Wi-Fi module W485

Installation manual with T16 transmitter and SP231 security control panel

May, 2019

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

<u>This installation manual describes how to connect and configure the *W485* to operate with the *T16* transmitter and *SP231* security control panel.</u>

The Wi-Fi module ***W485*** is compatible with the Trikdis radio transmitter ***T16*** and control panel ***SP231***. The ***W485*** sends messages wirelessly via Wi-Fi internet router to the CMS (central monitoring station). It is not possible to control the ***T16*** transmitter or ***SP231*** control panel using the ***W485***.

The ***W485*** Wi-Fi module can also be connected along with ***G16*** and ***G16T*** communicators. Configuration is described in the ***G16*** and ***G16T*** communicators' manuals.

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

Features

Connection

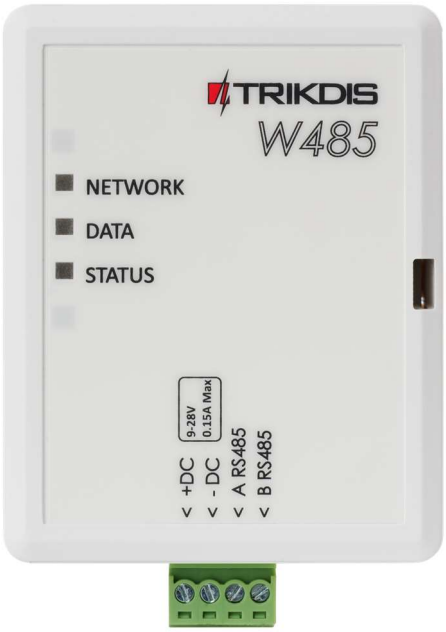
- Connection type: Wi-Fi.

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 Wi-Fi module ***W485*** uses Contact ID codes to transmit event messages via Wi-Fi.

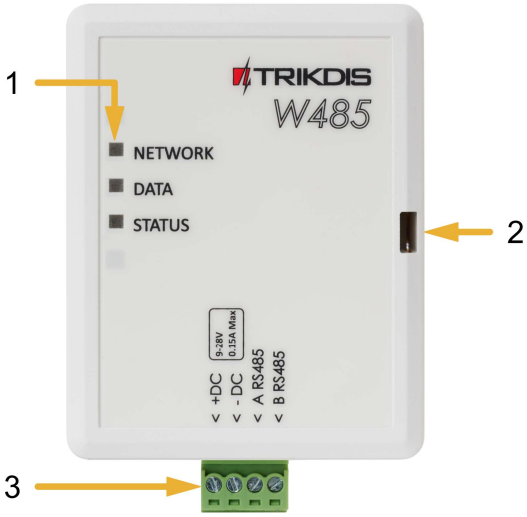


1.1 Specifications

Parameter	Description
Power supply voltage	9-28 V DC
Current consumption	50 mA (stand-by) Up to 150 mA (transmitting)
Compatible equipment	Trikdis radio transmitter ***T16***; Trikdis control panel ***SP231***; cellular communicator ***G16*** and ***G16T*** (firmware 1.32); cellular gate controller ***GV17*** (firmware 1.06)
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
Encryption key	6 symbol encryption key
Wi-Fi frequency	2,4 GHz
Wi-Fi protocol	802.11 b/g/n

Parameter	Description
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
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

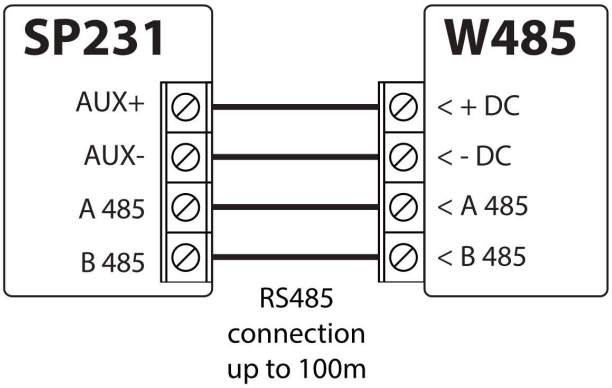
Indicator	Light status	Description
NETWORK	Green solid	Connected to Wi-Fi network
	Yellow blinking	Shows signal strength from 0 to 10
DATA	Green solid	Message is being sent
	Yellow solid	Unable to send message
STATUS	Green solid	No operational problems
	1 blink	Unable to connect to Wi-Fi network
	2 blinks	Poor Wi-Fi signal strength

Indicator	Light status	Description
	3 blinks	Not connected via at least one of the channels

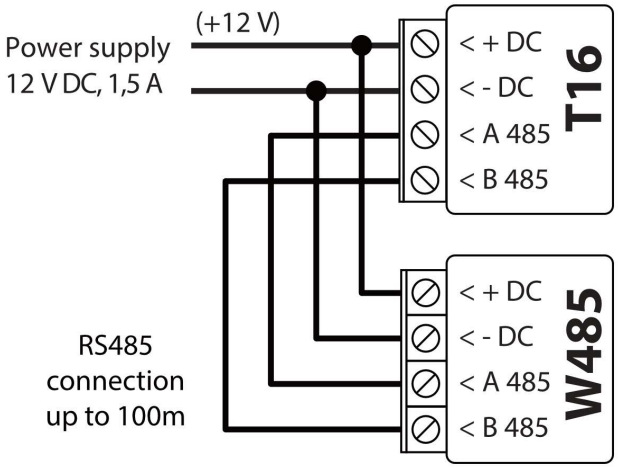
If none of the LED indicators are active, check the power supply and connections.

2 Schematics for connecting the Wi-Fi module W485

Wi-Fi module W485 connection scheme with SP231

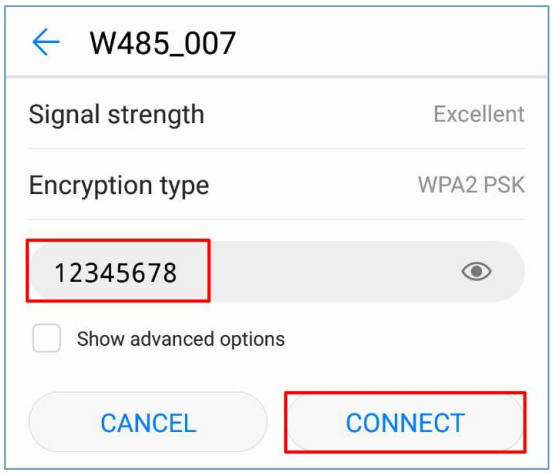


Wi-Fi module W485 connection scheme with T16

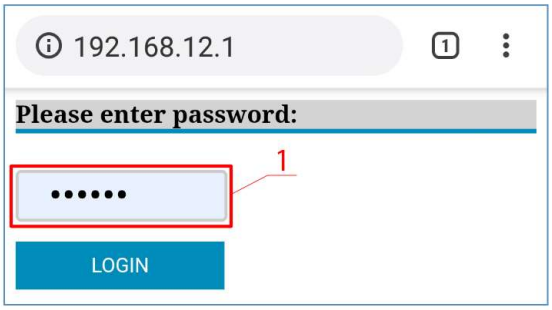


3 Setting parameters

Connect the ***W485*** module to a Wi-Fi network. To do this, use a phone or a laptop. Open the Wi-Fi access to the internet window. Choose the network ***W485_xxx***. In order to connect to the ***W485_xxx*** network, you need to enter the password (default password - 12345678) and click **CONNECT**.

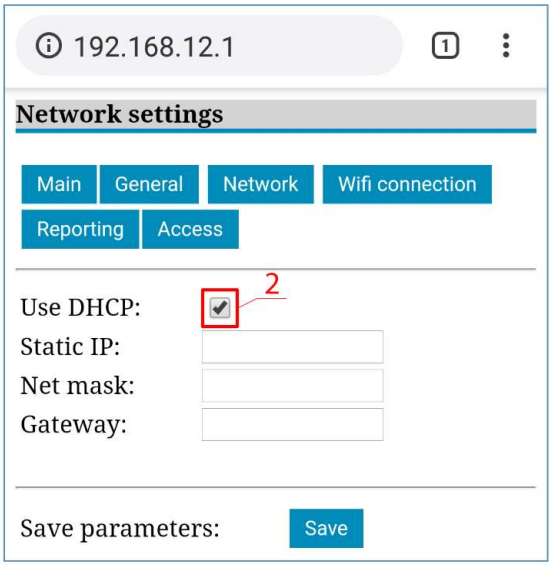


1. Open a browser and enter the IP address 192.168.12.1. In the window that opens, enter the password (default password – 123456). Click **LOGIN**.



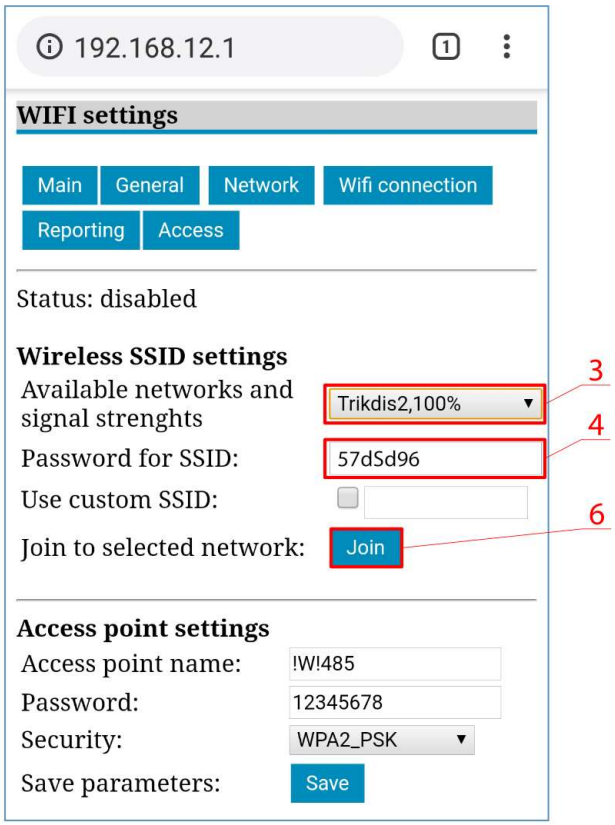
2. If the box **Use DHCP** is ticked in the **Network settings** window, the Wi-Fi module will automatically read the network parameters (**Gateway**, **Net mask**, **Static IP)** and the module will be assigned an IP address.

Set the necessary settings and click **Save**.



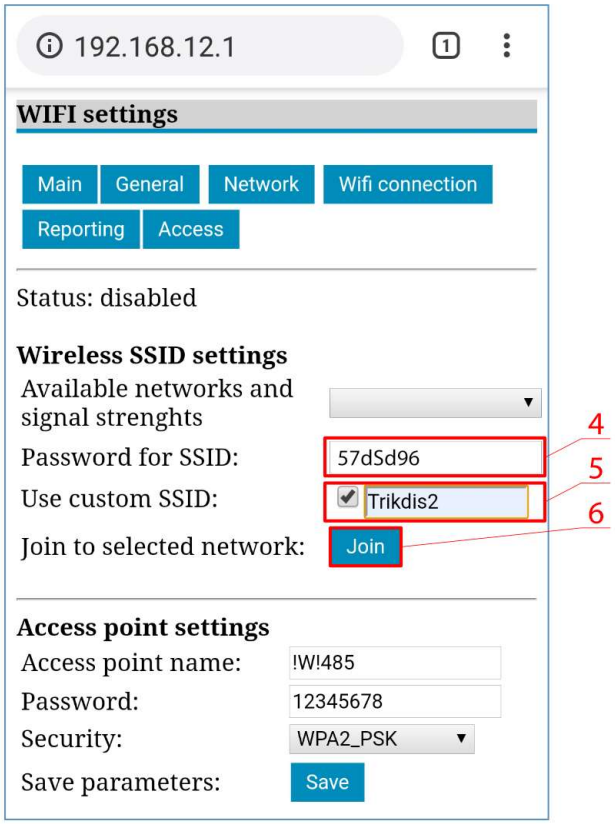
3. Choose a Wi-Fi network in the **WIFI settings** window.
4. Enter the Wi-Fi network password.

6.Click the **Join** button.

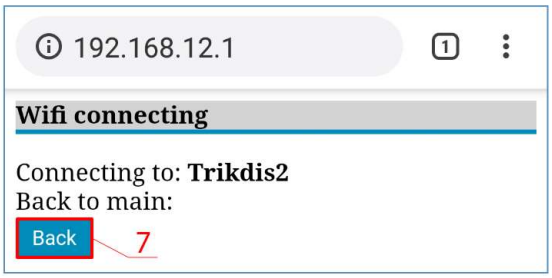


If the network is not on the **Available network and signal strengths** list or if it is hidden, you must:

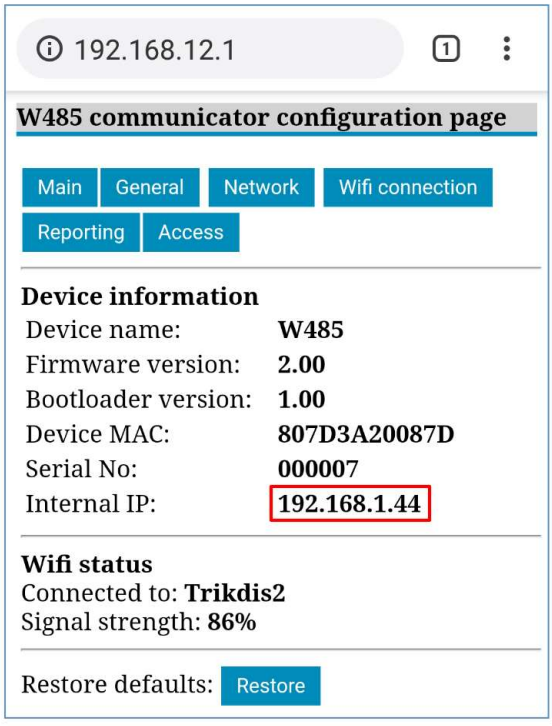
4. Enter the Wi-Fi network password.
5. Enter the network name in the **Use custom SSID** field and tick the box.
6. Click the **Join** button.



7. A window will open. You must wait for the module to connect and then click **Back**.



The connection will be configured and the Wi-Fi module will be assigned an IP address.



„General settings“ window

Account ID – enter device number.

Account ID from master – if the box is ticked, messages will be sent with the number of the main device (the one that the Wi-Fi module is connected to).

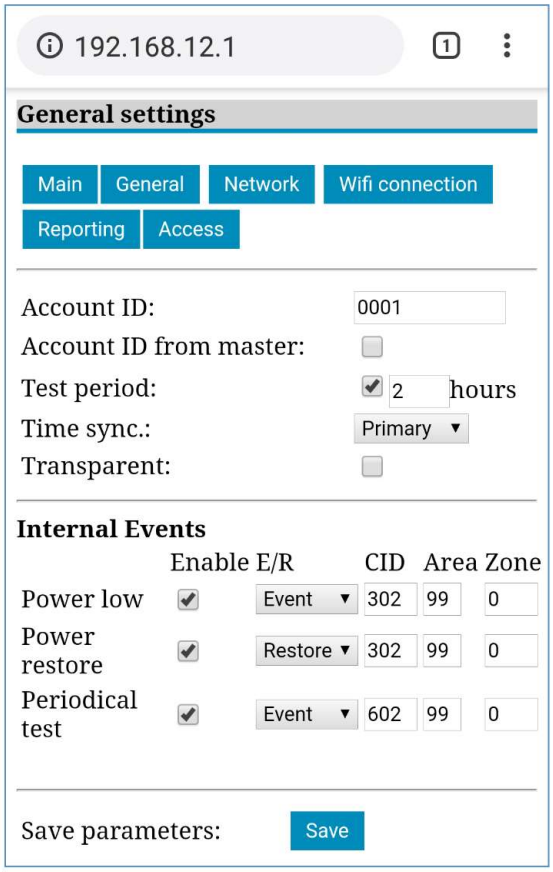
Test period – period for sending TEST connectivity check messages.

Time sync. – choose which server (receiver's or Protegus) to use for time synchronization.

Transparent - remove the check box to make the module ***W485*** work with ***T16*** and ***SP231.***

Internal events – settings for sending internal events.

Set the necessary settings and click **Save**.



"Reporting" window

General settings:

Backup reporting after – specify the number of unsuccessful attempts to send a message using the primary channel before switching to the backup channel.

Return to primary after – specify the time period after which the device will attempt to regain connection via the primary channel.

Primary channel:

Mode – specify the protocol (TCP or UDP) for sending messages.

Host – enter the receiver's IP address.

Port – enter the receiver's network port number.

Encryption key – enter the encryption key.

Ping interval – enter the time period in between PING signals.

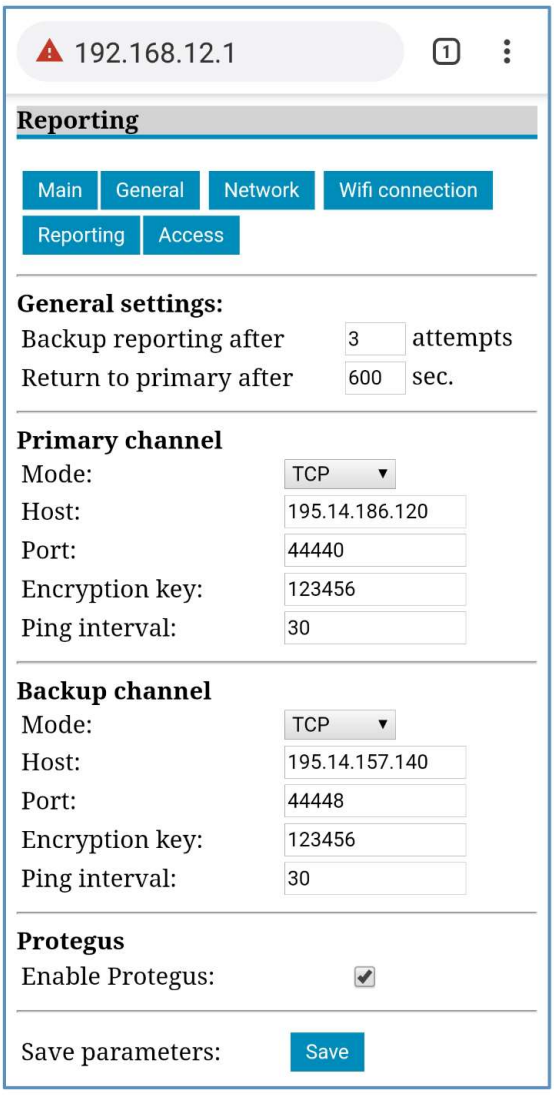
Backup channel:

Set the parameters for the backup channel. This will ensure that if connectivity via the primary channel is lost, events will be sent via the backup channel. Configure the backup channel using the setting field descriptions above.

Protegus:

Enable Protegus: - enable ***Protegus*** service the, ***W485*** will send notifications to ***Protegus*** app.

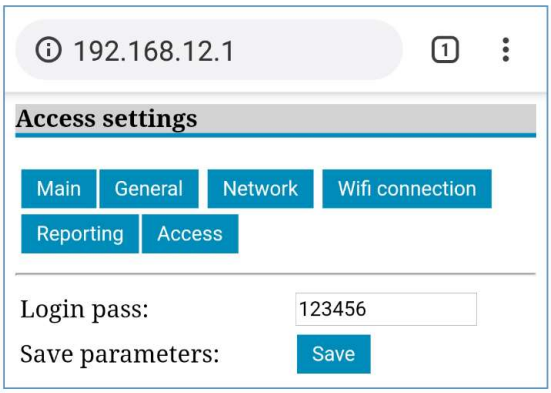
Set the necessary settings and click **Save**.



"Access settings" window

Login pass – set the password for connecting with the Wi-Fi module.

Set the necessary settings and click **Save**.



4 Adding the Wi-Fi module W485 to Protegus app

Adding the Wi-Fi module ***W485***, which is connected to the radio transmitter ***T16***, to Protegus. With Protegus the user will see the status of the system and receive event notifications.

1. Download and launch the ***Protegus*** application or use the browser version: www.protegus.eu/login

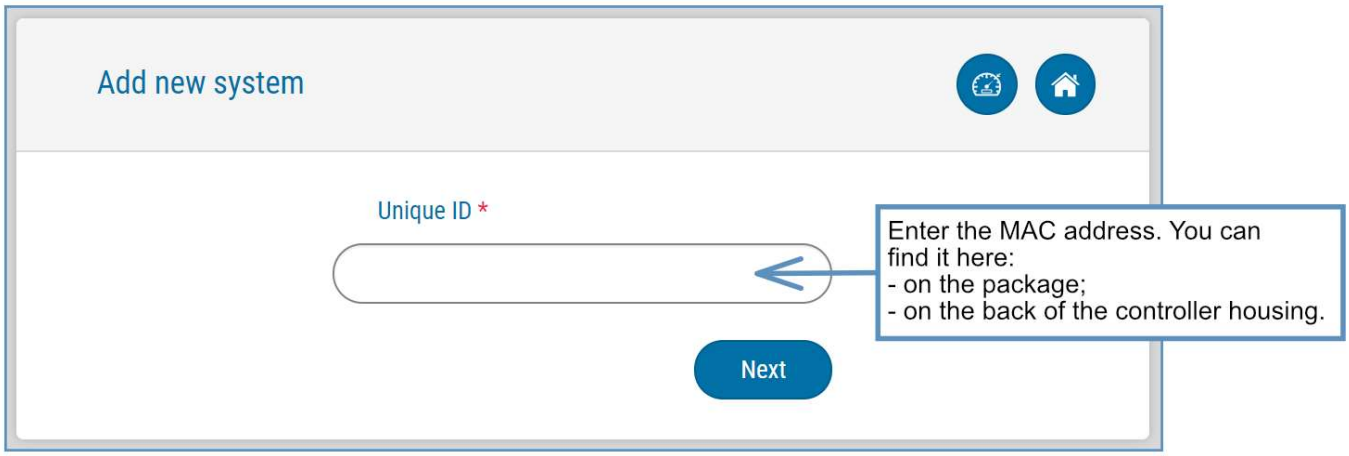
GET IT ON Google Play | Get it on iTunes | protegus web

2. Log in with your user name and password or register and create new account.

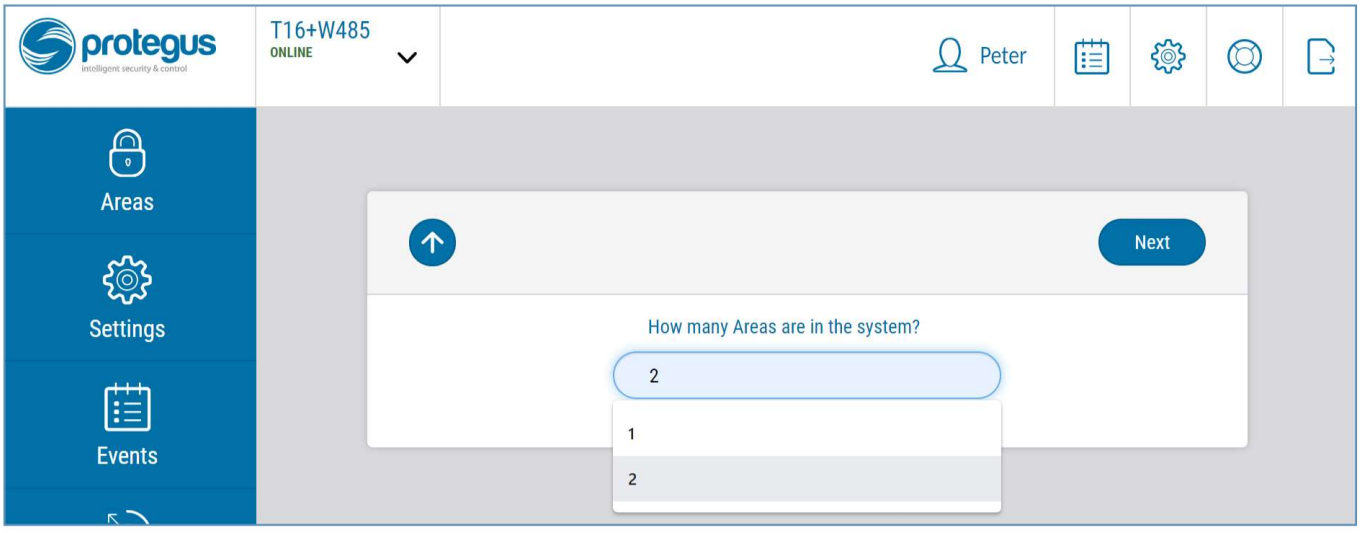
Important: When adding the ***W485*** to ***Protegus*** check if:

1. ***Protegus cloud*** is enabled;
2. Power supply is connected ("POWER" LED illuminates green);
3. Registered to the Wi-Fi network ("NETWORK" LED illuminates green and blinks yellow).

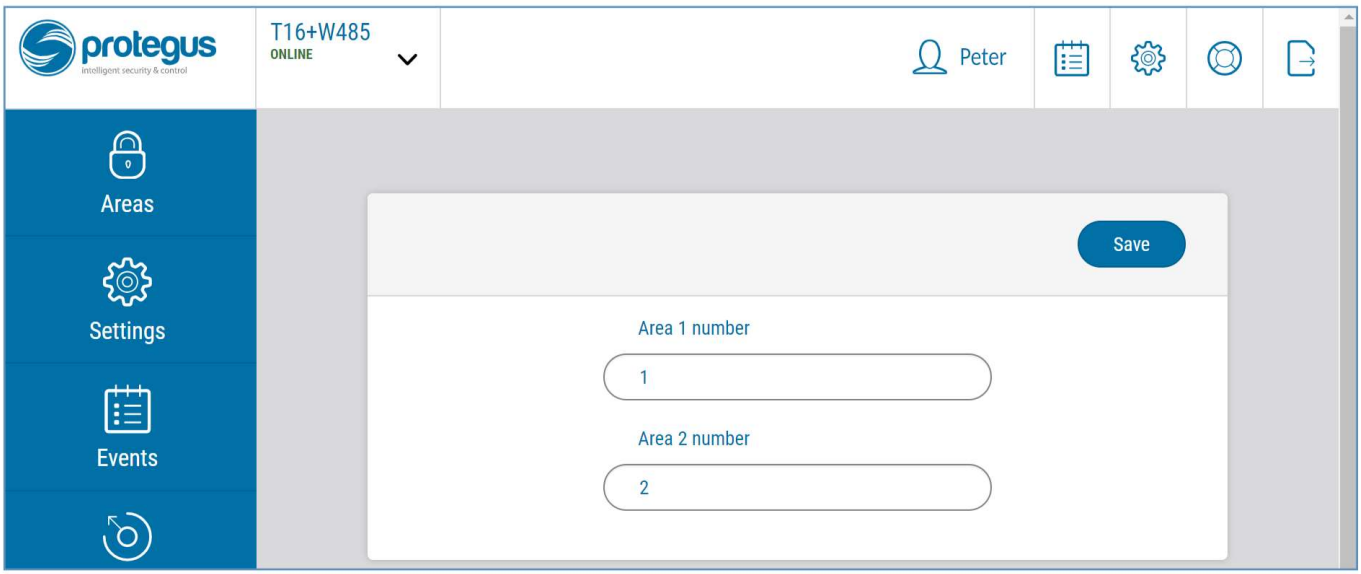
3. Click **Add new system** and enter the ***W485***'s "*MAC*" address. This address can be found on the device and the packaging sticker. Click **Next**.



4. In the new window, click **Areas** in the side menu. In the next window, specify how many alarm system areas.



5. In the new window, identify what is the number for each of the specified areas in the security system and press **Save.**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intelligent security & control
T16+W485
ONLINE
Peter
Areas
Settings
Events
Save
Area 1 number
1
Area 2 number
2