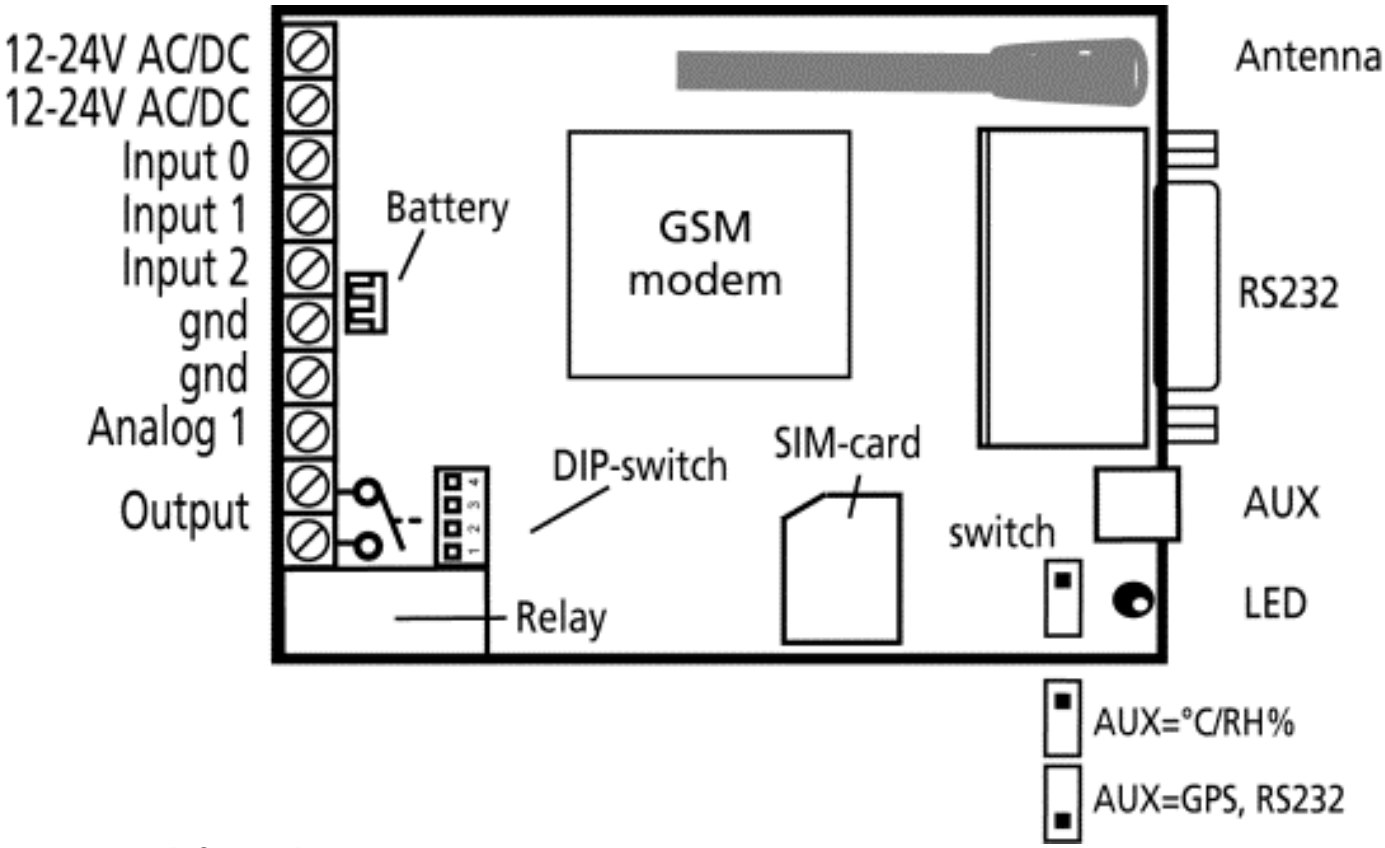
Installation

1. Prepare a SIM card so that the PIN code is 1234 or is deactivated. Mount the card in the unit. The unit has now 1234 as password or runs without a password. The card must be placed as shown below.
2. Connect inputs, outputs and power cable (12-24 VAC/DC) and if necessary a rechargeable 3,6 V Li-ion battery.
3. Turn on the power. A red diode is lit. After max. 1 min. the diode flashes approx. every 2 sec., and the unit is ready.

The GSM unit interior



DIP-switch for analog input

1 ON:	0-10 VDC
2 ON:	0/4-20 mA
3 ON:	PT-100
4 ON:	Profort probes
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 print voltage when The DIP-switch 1 is on, and 2-4 are off

Set-up on PC via the PC COM-port 

1. Connect the device to the PC COM port with an RS-232 cable or USB-RS232 converter (the converter driver must be installed)
2. Install Profort PC software on a computer with Windows by downloading the program from www.profort.dk. Start the program and enter the product key specified on the page.
3. Enter the number of the COM port the PC is using
4. Complete the rest of the setup program and end by transferring the information to the device

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

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Set-up via masterView 

1. Open a browser on your PC, tablet or smartphone.
2. Type http://setup.masterview.dk in the address bar, and choose 'setup' (or login via www.profort.dk). Log on to the portal or create yourself as user. An unlimited number of units can be connected to any user, and several users can be connected to the same units.
3. Create a new unit in the list and choose multiGuard DIN4 as unit. When you press SAVE the portal sends a text message to the unit, which connects it to the Profort server via GPRS/Internet on the SIM-card. The USERNAME of the unit will now be its telephone number (to be used, if controlling the unit via the Profort app). All communication will then take place as data.
4. Type in the required information and press 'send and save'.
5. The unit is now ready to use.

Set-up with text message

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

Define the unit phone number and change password, if necessary. Add ID text.	`1234 N0 88888888 yyyy ID text` (N0 = N + zero)	1234=current password, N0, 88888888= the unit mobile no. yyyy = new four-digit password. ID text: First text in all messages from unit (max. 32 characters).
Receivers		
Add	`1234 N1 11111111`	Adds receiver 11111111 in space no. 1 to receive alarm as text message.
	`1234 N2 11111111 *`	Adds receiver 11111111 in space no. 2 to receive alarm as call with tones. Further spaces (25 in all): N2..N9, NA (10), NB (11) .. NP (25),.
Delete	`1234 N1`	Deletes receiver in space no. 1
Text on input		
Add	`1234 A0 OPEN TEXT`	TEXT on input 0 by open/break. x = (A0…A2)
	`1234 L0 CLOSE TEXT`	TEXT on input 0 by close/make. (L0..L2)
Delete	`1234 A0`	Deletes TEXT for input 0 by open/break. (A0..A2)
	`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	`1234 V1 S yyyy zzzz`	Set-up of the scale (yyyy = zzzz): 0-10 V (DIP-switch 1=ON) 0 10 0-20 mA. (DIP-switch 2=ON) 0 20 4-20 mA. (DIP-switch 2=ON) -5 20 PT100. (DIP-switch 3=ON) -309 115 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°C.
Add text in LOW interval	`1234 V1 A LOW TEMP`	Alarm text in LOW interval (below 5°C).

Add text in MIDDLE interval	`1234 V1 L NORMAL TEMP`	Alarm text in MIDDLE interval (between 5 and 30°C).
Add text in HIGH interval	`1234 V1 B HIGH TEMP`	Alarm text in HIGH interval (over 30°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.) Sets relay output to activate by alarm on an input.
Output follows state on input	`1234 GA`	Indicates that the output follows the corresponding input if text is added. 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 on alarm (1234 space, G+null).
Add macro 0 to return temperature	`1234 M0 TEMP <V1 R>`	The unit returns value for analog 1 (e.g. temperature) when a text message 'TEMP' is sent ('1234' is omitted in macros).

Additional help: see the manual on www.profort.com

Control of relay and functions with call from telephone

Relay:

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

Examples of codes:

*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 connection is established, enter the desired code and hang up.

x (x = 0-9 for macro 0-9)	Performs macro x

Control with text message

Connect and disconnect unit	`1234 ON`	GSM unit is connected, diode flashes lazily every 2nd sec.
	`1234 OF`	GSM unit is disconnected, diode flashes briefly every 2nd sec.
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 information about GSM transmission power and battery level Example: OK>>OK SQ: xx% BAT: yyV xx = transmission power in percentage. 25 % is least acceptable value yy = battery status
	`1234 V1 R`	Downloads measurements on the analog input
Connection to the Internet	`1234 EA 12345678 12345678`	GPRS traffic starts (12345678=mobile number of the unit)
	`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 secs.)
	`1234 JM`	Programs the unit to send alarm in case of power failure after approx. 30 min. (Default setting)

Additional control

The unit can also be controlled by use of the PC program and some functions can be controlled directly from the internet.

See more in the manual or log on to internet management via www.profort.dk

Macro with command

Add a ”super command” by gathering together one or more commands. Name it and activate it under the chosen name. This works with text message, call from telephone and DTMF-tones, and the internet. It is possible to set up 20 macros.

Set up macro with command	`1234 M1 NAME <COMMAND>`	Sets up macro 1 (M0..M9 and R0..R9) under the name NAME and adds command in < >. More commands in the same macro can be separated by semicolon ’;’ without space. Example: `1234 M1 SHORT PULSE <S0;B0>`
Play macro	`TEMP`	Plays macro with the name TEMP (PIN code is omitted when executing macros)
Delete macro	`1234 M1`	Deletes macro 1 (M0..M9 and R0..R9).

Additional help: see the manual on www.profort.dk

Power supply

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

Battery

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

Usage

Approx. 50 mA when resting (supplied with 12-24 VAC/DC)
Approx 15 mA when resting (supplied with battery)
150 mA when battery-charged
2 mA when resting (instruction 'DN') and supplied 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 connect/disconnect (level/pulse)
Input 1: also pulse/minute counter
Input 2: also pulse counter

Input, analog

0-10V DC
0/4-20mA
PT-100
Profort temperature sensor (Profort-no. 007995)

Pulse- and minute counter

Max. 10Hz. Maks. one mio. pulse or minutes

Dimension

4 DIN-modules
69x86x57 mm, weight: 125 g.

Temperature

– 20 °C - +55 °C

Antenna

1 internal antenna for GSM-modem.
Possibility of adding external antenna (Profort-no. 369003) with 2,5 m cable and 5 m extension (Profort no. 301110) or 10 m extension (Profort no. 301111)

multiGuard DIN6

- 2 relay outputs
- 4 digital inputs
- 1 analog input
- 230V/12-24V power supply
- 9V rechargeable back-up battery (acquisition)
- Connector for external IR sender
- DIN-rail with six modules
- Mudbus interface

multiGuard Master RF

- 8 relay outputs
- 8 digital inputs
- 4 analog inputs
- Wireless 868 MHz receiver
- 230V/12-24V power supply
- 9V 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/humidity sensor
- 1 recorder for infrared codes
- 12V DC power supply (inclusive)
- 3,6V Li-ion back-up battery (inclusive)
- Box for wall mount
- Connector for external IR-sender

IP-65-box for GSM unit

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

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