



## Technical data

Measurements	105 x 80 x 30 mm
Voltage	10-28 VDC
Current	Standby approx 16 mA, 500 mA peak
Inputs	4 inputs NO or NC, alternative temperature
Outputs	2 Closing rely outputs 1A 24V AC/DC
Temperature-measurement	Internally or optional temperature sensors on input 1-4. measurement area +50 till -35 grader
Ambient temperature	-20 to +55 centigrade's, non condensing



## INTRODUCTION

Thank you for choosing the GSM-A2. For using the product to its full potential, please note that this is a quick-start guide. A complete manual are in preparation and will be ready Q3 2011

## Function

GSM-A2 is compact universal GSM communicator that can alert on various events by sending SMS as power fail, triggering of inputs, temperature, or other sensors.

## Alarm types

GSM-A2 is designed to send SMS to subscribers in the mobile phone network. Some mobile operators have SMS to mail service.

## SIM card

GSM-A2 is designed for operation in the GSM network and a valid SIM card must be inserted in the unit. It works in the 2G network and SIM-card with only 3G can not be used. We recommend subscription but pre-paid can be used.

## Presets:

In GSM-A2 it is possible to select different presets that covers the most common applications and lets you start-up the unit quick and simple. With one SMS command you select one of 3 applications described on page 4-6.

## Programming

With the PC program GSM Toolkit you have power tool to program your GSM-A2 and optimize it for your application. Distance programming and trouble

shooting with SMS saves a lot of time and travel  
Application for ANDROID and internet programming are in preparation and coming in Q3 2011.

## Package:

GSM-A2 unit  
GSM-antenna  
Quick-start instruction

## Options:

Antennas  
Antenna cables  
Temperature sensor  
Magnetic contacts  
PIR sensors  
GSM Toolkit compact disc with cables



ANDROID APP

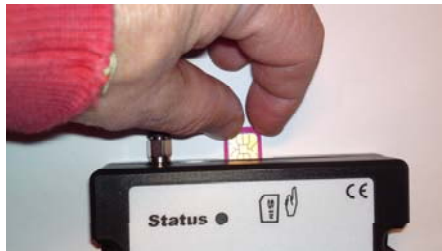


# Radiolink GSM-A2 Quick-start

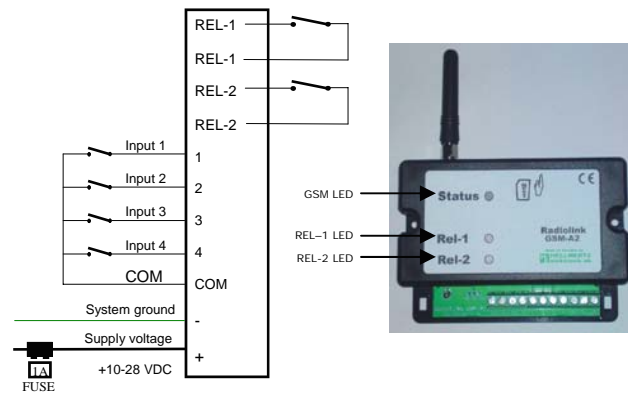
## STEP 1

Install a valid 2G GSM SIM-card in the unit and do the following:  
 Note the SIM-cards subscriber number.  
 The SIM-card must be activated by the operator  
 If pre-paid make sure that it is filled up with credits  
 The PIN code must be deactivated.

Insert the SIM card gently with the contact surface facing the front and the cut of corner down to the left.



Wiring diagram



## STEP 2

Mount GSM-A2 in a place protected from water, dust etc.  
 Wire according to the above diagram.  
 As soon as the power is connected to GSM-A2, the status LED will flash rapidly in 30-40 seconds. When it makes 1-5 slow flashes it has logged on to the GSM network. The slow flashes indicates the signal strength of the GSM network on a scale from 1-5 units. Must be at least 1.



# Radiolink GSM-A2 Quick-start

## Commands shortform & SMS questions to GSM-A2

SMS command	Action	Answer	Comment
A2!!	Activation of factory presets.	A2 Initiating OK	Sending cell phone number will be first alarm number
Status?	Status question	Return SMS with status answer	System check
Tele??	Query programmed telephone numbers	Return SMS with all programmed numbers	Number check
Tele!*2, +46701234567	Add telephone number 2 with country code	Return SMS with all programmed numbers	Same procedure for remaining numbers. (max 8)
Tele!*2,	Erase telephone number 2	Return SMS with all programmed numbers	Overwrites old number
Aon	Alarm on	Return SMS with status	Alarm on
Aoff	Alarm off	Return SMS with status	Alarm off
Temp?	Query actual temperature	Return SMS with temperature	Actual value
Volt?	Query actual supply voltage	Return SMS with actual voltage	Actual value
On*1*	Activate rely REL-1	Return SMS with status	Only if REL-1 is free and not programmed for another function)
On*2*	Activate rely REL-2	Return SMS with status	Se above
Off*1*	Avaktivera REL-1	Return SMS with status	Se above
Off*2*	Avaktivera REL-2	Return SMS with status	Se above
Heaton	Activates heating	Return SMS with status	Heating on
Heatoff	Deactivates heating	Return SMS with status	Heating off
Termon	Activates maintenance heat	Return SMS with status	Maintenance heat on
Termoff	Deactivates maintenance heat	Return SMS with status	Maintenance heat off



## Pre programming SMS Command **A2!! 02**

### Application

GSM-A2 is used for controlling the temperature and sending SMS alert to pre programmed (maximum 8) telephone numbers in a list. Wired like this a closing of inputs will generate an SMS to all number in the list. Input 3 is used for controlling the embedded thermostat. Input 4 is used for the temperature sensor. GSM-A2 sends low temperature warning and are controlling the heat.

### Preset values:

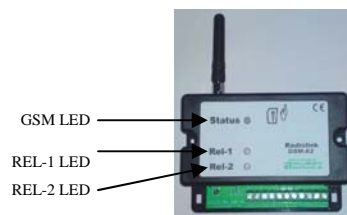
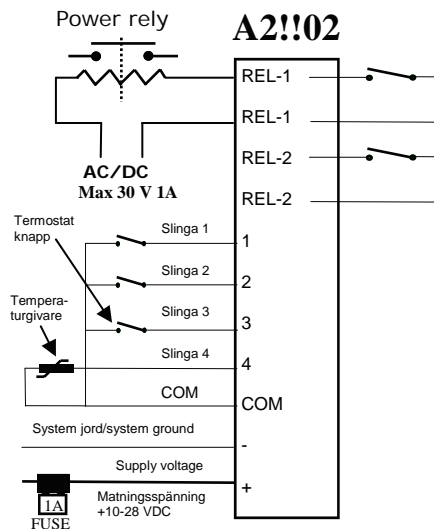
Freeze warning: +3° 5 min  
 Away heating: +10° 5 h  
 Stay heating: +20° 5 h

Rel-2 are free to be controlled by SMS command.

### LED Indicators

GSM LED flashes short indicates standby/ready mode. Steady on indicates activity. After activity GSM flashes with 1-5 flashes indicating the GSM network signal strength. Returns to short flash after while.

REL-1 contact are used for heat control  
 REL-1 LED indicates heat control status  
 Heatoff = LED out  
 Heaton = LED steady on.  
 Termon = LED short flashing, thermostat is on, REL-1 is off (heat off)  
 Termon = LED long flashing, thermostat is on, REL-1 is on (heat on)



## STEP 3

*Quick-start* is initiated by sending a command to the unit with SMS. The unit load the selected pre-set and the sending number is added to telephone list as first alarm number.

Send text: **A2!!XX (XX = preset number)**

Answer: **A2 initiering ok**

*You have now completed the quick-start of your new GSM-A2*

Check unit status, information of power, alarm and more.

Send text: **Status?**

GSM-A2 responds with status message

Add a second number for SMS alert, max 8 number.

Send text: **TELE!\*2+4670123456**

Activate any of inputs 1-4 and check that you receive an SMS.

### Inputs/outputs

1-4 is external inputs

5 is the internal temperature sensor

The function of the in and outputs can be altered by SMS

### Trouble shooting

#### No SMS is coming in at alarm condition.

Try to send **VER?** GSM-A2 should respond with the version number. Check that correct number is programmed. Send text: **TELE??** GSM-A2 shall respond with programmed numbers. Bad GSM network? Is the led flashing OK? Check that SIM PIN code is deactivated. Check the wiring. Repeat step 3

#### Change text message.

After preset you can change the texts 1-4 by sending a new text with SMS as following:

**Text!\*01,High level Pump 12, building 4**

When the answer: **Text\*\*01,High level Pump 12, building 4** is the new text entered and GSM-A2 is ready to use.



# Radiolink GSM-A2 Quick-start

## Pre programming SMS Command **A2!!**

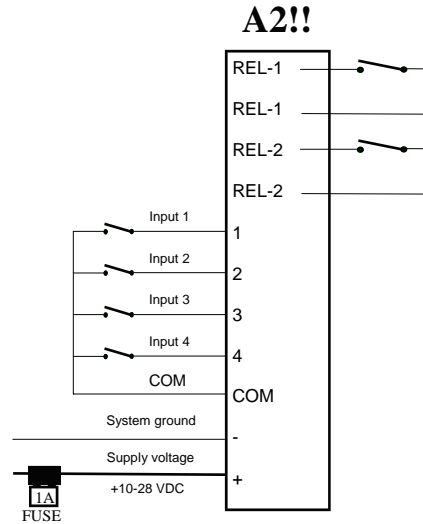
### Application

GSM-A2 are used for sending SMS to pre programmed maximum 8 telephone numbers in a list. Wired like this a grounding of one of the inputs will generate an SMS to all number in the list.

Rel-1 & Rel-2 are available to be controlled by SMS command.

### Commands

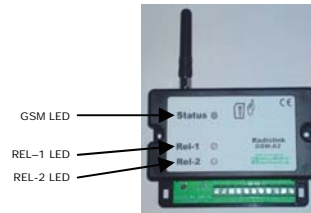
On\*1\*  
Off\*1\*  
On\*2\*  
Off\*2\*



### LED Indicators

GSM LED flashes short indicates standby/ready mode. Steady on indicates activity. After activity GSM flashes with 1-5 flashes indicating the GSM network signal strength. Returns to short flash after while.

LED REL-1 & REL-2 activated on indicates relay on.



# Radiolink GSM-A2 Quick-start

## Pre programming SMS Command **A2!!01**

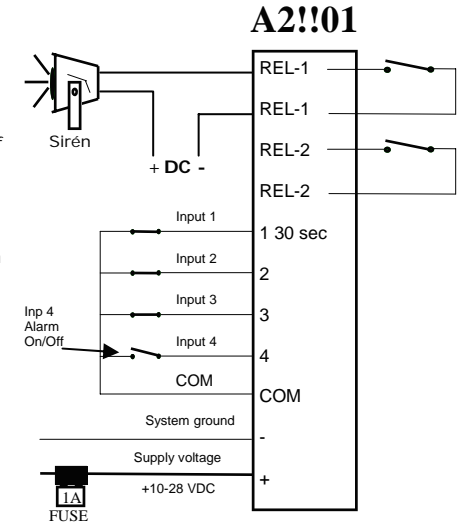
### Application

GSM-A2 is used for sending SMS to pre programmed (maximum 8) telephone numbers in a list. Wired like this an opening of one of the inputs will generate an SMS to all number in the list.

Input 4 is used for set the alarm on/off with key switch or code keyboard. Closed input = alarm off  
Open input = alarm on

To the other inputs switches, magnetic contacts or PIR with normally closed contact can be connected.

Rel-2 are free to be controlled by SMS command.



### LED Indicators

GSM LED flashes short indicates standby/ready mode. Steady on indicates activity. After activity GSM flashes with 1-5 flashes indicating the GSM network signal strength. Returns to short flash after while.

LED REL-1 on = siren active

LED REL-2 indicates alarm status. Flashes at alarm on. (LED only, relay 2 is free for remote control)

