

MODEM DESCRIPTION

The EKOLAN modem is designed to work with controllers for solar systems and heat pumps as well as other equipment offered by Hewalex. The modem enables the user to communicate with the controller through a web-based application. Components are placed in a closed plastic housing with LEDs and sockets.

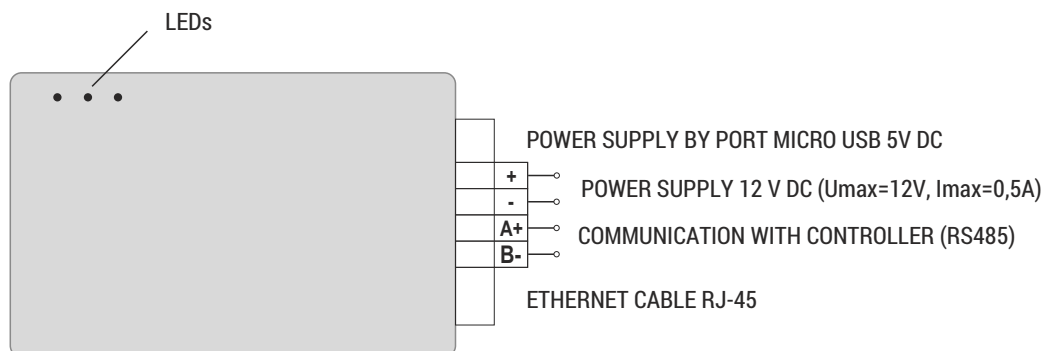


1 APPLICATION

The purpose of the system supplied along with the LAN modem is to enable:

- view of the system operating parameters,
- changes of the controller presets within the remote control scope,
- sending messages about alarm states as e-mails,
- multi-year 24-hour backup of the system operation data with the storage rate of 60 seconds,
- generating multiple statistics and diagrams related to the operation of the system,
- remote maintenance of the system which the hardware supplier provides to ensure the maximum efficiency of the system operation.

FIG.1. LAN modem - controller connection scheme



2 INSTALLATION PROCEUDRE

Installation Guidelines:

- 1 All installation works should be carried out after disconnecting AC main power supply.
- 2 Modem communication wires should be placed at a distance from high voltage wires.
- 3 Damaged modem wires should be replaced with the new ones.
- 4 It's required to provide access to the Ethernet network featured with dynamic allocation of IP addresses (DHCP protocol).

2.1. Connection to the AC mains

It is possible to use one of the following methods:

- By microUSB external power supply - voltage 5V
- By external power supply- voltage 12V
- Directly through the controller of the solar system – voltage 12V (see Table 2).

Tab.1 Direct connection through the controller – description of the sockets

Controller name	12V socket indication
G422-xx	5 and 6
GH26-xx	5 and 6
G426-P01	RS485-1 port
G426-P02	RS485-2 port (default connection)

For devices not listed in the Table 1 the connections should be made according to instructions in the manual provided together with the external device.

ATTENTION: Connect only one power source to the modem, regardless of the number of connected external devices.

2.2. Connecting Modem to external devices

In case of only one device to be connected proceed according to Fig.2. In case of connecting more devices proceed according to Fig 3. (Multipoint topology). It is not allowed to connect the devices as shown in Fig. 4 (Star topology).

Fig.2 Correct connection of the modem through direct connection with the controller – sockets description

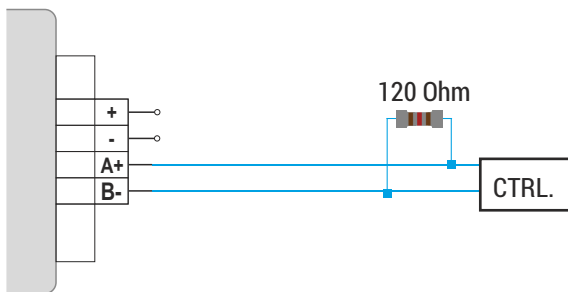


Fig.3 Correct connection of several devices in the RS485 network (the multipoint topology)

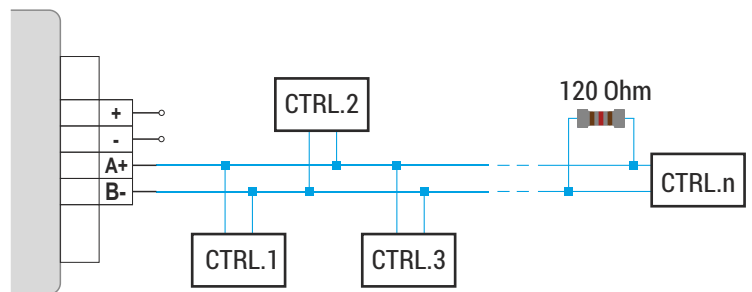
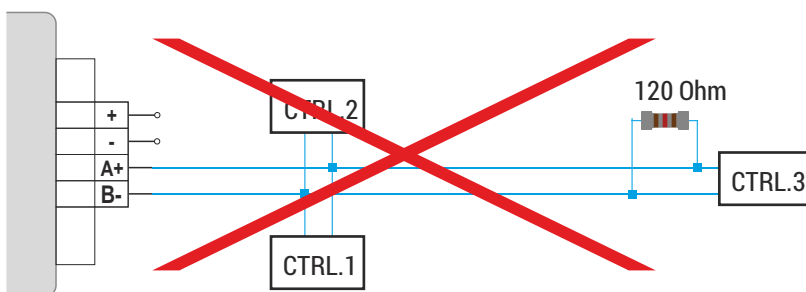


Fig.4 Incorrect connection of devices in the RS485 network (the star topology)



2.3. ACCESS TO THE INTERNET

The communication between modem and server takes place through RJ-45 socket. It's required to provide access to the Ethernet network featured with dynamic allocation of IP addresses (DHCP).

2.4. Starting the modem

After switching on the controller and selecting the **CONTROLLER SETTINGS** in the **MENU**, go to the Port RS485 option and set the following parameters::

- Band rate: 38400
- Physical address: 2 (for the first controller of the solar system), 3,4,5 for subsequent controllers, respectively
- Logical address: 2

After introducing the settings, wait for about 2 minutes until changes apply. Check LED diodes and verify their status as shown in Table 2.

Tab.2 Description of LEDs signals and corresponding status of operation of the modem

		Description
State	GREEN	flashes
		constant
	YELLOW	constant
		flashes
RED	constant	
	flashes	

* Check the wiring between modem and controller as well as **CONTROLLER SETTINGS** in the menu (**Port RS485**)

**Check if Internet access is available, cable is connected and home network has a right configuration.

Technical Support is available at ekontrol@hewalex.pl.

2.5. Starting EKONTROL web application

Access to the web application is granted after successful modem registration at www.ekontrol.pl in the tab Log in

3 INFORMATION ON MARKING AND COLLECTING WASTE ELECTRIC AND ELECTRONIC EQUIPMENT



The symbol placed on the product or its packaging refers to the selective collection of waste electric and electronic equipment. It means that this product should not be disposed together with other household waste. Proper disposal of old and waste electric and electronic devices will help avoid effects which are potentially adverse for the environment and human health.

The user is responsible for collecting the waste equipment in the selective manner and handing it over to a waste equipment collector.