

# DGSM-2A

GSM module with 2 relay outputs and 2 configurable inputs for applications such as gate openings, alarms and remote automations



## 1.0. TECHNICAL CHARACTERISTICS

<i>Radio characteristics</i>	Quad-Band GSM/GPRS, 850/900/1800/1900MHz Compliant GSM 2/2+, Class 4 (2W @ 850/900MHz), Class 1 (1W @ 1800/1900MHz)
<i>Working feeding</i>	12 - 24 Vac/Vdc, $\pm 10\%$
<i>Consumption</i>	12Vdc: max 200mA 24Vdc: max 100mA
<i>Inputs</i>	2 alarm configurable inputs, potential free contacts IN1 arranged for a contact NO, debounce 1s IN2 arranged for a contact NC, debounce 1s
<i>Outputs</i>	2 outputs relay with a common contact, max 30Vdc 0.5A RL1 from factory impulsive for 3s RL2 from factory bi-stable
<i>Typical applications</i>	Gate opening via telephone ring Remote automations with SMS commands alarms via SMS, at medium priority
<i>Antennas (furnished separate)</i>	GSM01A (stilus 90°) GSM1125 (antenna on support, cable 2.5m)
<i>Dimensions</i>	105 x 95 x 32 mm
<i>Working temperature</i>	-10°C +50°C
<i>IP degree</i>	IP43

## 1.1. WARNING!!! READ CAREFULLY!!!

- Do not install the product close to other radio devices or medical devices (example: pacemakers), could make interferences and disturb on functioning.
- Do not install the product on aircrafts, on environments with explosive atmosphere, in proximity inflammables materials or dangerous explosive.
- The DGSM-2A module can cause radio interferences to audio devices, computers.
- In order to assure the correct functioning of the module DGSM-2A, use only the certified accessories.
- The DGSM-2° module will not function in case of lack of electrical feeding or if the feeding is not compliant to specifics reported on this manual.
- The correct functioning of the DGSM-2A module is bind to the usage of an active SIM, functioning perfectly, with proper credit. It's up to the installer to do periodic checks on the correct functioning and on remaining credit of the SIM. Could exists bibdings on time-break between following recharges or bindings of different nature: check this by your mobile network operator and adopt the proper measures so the SIM will be always functioning.
- Install the DGSM-2° module and the GSM antenna so it is assured a proper covering on the signal, even in case of bad weather (snow, rain).
- As by the characteristic of the GSM network, there is no guarantee that the SMS messages sent by the network operator to the DGSM-2A and vice versa arrives immediately. Delays could happen, also big, depending on the situation of the network (traffic, covering).
- The DGSM-2A module was tested with SIM's of the most important Italian mobile network operators (TIM, Vodafone, Wind). As the great variety of national and international operators, it is not granted the perfect functioning with all the SIM present on the market.
- In order to avoid a block of the SIM by the operators, the DGSM-2A restarts automatically every 5 days. During the restart it is not granted the functioning.



### WARNING!!!

The DGSM-2A module is designed for the usage on the field of common or industrial automation. The GSDM-2A should never be used in a situation were a damage or a malfunctioning of the module or of the GSM network could produce damages to things, animals or persons.

We are not responsible for damages caused to improper usage of the DGSM-2A module.

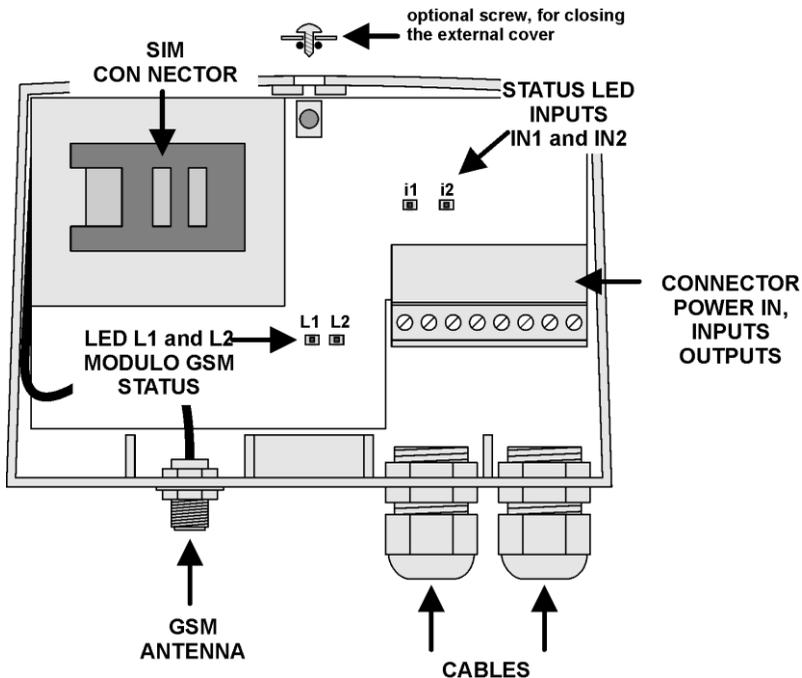
## 1.2. DISPOSAL

The device should be disposed by the user as by directives in force.

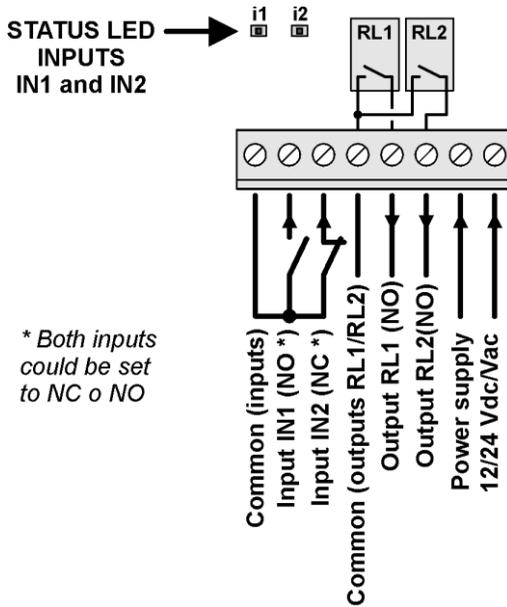
### 1.3. MAIN CHARACTERISTICS

- GSM module for simple and quick automations.
- Universal feeding 12V or 24V, Vac or Vdc.
- 2 outputs relay potential free contact, max 30Vdc / 0.5A, configurable as temporized or bi-stable.
- 2 inputs of alarm for potential free contacts, configurable as NO or NC.
- Functionality gate opening: at the reception of a ring from a number present in the rubric of the SIM, the output RL1 is activated (from factory, impulsive mode at 3s).
- Functionality alarm: at the activation of one of the inputs, an alarm SMS will be send to the enabled numbers and a ring tone of immediate advise will be done. From factory, the input IN1 is NO (normally open) and the input IN2 is NC (normally close).
- The configuration of the inputs, of the outputs and of the numbers in the rubric is done by simple SMS commands.
- Leds of inputs state.
- Leds red and green for the advise on the state of the DGSM-2A module.
- Periodical restart of the module against the block of the SIM by mobile network operators.
- Antennas furnished separate: GSM01A (stilus 90°), GSM1125 (antenna with support, cable 2.5m)

### 1.4. GENERAL PLAN



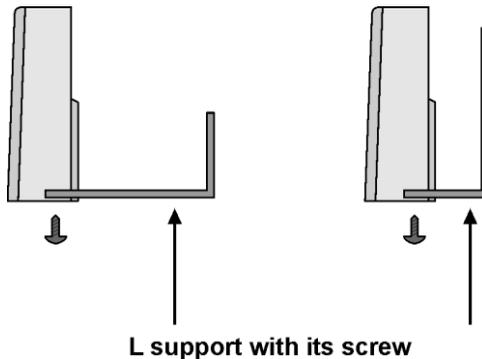
## 1.5. CONNECTION PLAN



### warning!!!

The feeding at 12/24 Vac/Vdc should be enough to sustain peaks of current consumption needed by the functioning of the GSM module.  
If the feeding is not proper enough, can cause malfunctioning during the reception of calls or during the sending of alarm SMS.

## 1.6. INSTALLATION ON WALLS



For an installation on wall, fix the support by a plug with 3mm of diameter and fix, by his proper screw, the support to the bottom of the box.

## 1.7. GENERAL FUNCTIONING

The DGSM-2A module has two main characteristics:

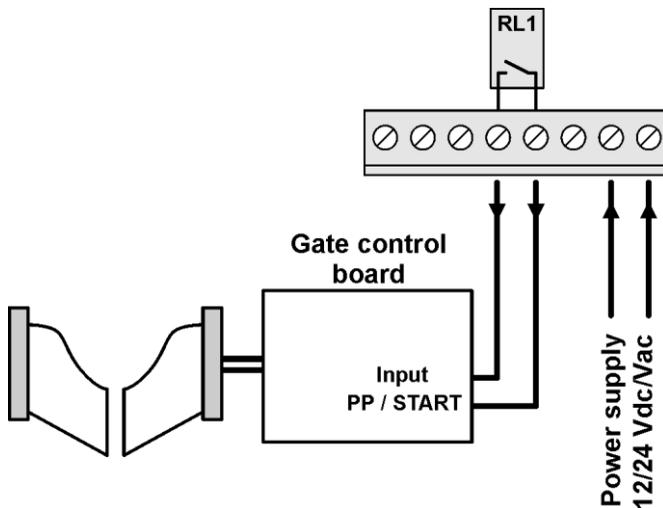
- Functioning as gate opener: users can activate the output RL1 doing a brief call to the phone number of the SIM installed on the DGSM-2A. The module will end immediately the call, without any charge to the credit and if the number calling is in memory will activate the output RL1 (by factory, impulsive mode 3s)
- Functioning as alarm: at the activation of the input IN1 or IN2 an alarm SMS will be send to enabled numbers and do a brief call (ring) of immediate advise.

From factory, the input IN1 is NO and the input IN2 is NC: the installer can connect the external device to one of the two inputs, depending on the need.

Moreover, always with factory settings, the relay RL2 is configured as bistable: with an SMS command is possible to activate and deactivate the output in order to command external devices.

Beyond those main presetting functionalities, by command SMS it's possible to configure other operating modes: it's possible to read the situation of input, it's possible to activate the relay outputs. Both inputs and outputs are configurable (inputs NO/NC with delay time, outputs by relay temporized or bi-stable). Look at the following examples.

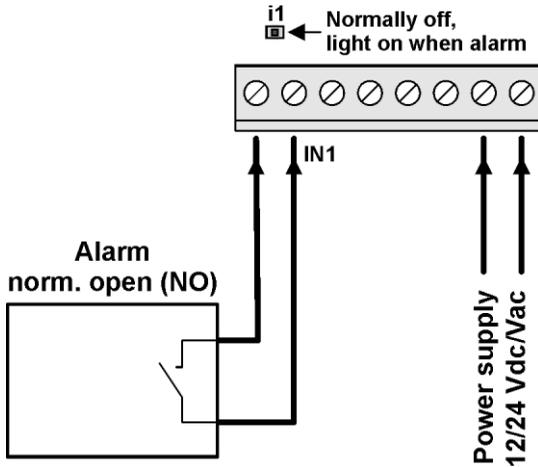
## 1.8. EXAMPLE N. 1 – GATE OPENING



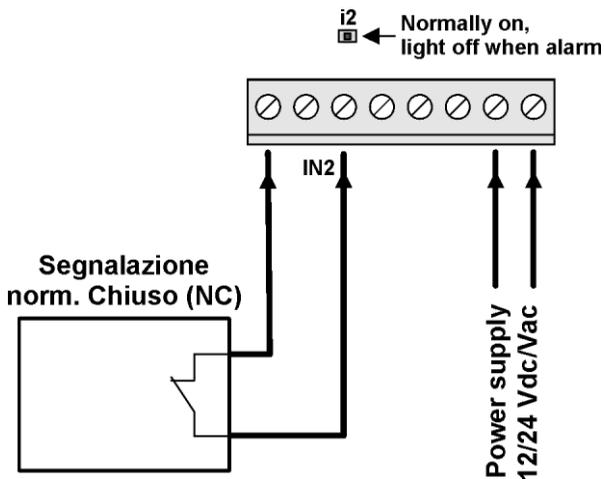
The control board of the gate automation will be command by the relay RL1 (from factory set as impulsive functioning of 3s). All the users present in the rubric of the SIM can activate RL1 and therefore open and close the gate, by doing a brief call to the number of the SIM present in the DGSM-2A. The module will end immediately the call without any charge to the user's credit. The output RL1 can be set by configuration strings (see. P.14), updatable by the SMS command "F".

## 1.9. EXAMPLE N. 2 – ALARM DEVICES N.O. AND N.C.

At the activation of the input IN1 or IN2 an alarm SMS will be send to enabled numbers together with a brief advising ring.  
The enabled numbers are those who have on the description the special char "!" (alarm AL1, input IN1) and/or the special char "?" (alarm AL2, input IN2).

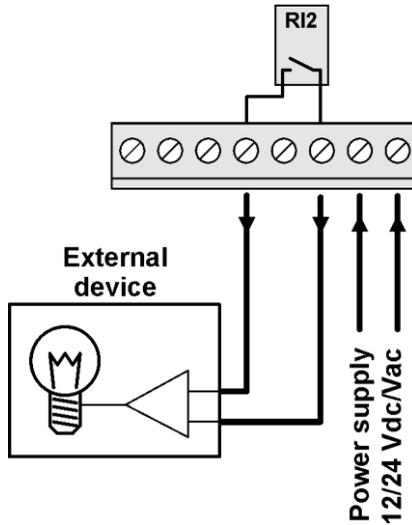


From factory, the input IN1 is configured as NO, with a delay time of 1s.



From Factory default the input IN2 is configured as normally Closed (N.C.) with delay time of 1s. Inputs are configured by SMS configuration strings (see page 14), which are updatable by the SMS command "F".

## 1.10. EXAMPLE N. 3 – GENERIC EXTERNAL DEVICE



The DGSM-2A module can control external devices via SMS commands. From factory settings the relay RL2 is configured as bi-stable. In this way, it's possible to open and close the contact by the following SMS commands.

To activate RL2 (close the contact):      `0.0000.RL2.1.`

To deactivate RL2 (open the contact):      `0.0000.RL2.0.`

The number from where those SMS comes has to be stored in the rubric of the SIM, as "master" number (starting with special char "#" in the description).

If the DGSM-2A is switched-off, the output will be deactivate.

Remember that the relay outputs have the following electrical characteristics:

- max 30Vdc 0.5A
- common contact between RL1 and RL1

The output RL2 could be configured by configuration strings (see p.14), updatable by the SMS command "F".

## 1.11. IMPORTANT! – PREPARATION OF THE SIM



The correct functioning of the DGSM-2A module is bind to the usage of an active SIM, functioning perfectly, with proper credit. It's up to the installer to do periodic checks on the correct functioning and on remaining credit of the SIM. Could exists bindings on time-break between following recharges or bindings of different nature: check this by your mobile network operator and adopt the proper measures so the SIM will be always functioning.



The DGSM-2A module is compatible with SIMs of network operators in GSM band.  
Do not use SIM which works exclusively on UMTS band.



The DGSM-2A module was tested with SIM's of the most important Italian mobile network operators (TIM, Vodafone, Wind). As the great variety of national and international operators, it is not granted the perfect functioning with all the SIM present on the market.  
Moreover is not suggested to SIMs not recent.

- The SIM need to have the initial control on the PIN deactivate. Insert the SIM in a cellular phone and by the procedure, who depends from the brand of the phone, deactivate the control over the PIN number. To verify the deactivation, switch off and then on the cell phone: the PIN should not been request.

### Example: NOKIA 2630

Menu – Settings – Security – Request of PIN code – NO

- Warning: when a SIM has the control over the PIN deactivate, the PIN (4 digits number) continue to be inside the SIM even if it's not controlled. Therefore, store carefully the PIN number in a safety place: if in the future will be need to restore the control, the PIN number will be needed again
- The SIM must to don't have any number in his internal rubric or any SMS message on the various memories (messages read, messages send...etc).
- To delete any number in the rubric or message in the memories, insert the SIM on a cellular phone and by the proper procedure, who depends from the brand of the phone, do the deleting of every number and every message.
- Generally mobile network operators store on the SIM's memory some useful number: delete all this useless number for the functioning of DGSM-2A.
- Warning: both for the numbers in the rubric as for the SMS messages, be sure to delete those in the internal memory of the SIM and not those in the cellular phone. Refer to the manual instruction of the cellular phone.

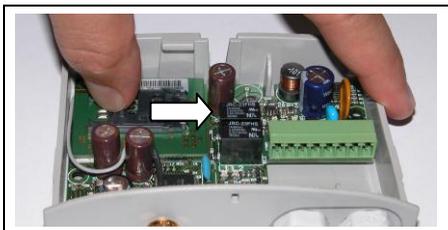
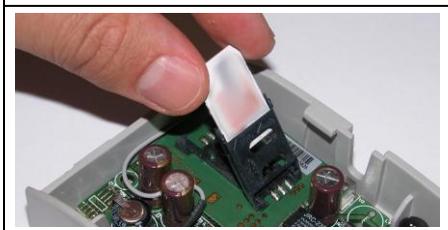
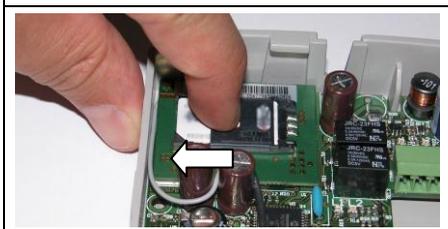
### Example: NOKIA 2630

To read and write in the rubric of the SIM:

Menu - Rubric - Settings – Memory in usage – SIM card

- Always using a cellular phone, it's more convenient to store in the rubric of the SIM the master number (with special char # as first char of the name ). Attention to memorize the master number in the rubric of the SIM and not in the cellular phone. Refer to paragraph SIM RUBRIC AND USERS at page 10.

## 1.12. Insertion of the SIM

	<p>Drag the cover of the SIM housing to the right side in order to unlock it. See picture here at left side.</p>
	<p>Rise the cover.</p>
	<p>Insert the SIM as by picture, with contacts towards down side.</p>
	<p>Push the SIM controlling that it fits perfectly in the housing, the cut corner has to be like in the picture.</p>
	<p>Drag the cover of the SIM housing to the left side in order to lock it.</p>

## 1.13. SIM RUBRIC AND USERS

- The DGSM-2A module works using the phone numbers memorized in the rubric of the SIM. Moreover some configuration parameters are memorized as SMS messages in the memory "Messages not send".
- So, the phone numbers of the users are saved from the DGSM-2A module into the rubric of the SIM and not in a separate memory. In this way, the installer can do a first memorization of the users inserting the SIM in a normal cellular phone.
- As the phone numbers are saved in the rubric of the SIM, the maximum number of users depends on the capacity of the SIM. This capacity can start from 40 to 250 users, depending on the memory of the SIM.
- Each user is associated to a telephone number and to a text ( for example, the surname or a progressive number choose by the installer). The number has to have a maximum of 20 digits and the name a maximum of 12 char.



### **warning!!!**

The users who call the DGSM-2A can't have his number hidden, when they call the DGSM-2A have to be able to recognize the number of who's calling ("ID caller" activate).

- Important! Is convenient to use the annexed sheet to the present manual in order to preserve the data of the installation but first of all to write down telephone numbers and the description of users present in the memory of the SIM card used into the DGSM-2A. Only so is possible to know exactly which numbers are memorized in the SIM and therefore safety do operations of deleting or adding via SMS commands.
- We remark that the deleting via SMS could take place only knowing the description of the user. We suggest the installer to use different description for every user and write down every description of users, for example on the separate sheet of this manual.
- If a user has the description text which starts with special char "#", "!" or "?" (even all three together), then he is a special user. Every of the three special char correspond to an advanced functionality.
- The starting char "#" means a special master user, which has a complete access to the DGSM-2A. He can configure outputs and inputs, memorize or delete users via SMS commands. Warning: if in the name there are not present also char "!" and/or "?", the user will not receive any alarm message.
- The char "!" means that the user (master or normal) has to be advised in case of activation of the alarm associated to input IN1.
- The char "?" means that the user (master or normal) has to be advised in case of activation of the alarm associated to input IN2.

Examples of description of users in memory:

- |            |  |
|------------|--|
| #Andrea    | This user is a special master user but he doesn't receive any alarm message.                     |
| #!Marco    | This is a special master user and he does receive the advise of alarm IN1 but not of IN2.        |
| !?Stefania | This is a normal user, he could activate RL1 by a ring and receives advise of alarm IN1 and IN2. |



When the users are memorized into the memory of the SIM (via a cellular phone or SMS commands), keep attention to don't use more then 12 characters for the description (total, included special char and names)!!!

## 1.14. SMS COMMANDS (ONLY MASTER NUMBERS)

- To see the complete list of available commands look to the last two pages of the manual.
- SMS commands are special SMS that only master users could send to the phone number of the SIM installed on the DGSM-2A to execute some task.
- SMS commands could be used only by special master users (with “#” in the description). If other users send SMS commands, they are ignored.
- Every SMS command has to have the password of the installation, composed by 4 digits (in the following pages is referred as <psw>). By factory default, the password of the installation is "0000". Such password is not related to PIN number of the SIM: they are two completely different numbers.



Don't loose the password of the installation!!!  
It will be no more possible to use the DGSM-2A module.!!!

- At the reception of a SMS command from a special master number, the DGSM-2A execute what is command to do and returns an SMS of confirmation or of error.
- Every SMS command is composed from more parts divided by a dot “.”
- Warning: the commands has to be write correctly, without spaces or special char, with a separation dot “.” between the different parts of the message and with a dot “.” at the end of the message. Please read carefully the guide to commands in the following pages.

## 1.15. ADD THE FIRST MASTER TELEPHONE NUMBER

As already said before using a cellular phone is convenient to memorize immediately in the rubric of the SIM the master number ( with special char “#” as first char of the name). In this way we are ready to work as it possible to send configuration SMS from the master number.

If the SIM has no master number in the rubric then will accept a SMS message in order to add a user (command “A”) from any telephone number but with the only bind that it must be the master (the first char in the description has to be “#”). If the SIM has any master number in his memory, it will be impossible to do any SMS command.

Example:

**A**.0000.347123456.#marco

Add a master number with description "#marco"

Once the master number is in the rubric of the SIM, it's possible to execute all the SMS commands available.

## 1.16. ADD USERS

To add a user or other master number, the command "A" will be used.

Example:

```
A.0000.3223122587.luca.      Add the normal user
```

The description of the user ("luca" in the above example) has to be maximum 12 char long, included special char "#", "?", "!".

If the memorization was successful, a confirmation message will be received:

```
DGSM2A User add "3223122587" "luca"
```

- Obviously it's possible to add users also inserting the SIM into a cellular phone and adding a new contact in the rubric.
- Attention: wait the confirmation message. If we send various messages it's possible that we memorize various times the same number!
- Attention: use univocal descriptions, different for each user!
- As the telephone numbers are saved in the rubric of the SIM, the maximum number of user depends on the capacity of the SIM. The capacity could vary from 40 to 250 users, depending on the memory of the SIM.

## 1.17. Delete users

In order to delete a user from the rubric of the SIM, it's absolutely necessary to know his description.

Example:

```
C.0000.luca.      delete the user "luca"
```

If the deleting was successful, a confirmation message will be received:

```
DGSM2A user deleted "3223122587" "luca"
```

Warning: in order to delete a user it's necessary to exactly know his own description. If for example we write only "luc", it will be delete the first name of the rubric which has "luc" in the description. Therefore could be cancelled "luca" or "lucia".

Attention: Uppercase and lowercase are important. If, for example, we write "Luca" or "LUCA", the user "luca" will be not delete.

Suggestion: The usage of codes at three digits in the description could be of great help. Therefore maintain a paper rubric with codes/ telephone numbers.

Example:

```
C.0000.015.      (delete the code 015, which correspond to number XXXXXXXXXXXX)
```

## 1.18. ALARMS

The DGSM-2A module has two inputs for alarm: IN1 and IN2. From factory settings, the input IN1 is of the kind N.O. (normally open), the input IN2 is of the kind N.C. (normally close): if not used IN2 must be connect to the common of inputs ( see the plan at page 4).

At the activation of the alarm input (closed if N.C., opened if N.O.) the DGSM-2A module sends an alarm SMS and do a brief ring tone of advise. The text of the alarm is defined by configuration strings for alarms, with the prefix AAAL1 and AL2 (see page 14).

- Every input has a delay time (debounce) to avoid undesired activations, even in activation that in deactivation. From factory settings, such delay time is of 1s.
- The kind of input and the delay time are both configurable by SMS with configuration strings (see p.14).
- Warning: for each alarm input, after every activation and following activation of the alarm, there's a deactivation time of aprox. 10 minutes. This is to avoid that repeating impulses sends continuously SMS and consequently they finish the credit.

## 1.19. DIRECT COMMAND OF RELAYS

To directly command a relay, it's possible to use an SMS with the command "O" (see the re-suming table of commands at page 11).

Example:

- `O.0000.RL1.1` (activate the output RL1)
- `O.0000.RL2.0` (deactivate the output RL2)

- The activation time or the bi-stable functionality must be previously set by configuration strings of outputs (RL1 and RL2, see in the following pages). From factory defaults, relay RL1 is impulsive for 3s and RL2 is bi-stable.
- At every command "O" the DGSM module will reply with an SMS with situation of the state if inputs and outputs (see here below).

## 1.20. READING THE STATUS OF RELAYS AND INPUTS

To read the status of the relay outputs and of the inputs it's possible to use the command "O" (see the referring table of commands at page 11) with a second parameter "2".

Example:

- `O.0000.RL1.2` (read the status of inputs and outputs)

The first parameter (RL1 in the above example) is no influential. Example of answer:

```
DGSM2A Status of outputs and inputs: RL1=ON, RL2=OFF, IN1=ON, IN2=OFF
```

Attention! If an input is configured as N.C., then it is OFF when the input is closed and ON when open.

## 1.21. CONFIGURATION STRINGS

- Some configurations of the DGSM-2A are done by “configuration strings”, which are special SMS who modify the functioning of inputs, outputs and alarms.
- To update configuration strings of the module DGSM-2A, it will be used the SMS command “F” (see last pages of the manual).
- Those strings are saved as SMS in the memory of the SIM. In this way is possible to modify them also by an external cellular phone.
- Those special SMS which contain configuration strings are created automatically by the DGSM-2A at the first start up (initially the SIM must be completely empty, without saved SMS).

### Configuration of inputs (IN1, IN2)

- Inputs (first three char "IN1" or "IN2"): it is possible to indicate for each input if it is N.O. or N.C. and the delay time (from 0 to 20s). The delay time indicates the minimum length of an impulse so it cause an alarm.
- Examples of configuration string for inputs.

IN2 NO 1            The input IN2 is Normally Open (NO) with delay time 1s.

IN1 NC 20          The input IN1 is Normally Close (NC) with delay time 20s.

By default, IN1 is configured as NO with delay time of 1s, IN2 is NC with delay time of 1s (if not used must be bridged). The delay time allows to filter potential bouncing: the input is considered ON or OFF if it remain, for more then the delay time, in the same status.

### Configuration of outputs (RL1, RL2)

- Outputs (first three char "RL1" o "RL2"): is possible to indicate for each output if it is bi-stable (step-step) or temporized. In this last case it's possible to specify the activation time in seconds (from 1s to 3600s (1 hour)).
- Example of configuration string for outputs.

RL2 B              The relay RL2 is configured as bi-stable.

RL1 T 60           The RL1 is configured as temporized as 60s (1 minute).

### Configuration of alarms (AL1, AL2)

- Alarm messages (first three char "AL1" or "AL2"): sets the alarm messages to send in case of activation of inputs IN1 or IN2.
- Warning: the maximum number of chars in an alarm message is of 160!!!
- Example of configuration string of alarm messages.

AL1 Warning, alarm of flooding garage in Barnaby St. nr.84

AL2 Alarm malfunction of UPS garage nr. 5

## 1.22. LEDS L1 and L2

The leds L1 (red) and L2 (green) gives some information on the functioning of the DGSM-2A.

- Just after the start up the green led L2 blinks quickly, indicating the passage through the different phases of the initialization of the GSM module.
- During the normal functioning, the number of the blinks of the green led L2 states the quality of the receiving field of the GSM:

1 blink	GSM field insufficient!, check the antenna connection.
2 blinks	GSM field hardly sufficient, the functioning is not assured on worst conditions.
3 blinks	Good GSM field.
4 blinks	Optimum GSM field.
5 blinks	Excellent GSM field.

- If the GSM field is insufficient or hardly sufficient, check that the external GSM antenna is correctly connected. Eventually, try to use a magnetic antenna with a coaxial cable of some meter (**ANTGSM2**) to be fixed closet o a window or an opening.
- In case of fatal errors, both leds L1 and L2 blinks together. The number of blinks states the kind of error. Refer to the following table.

Number of blinks	Error	Actions to be done
2 blinks	Internal error of the DGSM-2A	Fatal error. Try to switch off the module for 10s and then switch it on. If the problem continues, contact Distributor.
3 blinks	Generic error of the SIM	Check that the SIM is present and correctly inserted.
4 blinks	Wrong PIN number	The SIM has a wrong PIN habilitate (see p. 8 ) or has a different PIN from the one sets with the command N (see p.16).
5 blinks	Insufficient GSM field	The GSM field is insufficient. Check the antenna connection and check with an external cellular phone that there is enough GSM field (at least 3 signs).
6 blinks	Error of the internal EEPROM memory	Fatal error, contact Distributor.

## 1.23. USAGE OF SIM WITH PIN CODE

The DGSM-2A allows the usage of a SIM with PIN number active. In this way the SIM card is protect from robbery and unauthorized usage. The DGSM-2A will only accept SIMs with the correct PIN. To activate this functionality, see carefully what is reported in this chapter.

- The DGSM-2A module doesn't allow the activation or the deactivation of the PIN of the SIM: this operations must be executed by an external cellular.
- Warning: when the PIN of a SIM is deactivate (by an external cellular phone), only his initial control, at the start-up module, is deactivate. The PIN number is still in the SIM, but it is not activate.
- At the moment the control over the PIN is activate (always by a cellular phone), it's necessary to remind the original number: if it get lost and we fail several the number, it's necessary to use the special code PUK, given at the moment of purchase of the SIM.
- The PIN code set by the describe procedure will be stored into the internal memory of the module DGSM-2A. At every start up, the module transmit the PIN to the SIM: if it is wrong, an error message will be displayed (4 simultaneous blink of L1 and L2).



**ATTENTION!!!** In case of lost or forgotged PIN, the DGSM-2A will be blocked and can't be accessed anymore!

To activate the PIN functionality, it's necessary to strictly follow the procedure.

1. It's necessary to start from a SIM with the control over the PIN disabled and a master number in the memory.
2. With the module DGSM-2A off, insert the SIM and switch on the module.
3. With a cellular phone which has a "master" number, send the following command:

```
N.pppp.nnnn.NNNN.
```

Where:

pppp is the password of the module DGSM-2A

nnnn is the old PIN (if it was deactivate, the PIN is 0000)

NNNN is the new PIN to activate

For example:

```
N.0000.0000.1234.
```

With this command we have saved the new PIN, into the internal memory of the module DGSM-2A, to be used in the next restart. The SIM has not being update, we must done it by an external cellular phone (see next steps)!

4. Wait the confirmation message:

```
DGSM2A - PIN changed into 1234
```

5. Switch off the DGSM-2A, extract the SIM and insert it into a cellular phone.

6. By the cellular, activate the PIN (we must know the old PIN) and change the PIN to the new value (in the above example: 1234) .
7. Switch off the cellular and insert the SIM into the switched off DGSM-2A.
8. Switch on the DGSM-2A: check there's no errors. In particular, if after the initialization (green led blinks quickly) there's 4 blinks of the green and red LED, then the set PIN is not correct: check with a cellular phone that the PIN of the SIM is the one set with the command "N".

To deactivate the PIN functionality of the DGSM-2A, do the following procedure.

1. Set the internal PIN of the DGSM-2A to "0000", always with the command N.  
For example:

```
N.0000.1234.0000.
```

2. Wait for the confirmation message: at the next restart, the DGSM-2A will expect a SIM with the control over the PIN number, deactivate. The SIM is still untouched , therefore we have to use it with a cellular phone (see next steps).
3. Switch off the DGSM-2A, extract the SIM and by a cellular phone deactivate the control over the PIN number.
4. Insert the SIM, with the control over the PIN deactivate, and switch on the DGSM-2A: check there's no errors

Command	Syntax	Description
A	A.<psw>.<num1>.<descr>.	<p>Add a new telephone user. <u>The description must have max 12 char (including special chars).</u></p> <p>Important!!!Special chars to write before the description (name) of the number:  # = master number (can send commands)  ! = receive alarm AL1 (input IN1)  ? = receive alarm AL2 (input IN2)</p> <p>None special chars: normal user: could do only callings/rings to activate REL1.</p> <p>Example:</p> <p>A.0000.3225462587.#!?!Marco. (add user Marco as master and recipient of alarms AL1 and AL2)</p> <p>A.0000.3270123456.Cinzia. (add user Cinzia as simple user which can only ring to activate REL1)</p> <p>A.0000.3402323447.!Ugo. (add user Ugo as simple user but is recipient of alarm AL1)</p> <p>Important! Each user need to have a unique description, to be report in a paper register (see annexed sheet "Document of installation"). In this way it will be easy to delete them with the command "C" (see below), which execute a search on the description.</p> <p>Example:</p> <p>A.0000.3225462587.#!0010. (add user 0010 as master and recipient of alarm AL1)</p>
C	C.<psw>.<descr>.	<p>Delete a phone number searching on the SIM rubric by the description. If there's more number which correspond to the search, it deletes only the first found.</p> <p>Example:</p> <p>C.0000.Marco. (deletes "Marco" but also "#!?!Marco")</p> <p><u>Warning:</u> if we write "Giorg" we can delete a user which name is "Giorgio" but also a user with name "Giorgia"! Moreover, if we send a deleting command with "el" the module could delete the user "elena" but also "michele". Therefore, is convenient to send the complete description so to don't cancel undesired numbers. Check the reply message that inform the correct deleting of the user. Suggestion: it would be more convenient to use codes with three digits instead to descriptions and have a paper register of the codes/telephone numbers. Example:</p> <p>C.0000.015. (delete the code 015, which correspond to the number XXXXXXXXXX)</p>

<b>P</b>	<b>P.</b> <psw>.<newpsw>.	Sets a new password of installation in the DGSM-2A, to be used in every SMS command. <u>From Factory defaults the DGSM-2A has password "0000"</u> , which has nothing to do with the PIN. Example (change password from "0000" to "1234"): P.0000.1234.
<b>I</b>	<b>I.</b> <psw>.	Ask for the number of users in memory. Example: I.0000.
<b>F</b>	<b>F.</b> <psw>.<configuraz>.	Modify a configuration string (IN1, IN2, RL1, RL2, AL1, AL2). Example: F.0000.RL1 T 3. F.0000.IN1 NC 15. F.0000.AL1 Alarm home.
<b>O</b>	<b>O.</b> <psw>.RLx.n.	Activate/deactivate relays RL1 or RL2 or read the status of inputs and outputs. Value of <n>: 0 = deactivate 1 = activate 2 = Read the status of inputs and outputs Example: O.0000.RL1.1. (activate output RL1) O.0000.RL2.0. (deactivate output RL2) O.0000.RL1.2. (read the status of all the inputs and outputs)
<b>N</b>	<b>N.</b> pppp.nnnn.NNNN.	Change of the PIN of the SIM.( <u>Warning: read carefully the chapter at page 16</u> )!

### WARNING!

- Be careful to dots "." between parameters and at the end of the command!
- The password <psw> from factory default is "0000", if changed, the new password must be carefully store it, otherwise it will be no more possible to access to the DGSM-2A module!

## 1.24. CE STATEMENT OF CONFORMITY

The manufacturer declares that the product

**DGSM-2A**

complies with the essential requisites contained in the following UE directives:

- directive on the electromagnetic compatibility
- directive on the low voltage 73/23/CEE and followings

Applied laws of harmonization:

EN55014-1, EN55014-2, EN 61000-3-2, EN 61000-3-3, EN60335-1

Moreover, this product is compatible with the usage in an installation complying to Directive 98/37/CE norms:

EN 12453, EN 12445, EN 12341-1

