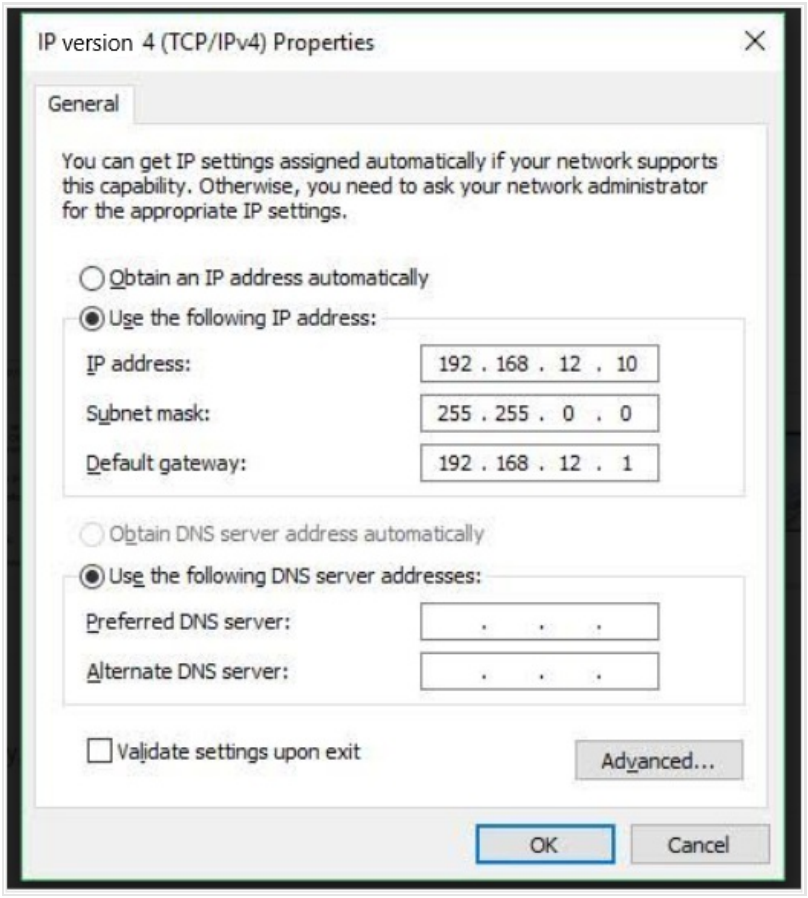
4. Open the connection properties window by right-clicking the mouse and selecting “Properties”:

Operation Parameters Setting



5. Select Internet Protocol Version 4 (TCP/IPv4), press “Properties”, and set the following configuration:

Operation Parameters Setting



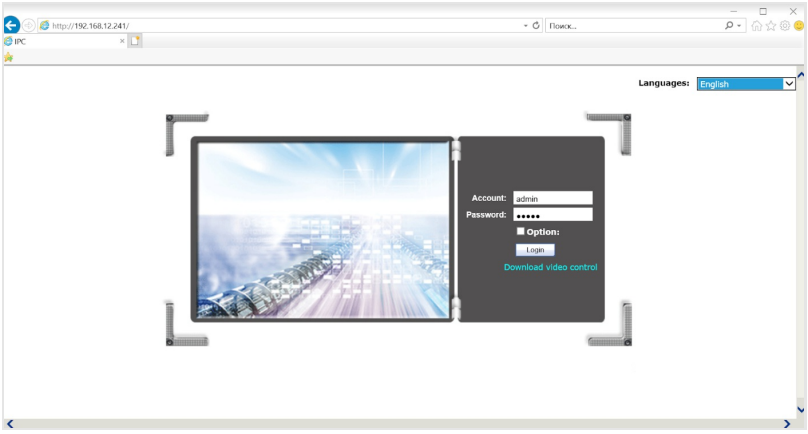
6. Press “OK”

Browser setting

1. Connect the video camera to any video terminal connector (“CAM1” – “CAM4”)

2. Open Internet Explorer and enter the camera configuration address. By default: 192.168.12.241

3. A window will open to confirm ie.exe installation:



4. Press “OK” and follow the installer's tips

5. Refresh the page or restart the browser

6. You will be prompted to enable the Active X add-on:

7. Press “Allow”

The browser will be configured only once, ie.exe reinstallation is not required.

Omnicomm OKO video camera setting

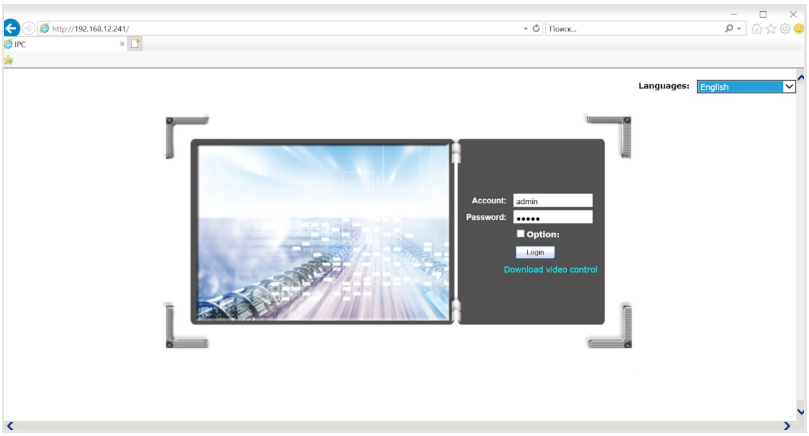
Each video camera is connected and configured individually in turns. Only one camera may be connected at a time.

1. Switch on the Omnicomm OKO video terminal power

2. Connect the video terminal to a PC via Ethernet interface using a LAN adapter and a patch cord delivered with the video terminal

3. Connect the video camera to any video terminal connector (“CAM1” – “CAM4”)

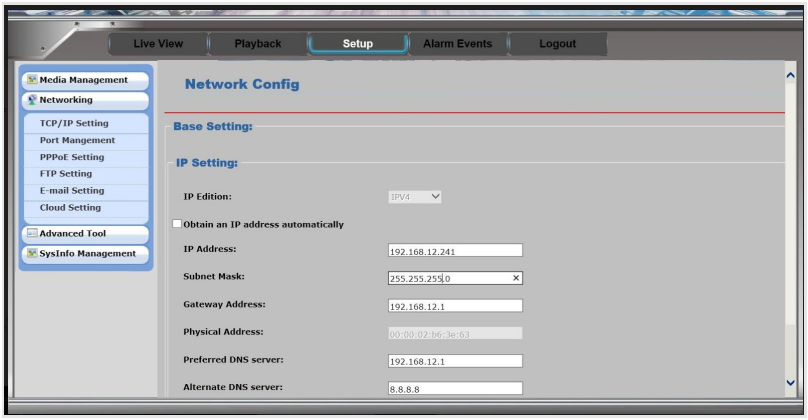
4. In your browser, enter the video camera configuration interface address – 192.168.12.241



In the “Account” and “Password”, enter “admin”.

Press the “Log in” button.

Operation Parameters Setting



5. In the “Settings” / “TCP / IP setting” section:

Set the IP address in the corresponding field, depending on the connector the camera is plugged in:

“CAM1”: 192.168.12.241

“CAM2”: 192.168.12.242

“CAM3”: 192.168.12.243

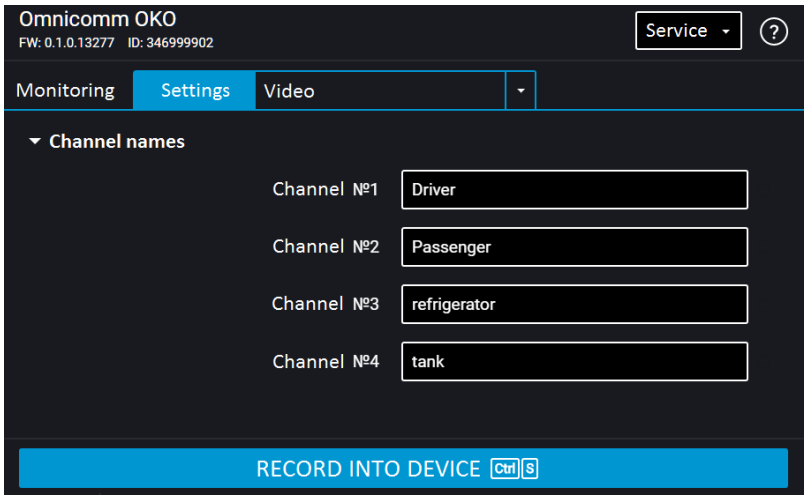
“CAM4”: 192.168.12.244

When several cameras are connected to the video terminal, their IP addresses must be different.

Omnicomm OKO video terminal setting

1. Connect the OKO video terminal to a PC using a mini USB – USB cable
2. Run Omnicomm Configurator.

In the “Settings” tab select the “Video” section from the list:



In the “Channel Name” fields enter the name to be applied to the video, to identify the

camera. Use Latin characters and digits only. Maximum number of characters – 13.

Restart the Omnicomm OKO video terminal after setting up the cameras.

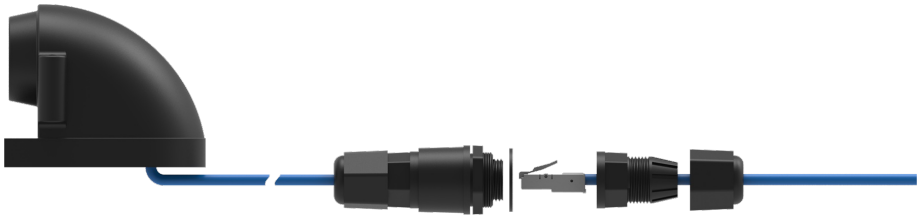
The time on video files received from the camera is displayed in UTC+0 format.

Omnicomm OKO video camera connection and installation

1. Select the required patch cord length

2. At the video camera side:

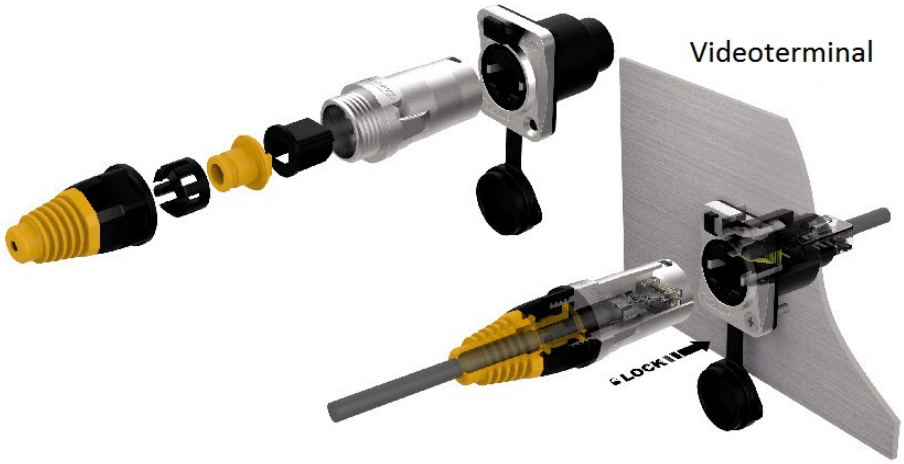
- Pass the patch cord through the connector as shown in figure:



- Clamp the patch cord with RJ-45 connector using a crimper as per the CAM pins assignment shown in Connector Pin Assignment

3. At the Omnicomm OKO video terminal side:

- Pass the patch cord through the connector as shown in figure:



- Clamp the patch cord with RJ-45 connector using a crimper as per the CAM pins assignment shown in Connector Pin Assignment
- Plug the camera into the connector corresponding to the set channel

4. Remove the protective film from the camera base

5. Fix the camera on a flat surface

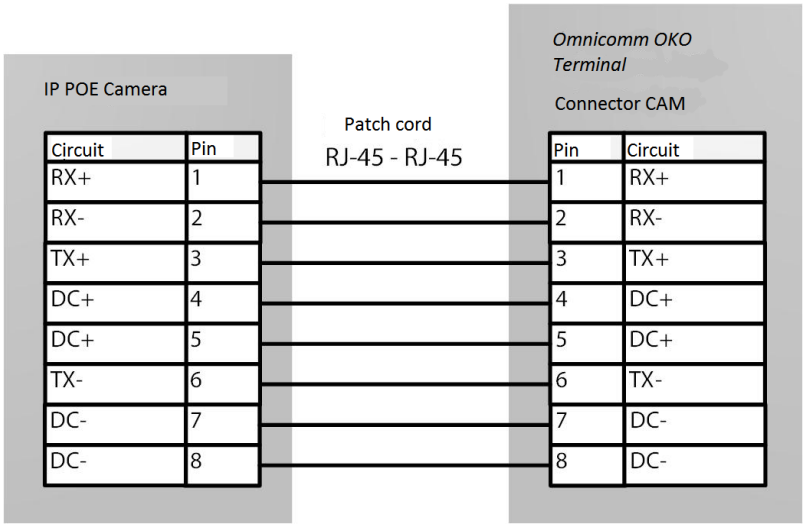
The camera may also be installed using self-tapping screws. To do this, remove the camera's protective housing and fix it on the surface through the holes in the housing base.

> We recommend that you use a multicore twisted pair intended for outdoor use, as a patch cord.

Other video cameras connection and installation

Clamp the patch cord of required length with RJ-45 connectors on both sides using a crimper. Connect the camera to the video terminal.

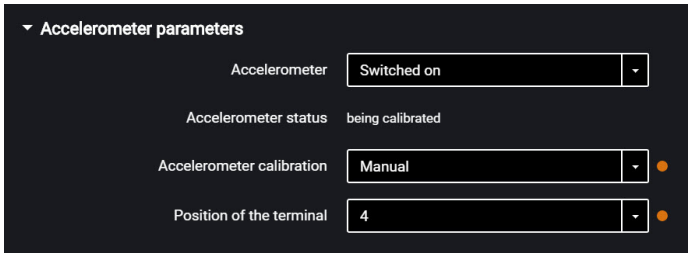
Perform connection according to the diagram:



Driving Safety Control

In the **"Settings"** tab select the **"Additional equipment"** section from the list.

In the **"Accelerometer parameters"** section:



"Accelerometer" – enable/disable the use of accelerometer for measuring the vehicle

acceleration.

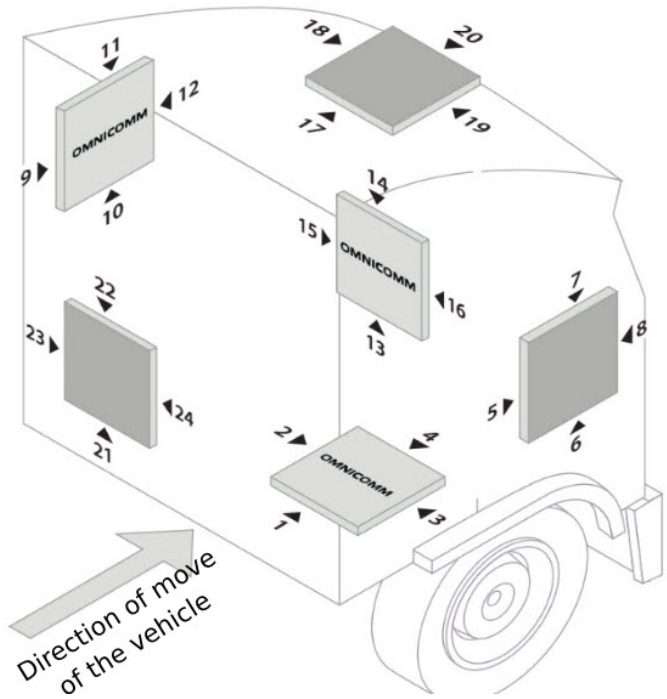
"Accelerometer status" – accelerometer condition. Possible options: not used, calibration, calibrated, calibration error.

"Accelerometer calibration" – select the accelerometer calibration mode.

Prior to performing the calibration, firmly fix the terminal and do not change its position during operation.

Automatic calibration is recommended for vehicles that are operated mainly at speeds above 50 km/h. Automatic calibration takes from 2 minutes to 24 hours depending on the frequency of accelerations and braking on straight sections of the road.

When selecting manual calibration, in the "Terminal position" field, select one of 24 positions as shown in figure:



Arrow ► indicates the location of the video terminal's X1 connector.

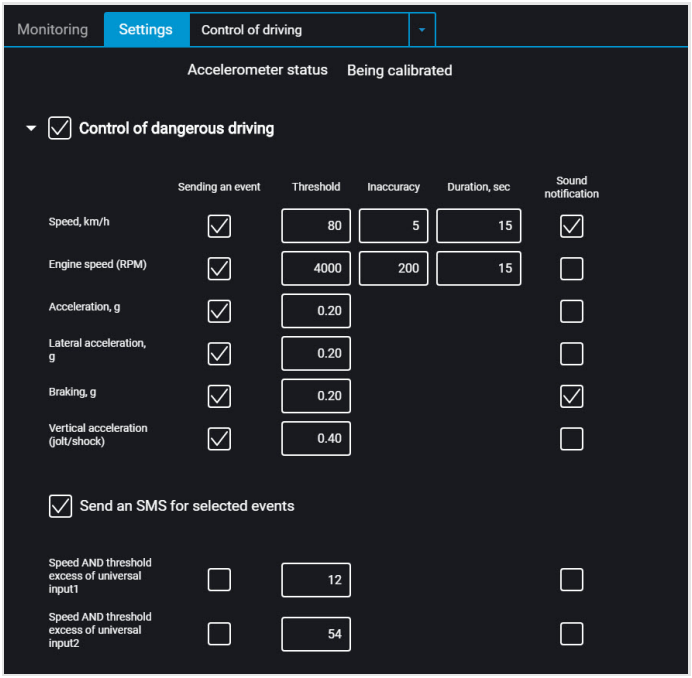
The "Omnicomm" inscription in the figure corresponds to the top cover of the video terminal.

Deflection of the video terminal from the axes during manual calibration should not be more than 5 degrees.

In the **"Settings"** tab select the **"Driving Control"** section from the list.

"Dangerous driving control" – enable/disable registration of dangerous driving when exceeding the set values of monitored parameters.

Operation Parameters Setting



Select monitored parameters:

"Event reporting" – enable/disable event sending to Omnicomm Online.

- "Speed" – vehicle speed control

Threshold – enter the maximum permissible speed, upon exceeding which dangerous driving will be registered. Possible values: from 2 to 150 km/h. Default value: 80 km/h.

Deviation – enter the speed value that can be exceeded by maximum permissible speed without triggering dangerous driving registration. Possible values: from 0 to 50 km/h. Default value: 5 km/h.

Duration – enter the period of time allowed to exceed maximum permissible speed without triggering dangerous driving registration. Possible values: from 0 to 300 s. Default value: 15 s.

- "Engine speed (RPM)" – engine RPM monitoring

Threshold – enter the maximum permissible engine RPM, upon exceeding which dangerous driving will be registered. Possible values: from 0 to 10,000 rpm. Default value: 4,000 rpm.

Deviation – enter the RPM value allowed to exceed the maximum permissible RPM without registration of violation. Possible values: from 0 to 1000 rpm. Default value: 200 rpm.

Duration – enter the period of time allowed to exceed maximum permissible engine RPM without registration of dangerous driving. Possible values: from 0 to 300 s. Default value:

Operation Parameters Setting

15 s.

- "Acceleration" – acceleration control during vehicle speeding up

Threshold – enter the value of acceleration while speeding up, which exceeding will trigger registration of dangerous driving

- "Lateral acceleration" – acceleration control during vehicle turning

Threshold – enter the value of acceleration while turning, which exceeding will trigger registration of dangerous driving

- "Braking" – acceleration control during vehicle braking

Threshold – enter the value of acceleration while braking, which exceeding will trigger registration of dangerous driving

- "Vertical acceleration (pounding / shock)" – acceleration control during vehicle pounding

Threshold – enter the value of acceleration while pounding or bumping, which exceeding will trigger registration of dangerous driving

- "Speed and threshold exceeding of potential UI1"

Threshold – enter the value of speed, which exceeding will trigger registration of dangerous driving, if universal input No.1 is closed/open.

- "Speed and threshold exceeding of potential UI2"

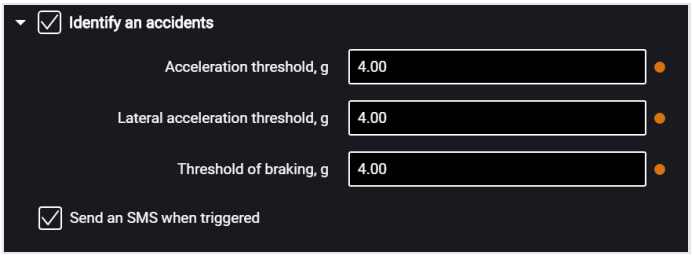
Threshold – enter the value of speed, which exceeding will trigger registration of dangerous driving, if universal input No.2 is closed/open.

The notification for the event "Speed and Exceeding of threshold of potential UI1, UI2" is generated only when the selected speed source is "GPS". (see Selection of Speed Source).

- "Send SMS for selected events" – enable SMS sending upon registration of dangerous driving
- "Send photo for selected events" – enable digital camera photo sending upon registration of dangerous driving

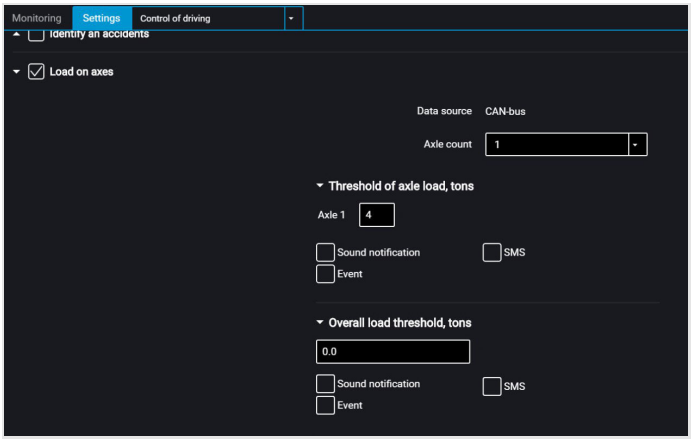
"Sound notification" – enable/disable sound notification if thresholds of monitored parameters are exceeded. To run sound notification connect a sound emitter to controlled output No.1.

"Determine accidents" – enable/disable accident registration upon exceeding the set values of monitored parameters.



- "Acceleration threshold" – value of acceleration while speeding up, which exceeding will trigger registration of accident
- "Lateral acceleration threshold" – value of acceleration while turning, which exceeding will trigger registration of accident
- "Braking threshold" – value of acceleration while braking, which exceeding will trigger registration of accident
- "Send SMS upon triggering" – enable SMS sending upon registration of accident
- "Send photo upon triggering" – enable digital camera photo sending upon registration of accident

"Axle load" – enable/disable control of vehicle axle load and total vehicle load.



"Data source" displays the axle load data source. Possible options: ALM Weight Indicator and CAN.

To select the ALM Weight Indicator as a data source choose Indicator in the RS-485 or RS-232 interface configuration.

To select the CAN bus as a data source enable SPN 582 and SPN 928 in the CAN settings

tab.

If the ALM Weight Indicator and the CAN Bus are both set as data source, the ALM Weight Indicator will be used.

“Number of axles” – set the number of vehicle axles. Possible values: from 1 to 8. Maximum value – 8 for CAN, 6 for ALM.

“Axle load threshold, tonnes” – enter the value of load on each axle, upon exceeding which an event will be registered.

- “Sound notification” – enable/disable sound notification if thresholds of monitored parameters are exceeded
- “Events” – enable/disable event sending to Omnicomm Online
- “Photo” – enable digital camera photo sending upon load exceeding
- “SMS” – enable SMS sending upon load exceeding

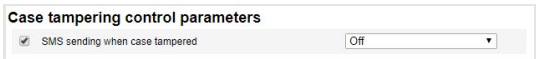
“Total load threshold, tonnes” – enter the value of total vehicle load, upon exceeding which an event will be registered.

- “Sound notification” – enable/disable sound notification if thresholds of monitored parameters are exceeded
- “Events” – enable/disable event sending to Omnicomm Online
- “Photo” – enable digital camera photo sending upon load exceeding
- “SMS” – enable SMS sending upon load exceeding

Case Tampering Control

In the **“Settings”** tab select the **“Additional equipment”** section from the list.

In the **“Case tampering detection”** section:

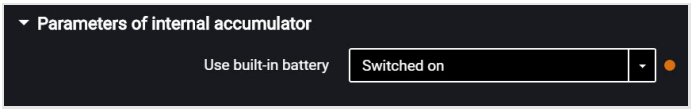


“SMS sending upon an attempt open the case” – enable/disable SMS sending upon triggering the anti-tamper switch.

Internal Battery

In the **“Settings”** tab select the **“Additional equipment”** section from the list.

In the **“Parameters of internal accumulator”** section:



“Use built-in battery” – enable/disable use of internal battery when the main power supply is turned off and the terminal is operating in the “Collect data at jolting” mode.

Service Functions

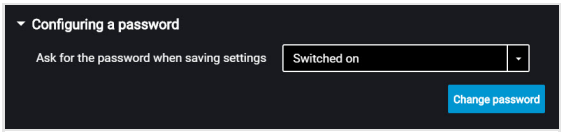
Video Terminal Restart

In the “Service” menu select “Restart Terminal”.

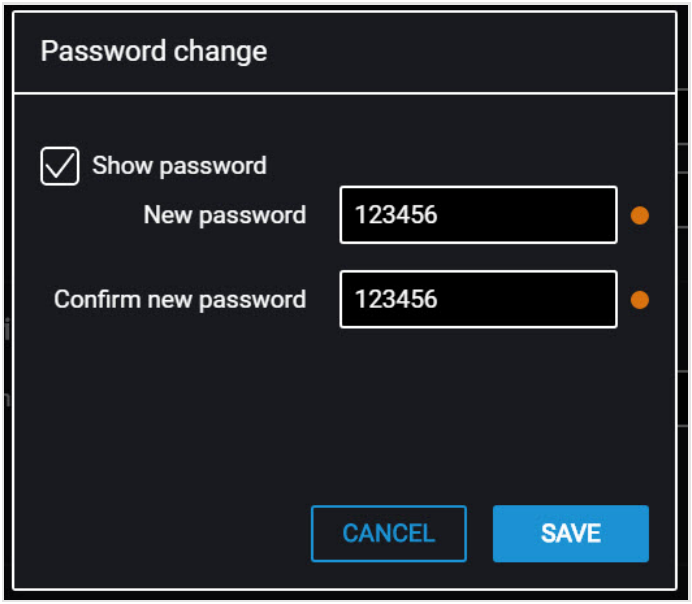
Setting Password on Configuration Changing

In the **“Settings”** tab select the **“Additional equipment”** section from the list.

In the **“Configuring a password”** section:



If you need to use a password to configure the terminal settings, in the field “Ask for password when saving settings” select “Enabled”. Press the “Change password” button. A window will open:



"New password" and "Confirm new password" – enter a new password that will be used to get access to settings configuration. The password shall contain 8 characters maximum.

Press the "Save" button.

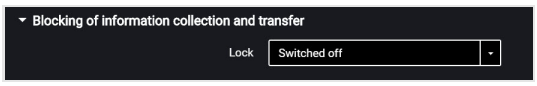
"Confirm password" – repeat the entered password. Press the "Record into device" button.

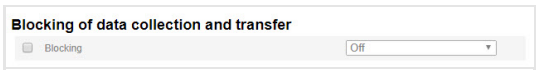
Data Collection and Transmission Blocking

In the **"Settings"** tab select the **"Connection"** section from the list.

In the **"Blocking of information collection and transfer"** section:

To block the terminal data acquisition and transmission in the "Lock" field select "Switced off":





To unlock data collection and transmission use Omnicomm Configurator or send SMS command *UNBLOCK# to the SIM card, inserted in the video terminal.

Remote Configuration Server Operation Setting

Set password on terminal settings modification by either of the following ways:

- When configuring the terminal using Omnicomm Configurator set password on settings modification that is different from the password set by default. Password set by default – empty line

- Send SMS command to change password set by default: *SETPWDID 235009988 12345#

where: 235009988 – terminal ID; 12345 – password to be set. The password shall contain 8 characters maximum and may include any digits and letters.

> You cannot change a previously set up password in this way.

The video terminal will be authorized on the Remote Configuration Server and will be available for operation via the Remote Configuration Server after 6 hours.

Terminal SIM Card Number Identification

The terminal SIM card telephone number is automatically displayed in the Remote Configuration Server after the second connection to the RCS.

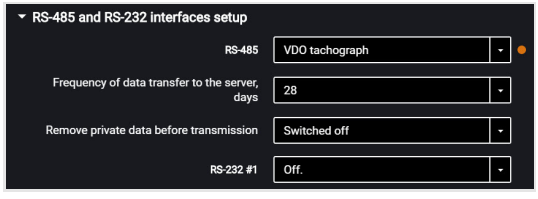
> SMS sending shall be enabled for the SIM card.

Auxiliary Equipment

RS-485 and RS-232 Interfaces

Connection of auxiliary equipment (CAN-Log, PP-01 passenger sensors, DV-1 driver display, JPEG camera, data reception from vehicle J1708 data bus, reception and transmission of navigation data as per NMEA standard) is carried out through RS-485 and RS-232 interfaces. When needed, it is recommended to use the RS-232 to RS-485 converter.

In the “Settings” window open the “Inputs” tab:



Auxiliary Equipment

For RS-485 and RS-232 interfaces choose the setting:

- “Disabled” – interface is not used
- “Omnicomm LLS” – use to connect Omnicomm LLS fuel level sensors
- “Omnicomm LLS / LLD” – use to connect Omnicomm LLS fuel level sensors or Omnicomm LLD fuel volume indicator
- “ALM Weight Indicator” – use for connection to the axle load monitoring device
- “CAN-Log” – connection to a CAN-log device
- “J1708” – connection to the vehicle J1708 data bus
- “NMEA reception” – use of navigation data from an external device. If you select this option, you must specify the data port bit rate. “RS port bit rate for NMEA data” – select the data port bit rate for reception of navigation data from an external device
- “NMEA transmission” – use the Terminal navigation data in an external device
- “PP-01” – use for connection of the passenger throughput sensor
- “Camera” – use for the digital camera connection
- “DV-01” – use for the driver display connection
- “Tachograph VDO” (only in Omnicomm Configurator) – use for Continental tachograph connection

“Frequency of data transmission to server” – select the number of days for the DDD files transmission to the communication server. Possible options: from 1 to 28 days.

“Delete personal data before transmission” – if necessary, enable deleting the driver's personal data prior to data submission to the server.

- “iQFreeze” – use for connection of the refrigerator control device
- “Modbus (Struna +, PMP-201)” – use for connection to the level gauge PMP-201 or the Struna + system
- “TPMS Pressure Pro” (only for RS-232 interface) – use for connection of the tire pressure sensors though TPMS Pressure Pro protocol
- “Truck-TPMS” (only for RS-232 interface) – use for connection of the tire pressure sensors though Truck-TPMS protocol

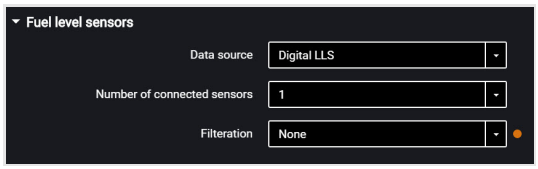
Auxiliary Equipment

- "TPMS 6-13" (only for RS-232 interface) – use for connection of the tire pressure sensors though TPMS 6-13 protocol

Fuel Level Sensors

In the **“Settings”** tab select the **“Inputs”** section from the list.

In the **“Fuel Level Sensors”** section:



“Data source” – select the type of fuel level sensors. Possible options:

- “Digital LLS” – when connecting fuel level sensors Omnicomm LLS
- “Frequency LLS-AF” – when connecting fuel level sensor Omnicomm LLS-AF
- “Vehicle sensor” – when connecting the vehicle standard fuel sensor
- “CAN Bus” – when connecting to the CAN bus
- “Struna +” – when connecting to the “Struna +” system
- “PMP-201” – when connecting the level gauge PMP-201
- “Disabled” – in case fuel level control is not required.

When Omnicomm LLS and Omnicomm LLS-AF fuel level sensors are connected:

“Number of connected sensors” – specify the number of sensors connected to the terminal.

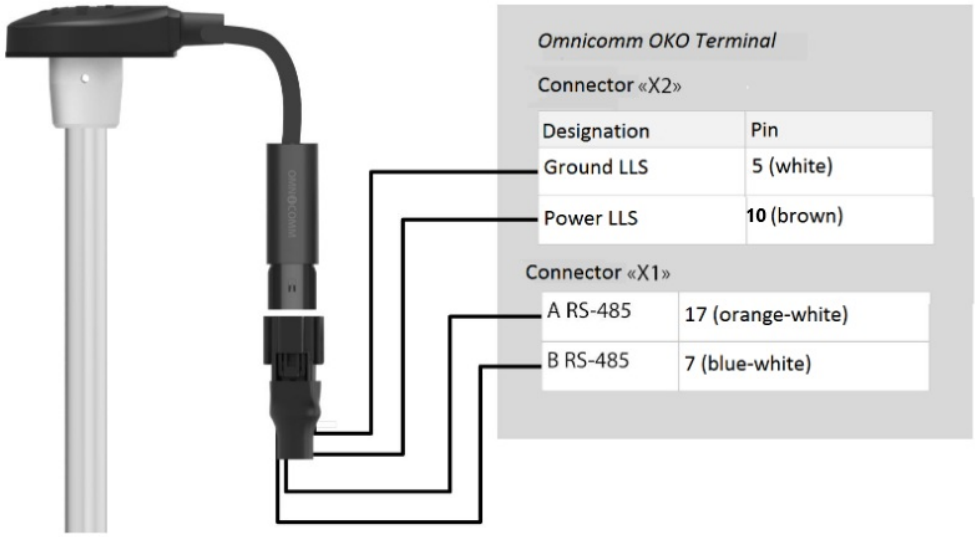
When choosing LLS fuel level sensors connected to a universal input, you need to configure the universal input. For automatic configuration of the universal input in Omnicomm Configurator press the “Configure UI” button.

“Filtration” – enter the size of inner filter. Possible options of filtration:

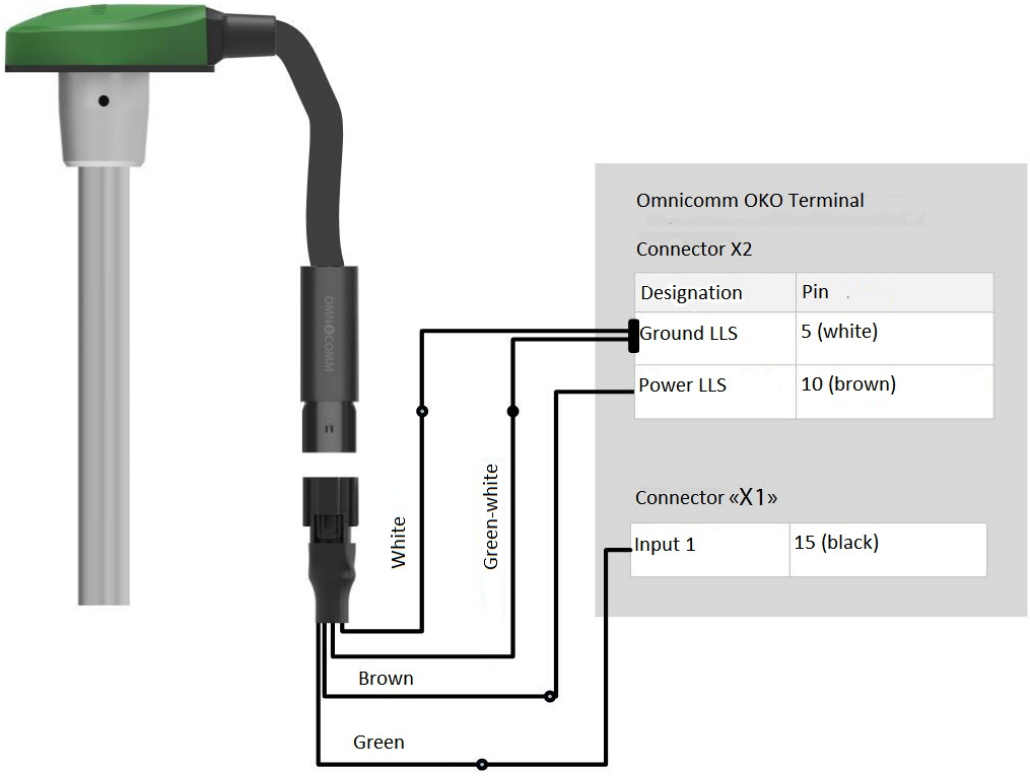
- “None” – filtration is performed only according to the settings in the Omnicomm LLS sensor
- “Low” – used in case of product installation in stationary fuel storages and non-mobile machinery
- “Medium” – used in case of vehicle's operation in normal road conditions
- “Strong” – used in case of vehicle's operation in normal and severe road conditions
- “Maximum” – used in case of vehicle's operation in severe road conditions and when connecting a standard fuel sensor with analog output

Auxiliary Equipment

Connection of Omnicomm LLS fuel level sensor should be performed according to the diagram:



Connect Omnicomm LLS-AF fuel level sensor according to the diagram:



Connect several Omnicomm LLS-AF sensors to the video terminal one by one, starting with 1 universal input.

Omnicomm LLS-AF sensor must be set to output a frequency signal in the range from 30 to 1053 Hz.

When connecting the video terminals to the “Struna +” system or the “PMP-201” sensor:

- “Fuel tank volume, L” – enter the fuel tank volume. Possible values: from 0 to 65,000
- “Current fuel volume, L” – displays the current volume according to

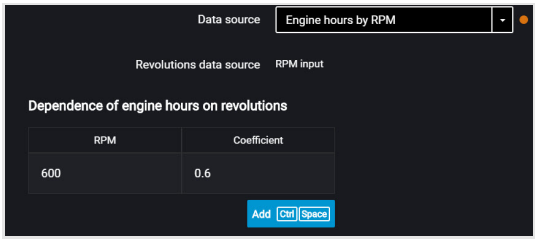
the “Struna +” system or the “PMP-201” sensor

Connect the “PMP-201” sensor and the “Struna +” system according to the documentation on these devices. You may connect only one “Struna +” system. The network address, by default, is 80.

Omnicomm LLD Indicator

In the **“Settings”** tab select the **“Auxiliary equipment”** section from the list.

In the **“Data transmission to Omnicomm LLD indicator”** section:



“Data source” – select the data source to display the value on the Omnicomm LLD indicator. Possible options:

- “GPS speed” – displays the vehicle speed
- “Universal input“ – displays the status or values on the terminal universal input depending on the connected auxiliary equipment
- “Engine hours by RPM” – displays vehicle engine hours

When selecting “Engine hours by RPM”, fill in the table of RPM recalculation to engine hours as follows:

In the field “Revolutions per minute” enter the value of RPM, in the field “Factor” enter the value of conversion factor to calculate the engine hours value.

The conversion coefficients are determined based on the operating conditions of the vehicle. Maximum number of rows – 5.

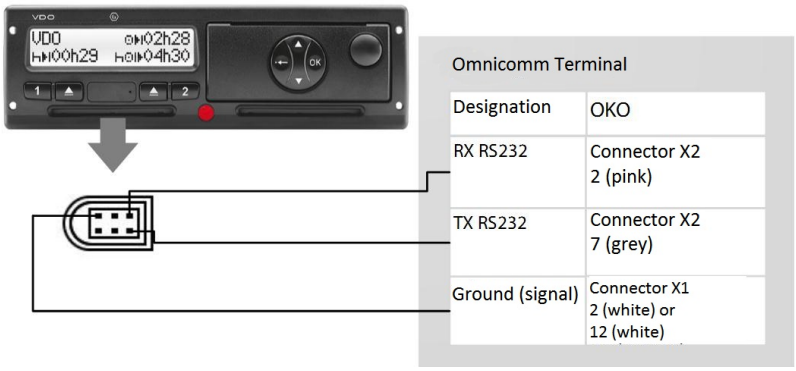
Engine hours are displayed on the LLD indicator as hour values with a fractional part (1.50 means 1 hour 30 minutes) in the format HH.XX in the range of up to 100 hours and HHH.X

in the range of 100.0 to 999.9 engine hours. If the number of engine hours is more than 1000, the last three significant figures are displayed and one symbol after the decimal point.

Engine hours are fully recorded in the terminal and sent to the CS on a continuous accrual basis.

Tachograph

Connect the Continental tachograph to the OKO video terminal via RS-232 and RS-485 interfaces according to the diagram:



Power connections of the terminal and the tachograph must be made similarly: both after the vehicle ground disconnect switch.

When needed, it is recommended to use the RS-232 to RS-485 converter.

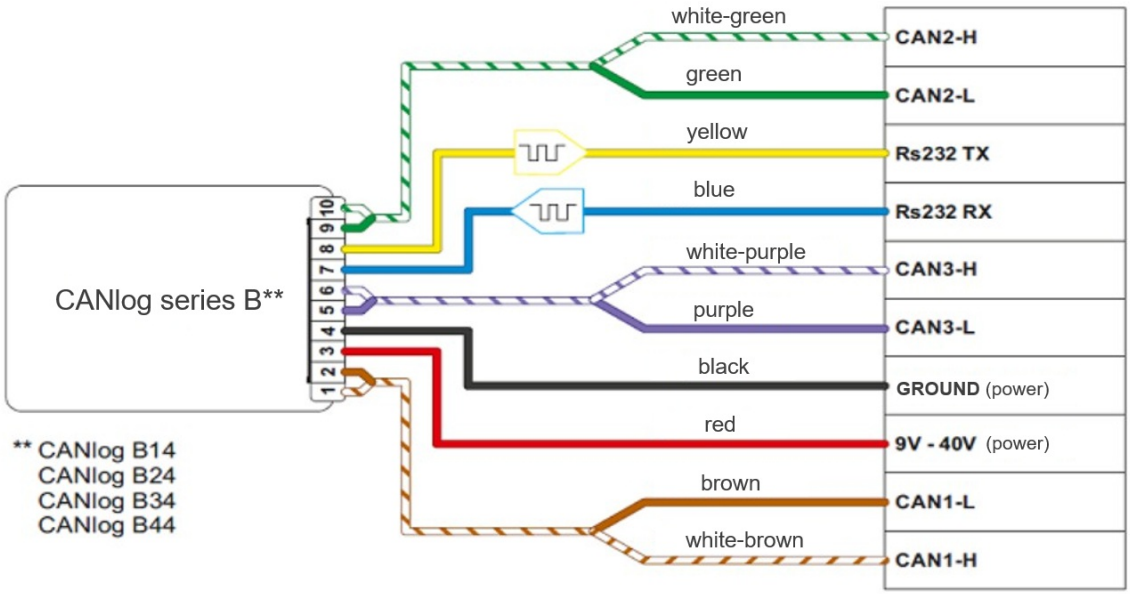
To read the DDD files from the Continental tachograph, in Omnicomm Configurator configure the RS-232 or RS-485 interface of the terminal.

CAN-LOG controllers

Omnicomm OKO video terminals support the connection of CAN-LOG controllers.

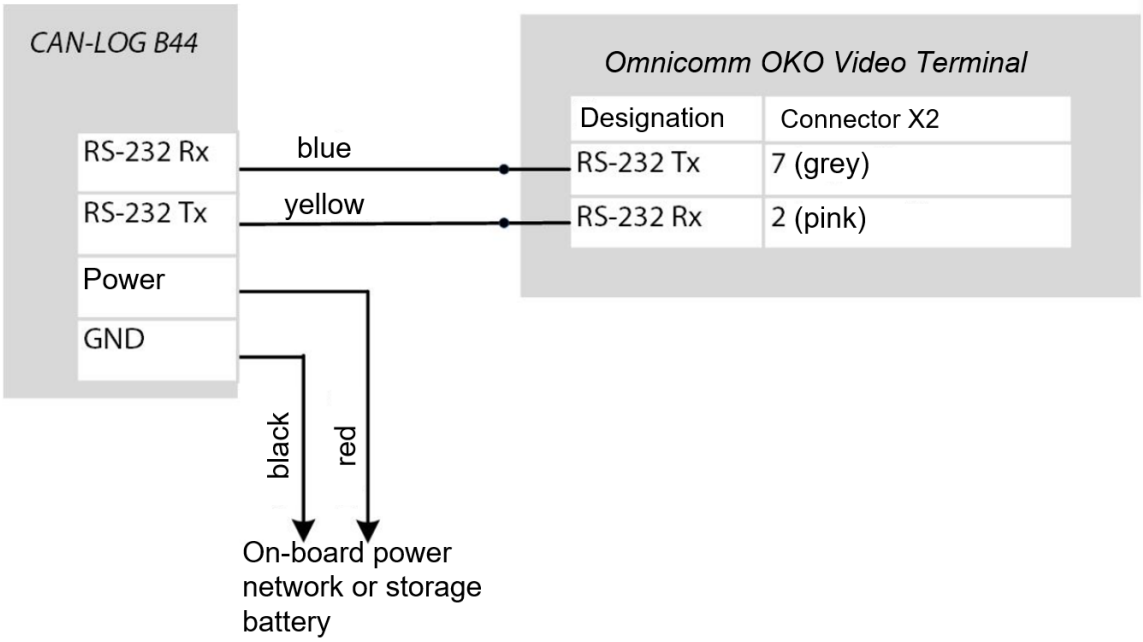
Connect the CAN-LOG, series B14, B24, B34, B44, to the vehicle's CAN bus, as shown in the diagram:

Auxiliary Equipment



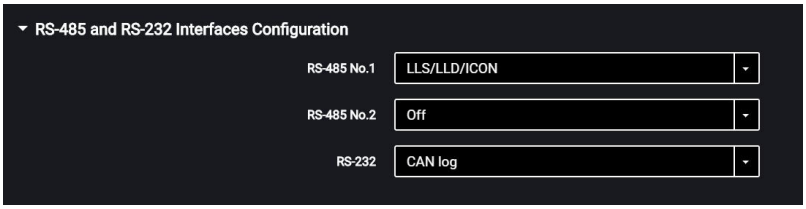
Follow the instructions provided by the CAN-LOG manufacturer during connection.

Connect the CAN-LOG to the terminal via the RS-232 interface as shown in the diagram:



In Omnicomm Configurator, in the “Settings”/“Inputs” window, in the “RS-485 and RS-232 Interface Configuration” section:

Auxiliary Equipment



“RS-485” - select CAN log.

CAN-LOG parameters, displayed in Omnicomm Online and in Omnicomm Configurator

SPN	Omnicomm Online	Configurator	CAN-LOG series B V4	CAN-LOG series B V2	CAN-LOG series P V1
70	Park. brake status	Parking brake status	Yes	Yes	Yes
91	Acceler. pedal pos., %	Accelerometer pedal position (%)	Yes	Yes	Yes
96	Fuel level		Yes	Yes	Yes
110	Eng. coolant temp., °C	Engine coolant temperature	Yes	Yes	Yes
175	Eng. oil temp.,°C	Engine oil temperature			Yes
182	Daily fuel cons., l	Daily fuel consumption	Yes	Yes	
190	Engine RPM, rpm	Engine RPM	Yes	Yes	Yes
244	Daily mileage, km	Daily mileage	Yes	Yes	
245	Odometer reading, km	Total mileage	Yes	Yes	Yes

Auxiliary Equipment

SPN	Omnicomm Online	Configurator	CAN-LOG series B V4	CAN-LOG series B V2	CAN-LOG series P V1
247	Engine hour meter reading, hour:min	Total engine operation time	Yes	Yes	Yes
250	Fuel consumption meter reading, l	Overall fuel consumption	Yes	Yes	Yes
527	Cruise Control status	Cruise Control status	Yes	Yes	
582	Axle load, kg	Axle load	Yes	Yes	Yes
597	Serv. br. ped. status	Status of the service brake pedal	Yes	Yes	Yes
598	Clutch ped. status	Status of the clutch pedal	Yes	Yes	
914	Mileage before maintenance, km	Mileage before next maintenance	Yes	Yes	
916	Engine hours before maintenance, h	Time before next maintenance	Yes	Yes	
1624	Inst. speed, km/h	Instantaneous speed	Yes	Yes	Yes

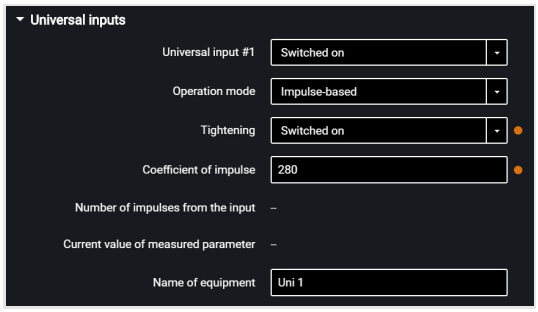
Universal Inputs

Universal inputs are intended for connecting the auxiliary equipment with pulse, potential, analog or frequency output and its operation monitoring.

In the **"Settings"** tab select the **"Inputs"** section from the list.

In the **“Universal Inputs”** section:

Sensors with pulse output



“Universal input” – select “Enabled”.

“Operating mode” – select “Pulse”.

“Equipment name” – enter the monitored parameter name.

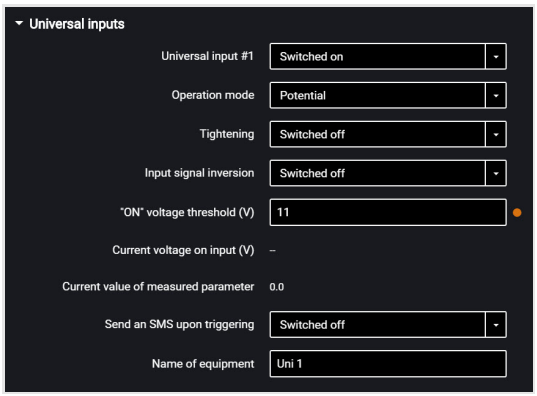
“Pull-up resistor” – select “Enabled” when working with “open collector”-type sensors or contact sensors.

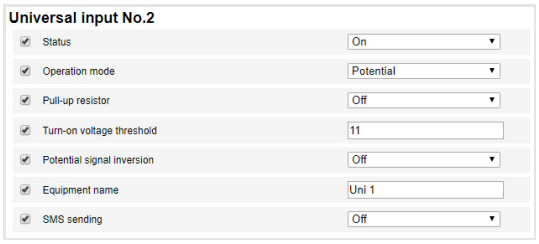
“Coefficient of impulse” – enter the calibration factor converting the number of pulses to the determined physical quantity.

“Number of pulses from the input” (in Omnicomm Configurator) – number of pulses coming at the universal input.

“Current value of measured parameter” – displays the value at the input with account for the calibration factor.

Sensors with potential output





"Universal input" – select "Enabled".

"Operating mode" – select "Potential".

"Potential input activation voltage threshold" – set the value of voltage threshold, after which the terminal will record activation of the sensor. Default value – 9 V.

"Pull-up resistor" – select "Enabled" when working with "open collector"-type sensors or contact sensors.

"Input signal inversion" – set "Enabled" for the sensor with open contacts or contacts closing on commission of any action.

"Current voltage" – value of the voltage at the universal input of the terminal.

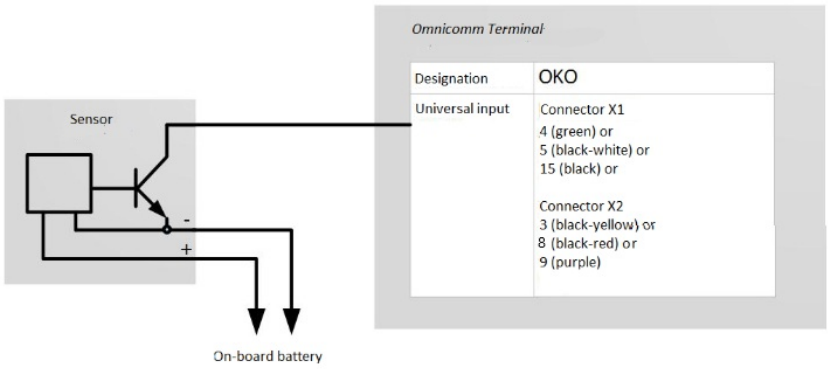
"Current value of measured parameter" – auxiliary equipment switched on or off.

"SMS sending upon triggering" – select "Enabled" to send SMS when the potential universal input is triggered.

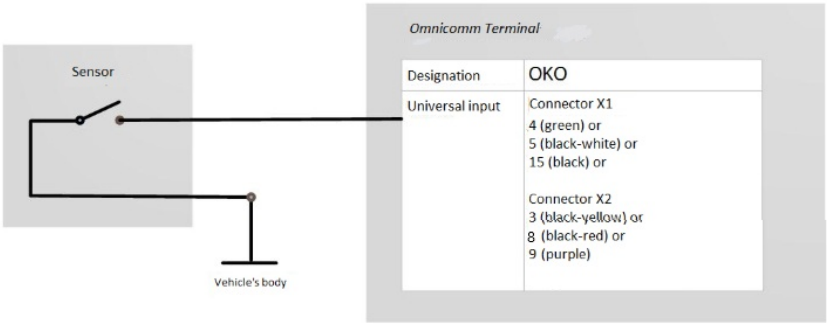
"Equipment name" – enter the monitored parameter name. Possible sensor types: contact or contactless digital sensors.

Connect contactless sensors (capacitance, inductance, optical or magnetic) and N-P-N sensors with "open collector"-type input according to the diagram:

Auxiliary Equipment

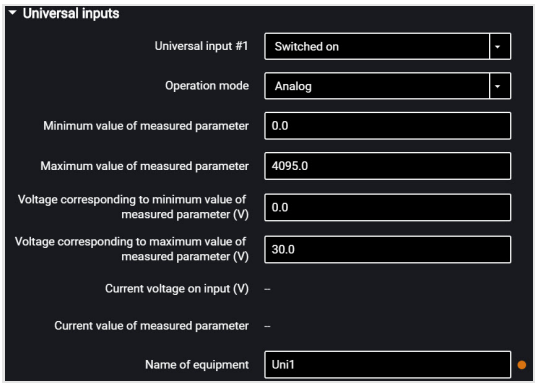


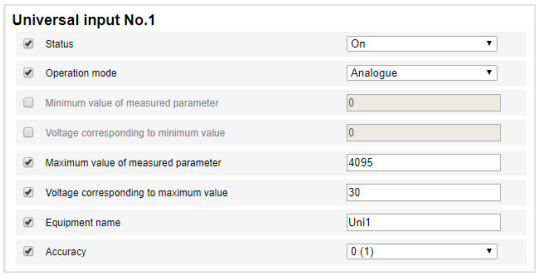
Connect contact sensor according to the diagram:



You can use standard equipment control elements (activation buttons / limit switches / sensors triggered by excess pressure or temperature, etc.) or an additionally mounted sensor as the contact sensor. We recommend that you first check the possibility of connection to a standard device and install an additional sensor only if there is none.

Sensors with analog output





"Minimum measured value" – set the minimum value to be measured by the sensor (in the units of measurement of this value).

"Voltage corresponding to the minimum value" – set the value of voltage corresponding to the minimum measured value.

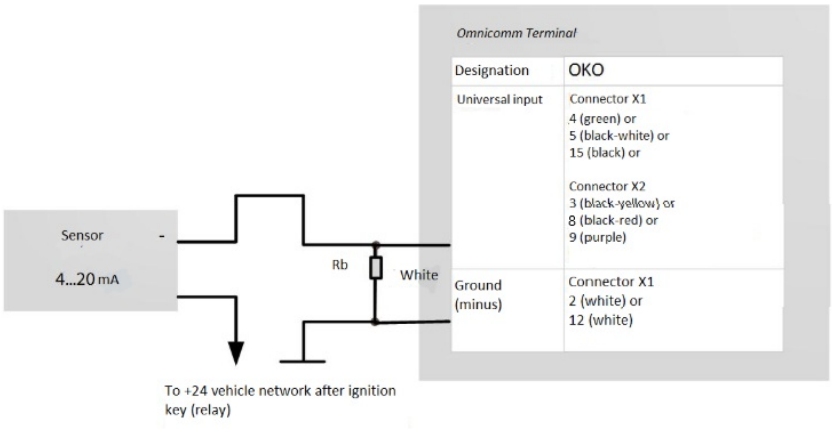
"Maximum measured value" – set the maximum value to be measured by the sensor (in the units of measurement of this value).

"Voltage corresponding to the maximum value" – set the value of voltage corresponding to the maximum measured value.

"Current voltage at universal input" – value of the voltage at the universal input of the Terminal.

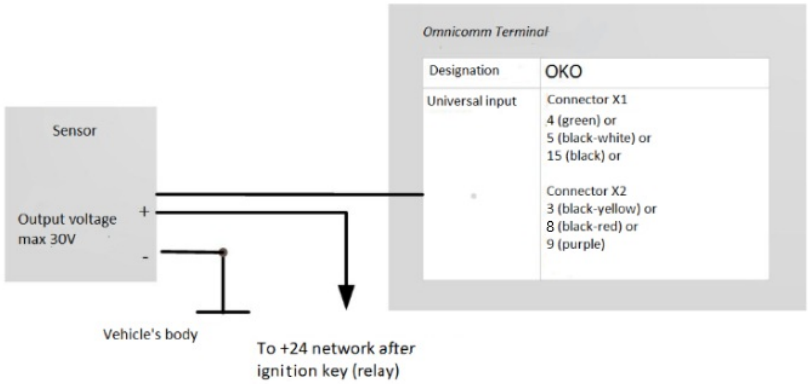
"Current value of measured parameter" – current measured value. "Equipment name" – enter the monitored parameter name. Analog sensor types:

- with uniform current output:

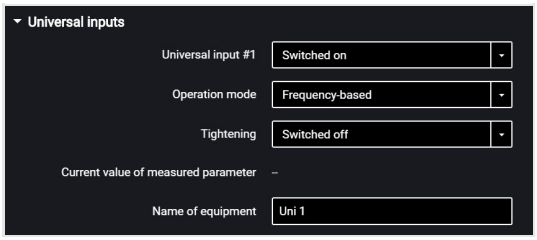


- with uniform voltage output:

Auxiliary Equipment



Sensors with frequency output



“Universal input” – select “Enabled”.

“Operating mode” – select “Frequency”.

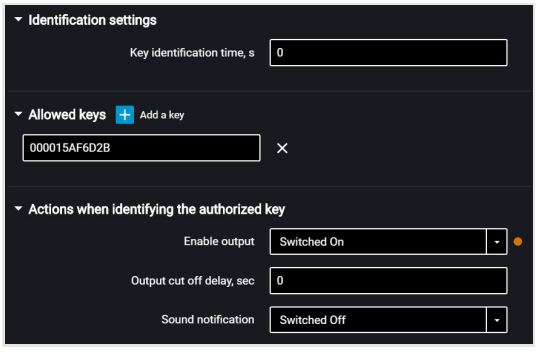
“Pull-up resistor” – select “Enabled” when working with “open collector”-type sensors or contact sensors.

“Current value of measured parameter” – current measured value.

“Equipment name” – enter the monitored parameter name.

Driver Identification

In the **“Settings”** tab select the **“Identification”** section from the list.



“Key/card identification duration” – specify the time value when iButton is applied,

after which will be enabled the second digital output of the terminal. Possible values: from 0 to 60 seconds.

In the **"Authorized keys"** section check the box and enter the iButton key numbers, which application will enable the second digital output. The key number is indicated in 6-byte format.

For example, for a key you must enter: 000015AF6D2B

If no key is indicated in this section, the events will be recorded for all applied keys.

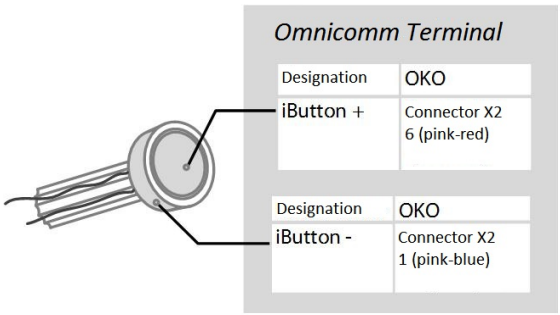
"Output activation" – select "enabled" if you want to activate the second discrete output when the iButton / card authorized key is applied.

"Output cut off delay" – specify the time after disconnecting the iButton / card key from the readout device, after which the second digital output will be disabled. Possible values: from 0 to 3600 seconds.

If necessary, enable/disable the sound reminder of the driver's authorization in the field "Enable sound reminder" – "Yes"/"No", respectively.

iButton readout device connection and installation

Determine the correspondence of the wire colours to the reader contacts, ringing out the wires and reader body contacts with each other using multimeter. Connect the iButton reader according to the diagram:



iButton reader must be installed on the vehicle front panel or in the service cover on the vehicle front panel.

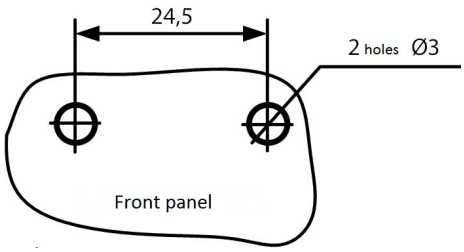
At the installation site, drill a hole of Ø9 mm, install the iButton reader device, put on the sealing ring and lock washer.

Connect the sound emitter:

1. Connect the yellow-red wire of the sound emitter to the controlled output of the terminal, connect the brown wire to +12 V /(+24 V) vehicle network

2. Perform installation on/under an inclined or horizontal surface of the vehicle cabin front panel, fixing it with screws (self-tapping screws) or glue

3. At the installation site, when using screws, drill holes as shown in figure:



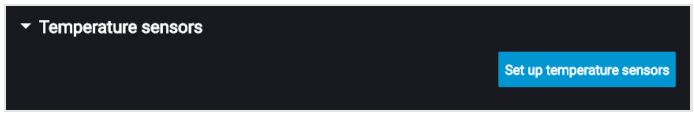
4. Mount the sound emitter on the prepared surface and fix.

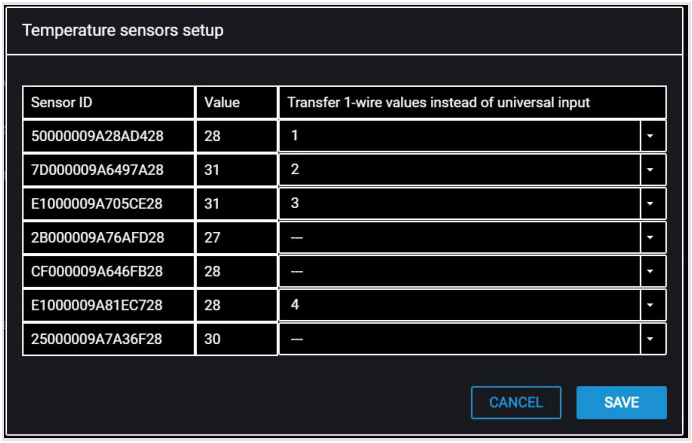
Temperature Sensor

Omnicomm OKO terminals support connection of up to 8 temperature sensors.

In the **"Settings"** tab select the **"Auxiliary equipment"** section from the list.

The **"Temperature sensors"** section displays the readings of temperature sensors connected to 1-Wire interface:





“Send value of 1-Wire sensor instead of UI” – select the number of the universal input for displaying the temperature values in Omnicomm Online.

RFID Reader Devices Connection

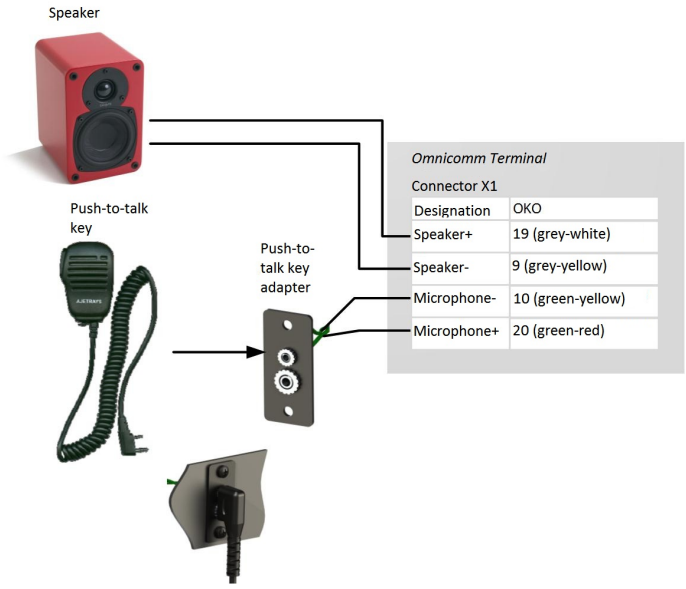
Terminal supports connection of swipe card reader devices via 1-Wire physical interface.

The connected reader device must fully simulate the exchange protocol of DS1990A product.

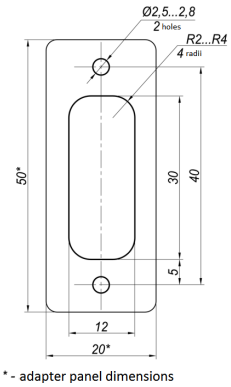
Timing diagrams must be executed for all officially declared specifications.

Voice communication

Determine the correspondence of the wire colours to the push-to-talk key adapter contacts, ringing out the wires and adapter contacts with each other using multimeter. Connect the Omnicomm OKO terminal voice communication set according to the diagram:



1. At the installation site, drill two holes Ø2.5 mm:



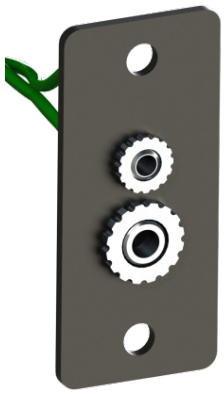
* - adapter panel dimensions

2. Drill a rectangular hole 30×12 using a milling cutter or a drilling bit and install a push-

to-talk key adapter

3. Fix the push-to-talk key adapter on the surface with self-tapping screws

4. Connect the push-to-talk key connector with the adapter connector:

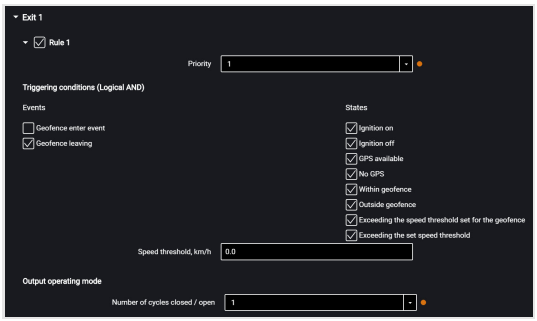


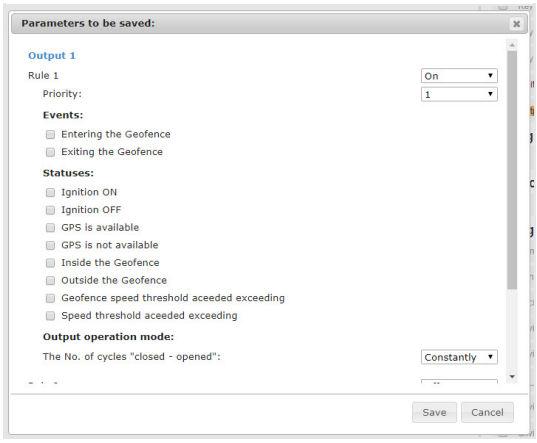
Controlled Equipment

In the video terminals, for each controlled output, up to three operation rules are provided.

The rules are set by event or by a combination of events and states.

In the **“Settings”** tab select the **“Outputs”** section from the list:





“Rule priority” – set the priority of the rule. When at the same time several rules apply, a rule with the highest priority is used.

Possible options: 1 (highest), 2, 3 (lowest).

Select “Events”:

- Entering the geofence

- Leaving the geofence

Select “States”:

- Ignition on
- Ignition off
- GPS available
- No GPS
- Being in geofence
- Being outside geofences
- Exceeding speed threshold set for geofence
- Exceeding the set speed threshold

In the “Output operation mode” section:

Number of “closed-open” cycles – specify the number of output enabling/disabling. Possible options:

- continuous – the output is always enabled (only available for states)
- from 1 to 9 – (only relevant for events, because for states fulfillment of this condition would lead to indefinite cycle repeating)

When selecting the number of cycles, specify:

“Delay before closing” – specify the time until the output activation. Possible values: from 0.1 to 9.9 s.

“Duration of closing” – specify the time, during which the output must be activated. Possible values: from 0.1 to 9.9 s.

“Duration of opening” – specify the time until the next output activation. Possible values: from 0.0 to 29.9 s.

Example 1. The following values are set:

- State – "Being in geofence"
- Number of "closed-open" cycles – 5

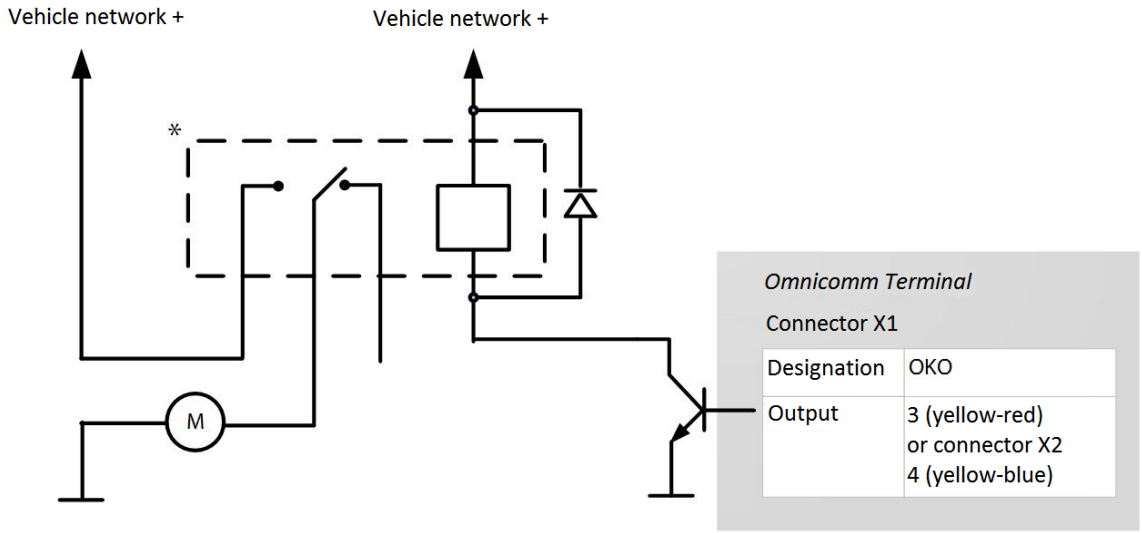
If the vehicle is inside the geofence, the output will be enabled and disabled 5 times. Output enabling/disabling (5 times each) will be repeated until the vehicle exits the geofence.

Example 2. The following values are set:

- State – "Being outside geofence", "GPS available"
- Number of "closed-open" cycles – "Continuous"

If the vehicle is outside the geofence and the GPS module data are valid, the output will be enabled, until the moment of entering the geofence or GPS data absence.

Connect auxiliary equipment to controlled outputs of the video terminals according to the diagram:



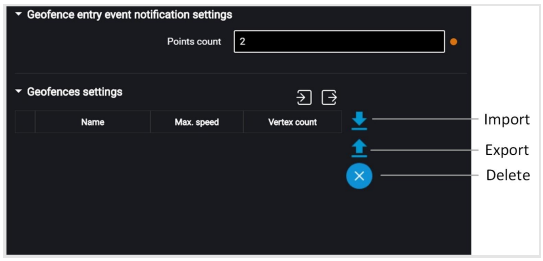
* Relay with operation voltage suitable for the voltage of this vehicle network (12 or 24 VDC)

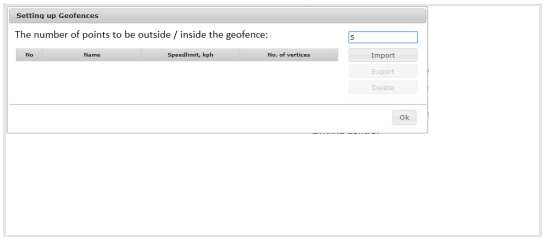
You can also control digital output by SMS commands: *SETDOUT param#, *GETDOUT#, *CLRDOUT param#

Geofence Setting

In the terminals, geofence setting is provided to enable the controlled outputs.

In the **"Settings"** tab select the **"Geofences"** section from the list.





"Number of points to confirm being inside/outside the geofence" – specify the number of successively defined vehicle coordinates required to register the vehicle being inside or outside the geofence. Coordinates determination time – 1 sec. Possible values: from 1 to 10.

To add a geofence, press the "Import" button and select the .xml file with geofence settings.

> The geofence name must be not more than 8-character long and consist of symbols, digits and Latin letters.
>
> Geofence should not contain consecutive points with the same coordinates.

Maximum number of geofences – 6.

Maximum number of peaks – 24.

Panic Button and GSM Call Button

In the **"Settings"** tab select the **"Auxiliary equipment"** section from the list.

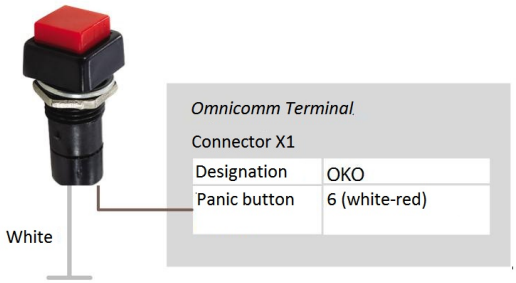
In the **"Panic button parameters"** section:

"Data source" – enable/disable condition control of the panic button.

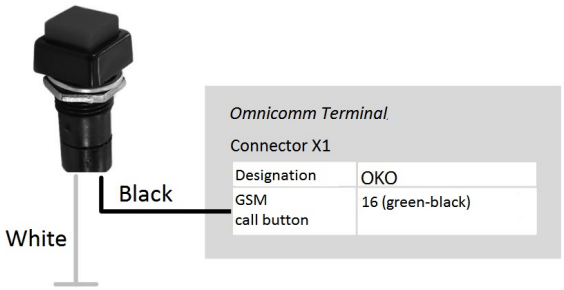
"SMS sending upon triggering" – enable/disable SMS sending upon the panic button

pressing.

Connect the panic button according to the diagram:

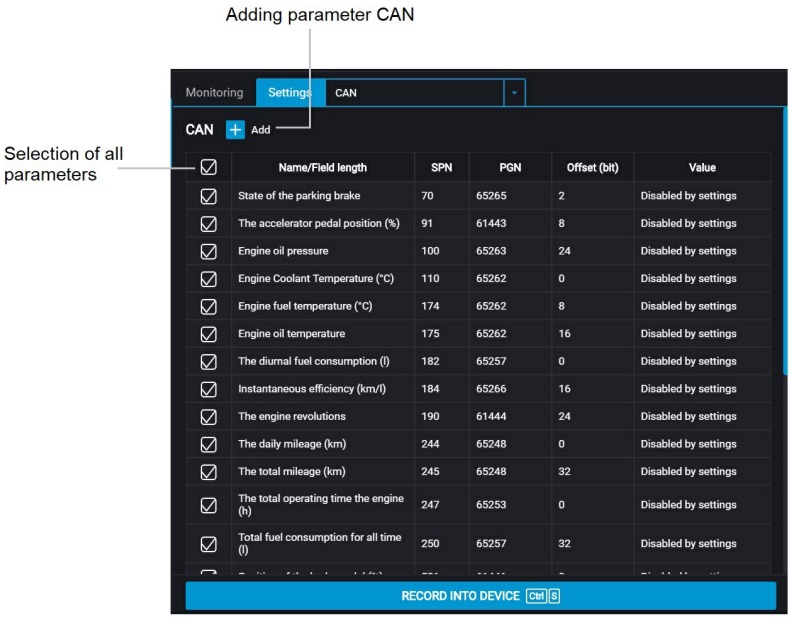


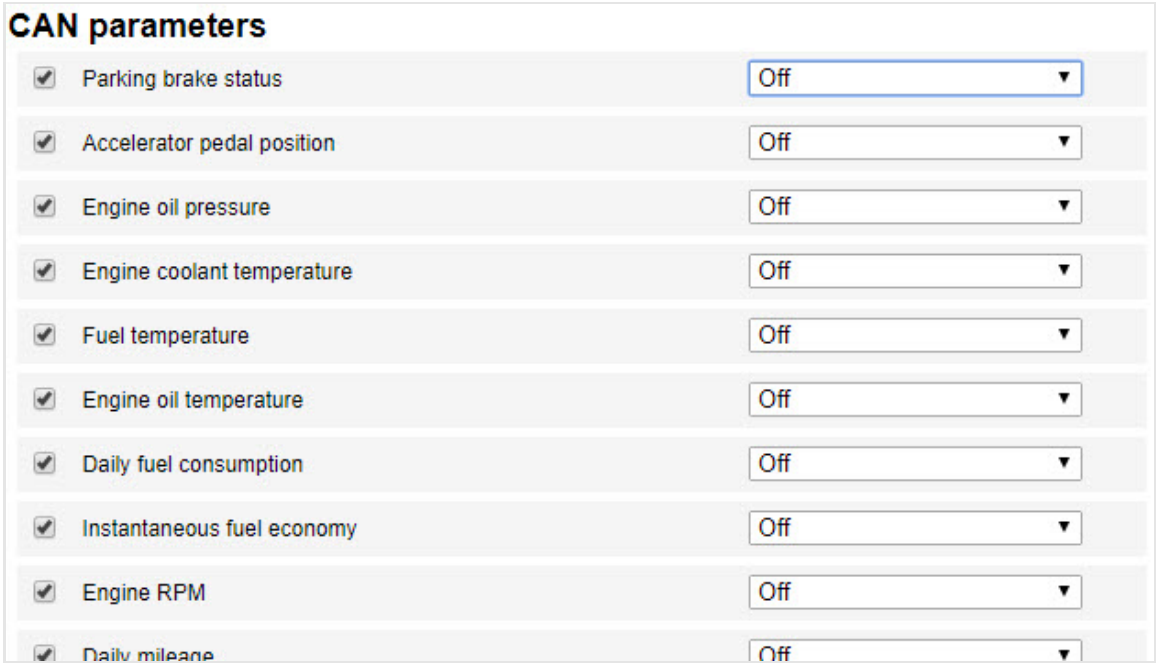
Connect the GSM response button to video terminals according to the diagram:



CAN Bus

In the **"Settings"** tab select the **"CAN"** section from the list.



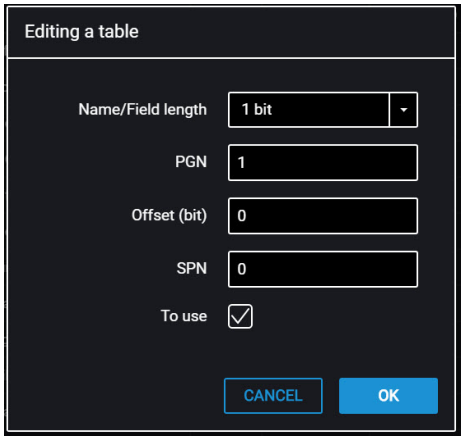


From the list, select the parameters, which value shall be displayed in Omnicomm Online, and check the corresponding boxes in the "Use" column.

"Use ContiPressureCheck" – check the box for processing of data received from the ContiPressureCheck tire pressure monitoring system. When the ContiPressureCheck system is used, you must configure the tire pressure monitoring in Omnicomm Online

(see Omnicomm Online. Administration Guide).

If you need to add parameters for reading from the CAN bus, which are not on the list, press the “Add” button in Omnicomm Configurator. A window will open:



“Length” – select the length of the data packet. Possible values: 1, 2, 3, 4 (bit), 1, 2, 4 (bytes).

“PGN” – enter the parameter group number that defines the contents of the corresponding message according to SAE J1939. Possible values: from 1 to 262143.

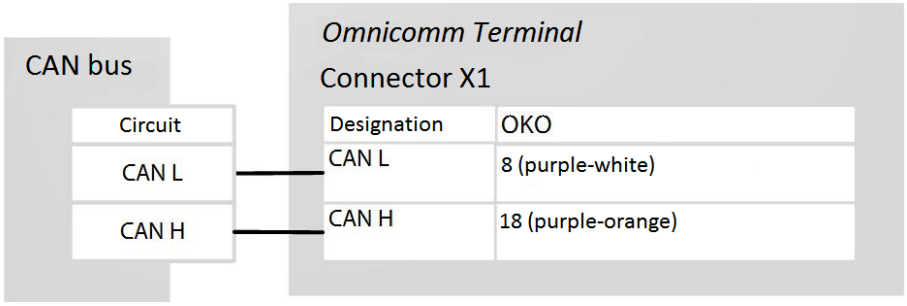
“Offset” – enter the offset value relative to the base address of the bit storing area. Possible values: from 0 to 63.

“SPN” – enter the parameter code according to SAE J1939. Possible values: from 0 to 4294967295.

“Use” – check the box if you want to read this parameter from the CAN bus. Press the “Save” button.

The connection to the vehicle CAN-bus should be performed via the concatless CAN reader (CAN-crocodile).

When using contactless CAN readers, the connection of the CAN readers to the terminals should be performed according to the scheme:



Configuring the reception of data on the fuel volume in the tank from the vehicle CAN bus Connect and configure reception of the vehicle equipment operation parameters from CAN J1939 data bus and set the setting of fuel sensor – “CAN Sensor”.

Check indication of the fuel sensor values in the “Monitoring” tab, the value must be from 0 to 4095.

When reading the fuel level in the tank from the CAN bus, set the operating mode of the terminal while ignition off to “Collect data during pounding” mode. Otherwise, the fuel level graphic will not be displayed correctly.

Sealing

Protective cover sealing is provided for Omnicomm OKO video terminals.

Apply the sealing sticker to the protective cover so as to prevent removing the cover without damaging the sticker.

LED indication

Indicator	Indication mode	Value
Power (red)	Off	Power off
	Permanently lighted	Power: Main
GPS (green)	Off	Module power supply off
	Permanently lighted	Valid data from satellites are received
3G (green)	Off	Module power supply off
	Permanently lighted	Within the GSM network coverage, exchange with communication server is performed
SD1, SD2 (green)	Off	Video recording is not performed
	Permanently lighted	SD card failure. Video recording is not performed
	Flashing	Video recording is performed

SMS Commands

SMS commands for terminal management

Command		Designation
Command text in SMS	Reply to a command in SMS	
*SOUND 1#	SOUND ON	Request for turning on the siren
*SOUND 0#	SOUND OFF	Request for turning off the siren
*SETDOUT param# Param=0 Param=1 Param=0,1	SETDOUT Possible parameter values: param = OK if the command is forwarded to execution param = ER if the command is not forwarded to execution	Request for disabling digital output
*GETIMG#	GETIMG param Possible parameter values: param = OK if the command is forwarded to execution param = ER if the command is not forwarded to execution	Request for taking picture (if the camera is connected)
*CLRDOUT param# Param=0 Param=1 Param=0,1	CRLDOUT param Possible parameter values: param = OK if the command is forwarded to execution param = ER if the command is not forwarded to execution	Request for enabling digital output

SMS Commands

Command		Designation
Command text in SMS	Reply to a command in SMS	
*GETDOUT#	DOUT 0=1 1=0 где: output_number=output_state	Request for state of digital output
*CONNECT#	CONNECT CS_address:port	Request for establishing connection of Terminal with CS
*GETLINK#	LINK # LINK ip4_CS_address:port date_and_time	Request for status of connection to CS
*GETINFO#	INFO DID=deviceID HW=hardware_code_version BL=bootloader_version FW=firmware_version REC=number_of_records_in_archive IMEI=GSM_modem_unique_identifier	Request for state of terminal
*RESET#	RESET param Possible parameter values: param = OK if the command is forwarded to execution param = ER if the command is not forwarded to execution	Reset of terminal

SMS Commands

Command		Designation
Command text in SMS	Reply to a command in SMS	
*GETSTAT#	STAT terminal_date_and_time GPS=position as per GPS SPD=speed IGN=ignition_state L1=fuel_level:sensor_state L6=fuel_level:sensor_state Fuel level sensor state codes LLS/LLS-AF: • 0 - disabled; • 1 - not ready; • 2 - ready, , frequency 20 - max Hz; • 3 - error, frequency 0 - 19 Hz;	Request for vehicle state
*SETPWDID vid pwdid# vid - identification of Terminal; pwdid - password/identification.	SETPWDID ERRID/ERRNulPWD/ERRAlrSet/PWD:pwdid OK	Setting parameter “Password”
*CONNECTSC#	CONNECT SC	Request for connection of terminal with configurator server
*SETAPN apn# apn - APN of the operator	SETAPN apn ERR/OK	Setting APN
*SETAPN2 apn# apn - APN of the operator of second SIM card	SETAPN apn ERR/OK	Setting APN for second SIM card

SMS from Videoterminal

Command		Designation
Command text in SMS	Reply to a command in SMS	
*GPSCOLD#	GPSCOLD ERR/OK	Cold start of GPS reciever
*UNBLOCK#		Unblocking the terminal

SMS from Videoterminal

Event	Message format	Example
Panic button triggering	Panic button. Vehicle name; VID; http://google.com/maps?q=Latitude, Longitude; dd/mm/yyyy; hh:ss.	Panic button. E777KX_97; ID336011133; http://google.com/maps?q=55.7889,37.5887; 01/04/19; 09:25.

SMS from Videoterminal

Event	Message format	Example
Dangerous driving is detected	Dangerous driving. a=xx.xx g on the X-axis; Vehicle name; VID; http://google.com/maps?q=Latitude, Longitude; dd/mm/yyyy; hh:ss.	Dangerous driving. Suspension impact>0.20 g, E777KX_97; ID336011133; http://google.com/maps?q=55.7887,37.5887; 01/04/19; 09:29. Dangerous driving. Sharp turn>0.20 g, E777KX_97; ID336011133; http://google.com/maps?q=55.7887,37.5887; 01/04/19; 09:29. Dangerous driving. Acceleration>0.20 g, E777KX_97; ID336011133; http://google.com/maps?q=55.7886,37.5887; 01/04/19; 09:33. Dangerous driving. Braking>0.20 g, Suspension impact>0.20 g, E777KX_97; ID336011133; http://google.com/maps?q=55.7886,37.5889; 01/04/19; 09:40.
An accident is detected	Accident. a=xx.xx g on the X-axis; Vehicle name; VID; http://google.com/maps?q=Latitude, Longitude; dd/mm/yyyy; hh:ss.	Accident. a>0.40 g; E777KX_97; ID336011133; http://google.com/maps?q=55.7887,37.5891; 01/04/19; 09:45.
Universal input triggering	Sensor. Equipment name. UI. Vehicle name; VID; http://google.com/maps?q=Latitude, Longitude; dd/mm/yyyy; hh:ss.	Uni 1 sensor. E777KX_97; ID336011133; http://google.com/maps?q=55.7887,37.5888; 01/04/19; 09:29.
Body tampering (except for Light, Smart)	Body tampering. Vehicle name; VID; http://google.com/maps?q=Latitude, Longitude; dd/mm/yyyy; hh:ss.	Body tampering. E777KX_97; ID336011133; http://google.com/maps?q=55.7886,37.5888; 01/04/19; 09:36.

Event	Message format	Example
Overspeeding	Speed. Speed value>Value of the speed threshold; km/h; Vehicle name; VID; http://google.com/maps?q=Latitude, Longitude; dd/mm/yyyy; hh,ss	Speed. 88>60 km/h; E777KX_97; ID336011133; http://google.com/maps?q=55.7886,37.5888; 01/04/19; 09:36.
Exceeding of RPM	RPM. RPM value>Value of RPM threshold, rpm; Vehicle name; VID; http://google.com/maps?q=Latitude, Longitude; dd/mm/yyyy; hh:ss	RPM. 42000>20000 rpm; E777KX_97; ID336011133; http://google.com/maps?q=55.7886,37.5888; 01/04/19; 09:36.

For all SMS, in which the user is notified that the thresholds are exceeded, the measured value and the threshold value are transmitted.

Firmware Change Log

Date	Firmware Version	Changes
January 14, 2019	FW 307	- solved factory reset issue when cleaning the terminal data archive or in case of on-board network voltage drop - enhanced GPS communication (eliminated periodic coordinate discarding at 00-00 UTC) - solved a problem of lack of communication with Profi Wi-Fi terminals, if there is a 0 in IP-address (for example, 192.168.0.1) - rectified freezing of OmnicommLLS-AF fuel level sensor values when the terminal switches to “Collect all except GPS mode”

Firmware Change Log

Date	Firmware Version	Changes
October 31, 2019	FW 309	- CAN-LOG Series B universal controller supported - ContiPressureCheck tyre pressure monitoring system now supported - accelerometer calibration state is now displayed on the Remote Configuration Server

OMNICOMM

info@omnicomm-world.com
www.omnicomm-world.com