SIEMENS

IGS6-10 GSM Interface Unit

Siemens Add-on Modem for Sintony 60

Configuration Manual

Fire Safety & Security Products

Siemens Building Technologies

Contents

1 Product description

The IGS6-10 is a GSM add-on modem. It connects to the Sintony bus and can function as a second dialer or backup dialer to the one in the control panel.

When an event or alarm takes place the unit can either report to a central station or send an SMS message to a cellular phone.

The following reporting media can be used simultaneously:

Reporting media	Reporting format
TCP/IP	CID
GPRS	CID
GSM	SMS

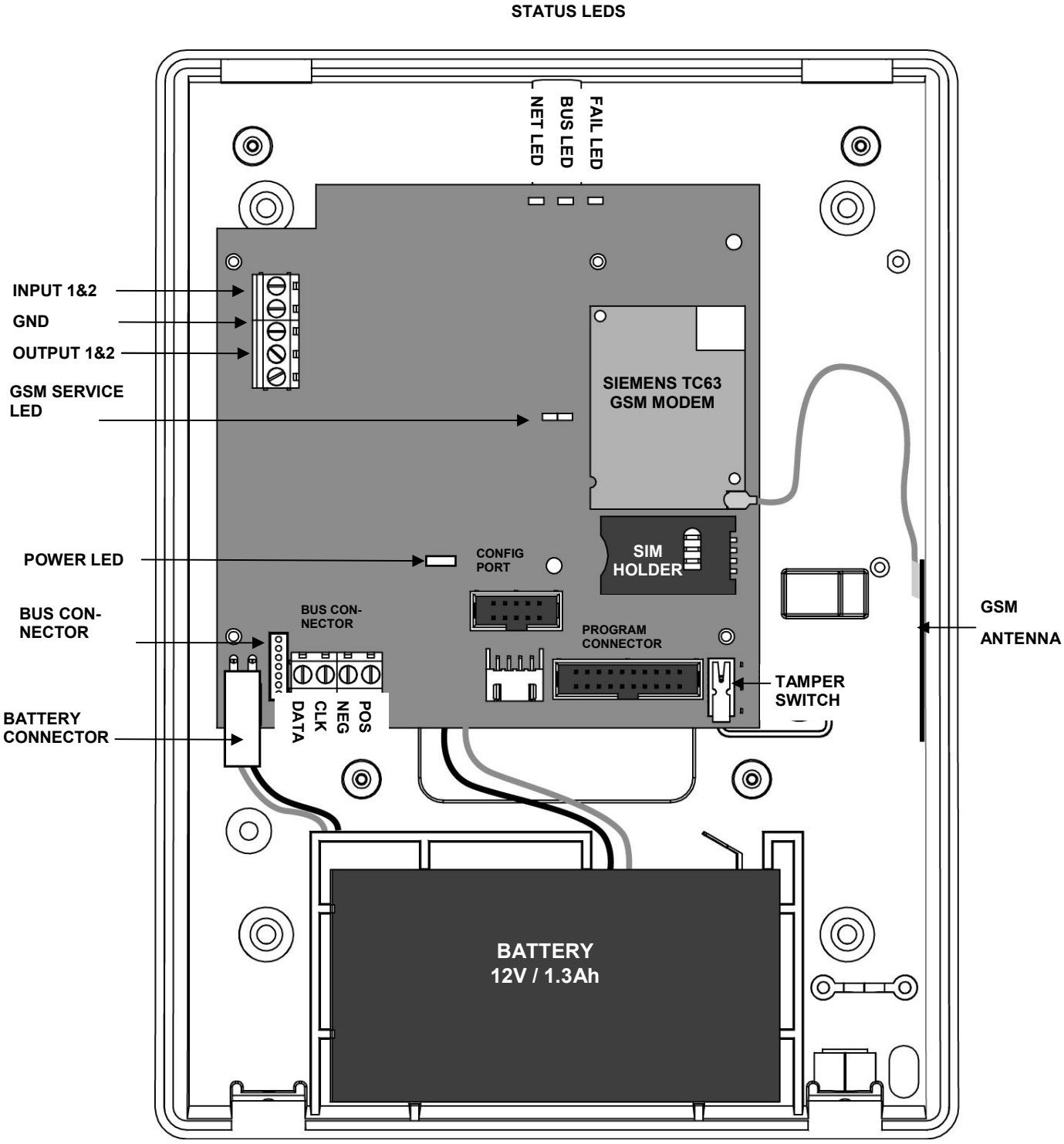
Features

- Full report for all the events of the IC60.
- Reporting formats in CID and SMS.
- Reporting up to 4 subscriber phones in each format.
- Communication via GSM Quad Band 900 / 1800 MHz or 850 / 1900 MHz based on Siemens TC63 engine.
- Rechargeable lead acid 12 V/1.3 Ah backup battery.
- Tamper alarm is triggered if cover is opened or the unit is torn from the wall.
- Programming the unit by a PC via USB Port and via GPRS.
- Two operation modes: 1. Backup for the control panel dialer.
  2. Parallel reporting channel.

2 Technical data

Radio frequency		
Operating frequency	850 MHz, 900 MHz, 1800 MHz, 1900 MHz	
Output power	Class 4 EGSM850: 2 W Class 4 EGSM900: 2 W Class 1 EGSM1800: 1 W Class 1 EGSM1900: 1 W	
GPRS multi-slot class	12	
Modem Type	GSM Quad-Band	
Internal Antenna	Tri-Band	
Communication services		
TCP/IP	Stack access via AT commands	
Internet services	TCP, UDP, HTTP, FTP, SMTP, POP3	
GSM Report Modes	TCP/IP over CID GPRS over CID GSM over SMS	
Interfaces		
Antenna connector	U.FL-R-SMT	
SIM card	3 V, 1.8 V	
Bus	IC60	
Power consumption		
Power supply – External Adaptor (Optional)	14.2V ±0.2V V DC	
Battery	12 V 1.3 Ah Lead Acid	
Current consumption	Standby: 100 mA	Max. 200 mA
Battery charging control	Current limited 260 mA@short 1.6 A fuse protected	
Input 1	Reprogrammed SMS	
Input 2	Not In Use	
Output 1	Active "Low" while there is a network error (GSM fail, low RSSI)	
Environmental conditions:		
Operation temperature	-10 to +50 °C	
Storage temperature	-20 to +60 °C	
Humidity (EN60721)	< 85 % r.h., non condensing	
Approvals	R&TTE, FCC, UL, IC, GCF, PTCRB, CE, Local approvals and network operator certifications	

3 Connections & Component Layout



1	Status LEDs	NET: turns green when there is communication with TCP/IP server. BUS: blinks yellow on BUS communication with control panel. FAIL: Blinks or stable in red on network error (problem with SIM card, GSM network…).
2	SIM card holder	SIM card used for the GSM modem.
3	Antenna	Cellular phone antenna connector.
4	Tamper Switch	Activates alarm if cover is removed.
5	Program Connector	Connector for connecting the inputs and outputs.
6	CONFIG PORT 1	Serial port and connects to a PC or laptop.
7	Battery Connector	Backup rechargeable battery 12 V/1.3 Ah lead acid.
8	Bus Connector	For communication with the control panel.
9	Power LED	Red when power ok.
10	GSM modem	Siemens TC63 GSM modem
11	GSM Service LED	Blinks yellow when GSM service connected.
12	Terminal block	Output 1&2
13		Gnd
14		Input 1&2

Status LEDs description

Seq	LED	Description
1	Unit Status	NET LED: turns green when there is communication with TCP/IP server.
2		BUS LED: Blinks yellow on BUS communication with IC-60.
3		Fail LED: Blinks or stable in red on Critical errors.
4	Power LED	Turns red to show unit is power.
5	Modem LED	Blinks yellow when GSM service is connected.

4 Pre-installation requirements

4.1 Cellular account

You need to open a cellular account with your cellular service provider to enable the cellular gateway module on your unit.

On opening the account you receive the following:

– A cell-phone number

– GSM/GPRS SIM card

4.2 SIM card

When ordering the GSM/GPRS SIM card, be sure to specify to the cellular service provider that the SIM card needs to be activated for GPRS data services (unlocked). In some locations you might receive a password for this, and maybe even a different number.

4.3 TCP / IP

For TCP/IP connection you need:

– APN (Access Point Name)

  APN is the name of an access point for GPRS. It identifies an external network that is accessible from a terminal. An APN has several attributes associated with it that define how you can access the external network at that point.

  Speak to your local service provider to get the ATN of your network.

– IP of target receiver.

4.4 Hardware

– PC or laptop with a USB port

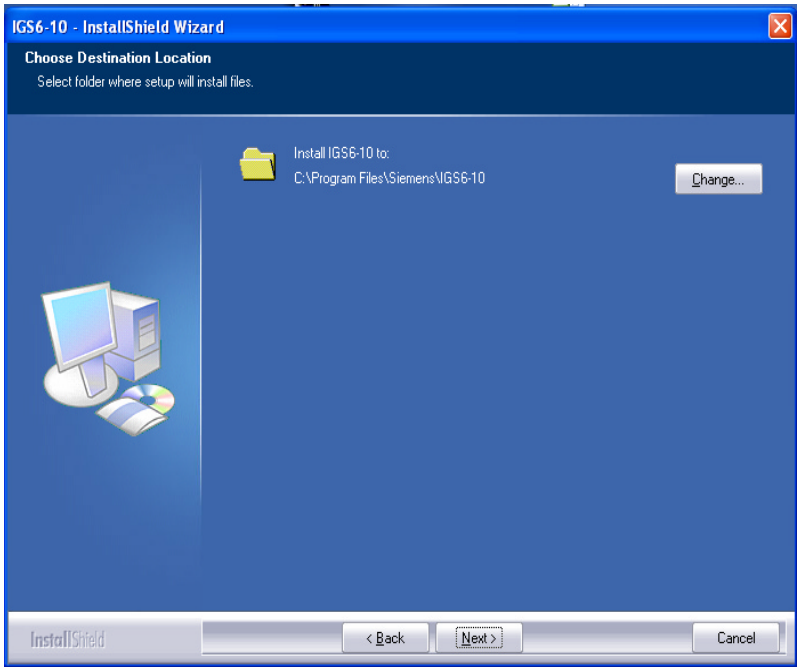
4.5 Software

– Windows XP or VISTA

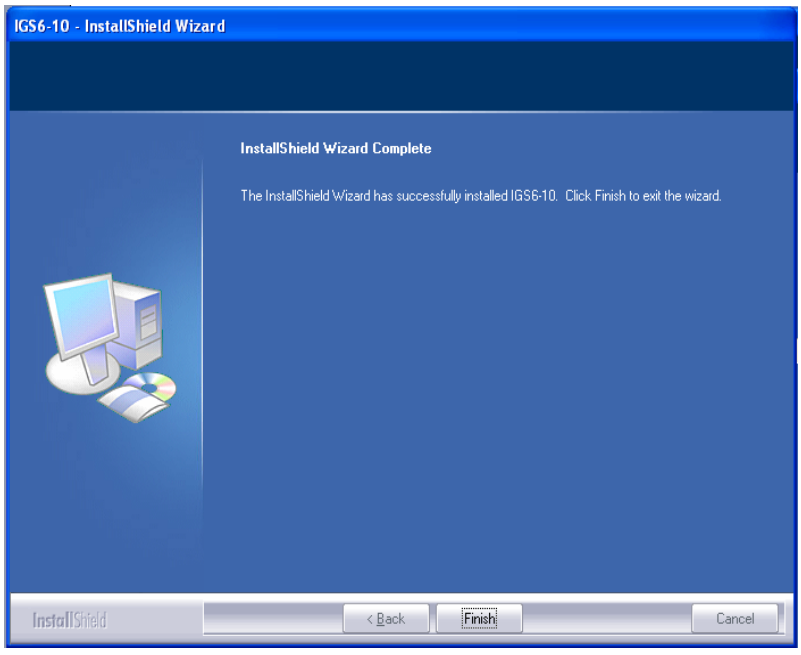
5 Installation

5.1 Configuration software

1. Double Click the installation file.
   ➔ The InstallShield Wizard opens.



2. Choose the destination location.
3. Click **Next**.
   ➔ The installation starts.



4. After the installation click **Finish**.
   ➔ The configuration software IGS6-10 is installed.

5.2 Unit Installation

- Before installing the hardware we strongly recommend that you pre-program the unit. This is done using a PC or a laptop running the configuration program and using the USB cable supplied.
- If the GSM unit is installed as a backup module, it should be installed at another location than the panel.

Disconnect the mains and the backup battery.

1. Choose a suitable location for the unit within 1 to 20 meters from the IC60.
2. The location must be within the secured area.
3. Using the paper template drill 4 holes in the wall to mount the unit.
4. Using four screws, fix the unit to the wall.
5. Connect the unit to the Sintony bus: POS, NEG, CLK, DATA (see section 3: Connections).

- If external power supply is used to power the IGS6-10, the GND of the bus (from control panel) must be connected with the GND of the external power supply.
- The 2 wires are connected on the same terminal (NEG).

6. Install the SIM card into the SIM card holder.

- Before installing the SIM card, it is advised to disable the "call waiting" and the "roaming" options, by calling the local GSM provider.

7. Verify that the antenna is connected.
8. Power on the IC60.
9. Connect the backup battery.

6 Unit Configuration

6.1 Prerequisites

- To ensure reporting disable the setting "No Keypad Indication if Armed": P25E13E 5E in the IC60.
- Disable the setting: P168E1-16E 4E in the IC60.
- Starting the software is only possible if the IGS6-10 modem is connected to the PC.

6.2 Starting the software

1. On the desktop, double-click the icon 

.
2. Select a language.
3. Click the **Next** button.

➔ The following window will open:

If the SIM Card has a PIN Code, the following window will appear. If not forward to next chapter.

4. Type the correct PIN code.
5. Press **OK**.

6.3 Configuration methods

There are 2 ways to configure the modem:

- **Local control via COM**: for configuration via local PC (USB).
- **Control modem via Data Link**: for remote configuration via GSM data call

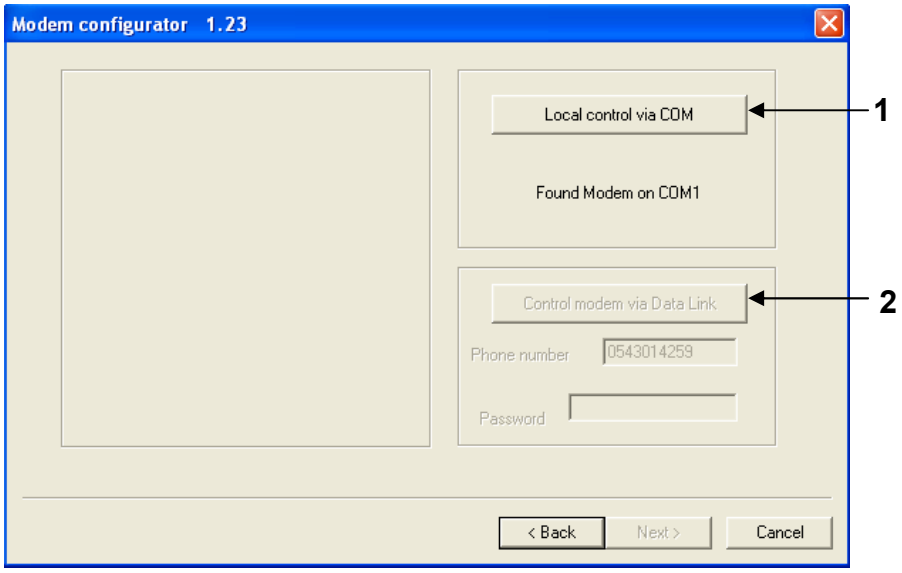


Fig. 1 Configuration method

6.3.1 Local control via COM

Prerequisites:

- The USB cable is connected.

1. Start the program.
2. Press the button **Local control via COM** (see Fig. 1).
3. Press **Next**.

6.3.2 Remote mode configuration

Disconnect the master unit (the modem you are dialling from) from the keypad bus of the IC60.

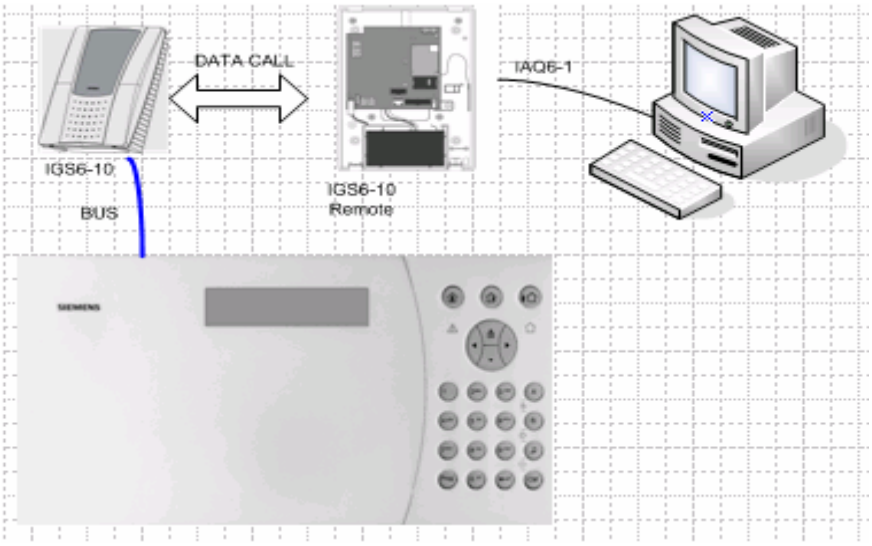


Fig. 2 Configuration method: Remote mode configuration

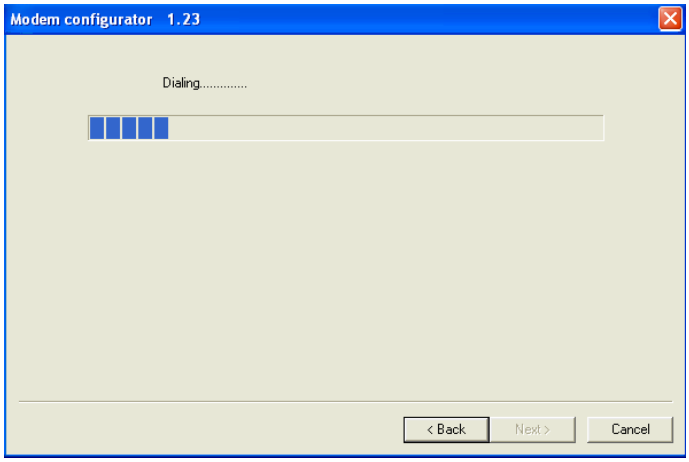
Prerequisites:

- The SIM card has been inserted in both modems.
- A network connection is established.
- The access code is available.

Before making a remote configuration, a local configuration has to be made using the USB cable (see chapter 6.4.1: Local control via COM).

1. Start the program.
2. Press the button **Control modem via Data Link** (see Fig. 1, page 13).
3. Enter the phone number of the "far end" unit (the one that will be configured remotely),
4. Enter the password.
5. Press **Next**.

➔ The modem is dialling (see also Fig. 2):



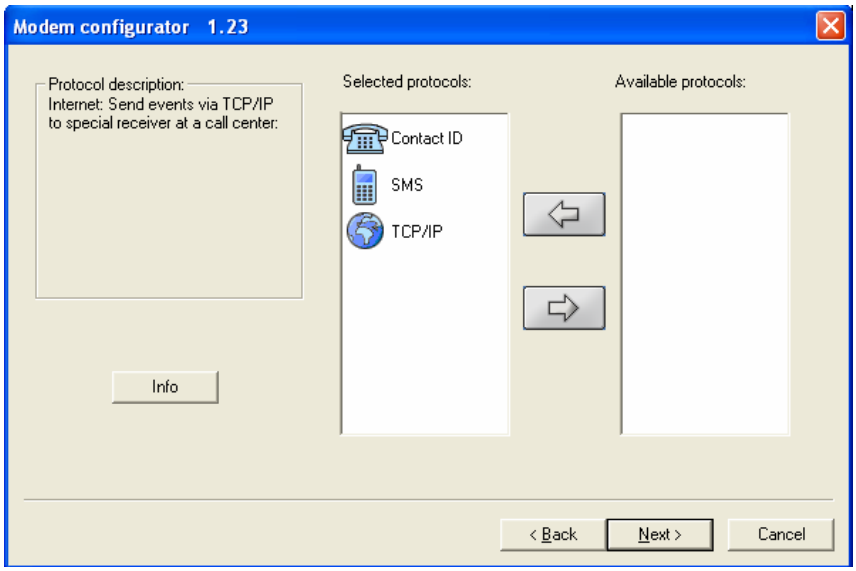
6.4 Protocols

The following protocols can be used simultaneously:

Reporting media	Reporting format	Reporting priority	Symbol	Section
TCP/IP	CID	1		6.4.1
GPRS	CID	2		6.4.2
GSM	SMS	3		6.4.3

If both GSM and TCP/IP protocols are selected, the data will be sent only via TCP/IP. If TCP/IP fails, the data will be sent via GSM.

1. Select the required protocols from the **Available protocols**.



2. Move it to the **Selected protocols** by pressing  .

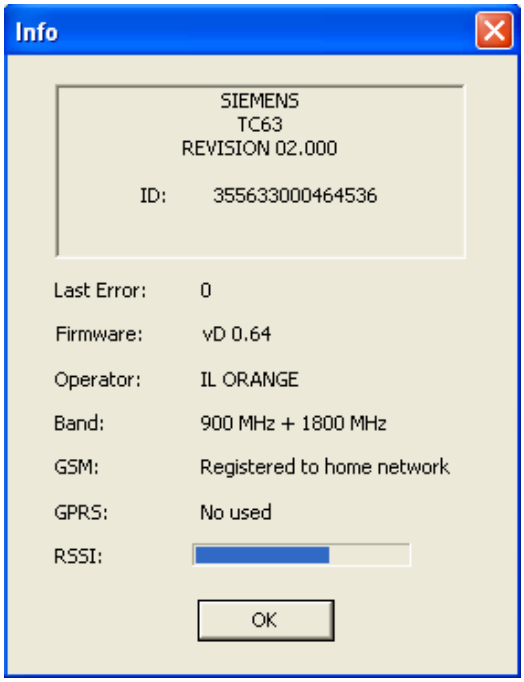
➔ The required protocols re listed in the field **Selected protocols**.

The order of configuration windows depends on the order of the protocols in the selected protocols list.
I.e. if the order of the protocols is TCP/IP, SMS, and CID so the first configuration window will be Internet configuration, the second will be SMS configuration, etc…

3. Click the 

button.

➔ The modem status is displayed (in the following Fig. the firmware version of the IGS6-10, the operator and the RSSI level):



If there is a network error (see section 3: Connections), this window pops up automatically.

4. Click OK.

➔ The window will be closed

6.4.1 TCP/IP

Prerequisites:

- APN (see section 4.3: TCP / IP) of your service provider.
- Domain name or an IP address.

1. Click the Next > button.

➔ The window **Internet configuration** will open:

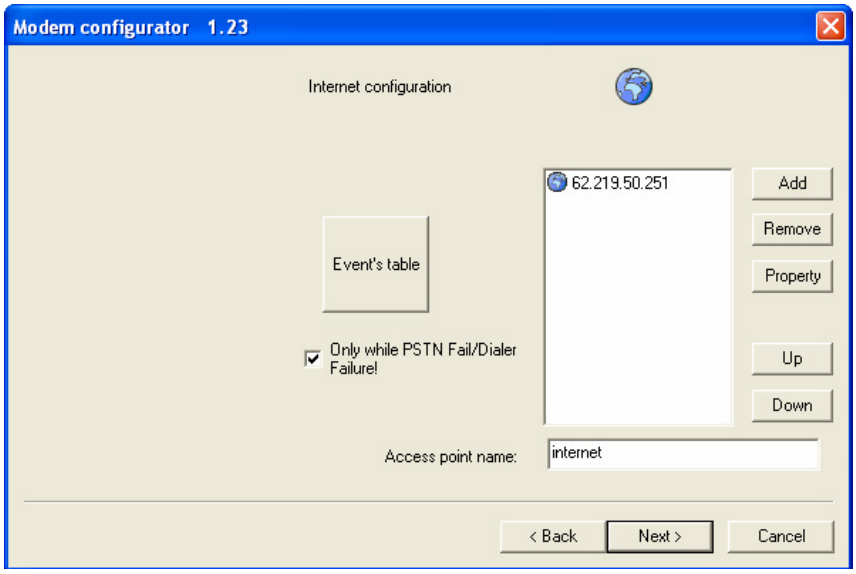


Fig. 3 Internet Configuration

Button or Field	Description
Access point name	Displays the internet service provider (APN address)
Event's table	Displays the available events to trigger the IGS6-10 modem.
Add	Add a new entry to the list.
Remove	Removes an unwanted number.
Properties	Edit the existing account and IP Address (or phone number)
Up	The top number is dialed first and if unavailable continues to the next in sequence. Use these buttons to move the numbers up and down the list so that you can place them in the required sequence.
Down	

There are 2 ways to operate the IGS6-10 modem:

– As backup

– Independently

Backup

The backup will operate at the following cases:

- Physical loss of phone line.
- Dialer: Unanswered.
- Dialer: No Kiss-off.

If you want the IGS6-10 modem to operate only as backup to PSTN and the integrated dialer of the IC60:

2. Disable the setting “Enable Dialer: P175E 1E in the IC60.

3. Select the checkbox **Only while PSTN Fail/Dialer Failure!** (this option can be checked separately for every protocol).

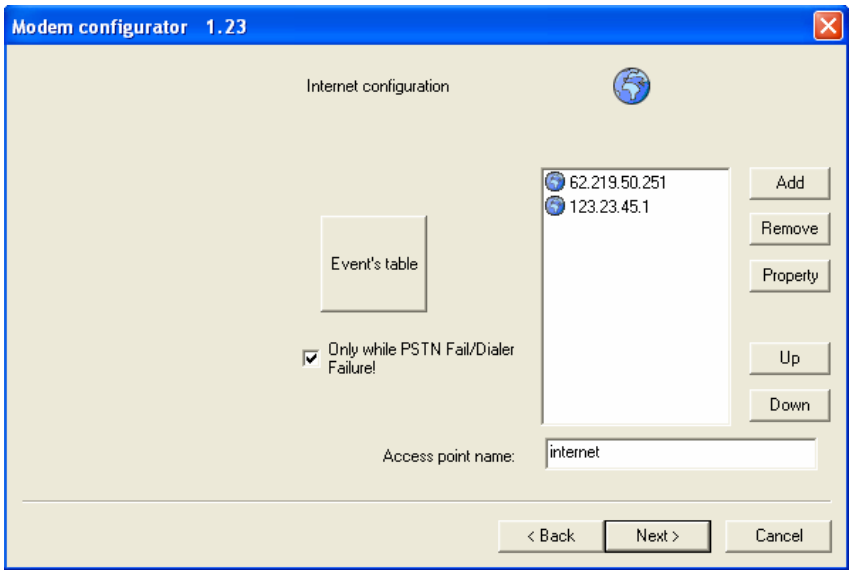
Independently

If you want the IGS6-10 modem unit to operate independently of the PSTN of the control panel:

4. Uncheck the checkbox **Only while PSTN Fail/Dialer Failure!**
   ➔ The IGS6-10 unit will transmit the events together with the telephone line of the control panel.

5. To add new IP addresses click the button Add.

6. Enter a **4 digit** ID number for the IGS6-10 modem in the account field.
7. In the next field enter a domain name or an IP address.
8. Click the button OK.
   ➔ The new IP address has been added to the list.



9. Enter the **Access point name** (APN) of your service provider.
10. To add events to trigger a transmission click the button Event's table.
    ➔ The window **Event ListView** opens:

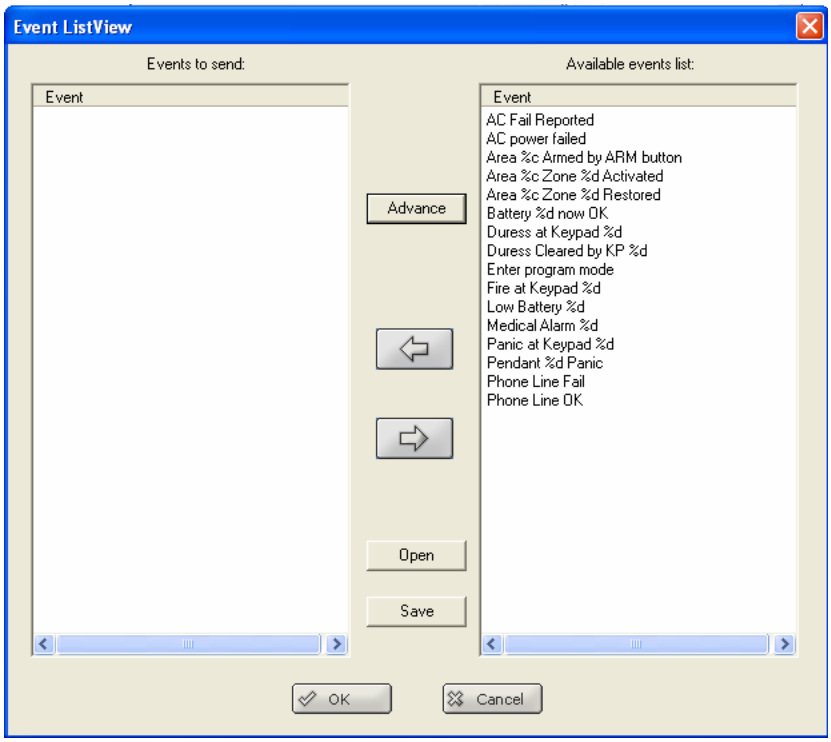


Fig. 4 Events in simple mode

There are two modes:

- Simple mode: The available events list has only common events (see Fig. 4).
- Advanced mode: The available events list has all events (Fig. 5).

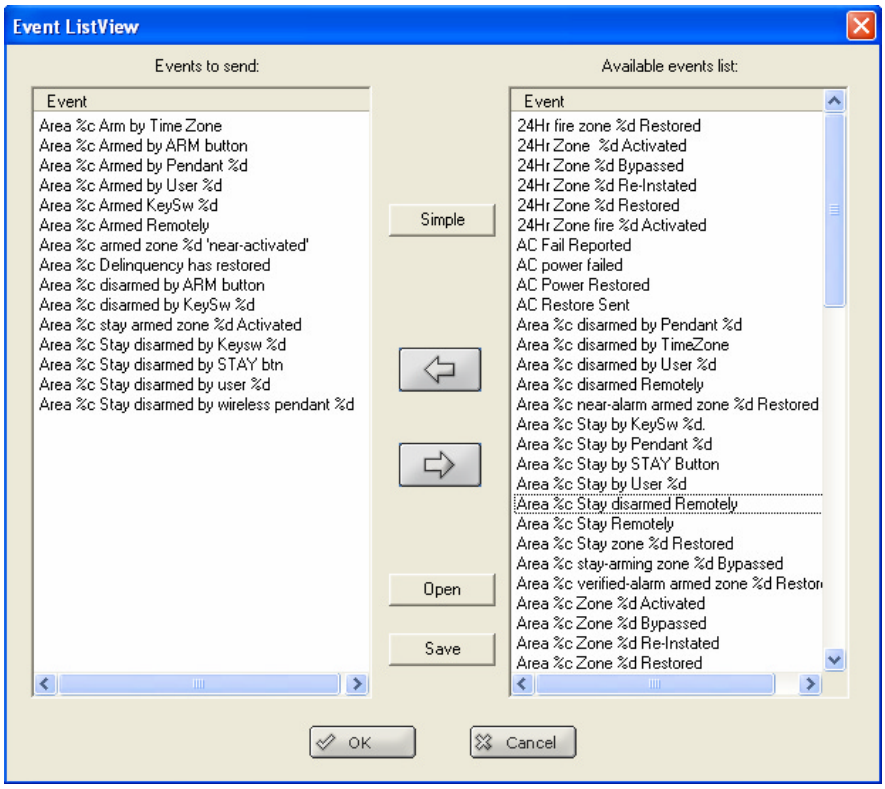


Fig. 5 Events in advanced mode

11. Choose a mode.

12. Double-click an event from the **Available events list**

-OR-

Select one and then click the button ⇦.

➔ Multiple events are now shown in the field **Events to send**. Any one of these events causes the IGS6-10 modem (if enabled) to transmit the event information.

13. To load a configuration: click the button Open.

14. To save the current configuration on your PC: click the button Save.

You can make multiple configurations and save them on your PC. Speak with your service provider which typical data should be saved.

15. Click the button OK.

➔ The Internet configuration is complete.

6.4.2 Contact ID configuration

1. Click the button Next >.

➔ The window **Contact ID configuration** opens.

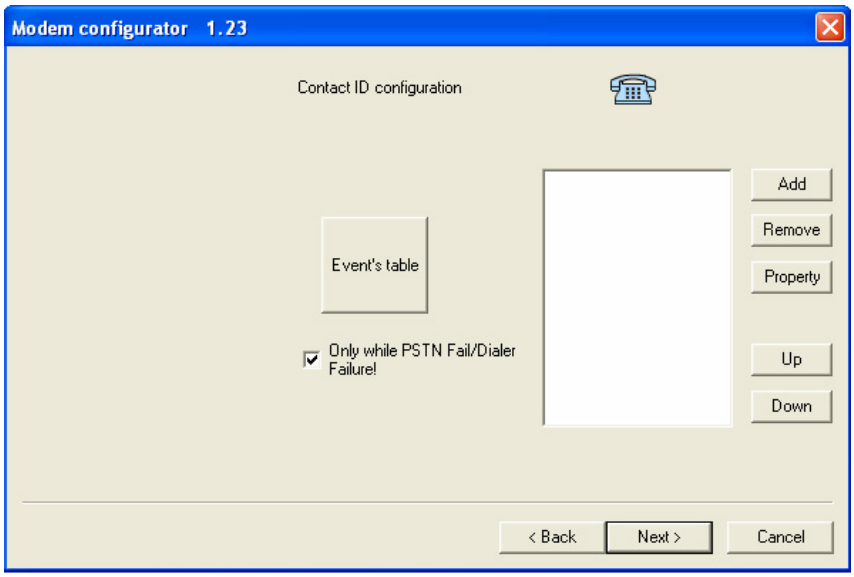


Fig. 6 Contact ID configuration

2. Configure the window **Contact ID configuration** as described in section 6.4.1. Exception: Entry of APN not required.

6.4.3 SMS configuration

1. Click the button Next >.

➔ The window **SMS configuration** opens:

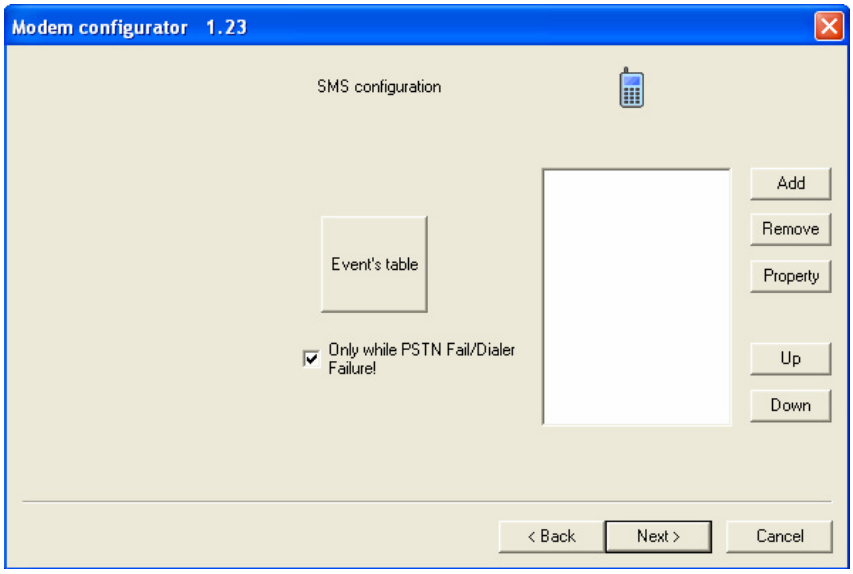


Fig. 7 SMS configuration

2. Configure the window **SMS configuration** as described in section 6.4.1. Exception:

- Entry of APN not required.
- Instead of a domain name or IP address you have to enter a telephone number.

6.5 Remote access configuration

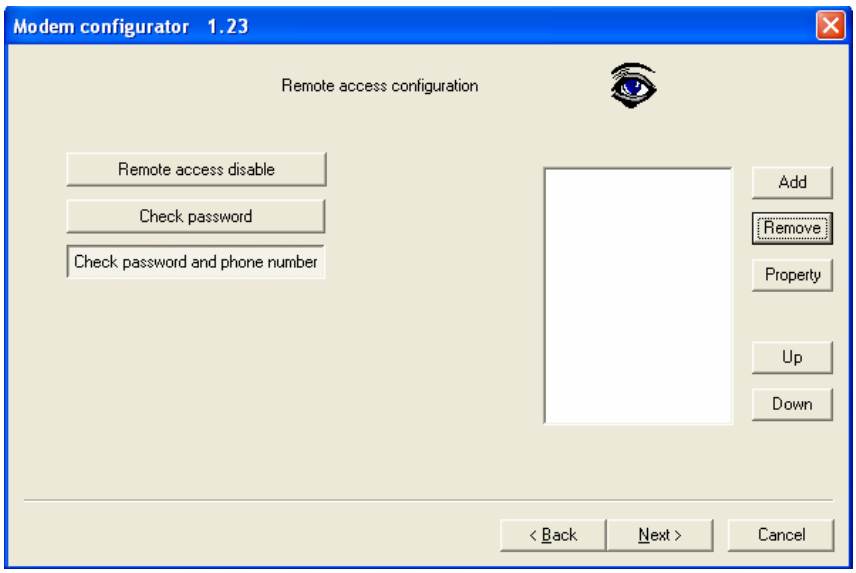
In this window you can setup the remote configuration.

There are 2 security levels:

- Only password
- Password and telephone number. The telephone number will be used to get connection from the local unit to this unit, in order to figure this unit remotely.

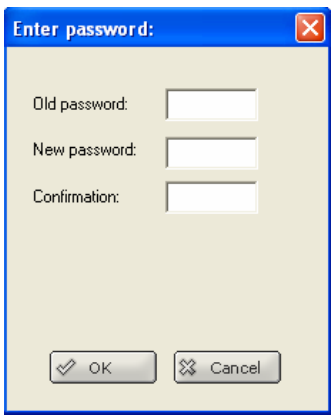
Make sure that your telephone can display the incoming phone number.

1. Click the button Next >.
   ➔ The window **Remote access configuration** opens:



2. If remote access is not to be allowed, press the button **Remote access disable**.
3. If the authentication requires a password, press the button **Check password**.
   ➔ The window **Enter password** opens:

If previously no password was used, the field old password will not appear.



4. Enter the desired password (max. 10 characters).
5. If the authentication requires a password and a phone number, press the button **Check password and phone number**.

➔ The window **Add phone number** opens:

6. Enter the desired password (max. 10 characters).
7. Enter the phone number.
8. To erase the password at this entry remove the phone number from the list.
9. Click the button 

.

➔ You will get back to the configuration window.

6.6 Fast SMS configuration

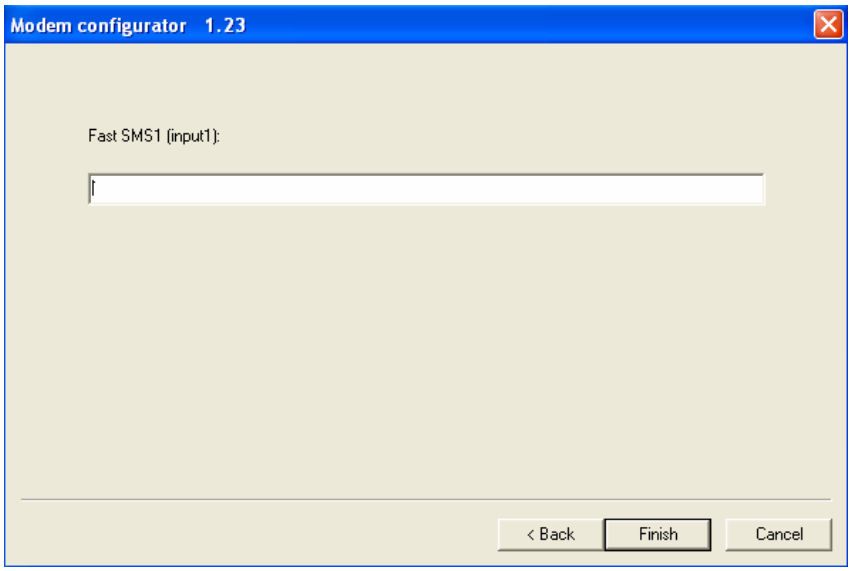
This is the window to customize the SMS that will be triggered at Input 1.

When Input 1 is shorted to ground (pulse), the custom SMS will be sent to the phone number entered in the SMS configuration window. If the SMS protocol is not selected in the field **Selected protocols**, then no SMS will be sent.

As an additional feature, when this input is shorted to ground, an event "General Alarm" will be sent in CID (number 140), beside the custom SMS.

For the CID event to be sent, select the CID protocol in the field **Selected protocols**. This event will be sent to the phone numbers entered in the contact ID configuration window. If there was a kiss-off of this event, the reporting will stop. If there wasn't a kiss-off of this event, the event will be reported to the next phone number (if there is any). If you leave these fields blank, then no SMS and no CID will be sent.

1. Click the button Next >.
   ➔ The window **Fast SMS** opens.



2. Make you configuration.
3. Click the button Finish.
   ➔ The configuration is finished.

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