



Communicator FIRECOM for fire alarm control panel Installation manual

April, 2025



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Safety precautions

The communicator 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.

Communicator FIRECOM for fire alarm control panels



1. Description

Communicator *FIRECOM* meets the requirements of standard EN 54-21:2006; EN 54-4:1997/AC:1999/A1:2002/A2:2006.

The product complies with the performance requirements of EN54-21 standard Annex A for type 1 transmission system type. Communicator *FIRECOM* Certificate No: 1922-CPR-2083. Fire detection and fire alarm systems. Alarm transmission and fault warning routing equipment. Power supply equipment.

The product is certified by notified product certification body: No.1922 "Dedal", Nesebar Mladost str. 50, Bulgaria, 8230 Trikdis technical support contacts: support@trikdis.lt, +37067422877.

The *FIRECOM* is used for transmitting fire alarm control panel messages via LAN and/or cellular networks to the Central Monitoring Station's receiver.

Principle of operation. When an input (zone) of the communicator is violated, the *FIRECOM* will transmit an event message to the Central Monitoring Station's receiver or to the *Protegus2* app using mobile internet and/or LAN network. It can also send SMS messages and make phone calls. The communicator is available with 4G modem.

Features

Messages to the security company

- Sends events via the built-in LAN module or cellular 4G modem.
- Events are sent via available communication channels with the selected priority.
- Any CMS can receive reports, as long as they have TRIKDIS software/IP receiver or any other manufacturer's IP receiver supporting SIA DC-09 IP protocol.
- Prioritizing the transmission of events to the CMS: messages are first transmitted to the CMS and only then to *Protegus2*.



- Possibility to send event reports to CMS of two different security companies.
- Event messages are sent in Contact ID or SIA codes.

Messages to users

- Calls selected phone numbers (up to 8 users).
- Sends SMS messages about events.
- "Push" and special sound event notifications using the *Protegus2* application.
- Remote temperature monitoring.

Remote control of outputs

- Via Protegus2 app.
- By calling the device's phone number.
- Via SMS messages.

Settings and installation

- Quick and easy installation.
- Device configuration either using an USB cable or remotely using *TrikdisConfig* software.
- Remote updating of firmware.
- Two access levels (types of accounts) for setting parameters: for the installer and for the administrator.

Inputs and outputs

- 3 relay outputs (1 A, 30V DC).
- Input "FLOOP" is intended for connection of two-wire fire detectors.
- 10 I/O terminals, each of which can be set as an input (IN) or output (OUT) terminal. Selectable Input (IN) types: NC, NO, EOL, EOL-T, ATZ, ATZ-T. Resistors of different ratings can be used in EOL and ATZ circuits.

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- With *iO* expander modules, the number of IN inputs can be expanded up to 32 units, and the number of OUT outputs can be expanded up to 16 units.
- RS485 bus is used to connect *iO* series expander modules.
- RS485 2 bus is used to connect fire alarm control panels.

1.1 Specifications

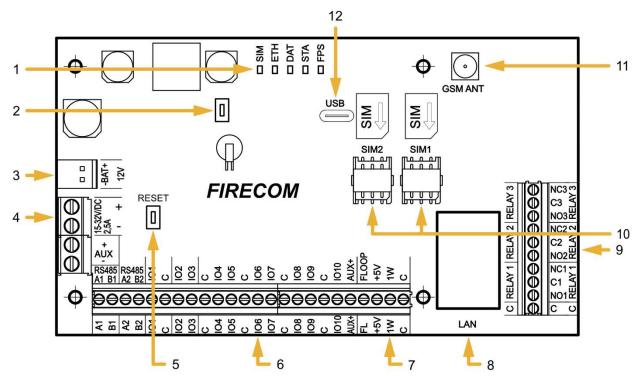
Parameter	Description
LTE modem frequencies:	
EU (Europe)	LTE-FDD: B1/B3/B5/B7/B8/B20/B28
LA (Latin America)	LTE-FDD: B2/B3/B4/B5/B7/B8/B28/B66
Power supply voltage	15-32 V DC, 2.5A
Current consumption	Up to 50 mA (stand-by).
	Up to 300 mA (transmitting).
	Up to 2.5 A (after connecting the maximum possible load with external devices).
Backup power source [BAT]	12 V lead – acid battery, 4 Ah/7 Ah
Battery charge current	Up to 500 mA
Power voltage and current for external devices [AUX]	12 V DC, up to 1 A
Transmission protocol	TRK, SIA DC-09_2007, SIA DC-09_2012, SIA DC-09_IPcom, TL150
Encryption key	6 symbol encryption key.
Connection to CMS	TCP/IP or UDP/IP
Event codes	Contact ID, SIA codes.
LAN module	Yes, built-in
LAN network configuration type	DHCP or manual
SIM card	1, NANO size
Report transmission directions	- To main and backup receivers of 2 different security companies;
	- To <i>Protegus2</i> cloud, to iOS/Android <i>Protegus2</i> mobile apps;
	- To 8 mobile phones via SMS messages.
	- Calls 8 mobile phones.
Event reporting transmission channels	4G, Ethernet (LAN), SMS, call
Message encryption	Yes
Internal clock	Yes
User	40
Dual purpose terminals [I/O]	10; IN or OUT function selected during programming. When IN is selected, available types: NC, NO, EOL, EOL_T, ATZ, ATZ_T. When OUT is selected, the terminal becomes open collector (OC) type with up to 100 mA current
No. of groups	8
No. of zones	10 (20 zones if using ATZ), (can be expanded to 32 zones using expanders)
No. of PGM outputs	3 relay (1 A, 30V DC). (can be 13 if IO terminals are set as outputs. Can be expanded to 16 outputs with expanders)
Buffer memory capacity	60 events
Events log memory	Up to 1000 events. Oldest entries deleted automatically.
www.trikdis.com	6 April, 2025



Communicator FIRECOM for fire alarm control panels

Parameter	Description
Configuration	Remotely using TrikdisConfig software or locally using USB Type-C.
1-Wire data bus length [1 WIRE]	Up to 30 m
Compatible temperature sensors	Maxim [®] /Dallas [®] DS18S20, DS18B20; AM2301 series
Max. number of temperature sensors connected to <i>1-Wire</i> data bus	8 (Dallas) or 1 (if an AM2301 series sensor is used)
RS485 bus	2
RS485 bus length	Up to 100 m
Supported modules	<i>iO-8</i> – expander module;
	<i>iO-MO</i> – iO-WL radio wave transceiver;
	<i>iO-LORA</i> – expander module;
	<i>iO8-LORA</i> – expander module;
	PB-LORA – panic button;
	REL-LORA – expander module;
	Fire alarm control panel with ESPA 4.4.4 protocol;
	NSC Solution – fire alarm control panel;
	INIM Smartline - fire alarm control panel;
	C-TEC Cast ZFP – fire alarm control panel.
Operating environment	Temperature from -10 °C to +50 °C, relative air humidity – up to 80% at +20°C.
Dimensions	235 x 205 x 92 mm
Weight	1.35 kg

1.2 Elements of the FIRECOM communicator





- 1. Connectivity and operation indicator lights.
- 2. Button. Not used.
- 3. Backup power supply terminal block.
- 4. Main power supply terminal block.
- 5. RESET button.
- 6. External terminal block.

7. "1-WIRE" data bus terminal block.

- 8. RJ45 LAN connector.
- 9. PGM relay terminals.
- 10. Nano-SIM card holder (SIM2 not used).
- 11. SMA screw-on type connector for GSM antenna.
- 12. USB Type-C connector for configuring the communicator settings.

1.3 Purpose of terminals

Terminal	Description				
Power terminal "+"	Power supply terminal (15 – 32 V DC positive terminal)				
Power terminal "-"	Power supply terminal (15 – 32 V DC negative terminal)				
BAT+	Backup power supply positive terminal 12 V				
BAT-	Backup power supply negative terminal 12 V				
AUX+	Positive 12 V power terminal for external devices				
AUX-	Common negative terminal				
A1 RS485	RS485 bus is for connecting <i>iO</i> expansion devices				
B1 RS485					
A2 RS485	RS485 bus for connecting fire alarm control panel				
B2 RS485					
101 – 1010	Input/output terminals (default setting – input)				
С	Common negative terminal				
AUX+	Positive 12 V power terminal for external devices				
FLOOP	Terminal for connecting a 2-wire fire detector				
+5 V	Positive 5 V, 0.2 A power terminal for 1-Wire devices				
1 WIRE	"1-Wire" data bus terminal				
С	Common negative terminal				
NO1/C1/NC1	1st PGM relay output terminals				
NO2/C2/NC2	2nd PGM relay output terminals				
NO3/C3/NC3	3rd PGM relay output terminals				

1.4 LED indication of operation

Indicator	Light status	Description
SIM	Off	Not connected to GSM network
	Green blinking	SIM card is registering on GSM network.
	Green solid	SIM card registered on GSM network.
	Green solid and yellow blinking	The communicator is connected to GSM network. Sufficient GSM signal strength level for 4G is 3 (three yellow flashes).
ETH	Green blinking	LAN cable disconnected or DHCP problem.
	Green solid	Connected to LAN network.



Indicator	Light status	Description
DAT / DATA	Off	All event messages sent
	Green solid	Message is being sent
	Yellow solid (DAT)	There are unsent event messages in buffer memory
STA / TROUBLE	Green blinking (STA)	No operational problems
	Off (TROUBLE)	No operational problems
	1 red flash	No SIM card inserted
	2 red flashes	The PIN code of the SIM card is incorrect
	3 red flashes	Unable to connect to GSM network
	4 red flashes	Unable to connect to the IP receiver using the primary channel
	5 red flashes	Unable to connect to the IP receiver using the secondary channel
	6 red flashes	No DC power
	7 red flashes	AUX output fault (overcurrent or overvoltage0
	8 red flashes	Battery failure
	9 red flashes	The LAN cable is disconnected
	10 red flashes	LAN DHCP problem
FPS / POWER	Off	Power supply is not connected
	Green solid	No problems with power supplies
	1 green flash	No AC power
	2 green flashes	Insufficient backup power supply voltage

1.5 Components necessary for installation

Before beginning installation, make sure that you have:

- 1. A USB Type-C type cable for configuration.
- 2. At least 4-wire cable for connecting the communicator to the fire alarm control panel.
- 3. A flat-head 2,5 mm screwdriver.
- 4. An external GSM antenna if network coverage in the area is poor.
- 5. An activated nano-SIM card (PIN code requests can be turned off).
- 6. The manual of the fire alarm control panel that the communicator will be connected to.

Order the necessary components separately from your local distributor.

2 Powering the communicator

2.1 Main power supply

The communicator must be powered by a DC source. A backup power supply – a 12 V battery – must be connected to the system to ensure the supply of power is uninterrupted.

2.2 Backup power supply

If there are problems with powering the system from the main power supply, an "*DC Fault*" event report will be generated and the panel will automatically switch to the backup 12 V battery. If the battery's voltage falls to 11,5 V, a "*Low Battery*" event report will be generated. The battery will be disconnected if the voltage falls bellow 9,5 V. If DC voltage is restored, an "*DC Restore*" report will be generated and the battery charging process will begin automatically. When the battery's voltage rises to 12,6 V, a "*Battery Restore*" event report will be generated.



2.3 Communicator kit

Name	Quantity
FIRECOM communicator board with antenna, built into a metal housing	1 pc.
Metal housing with Mean Well impulse power supply	1 pc.
Resistor 10 kΩ	20 pcs.
Wire for connecting battery	1 pc.
Tamper sensor	1 pc.
Terminal block with 3,15 A fuse	1 pc.
Fastening elements (screws - 4 pcs., nylon plugs - 4 pcs.).	1

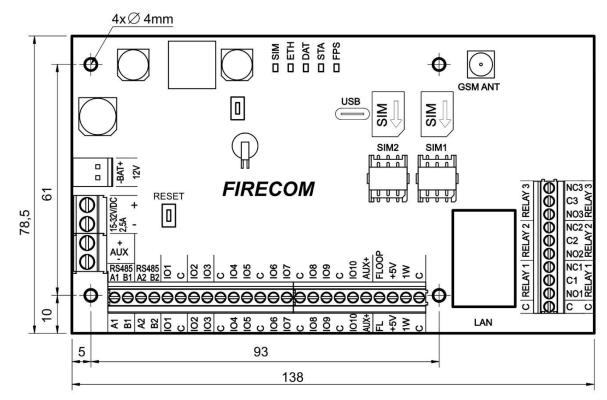
Note: USB cable (Type-C type) for programming the communicator sold separately.

3 Installation of the system

The communicator board is installed into a mounting housing that already has a DC power supply with a 3,15 A fuse installed and also has space intended for a backup battery.

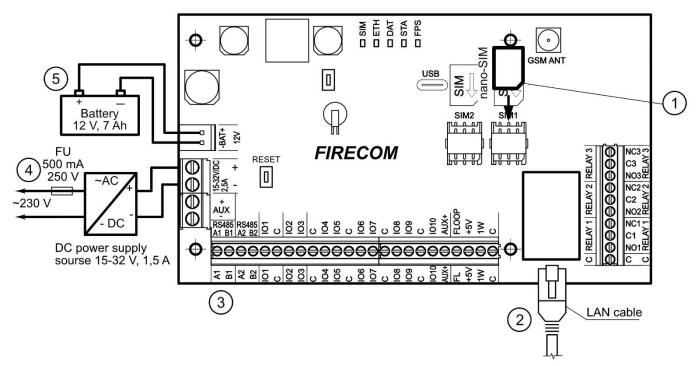
Dimensions of the FIRECOM board

The picture below shows the dimensions of the board and its mounting holes (in millimeters), and also the locations of the holes.





3.1 Order of connecting devices



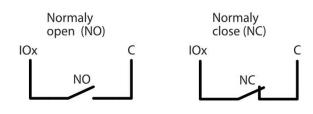
- 1. If you are using a SIM card, insert the activated SIM card into the SIM card holder.
- 2. If you are using LAN, connect the LAN cable.
- 3. Using the given connection schematics and the connection schematics for every device to be connected, connect fire sensors, signalers and controlled devices.
- 4. Connect the AC power supply wires to the terminals.
- 5. Insert a backup battery into the mounting housing. Connect the battery's terminals to the BAT+ / BAT- terminals on the communicator.

Note: When choosing a battery, it must be charged to 80% capacity within 24 hours, and the remaining capacity is reached within the next 48 hours to meet the requirements of the EN54 standard.

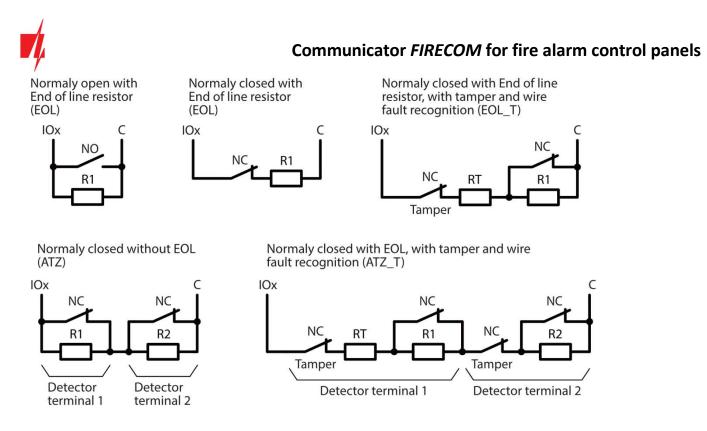
3.2 Connecting sensors

There are 10 terminals *IO1–IO10* (inputs) on the communicator board for connecting sensor circuits. The number of inputs can be expanded to 32 using input expanders (*iO-8, iO-MO, iO-LORA, iO8-LORA*). Any terminal can be set as an input and assigned zone attributes: circuit type (NO, NC, EOL, EOL_T, ATZ, ATZ_T); sensitivity to temporary circuit events; see chapter 6.6 ""Zones" window".

Schematics for connecting sensors.



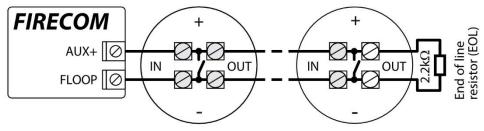
RT	R1	R2
2.2k	2.2k	4.7k
1k	1k	2.2k
5.6k	5.6k	3.3k
5.6k	3.3k	5.6k
3.3k	6.8k	3.3k
2.2k	4.7k	8.2k
10k	10k	5.6k



3.3 Connecting smoke detectors

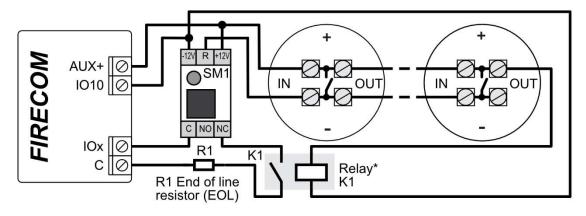
Schematic for connecting two-wire smoke detectors.

Schematic for connecting two-wire smoke detectors to "FLOOP" output. When this circuit diagram is used, the "Input" type "FC Fire sensor (FLOOP input)" must be specified in the "Zones" window. The alarm current of the fire detector must be more than 10mA. Up to 8 fire detectors can be connected to the "FLOOP" output.



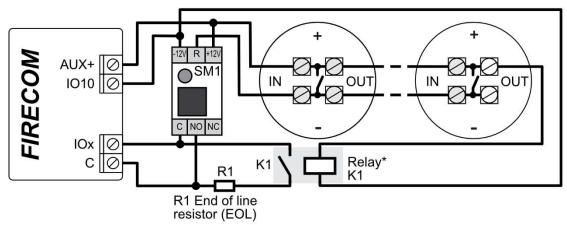
Wiring diagrams for two-wire smoke detectors with relay module SM1. In order to connect the smoke detector circuit to the selected input, it is necessary to activate the input (IOx) and set the circuit type (NO, NC, EOL, EOL_T, ATZ, ATZ_T) (see 6.6 ""Zones" window").-To connect a smoke detector power circuit to the PGM output (IO10), the **"Fire Sensor Reset"** function must be assigned to the output (see chapter 6.7 ""PGM" window").

* The relay is used to detect a broken cable and removal of a fire detector. If you do not use a relay (K1), then contact K1 must be short-circuited.



Or

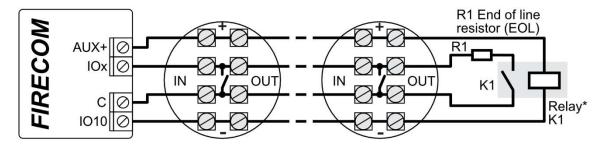




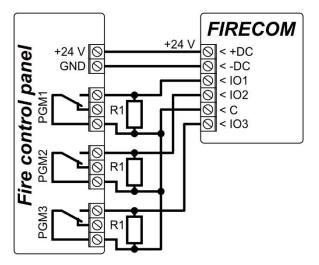
Schematic for connecting four-wire smoke detectors.

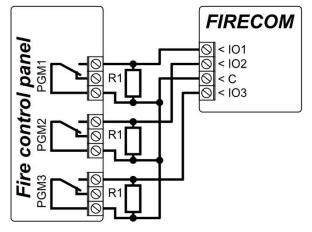
In order to connect the smoke detector circuit to the selected input, it is necessary to activate the input (IOx) and set the circuit type (NO, NC, EOL, EOL_T, ATZ, ATZ_T) (see 6.6 ""Zones" window "). To connect a four-wire smoke detector power circuit to the PGM output (IO10), the "**Fire Sensor Reset**" function must be assigned to the output (see chapter 6.7 ""PGM" window").

* The relay is used to detect a broken cable and removal of a fire detector. If you do not use a relay (K1), then contact K1 must be short-circuited.



3.4 Schematic for connecting the communicator to a fire alarm control panel





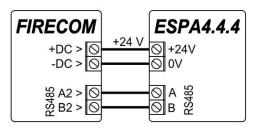
Connecting *FIRECOM* (with built-in power supply) to the fire panel

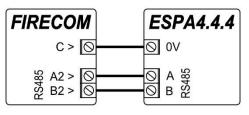
Connecting *FIRECOM* (without power supply) to the fire panel

If you want to monitor the status of the fire alarm panel, connect its corresponding outputs to the *FIRECOM* inputs. The outputs (PGM1, PGM2, PGM3) of the fire panel must be configured as panel status outputs (Alarm, Trouble, etc.).



3.5 Schematic for connecting the fire panel with the ESPA4.4.4 protocol





Connecting *FIRECOM* (without power supply) to the fire panel

Connecting *FIRECOM* (with built-in power supply) to the fire panel

FIRECOM communicator settings with TrikdisConfig when connecting the fire alarm control panel.

- 1. Choose the ESPA4.4.4.
- 2. Select connection type.
- 3. The FIRECOM communicator and the fire panel must have the same data transmission settings.

TrikdisConfig 1.66.60 FC	E170				-	
Program 🥜 Action	D About					
	Read [F4	4] Write [F5]	Open [F8]	Save [F9]	Disconnect	
System Options	R\$485	modules				
Reporting to CMS		modules				
Users & Reporting						
	ID	Module	Serial No.	Name	Firmware version	
Modules	1	Not available		Expander ID1		
Zones	2	Not available		Expander ID2		
PGM	3	Not available		Expander ID3		
6	4	Not available		Expander ID4		
Sensors	5	Not available		Expander ID5		
System events	6	Not available		Expander ID6		
Events Log	7	Not available		Expander ID7		
	8	Not available		Expander ID8		
Firmware	RS485	2 interface				
	Inter	face type	ESPA 4.4.4	1		
Remember password]			<u> </u>		
Show passwords	Conn	ection	RS485 -	2		
Default settings Resto	re Com	municator response to pag	er address 2 to 8. Port settings - 8	~=		
	Baud		9600 -		3	
IMEI/Unique ID: 866069063929671	Setti	ngs (bits, parrity, stop bit:	;) 8 * None *	1 • Delay, mS 0		

4. Enter phone numbers, e-mail of users who should get messages from the *FIRECOM*.

f TrikdisConfig 1.66.60 FC_E170		- 🗆 X
🏠 Program 🛛 🎤 Action	21 About	
	Read [F4] Write [F5] Open [F8] Save [F9]	Disconnect
System Options	Users Protegus SMS answer texts SMS for Panel events	4
Reporting to CMS Users & Reporting	Users & Reporting to User	
Modules	:9 Name Tel number Email	PGM ACK FWD
Zones	1A Jonas +370698745 jonas@trikdis.lt 7A	



5. If you want the user to receive messages (or calls) about events, tick the SMS (or Call) box.

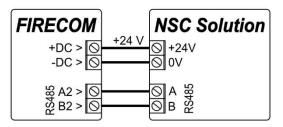
📫 TrikdisConfig 1.66.60 FC_E170									—	×
🗭 Program 🛛 🎤 Action	Mabout									
	Read [F4]	Write [F5]		Oper	n [F8]	Save [F9]		Disconnect		
System Options	Events SN	IS & Call reporting								
Reporting to CMS					1					
Users & Reporting			User 1							
Modules	;D	Event SMS text Check/uncheck all rows:	SMS	Call						
Zones	9 Event	Power fault								
PGM	9 Restore	Power restore								
Sensors	10 Event	Comm. path lost								
System events		Comm. path restored								
	11 Event 12 Event	AUX overcurrent		H						
Events Log		Low voltage Value restored		H						
Firmware	13 Event	High voltage								
	13 Restore	Value restored			j					
Remember password	14 Event	Fire alarm								
Show passwords	15 Event	Zone Fault								
Default settings Restore	15 Restore 16 Event	Zone Fault restored		H						
inestore		Low humidity Value restored		H						
	17 Event	High humidity								
IMEI/Unique ID:	17 Restore	Value restored								
866069063929671	19 Event	ESPA 4.4.4 text	\checkmark			5				

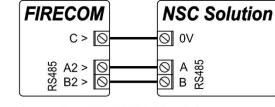
6. Configure the communication channel if messages should be sent to the CMS receiver. Event messages are transmitted using the SIA DC-09 protocol.

🕫 TrikdisConfig 1.66.60 FC_E170)							_	×
🔅 Program 🎤 Action	About								
	Read [F4] Write	[F5]	Open	[F8]	Save [F9]		Disconnect	t	
System Options	Reporting Settings								
Reporting to CMS	Primary channel				Parallel channel				
Users & Reporting	Communication type	Disabled	*		Communication type	Disabled	*		
Modules	Domain or IP								
Zones	Port	0		6					
PGM	Protocol	TRK	*						
Sensors	Encryption Key	*****							

Test the system. Activate the fire alarm and check that **FIRECOM** messages are sent to the CMS (central monitoring station) and to **Protegus2**.

3.6 Schematic for connecting the fire panel NSC Solution





Connecting *FIRECOM* (without power supply) to the fire panel

Connecting *FIRECOM* (with built-in power supply) to the fire panel

FIRECOM communicator settings with TrikdisConfig when connecting the NSC Solution fire alarm control panel.

- 1. Choose the **NSC solution** fire alarm control panel.
- 2. The "NSC slave address" must not match the address of the connected fire panel modules.

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Program 🎤 Action	Read [F4] Write [F5]	Open [F8] Sa	ve [F9]	Disconnect	
System Options		nodules				
Reporting to CMS		modules				
Users & Reporting			Control Man	News	Plana and an	
Modules	ID 1	Module Not available	Serial No.	Name Expander ID1	Firmware version	
Zones	2	Not available		Expander ID2		
	3	Not available		Expander ID3		-
PGM	4	Not available		Expander ID4		
Sensors	5	Not available	č.	Expander ID5		
System events	6	Not available		Expander ID6		
Events Log	7	Not available	i i i i i i i i i i i i i i i i i i i	Expander ID7		
-	8	Not available		Expander ID8		
Firmware	RS485	2 interface				
Remember password	Inter	ace type NSC	solution -	1		

3. Enter phone numbers, e-mail of users who should get messages from the *FIRECOM*.

📫 TrikdisConfig 1.66.60 FC_E170)	— D ×
🏶 Program 🔗 Action	2 About	
	Read [F4] Write [F5] Open [F8] Save [F9]	Disconnect
System Options	Users Protegus SMS answer texts SMS for Panel events	3
Reporting to CMS		
Users & Reporting	Users & Reporting to User	
Modules	:D Name Tel number Email	PGM ACK FWD
Zones	1A Jonas +370698745 jonas@trikdis.lt	
Zones	24	

4. Users will get SMS messages and phone calls about events that are ticked. You can add additional CID event codes in the CID column. You must enter SMS text messages next to new codes. If you want the user to receive messages (or calls) about events, tick the SMS (or Call) box.

📫 TrikdisConfig 1.66.60 FC_E17	0								×
🔅 Program 🛛 🔑 Action	🕮 About								
	Read [F4]	Write [F5]		Open [F	8]	Save [F9]	Disconne	ct	
System Options	Users Prote	egus SMS answer texts	SMS for Pa	nel evo	ents				
Reporting to CMS		-							
Users & Reporting	Zn CID	SMS text	User 1 SMS	Call	٦				
Modules	1 E110	Fire alarm							
Zones	2 E118	Fire pre-alarm state	✓						
PGM	3 E380	Detector fault	✓		4				
Sensors	4 E323	Line fault	✓						
	5 E301	AC loss	~						
System events	6 E302	Low battery	✓		4				
Events Log	7 E311	Missing battery	✓						



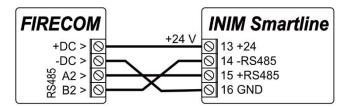
5. Configure the communication channel if messages should be sent to the CMS receiver.

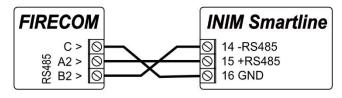
FC_E170	Û.							—	×
🔅 Program 🔑 Action	🕮 About								
	Read [F4] Write [[F5]	Open	[F8]	Save [F9]		Disconnec	t i	
System Options	Reporting Settings								
Reporting to CMS	Primary channel				Parallel channel				
Users & Reporting	Communication type	Disabled			Communication type	Disabled	*		
Modules	Domain or IP								
Zones	Port	0		5					
PGM	Protocol	TRK	Ŧ						
Sensors	Encryption Key	*****							

After setting up the **FIRECOM** communicator, turn on power supply the fire control panel. Wait for the fire control panel software to load. It is necessary to scan the modules connected to the RS485 bus on the fire control panel. On the fire control panel, press: **PROG.>INSTALLER>(Enter the installer code) 00000 OK>(Select) SETTINGS>ENTER>(Select) SCAN RS485>ENTER**. Wait for the scan to complete. Return to the main screen by pressing "**CANCEL**" twice.

Test the system. Activate the fire alarm and check that *FIRECOM* messages are sent to the CMS (central monitoring station) and to *Protegus2*.

3.7 Schematic for connecting the fire panel INIM SMARTLINE





Connecting *FIRECOM* (without power supply) to the fire panel

Connecting *FIRECOM* (with built-in power supply) to the fire panel

Slave mode must be set for the INIM Smartline panel when it is connected to the FIRECOM communicator via RS485 bus.

irim SmartLeague			×
File Programming Settings Database Check	control panel ?		Ŧ
☆ □- ■ SmartLine Control Panel	System Layout Programming		
- Power Supply	i 📕 📕		
- ₩ RS485 BUS - ₩ Holidays - ♡ Timer - √ ∑ Equations - ₩ Zones	Master/Slave Settings Configure as Master Oconfigure as Slave Assign address	-	

Note:You cannot connect the *FIRECOM* using the RS485 bus if repeaters are connected to the INIM Smartline panel.iO expansion modules are not supported when the *FIRECOM* is connected to the INIM Smartline panel via
RS485 bus.

FIRECOM communicator settings with TrikdisConfig when connecting the INIM SMARTLINE fire alarm control panel.



1. Choose the Inim Smartline fire alarm control panel.

🕈 Program 🛛 🎤 Action	About					
	Read [F4]	Write [F5]	Open [F8] Sav	e [F9]	Disconnect	
System Options	RS485 n	nodules				
Reporting to CMS		modules				
Users & Reporting		Module	Serial No.	Name	Firmware version	
Modules	1	Not available	Schulter.	Expander ID1		
Zones	2	Not available		Expander ID2		
PGM	3	Not available		Expander ID3		
	4	Not available		Expander ID4		
Sensors	5	Not available		Expander ID5		
System events	6	Not available		Expander ID6		
Events Log	7	Not available		Expander ID7		
Firmware	8	Not available		Expander ID8		
	RS485 2	2 interface				

2. Enter phone numbers, e-mail of users who should get messages from the *FIRECOM*.

🕫 TrikdisConfig 1.66.60 FC_E170)	-	
🔅 Program 🎤 Action	D About		
	Read [F4] Write [F5] Open [F8] Save [F9]	Disconnect	
System Options	Users Protegus SMS answer texts SMS for Panel events	2	
Reporting to CMS			_
Users & Reporting	Users & Reporting to User		
Modules	:D Name Tel number Email		M ACK FWD
Zones	1A Jonas +370698745 jonas@trikdis.lt		
Zones	24		

 Users will get SMS messages and phone calls about events that are ticked. You can add additional CID event codes in the CID column. You must enter SMS text messages next to new codes. If you want the user to receive messages (or calls) about events, tick the SMS (or Call) box.

TrikdisConfig 1.66.60 FC_E170)				÷-	
🏠 Program 🖉 Action	DAbout					
	Read [F4]	Write [F5]	Oper	n [F8] Save [F9]	Disconnect	
System Options	Users Prot	egus SMS answer texts	SMS for Panel	events		
Reporting to CMS						
Users & Reporting	Zn CID	SMS text	User 1 SMS Call			
Modules	1 E110	Fire alarm		-		
Zones	2 E118	Fire pre-alarm state				
PGM	3 E380	Detector fault		3		
Sensors	4 E323	Line fault				
	5 E301	AC loss				
System events	6 E302	Low battery		=		
Events Log	7 E311	Missing battery				

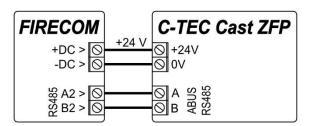
4. Configure the communication channel if messages should be sent to the CMS receiver.

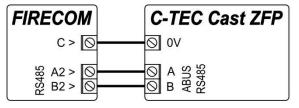


TrikdisConfig 1.66.60 FC_E170							-	×
🔅 Program 🔗 Action	Devit About							
	Read [F4] Write	[F5]	Oper	n [F8]	Save [F9]		Disconnect	
System Options	Reporting Settings							
Reporting to CMS	Primary channel	-			Parallel channel			
Users & Reporting	Communication type	Disabled			Communication type	Disabled	-	
Modules	Domain or IP							
Zones	Port	0		4				
PGM	Protocol	TRK	Ŧ					
Sensors	Encryption Key	*****						

Test the system. Activate the fire alarm and check that **FIRECOM** messages are sent to the CMS (central monitoring station) and to **Protegus2**.

3.8 Schematic for connecting the fire panel C-TEC Cast ZFP





Connecting *FIRECOM* (with built-in power supply) to the fire panel

Connecting *FIRECOM* (without power supply) to the fire panel

FIRECOM communicator settings with TrikdisConfig when connecting the C-TEC Cast ZFP fire alarm control panel.

- FrikdisConfig 1.66.60 FC_E170 × Action About Program Open [F8] Save [F9] System Options RS485 modules Reporting to CMS RS485 m Users & Reporting ID Module Serial No Name Firmware version Module Expander ID1 Not available 1 2 Not available Expander ID2 Zones 3 Not available Expander ID3 PGM 4 Expander ID4 Not available Sensors 5 Expander ID5 Not available Expander ID6 System events 6 Not available Expander ID7 Not available **Events** Log 8 Not available Expander ID8 Firmware RS485 2 interfac Interface type C-TEC Cast ZFP 1 Remember password
- 1. Choose the **C-TEC Cast ZFP** fire alarm control panel.

2. Enter phone numbers, e-mail of users who should get messages from the *FIRECOM*.

FC_E170)			- 0	×
🔅 Program 🎤 Action	M About				
	Read [F4] Write [F5] Open [F8] Save [F9]		Disconnect		
System Options Reporting to CMS	Users Protegus SMS answer texts SMS for Panel events	2			
Users & Reporting	Users & Reporting to User			_	
Modules	:D Name Tel number Email			PGM ACK FWI	
Zones	1A Jonas +370698745 jonas@trikdis.lt 2A				



 Users will get SMS messages and phone calls about events that are ticked. You can add additional CID event codes in the CID column. You must enter SMS text messages next to new codes. If you want the user to receive messages (or calls) about events, tick the SMS (or Call) box.

TrikdisConfig 1.66.60 FC_E17	0								-	×
🔅 Program 🛛 🎤 Action	💷 Abo	out								
	Read	[F4]	Write [F5]		Oper	[F8] Save [F9]	Disco	nnect	
System Options	User	rs Prote	egus SMS answer texts	SMS for	Panel	eve	nts			
Reporting to CMS		13 1100			unter	1				
Users & Reporting]			User						
Modules	Zn 1	CID E110	SMS text Fire alarm	SMS	Call	-				
Zones	2	E118	Fire pre-alarm state							
PGM	3	E380	Detector fault	-			3			
Sensors	4	E323	Line fault	✓						
	5	E301	AC loss	\checkmark						
System events	6	E302	Low battery	✓		=				
Events Log	7	E311	Missing battery	~						

4. Configure the communication channel if messages should be sent to the CMS receiver.

🔻 TrikdisConfig 1.66.60 FC_E170							-		×
🔅 Program 🛛 🔑 Action	🕮 About								
	Read [F4] Write [F5]	Open [[F8]	Save [F9]		Disconnect			
System Options	Reporting Settings								
Reporting to CMS	Primary channel			Parallel channel					
Users & Reporting	Communication type Dis	abled *		Communication type	Disabled	*			
Modules	Domain or IP)	
Zones	Port 0		4						
PGM	Protocol	< *							
Sensors	Encryption Key	••••							

Install the **ZFPtools** program on your computer. Run the **ZFPtools** program. Turn on the power supply of the fire control panel. Wait until the fire panel software is loaded. Connect the fire panel to the computer using a USB2.0 A-B cable.

1. Open the "Node View" tab.

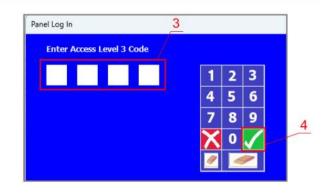
💼 ZFP Programming Tools - <no name=""></no>		- o x
Eile Edit Tools Help		
	A & <u>&</u>	
Site Details System View Node View Cause and Effects Options		
Client	Installer	Logo
Name:	Name:	
Address:	Address:	
Post Code:	Post Code:	С-ТЕС
Telephone:	Telephone:	
General		
 Auto Adjust Daylight Saving Time Synchronise Panel Date/Time To PC on Panel update 		



2. Download the fire panel settings to your computer.

🏥 ZFP Programm	ning Tools -	<no name=""></no>									×
ile <u>E</u> dit <u>T</u> ools	<u>H</u> elp										
6 🖻 🖡		r 7	4	a 💰							
Site Details System	n View Nod	e View Cause and Effects Opti	ons		2						
[1]Panel 1											
Name	Panel 1			Send All Data		Retrieve A	l Data	<u> </u>	Retrieve Dev	vice Data	
General Properties	Basic Con	figuration Loops and Zones De	vices Device Summa	ry Network Filters Panel N	lotes Panel Logs						
Network Prope	erties			Panel Recalibration Time							
Segment	1	•		Recalibration Time	4:00	~					
Address	1	•			Copy to	all panels					
				Verification Times							
Firmware Vers	ions			Detectors	10	•	seconds				
Main Boa	rd	Not Known		Manual Call points	0	٢	seconds				
Loop Driv	ver 1	Not Fitted		I/O	5		seconds				
Loop Driv	er 2	Not Fitted		Faults	5	\$	seconds				
					Copy to al	panels					

- 3. Enter the code (default code 4444).
- 4. Click "**OK**".





- 5. Select "BMS Interface".
- 6. Click on the free icon.

〕ZFP Programming Tools - <no name=""> * le <u>E</u>dit <u>T</u>ools <u>H</u>elp</no>			- 0
	¥ 🕹 🕹 🧉		
e Details System View Node View Cause and Ef	fects Options		
granel I			
Name Panel 1	Send	All Data	Retrieve Device Data
eneral Properties Basic Configuration Loops and	Zones Devices Device Summary Network P	ilters Panel Notes Panel Logs	6
System A-Bus Loop 1 Loop 2			
Device Palette All System	Cevice Palette		Edit Devices 🔶
	- 🖳 🔂 🔄 🔂	🧒 🔊 🖼 🗭 🖾 🚱 🐼	
Monitored Input	$1 \times 3 \times 5$	6 7 8 9 10 11 12 13	14 15 16 17 18
Panel Printer	19 20 21 22 23	24 25 26 27 28 29 30 31	32 33 34 35 36
RadioPager	$\times \times \times \times \times$	\times	\times \times \times \times \times
Event Timer	37 38 39 40 41	42 43 44 45 46 47 48 49	50 51 52 53 54
	55 56 57 58 59		
Delay Timer	33 30 37 36 35	00 01 02 03 04	
Network Driver			
FAT/FBF Device			
Panel Silence			
	5		
BMS Interface			
C Panel Reset			

7. Click "Edit Devices".

ZFP Programming Tools - <no name=""> *</no>					
ile <u>E</u> dit <u>T</u> ools <u>H</u> elp					
D 🖻 🖬 🖬 🖉	× 🔺 🔮 🍝				
te Details System View Node View Cause and El	ffects Options				
1]Panel 1					
Name Panel 1	Sector Se	end All Data		Retrieve De	evice Data
General Properties Basic Configuration Loops and	Zones Devices Device Summary Netwo	ork Filters Panel Notes Panel Logs			7
	Zones Devices Device Summary Netwo	vrk Filters Panel Notes Panel Logs			7
	Zones Devices Device Summary Netwo	rrk Filters Panel Notes Panel Logs Devices		Edit Devic	7
System A-Bus Loop 1 Loop 2		Devices			7
System A-Bus Loop 1 Loop 2 Device Palette	- Device Palette	Devices		» @ X	7
All System	- Device Palette	Devices	I have been been been been been been been be	» @ X	$\langle \times$

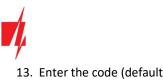


8. In the "Device" tab, enter the system name.

ZFP Programming Tools - <no< p=""></no<>	Name> *				- 0
<u>File E</u> dit <u>T</u> ools <u>H</u> elp					
C 🖻 🔒 🖶 -	r 🤉 🗎	B			
Site Details System View Node Vie	W Cause and Effects Options				
[1]Panel 1					
Name Panel 1		Send All Data		Retrieve All Data	Retrieve Device Data
General Properties Basic Configura System A-Bus Loop 1 Loop 2	ation Loops and Zones Devices Device Su				
Device Palette	Devices		idit Devices 📥	Device Pro	operties
	🛏 🖉 🔊 🔁 💽 🔚		O (Device Properties	
1 2 3 4	5 6 7 8 9 10	11 12 13 14	15 16	Name FIRECOM Device Type BMS Interface	8
				Device Type DHS Interface	
				-	
				Disablement Activates	<none></none>
				Fault Group	<none></none>

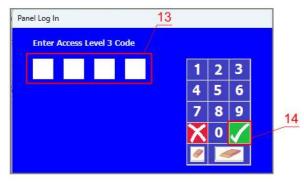
- 9. In the "Properties" tab, enter the system name.
- 10. Specify the "ABUS RS485" bus to which the FIRECOM communicator is connected.
- 11. Configure messages.
- 12. Write the settings to the fire panel.

📩 ZFP Programming Tools - <no name=""> *</no>				-		×
file <u>E</u> dit <u>T</u> ools <u>H</u> elp						
<u>C</u> 🖻 🖬 🖬 🖌						
ite Details System View Node View Cause a [1]Panel 1	nd Effects Options	2				
Name Panel 1		Send All Data	Retrieve All Data	Retrieve De	evice Data	
General Properties Basic Configuration Loops System A-Bus Loop 1 Loop 2	and Zones Devices Device Summary N					
Device Palette	Devices	Edit Devices 📌	Devio	e Properties		_
	s 🖻 🖳 🖻 🔜		Device Properties			
			Device Type BMS Interface			
			Connection	ABUS RS485	~	K
			BAUD Rate	57600	~	
			Response Timeout	250	\$	
			Max Retries	5	¢	
			Zone Disablements	Reports Zone	~	
			Input Group Disablements	Reports Group	~	
			Output Group Disablements	Reports Group	~	
			Group Actions	Reports Group	~	
			Event Message Delay	0	\$	



Communicator FIRECOM for fire alarm control panels

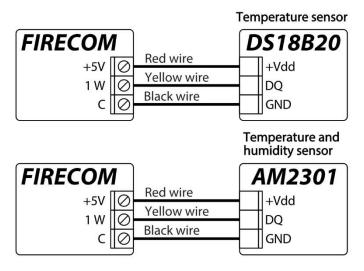
- 13. Enter the code (default code 4444).
- 14. Click "OK".



The fire panel is programmed. Disconnect the cable from USB2.0 A-B of the fire panel.

Test the system. Activate the fire alarm and check that FIRECOM messages are sent to the CMS (central monitoring station) and to Protegus2.

Schematic for connecting a temperature sensor 3.9

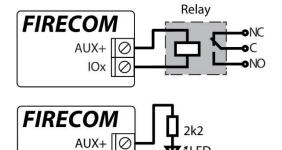


Temperature sensors should be connected according to the given schematic. Maxim[®]/Dallas[®] DS18S20, DS18B20 temperature sensors (up to 8) or AM2301 humidity and temperature sensor (up to 1) can be connected to the communicator FIRECOM.

If a wire longer than 0,5 meters is used to connect a temperature sensor, we recommend using twisted pair cable (UTP4x2x0,5 or STP4x2x0,5).

The "+5V" terminal on the board is for supplying devices connected to the "1-Wire" data bus with 5 V DC voltage. The maximum output current is 0,2 A. The output is protected from overload. If the maximum allowed current is exceeded, the power will automatically be switched off. The communicator automatically recognizes and links connected devices.

3.10 Schematics for connecting a relay and an LED indicator

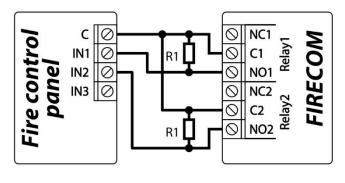


IOx 0

Using the relay terminals, it is possible to remotely control (turn on/off) various electrical devices. The communicator's universal "I/O" terminal must be configured as an output (OUT) and must have the definition "Remote control" assigned.



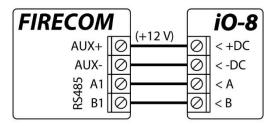
3.11 Schematics of connecting the inputs of the fire panel to the communicator

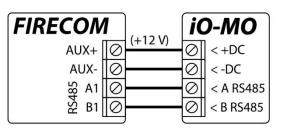


According to the EN54 standard, the fire panel from the communicator must receive information about the failure of communication with the monitoring station, as well as about the successful received of messages to the monitoring station. It is necessary to connect the PGM outputs (for example: "Relay1" and "Relay2") of the communicator to the special inputs of the fire panel. The PGM output of "Relay1" must be set to "CMS fail". The PGM output of "Relay2" must be set to "ACK received". "Relay1" output is activated in case of violation of the communication channel with the CMS. "Relay2" output is activated for 5 sec. upon successful sending of a message to the CMS.

3.12 Schematics for connecting iO series expander modules

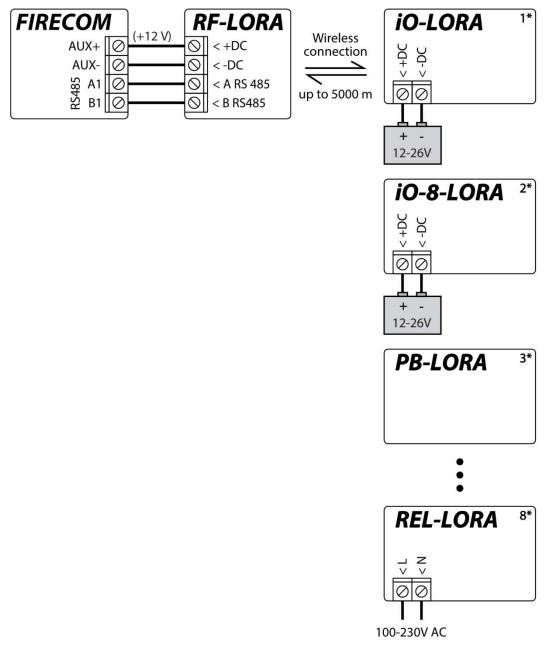
If the communicator **FIRECOM** needs to have more inputs IN or outputs OUT, connect a wired or wireless TRIKDIS **iO** series input and output expander. The **FIRECOM**'s configuration for expander modules is described in chapter 6.5 ""Modules" window".







Schematics for connecting LORA modules.



3.13 Turning on the communicator

To turn on the communicator, first you need to turn on its power supply. The communicator's LED indicators must operate in the following way:

- The "STA" diode must blink in green this indicates that the power supply voltage is sufficient;
- The "SIM" diode must be green solid and periodically blink in yellow no less than 3 times the green color indicates that the SIM card is successfully registered on the mobile network, while the number of yellow flashes indicate the mobile signal strength. The "ETH" indicator lights up green when the communicator is connected to the LAN network.

Note:	Sufficient 4G mobile network strength is 3 (three yellow flashes of the "SIM" indicator).
	If you see fewer yellow flashes of the " SIM " diode, the strength of the mobile network is insufficient. We recommend choosing a different place for installing the communicator, changing the location of the antenna or using a more sensitive mobile antenna.
	If the light indication is different, see chapter 1.4 "LED indication of operation" to find out the reason.
	If all of the FIRECOM indicator lights are off, check the power supply and connections.



4 Quick configuration using TrikdisConfig software

- 1. Download the configuration software *TrikdisConfig* from <u>www.trikdis.com</u> (type "TrikdisConfig" in the search field) and install it.
- 2. Connect the *FIRECOM* to the computer using a USB Type-C cable.
- 3. Launch *TrikdisConfig*. The program will automatically recognize the connected device and will automatically open the *FIRECOM* configuration window.
- 4. Click the **Read [F4]** button to see the current parameters of the *FIRECOM*. If a window requesting the administrator or installer code opens, enter the 6-digit code.

Below we describe the settings you need to edit to make the controller send events to the **Protegus2** app or to the Central Monitoring Station.

4.1 Settings for connecting to Protegus2 app

In the "System options" window, "SIM" settings group:

📫 TrikdisConfig 1.66.60 FC_E170)			- 🗆 X
🔅 Program 🎤 Action	💷 About			
	Read [F4] Write [F5]	Open [F8] Save	[F9]	Disconnect
System Options Reporting to CMS	System general Groups Access			
Users & Reporting	General Object ID	0001	SIM	
Modules	Object name	Fire communicator	SIM card PIN	1234 1
Zones		1 day(-s) 0 h	APN	internet 2
PGM	Test period	(a)(-s) o n	Login	

- 1. Enter the "SIM card PIN" code.
- 2. Change the "APN". You will find the "APN" on the SIM operator's website. "Internet" is universal and works in the networks of most operators.

In the "Users & Reporting" window, "Cloud application" settings group:

frikdisConfig 1.66.60 FC_E170)	- 🗆 X
Program Action	About	
	Read [F4] Write [F5] Open [F8] Save [F9]	Disconnect
System Options Reporting to CMS	Users Protegus SMS answer texts	
Users & Reporting	Cloud application	
Modules	Enable cloud service	
Zones PGM	Parallel reporting Cloud Access Code	

- 3. Tick the box "Enable cloud service".
- Change the *Protegus2* "Cloud access Code" if you want users to be asked to enter it when they add the system in the *Protegus2* app (default password – 123456).



In the "Reporting to CMS" window, "Settings" tab:

FC_E170)			- 0
Program Action	🕮 About			
System Options Reporting to CMS	Read [F4] Write [F5] Reporting Settings Settings	Open [F8] Save	[F9] Disconnect	
Users & Reporting Modules Zones PGM Sensors System events Events Log Firmware	Return to Primary after IP Ping period Backup reporting after DNS1 DNS2 Object ID in SIA DC-09 SIA DC-09 receiver No. Local time in SIA	5 min 60 ₅ 3 attempts 8.8.8.8 1.1.1.1 0001 1 Line No: 1	DHCP 5 Static IP 0.0.00 Subnet mask 0.0.00 Default gateway 0.0.00 Lan Trouble indication	
Remember password Show passwords Default settings Restore	Reporting mode CMS	* SIM *	SIM parameters 6 Disable indication of the absence of a SIM card Use dial and SMS when working over internet module	7

- If a LAN cable is connected to the communicator, check the box "DHCP" (automatic registration mode) so that the FIRECOM communicator will automatically read the network settings (subnet mask, gateway) and an IP address will be assigned to it.
- 6. The parameters for how the communicator will send messages to *Protegus2* are set. Connection types are set in sequence. If the connection with the primary connection type fails, it switches to the next one and so on. If the fallback connection type succeeded in passing the message to *Protegus2*, then the "Return to Primary" connection type will be attempted after a set time interval.

Program 🎤 Action	Abo	ut											
	Read		Write [F5]		T	Open	[F8]	Save [F	9]		Disconne	ct	
System Options	Zon	es settings	SMS & Call reporting	Zo	ne's	codes		7					
Reporting to CMS								Ē					
Users & Reporting	Zone	e Name	Input	Grou	p	Туре	CMS	Prot.	Delay				
-	1	Zone 1	FC 1 I/O	1	*	EOL	~	-	800				
Modules	2	Zone 2	FC 2 I/O	1		EOL	4	-	800				
Zones	3	Zone 3	FC 3 I/O	1	*	EOL	~	-	800				
PGM	4	Zone 4	FC 4 1/O	1	-	EOL	1	1	800				
	5	Zone 5	FC 5 I/O	1	*	EOL	~	-	800				
Sensors	6	Zone 6	FC 6 I/O	1	*	EOL	1	~	800				
System events	7	Zone 7	FC 7 1/O	1	-	EOL	~	-	800				
Events Log	8	Zone 8	FC 8 I/O	1	-	EOL	~	-	800				
Firmware	9	Zone 9	FC 9 I/O	1	-	EOL	~	-	800				
Filliware	10	Zone 10	FC 10 I/O	1	+	NC	1	-	800				
	11	Zone 11	Disable	1	*	NO	~	~	400				

In the "Zones" window, "Zones settings" tab:

7. Tick the boxes if you want users to receive notifications to *Protegus2* about changes in zone states.



In the "PGM" window, "Outputs" tab:

Program 🔗 Action	D About								
	Read [F4]	Write	[F5] Open	[F8] Save [F9]		Disconnec	t		
System Options	Outputs	Set Action	Scheduler SMS & Call reportin	a				8	
Reporting to CMS			generation of the second second second second	~			_/		
Users & Reporting	PGM No	Name	PGM output	Output definition	Pulse Time, s	CMS	Prot.		
	1	PGM 1	RELAY 1	Remote Control	20				
Modules	2	PGM 2	RELAY 2	Remote Control	20				
Zones	3	PGM 3	RELAY 3	Remote Cont *	20				
PGM	4	PGM 4	Disable	Remote Control	20				
	5	PGM 5	Disable	Fire Sensor Reset	20				
Sensors	6	PGM 6	Disable	CMS fail	20				
System events	7	PGM 7	Disable	ACK received	20				
Events Log	8	PGM 8	Disable	Main power lost	20				
-	9	PGM 9	Disable	Battery failure	20				
Firmware	10	PGM 10	Disable	Zone alarm	20				
	11	PGM 11	Disable	Zone tamper	20				
	12	PGM 12	Disable	Panel lost	20				
Remember password	13	PGM 13	Disable	Remote Control	20				

8. Tick the boxes if you want users to receive notifications to *Protegus2* about changes in PGM output states.

In the "System events" window, "Events" tab:

Program Action	Ab								
Program Action	EL AD	out							
	Read	1 [F4] Write [F5]		Open [F	-8]	Save [F9]		Disconnect	
System Options	Eve	ents SMS & Call reporting			9				
Reporting to CMS					_				
Users & Reporting	ID	Event name	Enable	CMS	Prot.	CID Code	SMS event text	SMS restore text	
	1	Low Battery	-	~	~	302	Battery low	Battery restore	
Modules	2	Periodic test	1	4	~	602	Periodic test		
Zones	3	Battery missing	1	~	-	311	Battery missing	Battery restore	
PGM	4	RS485 fault	~	~	-	333	RS485 device fault	RS485 device restore	
	5	High temperature	1	~	~	158	High value	Value restored	
Sensors	6	Low temperature	~	1	1	159	Low value	Value restored	
System events	7	Temp. sensor lost	~	~		380	Sensor fault	Sensor restore	

9. Tick the boxes if you want users to receive notifications to *Protegus2* about changes in the communicator's internal event states.

After finishing configuration, click the **Write [F5]** button and disconnect the USB cable.

Note: See chapter 6 "Description of TrikdisConfig windows" to find more about other FIRECOM settings in TrikdisConfig.

4.2 Settings for connecting to Central Monitoring Station

In the "System Options" window, "System general" tab:

frikdisConfig 1.66.60 FC_E170					- 0 >
Program Action	🕮 About				
	Read [F4] Write [F5]		Open [F8] Save	[F9]	Disconnect
System Options Reporting to CMS	System general Groups Acce	ess		SIM	
Users & Reporting Modules	Object ID		0001 1	SIM card PIN	1234 2
Zones	Object name Test period	•	Fire communicator	APN	internet 3

 Enter the "Object ID" (account) number provided by the Central Monitoring Station (4 characters, 0-9, A-F. Do not use FFFE, FFFF Object ID).

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- 2. Enter the "SIM card PIN" number.
- 3. Change the "APN". You will find the "APN" on the SIM operator's website. "Internet" is universal and works in the networks of most operators.

TrikdisConfig 1.66.60 FC_E170		-	×
Program Action	D About		
System Options	Read [F4] Write [F5] Open [F8] Save [F9] Disconnect Reporting Settings	t	
Reporting to CMS Users & Reporting Modules Zones PGM Sensors System events Events Log Firmware	Settings LAN network parameters Return to Primary after 5 min IP Ping period 60 s Backup reporting after 3 attempts DNS1 8.8.8.8 0.0.0 DNS2 1.1.1.1 Default gateway 0.0.0 Dbject ID in SIA DC-09 0001 Lan Trouble indication		
Remember password Show passwords Default settings Restore IMEI/Unique ID: 866069063929671	Sim protegus Main type CMS Protegus Backup type Ethernet (LAN) Ethernet (LAN) Disable indication of the absence of a SII card Backup type SIM SIM Use dial and SMS when working over internet module Return to main (both channel) 10 min		

In the "Reporting to CMS" window, "Settings" tab:

- 4. If a LAN cable is connected to the communicator, check the box "DHCP" (automatic registration mode) so that the *FIRECOM* communicator will automatically read the network settings (subnet mask, gateway) and an IP address will be assigned to it.
- 5. The parameters for how the communicator will send messages to CMS are set. Connection types are set in sequence. If the connection with the primary connection type fails, it switches to the next one and so on. If the fallback connection type succeeded in passing the message to CMS, then the "Return to Primary" connection type will be attempted after a set time interval.

In the "Reporting to CMS" window, "Reporting" tab:

📫 TrikdisConfig 1.66.60 FC_E170	i -							-		×
🔅 Program 🎤 Action	D About									
System Options	Read [F4] Write Reporting Settings	[F5]	Ope	n (F8)	Save [F9]		Disconnec	t		
Reporting to CMS	Primary channel				Parallel channel					
Users & Reporting	Communication type	Disabled	*	6	Communication type	TCP/IP	-	12	4	
Modules	Domain or IP			7	Domain or IP					
Zones	Port	0		8	Port	0				
PGM	Protocol	TRK		9	Protocol	TRK	*			
Sensors	Encryption Key	123456		10	Encryption Key	123456				
System events										
Events Log	Backup channel			-	Parallel backup channe	t				
Firmware	Communication type	Disabled	*	11	Communication type	TCP/IP	*			
	Domain or IP				Domain or IP					
Remember password	Port	0			Port	0				
Show passwords	Protocol	TRK	Ŧ		Protocol	TRK	*		-	
Default settings Restore	Encryption Key	123456			Encryption Key	123456				

- 6. **Communication type** choose a communication type (TCP or UDP).
- 7. Domain or IP enter the receiver's domain or IP address.



- 8. **Port** enter the receiver's network port number.
- 9. **Protocol** choose which transmission protocol should be used for sending messages: **TRK** (to TRIKDIS receivers), **DC-09_2007** or **DC-09_2012** (to universal receivers), **TL150** (to SUR-GARD receivers).
- 10. Encryption Key enter the receiver's encryption key.

Note: If you chose DC-09 as the transmission protocol, additionally enter the object, line and receiver numbers in the "Settings" setting group of the "Reporting to CMS" window.

- 11. (Recommended) Configure the "Backup channel" settings.
- 12. Configure "**Parallel channel**" if messages will be sent to the second receiver of the CMS.

After finishing configuration, click the Write [F5] button and disconnect the USB cable.

Note: See chapter 6 "Description of TrikdisConfig windows" to find more about other FIRECOM settings in TrikdisConfig.

5 Remote control

5.1 Adding the communicator to *Protegus2* app

Using *Protegus2*, users can see the system's state and receive notifications about system events.

1. Download and launch the *Protegus2* app or use the browser version <u>web.protegus.app</u>:



2. Create a new account or log in with your user name and password.

IMPORTANT: When adding the system to Protegus2 the FIRECOM communicator must:

- 1. Have an inserted and activated SIM card with the PIN code entered or disabled;
- 2. Have Protegus2 service enabled. See 6.4 "Users & Reporting" window;
- 3. Have the power switched on ("STA" LED must be blink green);
- 4. Be connected to a network (the "SIM" LED must be green solid and blink yellow; or/and "ETH" LED is green when connected to LAN network).



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 Click "Add new system" and enter the FIRECOM's "Unique ID" number. It can be found on the device and packaging sticker. After entering the "Unique ID", click the "Next" button.



5.2 Configuration and control via SMS messages

1. Change the administrator password

To ensure safety, change the default administrator SMS password. Send an SMS message of the following format:

PSW 123456 xxxxxx

123456	Default administrator password
123456	Default administrator password

XXXXXX New 6-symbol administrator password

2. Allow other users to control

Only phone numbers on the user list can control the system using SMS messages or phone calls. From an administrator phone, send SMS messages with other people's phone numbers and names to allow them to control the system:

SETN xxxxxx PHONEx=+PHONENR#NAME#EMAIL

XXXXXX	6-symbol administrator password
X	User's number on the list. (If you write 1 as the user number, you will transfer your administrator's rights to the other user.)
PHONENR	User's phone number
NAME	User's name
EMAIL	User's e-mail

SMS command list

Command	Data	Description
INFO		Request information about the communicator. Object name, partition state, IMEI number, GSM signal strength, firmware version and serial number will be included in the reply. E. g.: <i>INFO</i> 123456
RESET		Reset the device. E.g.: RESET 123456
OUTPUTx	ON	Turn on an output, "x" is the output number. E.g.: OUTPUT1 123456 ON
	OFF	Turn off an output, "x" is the output number. E.g.: OUTPUT1 123456 OFF



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Command	Data	Description
	PULSE=ttt	Turn on an output for a few seconds - "x" is the OUT output number, and "ttt" is a three-digit number that specifies pulse time in seconds. E.g.: OUTPUT1 123456 PULSE=002
PSW	New password	Change password. E.g.: PSW 123456 654123
TIME	YYYY/MM/DD,12:00:00	Set date and time. E.g.: TIME 123456 2023/05/09,12:23:00
ΤΧΤΑ	Object name	Specify an object name. E.g.: TXTA 123456 House
RDR	PhoneNR#SMStext	Forward SMS messages to the specified number. The phone number must start with a "+" sign and the international country code. E.g.: RDR 123456 +37061234567#forwarded text
ASKI		Request SMS message about statuses of inputs IN. E.g.: ASKI 123456
ASKO		Request SMS message about statuses of outputs OUT. E.g.: ASKO 123456
ASKT		Send SMS message with values of all temperature sensors. E.g.: ASKT 123456
FRS		Resets the fire sensor's output, if the output OUT is assigned the function "Fire sensor reset". E.g.: FRS 123456
SETN	PhoneX=PhoneNR#Name#email	Add a phone number, username, e-mail and assign it to user "x". "x" is the phone number's line on the list. The phone number must start with a "+" symbol and international country code. The phone number and username must be separated by a "#" symbol.
		E.g.: SETN 123456 PHONE5=+37061234567#JOHN#jonas@trikdis.lt
	PhoneX=DEL	Delete user's phone number and name from the system. E.g.: SETN 123456 PHONE5=DEL
UUSD	*Uusd code#	Send a UUSD code to the operator. E.g.: UUSD 123456 *245#
CONNECT	Protegus=ON	Connect to Protegus cloud service. E.g.: CONNECT 123456 PROTEGUS=ON
	Protegus=OFF	Disconnect from Protegus cloud service. E.g.: CONNECT 123456 PROTEGUS=OFF
	Code=123456	Protegus cloud service code. E.g.: CONNECT 123456 CODE=123456
	IP=0.0.0.0:8000	Specify the main server's connection channel's TCP IP and Port. E.g.: CONNECT 123456 IP=0.0.0.0:8000
	IP=0	For turning off the main channel. E.g.: CONNECT 123456 IP=0
	ENC=123456	TRK encryption key. E.g.: CONNECT 123456 ENC=123456
	APN=Internet	APN name. E.g.: CONNECT 123456 APN=INTERNET
	USER=user	APN user. E.g.: CONNECT 123456 USER=User
	PSW=password	APN password. E.g.: CONNECT 123456 PSW=Password

5.3 Control PGM outputs using phone calls

Perform these actions if you want to control a PGM output remotely:

- The user must be allowed to control outputs OUT and the output OUT must have type "Remote control" assigned (using *TrikdisConfig*).
- Call the number of the *FIRECOM*'s SIM card. The *FIRECOM* will answer the call and you can dial commands using the phone's keypad (see the table).



Mobile phone keyboard command list

Keyboard buttons	Function	Description
[output no]*[state no]#	Control selected	Controls the specified PGM output.
	output OUT	State:
		[0] – output turned off;
		[1] – output turned on;
		[2] – turned off for pulse time;
		[3] – turned on for pulse time;
		(pulse time is specified in the <i>TrikdisConfig</i> software, "PGM" table)
		[*] – this symbol shows the end of the command.
		E.g. (turn on output 1): 1*1#
		E.g. (turn off output 1): 1*0#
		E.g. (turn on output 2 for " Pulse time" specified in the TrikdisConfig "PGM" table): 2*3#
#	Retry entering the command	If you made a mistake while entering the command, press "#" on the phone's keyboard and enter the command again.

6 Description of *TrikdisConfig* windows

6.1 Description of TrikdisConfig status bar

Once the *FIRECOM* is connected, *TrikdisConfig* will display information about the connected device in its status bar.

IMEI/Unique ID: 866069063929671				
Status: reading done	Device: FC_E170 SN:000045 BL: 1.02 FW:1.05 HW: State USB Role: Administrator			
Name	Description			
IMEI/Unique ID	Device's IMEI number			
Status	Operational state			
Device	Device type (must show <i>FC_xxxx</i>)			
SN	Device's serial number			
BL	Bootloader version			
FW	Device's firmware version			
HW	Device's hardware version			
State	Type of connection with the program (USB or remote)			
Role	Access level (shown after access code is approved)			

When the **Read [F4]** button is clicked, the program will read and show settings currently saved on the **FIRECOM**. With **TrikdisConfig**, set the required parameters using the following program window descriptions.



6.2 "System Options" window

"System general" tab

📫 TrikdisConfig 1.66.60 FC_E170	í.			- 🗆 X
🔁 Program 🥜 Action	🛄 About			
	Read [F4] Write [F5]	Open [F8] Save	: [F9]	Disconnect
System Options	System general Groups Access			
Reporting to CMS	General		SIM	
Users & Reporting	Object ID	0001	SIM card PIN	1234
Modules	Object name	Fire communicator	APN	
Zones	Test period 🗸	1 day(-s) 0 h		internet
PGM	Test period		Login	
Sensors	Start test at	✓ 13:30	Password	
System events	Clear Events after reset	✓	Locked ICCID	
Events Log	Text language	Baltic -		
Firmware	Suspend event reporting when 10	same events per 10 s		
	Restore event reporting after	1 min	Time settings	
			Module's time:	2024/12/02 08:52:11
Remember password	Call	2 time(s)	Read time	Set PC time
Show passwords	EOL Type	2k2+2k2+4k7 -	Time zone (hours)	+2 + 0 min
Default settings Restore	Communication path test	1 days -	Time set	GSM modem *
			Daylight saving time	300
IMEI/Unique ID: 866069063929671			Power failure delay, s	300
Status: reading done	Device: FC_E170 SN:000	0045 BL: 1.02 FV	V:1.05 HW:	State USB Role: Administrator

"General" settings group

- Object ID if events are going to be sent to the CMS, enter the Object ID (4-symbol hexadecimal number, 0-9, A-F. Do not use FFFE, FFFF Object ID) given by the CMS.
- **Object name** the name given to the object that will be used in SMS messages sent to the user.
- **Test period** when the box is ticked, "Test" messages will be sent every set period.
- Start test at tick the box and specify a time when test reports should be sent.
- Clear Events after reset all unsent event messages will be deleted upon reset.
- **Text language** set the preferred language and the specific symbols of that language will be used in SMS messages.
- You can **Suspend event reporting when ...** a number of **same events per ... s** happen.
- **Restore event reporting after ...** set the time after which suspending of event reporting will be cancelled. The time can be anywhere from 0 to 999 minutes.
- Call when an event occurs, the *FIRECOM* will call user(-s) as many times as is set. If the call is declined or answered, the *FIRECOM* will stop calling. Duration of a call is 20 seconds.
- **EOL Type** specify the nominals of the resistors connected to the sensors (EOL End Of Line. RT + R1 + R2. Resistor RT tamper; resistor R1 sensor No 1; resistor R2 sensor No 2).
- **Communication path test** specify the time interval after which the communicator will check the Backup communication channels by sending messages to the CMS. After sending the messages on the Backup communication channels, the communicator will return to the Primary communication channel.

"SIM" settings group

- Enter the "SIM card PIN" code.
- **APN** network service provider's mobile internet access point name. You must enter the **APN** if event messages will have to be sent to **Protegus2** app or to the CMS via GPRS.
- If required by the GPRS network service provider, enter the **APN** user name and password in the fields **Login** and **Password**.
- Locked ICCID enter the ICCID number of the SIM card if you want the communicator to work only with this SIM card.



"Time settings" settings group

You can set the time by clicking the "Set PC time" button. If "Disabled" is chosen in the "Time synchronization" field, the computer's time will be set for the communicator. If a modem or a server is chosen in the "Time synchronization" field, the communicator will synchronize its time according to that modem or server.

- **Time zone (hours)** specify your country's time zone. For example, if the communicator will be installed in Lithuania, enter +3.
- **Time set** specify a server to synchronize the **FIRECOM**'s internal clock with. Synchronization occurs after the communicator is powered on.
- **Daylight saving time** if you check the box, the communicator's internal clock will be automatically switched to summer or winter time.
- **Power failure delay** in the event of a power failure in the main power supply, a power failure notification will be sent after the specified time delay. When the supply voltage is restored, a notification of the supply voltage recovery will be sent after the specified time delay.

"Groups" tab

TrikdisConfig 1.66.60 FC_E170		-	×
😫 Program 🔗 Action	D About		
	Read [F4] Write [F5] Open [F8] Save [F9]	Disconnect	
System Options	System general Groups Access		
Reporting to CMS			
Users & Reporting	ID Group name		
Modules	1 Group 1		
Modules	2 Group 2		
Zones	3 Group 3		
PGM	4 Group 4		
Sensors	5 Group 5		
Sensors	6 Group 6		
System events	7 Group 7		
Events Log	8 Group 8		

Zones can be assigned to groups. The name of each group can be changed. Group names will be visible in *Protegus2*.

"Access" tab

📫 TrikdisConfig 1.66.60 FC_E170)				×
Program 🎤 Action	De About				
	Read [F4] Write [F5]	Open [Fi	8] Save [F9]	Disconnect	
System Options	System general Groups Acc	255			
Reporting to CMS					
Users & Reporting	Access codes		Installer permissions		
Modules	Administrator Code	123456	Object ID		
Zones	SMS password	123456	SIM card		
PGM	Installer Code	654321			
Sensors			Menu 'Users & Reporting'	(
System events				Editable *	
Events Log			Menu 'Modules'	Editable *	
Firmware			Menu 'Zones'	Editable -	
			Menu 'PGM'	Editable *	
Remember password			Menu 'Reporting to CMS'	Editable *	
Show passwords			Menu 'System events'	Editable -	

Settings group "Access codes"

- Administrator Code gives full access to configuration functions (default code 123456).
- **SMS password** password for remote control and programming via SMS messages (default code 123456).
- Installer Code gives limited access to changing the communicator's configuration (default code 654321).



Note: If the default *administrator code* is set (123456), after pressing **Read [F4]** the program will immediately show the current operational parameters of the device without asking for the code.

Settings group "Installer permissions"

The administrator can set which parameters can be changed by the installer.

6.3 "Reporting to CMS" window

"Reporting" tab

TrikdisConfig 1.66.60 FC_E170	ļ.						-		×
Program 🎤 Action	D About								
System Options	Read [F4] Write Reporting Settings	(F5)	Open (F8] Save [F9]		Disconnec	t		
Reporting to CMS	Primary channel			Parallel channel	-				
Users & Reporting	Communication type	Disabled	*	Communication type	TCP/IP	*			
Modules	Domain or IP			Domain or IP					
Zones	Port	0		Port	0				
PGM	Protocol	TRK	*	Protocol	TRK	*			
Sensors	Encryption Key	123456		Encryption Key	123456				
System events									
Events Log	Backup channel			Parallel backup channe				í.	
Firmware	Communication type	Disabled	×	Communication type	TCP/IP	*			
	Domain or IP			Domain or IP					
Remember password	Port	0		Port	0				
Remember password Show passwords	Protocol	TRK	*	Protocol	TRK	*			
Default settings Restore	Encryption Key	123456		Encryption Key	123456				

The communicator sends messages to the Central Monitoring Station using internet (IP).

You can assign a backup channel to the primary channel. It will be used when connection via the primary channel is lost.

Messages sent to the Central Monitoring Station are encoded and password protected. To receive messages and forward them to monitoring software, a TRIKDIS receiver is required:

• For IP messages – receiving program IPcom Windows/Linux, hardware IP/SMS receiver RL14 or multi-channel receiver RM14.

Settings group "Primary channel" ("Parallel channel")

- **Communication type** choose a method for connecting to the Central Monitoring Station's receiver.
- Domain or IP enter the receiver's domain or IP address.
- **Port** enter the receiver's network port number.
- Protocol select in which coding the events should be sent: TRK (to TRIKDIS receivers), DC-09_2007 or DC-09_2012 (to universal receivers. By selecting the SIA DC protocol, you can select the SIA-DCS messaging format.), TL150 (to SUR-GUARD receivers).
- Encryption Key 6-digit message encryption key. The communicator's encryption key must match the receiver's encryption key.

If parameters are set for the parallel channel, reports will be sent using both channels simultaneously. Both channels cannot be configured for the same receiver.

Settings group "Backup channel" ("Parallel backup channel")

Enable backup channel mode to allow messages to be sent using the backup channel if the connectivity is disrupted. Configure the backup channel using the same settings as described above.



"Settings" tab

TrikdisConfig 1.66.60 FC_E170					- 1	o x
Program Action	About					
System Options Reporting to CMS	Read [F4] Write [I Reporting Settings Settings	Open [F8	8] Save [F9]	Disconnect		
Users & Reporting Modules Zones	Return to Primary afte	5 60	min DHCP 5 Static IP	. 0.0.0		
PGM Sensors System events Events Log	Backup reporting after DNS1 DNS2 Object ID in SIA DC-09	3 8.8.8.8 1.1.1.1 0001	attempts Subnet mask Default gatewa Lan Trouble ind			
Firmware	SIA DC-09 receiver No. Local time in SIA	1 Line No				
Show passwords	Reporting mode	MS Protegus	SIM parameters			
Default settings Restore	Main type Backup type Backup type 2	(thernet (LAN) * Ethernet (L M * SIM Disabled * Disabled	Card Use dial and SN	on of the absence of a SIM IS when working over	>	
IMEI/Unique ID: 866069063929671	Return to main (both channel)	0 min	internet module Disable the use	e of SIM card mobile data		

Settings group "Settings"

- **Return to Primary after** time period after which the *FIRECOM* will attempt to regain connection with the "Primary channel".
- IP PING period sending period of internal PING signals for checking connectivity. These messages are sent only via IP channel. The receiver does not forward these signals to the monitoring software and thus does not overload the software. The monitoring software is only notified when the receiver does not receive a PING message from the device for a preset period of time.

By default, the receiver will send a "Connection lost" message to the monitoring software after a time period that is three times longer than the communicator's PING sending period. E.g. if the IP PING period is 3 minutes, the receiver will send a lost connection message if it does not receive a PING for 9 minutes.

PING messages also keep an active connection session between the device and the receiver. An active session is required to configure and control the communicator remotely. We recommend setting the PING period to be no longer than 5 minutes.

- Backup reporting after specify the number of unsuccessful attempts to send a message using the "Primary channel". If the message fails to send after the specified number of attempts, the device will transmit using the "Backup channel".
- DNS1, DNS2 (Domain Name System) server that specifies the domain IP address. It is used when a domain is specified
 in the connectivity channel's "Domain or IP" field (instead of an IP address). Default setting Google DNS server
 addresses.

The following settings are only shown when **DC-09_2007** or **DC-09_2012** protocol is chosen in the connectivity channel's **Protocol** field.

- **Object ID in SIA DC-09** <u>enter the object number. If you chose the DC-09 protocol, the object number entered in this</u> <u>field will be used</u>. You can enter the 3-16 symbol hexadecimal number given by the central monitoring station.
- SIA DC-09 receiver No. enter the receiver's number.
- SIA DC-09 line No. enter the line number in the receiver.
- Local time in SIA check the box so that the messages sent to the CMS indicate the time set in the module.

Settings group "Reporting mode"

For setting parameters on how the communicator will communicate with the CMS channels and with *Protegus2*. The connection types are specified in order. If the communicator fails to connect using the "**Main type**" connection, it switches to the "**Backup** type", and so on. If the backup connection type was successful in transmitting the message to the CMS, then the "**Return to** main" connection type will be attempted after the specified time interval.



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- Main type select a connection type (SIM, Ethernet (LAN)) with the CMS receiver and Protegus2.
- Backup type select a connection type (SIM, Ethernet (LAN)) with the CMS receiver and Protegus2.
- Backup type 2 select a connection type (SIM, Ethernet (LAN)) with the CMS receiver and Protegus2.
- **Return to main (both channel)** time period after which the *FIRECOM* will attempt to regain connection using the *primary* channel, if it was running a backup channel, min.

Settings group "LAN network parameters"

- **DHCP mode** mode for registering on the LAN network (manual or automatic). Tick the box and the *FIRECOM* communicator will automatically read the network settings (subnet mask, gateway) and will automatically be assigned an IP address (automatic registration mode).
- Static IP static IP address for manual registration mode.
- Subnet mask subnet mask for manual registration mode.
- **Default gateway** gateway for manual registration mode.
- LAN Trouble indication check the box so that the LED on the communicator lights up when the LAN communication link fails.

Settings group "SIM parameters"

- **Disable indication of the absence of a SIM card** when the box is ticked, the **FIRECOM** communicator will not display an indication that there is no SIM card inserted.
- Use dial and SMS when working over internet module ticking this box will enable controlling the communicator using
 phone calls and SMS messages. If the box is not ticked and there is a LAN network available, then SMS and phone calls
 are not used. If the box is not ticked and there is no LAN network, the *FIRECOM* can still be controlled using phone calls
 and SMS messages. The *FIRECOM* will send SMS messages to the user.
- **Disable the use of SIM card mobile data** ticking the box will disable the usage of the SIM card's mobile data. Data will only be sent using LAN. If a LAN network is temporarily unavailable, the *FIRECOM* will store data in memory. When the LAN network is restored, the *FIRECOM* will send data using LAN.

6.4 "Users & Reporting" window

"Users" tab

📫 TrikdisConfig 1.66.60 FC_E1	170			- 0
Program 🦻 Action	About			
	Read [F4] W	rite (F5)	Open [F8] Save [F9]	Disconnect
System Options	Users Protegus	SMS answer texts		
Reporting to CMS				
Users & Reporting	Users & Reporting	to User		
Modules	ID Name	Tel number	Email	PGM ACK FWD
Zones	1A Jonas	+370698547	jonas@trikdis.lt	
PGM	2A 3A			
Sensors	44			
System events	5A			
Events Log	6A			
	7A			
Firmware	8A			
	9			
	10			

Settings group "Users & Reporting to User"

- ID user's number on the list.
- Name user's name. These names will be used in event SMS messages and application.
- **Tel number** the user's phone number that will receive SMS messages. The numbers must start with the international country code. The first 8 telephone numbers will receive reports using messages and phone calls.
- E-mail enter the user's email, so that the user would be invited to *Protegus2* to control the system.
- **PGM** if the box is ticked, the user can remotely control outputs (calls, SMS).



- ACK if the box is ticked, the *FIRECOM* will send SMS messages with "SMS answer text" to the user after every received SMS command.
- **FWD** if the box is ticked, SMS messages received from non-system users will be forwarded to the user (e.g. SIM card account balance, random promotional messages, etc.).

"Protegus" tab

TrikdisConfig 1.66.60 FC_E17	0			o x
🗭 Program 🖉 Action	About			
	Read [F4] Write [F5]	Open [F8] Save [F9]	Disconnect	
System Options	Users Protegus SMS answer	texts		
Reporting to CMS				
Users & Reporting	Cloud application			
Modules	Enable cloud service			
Zones	Parallel reporting			
PGM	Cloud Access Code	123456		

Settings group "Cloud application"

- Enable cloud service enable *Protegus 2* service to allow the *FIRECOM* to exchange data with the *Protegus2* app and remotely configure the device using *TrikdisConfig*.
- Parallel reporting enable parallel message sending via the "Primary channel" and to Protegus2.
- Cloud access code 6-digit code for logging in to *Protegus2* (default code 123456).

"SMS answer texts" tab

TrikdisConfig 1.66.60 FC_E170				-	×
Program 🔑 Action	About				
	Read [F4] Write	e (F5)	Open [F8] Save [F9]	Disconnect	
System Options	Users Protegus St	AS answer texts			
Reporting to CMS	SMS answer texts				
Users & Reporting					
Modules	Answer	SMS text			
	Command done	Command done			
Zones	Wrong password	Wrong password			
PGM	Wrong data	Wrong data			
Sensors	Wrong command	Wrong command			
	Zone alarm	Alarm!!			
System events	Zone restore	Alarm restored			
Events Log	Output ON	OUT ON			
Firmware	Output OFF	OUT OFF			

Settings group "SMS answer texts"

The text for answers to commands sent using SMS messages can be customized in the column "SMS text". Also here are the texts of SMS messages that are used when activating inputs or outputs.



6.5 "Modules" window

"RS485 modules" tab

	Read [F4]	Write [F5]	pen [F8] Sa	ive [F9]	Disconnect	
System Options	RS485 m	odules				
Reporting to CMS		nodules				
Users & Reporting	ID	Module	Serial No.	Name	Firmware version	
Modules	1	Not available	v	Expander ID1		
Zones	2	Not available		Expander ID2		
PGM	3	iO-8 expander		Expander ID3		
	4	iO-MO expander		Expander ID4		
Sensors	5	iO-LORA expander		Expander ID5		
System events	6	iO8-LORA expander		Expander ID6		
Events Log	7	PB-LORA Panic button		Expander ID7		
	8	REL-LORA expander		Expander ID8		
Firmware		l interface		5.		-

Settings group "RS485 modules"

- **ID** module's number on the list.
- Module choose the module being used (modules *iO-8, iO-MO, iO-LORA, iO8-LORA, PB-LORA, REL-LORA*) from the module list.
- Serial No. mandatory 6-digit number that can be found on the module's casing and its packaging.
- Name you can give the module a name.
- Firmware version the firmware version will be shown when the FIRECOM finds the connected module.

TrikdisConfig 1.66.60	FC_E170							
🗭 Program 🛛 🎤 Act	ion 🔟	About						
	Re	ead [F4]	Write [F5]	Ope	en [F8] Sa	we [F9]	Disconnect	
System Options		R\$485 m	nodules					
Reporting to CMS			modules					
Users & Reporting		ID	Module		Serial No.	Name	Firmware version	_
Modules		1	Not available		Serial INO.	Expander ID1	nimware version	
Zones		2	Not available			Expander ID2		
		3	Not available			Expander ID3		
PGM		4	Not available			Expander ID4		
Sensors		5	Not available			Expander ID5		
System events		6	Not available			Expander ID6		
Events Log		7	Not available			Expander ID7		
Firmware		8	Not available			Expander ID8		
Filliwale		RS485 2	2 interface					
		Interf	ace type	Disabled	•			
Remember password				Disabled	·····			
Show passwords	_			ESPA 4.4.4	t			
Default settings Re	store			NSC solution				
				INIM smartline				
				C-TEC Cast ZF	P			
IMEI/Unique ID:				L				

Settings group "RS485 2 modules"

Fire panels (with **ESPA4.4.4** protocol, **NSC solution**, **INIM smartline**, **C-TEC Cast ZFP**) can be connected to the RS485 2 bus of the *FIRECOM* communicator. The connection diagram of the fire panel and settings is shown in paragraphs 3.5-3.8.



6.6 "Zones" window

"Zones settings" tab

Program 🎤 Action	Abo	ut									
	Read	[F4]	Write [F5]			Open	[F8]	Save [F	-9]	Disconnect	
System Options	Zone	es settings	SMS & Call reporting	Zor	ne's	codes					
Reporting to CMS											
Users & Reporting	Zone	Name	Input	Group	0	Туре	CMS	Prot.	Delay		
	1	Zone 1	FC 1 I/O	1	*	EOL	4	-	800		
Modules	2	Zone 2	FC 2 1/O	1	-	EOL	4	-	800		
Zones	3	Zone 3	FC 3 I/O	1	*	EOL	4	-	800		
PGM	4	Zone 4	FC 4 I/O	1	-	EOL	1	-	800		
	5	Zone 5	FC 5 I/O	1	*	EOL	~	-	800		
Sensors	6	Zone 6	FC 6 I/O	1	+	EOL	~	-	800		
System events	7	Zone 7	FC 7 1/O	1	+	EOL	~	-	800		
Events Log	8	Zone 8	FC 8 I/O	1	+	EOL	1	-	800		
Firmware	9	Zone 9	FC 9 I/O	1		EOL	1	1	800		
rinnware	10	Zone 10	FC 10 I/O	1	*	NC	1	-	800		
	11	Zone 11	Disable	1	+	NO	~	~	400		

- Zone No zone's number on the list.
- Name the zone can be given a name that will be used in SMS messages and application.
- Input choose which FIRECOM or expansion module input IN to assign to a zone.
- **Group** assigning a zone to a group.
- Type choose the type of circuit connected to the zone input IN from a list: NC normally closed; NO normally open; EOL – with an end of line resistor; EOL_T – with an end of line resistor and tamper monitoring; ATZ – two zone normally closed circuit with end of line resistors, without tamper monitoring function (to use this type, choose the second ATZ zone in the input list); ATZ_T – two zone normally closed circuit with end of line resistors, with tamper monitoring function (to use this type, choose the second ATZ zone in the input list).
- CMS if the box is ticked, messages about zone events will be sent to the CMS (central monitoring station).
- **Prot**. if the box is ticked, notifications about zone events will be sent to **Protegus2** app.
- Delay IN input zone reaction time in milliseconds.

"SMS & Call reporting" tab

TrikdisConfig 1.66.60 FC_E17			×
Program 🎤 Action	D About		
	Read [F4] Write [F5] Open [F8] Save [F9]	Disconnect	
System Options	Zones settings SMS & Call reporting Zone's codes		
Reporting to CMS			
Users & Reporting	User 1		
Modules	Zn SMS Call		
Zones	1 Event		
PGM	1 Restore		
Sensors	2 Event		
System events	a 2 Restore		

This window will only be displayed if at least one user phone number has been added to the "Users & Reporting" window.

- **Zn** zone number with an event identification word. Can be "Event" or "Restore".
- User SMS/Call choose how to inform users about every zone event via SMS message and/or call.



"Zone's codes" tab

📫 TrikdisConfig 1.66.60 FC_E170	D												-		×
🔁 Program 🥜 Action	About														
	Read [F4] Write [F5]		0	pen [F8	8]	Save	[F9]				D	lisconnec	ct		
System Options	Zones settings SMS & Ca	Il reporting	Zone's cod	les											
Reporting to CMS				_				1						1	
Users & Reporting]	Zone al	arm reportin	ng code				Zone re	store repo	orting co	de				
	Zone	Enable	E/R	CID	SIA	Group	Zone	Enable	E/R	CID	SIA	Group	Zone		
Modules	Zone 1	-	E	110	TA	1	001	~	R	110	TR	1	001	-	
Zones	Zone 2	 Image: A start of the start of	E	110	FA	1	002	~	R	110	FH	1	002		
PGM	Zone 3	~	E	110	FA	1	003	~	R	110	FH	1	003		
1 900	Zene A		-	110	EA	4	004	10	0	110	TH	4	004		

When the zone is triggered, the communicator will send an event message. The input is assigned a Contact ID (SIA) code, which will be sent to CMS and *Protegus2*.

- Enable checked event fields where messages will be sent to CMS and Protegus2.
- E/R choose what type of event will be sent when input is triggered "Event" (E) or "Restore" (R).
- **CID** enter the event code or leave the default value.
- SIA event SIA codes.
- **Group** enter the group number that will be sent when an event occurs.
- **Zone** enter the zone number that will be sent when an event occurs.

6.7 "PGM" window

"Outputs" tab

TrikdisConfig 1.66.60 FC_E170								0	
Program 🌮 Action	About								
	Read [F4]	Write	[F5] Open [F8]	Save [F9]		Disconnec	t		
System Options	Outputs	Set Action	Scheduler SMS & Call reporting						
Reporting to CMS		Detrebilitititititititi							
Users & Reporting	PGM No	Name	PGM output	Output definition	Pulse Time, s	CMS	Prot.		
	1	PGM 1	RELAY 1	Remote Control	20				
Modules	2	PGM 2	RELAY 2	Remote Control	20				
Zones	3	PGM 3	RELAY 3	Remote Cont *	20				
PGM	4	PGM 4	Disable	Remote Control	20				
	5	PGM 5	Disable	Fire Sensor Reset	20				
Sensors	6	PGM 6	Disable	CMS fail	20				
System events	7	PGM 7	Disable	ACK received	20				
Events Log	8	PGM 8	Disable	Main power lost	20				
	9	PGM 9	Disable	Battery failure	20				
Firmware	10	PGM 10	Disable	Zone alarm	20				
	11	PGM 11	Disable	Zone tamper	20				
	12	PGM 12	Disable	Panel lost	20				
Remember password	13	PGM 13	Disable	Remote Control	20				

- **PGM No** PGM output's number on the list.
- Name enter the name of the PGM output.
- **PGM output** assign outputs OUT of the *FIRECOM* or of an external device to a PGM.
- **Output definition** select operational mode of an output OUT.
- Pulse time, s assign a desired OUT turn on duration from 0 to 9999 seconds.
- CMS if the box is ticked, messages about chosen events will be sent to CMS.
- **Prot**. if the box is ticked, output event notifications will be sent to **Protegus2** app.



"Set Action" tab

TrikdisConfig 1.66.60 FC_E170)								-		
🛱 Program 🔗 Action	- 00 /	bout									
	Re	ad [F	4] Write [F5]	Ope	n [F8] Save	e [F9]		Disconne	ct		
System Options			Carlos Cara	Chic & Call							
Reporting to CMS		utput	s Set Action Sched	uler SMS & Call report	ung						
Users & Reporting	ID	Enabl	e PGM No.	Action	Pulse Time, s	Factor	Factor No.	Start when	Set va	alue	7
	1		N/A	PGM OFF	0	SMS received	N/A	N/A	SMS	text	
Modules	2		N/A	PGM OFF	0	SMS received	N/A	N/A	SMS	text	
Zones	3		N/A	PGM OFF	0	SMS received	N/A	N/A	SMS	text	
PGM	4		N/A	PGM OFF	0	SMS received	N/A	N/A	SMS	text	1
	5		N/A	PGM OFF	0	SMS received	N/A	N/A	SMS	text	1
Sensors	6		NI/A	DGM OFF	0	SMS received	NUZA	NIZA	SMS	taut.	-

- **ID** output's number on the list.
- Enable enables the PGM operation algorithm.
- PGM No. select the desired PGM output OUT that will be controlled after the event described in columns "Factor", "Factor No.", "Start when", "Set value" occurs.
- Action:
 - **PGM OFF** state of output OUT "Off".
 - **PGM ON** state of output OUT "On".
 - **Pulse OFF** initial state of output OUT "On". After the command the OUT state will become "Off" for the duration of the "**Pulse time**", and later it will automatically return to the initial "On" state.
 - **Pulse ON** initial state of output OUT "Off". After the command the OUT state will become "On" for the duration of the "**Pulse time**", and later it will automatically return to the initial "Off" state.
- Pulse time, s you can set the pulse time anywhere from 0 to 9999 seconds.
- Factor/Factor No. choose what event (Zone, SMS received, Zone tamper) will turn on the output OUT.
- Start when you can set an additional condition when to turn on the output OUT depending on the "Factor" event.
- Set value depending on the condition chosen in the "Factor" column a value (text of received SMS message) can be specified. If this value is identified, the action (chosen in the "Action" column) will be performed. The text of the SMS message can be separated by using % symbols. % symbols are used for separating the keyword that will change the state of a PGM output from the entire received SMS message.

%.....% - part of the received SMS message text must match with the text entered between % symbols (e.g. %hoUSe%. The text in an SMS message must include the text "hoUSe". Example of an SMS message: VacationhoUSe25864).

.....% - the beginning of the received SMS message must match the text entered until the % symbol (e.g. **hoUSe%**. The SMS message must start with the text **"hoUSe"**. Example of an SMS message: **hoUSeddss**).

%.... – the ending of the received SMS message must match with the text entered after the % symbol. (e.g. **%hoUSe**. The SMS message must end with the text **"hoUSe"**. Example of an SMS message: **1144hoUSe**).

The SMS message text is case-sensitive.

"Scheduler" tab

📫 TrikdisConfig 1.66.60 FC_E170)																_	×
🔂 Program 🔑 Action	🛄 About																	
	Read [F4]	Write	e [F5]			Op	en [F	[8]	Save [F	9]						Disco	nnect	
System Options	Outputs	Set Action	Schedule	SMS	& Cal	ll repo	ortina	7										
Reporting to CMS				-														
Users & Reporting]	Start time							Stop time									
Modules	ID Ena	bl Time	Mon Tue	Wed	Thu	Fri	Sat	Sun	Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
Zones	1	00:00							00:00									
	2	00:00							00:00									
PGM	3	00:00							00:00									
Sensors		00:00							00:00									

- ID schedule's number on the list.
- **Enable** enable the schedule.
- Start time set the time when OUT will be turned on (schedule start time).



- Stop time set the time when OUT will be turned off (schedule end time).
 - Mon Sun you can mark the days of the week when OUT will have to be turned on/off.

"SMS & Call reporting" tab

TrikdisConfig 1.66.60 FC_E170			×
😧 Program 🖉 Action	D About		
	Read [F4] Write [F5] Open [F8] Save [F9]	Disconnect	
System Options	Outputs Set Action Scheduler SMS & Call reporting		
Reporting to CMS			
Users & Reporting	PGM SMS Call		
Modules			
Zones	1 Event		
PGM	1 Restore		
Sensors	2 Event		
System events			
Events Log	3 Event 3 Restore		

This tab will only be displayed if there is at least one user phone number in the "Users & Reporting" window. These settings can only be made for the first 8 users.

- **PGM** the number of output OUT and turn on/off event type ("Event" output OUT turn on event and "Restore" OUT turn off event).
- User SMS/Call choose which users to inform via SMS message and/or call when an output OUT is turned on/off.

6.8 "Sensors" windows

Program Program	Rea	out d [F4] Write [F5]	Open	[F8] Save [F9]			Disconne	ct	
System Options	ID	Module type	Serial No.	Sensor name	Max	Min	High	Low	Delay, min
Reporting to CMS	1	Dicable Y	00000000000000000000	Sensor 1	30	2		-	0
Users & Reporting	2	Disable	000000000000000000000000000000000000000	Sensor 2	30	2	1	~	0
	3	Onboard PCB temperature	000000000000000000000000000000000000000	Sensor 3	30	2	~	~	0
Modules	4	In1 Voltage	000000000000000000000000000000000000000	Sensor 4	30	2	~	~	0
Zones	5	Dallas 1W sensor	000000000000000000000000000000000000000	Sensor 5	30	2	-	-	0
PGM	6	Disable	0000000000000000000	Sensor 6	30	2	~	-	0
Sensors	7	Disable	000000000000000000000000000000000000000	Sensor 7	30	2	~	~	0
	8	Disable	000000000000000000000000000000000000000	Sensor 8	30	2	-	-	0
System events									
Events Log									

- ID temperature sensor's number on the list.
- Module type choose a temperature sensor to assign to the ID.
- Serial No. serial number of the temperature sensor read by the communicator.
- Sensor name give the temperature sensor a name.
- Max when the temperature is higher than this setting, an event report will be generated. For an event message to be generated, the "High" box must be ticked.
- Min when the temperature is lower than this setting, an event report will be generated. For an event message to be generated, the "Low" box must be ticked.
- Sensor type choose the type of the connected temperature sensor (Dallas 1Wire up to 8 temperature sensors of this type can be connected. If Dallas sensors are chosen, they will be linked automatically; Humidity & Temperature one AM2301 temperature and humidity sensor can be connected. If the Humidity & Temperature sensor will be used, it must be manually assigned in the "Module type" column).



6.9 "System events" window

"Events" tab

TrikdisConfig 1.66.60 FC_E17	0								×
🗘 Program 🛛 🎤 Action	D Ab	out							
	Read	d [F4] Write [F5]		Open [F	8]	Save [F9]		Disconnect	
System Options	Eve	ents SMS & Call reporting							
Reporting to CMS	1	into a contreporting							
Users & Reporting	ID	Event name	Enable	CMS	Prot.	CID Code	SMS event text	SMS restore text	
	1	Low Battery	1	1	~	302	Battery low	Battery restore	
Modules	2	Periodic test	1	~	1	602	Periodic test		
Zones	3	Battery missing	~	4	-	311	Battery missing	Battery restore	
PGM	4	RS485 fault	~	1	~	333	RS485 device fault	RS485 device restore	
	5	High temperature	1	4	1	158	High value	Value restored	
Sensors	6	Low temperature	1	~	~	159	Low value	Value restored	
System events	7	Temp. sensor lost	~	~	~	380	Sensor fault	Sensor restore	

- ID event's number on the list.
- Event name event name.
- Enable enable event recognition.
- CMS messages about chosen events will be sent to CMS.
- **Prot**. notifications about chosen events will be sent to **Protegus 2** app.
- **CID Code** event's Contact ID code.
- SMS event text text of the event's SMS message.
- SMS restore text text of the event's restore SMS message.

"SMS & Call reporting" tab

TrikdisConfig 1.66.60 FC_E170						-	×
Program Action	About						
	Read [F4]	Write [F5]		Oper	n [F8] Save [F9]	Disconnect	
System Options	Events SMS &	Call reporting					
Reporting to CMS					1		
Users & Reporting	la l		User 1	-			
Modules		t SMS text ck/uncheck all rows:	SMS	Call			
Zones		ery low					
PGM		ery restore					
Sensors	2 Event Peri	odic test					
	3 Event Batt	ery missing					
System events	3 Restore Batt	tery restore					

This tab will only be displayed if there is at least one user phone number in the "Users & Reporting" window

- **ID** number and identification word (*Event, Restore*) of the event.
- Event SMS text text that will be used in event SMS messages.
- User SMS/Call choose the ways users will be informed about each event SMS message and/or phone call.



6.10 "Events Log" window

Read [F4] Write [F5] Open [F8] Save [F9] Disconnect System Options Read Log Clear Log	
Event No. Time CID Event definition Modules 2024-12-02 09:38:27 312:00:000 Aux fault 3 2024-12-02 09:38:20 302:00:000 Low Battery	
Event No. Time CID Event definition Modules 2024-12-02 09:38:27 312:00:000 Aux fault 3 2024-12-02 09:38:20 302:00:000 Low Battery	
Modules 4 2024-12-02 09:38:27 312:00:000 Aux fault 3 2024-12-02 09:38:20 302:00:000 Low Battery	
4 2024-12-02 09:38:27 312:00:000 Aux fault 3 2024-12-02 09:38:20 302:00:000 Low Battery	
3 2024-12-02 09:38:20 302:00:000 Low Battery	
Zones 2 2024-12-02 09:38:17 305:00:003 System start	
PGM 1 2024-12-02 08:35:47 301:00:000 Main power failure	
Sensors	
System events	

- Read Log button for reading the event log from the device's memory.
- **Clear Log** button for clearing the event log entries from the device's memory.
- In the table, you can find the "Event No.", "Time", "CID" code, "Event definition". The events log can show up to 1000 events stored in the *FIRECOM*'s memory.

6.11 Restore default settings

To restore the communicator's default settings, click the TrikdisConfig button "Restore".

Default settings Restore							
IMEI/Unique ID: 866069063929671							
Status: reading done	Device: FC_E170	SN: 000045	BL: 1.02	FW:1.05	HW:	State USB	Role: Administrator

7 Setting parameters remotely

IMPORTANT: Remote configuration will only work when the *FIRECOM*:

- 1. Has an inserted and activated SIM card with the PIN code entered or disabled.
- 2. Has *Protegus* service enabled. See 6.4 "Users & Reporting" window.
- 3. Has the power switched on ("STA" LED must be blink green);
- 4. Is connected to a network (the "SIM" LED must be green solid and blink yellow; or/and "ETH" LED is green when connected to LAN network).

If "SIM" is yellow solid or "DAT" is yellow solid, the device cannot connect to GSM and/or Protegus2.

- 1. On your computer, launch the configuration software *TrikdisConfig*.
- 2. In the "**Remote access**" window, enter the communicator's "**Unique ID**" number. You can find this number on the back of the device and on the device's packaging.



🕴 TrikdisConfig	1.66.60			-		×
Program	Action	E Help				
		Read [F4] Write [F5] Open [F8] Save [F9]				
		USB configuration				
		Configuration program • OK				
			J			
	Remo	te access				
	The most		-	-		
		Unique ID System Name				
	Choo	sse module Configure Co	ntrol			
					0	

- 3. (Optional) Enter a desired name for the communicator in the "System Name" field.
- 4. Click "Configure".
- 5. In the window that opens, click **Read [F4]**. If prompted, enter the administrator or installer code.
- 6. When you are finished setting the desired parameters, click **Write [F5]**. If you are done working with *TrikdisConfig*, click "Disconnect".

8 Communicator testing

When configuration and installation are complete, perform a system check:

- 1. To test an input of the communicator, enable it. Check if the events were received by the Central Monitoring Station (CMS) and/or *Protegus2* application.
- 2. To test the communicator's outputs, turn them on remotely and check their operation. Ensure that the events were received by the Central Monitoring Station (CMS) and/or *Protegus2* application.
- 3. Perform a fire alarm test to see if the CMS receives events correctly.

9 Updating firmware

Note: After connecting the communicator to *TrikdisConfig*, the program will automatically offer to update the firmware if any updates are available. Internet connection is needed for this feature. Antivirus software, firewall or strict internet access settings can block the automatic update feature. In this case, you will have to reconfigure your antivirus software.

The communicator's firmware can also be updated or changed manually. All prior settings of the communicator remain after an update. If the firmware is installed manually, it can be changed to a newer or an older version. Perform these steps:

- 1. Launch *TrikdisConfig*.
- 2. Connect the communicator to the computer using a USB Type-C cable or connect to the communicator remotely.
- 3. If a newer version of firmware is available, the program will automatically offer to install it.
- 4. Open the TrikdisConfig window "Firmware".



Program 🥜 Action	About		
	Read [F4] Write [F5]	Open [F8] Save [F9]	Disconnect
System Options	Firmware		
Reporting to CMS			
Isers & Reporting			
Aodules	Open firmware file		
ones			Open firmware Update [F12]
GM			
ensors			
ystem events			
vents Log			
irmware			
	\equiv		

- 5. Click the button "**Open firmware**" and choose the required firmware file.
- 6. Click the Update [F12] button.
- 7. Wait for the update to finish.