Wi-Fi module W485

Installation manual with cellular
communicators G16 and G16T

August, 2020

Contents

Safety precautions

The Wi-Fi module should be installed and maintained only by qualified personnel.

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

Always disconnect the power supply before making any electrical connections.

Any modifications, modernization or repairs not authorized by the manufacturer shall render the warranty void.

Please adhere to your local waste sorting regulations and do not dispose of this equipment or its components with household waste.

1 Description

The Wi-Fi module **W485** is compatible with the Cellular communicators **G16** and **G16T** (firmware 1.32) and is designed to transmit data and control commands via the Wi-Fi Internet network. **Insert SIM card into the communicator G16 (G16T) for W485 to work.**

It is recommended to change the **W485**'s **Access point** and **Login** passwords.
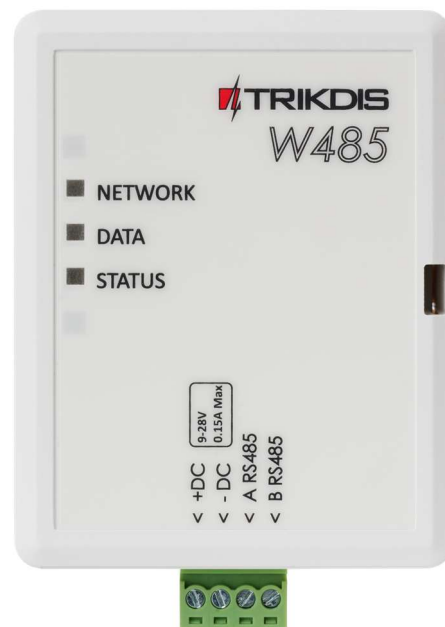
Features

Connection

- Connection type: Wi-Fi.

Settings and installation

- Quick and easy installation.
- Remote configuration using an internet browser.

Communication

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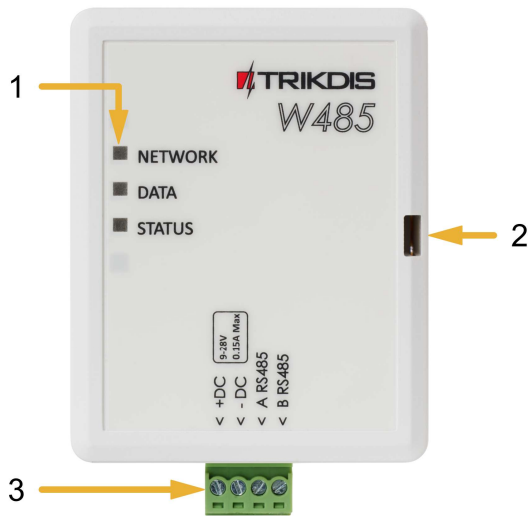- The module uses Contact ID codes to transmit event messages via Wi-Fi.

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** (**GATOR**) (firmware 1.06); cellular control panel **CG17**; RF transmitter **T16**; cellular communicator **G17F**
Connection to CMS	TCP/IP or UDP/IP via Wi-Fi
Event transmission protocol	TRK_TCP or TRK_UDP
Event sending	In Contact ID codes
Wi-Fi frequency	2,4 GHz
Wi-Fi protocol	802.11 b/g/n
Security mode	WPA, WPA2, WPA mixed
Network configuration type	DHCP or manual network configuration (using phone or laptop)
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

Parameter	Description
Weight	80 g

1.2 Wi-Fi module W485 elements

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

1.3 Purpose of terminals

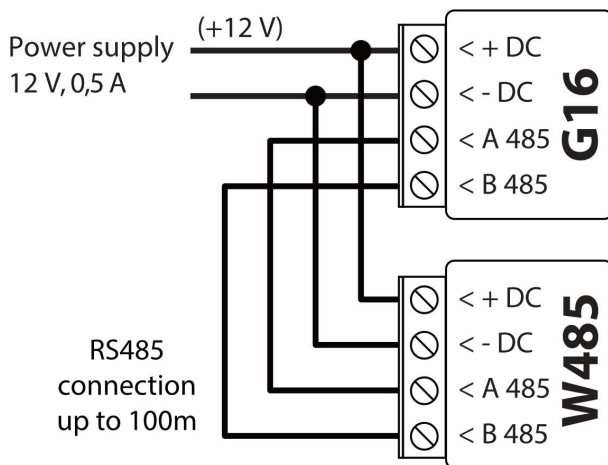| Terminal	Description
+DC	Power supply terminal (9-28 V DC positive terminal)
-DC	Power supply terminal (9-28 V DC negative terminal)
A RS485	Terminal A of *RS485* bus
B RS485	Terminal B of *RS485* bus

1.4 LED indication of operation

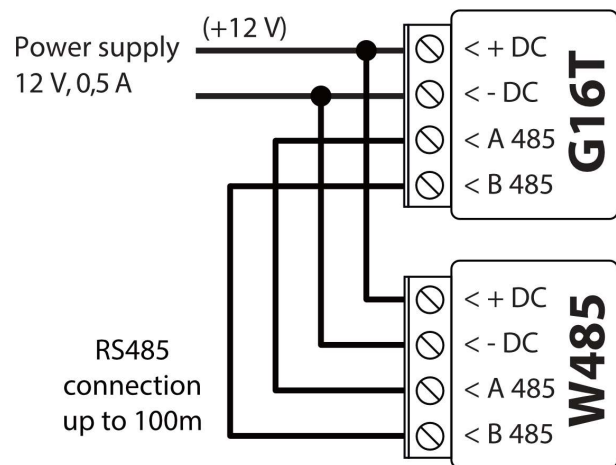| Indicator	Light status	Description
NETWORK	Green solid	Connected to Wi-Fi network
	Yellow blinking	Shows signal strength from 0 to 10
DATA	Green solid	Message is being sent
	Yellow solid	Unable to send message
STATUS	Green solid	No operational problems
	1 blink	Unable to connect to Wi-Fi network
	2 blinks	Poor Wi-Fi signal strength
	3 blinks	Not connected via at least one of the channels

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

2 Schematics for connecting the Wi-Fi module W485
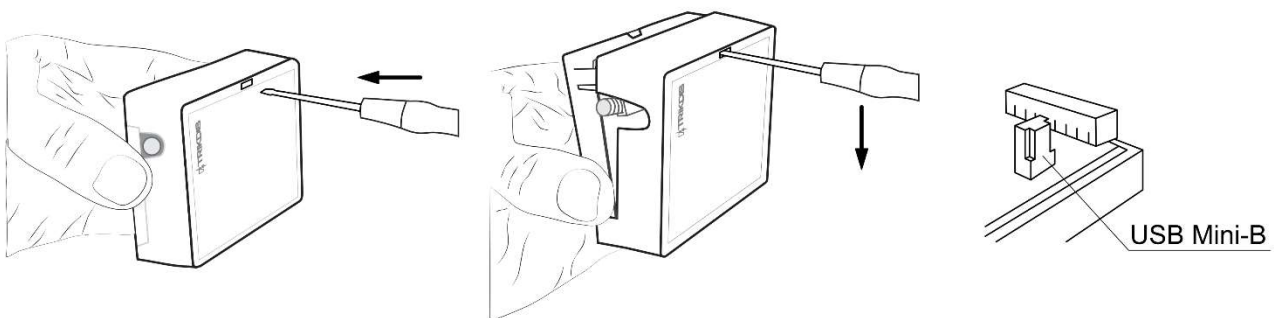
**Wi-Fi module W485
connection scheme with G16**

**Wi-Fi module W485
connection scheme with G16T**

Insert SIM card into the communicator _G16_ (_G16T_) for _W485_ to work.
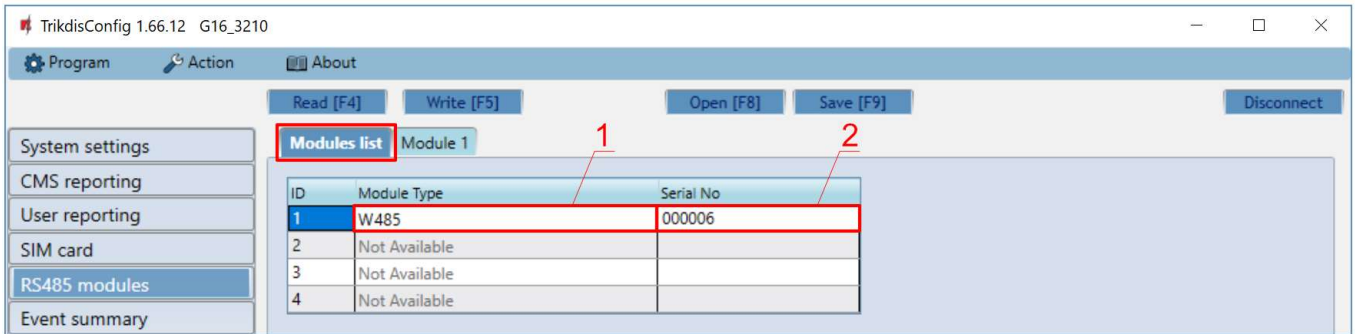
3 Setting parameters

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:

USB Mini-B

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.
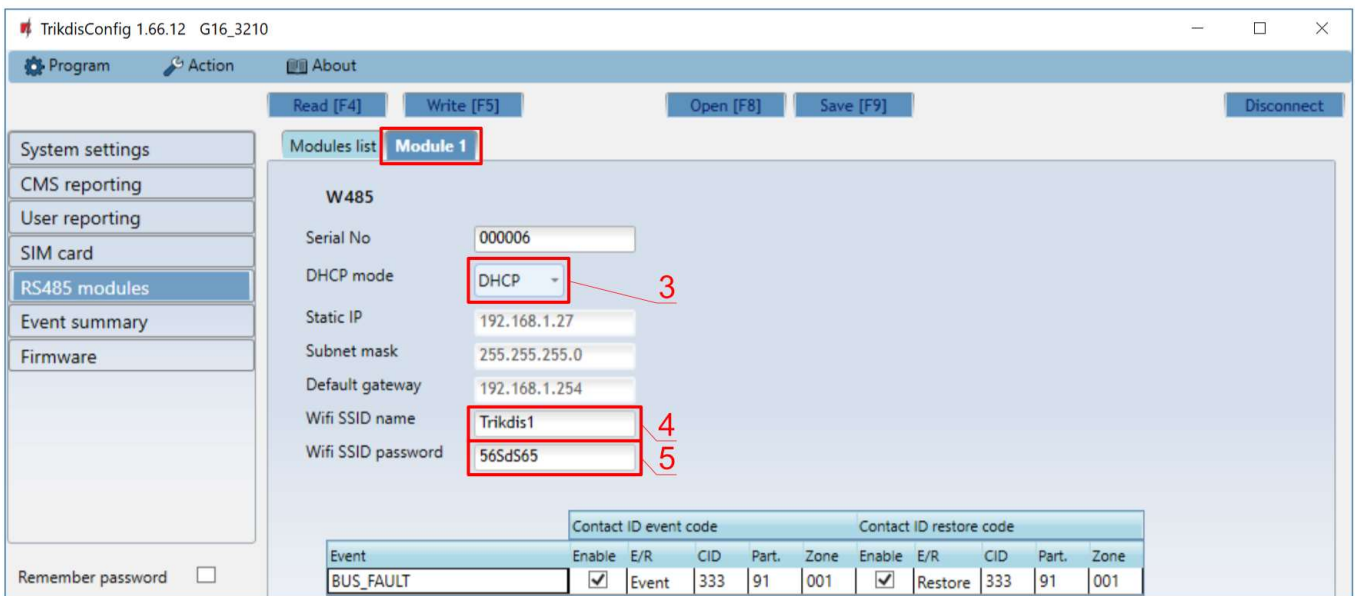
Below we describe what settings need to be set for the _W485_ module, which is connected to the _G16_ or _G16T_ communicator, to begin sending events to the CMS and to allow the security system to be controlled with the _Protegus_ app.
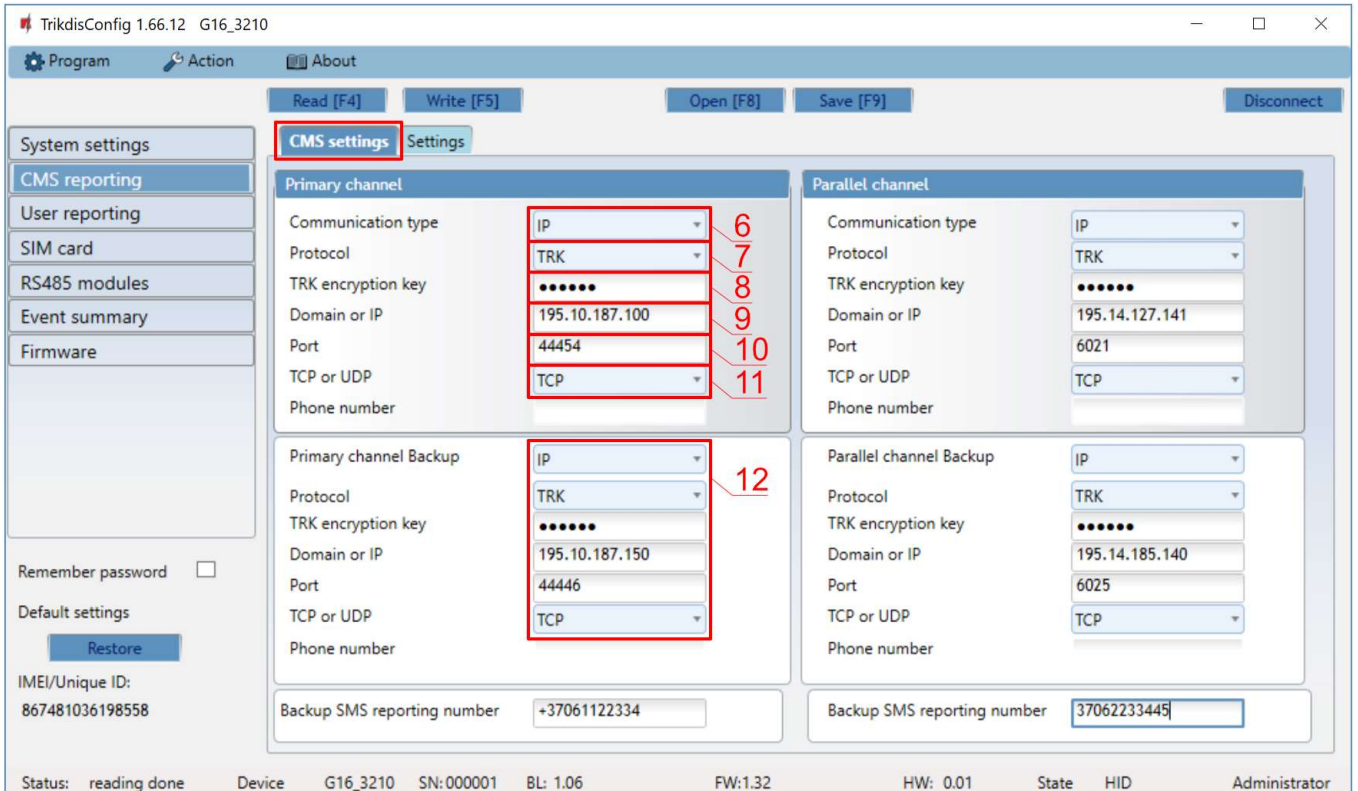
In „RS485 modules" window, „Modules list" tab:

1. **Module type** – select the module (**W485**) that is connected to the communicator via RS485 from the list.
2. **Serial No** – enter the module (**W485**) 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 Wi-Fi module **W485** automatically scan network settings. (**Gateway, Subnet mask, Static IP)**.
4. **Wifi SSID name** - enter the Wi-Fi network name.
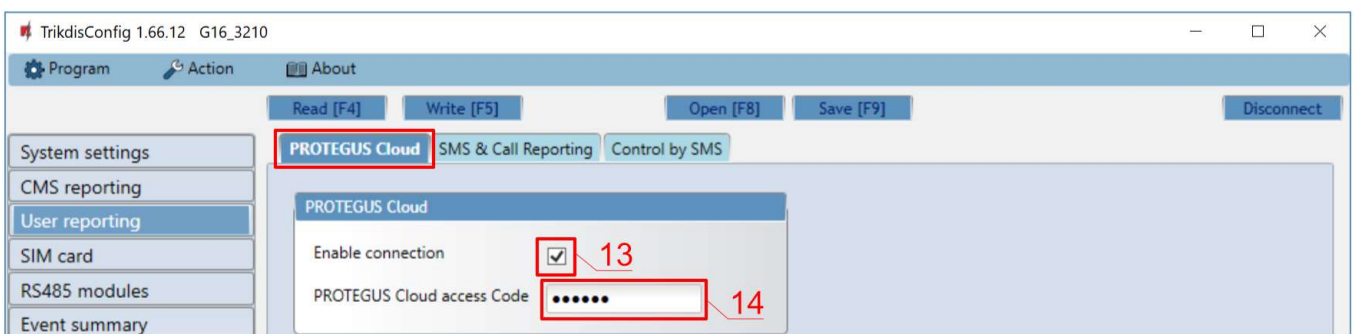5. **Wifi SSID password** - enter the Wi-Fi network password.

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

6. **Communication type** – select the IP communication type (Not recommended using SMS as the Primary channel).

7. **Protocol** – select in which coding the events should be sent: **TRK** (to TRIKDIS receivers), **DC-09_2007** or **DC-09_2012** (to universal receivers.

8. **TRK encryption key** – enter the encryption key that is set on the receiver.

9. **Domain or IP** – enter the domain or IP address of the receiver.

10. **Port** – enter the network port number of the receiver.

11. **TCP or UDP** – select in which protocol (TCP or UDP) the events should be sent.

12. (Recommended) Configure **Primary channel Backup** settings.

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

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

13. Check the **Enable connection** to **Protegus Cloud** check box.

14. 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.