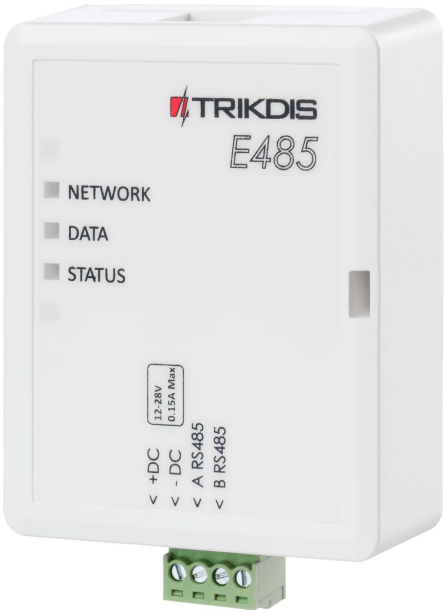


„Ethernet“ module *E485*

Installation manual

May, 2019

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Safety requirements

The module should be installed and maintained by qualified personnel.

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

Disconnect the power supply 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

The “Ethernet” module ***E485*** is compatible with the Cellular communicators ***G16*** and ***G16T*** (firmware from 1.32) and is designed to transmit data and control commands via the wired Internet network. By using the ***E485*** in conjunction with the ***G16*** or ***G16T***, messages are sent to the CMS (central monitoring station) via the wired internet network and in this case the mobile Internet is not used. When communication is interrupted on the wired internet network, messages are sent to the monitoring station via the mobile internet network. **Insert SIM card into the communicator *G16* (*G16T*) for *E485* to work.**

E485 transmits complete information about events to the monitoring station receiver.

Features

Connection

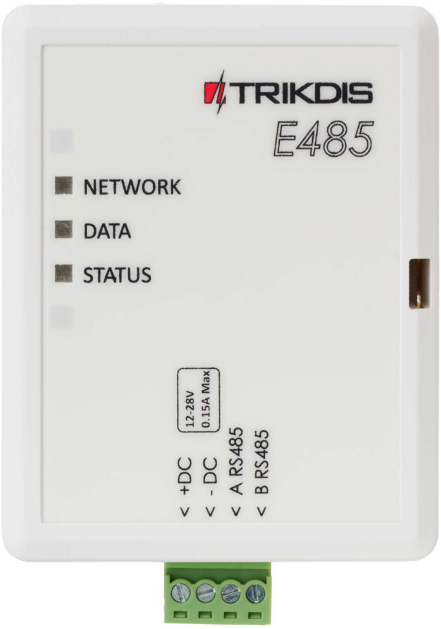
- Connection type: wired internet.

Settings and installation

- Quick and easy installation.

Communication

- Two primary connection channel and two secondary connection channel.
- Alternative sending of event logs to ***Protegus*** app, which allows the user to monitor the security system remotely.
- The module uses Contact ID codes to transmit event messages.

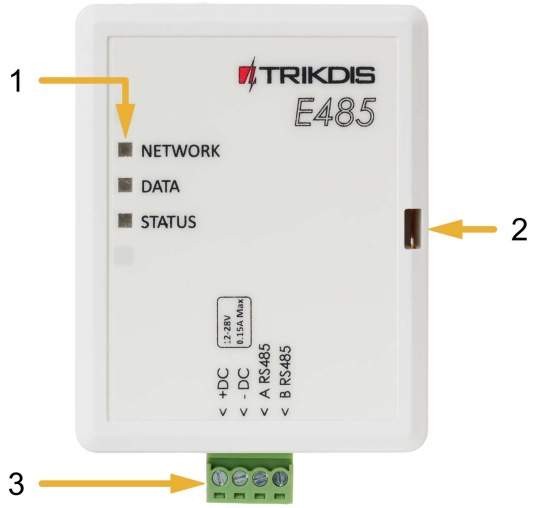


1.1 Specifications

Parameter	Description
Power supply voltage	9-28 V DC
Current consumption	50 mA (stand-by) Up to 150 mA (transmitting)
Compatible equipment	Cellular communicator ***G16*** and ***G16T*** (firmware 1.32); cellular gate controller ***GV17*** (firmware 1.06)
Connection to CMS	TCP/IP or UDP/IP via LAN
Event transmission protocol	TRK_TCP or TRK_UDP
Event sending	In Contact ID codes
Encryption key	6 simbol encryption key
Ethernet PHY	IEEE802.3, 10-100BaseTX, Full-duplex, RJ45 port
Network configuration type	DHCP or manual network configuration (from the main managed device G16 or G16T)

Parameter	Description
Operating environment	Temperature from –10 °C to +50 °C, relative air humidity – up to 80 % at +20 °C
Dimensions	88 x 62 x 26 mm
Weight	80 g

1.2 “Ethernet” module E485 elements



1. Indicator lights.
2. Frontal case opening slot.
3. Terminal for external connections.

1.3 Purpose of terminals

Terminal	Description
+DC	Power supply terminal (9-28 V DC positive terminal)
-DC	Power supply terminal (9-28 V DC negative terminal)
A RS485	Terminal A of *RS485* bus
B RS485	Terminal B of *RS485* bus

1.4 LED indication of operation

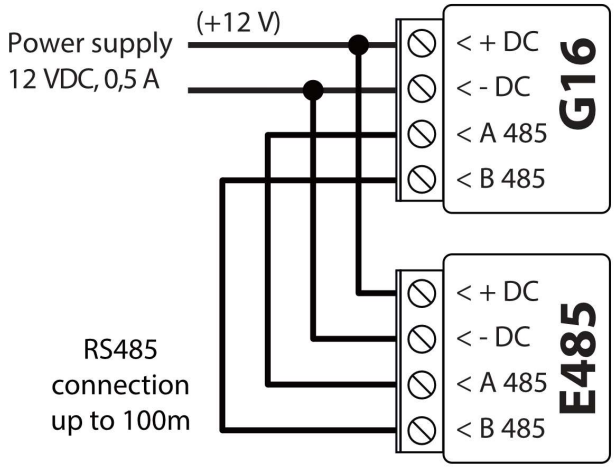
Indicator	Light status	Description
NETWORK	Green solid	LAN cable connected
	Yellow blinking	There is a communication with the communicator (G16 or G16T)
DATA	Green solid	Message is being sent
	Yellow solid	Unable to send message
Status	Green blinking	No operational problems
	1 red blink	LAN cable not connected
	2 red blinks	The problem with DHCP is not getting IP addresses from the router
	3 red blinks	The RS485 bus connection between the devices failed

Indicator	Light status	Description
	4 red blinks	No connection to the CMS
	5 red blinks	No connection to the CMS via the primary communication channel
	6 red blinks	No connection to the CMS via the parallel communication channel
	7 red blinks	No connection with Protegus Cloud

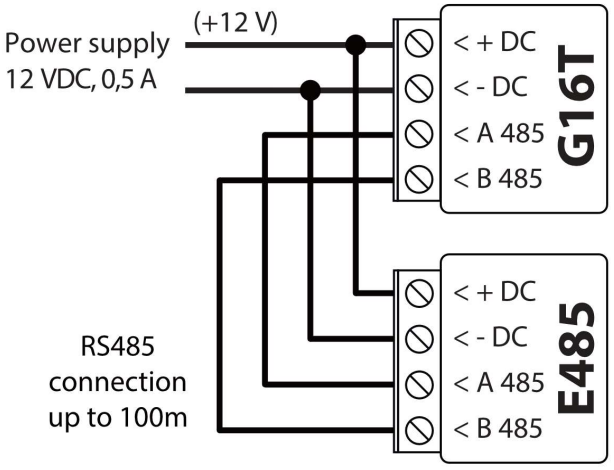
If none of the LED indicators are active, check the power supply and connections.

2 Schematic for connecting the „Ethernet“ module E485

Schematic for connection "Ethernet" module E485 with G16



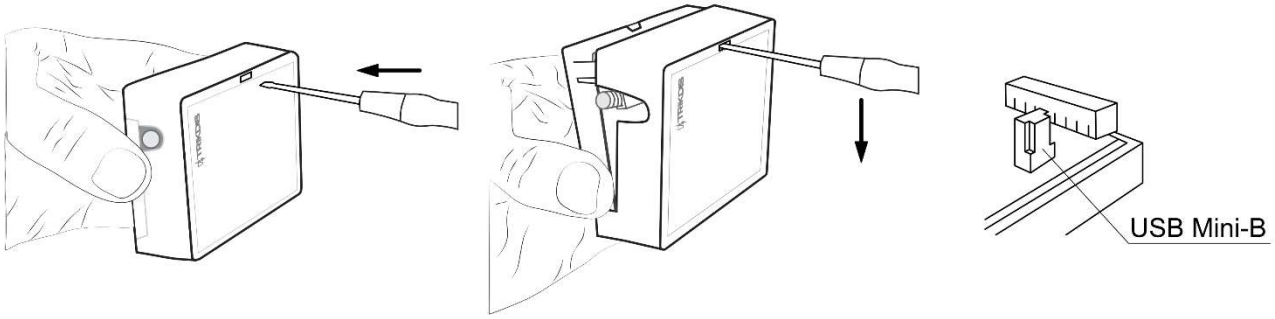
Schematic for connection "Ethernet" module E485 with G16T



Insert SIM card into the communicator *G16* (*G16T*) for *E485* to work.

3 Setting parameters

1. Download **TrikdisConfig** configuration software from www.trikdis.com (type “TrikdisConfig” in the search field) and install it.
2. Open the casing of the ***G16 (G16T)*** with a flat-head screwdriver as shown below:

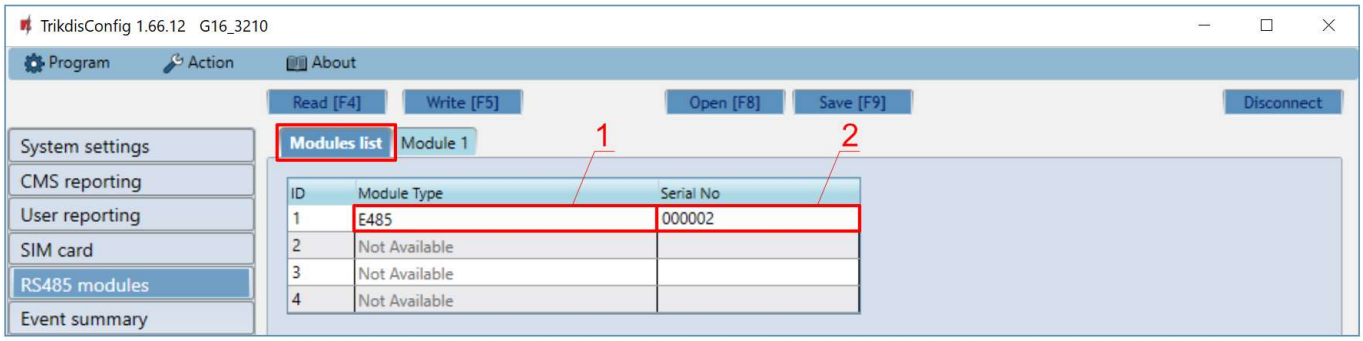


3. Using a USB Mini-B cable connect the ***G16 (G16T)*** to the computer.
4. Run ***TrikdisConfig***. The software will automatically recognize the connected communicator ***G16 (G16T)*** and will open a window for configuration.

5. Click **Read [F4]** to read the communicator's settings. If requested, enter the Administrator or Installer 6-digit code (default password - 123456) in the pop-up window.

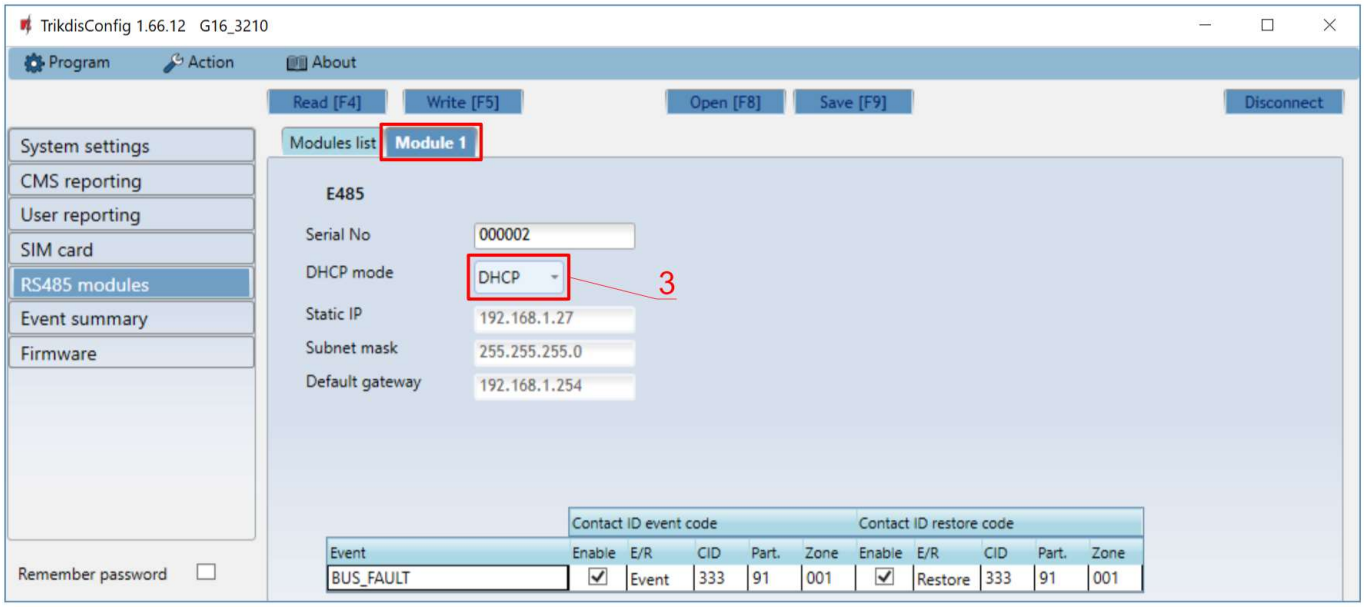
Below we describe what settings need to be set for the module to begin sending events to the CMS and to allow the security system to be controlled with the ***Protegus*** app.

In „RS485 modules“ window, „Modules list“ tab:



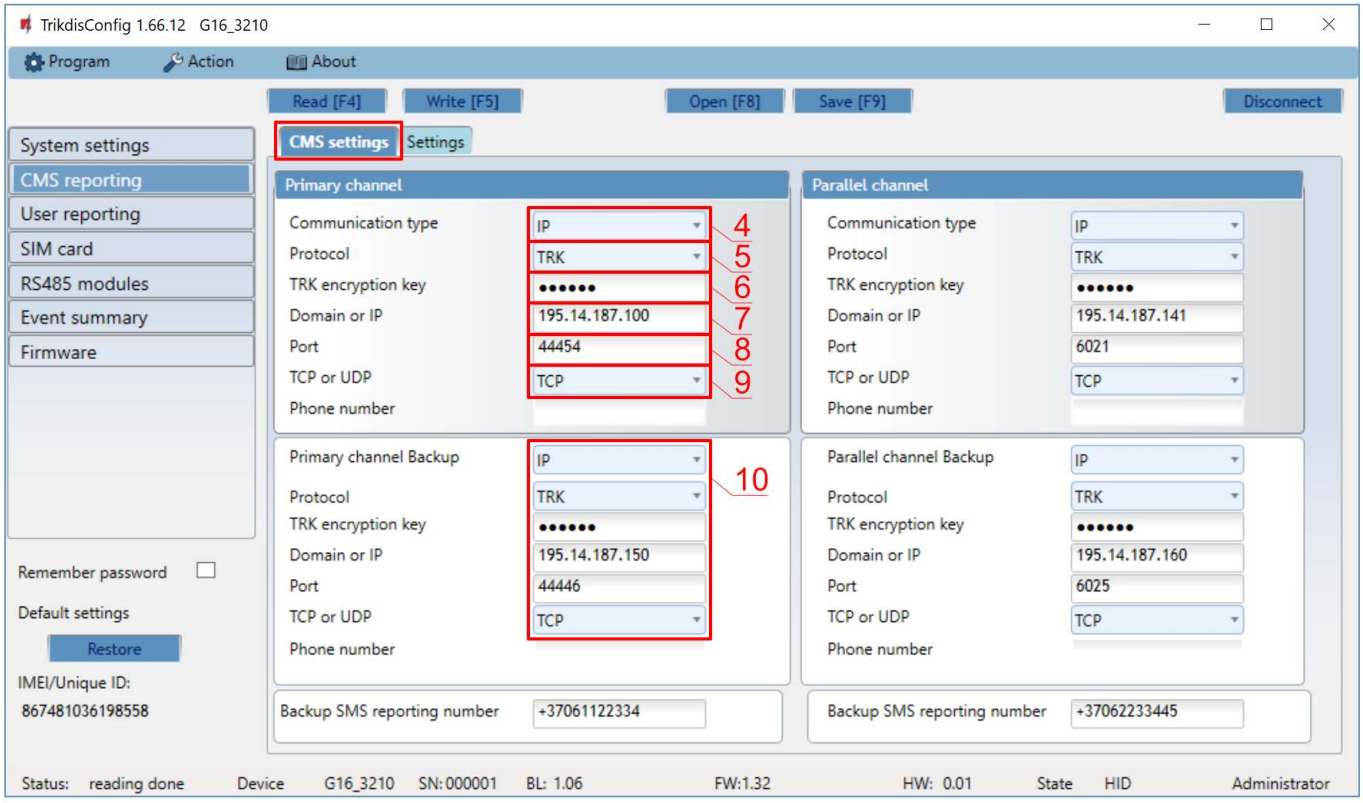
1. **Module type** – select the module (***E485***) that is connected to the communicator via RS485 from the list.
2. **Serial No** – enter the module (***E485***) serial number (6 digits), which is indicated on stickers on the module's case and packaging.

In „RS485 modules“ window, „Module 1“ tab:



3. Select **DHCP mode - DHCP**, and module ***E485*** automatically scan network settings. (**Gateway**, **Subnet mask, Static IP)**.

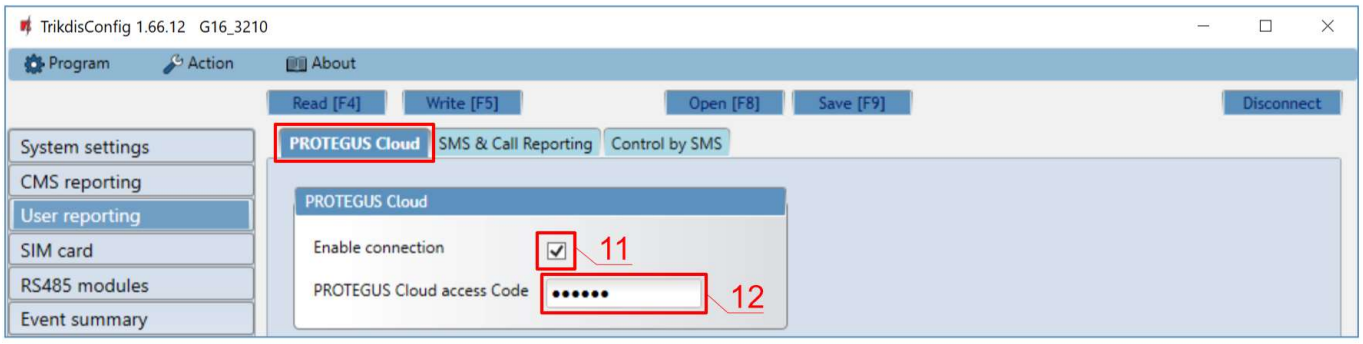
In „CMS reporting“ window, „CMS settings“ tab:



4. **Communication type** – select the IP communication type (Not recommended using SMS as the Primary channel).
5. **Protocol** – select in which coding the events should be sent: **TRK** (to TRIKDIS receivers), **DC-09_2007** or **DC-09_2012** (to universal receivers.
6. **TRK encryption key** – enter the encryption key that is set on the receiver.
7. **Domain or IP** – enter the domain or IP address of the receiver.
8. **Port** – enter the network port number of the receiver.
9. **TCP or UDP** – select in which protocol (TCP or UDP) the events should be sent.
10. (Recommended) Configure **Primary channel Backup** settings.

If needed, configure Parallel communication channel and Backup parallel communication channel.

In „User reporting“ window, „Protegus cloud“ tab:



11. Check the **Enable connection** to **Protegus Cloud** check box.
12. Change the connection to **Protegus Cloud access Code**. The user will be asked to enter the code when the communicator is added to the ***Protegus*** application (default code – 123456).

When the configuration is complete, press the **Write [F5]** button and disconnect the USB cable.