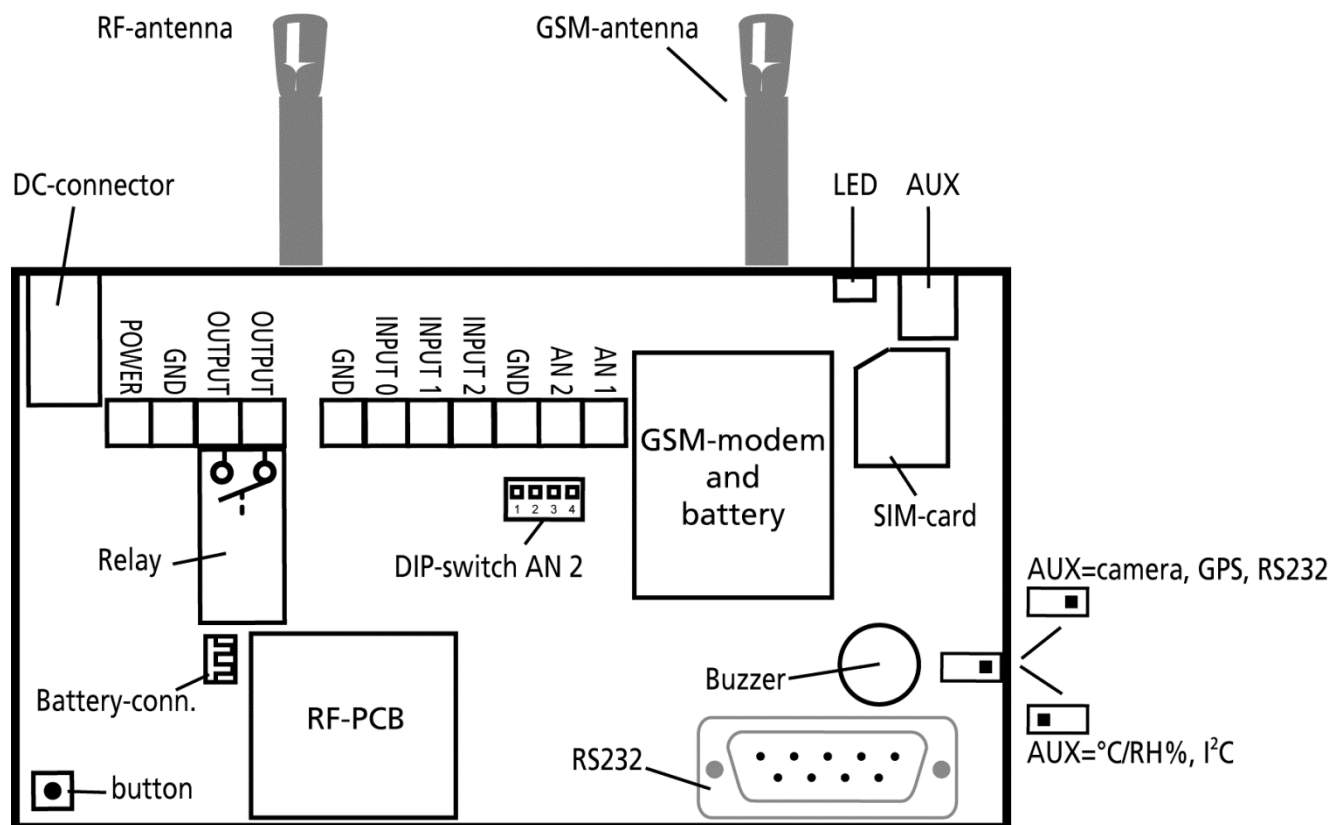




Mounting

1. Prepare a SIM card so that the PIN code is 1234 or deactivated. Mount the card in the unit. The unit now has 1234 as password or runs without a password. The card is turned the way shown below.
2. Connect inputs, outputs and power cable (12-24 VAC/DC) as well as, optionally, a rechargeable 3,6 V Li-ion battery.
3. Connect power. The unit first gives one short beep and then a red diode is lit. After approximately 20 sec. the diode flashes every 2 sec. and the unit is ready.

The multiGuard unit interior



DIP-switch for analogue input 2 (AN 2)

1 ON:	0-10 VDC
2 ON:	0/4-20 mA
3 ON:	PT-100
4 ON:	Profort, PTC- probe
All OFF:	digital input

Voltage on in- and outputs

Output:	AC max 230 VAC, 6A
	DC max 30 VDC, 6A
Inputs, digital:	max 12 VDC
	max power 2 mA
Input, analogue 2:	max 0-10 VDC
	Press only voltage when DIP-switch 1 is on and 2-4 are off
Input, analogue 1:	Profort, PTC probe

SET-UP

Set-up on PC via the PC COM-port



1. Connect the unit to the PC COM-port with an RS-232 cable or a USB-RS232 converter (the driver of the converter needs to be installed).
2. Install the Profort PC Program in a computer with Windows by downloading the program from www.profort.com. Start the program and type in the product key which can be found on the page.
3. Type in the number of the COM-port that the PC uses.
4. Fill in the rest of the information in the set-up program and finish with transferring it to the unit.

Set-up on PC via the Internet



1. Install the Profort PC Program in a PC with Windows by downloading the program from www.profort.com. Start the program and type in the product key which can be found on the page.
2. Mark 'Connection via the Internet' and choose a unique 'USERNAME'. You need the username to log on www.profort.com and/or to activate the Internet access of the unit.
3. Send following text messages to the unit:
(Notice: 1234 = password. Space counts as a character and is therefore important. Is the PIN code deactivated, 1234 can be left out).

1234 EA USERNAME 99999999

Define the username and phone number of the unit. 99999999 is the unit phone number

If the phone operator is Telia, then also send following text to indicate APN for Telia:

1234 EG www.internet.telia.dk APN for Telia

Notice: The SIM card in the unit needs to be opened for GPRS at the telephone operator.

4. Fill in the rest of the information in the set-up program and finish with transferring it to the unit.

Default set-up



The unit has 2 default set-ups: The relay output is drawn for 10 seconds in case of alarm (G1) and input 0 is set to connect/disconnect the unit with pulses (RP).

For further help: press F1 in the program; see the manual on the CD or on www.profort.com

SET-UP

Set-up with text message



1234 = password, 0 = zero, space counts as a character and is therefore important.

Define the phone number of the unit and (optionally) change password	1234 N0 xxxxxxxx yyyy (N0 = N + zero)	xxxxxxx = the unit phone no. yyyy = new four digit password Defines unit phone no. (N0) and create new password. New password is not necessary.
Receivers		
Register no. 1, no. 2 and so on	1234 N1 11111111 1234 N2 22222222	Registers receiver 1 and 2 to receive text to phone number 11 11 11 11 and 22 22 22 22 All in all 25 receivers.
Delete no. 1	1234 N1	Deletes receiver 1
Text on inputs		
Create	1234 Ax TEXT	TEXT on input x by opening/closing. x = 0,1, or 2
	1234 Lx TEXT	TEXT on input x by opening/closing. x = 0,1 or 2
Delete	1234 Ax	Deletes TEXT for input x by opening/closing. x = 0, 1 or 2.
	1234 Lx	Deletes TEXT for input x by opening/closing. x = 0, 1 or 2
Only alarm if text is created	1234 CT	The unit ignores input that does not have text connected to it
Create analogue input	1234 V1 S yyyy zzzz 1234 V1 M yyyy zzzz	Set-up of the scale (yyyy = minimum zzzz = maximum) for 0-10 V and for 0-20 mA. Set-up of values for intervals LOW, MIDDLE and HIGH (Point 1 and Point 2) on analogue input 1. If the value on input becomes larger or smaller than yyyy (Point 1) or larger or smaller than zzzz (Point 2), an alarm is sent.
	1234 V1 A TEXT	Alarm text LOW on analogue input 1 is sent when the value becomes smaller than the value defined in Point 1/yyyy (Vx M yyyy zzzz).

SET-UP – MANAGEMENT

	1234 V1 L TEXT	Alarm text MIDDLE on analogue input 1 is sent when the value becomes higher than the value defined in Point 1/yyyy or lower than the value in Point 2/zzzz (Vx M yyyy zzzz).
	1234 V1 B TEXT	Alarm text HIGH on analogue input 1 is sent when the value becomes higher than the value defined in Point 2/zzzz (Vx M yyyy zzzz).
Activate output in case of alarm	1234 Gx	x = 1-9 (1 = 10 sec., 2 = 20 sec., 3 = 30 sec., 4 = 1 min, 5 = 2 min, 6 = 4 min, 7 = 8 min, 8 = 16 min and 9 = constant.) Sets the relay output to activate in x time in case of alarm on an input.
Outputs follow condition on inputs	1234 GA	Indicates that the output follows the corresponding input if text is created. Notice: input signal has higher priority than command S0 (S + zero) and B0 (B + zero)

For further help: see the manual on the CD or on www.profort.com

Management of relay and functions with call from telephone

Relay:

Call the unit. Type in 1234 (password) when the connection is established, and await two 'beeps'. Type in the chosen code and end the call.

Code examples:

*00 (asterisk + zero + zero)	Pulses relay output for 10 sec.
*10 (asterisk + 1 + zero)	Opens relay output
*20 (asterisk + 2 + zero)	Closes relay output

Macro:

Call the unit. When the connection is established, type in the chosen code and end the call.

x (x = 0-9 for macro 0-9)	Executes macro x
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MANAGEMENT

Management with text message

Connect and disconnect the unit	1234 ON	Inputs are activated, red diode flashes
	1234 OF	Inputs are deactivated, red diode turns off
Activation of output	1234 S0 (S + zero)	Closes output
	1234 B0 (B + zero)	Opens output
	1234 P0 (P + zero)	Pulses output for approx. 10 sec.
Download	1234 OK	Downloads info about GSM transmission power and battery level. Example: OK>>OK SQ: xx% BAT: yyV xx = transmission power in percent. 25 % is lowest acceptable value yy = battery status
	1234 V1 R	Downloads measurements on the analogue input
Connection to the Internet	1234 EH USERNAME	GPRS traffic starts
	1234 EH	GPRS traffic stops
Send alarm immediately in case of power failure	1234 JS	Sends alarm immediately in case of power failure (after approx. 10 sec.)
	1234 JM	Sets the unit to send alarm in case of power failure after approx. 30 min. (Default setting)

Other management

The unit can also be managed through the PC program and all the functions can be controlled directly on the Internet.

See more in the manual or for Internet management log on www.profort.com

MACRO

Macro with command

Collect one or more commands in a 'super command' called a macro. Give it a name and activate it with that name. It works with either text message, phone call, DTMF-tones, or over the Internet. It is possible to create 10 macros.

A macro can be created with commands or with infrared codes from e.g. a remote control.

Create macro no. 1 with command	1234 M1 NAME <COMMAND> E.g. 1234 M0 TEMP <VI R>	Creates macro M0 .. M9 with the name NAME and attaches a command. More commands in the same macro are divided by semicolon ';' without space. Example: 1234 SHORT PULSE <S0;B0>
Play macro	TEMP	Plays the macro with the name TEMP
Delete macro no. 1	1234 M1	Deletes macro 1 (M0..M9).

For further help: see the manual on the CD or on www.profort.com

Connection of alarm units and remote controls

The unit has an inbuilt module for reception of wireless signals. This is how you connect alarm units and remote controls:

Briefly press down the little button in the unit (see figure). The unit begins to send out a number of beeps. Now it is ready to receive encoding of the first detector. Set off an alarm on the wireless detector. The multiGuard unit acknowledges by giving a quick beep and then it stops beeping. The first detector is now activated.

Connection of more units is done by repeating the process for the remaining tank units.

Connection of remote control is done in the same way – just press the 'unlock' button of the remote control instead of sending an alarm. The remote control is hereby connected to all the detectors that the multiGuard unit controls. If you need to change the settings or if you make a mistake, the multiGuard unit can be reset by sending the instruction 'P!'. Then you can start again as described above.

For further help: see the manual on the CD or on www.profort.com

SPECIFICATIONS

Power supply

12-24V DC min 0,5 A (included)

Battery

3,6V rechargeable Li-ion battery (included)

Consumption

Approx. 35 mA while resting (supplied with 12VDC)

150 mA when charging with battery

2 mA in case of power failure and supply with battery

Output

Max 6 A at 230V AC

Max 6 A at 35V DC

Inputs, digital

Max 1V, 2 mA (GND)

Min. 18V max 30 V (24V DC)

Input 0: also dis-/connection (level/pulse)

Input 1: also pulse/minute counter

Input 2: also pulse counter

Input, analogue 1 (AN 1)

Profort temperature sensor (Profort-no. 007995)

Input, analogue 2 (AN 2)

0-10V DC

0/4-20mA

PT-100

Profort temperature sensor (Profort-no. 007995)

Pulse and minute counter

Max 10Hz. Max one mio. pulse or minutes

Dimension

Design box, black

130x85x24 mm, weight: 125 g.

Temperature

- 20 °C - +55 °C

Antenna

1 internal antenna for GSM-modem. Possibility for external antenna (Profort-no. 369003)

1 internal antenna for RF. Possibility for external antenna (Profort-no. 369003)

The Profort PC Program Quick-setup

Compatible with all versions of Windows. The PC needs to have a COM-port (RS232). A USB-RS232-converter or connection through Internet via GRPS must be used.

NB! Product key for the PC program is indicated on the cover of the CD.

Other PC programs

- 'Basis set-up'. Expands the set-up possibilities.
- 'Professional set-up' as an alarm central on PCs supplied with GSM-modem.

OTHER PRODUCTS IN THE SERIES

multiGuard Light

- 4 relay outputs
- 8 digital inputs
- 2 analogue inputs
- 230V/12-24V power supply
- 9V rechargeable back-up battery (acquisition)
- DIN-rail with nine modules



multiGuard Max with wireless

- 8 relay outputs
- 1 analogue output 0-10V
- 8 digital inputs
- 4 analogue inputs
- Wireless modem 868 MHz
- 230V/12-24V power supply
- 9V rechargeable back-up battery (acquisition)
- RS232-port for PC or PLC
- IP-65 box
- Display
- Input for GPS and camera
- Plug for external IR-sender



multiGuard Remote with infrared

- 1 relay output
- 2 senders of infrared codes
- 3 digital inputs
- 1 temperature sensor
- 1 recorder of infrared codes
- 12V DC power supply (included)
- 3,6V Li-ion back-up battery (included)
- Input for GPS and camera
- Design box for wall mounting
- Plug for external IR-sender



IP-65 box for multiGuard units

- Waterproof box
- DIN-rail for 4 and 9 modules
- 3 PG inputs



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