

# GPRS PROTOCOL

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V0.2 2013-02-5 添加调度屏和广告屏协议

# 1. GPS Device Login Monitoring Center

Device sends the login packet: **##,imei:359586015829802,A;**

Server reply: LOAD

PS: If device receive “LOAD”, it indicates device connect server successfully. If device do not receive, it will continue to send login data.

## 2. Heartbeat-packets

To make sure the device real time online, the device send timed heartbeat-packet. Interval time is one minute.

Heartbeat-packet content is the IMEI number. E.g. 359586015829802

Server reply: ON

PS: If device receive “ON”, it indicate online. It indicate offline if device do not receive reply from server for three times. The device keep Reconnecting. After server verify the legitimacy of the device and receive complete frames data from device, it consider device online.

## 3. Sever sending data format

Header	ID	Keyword	content
**	,imei:359587010124900	,	,

### 3.1. Keyword Explanation

Send		Response	
Keyword	Function explanation	Keyword	Function explanation
100	Single track	001	
101	Auto track continuously	001	
102	Cancel Auto continuous track	102	Cancel Auto continuous track successfully
103	Track upon distance interval	001	
104	Cancel alarm	104	Cancel alarm successfully
105	Set movement alarm	105	Set movement alarm
106	Cancel movement alarm	106	Cancel movement alarm successfully

107	Set overspeed alarm	107	Set overspeed alarm successfully
108	Set time zone	108	Set time zone successfully
109	Cut off the Oil and Power	109	Cut off the Oil and Power successfully
		509	Cut off the Oil and Power when car speed is less than 20KM/H
110	Resume the Oil and Power	110	Resume oil and Power successfully
111	Set Arm	111	Set arm successfully
		511	Set arm failed, Pls turn off ACC
112	Set Disarm	112	Set disarm successfully
113	Switch to SMS Mode	113	Switch to SMS Mode Successfully
114	Set Geo-fence	114	Set Geo-fence successfully
115	Cancel Geo-fence	115	Cancel Geo-fence successfully
116	Data load	116	Data load successfully
117	Cancel Data load	117	Cancel Data load successfully
118	Set less GPRS Traffic	118	Set less GPRS Traffic successfully
119	Cancel less GPRS Traffic	119	Close less GPRS Traffic Successfully
120	Automatic update positions of vehicle turns	120	Automatic update positions of vehicle turns successfully
121	Set multi-area management	121	Set multi-area management successfully
122	Set IP , Port for Address Function	122	Set IP , Port for Address Function
123	Set shock alarm	123	Set shock alarm successfully
124	Cancel shock alarm	124	Cancel shock alarm successfully
125	Remote start	125	Remote start successfully
		525	ACC off
		526	No appointment
126	Set OBDII data sending way	126	Set successfully
150	Activate speed limit mode	150	Activate speed limit mode successfully
151	Deactivate speed limit mode	151	Deactivate speed limit mode successfully
152	Set speed limit	152	Set speed limit successfully

160	Server request photo	wtxx	[Server request] photo transmission start
161	Server request photo retransmission	vtxx	Photo retransmit [alarm trigger] Photo retransmission start
170	Send LCD/Handset, Dispatch screen (notice) data	170	Device response
171	Phone call dispatch : Center sends answer race request to vehicles	171	Device response
		175	Driver hand in answer order
172	Phone call dispatch : Center send "answer successfully" to vehicle which answer request successfully		
173	Phone call dispatch : Center send "answer failed" command to vehicles which answer request failed		
		176	For special case, driver cancel order
		177	Driver finish task
174	Phone call dispatch: Center send "cancel order" command to vehicle which answer request successfully		
180	Send to LED ads screen, add ads information	180	
181	Delete ads	181	

## 4. Device report message format

### 4.1. Message format

Header	ID	Content	Terminator
imei	:359587010124900		;

Field	Description	length (byte)
-------	-------------	---------------

header	The header is imei	4
ID	IMEI of the device , for identification	1+15
Content	Words of the content is separated by commas	N
Terminator	Terminator is ;	1

## 4.2. Description of field content

keywords	time	Cell phone number			latitude	S / N	Longitude	E/W	Speed	direction / request address
,001	,0809231929	,13554900601	F/L		A/V	S / N		E/W		360.00/1

Continued access

Altitude	ACC state	Door State	First fuel sensor	Second fuel sensor	Temperature	
	1	1				;

1,, acc

### For example:

imei:353451044508750,001,0809231929,13554900601,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,30.1,65.43,1,0,10.5%,0.0%,28;

### Content specification

Content after the first comma is: keywords

Content after the second comma is: year, month, day, hour, minute

Content after the third comma is: the number of sim card in the tracker

Content after the fourth comma is: whether the signal of GPS is ok.

F means gps data is valid, L means no gps signal. In the old version, it is 5 comma when L, the following field is null. It stand for LBS in the new version, LAC is instead of latitude, Cellid is instead of longitude.

imei:359586015829802,help me,0000000000,13554900601,L,,,22820,,10320,,,,;

Content after the fifth comma is: hour, minute, second of zero time zone

Content after the sixth comma is: Be corresponding to the content after the fourth comma, A=F, V=L;

Content after the seventh comma is: Latitude

Content after the eighth comma is: N is north latitude, S is south latitude

Content after the ninth comma is: Longitude

Content after the tenth comma is: E is east longitude, W is west longitude

Content after the eleventh comma is: speed

Content after the twelfth comma is: 1 stand for address request, non-1 stand for direction ( Direction will be sure with a decimal point )

Content after the thirteenth comma is: altitude

Content after the fourteenth comma is: The current state of the vehicle ACC; 1 is on, 0 is off

Content after the fifteenth comma is: The current state of the vehicle door; 1 is open the door, 0 is close the door

Content after the sixteenth comma is: the remaining Oil percentage in the fuel tank 1

Content after the seventeenth comma is: the remaining oil percentage in the fuel tank 2

Content after the eighteenth comma is: The current temperature sensor indicated

End with a semicolon after the nineteenth comma.

keyw rds	Time	Ac cu mu la ti ve mi le age	In st an t fu el	A ve ra ge Fu el	Dr ivi ng ti me	S pe ed	Po w er lo ad	W at er te m pe ra ture	Th rot le pe rc en ta ge	En gi ne sp ee d	ba tte ry vo lta ge	di ag no sti c tr ou bl e co de 1	di ag no sti c tr ou bl e co de 2	di ag no sti c tr ou bl e co de 3	di ag no sti c tr ou bl e co de 4
,OBD	,08092319 29	,													

keyw rds	Time	de vi ce st ate	Nu mb er of wh ee ls	Pr es s of Le ft fr on t ti	Le ft fr on t te mp er at ur	L e f t F ro n t s	Pr es s of ri gh t fr on t	r i g h t F ro n t	ri gh t Fr on t st ate	Pr es s of Le ft re ar ti re	Le ft re ar te mp er at ur e	le ft re ar st ate	Pr es s of ri gh t re ar ti	Ri gh t re ar te mp er at ur	Ri gh t re ar st ate
-------------	------	-----------------------------	--	--	---	--	---	--	---	---	---	-----------------------------------	--	---	--



				re	e	t	ti	t					re	e	
						a	re	e							
						t		m							
						e		p							
								e							
								r							
								a							
								t							
								u							
								r							
								e							
,TPM	,08092319	,													
S	29														

### 4.3. Description of keywords

Keywords	Function specification
001	location information
help me	SOS alarm
low battery	low battery alarm
move	Movement alarm
speed	Over seed alarm
stockade	GEO-fence alarm
ac alarm	Power off alarm
door alarm	Door open alarm
sensor alarm	Shock alarm
acc alarm	Acc alarm
accident alarm	accident alarm
bonnet alarm	bonnet alarm
footbrake alarm	footbrake alarm
T:	Temperature alarm
oil	Fuel alarm
DTC P0001	diagnostic trouble code: P0001
service	Vehicle maintenance notification

## 5. Detailed description of the message

### 5.1. Location message

#### 5.1.1. Single Locating

server → device

\*\*imei:359586018966098,100

device → server

imei:353451044508750,001,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

#### 5.1.2. track upon time interval:

server → device

\*\*imei:359586018966098,101,10s

Tracker report location information to the server by time intervals, this time intervals can vary from 10 S, or 15S or 30 minutes.

imei:353451044508750,001,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

#### 5.1.3. track upon distance interval

server → device

\*\*imei:359586018966098,103,0200m

After set track upon time interval, set track upon distance interval, tracker will track upon time and distance interval: when device movement reaches the limited settings and reaches reporting interval, device will report location information.

#### 5.1.4. Location information extension

Some products on the 001 field has been expanded, including the current oil data, while others include the current temperature.

Location information (after "001", distinct by space, the first one is the current amount of oil, the second is the current temperature):

Only including the current oil data,

imei:359586015829802,001 10.00,0809231429,,F,062947.294,A,2234.4026,N,11354.3277,E,0.00,360.00;

Meanwhile, including the current oil data and temperature.

imei:359586015829802,001 0.1% +28.0,0809231429,,F,062947.294,A,2234.4026,N,11354.3277,E,0.00,360.00;

**newest version Location information extend as follow format**

imei:353451044508750,001,0809231929,13554900601,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,30.1,65.43,1,0,10.5%,0.0%,+28.0;

GPS105, oil 2 fields define to the current definition of the cumulative mileage. Contents is long integer number string.

imei:353451044508750,001,0809231929,13554900601,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,30.1,65.43,1,0,10.5%,101,+28.0;

Indicates that travel 101 kilometers.

## 5.2. Set the device message with parameters

Receive the message sent by the server, device give an answer . means settings is successful or not

### 5.2.1.cancel Auto track continuously

Server → Device

\*\*imei:359586018966098,102

Device → server

imei:353451044508750,102,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.2. cancel alarm

Server → Device

\*\*imei:359586018966098,104

Device → server

imei:353451044508750,104,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

After sending a command to cancel the alarm, all alarm settings will be cancel, not effect.

### 5.2.3. set Movement alarm

Server → Device

\*\*imei:359586018966098,105,65535

Device → Server

imei:353451044508750,105,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

tracker will alarm when goes out of 200M,after set Movement alarm

## 5.2.4. cancel movement alarm

Server → device

\*\*imei:359586018966098,106

device → server

imei:353451044508750,106,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.2.5.Set overspeed alarm

Server → device

\*\*imei:359586018966098,107,080

device → server

imei:353451044508750,107,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.2.6.Set time zone

Server → device

\*\*imei:359586018966098,108,-5

device → server

imei:353451044508750,108,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

In the time zone command -5 means time zone ,in -5 zone ,if time zone is positive 8 ,omit digital 8

## 5.2.7.Cut off oil and power

Server → device

\*\*imei:359586018966098,109

If cut off oil and power successfully, the device will reply:

imei:353451044508750,109,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

When Vehicle speed is below 20 km / h ,it will execute cutting off oil and power and reply:

imei:353451044508750,509,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.2.8.Resume the oil and power

Server → device

\*\*imei:359586018966098,110

device → server

imei:353451044508750,110,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.2.9.Arm

Server → device

\*\*imei:359586018966098,111

When set Arm successfully, device reply:

imei:353451044508750,111,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

When set Arm fail, pls turn off ACC, device reply:

imei:353451044508750,511,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

After Armed, ACC, door, shock alerts will be effective

## 5.2.10. Disarm

Server → device

\*\*imei:359586018966098,112

device → server

imei:353451044508750,112,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.2.11. Switch to SMS Mode

Server → device

\*\*imei:359586018966098,113

device → server

imei:353451044508750,113,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.2.12. Set Geo-fence

Server → device

\*\*imei:359586018966098,114,22.553276,113.903516; 20.553276,114.903516

device → Server

imei:353451044508750,114,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

There are two latitude and longitude, The first latitude & longitude is coordinate of the top left corner of the Geo-fence, while the second latitude & longitude is the coordinate of the bottom right corner, note that there are positive and negative distinguish, positive can omit + ,negative need add -

## 5.2.13. Cancel Geo-fence

Server → device

\*\*imei:359586018966098,115

device → Server

imei:353451044508750,115,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.14. Data load

Server → device

\*\*,imei:359586018966098,116,20110418

load the tracking data of 18th April 2011 to monitoring platform.

device → Server

imei:353451044508750,116,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.15. Cancel Upload

Server → Device

\*\*,imei:359586018966098,117

Device → Server

imei:353451044508750,117,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.16. Activate Less Gprs Mode

Server → Device

\*\*,imei:359586018966098,118

Device → Server

imei:353451044508750,118,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.17. Deactivate Less Gprs Mode

Server → Device

\*\*,imei:359586018966098,119

Device → Server

imei:353451044508750,119,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.18. Automatic update positions of vehicle turns

Server → Device

\*\*,imei:359586018966098,120,030

Device → Server

imei:353451044508750,120,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.19. Set multi-area management

First , click multi-area management menu , take a point on map , pull a circle and record the radius . Name the area . Default name is area01-05 , at most 5 areas are supported . Save the area name , lat/long of point , Radius and send them to tracker . Then tracker will send one alert when going into the area , send another alert when getting out of area .

Server → Device

\*\* ,imei:359586018966098,121,22.353648,113.543678 area01,800m

121,22.353648 , 113.543678 are latitude , longitude of the point on map area01 is the name of area . 800M is radius . Radius can be 800KM too .

Device → Server

imei:353451044508750,121,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.20. Set IP , Port for Address Function

Server → Device

\*\* ,imei:359586018966098,122,192.168.1.1,9000

Device → Server

imei:353451044508750,122,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.21. Activate speed limit mode

Server → Device

\*\* ,imei:359586018966098,150

Device → Server

imei:353451044508750,150,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.22. Deactivate speed limit mode

Server → Device

\*\* ,imei:359586018966098,151

Device → Server

imei:353451044508750,151,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.2.23. Activate speed limit

Server → Device

\*\* ,imei:359586018966098,152,080

Device → Server

imei:353451044508750,152,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.3. Alerts (Device-Server )

Tracker send alerts to server . Server will analyze , but not respond .

### 5.3.1.SOS alert

imei:353451044508750,help me,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.2.Low Battery alarm

imei:353451044508750,low battery,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.3.Movement alarm

imei:353451044508750,move,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.3.Over Speed alarm

imei:353451044508750,speed,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.4.Geo fence alarm

imei:353451044508750,stockade,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.5.Power off alarm

imei:353451044508750,ac alarm,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.6.Door alarm

imei:353451044508750,door alarm,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;



### 5.3.7.Shock sensor alarm

imei:353451044508750,sensor alarm,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.8.ACC alarm

imei:353451044508750,acc alarm,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.9.Accident alarm

imei:353451044508750,accident alarm,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.10. Bonnet alarm

imei:353451044508750,bonnet alarm,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.11. Footbrake alarm

imei:353451044508750,footbrake alarm,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.3.12. Temperature alarm

imei:353451044508750,T:+28.0,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

“T:” means Temperature sensor alarm, “+28.0” mean current Temperature.

### 5.3.13. Oil leak/oil theft alarm

imei:353451044508750,oil 51.67,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

“oil” means oil alarm, and the balance oil in fuel tank is 51.67%。

Dual fuel sensor alarm, oil 1 alarm 51.6%:

imei:353451044508750,oil1,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,,,51.6,41.7,;

oil 2 alarm: 41.7%:

imei:353451044508750,oil2,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,,,51.6,41.7,;

### 5.3.14. Notification of Vehicle fault

imei:353451044508750,DTC,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,30.1,,1,0,10.5%,P0021,;

When the keyword is DTC, the place where oil 2 means diagnostic trouble code.

### 5.3.15. Vehicle maintenance notification

imei:353451044508750,service,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,3.3,,1,0,10.5%,+15,+500;

When the key word is service ,the place where oil 2 means expiration time of maintenance ,and the place where temperature means remain maintenance mileage. “+15”means there is 15 days before expiration time ,if “-15” means it has exceed expiration time 15 days. “+500” means there is remain maintenance mileage 500km,and “-500” means it has exceed maintenance mileage 500km.

### 5.4. Remote start

Server → Device

\*\*,imei:359586018966098,125

Device → Server

1、Startup

imei:353451044508750,125,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

2、Turn off the engine

imei:353451044508750,525,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

3、Appointment

imei:353451044508750,526,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.5. ACC working alarm

When ACC on, device send:

imei:353451044508750,acc on,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

When ACC off, device send:

imei:353451044508750,acc off,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

Server count the engine work time according to the time from ACC on and ACC off.

### 5.6. Multi-area management

When Device enter or get out of the preset Multi-area, and it will send information to server automatically

Enter the first area:

imei:353451044508750,area01 in,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

get out of the first area:

imei:353451044508750,area01 out,0809231929,,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.7. Absolute street address

The content after the 11th comma become 1, it means the device request Absolute street address; If the device have no GPS signal, the detail will be LBS.

imei:353451044508750,001,0809231929,13554900601,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,1;

after receive latitude and longitude, it will show Chinese if the device is in China, and English in foreign countries. The Chinese reply by server will be as below:

address1, 广东省深圳市南山区南头关二路 113-115 号, lat: 22.111111 long: 113.234564, T:11/08/09 17: 22, Speed: 01

Then the software of device need recognize "address1" and translate the Chinese into hexadecimal, send it out, the part in English send out directly, that means, if this content with Chinese, it need send 2 SMS message, one translate the Chinese into hexadecimal, the other SMS message is the part in English sent out directly.

When the device is in foreign countries, the information from server in English will be received as below:

address2, zhongguo guangdong shenzhen nanshan nantou guankou , lat: 22.111111 long: 113.234564, T:11/08/09 17: 22, Speed: 01

Then the device need adjudge "address2" remark, and forward directly to users' phone

Note: Send "address+password" to device to get the Absolute street address, if the device in SMS mode, it will switch to GPRS mode

## 5.8. photo transmission

### 1、Server request photo

Request Photo
** ,imei:359586018966098,160
Photo transmission start, XX means photo data amount.
imei:359586018966098,vtxx,0809231429,13554900601,F,062947.294,A,2234.4026,N,11354.3277,E,0.00,360.00;
Transmit data package, imei:359586018966098 is before each data package,VR,01,02,03 is photo queue in each data package
imei:359586018966098,vr, data packet.....

xx: mean photo data packet amount (decimal show in ASCII, vt15 mean 15 data packet)

### 2、Device send photo to server automatically when it have alarm

After device send alarm message to server, there is no other data sent to server when device send the photo.

Photo transmission start, XX means photo data amount
imei:359586018966098,vtxx,0809231429,13554900601,F,062947.294,A,2234.4026,N,11354.3277,E,0.00,360.00;
Transmit data package, imei:359586018966098 is before each data package,VR,01,02,03 is photo queue in each data package

```
imei:359586018966098,vr, data packet.....
```

### 3、Data re-transmission

When data is wrong ,server will request to re- transmit. When data is not received completely, or transfer is not finished over 30s,server will remove and request to re- transmit. If transmission is still not successfully finished for 3times,then server will cancel this action. That means each photo can be re-transmitted for 2 times at most, totally 3 times transmission plus the first one. That will be cancelled after 3 times.

During Photo transmission, other alarms will not be triggered and photos will not be sent.

photo re-transmission without photo re-taken
** ,imei:359586018966098,161
Photo transmission start,XX means photo data amount
imei:359586018966098,vtxx,0809231429,13554900601,F,062947.294,A,2234.4026,N,11354.3277,E,0.00,360.00;
Transmit data package, imei:359586018966098 is before each data package,VR,01,02,03 is photo queue in each data package
imei:359586018966098,vr,data package.....

Byte 0	Format of data packet		Byte N
Packet ID (2 Byte)	Data Size (2 Byte)	Photo data (Packet size-6 Byte)	Check code (2 Byte)

Packet ID: Serial number of packet, each photo data packet ID start from 0

Data size: the size of photo data in packet

Check code: Incorrect check code, Packet data divided by accumulation of check code is low byte, high byte= 0.

low byte of check code = accumulation (byte (0) ~byte (N-2)) , high byte of check code = 0.

**Note:** The data of one photo is finish, writing the photo data into JPEG file, it will generate a photo.

## 5.9.Scheduling screen

### 5.9.1. announcement

Server→ Device

\*\* ,imei:359586018966098,170,gong gao, 2012 12/25 tian yao xia yue

The words in blue is the content shown in scheduling screen

Device → Server

imei:353451044508750,170,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.9.2.Phone call dispatch

process:

### Center issue a dispatch Order

171---Center sends answer race request with Order No. and details to each vehicle

Vehicle hands in answer race Order with Order NO. Press Button Ok on the device

175--- Vehicle hands in answer race Order with order NO. only.

After judged, center sends “ successful answer” response to the first vehicle, also failure answer to other vehicles

172--- center sends“ successful answer”response to the first vehicle with Phone call dispatch order No and details

173---Center sends failure answer to other vehicles with Order No. only

After received successful answer from center, vehicle cancel the order with Order No. to center Press button “Down”, to cancel order due to special reasons

176---vehicle cancel order to center with Order No and reasons

Vehicle response center about carrying passengers successfully with Order No. Press Button Up, meaning Order finished

177--- Vehicle response center about carrying passengers successfully with Order No.

### Center cancel order

174---Center cancel order to the vehicle getting “ successful answer” response with Order No. only

Server →Device

1)、171--- Center sends answer race request with Phone call dispatch

Order No. and details

\*\*,imei:359586018966098,171,1301220909091,xin an 1 lu jie ke.

Order No and details are ascall code. The longest Order details is 235byte; The call phone dispatch order No is 13Byte,which is unique and consist of 12 digital date number and 1 self-composed digital. E.g.: 1301220909091

2)、172--- center sends“ answer successfully”response to the certain vehicle with Phone call dispatch order No and details

\*\*,imei:359586018966098,172,1301220909091,xin an 1 lu jie ke.

173--- Center sends failure answer to other vehicles with Order No. only

\*\*,imei:359586018966098,173,1301220909091

3)、174--- Center cancel order to the vehicle getting “ answer successfully” response with Order No. only . Special reasons make the order cancelled

\*\*,imei:359586018966098,174,1301220909091

Server → Device

1)、171---vehicles send responses to center with Order No. **meaning message received**  
imei:353451044508750,171,1301220909091,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

2)、175---Vehicle hands in answer race Order to Center with Order No. **Press button Ok on the device**  
imei:353451044508750,175,1301220909091,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

3)、after receive answer successfully from center

176--- vehicle cancel order to center with Order No and reasons; **Press button “Down”, to cancel order due to special reasons**  
imei:353451044508750,176,1301220909091,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

177--- Vehicle response center about carrying passengers successfully with Order No. **Press Button Up, meaning Order finished**  
imei:353451044508750,177,1301220909091,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

## 5.10.LED ads screen

### 5.10.1.Add ads

Server → Device

\*\*,imei:359586018966098,180,**03,Welcome to COBAN**

**Red number is message group code number, range from 03-99. Ads max capacity is 200 Byte;If code number has exist,then the details will be covered. Words in blue are details shown on Led screen**

Device → Server

imei:353451044508750,180,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

### 5.10.2.Delete ads

Server→ Device

\*\*,imei:359586018966098,181

Device → Server

imei:353451044508750,181,0809231929, ,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,,;

5.11.RFID

Example:

imei:353451044508750,rfid,0809231929,0083E869,F,055403.000,A,2233.1870,N,11354.3067,E,0.00,30.1,65.43,1,0,10.5%,0.0%,28;

Content description:

Key word: rfid

The number 0083E869 will be replaced by the ID of the RFID Tag

5.12. Tyres pressure monitoring

key words	time	status	Numbers of tyress	Left front tyres pressure	Left front temperature	Status of left front	Right front pressure	Status of right front	Left rear pressure	Status of left rear	Right rear pressure	Status of right rear
,tpms	,080923192901	,	,	,	,	,	,	,	,	,	,	,

Message example

imei:353451044508750,TPMS,080923192901,0,4,245.50,65,00111111,245.50,65,00111111,255.50,60,00111111,255.50,60,00111111;

### Content explain:

Time: year, month, day, hour, minute, second;

Status: Communication status between tracker and tyres pressue. 0 inicates normal, 1 indicates failure

Numbere of tyress: 4 is the default, for future expansion;

Left front tyres pressure: Floating point numbers strings, unit: Kpa

Left front tyres temperature: integer, decimal string, units: degrees Celsius;

Left front tyre State: eight-bit string, 0 indicates normal, 1 indicates failure.

8	7	6	5	4	3	2	1
0	0	1 High temperature	1 higher pressure	1 lower pressure	1 Sensor failure	1 Low battery	1 Air leakage
Reserve	Reserve	>75℃	>3.4Bar	<1.8Bar			

Right front tyre pressure: a floating-point string units; Kpa

Right front tyres temperature: integer, decimal string units: degrees Celsius;

Right front tyress condition: as above, the meaning of the fields is same as the fields of left front tyres status;

Left rear tyre pressure: a floating-point string, units; Kpa

Left rear tyre temperature: integer, decimal string, units: degrees Celsius;

Left rear tyres condition: as above, the meaning of the fields is same as the fields of left front tyres status

Right rear tyre pressure: a floating-point string, units; Kpa

The right rear tyre temperature: integer, decimal string, units: degrees Celsius;

Right rear wheel: as above, the meaning of the fields is same as the fields of left front tyres status

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- 1 UTC of position fix,forma: hhmmss.sss
- 2 Data status (A=Valid data, V=invalid data)
- 3 Latitude format: ddmm.mmmm
- 4 North (N) or South (S)
- 5 Longitude
- 6 East(E) or West(W)
- 7 Speed over ground 0.0 to 1851.8 knots
- 8 Track made good in degrees True, 000.0 to 359.9 degree, True course
- 9 UT date format: ddmmyy
- 10 Magnetic variation degrees 000.0 to180.
- 11 Degree
- 12 Checksum



绝密