GSM/GPRS/GPS Tracker **GL300**

SMS Protocol

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0. Revision history

Revision	Date	Author	Description of change
1.00	2013-05-02	April.chen	Draft

1. Overview

1.1. Scope

The SMS Protocol is a digital communication interface based on printable ASCII characters over SMS which is used for all communication between a cell phone or a SMS server and the terminal. The cell phone or the SMS server sends a command to the terminal and then the terminal confirms with an acknowledgement message. If necessary, the terminal also sends report messages to the cell phone or the SMS server.
The purpose of this document is to describe how to communicate with GL300 based on the pure SMS Protocol.
The protocol defined in this document works on GL300R00A02V06M128_NMX.

1.2. Reference

Table 1: Reference

SN	Document name	Remark
[1]	GL300 @Tracker Air Interface Protocol_V1.01.pdf	

1.3. Terms and Abbreviations

Table 2: Terms and abbreviations

Abbreviation	Description
ASCII	American National Standard Code for Information Interchange
GSM	Global System for Mobile Communications
HDOP	Horizontal Dilution of Precision
ICCID	Integrated Circuit Card Identity
SMS	Short Message Service
UTC	Coordinated Universal Time

2. Message Description

2.1. Message Format

All of SMS Protocol message are composed of printable ASCII characters. There are three kinds of message. These messages have following format:

Message format	Message type
<password><sp><command string>[<sp>]<parameter>…..	Command
<device name><sp><command type><sp><result>	Acknowledgement
<device name><sp><type><sp><google link>	Report

<*password*>: password for the command. Password length is four to six. The valid character of password is '0'-9', 'a'-'z', 'A'-'Z'. The default value is "gl300".
<*device name*>: The valid character of device name is '0' – '9', 'a'-'z', 'A'-'Z', '-', '_'. The default value is "GL300".
<*sp*>: it means space character here. The following <sp> in the document means the same.
<*command string*>: A string to distinguish different command request.
<*result*>: A string to indicate whether the command is confirmed and the executing result for some commands.
<*type*>:different kinds of report have their own message head.
Note:
1.<xxxx> is parameter name. It means the same in the whole document except <sp>.
[] means the information in it can be omitted.
2.All of SMS protocol messages must be sent in SMS way and only one message at one time

2.2. Commands and confirmation

2.2.1 Enable Periodical Report

2.2.1.1. Command details

This command will let the device report SMS message with google maps hyperlink periodically. Please refer to the chapter 2.3.1 for detailed information about the periodical report.

Command format	<password><sp>**start period report**<sp><period><unit><sp><times>
Example	gl300 start period report 30sec 5

<*password*>: The default password is gl300. It is consist of digits and letters.
<*period*>: The interval time to get GPS position and send the google link information. The value range is 5-86400 and the unit is second.
<*unit*>: The unit of the period. It can be **sec** (second), **min** (minute), **hou** (hour).
<*time*>: The continuous number of the periodical report messages to send. If it is 0, the device will report for ever.
start period report: it's command string for enable periodical report.

Note:
The command will modify some parameters in AT+GTFRI.
1. <Check interval>,<Send interval>,<Ignition check interval>,<Ignition send interval> in AT+GTFRI will be changed by <period>.
2. When enable period report, the <Mode> in AT+GTFRI will be set as 1 (Enable the scheduled timing report).
3. If enable period report, the bit0 and bit3 of <mode> in AT+GTNMD will be set as 0. (Bit0: Suspend the report of FRI (including +RESP:GTGSM for FRI) and Geo-Fence when it detects non-movement ; Bit3: Change the fix interval and send interval of FRI(including +RESP:GTGSM for FRI) to <rest fix interval> and <rest send interval> when it detects non-movement. In the case, it just modify the fix interval and send interval of FRI (including +RESP:GTGSM for FRI) but not suspend the report of FRI (including +RESP:GTGSM for FRI) even if Bit0 is 1).

2.2.1.2. Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to enable periodical report.

Message format	<device name> period report <result>
Example	GL300 period report on

<*device name*>: the name of the device. It is configurable (Please refer to the chapter 2.2.16 for details).

< *result* >: A string to indicate if enable period report or not.

on: it is successful to enable period report.

failed: it is failed to enable period report.(if the range of <*period*>is not 5-86400 while the unit is second, the command confirmation is GL300 period report failed).

2.2.2 Disable Periodical Report

2.2.2.1 Command details

This command will let the device stop reporting SMS message with google maps hyperlink periodically.

Command format	<password><sp>**stop period report**
Example	gl300 stop period report

stop period report: it's command string for disable period report.

Note:
When disable period report, the <Mode> in AT+GTFRI will be set as 0 (Disable fixed report function)

2.2.2.2 Command confirmation

This is acknowledgement message sent from the device to the number who sent the command to disable periodical report.

Message format	<device name> period report off
Example	GL300 period report off

2.2.3 Enable Motion Alert

2.2.3.1 Command details

This command will let the device report SMS message with google maps hyperlink when movement detected. Please refer to the chapter 2.3.2 for the details about the motion alert report.

Command format	<password><sp> **start motion alert**
Example	gl300 start motion alert

start motion alert: it's command string for enable motion report. When the device's state is changed from static to movement, it will report alert.

Note:
When enable motion alert, the bit2 of <*mode*> in AT+GTNMD will be set as 1(Report the message +RESP:GTNMR to the backend server when it detects movement.)

2.2.3.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to enable motion alert.

Message format	<device name><sp>motion alert<sp><on>
Example	GL300 motion alert on

<*device name*>: the name of the device.
<*on*>: on for enable motion alert.

2.2.4 Disable Motion Alert

2.2.4.1 Command details

This command will disable report SMS message with google maps hyperlink when movement detection.

Command format	<password><sp> **stop motion alert**
Example	gl300 stop motion alert

stop motion alert: it's command string for disable motion report.

2.2.4.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to disable motion alert.

Message format	<device name><sp>motion alert<sp><off>
Example	GL300 motion alert off

<*device name*>: the name of the device
<*off*>: off for disable motion alert

2.2.5 Enable Geo Alert

2.2.5.1 Command details

This command will let the device report SMS message with google maps hyperlink when

the specified Geo-Fence alarm is detected. Geo-Fence is a virtual perimeter on a geographic area using a location-based service, so that when the device enters or exits the area a notification is generated. Please refer to the chapter 2.3.3 for the details about the report for Geo-Fence.

Command format1	<password><sp>**set** **geo**<id><sp><longitude><sp><latitude>[<sp><radius>]
Example	gl300 set geo1 121.35438 31.45870

Command format2	<password><sp>set geo<id><sp>local <radius>
Example	gl300 set geo1 local 100

<*id*>: A numeric to identify the Geo-Fence. It is noticed that there is no space character between <id> and the command string before it.
<*longitude*>: The longitude of a point which is defined as the center of the Geo-Fence circular region. The format is "(-)xxx.xxxxxx" and the value range is from "-180.000000" to "180.000000". The unit is degree. West longitude is defined as negative starting with minus "-" and east longitude is defined as positive without "+".
<*latitude*>: The latitude of a point which is defined as the centre of the Geo-Fence circular region. The format is "(-)xx.xxxxxx" and the value range is from "-90.000000" to "90.000000". The unit is degree. South Latitude is defined as negative starting with minus "-" and north Latitude is defined as positive without "+"
<*radius*>: The radius of the Geo-Fence circular region. It can be omitted. If it is omitted, the radius for the geo-fence will be set as 200.
set geo: it's command string for enable geo report.

Note:
The command will modify some parameters in AT+GTGEO.
1. <*Longitude*>, <*Latitude*>, <*Radius*> in AT+GTGEO parameter value will be changed by <*longitude*>, <*latitude*>, <*radius*> in this command. And the parameter <*id*> will decide which Geo-Fence will be updated.
2. The <*Mode*> in AT+GTGEO will be set as 3 (Reports when enters or leaves the Geo-Fence).
3. The <*state mode*> in AT+GTGEO will be set as 1 (Don't report until the state changes) if the command's format is 1.
4. If enable Geo alert, the <*google mode*> in AT+GTGLM will be set as 1.
5. The command format2 use the current position as the centre of Geo-Fence.

2.2.5.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to enable geo alert.

Message format	<device name><sp>geo<id><sp>< result >
Example	GL300 geo1 on

<*device name*>: the name of the device

< *result* >: A string to indicate if enable geo alert or not

on: it is successful to enable geo alert.

failed: it is failed to enable geo alert.(if command format is format2, and GPS fix failed, the command confirmation is GL300 geo1 failed)

2.2.6 Disable Geo Alert

2.2.6.1 Command details

This command will disable report SMS message with google maps hyperlink when Geo-Fence alarm is detected.

Command format	<password><sp>**stop geo**<id>
Example	gl300 stop geo1

stop geo: it's command string for disable geo alarm report.

Note:

This command will cause the parameter <*Mode*> to 0 in the Geo-Fence defined by <*id*> (Disable the Geo-Fence on the specified GEO ID.). Please refer to the command AT+GTGEO for the details.

2.2.6.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to disable geo alert.

Message format	<device name><sp>geo<id><sp><off>
Example	GL300 geo1 off

<*device name*>: the name of the device.

2.2.7 Enable Power On/Off Alert

2.2.7.1 Command details

This command will let the device report SMS message with google maps hyperlink when power on or power off is generated. Please refer to the chapter 2.3.4 for the details of the report for power on and power off event.

Command format	<password><sp>**start onoff alert**
Example	gl300 start onoff alert

start onoff alert: it's command string for enable onoff report. , it will report alert, when power on or power off.

Note:

1. If enable onoff alert, the bit1 and bit11 of <*Event mask*> in AT+GTCFG will be set as 1.
2. If enable onoff alert, the <*google mode*> in AT+GTGLM will be set as 1 (Send a SMS with google link to the number is in the <*direct number list*> for SOS and GEO event and include the terminal name in the google hyperlink).

2.2.7.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to enable on/off alert.

Message format	<device name><sp>onoff alert on
Example	GL300 onoff alert on

<*device name*>: the name of the device

2.2.8 Disable Power On/Off Alert

2.2.8.1 Command details

This command will disable report SMS message with google maps hyperlink when power on or power off is generated.

Command format	<password><sp> **stop onoff alert**
Example	gl300 stop onoff alert

stop onoff alert: it's command string for disable the report for power on and power off event.

Note:
When disable onoff alert, the bit1 and bit11 of <Event mask> in AT+GTCFG will be set as 0.

2.2.8.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to disable on/off alert.

Message format	<device name><sp>onoff alert off
Example	GL300 onoff alert off

<*device name*>: the name of the device.

2.2.9 Enable Speed Alert

2.2.9.1 Command details

This command will let the device report SMS message with google maps hyperlink when over speed alarm is detected. Please refer to the chapter 2.3.6 for the detail of the report message for speed alert.

Command format	<password><sp>**start speed alert**<sp><speed>[<unit>]<sp><send interval>
Example	gl300 start speed alert 80 5

<*speed*>: the speed threshold for the over speed alert.
<*unit*>: The unit could be **km/h** or **mph**. if this area is empty, the default unit is **km/h**.
<*send interval*>: The interval to send the report message for over speed alert. The value range is 0|5 – 3600sec and the unit is second.
start speed alert: it's command string for enable speed alarm.

Note:
The command will modify some parameters in AT+GTSPD.
1. <*Max speed*>, <*Send interval*> in AT+GTSPD will be changed by <*speed*> and <*send interval*>. <*Min speed*> in AT+GTSPD is always set to 0.
2. If enable speed alert, <*Mode*> in AT+GTSPD will be set as 2 (Enable speed alarm. If the current speed is outside the speed range defined by min speed and max speed, a speed alarm is sent).
3. If enable speed alert, <*GPS on need*> in AT+GTCFG will be set as 2 (Never close GPS chip only in ignition on state or movement state)

2.2.9.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the

command to enable over speed alert.

Message format	<device name><sp>speed alert<sp><on>
Example	GL300 speed alert on

<*device name*>: the name of the device.

2.2.10 Disable Speed Alert

2.2.10.1 Command details

This command will disable report SMS message with google maps hyperlink when speed alarm is detected.

Command format	<password><sp>**stop speed alert**
Example	gl300 stop speed alert

stop speed alert: it's command string for disable speed alarm.

Note:
1. If disable speed alert, <*Mode*> in AT+GTSPD will be set as 0 (disable speed alarm).
2. If disable speed alert, <*GPS on need*> in AT+GTCFG will be set as 1 (Close GPS chip after retrieving GPS information every time)

2.2.10.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to disable speed alert.

Message format	<device name><sp>speed alert<sp><off>
Example	GL300 speed alert off

<*device name*>: the name of the device.

2.2.11 Enable Ignition Alert

2.2.11.1 Command details

This command will let the device report SMS message with google maps hyperlink when the ignition state is changed. Please refer to the chapter 2.3.7 for the details of the report for the ignition alert.

Command format	<password><sp>**start ignition alert**

Example	gl300 start ignition alert

start ignition alert: it's command string for enable ignition alert.

Note:
When enable ignition alert, the bit12 of *<Event mask>* in AT+GTCFG will be set as 1.

2.2.11.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to enable ignition alert.

Message format	<device name><sp>ignition alert<sp><on>
Example	GL300 ignition alert on

<device name>: the name of the device

2.2.12 Disable Ignition Alert

2.2.12.1 Command details

This command will disable report SMS message with google maps hyperlink when ignition alarm generated.

Command format	<password><sp>**stop ignition alert**
Example	gl300 stop ignition alert

stop ignition alert: it's command string for disable ignition alarm.

Note:
When disable ignition alert, the bit12 of *<Event mask>* in AT+GTCFG will be set as 0.

2.2.12.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to disable ignition alert.

Message format	<device name><sp>ignition alert<sp><off>
Example	GL300 ignition alert off

<device name>: the name of the device

2.2.13 Request Position

2.2.13.1 Command details

This command will let the device report SMS message with google maps hyperlink with the current position immediately. Please refer to the chapter 2.3.8 for the details of the position report.

Command format	<password><sp>**get position**
Example	gl300 get position

get position: it's command string for ask current position.

2.2.14 Restart

2.2.14.1 Command details

The command is used to restart the device.

Command format	<password><sp>**restart**
Example	gl300 restart

restart: it's command string for restart the device.

2.2.14.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to restart the device.

Message format	<device name> restart confirmed
Example	GL300 restart confirmed

<*device name*>: the name of the device.

2.2.15 Change Password

2.2.15.1 Command details

The command is used to change password. The maximum length of a password is 6.

Command format	<password><sp>**password**<sp><new password>

Example	gl300 password 123456

<*new password*>: the new password to change.
password: it's command string for change password.

Note:
The command will modify password for protocol commands. The default value is "gl300".
It is necessary to set new password according to the following format.
1. The maximum length of a password is six and the minimum length of a password is four.
2. The legal character for a password are only '0'-'9','a'-'z','A'-'Z'.

2.2.15.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to change password.

Message format	<device name> password confirmed
Example	GL300 password confirmed

<*device name*>: the name of the device.

2.2.16 Change Device Name

2.2.16.1 Command details

The command is used to change terminal name

Command format	<password><sp>**name**<sp><device name>
Example	gl300 name GL300

<*device name*>: the new name of the device.
name: it's command string for change device name.

Note:
The command will modify the parameter <*Device name*> in the command AT+GTCFG. The default value is "GL300".
It is necessary to change device name according to the following format.
The valid character of device name is '0' - '9', 'a'-'z', 'A'-'Z', '-', '_'.
The maximum length of a password is twenty.

2.2.16.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the

command to change device name.

Message format	<device name> name confirmed
Example	GL300 name confirmed

<*device name*>: the name of the device.

2.2.17 Restore Factory Settings

2.2.17.1 Command details

The command is used to restore the factory settings.

Command format	<password><sp>**restore**
Example	gl300 restore

restore: it's command string for reset all parameters to factory default.

2.2.17.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to restore factory settings.

Message format	<device name><sp>restore<sp>confirmed
Example	GL300 restore confirmed

<*device name*>: the name of the device.

2.2.18 Get IMEI

2.2.18.1 Command details

The command is used to get IMEI of the device.

Command format	<password><sp>**get imei**
Example	gl300 get imei

get imei: It is the command string to request the device to report the IMEI.

2.2.18.2 Command response

This is the response message sent from the device to the number who send the command to query IMEI.

Message format	<device name><sp>imei:<sp><imei>
Example	GL300 imei: 867844000069549

2.2.19 Add Administrator

2.2.19.1 Command details

The command is used to add an administrator who can receive report messages from the device.

Command format	<password><sp>**add admin**<sp><phone number>
Example	gl300 add admin +861388888888

add admin: it is command string for add an administrator.

Note:
The administrator's number will be added to <*direct number list*> in AT+GTGLM.

2.2.19.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to add administrator.

Message format	<device name><sp>add admin<sp><phone number><sp><result>
Example	GL300 add admin +861388888888 confirmed

<*device name*>: the name of the device.
<*result*>: A string to indicate the result to add the administrator.
confirmed: it is successful to add the administrator.
failed: it is failed to add the administrator.

2.2.20 Delete Administrator

2.2.20.1 Command details

The command is used to delete an administrator.

Command format	<password><sp>**del admin**<sp><phone number>
Example	gl300 del admin +861388888888

del admin: it is command string for delete an administrator.

2.2.20.2 Command confirmation

This is the acknowledgement message sent from the device to the number who sent the command to delete an administrator.

Message format	<device name><sp>del admin<sp><phone number><sp>confirmed
Example	GL300 del admin +861388888888 confirmed

<*device name*>: the name of the device.

2.2.21 Get Ignition State

2.2.21.1 Command details

The command is used to get ignition state.

Command format	<password><sp>**get ignition**
Example	gl300 get ignition

get ignition: it's command string for get ignition state.

2.2.21.2 Command response

This is the response message with the ignition state sent from the device to the number who sent the command to query ignition state.

Message format	<device name><sp>ignition<sp><on/off>
Example	GL300 ignition on

<*on/off*>: A string to indicate the ignition state.

on: The current ignition state is on.

off: The current ignition state is off.

2.3. Report Message

All following report messages are sent by the unit automatically if the corresponding conditions are reached. And they will be sent to the administrator's number if there is at least one administrator's number which is added by the **Add Administrator** command.

2.3.1 Periodical Report

Message format	<device name><sp>POSITION UPDATED: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%
Example	GL300 POSITION UPDATED: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%

<*device name*>: the name of the device.
<*google maps hyperlink*>: its format is http://maps.google.com/maps?q=<latitude>,<longitude>.

2.3.2 Motion Report

Message format	<device name><sp>Motion: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%
Example	GL300 Motion: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%

<*device name*>: the name of the device.
<*google maps hyperlink*>: its format is http://maps.google.com/maps?q=<latitude>,<longitude>.

2.3.3 Geo Report

Message format	<device name><sp><IN/OUT>GEO-<id>: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%
Example	GL300 IN GEO-1: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%

<*device name*>: the name of the device.

<*IN/OUT*>: IN for enter geo fence. OUT for exit geo fence.
<*google maps hyperlink*>: its format is http://maps.google.com/maps?q=<latitude>,<longitude>.
<*id*>:geo fence id.

2.3.4 Power On/Off Report

Message format	<device name><sp>POWER<ON/OFF>: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%
Example	GL300 POWER ON: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%

<*device name*>: the name of the device.
<*google maps hyperlink*>: its format is http://maps.google.com/maps?q=<latitude>,<longitude>.
<*ON/OFF*>: A string to indicate the power on event or power off event.
ON: for power on event.
OFF: for power off event.

2.3.5 Power Low Report

Message format	<device name><sp>POWER LOW: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%
Example	GL300 POWER LOW: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%

<*device name*>: the name of the device.
<*google maps hyperlink*>: its format is http://maps.google.com/maps?q=<latitude>,<longitude>.

2.3.6 Speed Report

Message format	<device name><sp>OVER SPEED(<speed>km/h): <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%
Example	GL300 OVER SPEED(125.6km/h): http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%

<*device name*>: the name of the device.
<*google maps hyperlink*>: its format is http://maps.google.com/maps?q=<latitude>,<longitude>.
<*speed*>: current speed for device.

2.3.7 Ignition Report

Message format	<device name><sp>IGNITION<ON/OFF>: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%
Example	GL300 IGNITION ON: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%

<*device name*>: the name of the device.

<*google maps hyperlink*>: its format is http://maps.google.com/maps?q=<latitude>,<longitude>.

<*ON/OFF*>: A string to indicate the current ignition state.

ON: The current ignition state is on.

OFF: The current ignition state is off.

2.3.8 Position Report

Message format	<device name><sp>LOC: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%
Example	GL300 LOC: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%

<*device name*>: the name of the device.

<*google maps hyperlink*>: its format is http://maps.google.com/maps?q=<latitude>,<longitude>.

Appendix A: Sms protocol table

Function	Message Format	Example	Direction
SOS event	<name> SOS: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%	**GL300 SOS:** **http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29** **F1 D2012/08/01T18:00:00 B74%**	Up
tracking one time	<name> LOC: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%	**GL300 LOC:** **http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29** **F1 D2012/08/01T18:00:00 B74%**	Up
In or out geo-fence	<name> IN(OUT) GEO-i: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%	**GL300 IN GEO-1:** **http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29** **F1 D2012/08/01T18:00:00 B74%**	Up
over speed alert	<name> OVER SPEED(<speed>km/h): <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%	**GL300 OVER SPEED(125.6km/h):** **http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29** **F1 D2012/08/01T18:00:00 B74%**	Up
periodical report	<name> POSITION UPDATED: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%	**GL300 POSITION UPDATED:** **http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29** **F1 D2012/08/01T18:00:00 B74%**	Up
ignition state report	<name> IGNITION ON/OFF: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%	**GL300 IGNITION ON:** **http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29** **F1 D2012/08/01T18:00:00 B74%**	Up

motion alert report	<name> MOTION: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%	**GL300 MOTION: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%**	Up
power low alert	<name> POWER LOW: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%	**GL300 POWER LOW: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%**	Up
power on/off alert	<name> POWER ON/OFF: <google maps hyperlink> F1 DYYYY/MM/DDTHH:MM:SS B74%	**GL300 POWER ON: http://maps.google.com/maps?q=31.222073,121.354335+%28GL300%29 F1 D2012/08/01T18:00:00 B74%**	Up
periodical report setting	<password> start period report <period><unit> <times>	**gl300 start period report 30sec 5**	Down
cancel periodical report	<password> stop period report	**gl300 stop period report**	Down
periodical report confirmation	<name> period report on/off (on for start，off for stop)	**GL300 period report on**	Up
Geo-Fence setting	<password> set geo<id> <longitude> <latitude>[<radius>]	**gl300 set geo1 121.35438 31.45870**	Down
Cancle Geo-Fence	<password> stop geo<id>	**gl300 stop geo1**	Down
Geo-Fence confirmation	<name> geo<id> on/off (on for start，off for stop)	**GL300 geo1 on**	Up
motion alert setting	<password> start motion alert	**gl300 start motion alert**	Down
stop motion alert	<password> stop motion alert	**gl300 stop motion alert**	Down
motion alert confirmation	<name> motion alert on/off (on for start，off for stop)	**GL300 motion alert on**	Up

over speed setting	<password> start speed alert <speed> <send interval>	**gl300 start speed alert 80 2**	Down
stop over speed alert	<password> stop speed alert	**gl300 stop speed alert**	Down
over speed confirmation	<name> speed alert on/off (on for start，off for stop)	**GL300 speed alert on**	Up
Restore factory settings	<password> restore	**gl300 restore**	Down
Restore factory settings confirmation	<name> restore confirmed	**GL300 restore confirmed**	Up
change password	<password> password <new password>	**gl300 password 654321**	Down
change password confirmation	<name> password confirmed/failed	**GL300 password confirmed**	Up
Set the authenticated number	<password> add admin <phone number>	**gl300 add admin +861388888888**	Down
Delete the authenticated number	<password> del admin <phone number>	**gl300 del admin +861388888888**	Down
authenticated number confirmation	<name> add/del admin <phone number> confirmed/failed	**GL300 add admin +861388888888 confirmed**	Up
Request postion once	<password> get position	**gl300 get position**	Down
Request IMEI	<password> get imei	**gl300 get imei**	Down
Reply IMEI	<name> imei: <imei>	**GL300 imei: 867844000069549**	Up
Start ignition alert	<password> start ignition alert	**gl300 start ignition alert**	Down
Stop ignition alert	<password> stop ignition alert	**gl300 stop ignition alert**	Down
ignition alert confirmation	<name> ignition alert on/off (on for start，off for stop)	**GL300 ignition alert off**	Up
Query ignition state	<password> get ignition	**gl300 get ignition**	Down

ignition state response	<name> ignition on/off (on for start， off for stop)	**GL300 ignition on**	Up
Start power on/off alert	<password> start onoff alert	**gl300 start onoff alert**	Down
Stop power on/off alert	<password> stop onoff alert	**gl300 stop onoff alert**	Down
power on/off alert confirmation	<name> onoff alert on/off (on for start，off for stop)	**GL300 onoff alert off**	Up
Set device name	<password> name <device name>	**gl300 name GL300**	Down
device name confirmation	<name> name confirmed/failed	**GL300 name confirmed**	
Restart the terminal	<password> restart	**gl300 restart**	Down
restart confirmation	<name> restart confirmed	**GL300 restart confirmed**	Up

Note:
The **Direction** column gives the direction of the SMS. **Down** means the SMS is command sent to GL300 from another phone number. **Up** means the SMS is sent from GL300 to the administrator number or the number who sent a command before.