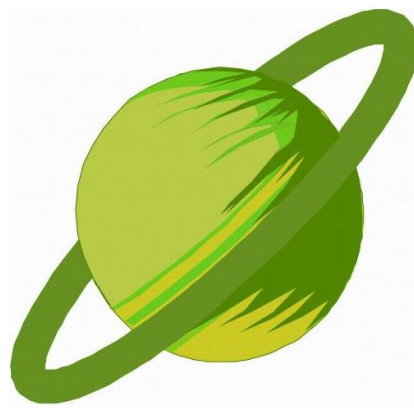


# Assist Monitoring System SekurIt



FCC ID: 2AO6CSU505E

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### Part One. Preface

Thank you so much for using our product!

The device administers your vehicle via GPS (Global Position System), mobile communication, and Internet. It works stable, accurate, and easy to be installed and operate

Core Functions: Our product can accurately locate the device position via GPS. The users can select mobile phone SMS and network (computer network address: [www.gps155.com](http://www.gps155.com); mobile phone network address: [www.gps155.com/wap](http://www.gps155.com/wap)) to locate the device and track the target in real-time.

### Special Statement:

We will neither undertake any responsibility of personal data loss and accidental damage due to user's improper operation and maintenance, nor any damages it includes.

Without our company's authorization, anyone must not copy, transmit, or transcribe any part of this manual in any form or by any means.

### Part Two. Specifications

Size: 40\*58\*14.5mm

Working Voltage: DC: 6~30V

Working Environment: -30~50°C, 40% to 80% RH

Band: 850/900/1800/1900MHz

GPRS: class 12, TCP/IP.

GPS: U-BLOX 7

Frequency: L1, 1575.42 MHz

GPS sensitivity: -164 dBm

Positioning accuracy: 10 m (2D RMS)

Working current: less than 30mA (12V); Less than 20mA (24V )

Working current in power saving mode: 4mA (12V)



### Part Three. Installing

1. Red wire connect to positive 12~24V DC
2. Black wire connects to negative
3. Yellow wire connects to relay device pin86. Pin85 connects to ground. Pin 30 and 87A of the relay device connect to oil pump line in series.
4. Green wire connects to ACC or other alarm devices; SOS for optional

The recommended positions to place device





Note: device cannot get wet by rain, the device side with “This side up” marking should be upward, and there is no metal sheet above the device.

#### **Part Four. Start to use device**

##### **4.1 Register the main monitoring number**

To use the device, user should insert a SIM card in the device.



**Insert the SIM  
card in the slot**

And then send SMS command to device SIM card to register the mobile phone number on our web tracking system first. (After sending SMS commands to device, device will reply with SMS to user to advice the status of execution. If the SMS command content or format is incorrect, device will tell you the SMS

command is invalid)

LED light indication:

User can see LED light from SIM card slot.

RED indicates to GPS, if flashing, means got GPS signal.

Blue indicates to GPRS, if flashing, means connected to server.

How to register?

Send SMS command **REG000000# (register)**

Note: default security password is 000000.

After registered, the device will reply SMS of the username and password to log in the web tracking system.

Note: if the SIM card in device has no GPRS or did not set correct APN, the device will reply SMS to tell you the registration is failed.

#### 4.2 Language setting

The device can set to different languages. Users can set language by sending SMS to device SIM card (default setting is in Chinese)

SMS format:

**EN** (set to English), **CN** (set to Chinese)

**ID** (set to Indonesian), **TH** (set to Thai)

#### 4.3 Set GPRS Access Point Name

In different countries, the user needs to set correct APN to get GPRS for device.

SMS format: **APN\*aa\*xx\*yy**

Here “aa” is the name of telecom operator, “xx” is the username and “yy” is the password. You can contact local telecom operator to get related information. If the username and password is blank, you cannot omit the “\*”, that is APN\*aa\*\*

For example, the telecom operator Jersey Telecom of United Kingdom, its APN name is “pepper”, username is “abc”, password is “abc”, so the SMS command to set APN is

**APN\*pepper\*abc\*abc**

Default setting of APN is China Mobile.

#### 4.4 Set subsidiary monitoring mobile phone number

User can authorize other mobile phone number to assist the management of monitoring. User can set maximum 3 subsidiary monitoring mobile phone number for the device.

To use this function,

Send SMS to device SIM card number: **ASSI**mobile number 1# mobile number 2#..... (**assistant**)

Note: the function of subsidiary number including checking device status, get position information. While setting subsidiary monitoring mobile phone number, need to add country code, e.g.: UK is +44, Brazil is +55

Example to set subsidiary monitoring number: **ASSI+44xxxxxx#**

The way to delete the subsidiary monitoring mobile phone number:

Send SMS to device SIM card number: **CLRASSI** mobile number 1# mobile number 2#..... (**clear assistant**)

You can also delete all the numbers in simple way:

Send SMS to device SIM card number: **CLRASSI**

To query all the subsidiary monitoring mobile phone number,

Send SMS to device SIM card number: **CHKASSI** (**check assistant**)

### Part Five. Detail of functions

#### ● SMS functions

##### 5.1 Basic functions

##### 5.1.1 Get position information

By sending SMS to device SIM card to get position information, there are 3 ways that user can choose.

A. Through GPS positioning, get detail address information

Here is the way to get the information:

Send SMS to device SIM card number: **LOCA**(**locate**)

B. Through Google map, get a Google link. You can input the link in browser to see the position on Google map.

Here is the way to get the information:

Send SMS to device SIM card number: **GOOGLE**

C. Through cell phone signal base station to get detailed address information.

Here is the way to get the information:

Send SMS to device SIM card number: **LBS** (Location Based Service)

### 5.1.2 Geo-fence

The user can set geo-fence to get noted that the device is entering or quitting some areas. The center of the geo-fence is the current position of the device, and radius can be set from 100 meters to 65530 meters. The maximum amount of the e-fence for one device is 3, and each is numbered as: 1, 2, 3. There are three alarm modes for the user to choose, they are “out of the fence”, “into the fence”, and “into or out of the fence”, each is denoted as A, B, C.

Here is the way to set it:

Send SMS to device SIM card number: **FENCE<sub>x</sub>\*y\*n**

“X” is the number of fence, “y” is the mode of fence, and “n” is the radius of the fence.

For example, if you need to set first fence to be out of fence reminding, and radius is 600 meters, you can send SMS like this **FENCE1\*A\*600**

The mode of fence can be modified. The way to modify the mode is like this:

Send SMS to device SIM card number: **FENCEMODE<sub>x</sub>\*y**

“x” is the number of fence, and “y” is the mode

If you need to delete the geo-fence you have set,

Send SMS to device SIM card number: **CLFENCE** (clear fence)

### 5.1.3 Report position information automatically by interval

User can set device to automatically report position information by replying SMS to user’s mobile phone

Send SMS to device SIM card number: **AUTOLOCAn**



(**automatic locate**)

“n” is a digit for hours from 0 to 99.

If the SMS you sent is AUTOLOCA2, then each 2 hours the device will reply position information to user’s mobile phone by SMS.

If you need to turn off this mode,

Send SMS to device SIM card number: **AUTOLOCA0**

#### 5.1.4 Remote control of engine power

If the device has connected with relay device, user can cut the supply of power and gas to the vehicle by sending SMS to stop the vehicle.

Here is the way to execute:

Send SMS to device SIM card number: **ENGOFF (Engine off)**

Note: after sending this command, device will control the stop of vehicle intelligently to ensure safety. If the vehicle speed is above 40 km/h, the execution of cutting power and gas is intermissive, that is, to cut and supply alternately; if the vehicle speed is below 40 km/h, the execution of cutting of power and gas will be done in one-time.

The way to resume power and gas supply:

Send SMS to device SIM card number: **ENGON (Engine on)**

#### 5.1.5 Power saving mode

Device can be set to power saving mode after 5 minutes that engine is off and no sense of vibration, so that to reduce power consumption and GPRS data flow. Once engine is on or sensed vibration, device will go back to normal working mode.

Here is the way to set: Send SMS to device SIM card number:

**SDMS1**

Here is the way to cancel: Send SMS to device SIM card number:

**SDMS0**

After set to power saving mode, this is to set the wake up time:

**WAKEn** ( $0 \leq n \leq 65530$  minutes, 0=turn off power saving mode. Default setting is 5 minutes, which means, after 5 minutes engine power off, and without vibration, device will go to sleep mode.)

While device is in sleep mode, this is to set how long time device

in sleep, and then wake up automatically:

**SLEEPn** ( $0 \leq n \leq 65530$  minutes; 0=no wake up. Default setting is 3 hours, which means, after device go to sleep, each 3 hours, device will wake up automatically.)

## 5.2 Basic alarming modes

### 5.2.1 Anti-theft alarm

User can turn on anti-theft alarm. After set, if the vehicle is moving at speed above 20km/h, or device sensed vibration, device will send SMS to user's mobile phone number to advice the abnormality of vehicle.

Here is the way to set:

Call the device, if device hang off call in 12 seconds, device is set to anti-theft alarm. Or send SMS **ALARMMODE**

Here is the way to cancel:

Call the device, if device hang off call in 5 seconds, device canceled anti-theft alarm. Or send SMS **CLALARM** (Clear Alarm)

### 5.2.2 Vibration sensitivity set up

User can set vibration level for device.

Send SMS to device SIM card number: **SENSEn** (n is a value from 0 to 10. Level 1 is most sensible. Default is level 2. If set to 0, is to turn off vibration alarm)

### 5.2.3 Over-speed reminding

User can set over speed reminding for the vehicle. After set, if the vehicle is driving above the speed which is set, the device will send SMS to user to remind user slow down.

Here is the way to set:

Send SMS to device SIM card number: **SPEEDn**

“n” is the value of speed by kilometer, from 0 to 1000. If set to 0, is to turn off over speed alarm

## 5.3 Device operation

### 5.3.1 Device reboot

User can send SMS to reboot the device

Here is the way to set:

Send SMS to device SIM card number: **RESTART**

After sending the SMS, device will reply SMS and you need to wait for 1 minute to do next operation.

### 5.3.2 Reset to default setting

User can reset the parameters to default settings.

Here is the way to set:

Send SMS to device SIM card number: **RST**

## 5.4 Device parameter setting

### 5.4.1 Time zone setting

User can set time zone for device if in different countries.

Here is the way to set:

Send SMS to device SIM card number: **TZE<sub>n</sub>** or **TZW<sub>n</sub>**

(time zone east / time zone west)

“n” is the number of time zone, TZE is to set eastern hemisphere, TZW is to set western hemisphere. For example, to set time zone for China is TZE8, and to set for Brazil is TZW3

### 5.4.2 Data transmitting interval

User can set the GPRS data transmission interval according to his demand for device while engine is on and off.

To set data transmission interval while engine is on,

Send SMS to device SIM card number: **HB<sub>n</sub>**

n=5~120 seconds. If “n” is set to 0, the data transmission is stopped.

To set data transmission interval while engine is off,

Send SMS to device SIM card number: **SHB<sub>n</sub>**

n=5~65530 seconds. If “n” is set to 0, the data transmission is stopped.

## 5.5 Other functions

### 5.5.1 Software version query

User can get software version information by sending SM

Here is the way to set:

Send SMS to device SIM card number: **ET**

#### 5.5.2 Status query

User can get device status by sending SMS

Here is the way to query:

Send SMS to device SIM card number: **CHECK**

#### 5.5.3 Modify registration password

User can modify the device security password by sending SMS

Here is the way to modify:

Send SMS to device SIM card number: **MODIFYPW**current password+new password (**MODIFY** password)

For example the current password is 000000, if you want to change to 123456, you need to send SMS MODIFYPW000000123456

#### 5.5.4 Get platform password back

If forget web tracking system log in password, user can get the password by sending SMS to device.

Here is the way to query:

Send SMS to device SIM card number: **PLFMPW** (platform password)

#### 5.5.5 Blind area compensation

When the GSM signal is bad or disconnected with server, device will store the data first, after connected with server, device will send the data to server.

#### 5.5.6 Turn on/off SMS reply

All SMS incurs expense If user do not need SMS reply in order to save SMS expense, can send **SMS0** to turn off SMS reply.

Send **SMS1** to resume SMS reply.

#### 5.5.7 Car plate number set up.

User can set car plate number for the device, so that when device is replying SMS, user can recognize the SMS is from which car.

Here is the way to set:

Send SMS to device SIM card number: **CARNAME#xxxxxxx#**

#### 5.5.8 Audio monitoring (optional)

User can monitor the audio of the device.

Here is the way to monitor:

Send SMS to device SIM card number: **CALL**

After sending the SMS, device will call back. Only admin numbers can use this function.

Admin number and secondary number also can call the device directly to monitor the audio. Default is calling for setting to anti-theft alarm. To turn on calling for audio monitoring, user should send SMS **KJT**. When in mode of calling to monitor audio, user cannot call to set anti-theft alarm. To return to calling for setting to anti-theft alarm, send SMS **KFD**.

#### 5.5.9 Alarm against external power down

When the external power is down, (e.g. cut by thief) device will send SMS to notify user so that to help protect vehicle from being stolen. At that time, the backup battery can supply power for device to continue working.

#### ● Network functions

A. Log on to the web tracking system to track online with PC.

Address: [www.gps155.com](http://www.gps155.com)

The main functions of web tracking system including: real time tracking, check history, geo-fence, over speed alarm, cut/resume power supply, vibration alarm, power-saving mode, mileage, etc. Besides, all SMS command can be sent from web tracking system.

## Monitoring and controlling page

The screenshot displays the 'Monitoring and controlling' web interface. At the top, there is a navigation bar with links for 'Back-stage management', 'Change password', and 'Log out'. Below this, the main content area is divided into several sections. On the left, there is a 'Monitoring list' table with columns for 'All devices (1)', 'ID', 'Status', 'Location', 'Speed', 'Direction', and 'Action'. The table shows one device with ID '358155100002828' and status 'online'. To the right of the table is a map of Asia with a red location pin. Below the map is a 'Controlling commands' section with a 'Measure distance' button. At the bottom is an 'Information display' section showing coordinates: '1122 358155100002... online 2013-5-30 11:18:38 50.7241933333333 -1.80474333333333 0 13 Heatherlea Road Bournemouth BH6 3HN, UK'. Callout boxes highlight the 'Monitoring list', 'Controlling commands', 'Account management', and 'Information display' sections.

B. Log on to the web tracking system to track online with mobile phone.

Address: [www.gps155.com/wap](http://www.gps155.com/wap)

## **Part Six. FAQ**

### **1. Mobile phone registration failed**

Possible causes:

1) The content or format of SMS is incorrect, or sent to the SIM card which is not in the device.

2) Device SIM card is not well inserted, or the SIM card in the device does not have GPRS function.

2. GPS positioning fails, i.e. the user receives a reply message "no positioning for the device" (note: normally device will get GPS signal in 35 seconds to 2 minutes)

Possible causes:

1) The GPS signal around the place where the GPS antenna is placed is too weak

2) The GPS antenna of the device is covered by metal objects, or the side of up and down is reversely placed.

3. The user has not received any reply when he sends commands to his device while his mobile phone is under normal circumstances.

Possible causes:

1) Device is not started.

2) Format or content of the SMS COMMAND is incorrect.

3) The user has sent SMS to a wrong SIM card number

4) GSM network is too busy

5) No balance in SIM card or no GPRS

Tip: Users can dial the device SIM card number to check if the device operates normally. If can get through or it says busy, then it is no problem; if cannot reach or it says powered off, then need to check other causes.

4. The user can not log onto the internet network platform by his host number.

Possible causes:

1) Password is not input correctly;

2) The main monitoring number has not been registered successfully.

5. It takes too much time for the user to receive the reply message after he has sent the COMMAND MESSAGE. (Note: the normal time for the user to get reply message is less than 2 minutes.)

Possible causes:

1) The device fails to connect to the network service platform.

2) GSM network is too busy

## Part Seven. SMS command list

EN/CN/ID/TH	Set language
CN	Set language to Chinese
REG	Register the main monitoring number
APN	Set GPRS access point
ASSI	Set subsidiary monitoring mobile phone number
CHKASSI	Query all the subsidiary monitoring mobile phone number
CLRASSI	Delete the subsidiary monitoring mobile phone number
LOCA	Through GPS positioning, get detail address information
GOOGLE	Get Google link
LBS	Location based service
FENCE	Set geo-fence
FENCEMODE	Modify geo-fence mode
CLFENCE	Remove the geo-fences
AUTOLOCA	Report position information automatically by interval
ENGOFF	Cut off engine power
ENGON	Resume engine power supply
SDMS	Power saving mode setting
ALARMMODE	Anti-theft alarm mode is on
CLALARM	Anti-theft alarm mode is off
SPEED	Over-speed reminding
RESTART	Device reboot
RST	Reset device
TZE/TZW	Set time zone
ET	Software version query
CHECK	Status query
MODIFYPW	Modify security password
PLFMPW	Query platform password
CARNAME	Car plate number set up



## **FCC Statement**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.