M518 GPS Tracking Device

（GPS+GPRS+GSM）

Detailed Information
Edition 1.0

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http://www.gatorcn.com

China Printing

ADD：**5F, TGK Building NO. 11, Yangtian Road,the 72nd Zone of Bao`an District,**

Shenzhen, Guangdong, China

TEL：**86-755-23085553**

FAX：**86-75529566339**

WEB： **http://www.gatorcn.com**

EMAIL： **vip7@gatorcn.com**

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2) GPRS and SMS tracking mode;
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6) Receive/send SM from/to mobiles or tracking software.
7) Authorize to voice monitor the car;
8) Protecting the device from high and low level voltage;
9) Resend data from signal blind area;
10) Cutting off the engine remotely;
11) 2 digital inputs for detecting the status of engine, door, air condition, etc.;
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13) Illegal open door alarm and illegal start engine alarm;
14) Monitoring fuel consumption and fuel changing alarm remotely;
15) Monitoring temperature and temperature changing alarm remotely;
16) Mileage statistics;
17) Three RS232 ports to connect three serial peripherals at the same time (such as handset, scheduling screen, camera, LED, RFID device);

2. Function Explanation:

1) Accurate GPS positioning, dynamic positioning deviation is less than 5 m;
2) GPRS and SMS tracking mode;
----- Transmit the data via GPRS to the server, through our tracking platform, users can get the car location and other information remotely and lively. Users also can send SMS to get the car location whenever and wherever.
3) Rollcall to get current location immediately;
----- Users can click "rollcall" button in the platform to get car location immediately.
4) Transmit data via interval;
----- For example, if the interval is 30 seconds, then the device transmits data every 30 seconds.
5) Two way voice communication via handset/dispatching screen;
----- Connect M508 with handset/dispatching screen, the drivers and dispatching center can make calls to each other, and the company can set dialing limited area to drivers.
6) Receive/send SM from/to mobiles or tracking software.
----- With handset or dispatching screen, the drivers can receive the SMS from dispatching center (the dispatching center can send message via mobiles or tracking software), and the drivers can reply SMS.

7)   Authorize to voice monitor the car;

----- Connecting the M508 with a microphone, users can listen in the car situation via mobile.

8)   Protecting the device from high and low level voltage;

----- The device M508 circuit can protect the device from high and low level voltage.

9)   Resend data from signal blind area;

----- In the area without GSM signal, the data is stored in the built-in flash memory, and once the car enters signal coverage, the device will resend the data to the server.

10)   Cutting off the engine remotely;

----- Users can cut off the engine remotely from platform or SMS.

11)   2 digital inputs for detecting the status of engine, door, air condition, etc.;

----- Users can know the status of engine, car door, air condition from platform remotely.

12)   SOS alarm, power-off alarm, over-speed alarm, parking alarm, Geo-fence alarm, fatigue driving alarm;

----- SOS alarm: A SOS button comes with M508, once connecting the sos button with M508, in emergency, the driver can press the sos button to get help. The SOS alarm can be received in the platform and SMS notification in mobile.

Power off alarm: once cut off the external power from M508, it will trigger an alarm.

Over speed alarm: users can set a speed limit in the platform, once the car over that limit, it will trigger an alarm.

Parking alarm: for example, if users set 3 hours in the platform, once the car parked over 3 hours, it will trigger an alarm.

Geo-fence alarm: first, users need to draw a geo-fence area, second, set drive in alarm or drive out alarm, then once the car drive in this area or drive out this area, it will trigger an alarm.

Fatigue driving alarm: if users set 4 hours in the platform, then once the car be driven continuous over 4 hours, it will trigger an alarm.

13)   Illegal open door alarm and illegal start engine alarm;

----- I Illegal open door alarm: when ACC is off, and the car siren loud over 6 seconds, it will trigger an alarm.

Illegal start engine alarm: when ACC is on, and the car siren loud over 6 seconds, it will trigger an alarm.

14)   Monitoring fuel consumption and fuel changing alarm remotely;

----- Connecting M508 with a fuel sensor, the users can monitor the fuel consumption remotely from platform. And users can set a range such as 5%, once the fuel changes 5% of total fuel in 2 minutes (this is a fixed time, can't change), it will trigger an alarm.

15)   Monitoring temperature and temperature changing alarm remotely;

----- Connecting M508 with a temperature sensor, the users can monitor the temperature remotely from platform.

16)   Mileage statistics;

----- To calculate the distance that the car was run. Users can choose time and date.

17)　Three RS232 ports to connect three serial peripherals at the same time (such as handset, scheduling screen, camera, LED, RFID device);

----- M508 can connect 3 accessories at the same time, respectively:

Handset/dispatching screen & camera & LED

Handset/dispatching screen & camera & RFID

Handset/dispatching screen & camera & camera

RFID & camera & camera

Handset and dispatching screen have the same functions, the only difference of them is the appearance, dispatching screen has a bigger screen than handset. They are used for dispatching cars and manage cars.

Camera is used for taking photos, and the photos are transmitted to the platform, so the users can check remotely.

LED screen is used for advertisement.

RFID is used to identifying drivers ID.

3. Operation Steps in The Platform:

3.1 Check car's location:

Method #1: login the webgps, and right click the vehicle plate number, click the button "Locate", then you will see the car location.
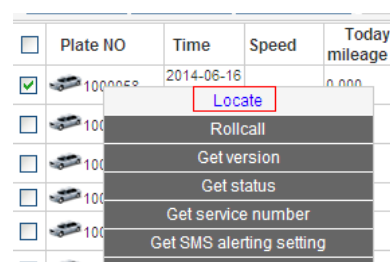
Method #2: send SMS command T,*123456* or TE,*123456*, the M508 will reply a message with the car location.

3.2 Rollcall the car:

Method #1 : login the webgps, and right click the vehicle plate number, click the button "Rollcall"
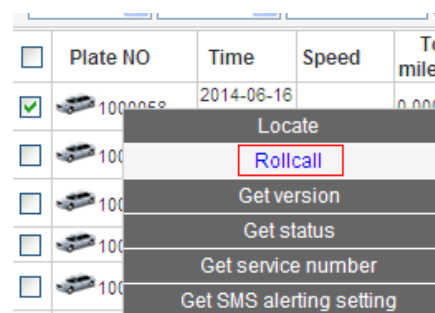
Method #2: send SMS command T,*123456* or TE,*123456*, the M508 will reply a
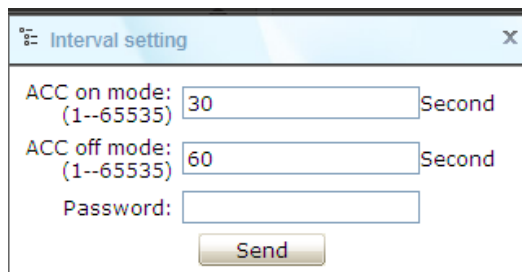
message with the car location.

3.3 Set Interval:

A, login the webgps and choose a online car;

B, click "Settings"—"interval setting"
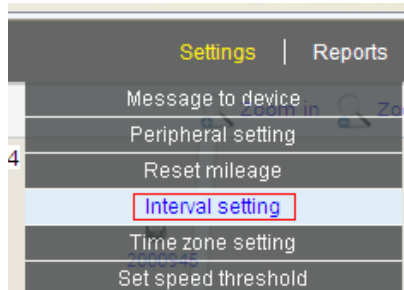
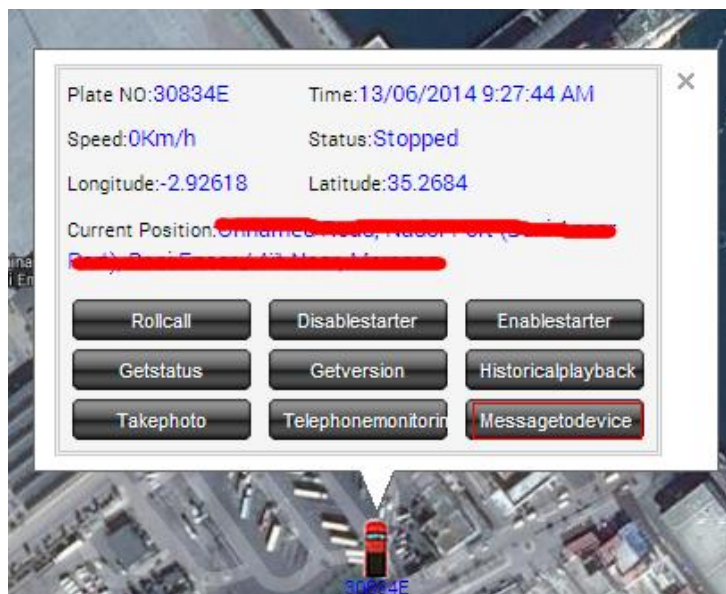C, fill in the the value for example 30s ACC on mode and 60s ACC off mode.
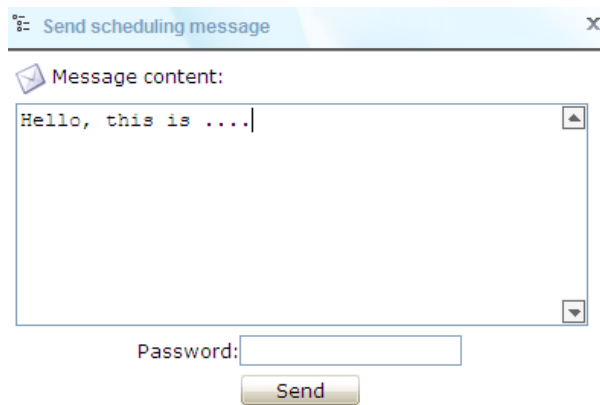

D, click "Send"

3.4 Send message from platform:

If the M508 connected with handset/dispatching screen, users can send message from platform:

A, put the mouse under the car icon, then click the button "Messagetodevice"

B, write down the message you want to send and then click "Send"
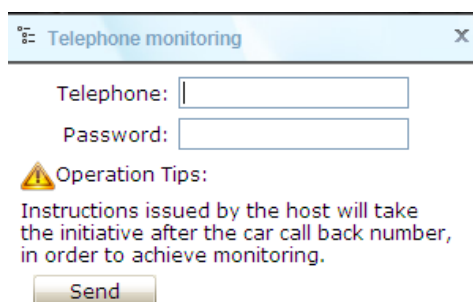
3.5 Voice monitoring the car:

A, login the webgps and choose a online car.

B, right click the vehicle plate number and click "Telephone monitoring"
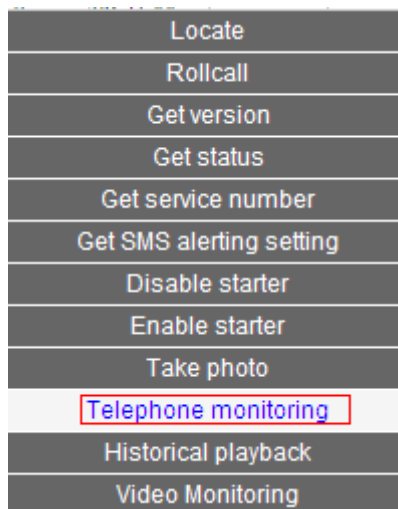
C, fill in your phone number

D, click "Send", the device will call you back so that you can listen in the car situation.

Note: the M508 should connect a microphone in order to realize this function.

3.6 Cut off the engine remotely:

A, login the webgps and choose a online vehicle.

B, right click the vehicle plate number and then click "disable starter"

Note: the M508 should connect with relay in order to realize this function.
In order to the driver can start the car again, please click "Enable" first.
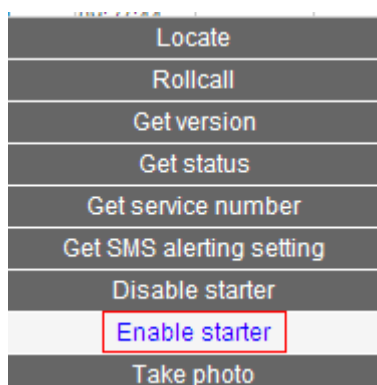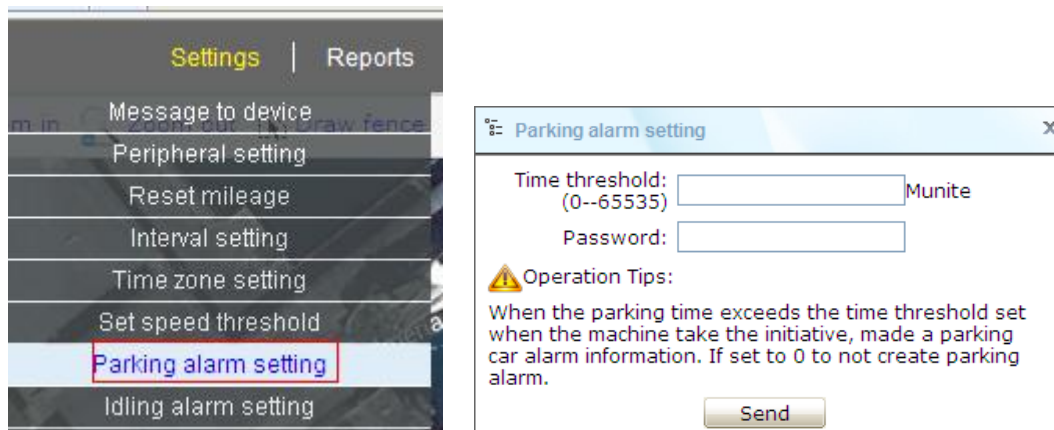

3.7 All alarms settings:

A, over speed alarm:

in the webgps, choose the car first, then click "Settings"—"Set speed threshold", fill in the speed threshold and click "Send".
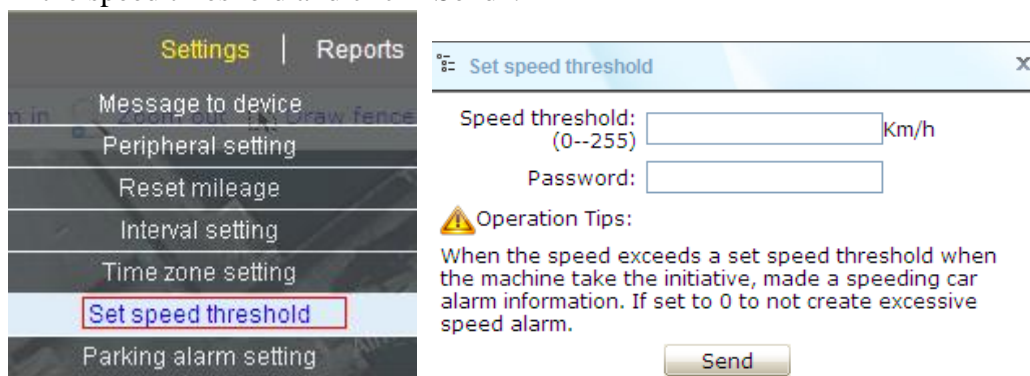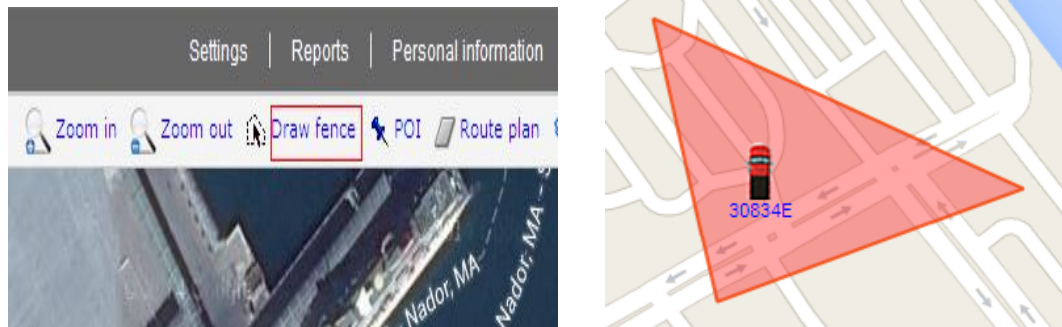

B, parking alarm:

Login the webgps and choose the car, click "Settings"—"Parking alarm setting", fill in the time threshold then click "Send".
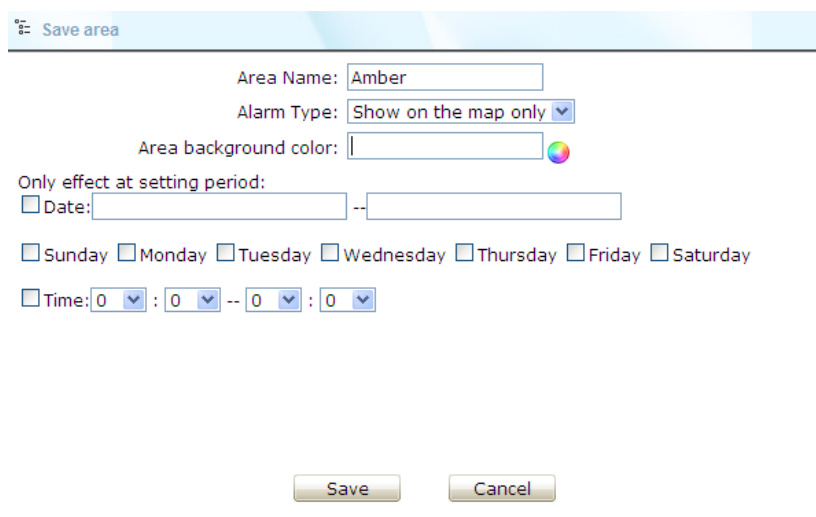
C, Geo-fence alarm:

First, draw a fence: click "Draw fence", then you can draw a area in the map according to your needs.
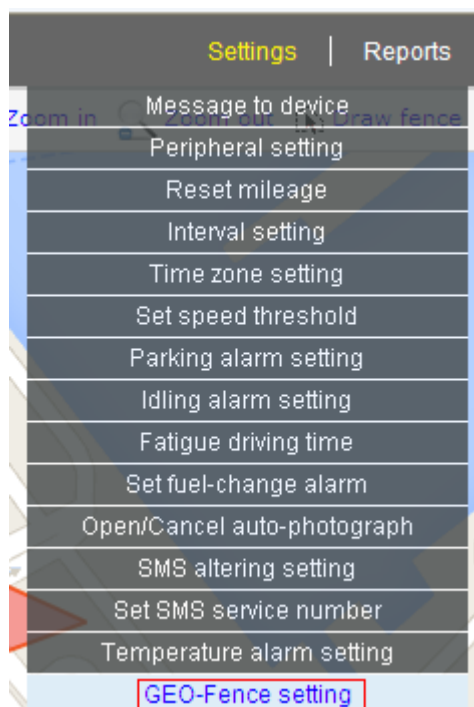

Then double click the mouse, it will show as following:

Fill in a name, and you can choose valid date and time, then click "Save".

Second, set geo fence alarm so that users can receive drive in or drive out alarm.
Click "Settings"—"GEO-Fence setting"

Click "drive-out alarm", and then click "Add", all vehicles will appear, choose the vehicles that you want to set geo-fence alarm, then click "OK".

D, fatigue driving alarm:

In the "Settings", click "Fatigue driving time", fill in the threshold, and you can fill in a buffer time, then click "Send".

3.8 Fuel monitoring:

Note: M508 should connect with a fuel sensor and fuel sensor should be installed in the tank correctly in order to realize this function.

First, set parameters in the VMS.

Fill in the minimum and maximum resistance, tank volume, maximum fluctuation (usually fill in 10% of the tank volume), and choose resistance increase when refuel or resistance reduce when refuel.

Second, in the webgps, click "Reports"—"Fuel consumption report", then users can monitor the fuel consumption remotely.
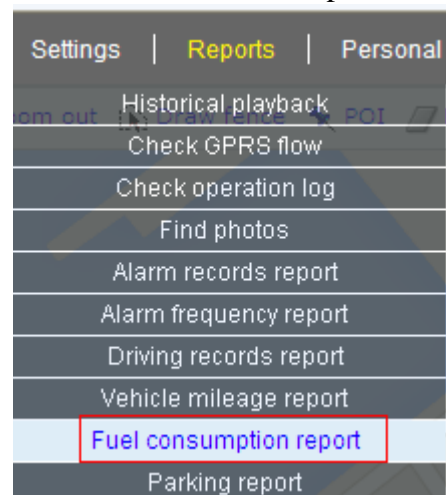
Third, fuel changing alarm:

In the webgps, click "Settings"—"Set fuel change alarm"

Fill in the blanks and click "Send".

3.9 Temperature monitoring:
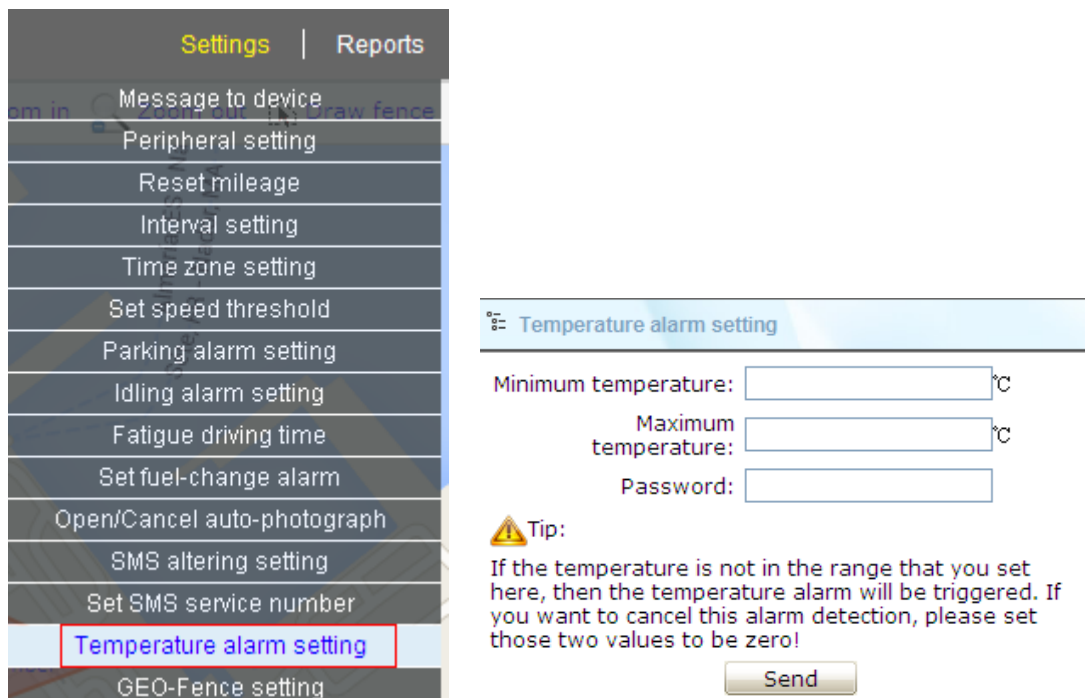
Note: M508 should connect with a temperature sensor in order to realize this function.
in the webgps, click "Reports"—"Temperature graph" or "Temperature report" then users can monitor the temperature remotely.

Set temperature alarm:
Click "Settings"—"Temperature alarm setting. Fill in the minimum temperature and maximum temperature, then click "send".

3.10 Check mileage statistic:

Click "Reports"—"Vehicle mileage report"
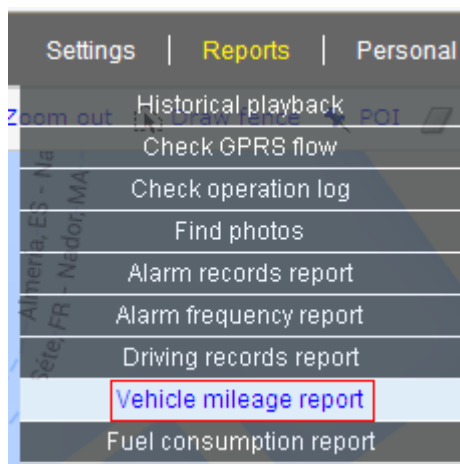
3.11 All accessories operation:

A, handset and dispatching screen: they are used to make callings and send messages. Please get the operation details in "**4) Send message from platform".**

B, Camera:

Once connected the M508 with camera, click "Settings"—"Open/Cancel auto-photograph". Users can set interval for taking photos and users can choose to take photo when ACC is ON, and users can set time and date limit.
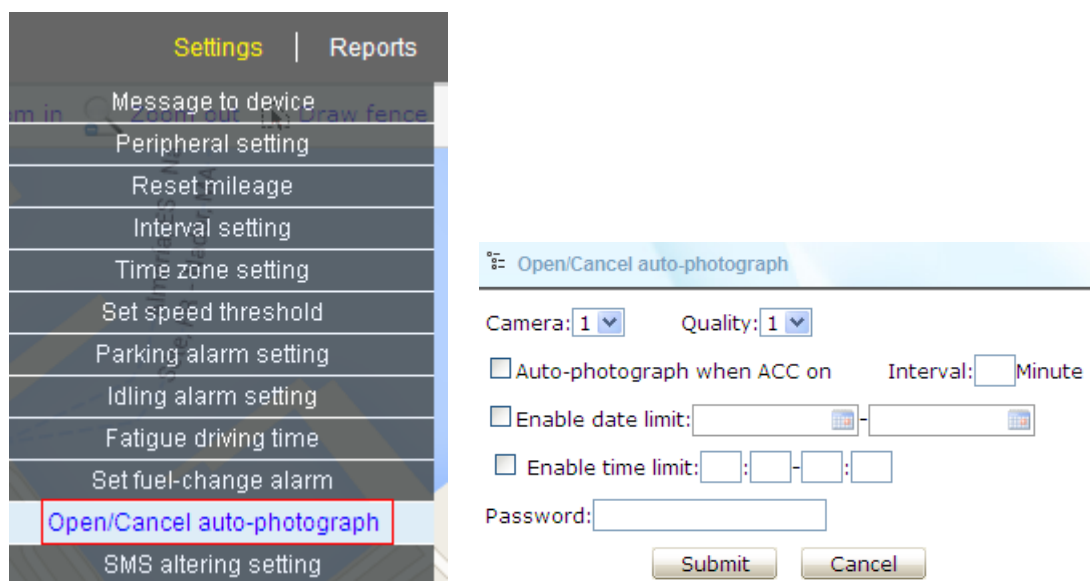
C, RFID device:

First, touch the RFID card to RFID device, in the webgps, click "Settings"—"RF data report" to check the card ID information. Then in the VMS, click "add RFID information", fill in the ID and name the card, users can put driver's name in it for future checking convenience.
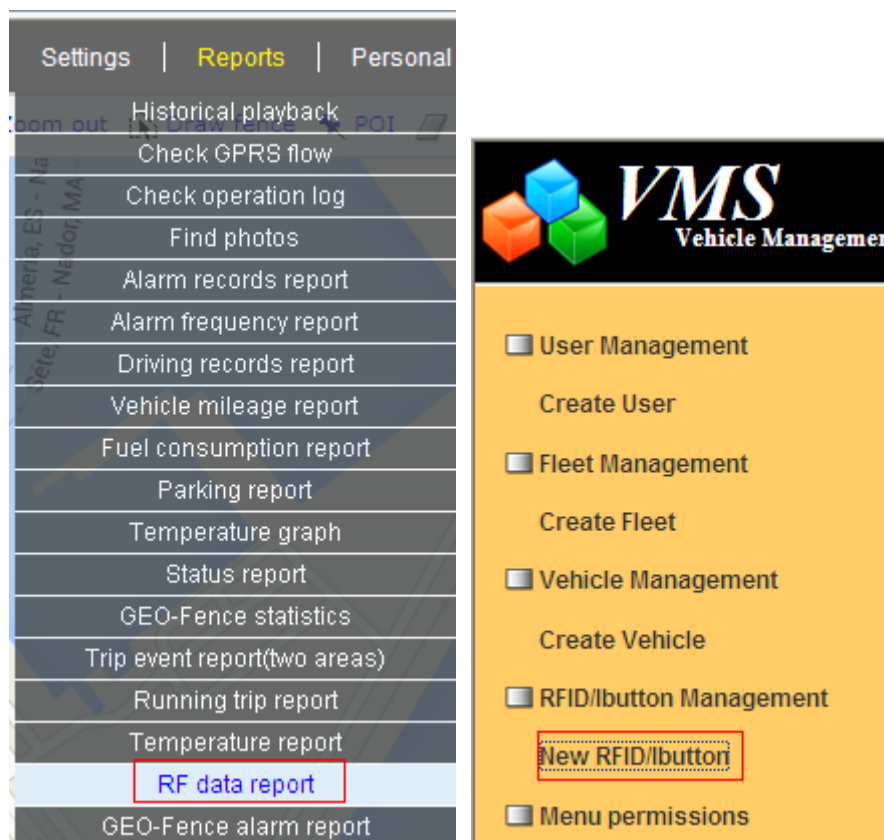
Second, check the "RF data report" again, users will see the drivers name and ID information to identify drivers.

4. Configure the M508 online in office or at home

1) Add a new vehicle in the VMS

2) Prepare a new SIM card, get APN information from its supplier, open GPRS and ensure enough money to send messages and make calls.

3) Put the SIM card into the tracker and then call the card to see if it is ok.

4) Connect the GSM/GPS antenna and make the GSM/GPS get signal (put the SIM antennas outside the window)

5) Connect with the power supply and voltage should be 8V-36V

6) Send the command by your mobile to the SIM card in tracker.

The command is showed as below.

SS,*APN*,*APN USERNAME*,*APN PASSWORD*,*IP*,*port*,*system number,*your phone number*,*Password*

S, *APN*,*IP*,*port*,*system number*,*your phone number*,*Password*

Note:

a. APN: Access Point Name of GPRS, you can get APN of SIM card from local operator

b. system number is same as system number created under VMS(11 digits and begin with 13).

c. please add country code in the front of service SMS number, such as: Chinese code is 86. SMS number is 13612345678, you can set the SMS number like this, *+8613612345678*

d. service SMS number: it is for receiving SMS alarm to monitor vehicle, for example, if press SOS button, service SMS number will get SOS alarm.

e. default password is 123456

For example, our server's IP: 211.154.139.208 and port is 8888, set parameters as follows to host device in our server:

S,*APN*,* 211.154.139.208*,*8888*,*13688998881*,*+8613418776340*,*123456*

5. Problems may meet when configure M508 and the solutions

Usually, the problem is the vehicle not getting online after send the SMS command. Follow the instructions one by one as below:

1) Call the device to see what happens.

   It rings: go to the next step.

   It not rings: check whether the sim card installed correct or not. Check whether the M508 installed correct or not. (Details: If the users are testing the device in office or at home, M508 has to connect with 12V DC external power supply, and put GPS and GSM antenna out of window. If it is tested in the car, make sure the installer connect all the cable correctly.)

2) Check with clients whether the device reply after sending SMS command.

   It replied: a)check whether the APN is correct or not, b)whether the port is correct or not, c) check whether the sim card has GPRS flow or not.

   It not replied: check the SMS command format, make ensure it is correct.

6. Problems may meet about M508

1) The device goes offline
A, check with sim card provider about the GPRS flow, make sure the sim card still has GPRS flow inside.
B, check with clients whether the car in signal coverage or not. Sometimes, the car is under signal blind area, so it goes offline.

2) Lock the car remotely.
If the clients request the M508 to lock the car remotely, you have to confirm with them, do they need to lock the car engine remotely or lock the car door remotely.
M508 can lock the car engine remotely with relay connected, but it can not lock the car door remotely.