GSM communicator *FireCom*

(v.1.61)

User Manual and Installation Guide

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Purpose of the document

This document introduces the features of GSM communicator *GF10* ***FireCom***, describes its operation, parameter setting procedure and usage peculiarities.

Contents

Safety requirements

Be sure to familiarise yourself with this manual before using communicator *FireCom*.
Communicator *FireCom* may only be installed and maintained by trained specialists who possess knowledge about operation of low voltage and signal transmission devices and their safety requirements.
Communicator *FireCom* must be set up in a limited access area and in a safe distance from sensitive electronic equipment. Communicator is not resistant to mechanical effects, humidity and aggressive chemical environment.

1. GSM communicator *FireCom*

GSM communicator *GF10* ***FireCom*** is used to transmit signals from UniPOS fire security control panel to the monitoring station via GSM communication channels.

FireCom – name of device

GF10 – type of device

Communicator is assembled in the metal case with extra space reserved for the standby power supply battery.

Main features:

- works with UniPOS control panels IFS 7002, FS 5100, FS 5200;
- messages are transmitted to the monitoring station via GPRS and/or voice channel;
- messages transmitted via GPRS are sent in TCP/UDP protocols and match protocol *Contact ID* codes;
- messages transmitted via the audio channel may be sent to the PSTN receiver in DTMF tones in SIA standard DC-05 protocol *Contact ID* codes;
- messages are sent via indicated communication channel or, if communication fails – via the backup channel;
- ability to send SMS messages to the mobile phones of up to 4 users;
- automatically rechargeable standby battery;
- operation is displayed by three external light indicators;
- four EOL type inputs;
- operation parameters and firmware version may be upgraded remotely;
- operation parameters are set using *G10config*;

1.1. Operation description

Communicator ***FireCom*** is connected to UniPOS fire security control panel serial output port. Communicator receives serial port signals and generates corresponding *Contact ID* messages.

Communicator ***FireCom*** may be used with other fire security panels by connecting the communicator inputs IN1 – IN4 with security control panel relay outputs. Communicator generates messages about input IN1 … IN4 external circuit status changes.

Communicator monitors power supply voltage changes and when the changes exceed the norm sends corresponding messages and signals using light indicators.

Communicator periodically sends communication test messages TEST which can be observed in the monitoring program.

Messages can be sent to the monitoring station and user mobile phones. Two technologies can be used for sending to the monitoring station: GPRS and/or by sending DTMF tones via the voice channel. Users may only be sent SMS text messages.

Received or generated message is sent through the main set channel. If a message reception confirmation is received from the monitoring station, communicator can send (if set during programming) SMS text messages to users. If reception confirmation is not received on time, message transmission is repeated several times and, in case of recurring failure, it is sent via standby (if set during programming) channel.

Communicator may perform continuous control of communication with the receiving equipment. Communication test signals *PING* are sent periodically to which the receiver sends reception confirmations. In case of main channel communication failure (the reception confirmation is not received), standby communication channel is used and messages are immediately transmitted via the standby channel. Communicator periodically attempts to restore the main communication channel according to the parameters set when programming.

Messages can also be sent via SMS text messages to four user mobile phones. An understandable SMS text message is ascribed to every fire security control panel message. SMS messages can be distributed to separate users depending on the type of the sent message.

Communicator output status changes when facing communication or operation problems. 12 V terminal which maintains the voltage level even when the main power supply fails is designed to feed the power load on the outputs.

Communicator is powered by the fire security control panel power supply unit. In case of lost power supply voltage from the main fire security control panel, communicator is powered by the standby battery. Battery is charged and sustained in the *hot* reserve mode when the fire security control panel power supply voltage is used.

To receive communicator messages the monitoring station uses reception equipment with installed IPcom software (computer with installed IPcom_Win, IP receiver RL10, server with installed IPcom_Linux)

Messages sent in DTMF signals are received by PSTN telephone receiver which receives and processes messages sent in standard SIA DC-05 protocol.

1.2. Technical parameters

GSM modem frequencies	850 / 900 / 1800 / 1900 MHz
GSM communication technologies	TCP/IP or UDP/IP via GPRS voice channel in DTMF tones
Message transmission protocols	TRK_TCP or TRK_UDP SIA DC-05 Contact ID
Message encryption	Yes, a six-symbol encryption key is used
Inputs	two inputs TXD, RXD communication via serial output port of the control panel four inputs IN1 – IN4, input type EOL=10 kΩ
Outputs	Four outputs OUT1 – OUT4, OC type, commutate voltage of up to 50 V and direct current of up to 100 mA
Memory	up to 60 messages
Parameters setting	via USB port remotely using IPcom
Main power supply	direct 18 V ... 36 VDC, from fire control panel power supply unit
User current	60 ÷ 100 mA (on standby), iki 600 mA (while sending data)
Standby power supply voltage	10 ÷ 13 V, 12V/7A/h capacity battery
Workplace	air temperature from -10°C to +50°C, relative humidity up to 80 % when +20°C
Measures	165 x 225 x 90 mm

1.3. Equipment

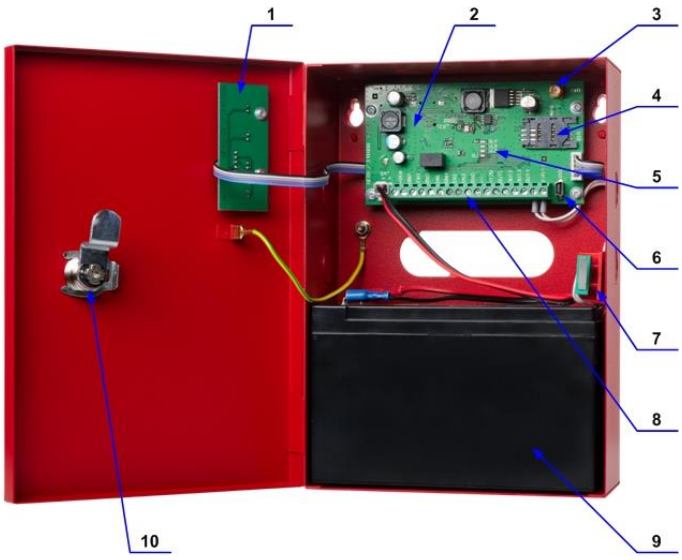
Communicator ***FireCom***	1 pc.
Mounting sleeve and a screw	4 sets
Resistor 10 kΩ	4 pcs.

Note:

Additional items in order to ensure operation of the communicator are necessary:

- *GSM operator SIM card;*
- *GSM antenna with SMA male connector;*
- *Standby power supply 12V/7A/h capacity battery;*

1.4. Overall view of communicator FireCom and layout of its elements



1. External indication board
2. Communicator motherboard
3. GSM antenna connector
4. SIM card slot
5. Internal light indicators VL1 ... VL4
6. USB connection for programming
7. Door status button
8. Terminal block
9. Standby power supply battery
10. Lock with key

1.5. Construction

Electronic elements of the communicator ***FireCom*** are mounted in the printed circuit boards which are situated in the metal case. Three communication and operation light indicators are located in the external indication board (1). Power supply unit, processor, GSM modem, GSM antenna connector (3), SIM card slot (4), internal light indicators (5), USB connection for programming (6) and terminal block (8) are located in the motherboard (2).

Door status button (7) is situated in the case. Its contact status changes one case doors are opened/closed. Case with reserved space for standby battery (9) may be locked (10).

1.6. Purpose of contacts

Contact	*Purpose*
ERTH GND	Grounding terminal
+VIN	24 V power supply terminal
GND	General terminal
TXD	Transmitted signal terminal
RXD	Received signal terminal
IN1	1st input terminal (type EOL=10 kΩ)
GND	General terminal
IN2	2nd input terminal (type EOL=10 kΩ)
IN3	3rd input terminal (type EOL=10 kΩ)
GND	General terminal
IN4	4th input terminal (type EOL=10 kΩ)
OUT1	1st output terminal (type OC), connection failure with the fire control panel
OUT2	2nd output terminal (type OC), connection failure with the receiving equipment
OUT3	3rd output terminal (type OC), failure
OUT4	4th output terminal (type OC), operation opposite to OUT2
TAMPER	Two terminals for an anti-tamper key

1.7. Light indication

1) On the doors of the case

Light indication	*Status*	*Meaning*
 ***Trouble*** denotes communicator operation errors	OFF	No operation failure
	1 red flash	Low standby battery voltage (below 11,5 V)
	2 red flashes	SIM card error (no or wrong SIM card)
	3 red flashes	SIM card PIN code error (incorrect PIN code)
	4 red flashes	Programming failure (IP address and port not entered)
	5 red flashes	Registration in GSM network failure
	6 red flashes	Registration in GPRS network failure
	7 red flashes	Connection to the receiver failure (no connection longer than 300 seconds)
	8 red flashes	Connection to the control panel failure (no connection longer than 30 seconds)
	9 red flashes	No 28 V power supply from the fire control panel
Power denotes power supply status	OFF	No power supply
	Green light	Power supply ON
Network denotes the connection status with the GSM network	OFF	Standby mode
	Yellow flashing	Data exchange with the fire control panel or monitoring station receiver is in progress

2) In the motherboard

Light indication	*Status*	*Meaning*
VL4 – VL2 denotes the GSM field strength	One light	GSM field strength is low (satisfactory connection)
	Two lights	GSM field strength is safisfactory (good connection)
	Three lights	GSM field strength is high (very good connection)

VL1 denotes operation of the microprocessor	Flashes periodically	Processor in operation, no failures, In other cases, - operation failures ir malfunction.

2. Communicator installation

2.1. Installation procedures

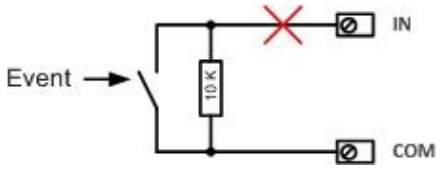
Action	*Notes*
1. Use four screws to attach the communicator in the space provided.	Location of the mounting holes is displayed on the packing box and in the Annex 4. Drill 8 mm diameter holes in the wall and insert plastic mounting sleeves.
2. Connect communicator to the fire control panel according to the diagrams presented.	Follow information in Annex **Connection diagrams**.
3. Set communicator operation parameters.	Refer to information laid out in section **Setting operation parameters**. For example, to receive all messages via one channel, e.g. via GPRS, it is enough to: – see *G10config* *Main* window. Enter communicator (object) identification number into the field ***Object ID*** and *PING* signal and *Test* message sending periods into fields ***GPRS PING time*** and ***Test time***; – see *G10config* *GPRS* window. Select the GPRS transmission channel in the list ***GPRS***, enter static IP address of the monitoring panel and the port number in the fields ***IP address*** and ***Port***, enter the access point name (APN) of the GPRS network in which the SIM card that is inserted into the communicator operates in the field ***APN*** and a six-digit encryption password that must match the IP receiver message decryption password in the field ***Encryption key***. **Note:** Do not delete ***DNS*** manufacturer values.
4. Insert an active SIM card.	Refer to your mobile network operator with regard to the SIM card. It is not recommended to use pre-paid SIM cards.
5. Screw the GSM antenna.	
6. Turn on the power supply.	Power supply from the fire control panel is turned on first. Standby battery is connected afterwards.
7. Check light indicators to evaluate whether the strength of the GSM connection is sufficient.	Two light indicators VL2, VL3 located in the motherboard must light. Pick another spot for the antenna or choose another antenna type if GSM level is not sufficient.
8. Check whether communicator is sending messages according to the parameters set during the configuration.	A message must be sent and received at the indicated IP address. Check whether all SMS messages are received if messages are sent to the mobile phone.

2.2. *Connecting communicator to the fire control panel*

Communicator ***FireCom*** is connected to UniPOS fire control panel serial output RS232 or relay outputs of other control panels.

Communicator terminals RXD, TXD, GND are used for connection to UniPOS control panels.

Inputs IN1 ... IN4 are used for connection to other control panels.



Input type EOL, resistance at the end of the line (EOL = 10kΩ)

Messages are generate once external circuit status changes:

- short-circuit in the external input circuit– ***Event***;
- resistance in the short-circuited circuit restored to 10 kΩ – ***Event restore***;
- broken external input circuit broke– ***Sensor Tamper***;
- resistance in the broken circuit restored to 10 kΩ – ***Sensor Tamper Restore***.

3. Setting operation parameters

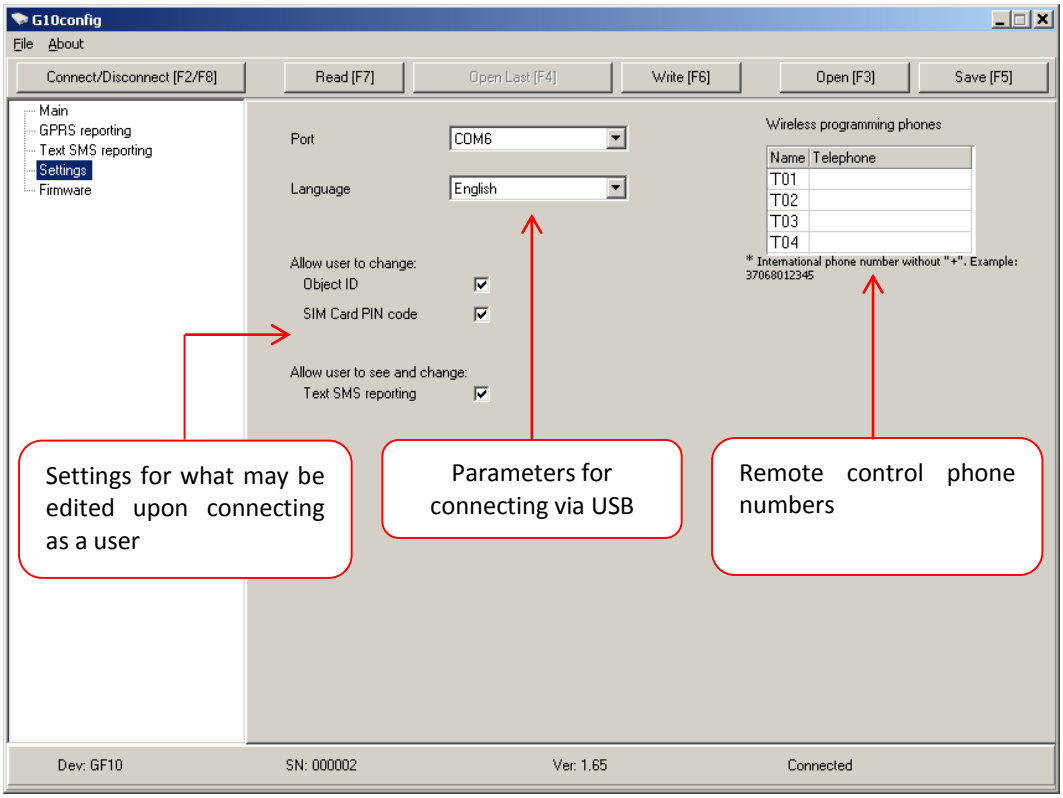
Operation parameters of communicator ***FireCom*** are set using software *G10config* (v1.9.0. or newer). Software may be found on http://www.trikdis.lt/.

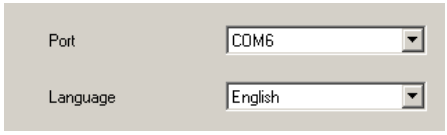
1. Connect the communicator ***FireCom*** to a computer using a USB cable.

Note:

*A USB driver must be installed on the computer. Download OS MS Windows USB driver installation file USB_COM.inf from the website www.trikdis.lt. A USB driver installation window **Found New Hardware Wizard** should appear on OS MS Windows during the first cable connection between the communicator and the computer. Select **Yes, this time only** when prompted and click **Next**. A new window **Please choose your search and installation options** will open. Click **Browse** and select the location where USB_COM.inf is saved. To finish the USB driver installation follow remaining installation wizard commands.*

2. Run *G10config*.
3. Select ***Connect*** in the menu.





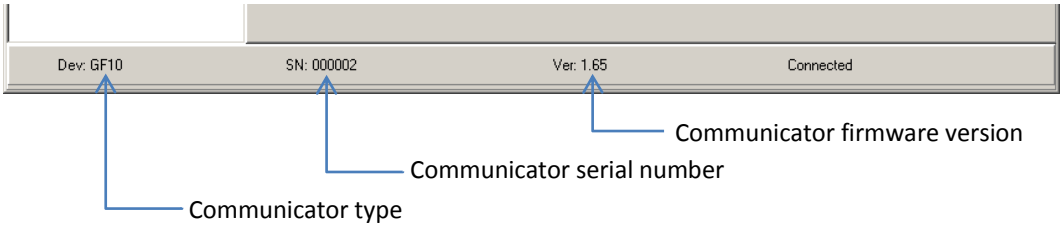
Select the USB port to which the communicator is connected in the list **Port**.
Note: the particular USB port to which the communicator is connected appears only when the two are connected.
Select the desired working language in the list ***Language***.

4. Click ***Connect [F2/F8]***.

Enter the access code (default – 1234) when prompted and click ***OK***.

Click ***Remember*** if you want the software to remember your access code. The prompt window will not appear next time.

Indicator ***Power*** should flash green and yellow in turns when communicator *FireCom* is connected to a computer.
Connection status *Connected* should be displayed in the *G10config* status bar alongside the information about the connected communicator:



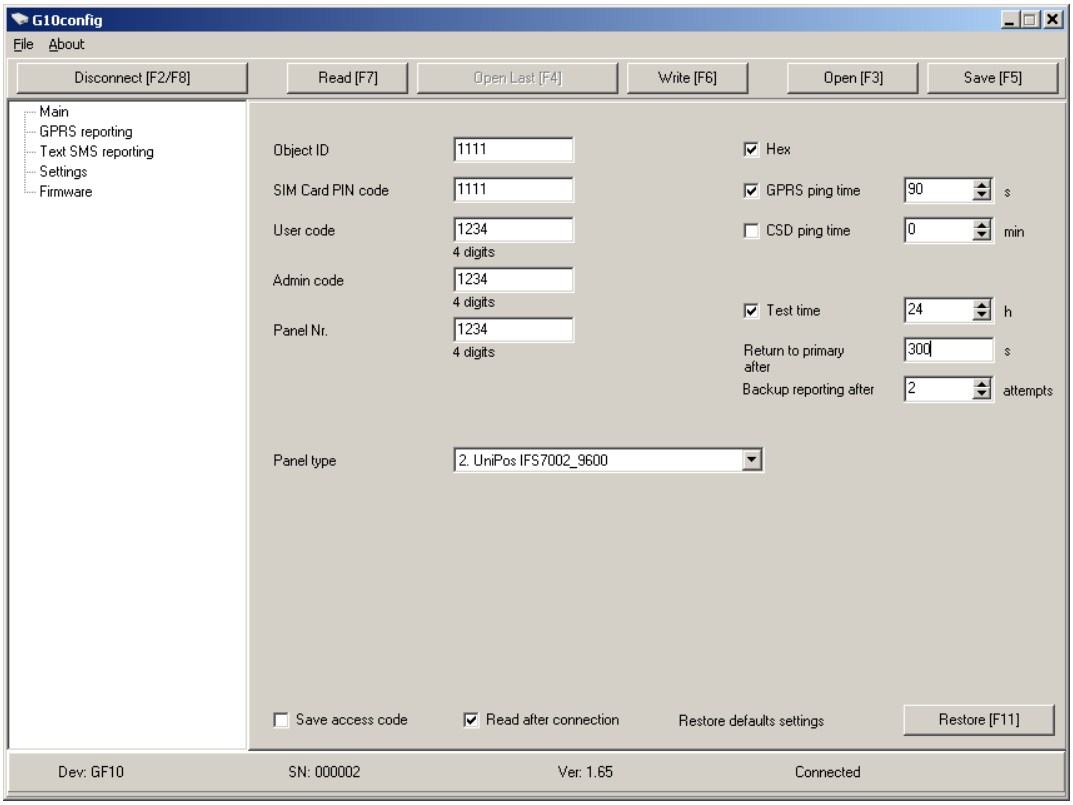
5. Click ***Read [F7]***.

Enter the access code (default – 1234) when prompted and click ***OK***.

Click ***Remember*** if you want the software to remember your access code. The prompt window will not appear next time.

6. Select desired communicator operation parameters:

*Select **Main** in the menu and set desired parameters:*



Object ID Field to enter the four-digit identification number;

Hex Tick if hexadecimal numbers will be used for entering the object ID;

SIM card PIN code Field for SIM card PIN code. Leave the field empty if PIN code request is disabled;

User code Field to enter the user code. Only those operation parameters that are allowed to be edited by the administrator can be edited when logging in with the user code;

Admin code Field to enter the admin code. All operation parameters can be edited when logging in with the admin code. Also, possibilities for editing the operation parameters for those logging in with the user code may be limited;

Control panel number Field for four-digit identification number of the control panel that the communicator is connected to;

Works with control panel.. Select the control panel type to which the communicator is connected. Select INPUT ONLY if communicator is connected to relay outputs of the control panel or other equipment;

GPRS PING time Communicator will send GPRS communication with the receiver test signals *PING* in a specified frequency;

CSD PING time Communicator will send communication test signals *PING* to PSTN receiver in a specified frequency;

Test time Communicator will send connection testing messages *TEST* to the monitoring panel in a specified frequency;

Return to primary after

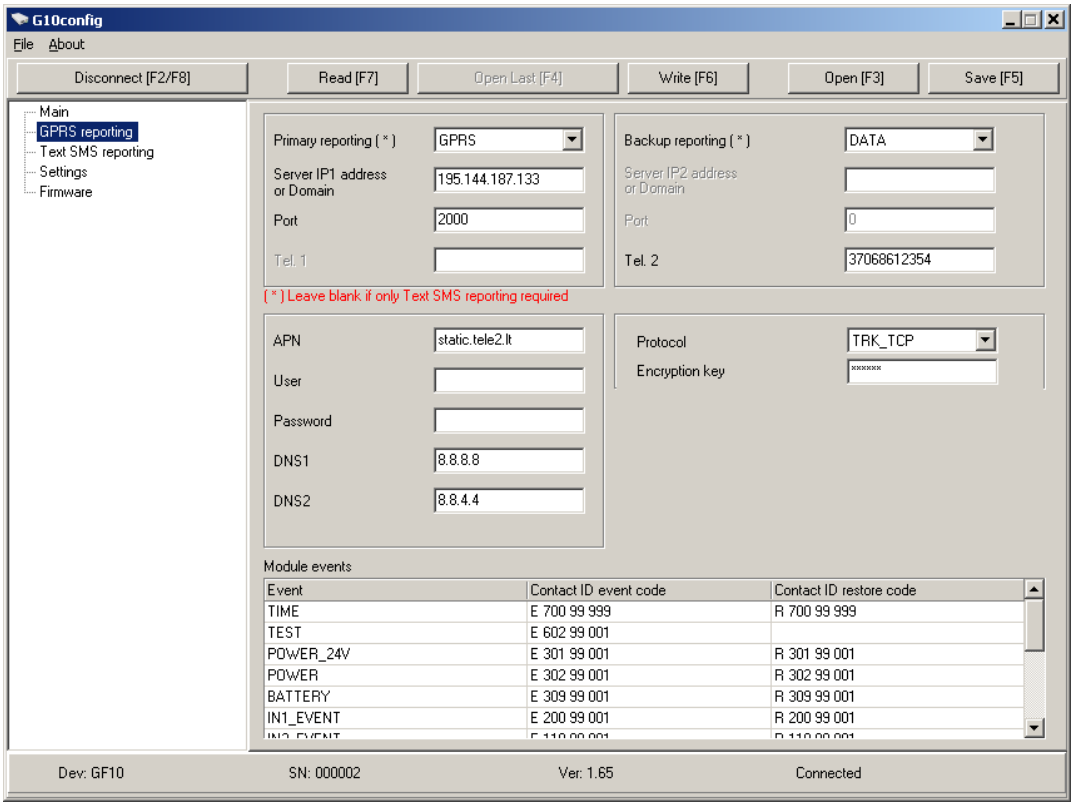
Used if both communication channels to the monitoring station are selected – main and backup. Enter the time interval value after which the communicator will try to restore the communication via the main channel;

Backup reporting after ... attempts

Used if both communication channels to the monitoring station are selected – main and backup. Enter the number of times communicator will try to send a message via the main communication channel and upon failure will start sending messages using the backup communication channel;

Tick ***Save access code*** to save the entered password. Program will not require it the next time.
Tick ***Read after connection*** and software will automatically read data after connection.
Click ***Restore [F11]*** to restore default communication settings. When prompted, click ***Yes***.

*Enter parameters for connection to the monitoring panel in **GPRS reporting**:*



Primary reporting Select the main connection channel via which communicator will send messages to the monitoring panel:
Tick ***GPRS*** and enter the IP address and the port number of the monitoring panel in the fields ***Server IP1 address or Domain*** and ***Port***. DNS server address must be entered alongside if domain is entered.
Tick ***DATA*** and enter the PSTN receiver phone number in the field ***Tel.1*** in order to send Contact ID messages in DTMF tones. Phone number is entered with the international country code, but without the + sign.

Backup reporting Select the backup connection channel via which communicator will send messages if connection via the main one is lost:
Tick ***GPRS*** and enter the second IP address and the port number of the monitoring panel in the fields ***Server IP1 address or Domain*** and ***Port***.
Tick ***DATA*** and enter the PSTN receiver phone number in the field ***Tel. 2*** in order to send Contact ID messages in DTMF tones. Phone number is entered with the international country code, but without the + sign.

Protocol Select the message encryption protocol from the list;

Encryption key Field to enter the six-digit encryption password. Password must match the decryption password entered in the reception software *IPcom*;

IP addresses, port and phone number, encryption protocol and key, other parameters may only be submitted by the panel manager

APN GSM network operator access point name*;*

User Login for connection to the GSM network;

Password Password for connection to the GSM network;

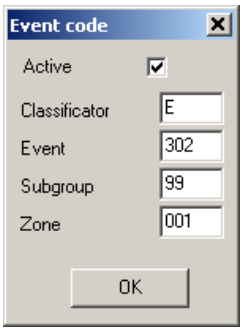
DNS1, DNS2 Server names of the domains;

APN, user name, password and DNS values must be submitted by the GSM connection operator the SIM card was purchased from.

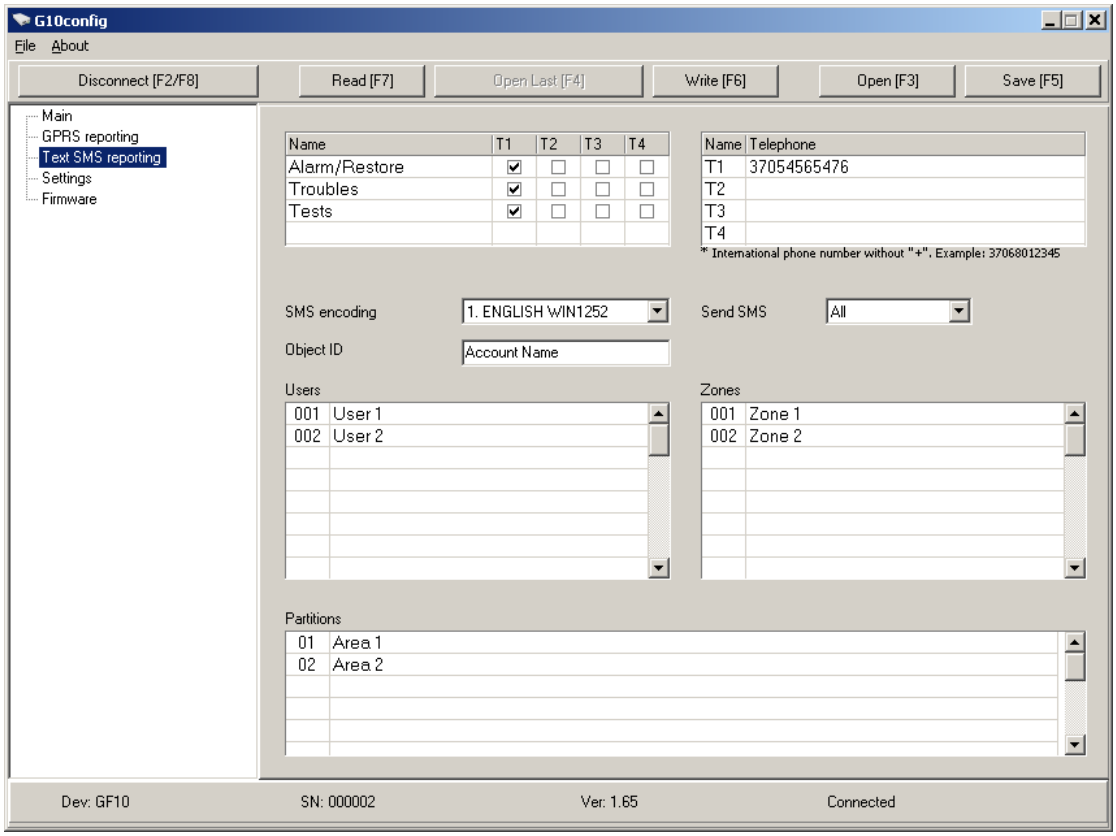
Communicator events Communicator events after which messages are sent are listed in the table below.

Event	*„E" event description*	*„R" event description*	*Recommended CID code*
TIME	Internal clock of the communicator is set	Internal clock of the communicator is not set	E/R 700 99 000
TEST	Periodic communicator TEST message		E 602 99 000
POWER_24V	Power supply lower than 20 V	Power supply over 26 V	E/R 301 99 000
POWER	Power supply lower than 11.5 V	Power supply restored to 12.5 V	E/R 302 99 000
BATTERY	Battery resistance lower than 10 V	Battery resistance over 11 V	E/R 309 99 000
IN1_EVENT	Short-circuit in input *IN1* circuit	Input *IN1* circuit after the short-circuit is restored	E/R 200 99 001
IN2_EVENT	Short-circuit in input *IN2* circuit	Input *IN2* circuit after the short-circuit is restored	E/R 110 99 002
IN3_EVENT	Short-circuit in input *IN3* circuit	Input *IN3* circuit after the short-circuit is restored	E/R 110 99 003
IN4_EVENT	Short-circuit in input *IN4* circuit	Input *IN4* circuit after the short-circuit is restored	E/R 300 99 004
PANEL	Communication failure with the fire control panel	Communication with the fire control panel is restored	E/R 350 99 000
GENERAL_TAMPER	Case doors are open	Case doors are closed	E/R 316 99 000
IN1_TAMPER	Input *IN1* circuit is broken	Input *IN1* circuit is restored after being broke	E/R 144 99 001
IN2_TAMPER	Input *IN2* circuit is broken	Input *IN2* circuit is restored after being broke	E/R 144 99 002
IN3_TAMPER	Input *IN3* circuit is broken	Input *IN3* circuit is restored after being broke	E/R 144 99 003
IN4_TAMPER	Input *IN4* circuit is broken	Input *IN4* circuit is restored after being broke	E/R 144 99 004

Left-click twice on ***Contact ID event code*** or ***Contact ID restore code*** to edit an event code and enter new values in the new window. Click ***OK*** when prompted.



*Enter parameters necessary for sending SMS messages to the users in the menu **Text SMS reporting**:*



Telephone Enter user phone numbers ***T1, T2, T3, T4*** to which SMS messages will be sent. Phone numbers are entered with the international country code, but without the + sign;

Name Select which users will be sent messages after a different type of an event occurs:
Select ***Alarm/Restore*** to send SMS messages about zone violations/restorations (event codes E/R1XX , see Annex 1);
Select ***Troubles*** to send SMS messages about system operation problems (event codes E/R3XX, see Annex 1);
Select ***Tests*** to send communication test messages *Test* via SMS messages (event codes E6XX, see Annex 1);

SMS encoding Select the desired SMS encoding from the list;

Object ID Enter the object name which will be included in the SMS message text;

Send SMS Select which messages listed in the table *Name* will be sent to users via SMS messages:
Select ***All*** to send messages about all events.
Select ***Only described*** to send messages about events that are listed in tables *Users, Zones, Partitions.* These tables should only be used in exceptional cases.
Entries in the table ***Users*** are linked with the user codes that are used to arm/disarm the alarm system. Name of the user will be included in the SMS message, if the user arms/disarms the alarm system;
Entries in the table ***Zones*** are linked with the protected zone events. Zone name specified in the table will be included in the SMS message, when zone is breached/restored.
Entries in the table ***Partitions*** are linked with the partitions of the security system into several independently protected areas. Area name indicated in the table will be included in the SMS message;

7. Click **Save [F6]** to move values entered in *G10config* fields to the communicator.
8. Click ***Disconnect [F8]*** and unplug the USB cable.

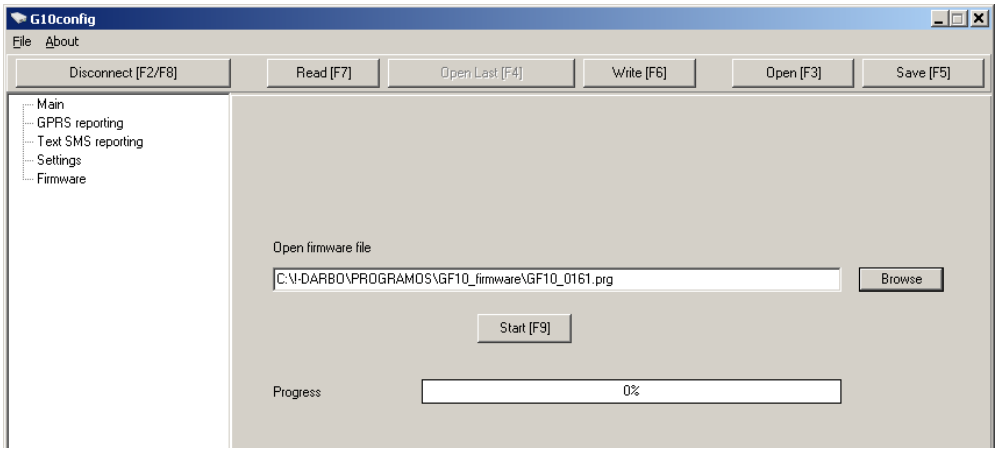
Save [F5] Click to save entered values on the computer. A file with an extension *.gst* will be created and may be use in the future as a template to configure other modules

Open [F3] Click to open a saved file with *.gst* extension.

4. Upgrading communication firmware

Previously purchased communicator ***FireCom*** firmware may be upgraded when the manufacturer updates communicator with new operation features:

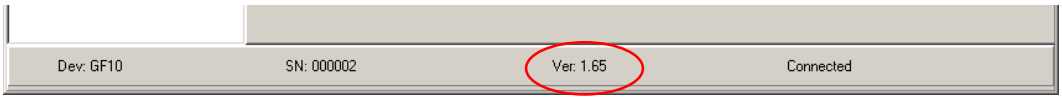
1. Download the newest *GF10_vx.xx.prg* file from http://www.trikdis.lt/
2. Connect the communicator to the computer, open *G10config* and select ***Firmware*** in the menu.
3. Click ***Browse*** and select file *GF10_vx.xx.prg* saved on the computer in the field *Open firmware file.*
4. Click ***Start [F9].*** Click ***Disconnect [F8]*** once the progress bar fills up. Disconnect the USB cable.



5. Plug in the USB cable back.

Note: *Firmware upgrade process lasts between 60 to 90 seconds!*

Wait until indicator ***Data*** stops flashing green and click ***Connect [F2]*** and ***Read [F7]***. New communicator firmware version will be displayed in the software *G10config* status bar.

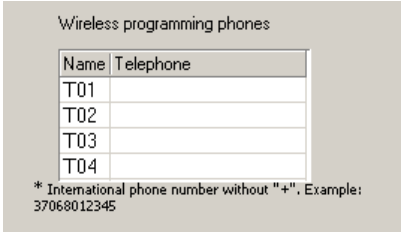


5. Setting operation parameters remotely

Remote setting of communicator ***FireCom*** operation parameters is possible only when messages are received by the software *IPcom*. Software *IPcom* may be found on www.trikdis.lt .

5.1. Remote communicator programming

Send an SMS message to the GSM number of the SIM card inserted into the communicator ***FireCom*** in order to set operation parameters of the communicator remotely. Upon receiving an SMS message, the communicator ***FireCom*** will initiate a continuous GPRS connection session with software *IPcom*.



If the phone number of the authorised person was entered in the field *Wireless programming phones* previously under the menu branch For c***onnecting*** during the setting of operation parameters, the communicator will initiate a GPRS connection session only upon receiving an SMS message from that specific phone number.

SMS message text ("_"refers to a gap between words in an SMS message):

CONNECT_9874_SERVER=100.100.100.100_PORT=1000_APN=tiekėjas_USR=vardas_PSW=psw_ENCR=enc

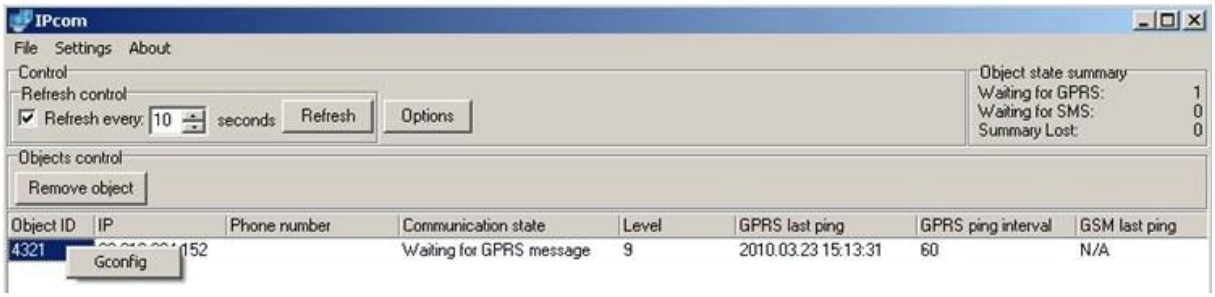
where:

CONNECT	start command;
9874	Enter the four-digit access code (default - 1234);
SERVER=100.100.100.100	SERVER= + enter the IP address of the computer with installed software *IPcom*;
PORT=1000	PORT= + enter the serial port number of the program *IPcom*;
APN=access point name	APN= + enter the access point name (APN) of the GPRS network in which the

	SIM card inserted into the communicator operates. Enter ..._*APN=*_... if the network provider does not require an access point name;
USR=user name	USR= + enter the login user name of the GPRS network in which the SIM card inserted into the communicator operates. Enter ..._*USR=*_... if the network provider does not require an access point name;
PSW=password	PSW= + enter the login password of the GPRS network in which the SIM card inserted into the communicator operates. Enter ..._*PSW=*_... if the network provider does not require an access point name;
ENCR=enc	ENCR= + enter the six-digit message decryption password (default – 123456).

5.2. Actions after sending an SMS message

1. Open *IPcom* and right-click on the identification number [Object ID] of the communicator whose parameters you wish to modify.



2. Left-click on the *G10config* button appearing next to the identification number.
3. Left-click on ***Connect*** and ***Read*** in the *G10config* taskbar. GPRS connection status ***Connected*** will be displayed in the program status bar if GPRS connection session with module ***FireCom*** is open.
4. Operation parameters of communicator ***FireCom*** are set in the same way as connecting it using the USB cable (see section **Setting operation parameters**).
5. Click ***Write*** to enter the parameters to the communicator.
6. Click ***Disconnect*** to end the GPRS connection session.

5.3. Upgrading operation firmware

1. Send an SMS message to the GSM number of the SIM card inserted into communicator ***FireCom*** (for details see section 5.1. Remote communicator programming).
2. Open *IPcom* and right-click on the identification number [Object ID] of the communicator whose parameters you wish to modify.
3. Left-click on ***Connect*** and ***Read*** in the *G10config* taskbar. GPRS connection status ***Connected*** will be displayed in the program status bar if GPRS connection session with module *FireCom* is open.
4. Select program *G10config* catalogue *Firmware*. Click ***Browse*** and select file *G10F_vx.xx.prg* previously downloaded from website www.trikdis.lt and saved on the computer.
5. Click ***Start*** to begin the upgrade process whose progress will be displayed in the progress bar. Click ***Disconnect*** once the progress bar fills up. Module will upgrade and restart automatically (it will take about 5 minutes). After the reboot, log in and click ***Read*** to read the data. New communicator *FireCom* firmware version bill be displayed in *G10config* status bar.
6. Read section **Setting operation parameters** if you wish to view or edit operation parameters.
7. Click ***Disconnect*** to end the GPRS connection session.

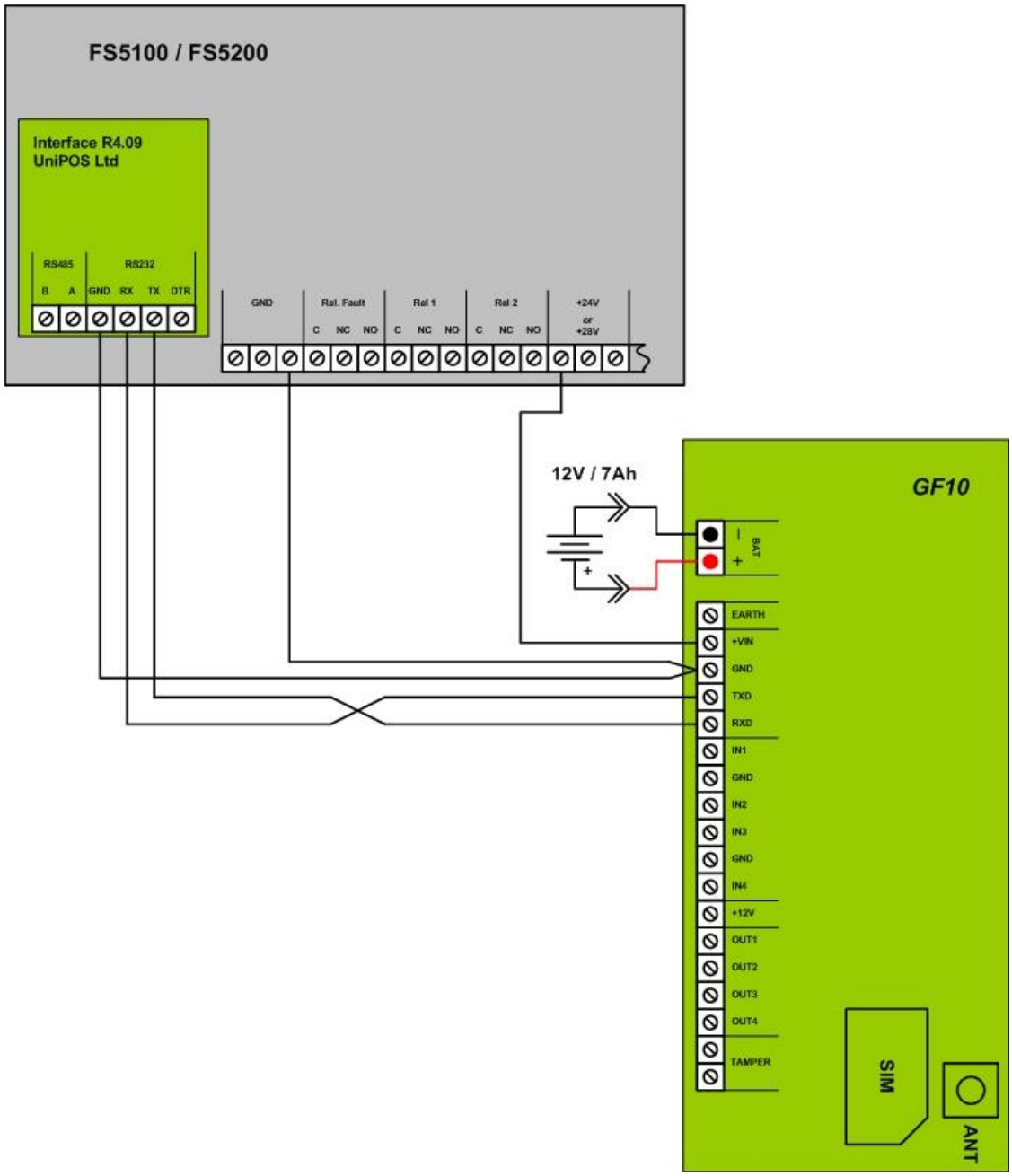
6. Warranty and limitation of liability

Manufacturer grants warranty for the product installed and operated according to the manual for 24 months.

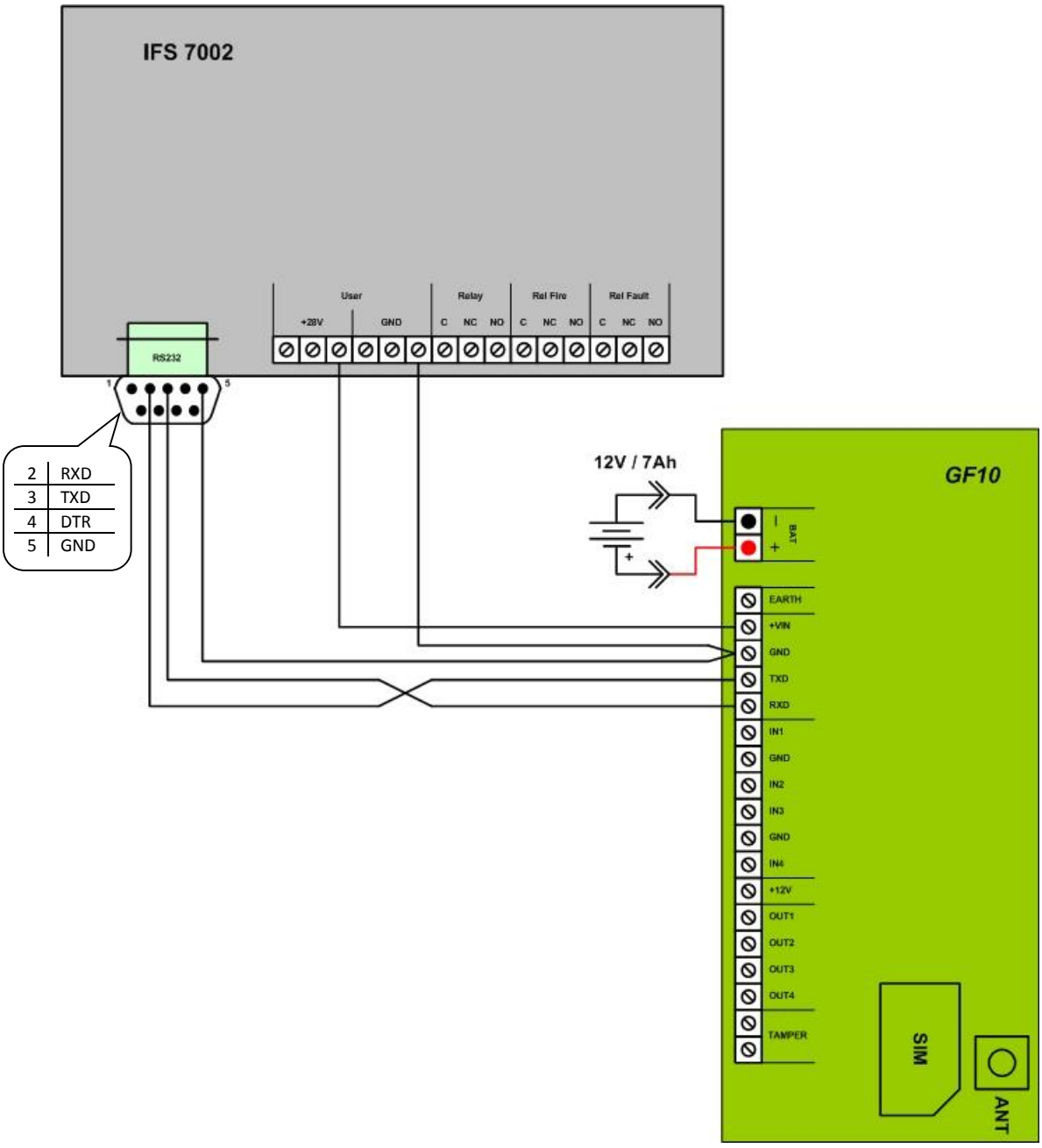
- By purchasing the Product, the Buyer agrees that the Product is a security system element informing about the status of the system. Set up Product does not decrease the possibility of the robbery, fire, burglary or any other breach of the premises.
- TRIKDIS is not liable in cases of the robbery, fire and other breaches of the premises of the Buyer and/or the Product user and shall not reimburse the resulting property or non-pecuniary damages.
- By purchasing the product, the Buyer agrees that TRIKDIS sold a Product that satisfies the requirements of the Buyer.
- TRIKDIS does not guarantee that the Product will operate in the indicated way if the Product is not used in accordance to its purpose and not set up in accordance to the User manual.
- TRIKDIS is not liable for the Product operation malfunctions, if they have occurred due to the loss of the GSM/GPRS/Internet connection or due to a failure in the networks of the connection service provider.
- TRIKDIS does not influence and is not liable for the pricing and costs of the GSM/GPRS/Internet connection operator services.
- TRIKDIS is not liable for the interruption of GSM/GPRS/Internet connection services to the Product buyer and/or the Product user and the property and non-pecuniary damages incurred thereof.
- TRIKDIS is not liable for the interruption in the electricity supply to the Product buyer and/or the Product user and the property and non-pecuniary damages incurred thereof.
- TRIKDIS is not liable if the Product Buyer and/or the Product user has not updated their product firmware version on time.
- There may be some technical inaccuracies, grammatical and typographical errors in the product manual. TRIKDIS reserves the right to edit, add and/or change the information in the manual.

7. Annex 1. Communicator *FireCom* connection diagrams

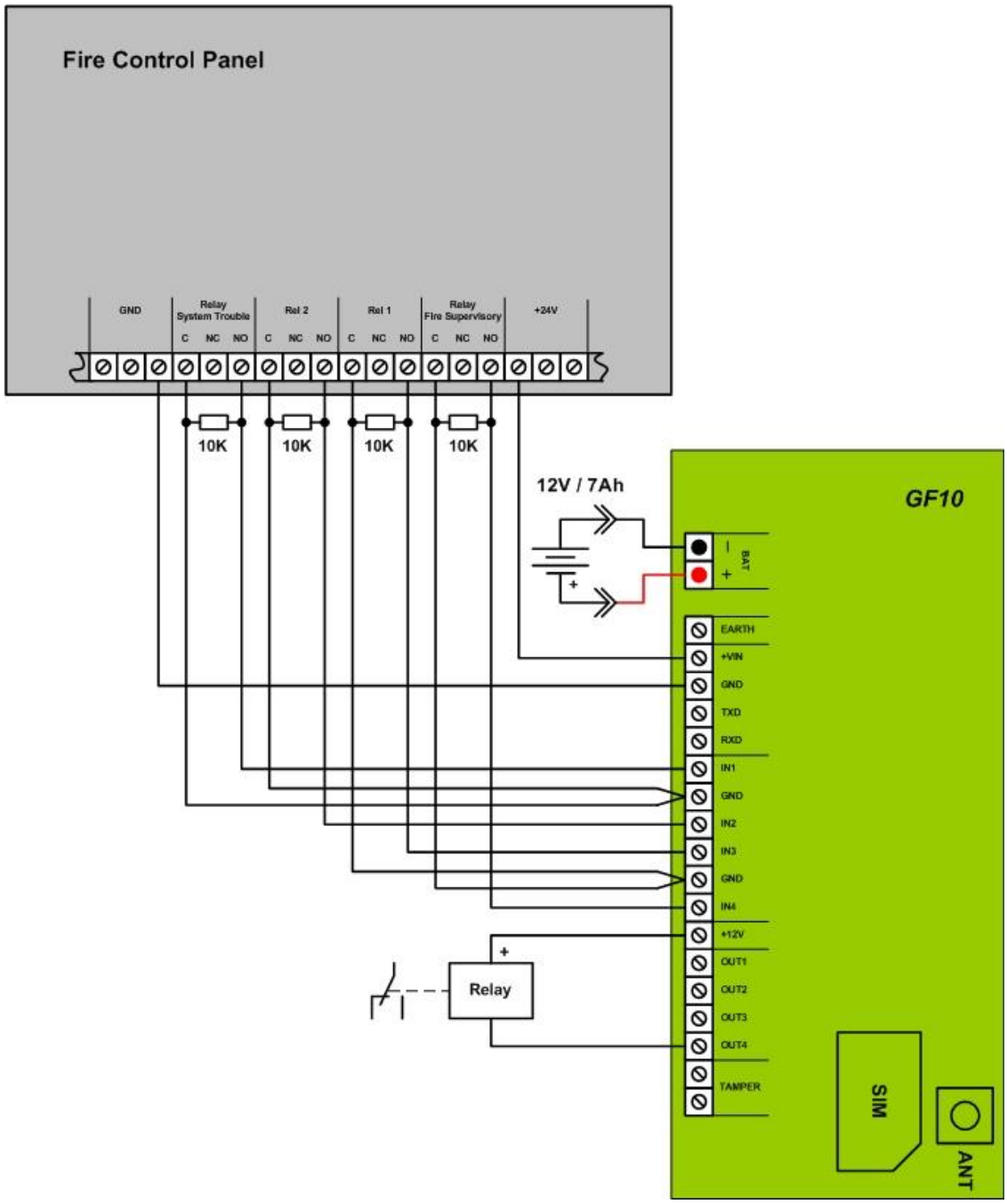
7.1. Diagram for connecting to UniPOS fire control panels FS5100 and FS5200

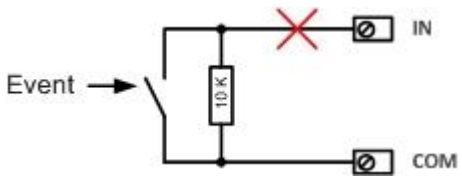


7.2. Diagram for connecting to UniPOS fire control panel IFS 7002



7.3. Diagram for connecting to relay outputs of fire control panels





Input type EOL, resistance at the end of the line (EOL = 10kΩ)

Messages are generate once external circuit status changes:

- short-circuit in the external input circuit– ***Event***;
- resistance in the short-circuited circuit restored to 10 kΩ – ***Event restore***;
- broken external input circuit broke– ***Sensor Tamper***;
- resistance in the broken circuit restored to 10 kΩ – ***Sensor Tamper Restore***.

8. Annex 2. Communicator *FireCom* fire control panel messages for the monitoring station

Messages generated by control panel IFS 7002 (as in control panel description) and corresponding Contact ID codes:

Event	Parameter					Sent Contact ID code			
	InOut	Zone	Loop	Addr	AddrL	Event	Code	Area	Zone
Reset Fire						R	110	00	000
Fire			x	x		E	110	Loop	Addr
Fire1			x	x		E	110	Loop	Addr
Fire2			x			E	110	Loop	000
Fire2A			x	x		E	110	Loop	Addr
PreFire	x	x	x	x		E/R	118	Loop	Addr
Activated Input	x		x	x	x	E/R	130	Loop	AddrL
Test Zone	x	x				E/R	601	00	Zone
Disable Zone	x	x				E/R	571	00	Zone
Disable Device	x	x	x	x		E/R	570	Loop	Zone
Disable Mtr. Output	x			x		E/R	570	00	Addr
Disable Addr Output	x		x	x		E/R	570	Loop	Addr
Disable Addr Input/Output	x		x	x		E/R	570	Loop	Addr
Disable Addr Input	x		x	x		E/R	570	Loop	Addr
Open Loop	x		x			E/R	331	Lopp	000
Open Power Loop	x					E/R	331	00	000
Short Loop	x		x			E/R	332	Lopp	000
Short Power Loop	x					E/R	332	00	000
Fault Zone	x	x				E/R	200	00	Zone
Removed Device	x	x	x	x		E/R	532	Loop	Zone
Fault device	x	x	x	x		E/R	300	Loop	Zone
Dirty Sensor		x	x	x		E	392	Loop	Zone
CRC Error	x	x	x	x		E/R	350	Loop	Zone
Not Initialized Device	x	x	x	x		E/R	330	Loop	Zone
New Device ID	x	x	x	x		E/R	330	Loop	Zone
New Device Type	x	x	x	x		E/R	330	Loop	Zone
New Device Class	x	x	x	x		E/R	330	Loop	Zone
Device Swap		x	x	x		E/R	330	Loop	Zone
Insolator	x	x	x	x		E/R	333	Loop	Zone
Power Loop Insolator	x		x	x		E/R	333	Loop	000
Short Addr Output						E	320	00	000
Open Addr Output						E	320	00	000
Short Mtr. Output	x			x		E/R	320	00	Addr
Open Mtr. Output	x			x		E/R	320	00	Addr
Fault GND	x					E/R	310	00	000
Fault Main Power	x					E/R	301	00	000
Fault Battery	x					E/R	309	00	000
Fault Auxiliary Power	x					E/R	301	00	000
Fault Internal Power	x					E/R	314	00	000
Battery Low	x	x	x	x		E/R	338	Loop	Zone
Fault Module 0	x					E/R	333	00	000
Fault Module 1	x					E/R	333	00	001
Fault Module 2	x					E/R	333	00	002
Fault Module 3	x					E/R	333	00	003
EEPROM Fault	x					E/R	304	00	000
Loop Reset	x		x			E/R	300	Loop	000
Watchdog Reset						E	305	00	000
Reset Panel						E	313	00	000

Manual Set						E	627	00	000
Remote Set						E	627	00	000
Deact. Input						E	300	00	000
More Device Loop	x		x			E/R	370	Loop	000
Undefined Addr Loop	x		x			E/R	370	Loop	000
CAN Fault						E	350	00	000
LAN Error	x			x		E/R	350	00	Addr
None Battery	x	x	x	x		E/R	311	Loop	Zone

Messages generated by control panel FS 5200 (as in control panel description) and corresponding Contact ID codes:

Event	Parameter	Sent Contact ID code			
		Event	Code	Area	Zone
New Configuration		E	306	00	000
EEPROM Error	Main processor 1	E	304	00	000
Programm code Error	Main processor 1	E	333	00	000
EEPROM CRC Error	Main processor 1	E	350	00	000
Programm code Error	Main processor 2	E/R	333	00	000
Programm code Error	Main processor 3	E/R	333	00	000
EEPROM CRC Error	Main processor 2	E/R	350	00	000
EEPROM CRC Error	Main processor 3	E/R	350	00	000
Clock fault		E/R	626	00	000
Event in line	Exit from Fire condition	R	330	00	Line
	Entering Fire condition 1	E	110	00	Line
	Entering Fire condition 2	E	110	00	Line
	Entering Pre-fire condition	E	118	00	Line
	Entering Removed fire detector	E	532	00	Line
	Entering Interruption	E	331	00	Line
	Entering Short circuit or Overl.	E	332	00	Line
	Exit Fire condition	R	110	00	Line
Event in monitored Output	Exit fault condition	R	320	00	Output
	Entering Interruption	E	320	00	Output
	Entering Short circuit or Overl.	E	320	00	Output
Fault main power suply		E/R	301	00	000
Fault backup battery		E/R	309	00	000
Fault Auxiliary power		E/R	301	00	000
Fault GND		E/R	310	00	000
Fault Internal power	Power 24V for lines 1 to 16	E/R	314	00	000
Fault Internal power	Power 24V for lines 17 to 32	E/R	314	00	000
Fault Internal power	Power -5V for lines 1 to 16	E/R	314	00	000
Fault Internal power	Power -5V for lines 17 to 32	E/R	314	00	000
Fault Internal power	Power +28V for output 1	E/R	314	00	000
Fault Internal power	Power +28V for output 2	E/R	314	00	000
Initial reset		E	313	00	000
Entering spec. Condition		E	338	00	000
Manual setup mode		E	627	00	000
Remote setup mode		E	627	00	000
Switching off the battery		E	311	00	000
Activated WatchDog		E	305	00	000
Line in test mode		E/R	601	00	Line
Disabled line		E/R	571	00	Line
Disabled monitored output		E/R	570	00	Output

Messages generated by control panel FS 5100 (as in control panel description) and corresponding Contact ID codes:

Event	Parameter	Sent Contact ID code			
		Event	Code	Area	Zone
Fire condition Stage 1		E/R	110	00	Line
Fire condition Stage 2		E/R	110	00	Line
Removed Fire detector		E/R	532	00	Line
Line Interrupted		E/R	331	00	Line
Line Short-circuited		E/R	332	00	Line
Output Interrupted		E/R	320	00	Output
Output Short-cirquited		E/R	320	00	Output
Manual setup mode		E	627	00	000
Remote setup mode		E	627	00	000
Activated WatchDog		E	305	00	000
Incompatible boards		E/R	330	00	000
Absence of 220V		E/R	301	00	000
Fault backup battery		E/R	309	00	000
Fault Auxiliary power		E/R	301	00	000
Fault GND		E/R	332	00	000
Fault Internal power		E/R	314	00	000
Initial reset		E	313	00	000
Low power		E/R	338	00	000
Line in test mode		E/R	601	00	Line
Disabled line		E/R	571	00	Line

9. Annex 3. Communicator *FireCom* messages for the users

Notes:

1. *Communicator FireCom may send the same messages as those designed for communicator G10. Some event codes (e.g. arm/disarm) are not available and must not be used!*
2. *Communicator FireCom sends messages bolded in the table.*

SMS text messages sent by communicator ***FireCom*** to the users:

Recorded event CID code	*Event code sent to CSP*	*Text in the Contact ID standard SIA DC-05-1999.09 code table*	*SMS message text sent to an user*
E/R 100	E 100	Medical Alarm	MEDICAL PANIC ALARM
	R 100		
E/R 110, 115	E 110	Fire Alarm	FIRE PANIC ALARM
	R 100		
E/E 110	E 110	Fire Alarm	FIRE PANIC ALARM*
	R 110		
E/R 120	E 120	Panic Alarm	PANIC ALARM
	R 120		
E 121	E 121	Duress Alarm	DURESS ALARM
E/R 130 … 149	E 130	Burglary Alarm	ALARM
	R 130	Burglary Alarm restore	Alarm restore
E/R 144	E 144	Sensor Tamper	ALARM*
	R 144	Sensor Tamper restore	Alarm Restore*
E/R 301	E 301	AC Loss	AC Power failure on control panel
	R 301	AC Loss restore	AC Power failure restored on control panel
E/R 302, 309	E 302	Low System battery	Battery Power failure on control panel*
	R 302	Low system Battery restore	Battery Power restored failure on control panel*
E/R 321	E 321	Bell 1	Bell trouble on control panel
	R 321	Bell 1 restore	Bell trouble restore on control panel
E/R 351	E 351	Telco 1 fault	Phone Line trouble on control panel
	R 351	Telco 1 fault restore	Phone Line trouble restored on control panel
E/R 400, 401, 406, 451	E 401	Open by user	OPEN by
	R 401	Close by user	CLOSE by
E/R 408	E 408	Quick DISARM	Quick DISARM
	R 408	Quick ARM	Quick ARM
E/R 409	E 409	Key switch zone	Key switch zone
	R 409	Key switch restored	Key switch restored
E 602	E 602	Periodic test report	Periodic Test*
E/R 700	E 700	Time set**	
	R700	Time isn‘t set**	

** SMS message text sent by communicator FireCom.*

*** Event codes are indicated in ECID code table.*

10. Annex 4. Scheme of communicator *FireCom* mounting holes