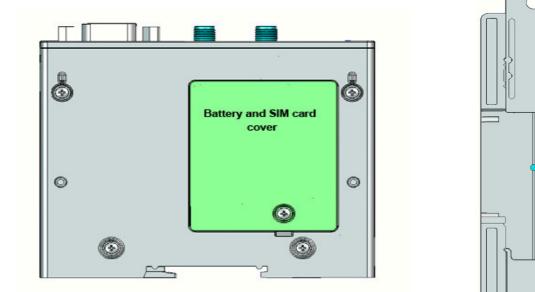
GSM Access Control model GSM18v4

User manual Version June 2016

1. General Overview

The GSM18v4 Access Control is our basic GSM access control system for cellular gate\door access control. The unit can store a list of authorized users and when someone calls the SIM of the unit, the unit hangs-up the call and checks if the phone number of the caller is in the list of the unit, and only if he is an authorized user, a pulse generated by internal relay to trigger the gate\door to open. There is no cost of call to the user. The unit can hold up to 1600 authorized users and up to 400 restricted (limited) users, totally 2000 users.



2. General Product Description

Weight:120 grams.Input voltage:12V DCAir humidity range:5% - 85%RoHS compliance:Fully compliant with the EU RoHS and WEEE DirectivesCasing material:The case made from plastic PC IP54.GSM frequencies:The unit supports quad band GSM frequencies

3. Installation

SIM card insertion

With a Philips screw driver open the SIM card drawer cover and insert the SIM card. Make sure the SIM card is capable to receive incoming SMS messages and to identify a caller ID.

GSM antenna

The GSM antenna needs to be connected to the SMA connector in the front panel of the unit.

Power Supply

The power supply for the unit must be a single voltage source of regulated power supply between 10V-14V Dc capable of providing a Min 2Amp peak during an active transmission. The unit is protected from supply voltage reversal. An internal fuse ensures an electrical safety according to EN60950 standard. This fuse is not removable.

<u>Connections</u>

- Red wire: Positive + 12V
- Black wire: Negative -V
- Yellow wire: Not in use
- White wire: Common (contact of the internal relay)
- Green wire: N.O. (Normally Open contact of the internal relay)
- Yellow wire: Not in use

Appling power to the unit

Before applying power, <u>**TEST THE SIM CARD IN YOUR PHONE**</u> and make sure you can make a call and it is activated and has its ID number on. Unscrew the cover on the unit and insert the SIM. <u>**NOTE**</u> ! Please wait 3 minutes to allow the unit to load the software after powering up the unit on. The LED in the unit will turn on to indicate the unit is ready for use.

System operation

A registered user can gain access by calling the unit which will automatically activate its output to trigger the gate/door to open. If the user's mobile number is a privet number, then he can gain access by sending an SMS to the unit. If access by SMS is desired, then SMS: O (lowercase or uppercase) to the unit.

4. Programming the unit

Make sure the Green LED is ON and the SIM card has a credit to make calls.

The unit can be programmed by SMS commands.

Whenever you program the unit by SMS, you must start the SMS message with the letter **P** (Password) followed by the **Manufacture's Default Password which is 1234** and then the desired command. For each SMS command you send, you will receive an SMS reply from the unit to confirm. Note! If there is no credit on the SIM card, the unit will not send an SMS confirmation back.

\Rightarrow <u>Programming phone numbers of normal users (0 - 1600)</u>

Example for how to register and add three phone numbers by SMS command; P.1234A.0417315263.0418655002.0411136585

"P" means: password

1234: Manufacture's default password.

"A" meaning: Add the following number(s).

"." The dot means end of a number.

0417315263 : phone number added.

0418655002 : phone number added.

0411136585 : phone number added.

You must write and send the SMS exactly as written above, with points between each phone number. If you failed to register several numbers on one go, try to send them one by one as follow:

P.1234A.0417315263

⇒ Deleting registered phone numbers by SMS command

To Delete All numbers P.1234format In order to delete registered phone numbers send SMS with the following structure: P.1234D.0417315263.0418655002 "P" means: password 1234: Manufacture's default password. "D" meaning: DELETE the following number(s). "." The dot means end of a number. 0417315263 : phone number added.

⇒ <u>Setting the internal clock by SMS command</u>

The unit's internal clock is automatically updated with the local time however in some old mobile networks this might not be applicable and therefore the unit's internal clock should be updated by a SMS as follows; **P.1234CU**

 \Rightarrow Setting up special users (phone numbers) (0 - 400) by SMS command Note: A special phone Number is a user who has limited number of eateries to access the property, or

limited to certain times or special days of the week.

Make sure to update the internal clock before you register special phone number as shown above. In order to register special phone numbers and set time zone for each number by SMS do as follows;

* To allow <mark>unlimited number of entries</mark> with <mark>limited time zone</mark> and <mark>limited days of the week</mark> for a special number:

P.1234AS.0418317452.1.0900.1700.127

"AS" meaning: Add Special number

" 1" meaning : To allow unlimited numbers of entries.

"900.1700" meaning: To limit entries between 9:00AM to 17:00PM.

"127" meaning: limiting entries for days of the week; Sundays Mondays & Saturdays.

* To allow limited number of entries with unlimited times or days for a special number: P.1234AS.041736690.3.6

"AS" meaning: Add Special number

" 3" meaning : Allow limited entries for this especial number.

"6" meaning : To limit 6 entries only.

Pls insert "0,0" instead of the time <u>if you do not want to limit</u> the entries between any time.

⇒ Delete Special phone numbers by SMS

In order to delete special phone numbers send the following

P.1234DS.0416824036,0433256815

"DS" meaning : Delete Special number (or numbers)

⇒ Changing the default programming password code by SMS

In order to change the "password programming code" you need to send an SMS with the following structure: **P.1234NP.1111**

P.1234 (the default code) required for any SMS command

The letters NP stands for "New Password" then the numbers 1111 are the new password which should be used from now on in any program SMS you send to the unit. "P.1111"

⇒ Gate Opening trigger Delay

The default pulse trigger of the internal; relay is 3 seconds. In order to change the trigger opening time of the relay to 1 seconds (for example), send SMS with the following structure

P.1234GOD.1,1,1,1

The Maximum time of the relay to stay open is 60 second

⇒ Info

In order to receive information on the numbers and special numbers stored in unit's memory send the following SMS command:

P.1234INFO

⇒ Disable/Enable the unit

The unit default status is enabled. In order to disable the unit send the following SMS **P.1234EN.0**

In order to enable the unit to function send **P.1234EN.1**

⇒ Open All

The "Open All" feature will allow the gate to open for any one that calls the unit. To enable this feature send SMS

P.1234open.1

To disable this feature send **P.1234open.0**

⇒ REST In order to reset the unit send the following P.1234RESET

> ECA Electronic Engineering Pty. LTD. Factory Address: No. 76 - 80 Levanswell Rd Moorabbin Vic. 3189 <u>ecaelcetronic@bigpond.com</u> <u>www.gatesonsolar.com</u> Tel: +61 3 95720535