

# **GPRS communication protocol by for gps watch**

**vision:V1.0**

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In this agreement all data all defer by [ the manufacturer \* equipment ID\* content length \* content], in which manufacturer must fixed two bytes, the content length fixed are four byte ASSII codes, High lows before after, for example the expression length is 65535.

## 一. Terminal to send commands

### 1. Link Keep

(1)

Terminal Send:

[CS\*YYYYYYYYYY\*LEN\*LK]

Example: [SG\*8800000015\*0002\*LK]

Platform Reply:

[CS\*YYYYYYYYYY\*LEN\*LK]

Example: [SG\*8800000015\*0002\*LK]

Explanation: Once link data every 5 minutes, if the terminal has not received the reply data, then 5 minutes reconnect.

(2)

Terminal Send:

[CS\*YYYYYYYYYY\*LEN\*LK, step, tumbling number , electric quantity percentage]

Example: [SG\*8800000015\*000D\*LK, 50, 100, 100]

Platform Reply:

[CS\*YYYYYYYYYY\*LEN\*LK]

Example: [SG\*8800000015\*0002\*LK]

Explanation: Once link data every 5 minutes, if the terminal has not received the reply data, then 5 minutes reconnect.

### 2. Position data report

Terminal Send:

[CS\*YYYYYYYYYY\*LEN\*UD, the position data (see appendix one)]

Example:

[SG\*8800000015\*0087\*UD, 220414, 134652, A, 22. 571707, N, 113. 8613968, E, 0. 1, 0. 0, 100, 7, 60, 90, 1000, 50, 0000, 4, 1, 460, 0, 9360, 4082, 131, 9360, 4092, 148, 9360, 4091, 143, 9360, 4153, 141]

Platform Reply:

Not have

Explanation: The terminal reports the position and the condition information according to the upload time, does not need the platform reply.

### 3. Blind spot Data Supplements

Terminal Send:

[CS\*YYYYYYYYYY\*LEN\*UD2, the position data (see appendix one)]

Example:

[SG\*8800000015\*0088\*UD2, 220414, 134652, A, 22. 571707, N, 113. 8613968, E, 0. 1, 0. 0, 100, 7, 60, 90, 1000, 50, 0000, 4, 1, 460, 0, 9360, 4082, 131, 9360, 4092, 148, 9360, 4091, 143, 9360, 4153, 141]

Platform Reply:

Not have

Explanation: Supplement reported data when Not logged in Platform

### 4. Alarm data report

Terminal Send:

[CS\*YYYYYYYYYY\*LEN\*AL, the position data (see appendix one)]

Example:

[SG\*8800000015\*0087\*AL, 220414, 134652, A, 22. 571707, N, 113. 8613968, E, 0. 1, 0. 0, 100, 7, 60, 90, 1000, 50, 0001, 4, 1, 460, 0, 9360, 4082, 131, 9360, 4092, 148, 9360, 4091, 143, 9360, 4153, 141]

Platform Reply:

[CS\*YYYYYYYYYY\*LEN\*AL]

Example: [SG\*8800000015\*0002\*AL]

Explanation: Terminal sends alarm information to the platform after alarming , if the terminal has not received the reply, then regular reporting until receive the alarm confirmation date.

## 二. Send command platform

### 1. Upload the data interval is set

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*UPLOAD, time interval]

Example: [SG\*8800000015\*0009\*UPLOAD, 10]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*UPLOAD]

Example: [SG\*8800000015\*0006\*UPLOAD]

Explanation: set the terminal regular reporting interval

## 2. Center number set up

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*CENTER, center number]

Example: [SG\*8800000015\*0012\*CENTER, 00000000000]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*CENTER]

Example: [SG\*8800000015\*0006\*CENTER]

Explanation: set center number, send sms commands to terminal by the center number.

## 3. Control password set up

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*PW, password]

Example: [SG\*8800000015\*0009\*PW, 111111]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*PW]

Example: [SG\*8800000015\*0002\*PW]

Explanation: set the terminal password, non center number send SMS commands to add a password.

## 4. Outgoing calls

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*CALL, telephone number]

Example: [SG\*8800000015\*0010\*CALL, 00000000000]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*CALL]

Example: [SG\*8800000015\*0004\*CALL]

Explanation: Through this command dial corresponding phone number.

## 5. Monitor

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*MONITOR]

Example: [SG\*8800000015\*0007\*MONITOR]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*MONITOR]

Example: [SG\*8800000015\*0007\*MONITOR]

Explanation: terminal automatic callback center number.

## 6. SOS Number set

### (1) First SOS number Set up

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*SOS1, telephone number]

Example: [SG\*8800000015\*0010\*SOS1, 00000000000]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*SOS1]

Example: [SG\*8800000015\*0004\*SOS1]

### (2) Second SOS number set up

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*SOS2, telephone number]

Example: [SG\*8800000015\*0010\*SOS2, 00000000000]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*SOS2]

Example: [SG\*8800000015\*0004\*SOS2]

### (3) Third SOS number set up

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*SOS3, telephone number]

Example: [SG\*8800000015\*0010\*SOS3, 00000000000]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*SOS3]

Example: [SG\*8800000015\*0004\*SOS3]

### (4) 3 SOS numbers set at the same time:

[CS\*YYYYYYYYYY\*LEN\*SOS, telephone number, telephone number, telephone number]

Example: [SG\*8800000015\*0027\*SOS, 00000000000, 00000000000, 00000000000]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*SOS3]

Example: [SG\*8800000015\*0003\*SOS]

Explanation: set the SOS number, dial to these numbers when terminal alarming.

## 7. Restore factory settings

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*FACTORY]

Example: [SG\*8800000015\*0007\*FACTORY]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*FACTORY]

Example: [SG\*8800000015\*0007\*FACTORY]

Explanation: The terminal restores factory settings

.

## 8. Set the language and time zone

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*LZ, language, time zone]

Example: [SG\*8800000015\*0006\*LZ, 1, 8]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*LZ]

Example: [SG\*8800000015\*0002\*LZ]

Explanation: set the terminal language and the time zone.

## 9. Version of the query

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*VERNO]

Example: [SG\*8800000015\*0005\*VERNO]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*VERNO, edition number]

Example: [SG\*8800000015\*0028\*VERNO, G29\_BASE\_V1.00\_2014.04.23\_17.46.49]

Explanation: check the terminal vision.

## 10. Restart

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*RESET]

Example: [SG\*5678901234\*0005\*RESET]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*RESET]

Example: [SG\*5678901234\*0005\*RESET]

Explanation: terminal restart.

## 11. Positioning instruction

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*CR]

Example: [SG\*5678901234\*0002\*CR]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*RESET]

Example: [SG\*5678901234\*0002\*CR]

Explanation: Wake up the terminal GPS module immediately, for a period of time in a position.

## 12. The shutdown instructions

Platform to send:

[CS\*YYYYYYYYYY\*LEN\*POWEROFF]

Example: [SG\*5678901234\*0008\*POWEROFF]

Terminal response:

[CS\*YYYYYYYYYY\*LEN\*RESET]

Example: [SG\*5678901234\*0008\* POWEROFF]

Explanation: the shutdown function.

## 三. Appendix

### Appendix One: Location data

Name	Examples (ASCII code)	Explanation
Date	120414	(day month year) April 21, 2014
Time	101930	(hour, minutes and seconds) ten nineteen 30 seconds
Whether the Location	A	A: positioning V: No positioning
latitude	22.564025	According to the definition of DD.DDDDDD format, this latitude value is: 22.564025.
Mark of latitude	N	N expresses the north latitude, S expresses the south latitude.
longitude	113.242329	According to the definition of DDD.DDDDDD format, this longitude value is: 113.242329.
Mark of longitude	E	E expresses the east longitude, W expresses the west longitude
Speed	5.21	5.21 km / hour.
Direction	152	In the direction of 152 degrees.
Altitude	100	Unit is meters

satellite number	9	Indicates that the GPS satellite number
signal intensity GSM	100	That represents the current GSM signal intensity (0-100)
Power	90	Expresses the current electric quantity rank percentage
Count the number of steps	1000	Counts the step is 1000
Roll number	50	Roll 50 times
Terminal state	00000000	Indicated with HEX string of character , the meaning is as follows: The high 16bit expression alarming, low 16bit expression condition. The Bit position (0 starts)                      Meaning (1 Effective) 0    Low battery state 1    out of fence state 2    Into the fence state 3    watch state 16    SOS alarm 17    Low battery alarm 18    out fence alarm 19    Into the fence alarm 20    Remove the watch alarm
Base stations number	4	upload Base stations number, 0 expressions does not uplaod the base station number
Base station tower	1	GSM Time delay
MCC country code	460	460 represent China
MNC network number	02	02 represent China Mobile
Base station location area code	10133	Area code
Base station number	5173	base station No.
base station signal strength	100	Signal strength
Near the base station 1 location area code	10133	Area code
Near the base station 1 number	5173	base station No.
near the base station 1 signal strength	100	Signal strength
Near the base station 2 location area code	10133	Area code
Near the base station 2 number	5173	base station No.
near the base station 2 signal strength	100	Signal strength
Near the base station 3 location area code	10133	Area code
Near the base station 3 number	5173	base station No.
near the base station 3 signal strength	100	Signal strength



Wifi information quantity	5	Wifi quantity(at most 5 pcs).According to the signal strength
Wifi 1 name	rrr	First wifi information name
Wifi 1 MAC address	1c:fa:68:13:a5:b4	First wifi MAC address
Wifi 1 signal strength	-61	First wifi signal strength
Wifi 1 name	abc	Second wifi name
Wifi 1 MAC address	1c:fa:68:13:a5:b5	Second wifi MAC address
Wifi 1 signal strength	-87	Second wifi signal strength