Contents

1. GPRS upload data format

<data length><data header><protocol version>,<device IMEI>,<device name>,<GPRS real-time/historical data flag>,<date>,<time>,<GPS positioning status>,<latitude value> ,<N/S>,<longitude value>,<W/E>,<number of Beidou satellites used>,<number of GPS satellites used>,<number of GLONASS satellites used>,<horizontal positioning accuracy>,<speed >,<heading>,<altitude altitude>,<mileage>,<MCC>,<MNC>,<LAC>,<Cell ID>,<GSM signal strength>,<heart rate>,<number of steps>,< Active time>, <light sleep time>, <deep sleep time>, <temperature sensor 1>, <temperature sensor 2>, <blood oxygen content>, <external device status>, <battery power>, <alarm event type>; <checksum><data tail>;!

2. GPRS upload data example

0180$MGV002,860719020193193,DeviceName,R,240214,104742,A,2238.20471,N,11401.97967,E,00,03,00,1.20,0.462,356.23,137.9,1.5,460,07,262C,0F54,25,65,755,60,180,350,36.5,28.3,100,1311,100,Timer;!

3. GPRS upload data analysis

project	description	Instance
< data length >	The length of the data (not including itself) is fixed as a four-digit number, range: 0001 to 9999, unit: byte.	0180
<data header>	It is fixed to the character $.	$
<protocol version>	MG is a fixed character, and V002 is the version number.	MGV002
,	Delimiter。	,
< Device IMEI >	The IMEI number of the GSM module of the device, fixed 15 bytes.	860719020193193
<device name>	The device name set by the user, range: 0~15 bytes. Note: The name can only use letters or numbers.	DeviceName
<GPRS real-time/historical data logo>	R represents real-time data, and S represents historical data.	R
<date>	The system date of the device, format: DDMMYY (day, month,month, year)。	240214
<time>	The system time of the device, format: HHMMSS (hour, minute, minute, second, second).	104742
< GPS positioning status >	A indicates that the GPS positioning is successful, and V indicates that the GPS positioning has failed.	A
<Latitude value>	Latitude value, format: DDMM.MMMM (degree and minute format)。	2238.20471
<N/S>	N means north latitude and S means south latitude.	N
<longitude value>	Longitude value, format: DDDMM.MMMMM (degree minutes format).	11401.97967
<W/E>	W means west longitude and E means east longitude.	E
<Number of Beidou satellites used>	The number of Beidou satellites used for positioning, ranging from 00 to 99.	00
<Number of GPS satellites used>	Number of GPS satellites used for positioning, range: 00~99。	03
<Number of GLONASS satellites used>	Number of GLONASS satellites used for positioning, range: 00~99。	00
<Horizontal positioning accuracy>	Horizontal positioning accuracy	1.20
<speed>	Speed, unit: nautical miles.	0.462
<course>	Heading, unit: degree.	356.23
<Altitude above sea level>	Altitude above sea level, unit: meter.	137.9
<mileage>	Mileage, unit: kilometers.	1.5
<MCC>	Mobile country code.	460
<MNC>	Mobile network number.	07
<LAC>	Location area code.	262C
<Cell ID>	Cell ID。	0F54
<GSM signal strength>	GSM signal strength, range: 00~99.	25
<Heart Rate>	Photoelectric heart rate value, range: 0~255 (0 means no	65

	photoelectric heart rate is detected), unit: bpm.	
<Count of steps>	The total number of steps for the day, range: 0~4294967295 (unsigned 32-bit integer), unit: step.	755
<Activity time>	The activity time in the sleep quality inspection period, range:0~65535, unit: minute.	60（I.e. 1 hour）
<Shallow sleep time>	The light sleep time in the sleep quality test period, range: 0~65535, unit: minute.	180（I.e. 3 hours）
<Deep sleep time>	The deep sleep time in the sleep quality inspection period, range:0~65535, unit: minute.	350（I.e. 5 hours and 50 minutes）
<Temperature sensor 1>	Temperature sensor 1 detection value, unit: degree.	36.5
<Temperature sensor 2>	Temperature sensor 2 detection value, unit: degree.	28.3
<Spo2>	Blood oxygen SPO2	100%
<External Device Status>	Charging status (0 means not charging, 1 means charging).	1311
	Wristband status (0 means not connected, 1 means only the first wristband is connected, 2 means only the second wristband is connected, 3 means both the first and second wristbands are connected).	
	Belt 1 status (1 means connected, 0 means disconnected).	
	Belt 2 status (1 means connected, 0 means disconnected).	
<battery power>	Battery level, range: 000~100.	100
< Alarm event type>	For the type of alarm event, see the table of alarm event types.	Timer
;	End symbol.	;
< Checksum >	Checksum (reserved).	
< Data tail >	Fixed as characters! .	!

4. Alarm event type table

Type name	**Description**	**Instance**
Restart	The device hardware restarts.	Restart
PowerOn	Device software startup.	PowerOn
PowerOff	Device software shutdown.	PowerOff
SOS	SOS emergency alarm.	Sos
Timer	Upload regularly.	Timer
CallForSms	Dial the phone back to the text message (only applicable to text messages).	CallForSms
LowBattery	Low battery alarm.	LowBattery
GeoX(GeoName) In	Enter the electronic fence, X is the serial number of the electronic fence, range: 1~5, GeoName is the name of the electronic fence set by the user, range: 0-9 bytes.	Geo1(home) In
GeoX(GeoName) Out	Out of the electronic fence, X is the serial number of the electronic fence, range: 1~5, GeoName is the name of the electronic fence set by the user, range: 0-9 bytes.	Geo1(home) Out
BeltOn	Wrist strap connection.	BeltOn
BeltOff	Wristband disconnected.	BeltOff
LocRequest	Real-time location query	LocRequest
Error	The alarm type is wrong.	Error