



Wi-Fi module W485 Installation manual with cellular communicators G16 and G16T

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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 <i>RS485</i> bus
B RS485	Terminal B of <i>RS485</i> bus

1.4 LED indication of operation

Indicator	Light status	Description			
NETWORK	WORK 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			
	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



Insert SIM card into the communicator G16 (G16T) for W485 to work.

3 Setting parameters

- 1. Download **TrikdisConfig** configuration software from <u>www.trikdis.com</u> (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 **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:

TrikdisConfig 1.66.12 G16_3210 - - ×									
🏠 Program 🌮 Action	🛄 Abou	Jt							
	Read [F	[4] Write [F5]		Open [F8] Save	[F9]		Discon	nect	
System settings	Module	es list Module 1		2					
CMS reporting	ID	Module Type	/	Serial No	1				
User reporting	1	W485	d.	000006					
SIM card	2	Not Available							
RS485 modules	3	Not Available							
Event summary	4	Not Available							

- 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:

📫 TrikdisConfig 1.66.12 G16_3210	0											_		×
🏠 Program 🎤 Action	🗐 About													
	Read [F4] Write [F5	5]		Open [f	-8]	Save	[F9]						Disc	onnect
System settings	Modules list Module 1													
CMS reporting	W485													
User reporting	Serial No.	00006	_											
SIM card	Senarivo U	00000												
RS485 modules	DHCP mode D	HCP -	3											
Event summary	Static IP 1	92.168.1.27												
Firmware	Subnet mask 2	55.255.255.0												
	Default gateway 1	92.168.1.254												
	Wifi SSID name Ti	rikdis1	4											
	Wifi SSID password 5	6SdS65	5											
		Contac	t ID event	code			Contact	ID restore	code					
Remember password	Event	Enable	E/R	CID	Part.	Zone	Enable	E/R	CID	Part.	Zone			
	BUS_FAULI	~	Event	555	ai	001	•	Restore	555	ai	001			

- 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:

# TrikdisConfig 1.66.12 G16_321	0				-		×
🔅 Program 🛛 🎤 Action	🕅 About						
	Read [F4] Write [F5]		Open [F8]	Save [F9]		Disco	nnect
System settings	CMS settings Settings						
CMS reporting	Primary channel			Parallel channel			
User reporting	Communication type	IP	- 6	Communication type	IP	*	
SIM card	Protocol	TRK	7 7	Protocol	TRK		
RS485 modules	TRK encryption key		8	TRK encryption key		_	
Event summary	Domain or IP	195.10.187.100	9	Domain or IP	195.14.127.141		
Firmware	Port	44454	10	Port	6021		
	TCP or UDP	TCP	11	TCP or UDP	TCP	*	
	Phone number			Phone number			
	Primary channel Backup	IP	- 40	Parallel channel Backup	IP	Y	
	Protocol	TRK	- <u>12</u>	Protocol	TRK	*	
	TRK encryption key			TRK encryption key			
Person has a second and	Domain or IP	195.10.187.150		Domain or IP	195.14.185.140		
Kemember password	Port	44446		Port	6025		
Default settings	TCP or UDP	ТСР	Ŧ	TCP or UDP	TCP	*	
Restore	Phone number		_	Phone number			
IMEI/Unique ID:]				4
867481036198558	Backup SMS reporting number	+37061122334		Backup SMS reporting number	37062233445		
Status: reading done De	vice G16_3210 SN: 000001	BL: 1.06	FW:1.32	HW: 0.01 Sta	te HID	Admini	strator

- 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:

📫 TrikdisConfig 1	1.66.12 G16_321	10 —		×
Program	& Action	Mana About		
		Read [F4] Write [F5] Open [F8] Save [F9]	Disco	nnect
System setting	IS	PROTEGUS Cloud SMS & Call Reporting Control by SMS		
CMS reporting				
User reporting		PROTEGUS Cloud		
SIM card		Enable connection I3		
RS485 module	s	PROTEGUS Cloud access Code		
Event summary	у			

- 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.