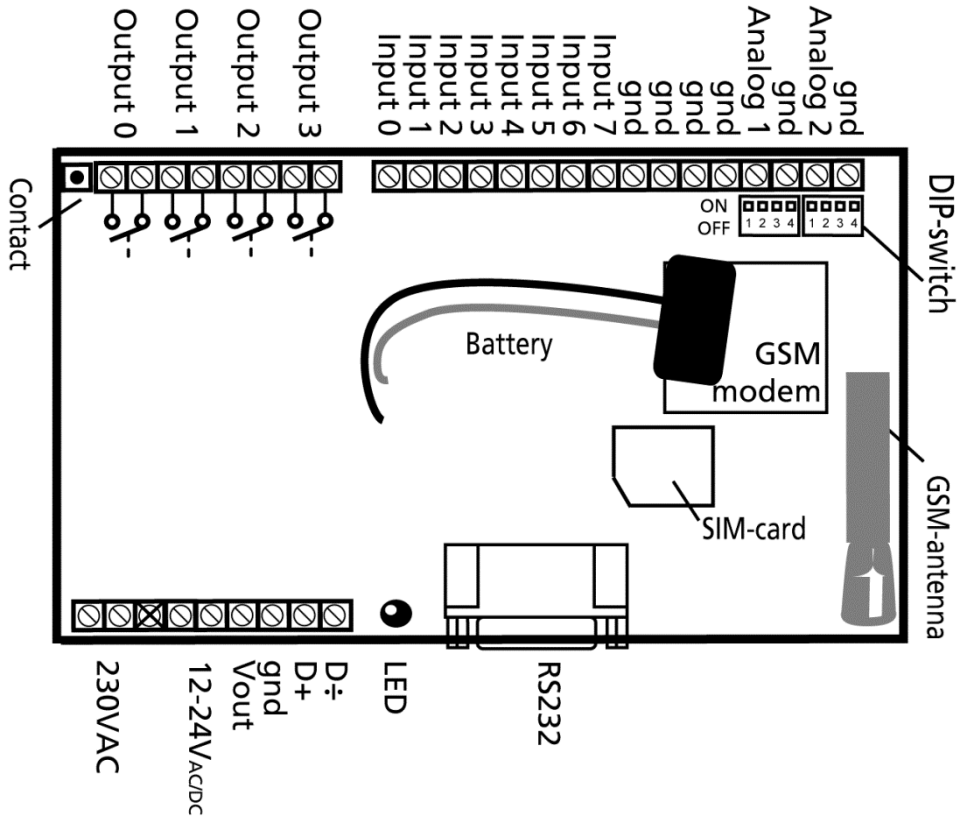
## Installation

1. Prepare a SIM card so that the PIN code is 1234 or is deactivated. Mount the card in the unit. The unit now has password 1234 or runs without a password. The card is mounted as shown below.
2. Connect inputs, outputs and power cable (230V/12-24V AC/DC). If necessary a rechargeable 9V battery.
3. Turn on the power. A diode is lit. After approx. 20 sec. the diode flashes approx. every 2 sec. and the unit is ready.

## multiGuard DIN9 interior




**DIP-switch for analog input**

| | |
|---|---|
| 1 ON: | 0-10 VDC |
| 2 ON: | 0/4-20 mA |
| 3 ON: | PT-100 |
| 4 ON: | Profort temperature sensor |
| All OFF: | digital input |

**Voltage**

Output: AC max. 230 VAC, 6A
DC max. 30 VDC, 6A
Input, digital: max. 24 VDC
max. power 2 mA
Input, analog: max. 0-10 VDC
Only connect voltage when the DIP-switch 1 is on, and 2-4 are off

## Set-up on PC via COM-port or USB 

1. Connect to PC via the unit RS232 by a RS232 cable or a USB-RS232, or connect to PC via the unit USB-port and wait until driver is installed. You can find driver under ‘Download’ on www.profort.com.

2. Install the Profort PC program on a computer with Windows. Download the program from www.profort.com. Start the program and enter the product key specified on the webpage.

3. Enter the number on the COM-port that the PC uses.

4. Check that “Connection to GSM-unit” appears in the status line. Restart PC if connection fails.

5. Fill in the rest of the set-up program and complete it by transferring the information to the unit.

Additional help: press F1 in the program, see the manual on the CD or www.profort.com

## Set-up with text message 

1234 = password, 0 = zero, space counts as a character and is therefore important. Do not fill in password if PIN is disabled on SIM-card.

| | | |
|---|---|---|
| Define the unit phone number and change password, if necessary | `1234 N0 88888888 yyyy ID-TEXT`<br>(N0 = N + zero) | 1234 = current password, N0, 88888888=mobile number of the unit.<br>Alternately yyyy=new four-digit password.<br>Alternately ID-text: First text in all messages from the unit (max. 32 characters). |
| **Receivers** | | |
| Add | `1234 N1 11111111` | Adds receiver 11111111 in space no. 1 to receive alarm as text message. yy yy yy yy |
| | `1234 N2 11111111 #` | Adds receiver 11111111 in space no. 2 to receive alarm as telephone call with tones.<br>Additional spaces (25 total):<br>N2..N9, NA (10), NB (11) .. NP (25),. |
| Delete | `1234 N1` | Deletes receiver in space no. 1 |
| **Text on input** | | |
| Add | `1234 A0 BREAK TEXT` | TEXT on input 0 by open/break. (A0..A7) |
| | `1234 L0 END TEXT` | TEXT on input 0 by close/make. (L0..L7) |
| Delete | `1234 A0` | Deletes TEXT for input 0 by open/break.<br>(A0..A7) |
| | `1234 L0` | Deletes TEXT for input 0 by close/make. (L0..L2) |
| Only alarm if text is added | `1234 CT` | The unit ignores input that has no text attached. |
| Add analog input 1 (V1) and 2 (V2) | `1234 V1 S yyyy zzzz` | Set-up of the scale (yyyy = zzzz): (V1 .. V2)<br>0-10 V (DIP-switch 1=ON) `0 10`<br>0-20 mA. (DIP-switch 2=ON) `0 20`<br>4-20 mA. (DIP-switch 2=ON) `-5 20`<br>PT100. (DIP-switch 3=ON) `-309 115`<br>Profort PTC. (DIP-switch 4=ON) `-132 63` |
| Add 2: Alarm points | `1234 V1 M 5 30` | The unit sends alarm e.g. when temperature passes 5 and 30 degrees C. |
| Add text in LOW interval | `1234 V1 A LOW TEMP` | Alarm text in LOW interval (below 5 degrees C.) |
| Add text in MEDÌUM interval | `1234 V1 L NORMAL TEMP` | Alarm text in MEDIUM interval (between 5 and 30 degrees C.) |

| | | |
|---|---|---|
| Add text in HIGH interval | `1234 V1 B HIGH TEMP` | Alarm text in HIGH interval (higher than 30 degrees C.) |
| Activate output in case of alarm | `1234 G1` | (G1 = 10 secs., G2 = 20 secs., G3 = 30 secs., G4 = 1 min, G5 = 2 mins, G6 = 4 mins, G7 = 8 mins, G8 = 16 mins og G9 = constant.)<br>Sets the relay output to activate in case of alarm on an input. Output is determined by zone. |
| Output follows state on input | `1234 GA` | Indicates that the output follows the corresponding input if text is added.<br>Notice: input signal has higher priority than command S0 (S + zero) and B0 (B + zero |
| Deactivate output in case of alarm | `1234 G0` | Output is not activated in case of alarm (G+null) |
| Add macro 0 for return of temperature | `1234 M0 TEMP <V1 R>` | The unit returns value on analogue 1 (e.g. temperature) when a text message with the word 'TEXT' is sent ('1234' omitted in macros). |

Additional help: see the manual on the CD or on www.profort

## Control with call from telephone

Call the unit. Press 1234 (password) when the connection is established, and await two 'beeps'. Press the desired code and hang up.

Code examples:

| | |
|---|---|
| *0x (x = 0-3 for output 0-3) | Pulses output x for 10 sec. |
| *1x (x = 0-3 for output 0-3) | Opens output x |
| *2x (x = 0-3 for output 0-3) | Closes output x |
| x (x = 0-9 for macro 0-9) | Performs macro x |

If a call is received and # is pressed

| | |
|---|---|
| during playing of voice message | The message is not sent to the following in the receiver list |

## Control with text message

| | | |
|---|---|---|
| Connect/disconnect the unit | `1234 ON` | Inputs are activated, red diode flashes |
| | `1234 OF` | Inputs are deactivated, red diode turns off |
| Activation of output x | `1234 S0` | Closes output 0. (S0..S1) |
| | `1234 B0` | Breaks output 0. (B0..B1) |
| | `1234 P0` | Pulses output 0 for 10 secs. (P0..P1) |
| Download | `1234 OK` | Downloads information about GSM transmission power and battery level<br>Example: OK>>OK SQ: xx%<br>xx = transmission power in percentage. 25 % is smallest acceptable value |
| | `1234 V1 R` | Downloads measurements on analogue input 1. (V1 .. V2) |
| Connection to the Internet | `1234 EH USERNAME` | GPRS traffic starts |
| | `1234 EH` | GPRS traffic stops |

## Additional control

The unit can also be controlled by use of the PC program and all functions can be controlled directly on the Internet.

On the print there's a button with the following three functions:

1. If button is pressed down while power supply is connected, a "beep" is heard after 7 secs. This resets the multiGuard DIN9 to default settings.
2. If button is pressed down during normal operations a "beep" is heard after 7 secs. If button is released immediately hereafter, macro 1 is performed. If no function has been saved on macro 1, nothing happens.
3. If button is pressed down after 7 secs., an additional "beep" will be heard after 14 secs. The 'sabotage' alarm is hereby activated.

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

## Record messages

**NB! It is important that the unit is within earshot when recording the messages!!!**

The receiver may acknowledge a voice message with #. This should take place immediately after playing the voice message and the sound of the 'beep'. If this does not happen, the unit will continue to the next receiver on the list.

1. Call the unit
2. Await 1 tone
3. Enter password., if applicable (e.g.. `1234`)
4. Await 2 tones
5. Enter '#' and no. of the message that you want to record, e.g. #8 (for general message)
6. Await 1 tone from telephone and after approx. 3 secs. A 'beep' from the unit
7. Record message until a 'beep' is heard from the unit (approx. 6 secs.)
8. Await 2 tones from telephone (approx. 6 secs.)
9. Call may be ended or a new voice message recorded, e.g.:
10. Enter `#1` (voice message for input 1)
11. Await a tone from the telephone and after approx. 3 secs. A 'beep' from the unit
12. Record alarm message for input1 until a 'beep' is heard from the unit (after approx. 6 secs.)
13. Repeat step 8-12 for more messages
14. Hang up

In case of incorrect password the unit disconnects and you'll have to dial up again.

Programming cable (SubD RS 232 plug) must not be connected while recording and/or testing voice messages!

Cable must also not be connected when testing voice messages!

| **Codes for recording of voice messages** | |
|---|---|
| #8 General message | 6 secs. |
| **Digital inputs** | |
| #0 for input 0 | 6 secs. |
| #1 for input 1 | 6 secs. |
| #2 for input 2 | 6 secs. |
| #3 for input 3 | 6 secs. |
| #4 for input 4 | 6 secs. |
| #5 for input 5 | 6 secs. |
| #6 for input 6 | 6 secs. |
| #7 for input 7 | 6 secs. |

| | |
|---|---|
| **Analog inputs** | |
| #90: analog input 0 | 6 secs. |
| #91: analog input 1 | 6 secs. |
| #92: analog input 2 | 6 secs. |
| #93: analog input 3 | 6 secs. |
| **System alarm** | |
| #94: power failure | 6 secs. |
| #95: power ok | 6 secs. |
| #96: sabotage | 6 secs. |
| #97: connecting | 6 secs. |
| #98: disconnecting | 6 secs. |

# SPECIFICATIONS

**Power supply**

230V AC min. 0,1A
12-24V AC/DC min 0,5 A
NB! Supply must not come into contact with the ground.

**Usage**

Approx. 30 mA when resting (supplied with 12 V)
5 W supplied with 230 V

**Outputs**

Max. 6 A at 230V AC
Max. 6 A at 35V DC

10VDC output supply. Max 100 mA.

**Inputs, digital**

Max. 1V, 2 mA (GND)
Min. 18V max 30 V (24V DC)

**Inputs, analog**

0-10V DC
0/4-24mA
PT-100
Profort temperature sensor (007995)

**Serial connections**

RS232 for setup or connection to e.g. PLC Modbus for external units, e.g. energy meters

**Counter**

Max. 20Hz. Max. 1 mio. counts

**Dimension**

9 DIN-modules
157x86x57 mm
Weight: 360 g.

**Temperature**

– 20 °C - +55 °C

**Voice memory**

90 sec.

**Antenna**

1 internal antenna for GSM modem

## OTHER PRODUCTS IN THE SERIES

**multiGuard® DIN6**

- 2 relay outputs
- 4 digital inputs
- 1 analog input
- 230V/12-24V power supply (acquisition)
- 9V re-chargeable back-up battery (acquisition)
- DIN-rail with six modules
- Modbus interface

**multiGuard® Master RF**

- 8 relay outputs
- 8 digital inputs
- 4 analog inputs
- Wireless 868 Mhz receiver
- 230 V / 12-24 V power supply
- 9 V rechargeable back-up battery (acquisition)
- Modbus interface
- IP-65 box
- Touch display for set-up and programming

**multiGuard® Remote IO**

- 1 relay output
- 2 senders of infrared codes for heat pump control
- 3 digital inputs
- 1 built-in temperature and humidity sensor
- 1 recorder for infrared codes
- 12 VDC power supply (inclusive)
- 3,6 V Li-ion back-up battery (inclusive)
- Design box for wall mount
- Plug for external IR-transmitter

**IP-65 box for multiGuard® DIN4/6/9-series**

- Waterproof box
- DIN-rail for 4/6/9 modules
- 3 PG inputs

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