



Ethernet communicator *E10Tv2*

USER MANUAL

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Safety Requirements

The security alarm system should be installed and maintained by qualified personnel.

Prior to installation, please read carefully this manual in order to avoid mistakes that can lead to malfunction or even damage to the equipment.

Disconnect power before making any electrical connections.

Changes, modifications or repairs not authorized by the manufacturer shall void your rights under the warranty.



Please act according to your local rules and do not dispose of your unusable alarm system or its components with other household waste.

1 Description

Communicator E10Tv2 is intended to upgrade intruder alarm panel which have telephone line communicator (TLC) for event signaling wired Internet (Ethernet).

Customers are informed about security system events in Protegus app. Communicator transmits full event information to Alarm Receiving Centre.

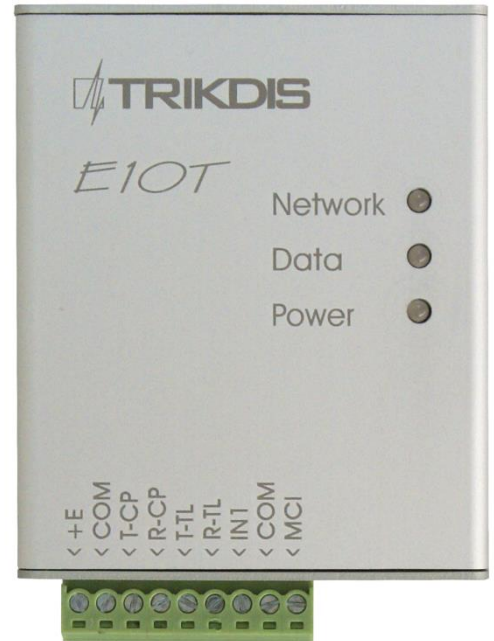
Features

Connection

- Connection to control panels via:
 - TLC terminal connection

Communications

- Simultaneous event reporting to Protegus Mobile/Web application, allowing user to remotely monitor alarm system
- Communicator transfers all messages from control panel in Contact ID codes
- Messages in TCP/IP or UDP/IP protocol are sent to ARC
- In case of lost connection with the main channel, switches automatically to backup channel



Configuration

- Quick and easy configuration and firmware updates
- Two access levels for setting of operating parameters

Input

- 1 input, type: NC, NO, EOL = 2.2 kΩ

1.1 Technical Parameters

Parameter	Description
Power supply voltage	12,6 ± 3 VDC
Current consumption	120 mA (stand-by), Up to 250 mA (transmitting)
Ethernet connection	IEEE802.3, 10 Base-T, RJ45 socket
Data pack content	Contact ID format codes
Memory	Up to 100 messages
Input	1, NC/NO/EOL-2,2 kΩ type
Operating environment	From -10 °C to 50 °C, with relative air humidity 80% when +20 °C
Dimensions	65 x 79 x 25 mm

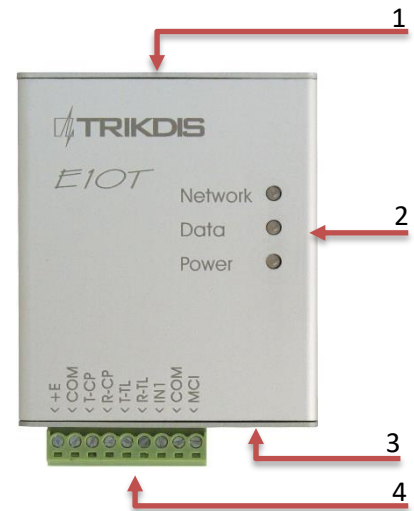
1.2 Package Contents

Module E10Tv2	1 pc.
User manual	1 pc.
Two-sided adhesive tape (10 cm)	1 pc.

Note: USB cable (Mini-B type) for programming the communicator via USB is not included.

1.3 Communicator structure

1	Ethernet connection RJ45 socket
2	Light indicators
3	USB Mini-B port for communicator programming
4	Terminal for external connections



1.4 Terminal block description

Contact	Description
+E	+12V power supply terminal
COM	Common ground terminal
T-CP	For connecting to the security control panel Tip terminal
R-CP	For connecting to the security control panel Ring terminal
T-TL	For connecting a telephone landline
R-TL	For connecting a telephone landline
IN1	1st input terminal for connection of external circuits (type NC)
COM	Common ground terminal
MCI	Data bus for connecting report transmission device

1.5 Light indication

LED	Operation	Description
"Network" displays the status of connection to the Internet	Green ON	Module is connected to the Internet
	Yellow ON	TCP/IP session is open
"Data" displays data transfer	Green ON	Unsent messages present
	Red ON	Messages cannot be sent
	Green flashing	Messages are being received from the control panel
"Power" displays power supply status and the functioning of the microprocessor	Green flashing	Power supply is sufficient
	Yellow flashing	Power supply is not sufficient ($\leq 11,5$ V)

1.6 Configuration of security control panel

Use programming manual of particular security control panel and set operation parameters of telephone communicator as following:

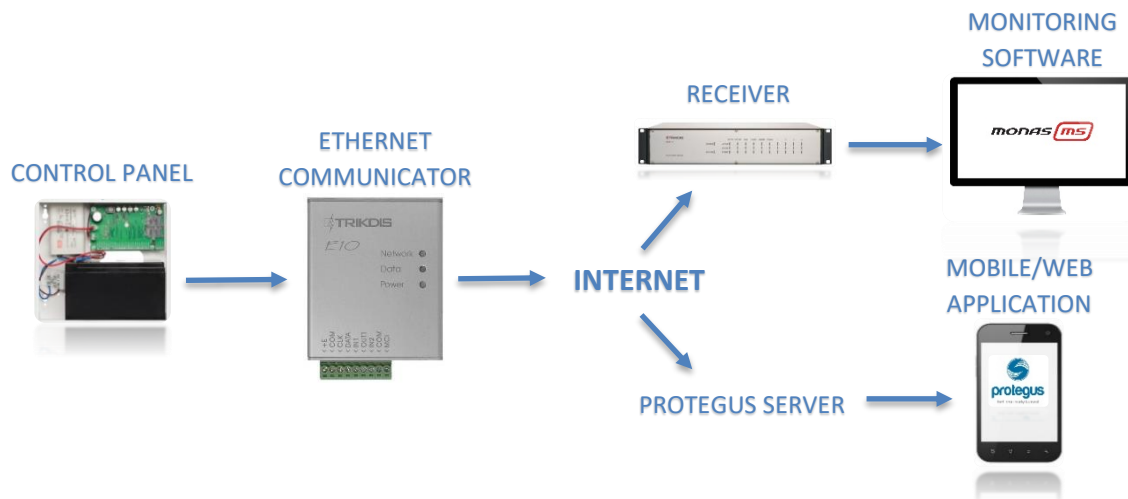
- 1) Enable the PSTN dialer of the panel.
- 2) Select DTMF mode.
- 3) Select Contact ID communication format.
- 4) If communicator is connected to a real telephone landline, enter a telephone number - **1234** for dialing, (If it is not connected to landline, any number not shorter than 2-digits, can be used).
- 5) Enter a 4-digit account number in the panel.

1.7 Before you begin

Before you begin, make sure that you have needed system requirements:

- 1) USB cable (Mini-B type, not included) for communicator E10Tv2 onfiguration.
- 2) CAT-5 Ethernet cable (maximum 100m, not included).
- 3) At least 4 wires cable for connecting communicator to control panel.

1.8 System view



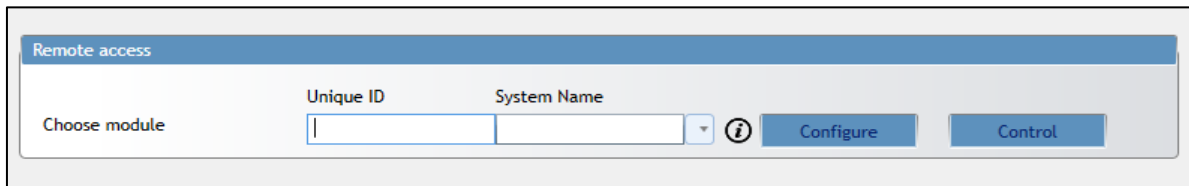
2 Connecting E10Tv2 to TrikdisConfig

Communicator can be configured using **TrikdisConfig** software via **USB cable** or **remotely**. The software is available on www.trikdis.com and operates in MS Windows OS.

IMPORTANT: To use **remote configuration** function, first communicator has to be configured via USB cable and Protegus service must be enabled.

- 1) Download and install **TrikdisConfig**.
- 2) Connect the communicator to the computer using USB cable or remotely.
 - a. **Using USB cable:** run the configuration software **TrikdisConfig**. The software will automatically recognise the connected device and will open a window for communicator configuration.

- b. **Remotely:** run the configuration software **TrikdisConfig**. In section **Remote access**, field **Unique ID** enter MAC address of communicator (MAC address is provided on the product package). (Optional) in the field **System Name** enter the desired name to the module. Press **Configure**.



- 3) Click **Read [F4]** to read the communicators parameters and enter the Administrator or Installer code in the

Note: When new firmware is released, TrikdisConfig will ask if firmware can be updated, click yes, and new window will open.

- In order to save the previously entered data, check **Preserve settings** box.
- Press **Update [F12]** and new firmware will be written to the communicator.

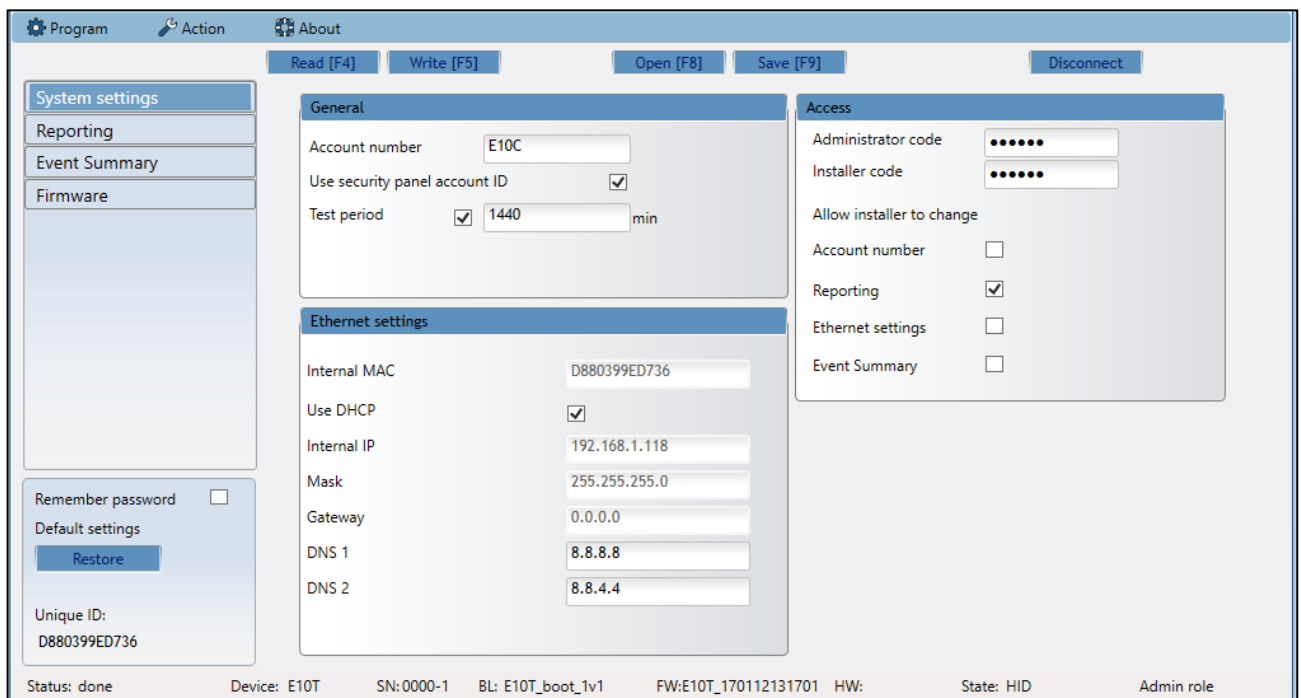
pop-up window. In order for the program to remember the code, check the box next to **Remember password**.

- 4) To open a configuration file, click **Open [F8]**.

Note: if administrator code is set as default (123456), it is not required to enter it and the request window will not appear.

3 Setting operation parameters

3.1 System settings



Settings → General:

- Write an appropriate **Account number** (4 symbols hexadecimal number).
- Select **Use security panel account ID** checkbox if messages from the security control panel must contain its identification number.
- **Test period:** periodic test messages will be sent according to a time interval set in this section

Settings → Ethernet settings

- **Internal MAC** is unique for each Ethernet communicator, and it is not changeable.

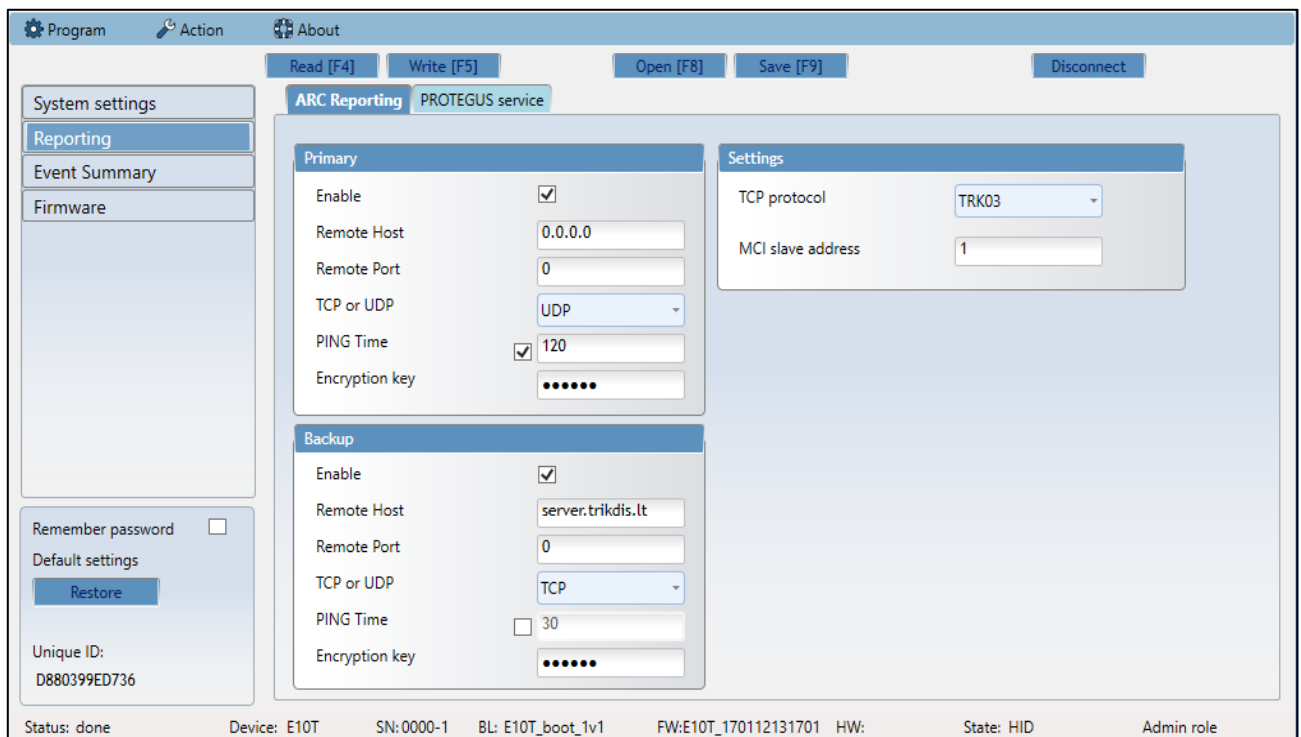
- When **Use DHCP** checkbox is selected, module registration in the network will be done automatically.
 - If automatic registration is unsuccessful, enter **Internal IP address**, subnet **Mask** and **Gateway** address manually. E10Tv2 supports DNS service;

Settings → Access

- Administrator code - allows full access to the configuration.
- Installer code - allows access to the configuration, limited by administrator. Administrator can allow installer to change:
 - Account number;
 - Reporting;
 - Ethernet settings;
 - Event summary.

Note: if administrator code is set as default (123456), it is not required to enter it and the request window will not appear.

3.2 Reporting → Alarm Receiving Centre (ARC) reporting



Reporting → Primary and backup

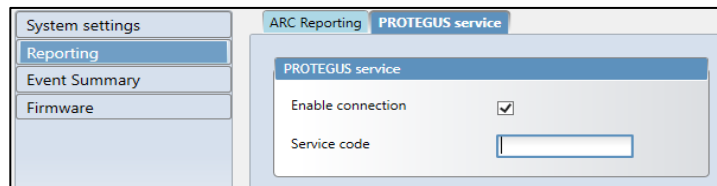
- To have connection with Primary and Backup channels mark checkboxes **Enable**.
- Fill in fields for **Remote Host**, **Remote Port**.
- Choose reporting protocol **TCP** or **UDP**.
- Enable **PING Time** and set time between signals in seconds (required for communication control).
- Enter **Encryption key** (six-symbol hexadecimal number).

Reporting → Settings

- Choose **TCP protocol** (an encryption protocol for messages to be sent to the monitoring station).
- Enter MCI slave address to communicate with connected event message generating device.

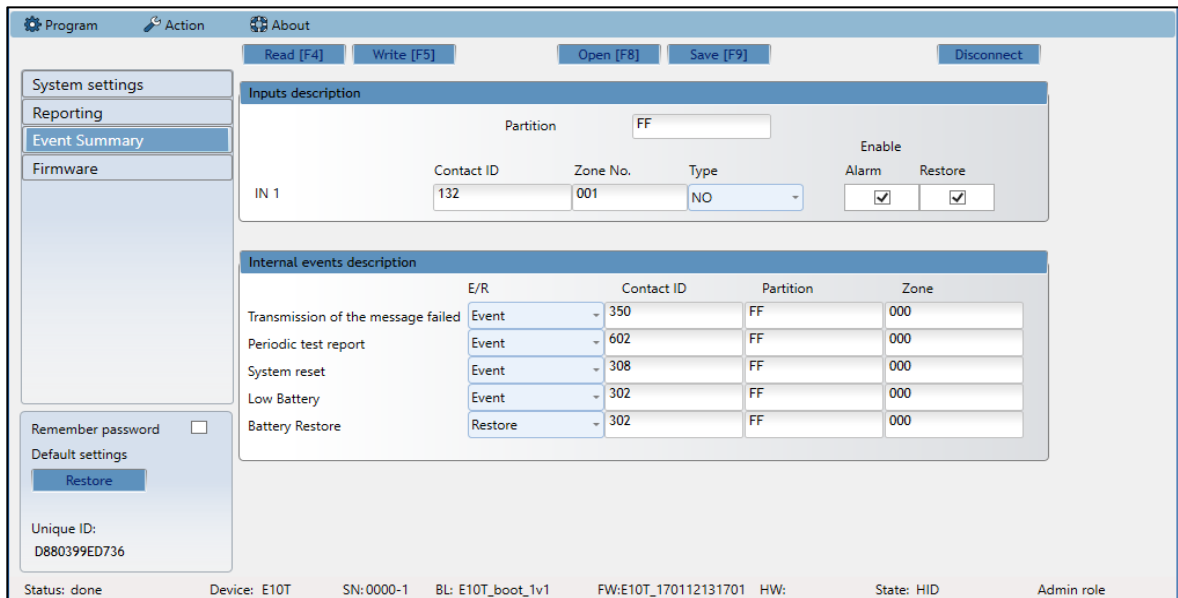
3.3 Reporting → Protegus service

Protegus service allows users to remotely monitor and control the communicator. Protegus service allows simultaneous transmission of data to the Protegus server for Mobile/Web application. For more information about PROTEGUS service visit <http://www.protegus.eu/>.



- Enable cloud service at **Reporting → PROTEGUS service** tab.
- Enter **Service code** (default code – 123456), for more safety change it to 6-symbol authentication code. This code is used, when adding new system to the application and controlling remotely via TrikidisConfig software (for more details refer to [5. TrikidisConfig remote control](#)).

3.4 Event Summary



Input description

- Describe input by filling in fields (these will be sent if Alarm/Restore occurs):
 - **Partition**;
 - **Contact ID** - can be customized or left default value;
 - **Zone No** - describe which zone will be controlled with IN 1;
- Select **Type** of input (NO, NC, EOL);
- Enable: report when event occurs (**Alarm**); report when input line will restore (**Restore**).

Internal events description

- To describe internal events select event type (Event or Restore), **Contact ID** code can be changed, enter **Partitions** and **Zone**.

3.5 After all parameters are set click Write [F5], to write parameters from TrikdisConfig program to communicator.

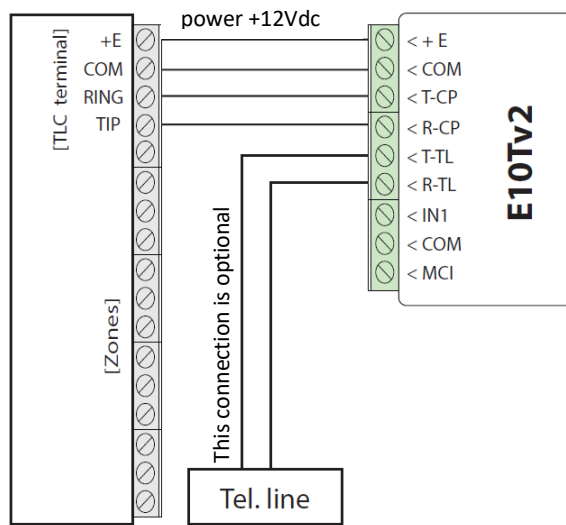
3.6 To create a configuration file which contains current parameters, click Save [F9].

3.7 Disconnect device:

- Click **Disconnect** to disconnect from access level (installer or admin) while communicator is connected via USB cable to a computer (role indication will be gone from status bar).
- If a configuration is done via USB cable, unplug the USB cable; click **Disconnect** to go back to the first window.

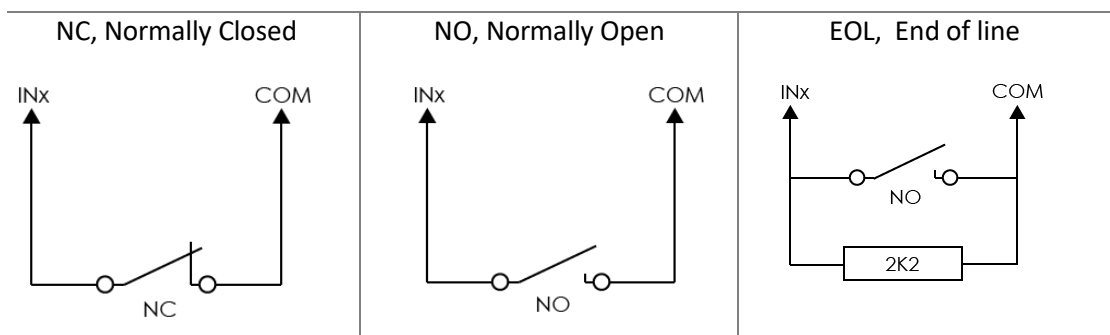
4 Installation process

4.1 Connect the communicator to the control panel using wiring diagram below

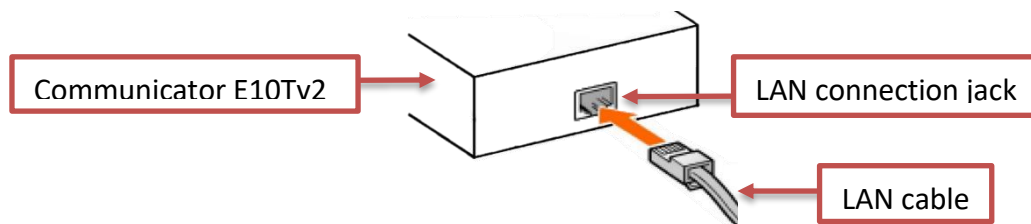


4.2 (Optional) connect sensors

The communicator contains one input terminal (IN1) for connection of sensors, it can be NC, NO or EOL.



4.3 Connect LAN cable



4.4 Turn on power supply

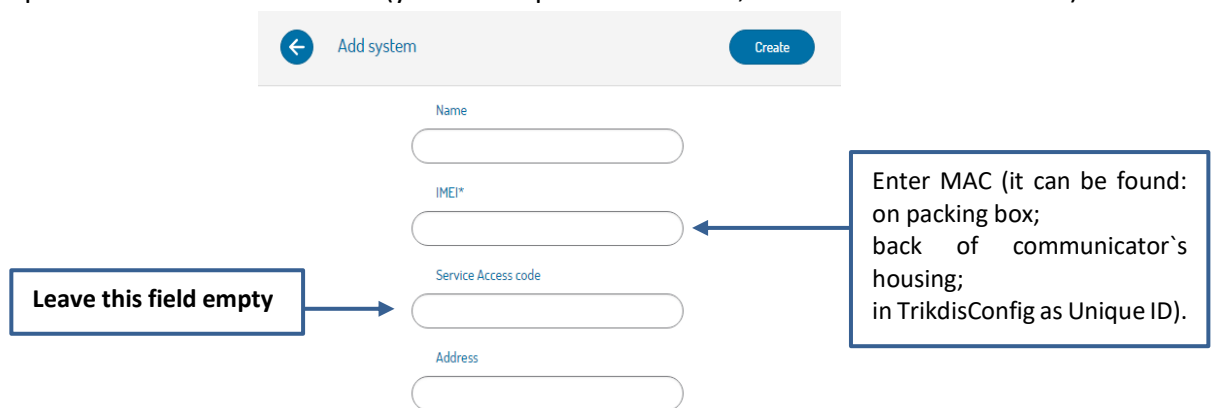
4.5 Perform system test

- 1) After configuration and installation is complete, perform a system test. Activate an event in the control panel, and make sure that the event arrives to the alarm receiving centre or is received by the mobile application.
- 2) To test communicator input, activate it and make sure that the correct messages arrives to recipients (app users).

5 Protegus WEB service

To receive notifications to Protegus application, register your communicator to Protegus web service:

- 1) Log in or sign in to <https://www.protegus.eu/login>.
- 2) Add the system to the Protegus: press **“Select system”**; next **“Add new system +”**, and enter the required data as shown below (you can skip fields **“Name”**, **“Address”** and fill it later).

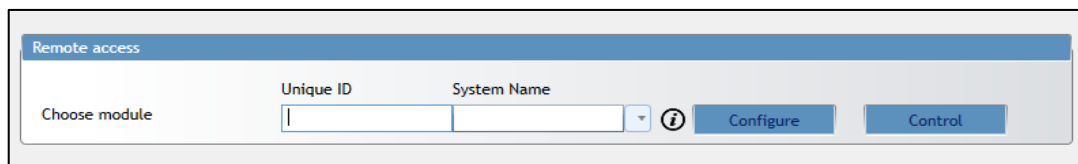


The screenshot shows a mobile application interface for adding a system. At the top, there is a back arrow, the text 'Add system', and a 'Create' button. Below are four input fields: 'Name', 'IMEI*', 'Service Access code', and 'Address'. Annotations include a box pointing to the 'Name' field with the text 'Leave this field empty', and another box pointing to the 'IMEI*' field with the text 'Enter MAC (it can be found: on packing box; back of communicator`s housing; in TrikdisConfig as Unique ID).'.

6 TrikdisConfig Remote control

Communicator E10Tv2 can be controlled remotely using TrikdisConfig software. To do so, follow steps below:

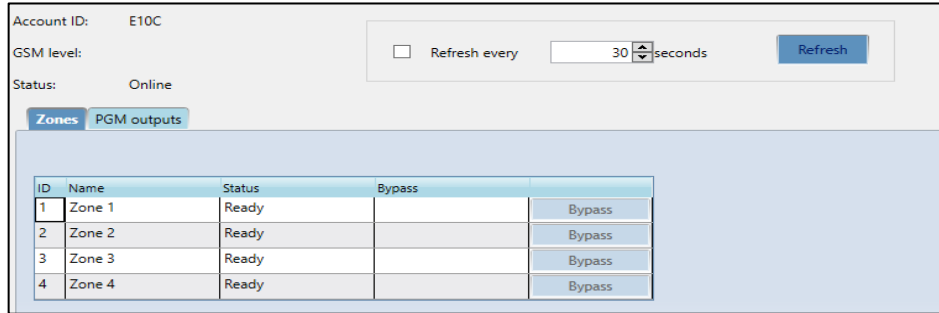
- 1) Open TrikdisConfig.
- 2) At the field **Remote access**, in the field **Unique ID** enter the MAC address. MAC address is provided on the product package.
- 3) (Optional) In the field **System Name** enter the desired name to the module.
- 4) Press **Control** button.



The screenshot shows a software window titled 'Remote access'. It contains a 'Choose module' dropdown menu, two input fields labeled 'Unique ID' and 'System Name', an information icon (i), and two buttons labeled 'Configure' and 'Control'.

- 5) Enter **Self-service code**: it is the same code as Protegus service code ([3.3 Reporting → Protegus service](#)).

6) In new window, **Zones tab**, zones can be controlled. Also, (in all tabs) refresh time can be selected.



7 Manual firmware update

The communicator firmware can be changed manually.

When writing firmware manually, it can be changed to a newer or older version. To update:

- 1) Run TrikdisConfig.
- 2) Connect the communicator via USB cable to the computer or connect to the communicator remotely.
 - If newer firmware version exists, the software will offer to download the newer firmware version file.

Note: If there is an installed antivirus software on your computer, it might block automatic firmware update option. In this case, you must reconfigure your antivirus software.

- 3) Select the menu branch **Firmware**.
- 4) Press **Open firmware** and select the required firmware file.
 - If you do not have the file, the newest firmware file can be downloaded by registered user from www.trikdis.com, under the download section of the E10Tv2 communicator.
- 5) To save communicators parameters, which were set earlier, check box **Preserve settings**.
- 6) Press **Update [F12]**.
- 7) Wait for the prompt about the completed update to appear.
- 8) Click **OK** in the prompted window.

Status bar

Once the communicator parameters are read, the status bar will display information about the device.



Status bar

Name	Description
Unique ID	MAC number of the device
Status	Action status
Device	Device type
SN	Serial number
BL	Bootloader version
FW	Firmware version
HW	Hardware version
State	Connection status
Admin	Access level (shows up after access code is confirmed)