Ethernet communicator

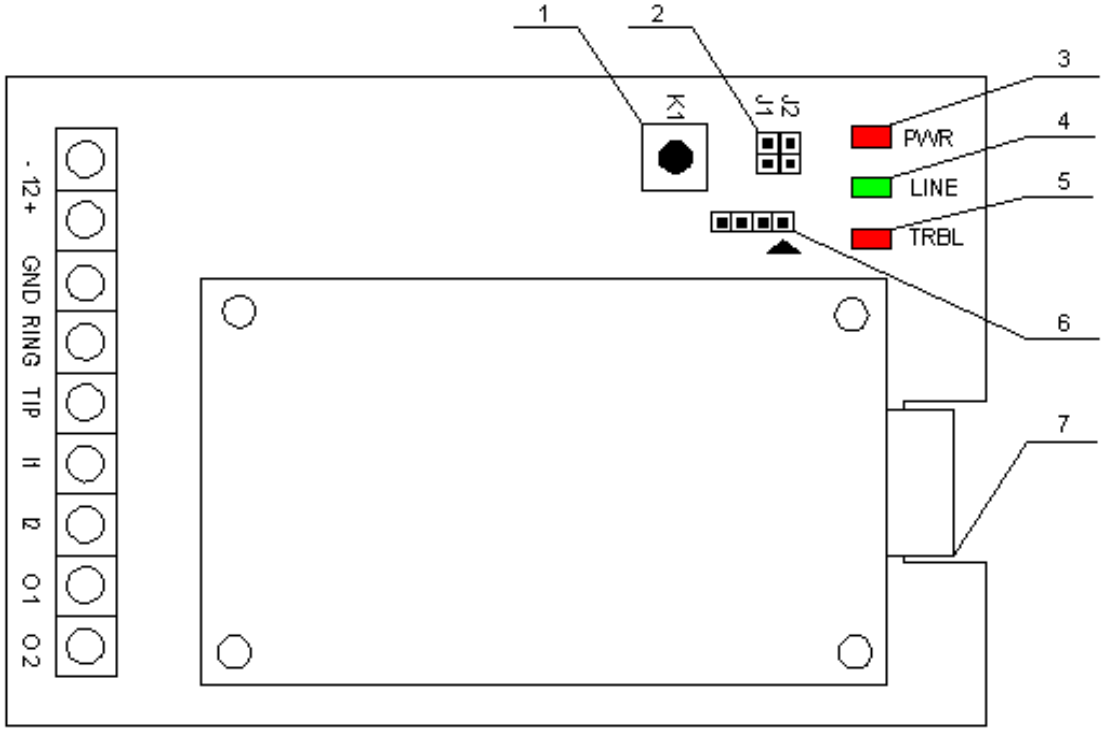
IF_SIA-IP

User manual

General information

IF_SIA-IP ethernet communicator is designed for collecting information in the SIA_IP format from the control panel and transmitting it to the Central Station via Ethernet in TCP/IP protocol. Information is transmitted directly into **WinSC** or **TLF_Server** software ot to any IP-Central Unit that supports SIA-IP protocol. In order to receive information in the **WinSC** software, you have to enable **SIA_IP** driver in the **Receiver settings** menu.

Communicator appearance is shown on Pic.1.



Pic.1 communicator appearance

1. Account assigning button
2. Jumpers for zone load assignment
3. Power indicator (PWR)
4. Communication indicator (LINE)
5. Communication trouble indicator (TRBL)
6. Programming port
7. Ethernet port

Connection and indication

In order to work properly, communicator and PC with installed software must be connected to the Internet and have real and static IP-addresses. It is recommended to power communicator from the panel's **AUX+** and **AUX-** outputs (12 V). **TIP** and **RING** contacts are connected to the corresponding contacts on the security panel..

After powering communicator, red PWR led will be turned on. When event is generated in the control panel and thone communicator is activated, green **LINE** led will be turned on. When the message is transmitted from the panel into the **IF_SIA-IP** communicator **LINE** indicator will blink fast. If the message is received correctly, **IF_SIA-IP** will transmit information to the Central Unit, using programmed IP-address. After the message is successfully transmitted **LINE** indicator will blink once.

When next message is generated, all the actions are repeated, regardless of the previous transmission result. All not transmitted messages are transmitted with the next transmission.

If the transmission failed, red **TRBL** led will turn on.

Device inputs and outputs

Device has two general purpose inputs: **I1** and **I2**.

Inputs can either be loaded to «0» or «+». Load type is selected using jumpers. **J1** jumper controls **I1** input, **J2** – **I2** input. If the jumper is removed than input is loaded to «+» (reacts to the **«0»/«break»** signals), if placed – loaded to «0» (reacts to the **«+»/«break»** signals). Maximum allowed voltage on the input – 15V.

Output **O1** is activated if the connection to the Central Unit is lost.

Output **O2** is not used in this version of the device and is reserved for future use.

Программирование параметров коммуникатора Wiznet.

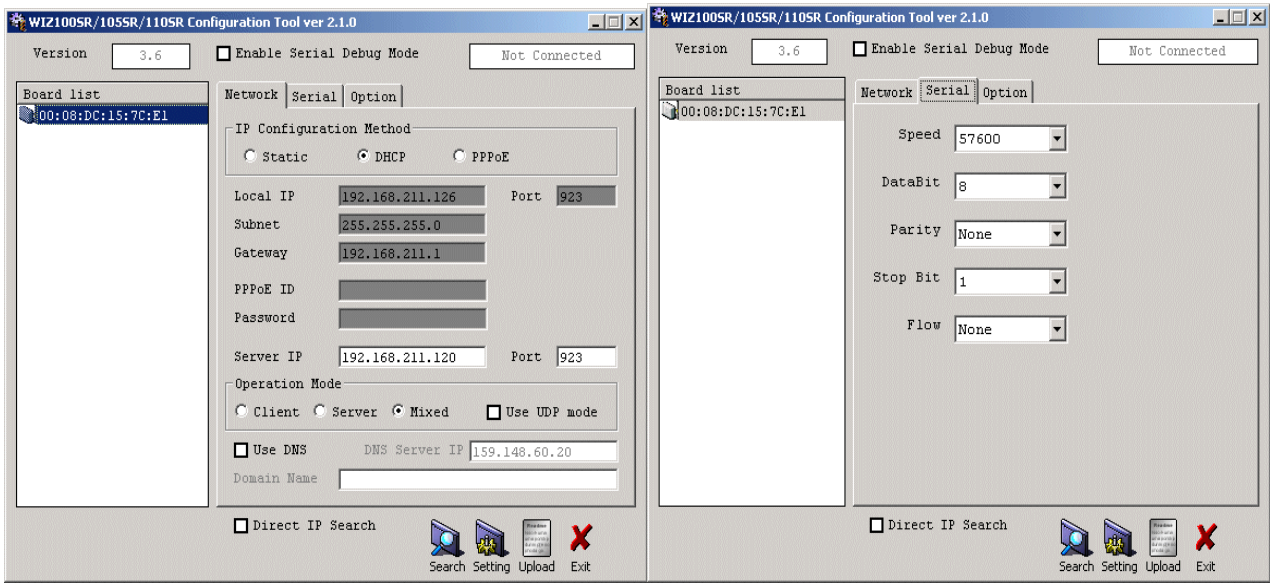
Communicator is programmed using a local network, with the **WIZ1x0SR_105SR_CFG** software.

In order to program the communicator, it must be powered on and Ethernet cable must be connected.

Attention! Ethernet cable must be connected before powering on.

Software appearance is shown in Pic.2.

After connecting communicator to the local network, you should press Search button and choose Desired communicator in «Board list» window.



Pic. 2. Programming software.

You have to program the following parameters in the module:

In the Network tab:

1. Remove selection from the **Enable serial debug mode** checkbox
2. **IP Configuration Method** section

In this section are set the type of communicator IP-address detection. **DHCP** – IP-address assigned automatically. **Static** – IP-address assigned manually. In that case you have to additionally set IP-address, subnet mask and gateway.

3. **Server IP and Server port –** Central station IP-address and TCP portIn
4. **Operation Mode** section you must choose **Client** and make sure that checkbox **Use UDP mode** is disabled.
5. In the **Serial** tab you have to set the following parameters:

Speed – 57600; Data Bits – 8; Parity – None; Stop Bit - 1; Flow – None

6. In the **Options** tab you have to set **Inactivity time** parameter equal to **1**.

Other parameter values must be left default.

To save configuration, press **Setting** button, to close the program **– Exit.**

Communicator account programming

IF_SIA-IP account is always programmed the same as the account of the connected control panel.

In order to program account you have to press and hold **K1** button and power up the communicator. **PWR** and **TRBL** leds will be turned on. After that you have to generate any message from the control panel. After the message is transmitted, **IF_SIA-IP** will change it's account and **TRBL** led will be turned off.

Communicator messages

Communicator messages are used to report status of two communicator inputs and are transmitted in **SIA_IP** format.

Communicator partition will always be 99.

Event codes are the following:

Event	Event code
Alarm on the first input	**TA1**
Restoration of the first input	**TR1**
Alarm on the second input	**TA2**
Restoration of the second input	**TR2**

Security panel programming.

Phone communicator programming.

In order for IF-1.4_TCP to work, in security panel communicator must be programmed a telephone number. By default IF-1.4_TCP number is 2. Phone programming example for the DSC 1565 panel:

In section [301] enter – 2, *, 6, #

For all the phone numbers must be programmed pulse dialing
Programming example for the DSC 1565 panel:

In section [380] – Light3 – ON, #

Also automatic event codes must be enabeled.
Programming example for the DSC 1565 panel:
In section [380] – Light3 – OFF, #

Communication format programming.

IF_SIA-IP uses SIA_IP communication format. Other formats are not supported, so you must specifically program this format.

Programming example for the DSC 1565 panel:

In section [360] enter – 04, #