





#### «TKLS-PROG-232» INTERFACE CONVERTER

## **USER MANUAL**







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### Introduction

This User Manual applies to the TKLS-Prog-232 USB-RS232 interface converter produced by TechnoKom Ltd. TKLS-Prog-232 allows connection of external devices equipped with RS-232 interface to USB and can be used for programming, data reading and configuring those devices.

In particular TKLS-Prog-232 is used for programming and configuring of TKLS-L fuel level sensors equipped with RS-232 bus.



All information on functions, functional capabilities and other specifications related to TKLS-Prog-232 converter, as well as all information contained in this User Manual is based on current data (at time of writing) and is deemed to be valid as of the date of publication.

TechnoKom reserves the right to modify the information or specifications without prior notice or commitment.

# **Technical Specification**

Description	Value
Connection to a PC	USB 2.0
Connection to an external device	RS-232
RS-232 Bus (TIA / EIA-232)	1
Type of power supply	USB
DC output (for external device)	12 ± 2 V, 200 mA
Operating temperature, °C	-40+85
Cable length, mm	195
Weight, g	25
Average life time, years	10

# Scope of supply

Nº	Description	Qty
1	USB-RS232 Converter «TKLS-Prog-232»	1
2	Adapter for connection to TKLS-L fuel level sensor	1
3	Set of operational documentation	1

## Interface Connectors

#### RS-232 connector of the USB-RS232 interface converter



Nº	Assignment
1	+Vin
2	-Vin
3	RS-232 (RxD)
4	RS-232 (TxD)

## Connection to TKLS-L fuel level sensor

Use special adapter supplied with TKLS-Prog-232 converter in order to connect the converter to TKLS-L fuel level sensor.

#### To connect TKLS-L fuel level sensor to a PC:

- disconnect the sensor from power supply;
- connect the 4-pin connector of TKLS-Prog-232 converter to the 4-pin connector of the adaptor (see Fig.1, step 1);
- connect TKLS-Prog-232 to PC (Fig.1, step 2);
- connect free end of the adaptor (Molex connector) to TKLS-L sensor (Fig.1, step 3);
- if the sensor drivers have been installed previously, connected device will be automatically recognized.

When TKLS-L fuel level sensor is connected to a PC, it is possible to send new settings to the sensor or update its firmware. For more detailed information see document «TKLS-L fuel level sensor User Manual».

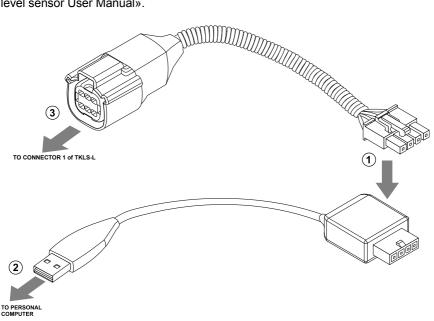


Fig.1. Connection to TKLS-L.

## Drivers installation

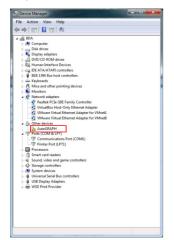
This section covers an installation procedure of the driver for TKLS-Prog-232 converter.

For proper operation the AGUSB Driver must be installed before connecting the converter to a PC. This driver can be downloaded for free from the official website of TechnoKom. The AGUSB Driver is compatible with MS Windows 7, 8, Server 2003, Server 2008 (x86 µ x64).

Given below is an example of the driver installation on MS Windows 7:

#### To install the driver:

- · connect TKLS-Prog-232 to a PC;
- if automatic driver installation is enabled in the system settings and the Internet connection is available, TKLS-Prog-232 driver will be downloaded from Windows Update server and installed automatically;
- if Internet connection is not available, it is recommended to install the driver manually following the instruction given below;
- download the archived driver file from the official website of TechnoKom and extract it to a temporary directory on a hard driver;
- when connecting the converter to a PC, the system will automatically found new equipment (Fig.2);



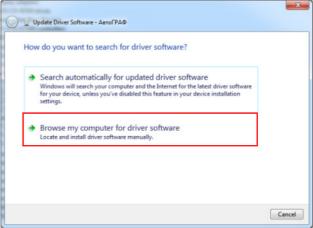


Fig.2. New equipment.

Fig.3. Browse for TKLS-Prog-232 driver.

- launch the driver update wizard and select "Browse my computer for driver software" to search for the drivers manually. Then select the folder where the driver files was extracted (Fig.3);
- install the driver. After the installation the connected device will be recognized (Fig.4).



Fig.4. TKLS-Prog-232 is connected.

