MEITRACK® MT88

User Guide

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2. Applications

- Personal Tracking and Protection
- Pet Tracking
- Assets Tracking and Security
- Vehicle Tracking

3. Product Function and Specifications

3.1 Product Function

- SiRF III GPS and Quad Band GSM 850/900/1800/1900Mhz
- AGPS (with GSM Base Station ID)
- Mini Size (49.30mm x 37.80mm x 18.00mm) and Lightweight 40g
- Low Power Consumption and Long Standby Time
- Recessed Braille SOS Button
- Track by SMS/GPRS (MEITRACK Protocol)
- Track on Demand
- Track by Time Interval
- Track by Distance Interval
- Track on Mobile Phone
- Listen-in (Voice Monitoring)
- Internal 4Mb Memory for Logging
- Inbuilt Motion Sensor
- Inbuilt Battery
- SOS Alarm

- Geo-fence Alarm
- GPS Blind Area Alarm
- Low Battery Alarm
- Speeding Alarm
- Mileage Report

3.2 Specifications

Items	Specifications
Dimension	48x36x15mm
Weight	40g
Charging Voltage	Mini USB charging interface, DC4.2V~5.5V/400mA
Back-up Battery	500mAh/3.7V
Power Consumption	65mA standby current
Operating Temperature	-20℃~55℃
Humidity	5%~95%
Work Time	48 hours in power-saving mode and 7 hours in normal mode
LED	2 LED lights to show power, GPS, GSM and other status
Button	1 SOS and 1 power on/off
Microphone	Internal microphone for wiretapping
Memory	4MB Byte
Sensor	Accelerometer
GSM Frequency	GSM 850/900/1800/1900MHz
GPS Chip	Latest GPS SIRF-Star III chipset
GPS Sensitivity	-159dB
Positioning Accuracy	10 meters, 2D RMS

4. MT88 and Accessories

- MT88 Main Unit with Battery
- USB Data Cable
- Desktop Charger
- CD

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5. View

Front & Back View

Side View

6. First Use

6.1 Install SIM Card

Check that the SIM has not run out of credit (test the SIM in a phone to make sure it can send and receive SMS);

Check that the SIM Lock code is turned off;

If you require the function of sending an SMS location report to the authorized phone number when it makes a call to the MT88, please make sure the SIM installed supports displaying caller ID;

Before installing the SIM card, turn off the power for MT88;

Take off the rubber cover for SIM Card holder and then insert the SIM Card.

6.2 Charging

Please make sure to charge the battery for at least 3 hours. 8 hours is highly appreciated.

6.3 LED Indications

Press and hold the Power On/Off button for 3~5 seconds to turn on/off MT88.

GPS LED (Blue)	
On	One button is pressed or charging.
Flashing (every 0.1 second)	Initializing or Power is not enough

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Flashing (0.1 second on and 2.9 seconds off)	MT88 has a GPS fix
Flashing (1 second on and 2 seconds off)	MT88 has no GPS fix
GSM LED (Green)	
On	A call is coming in / a call is being made
Flashing (every 0.1 second)	Initializing
Flashing (0.1 second on and 2.9 seconds off)	MT88 is connected to the GSM network
Flashing (1 second on and 2 seconds off)	MT88 is not connected to the GSM network

6.4 Track by Calling

Make a call to MT88 and it will report with one SMS.

For example,

Now,110727 02:48,V,16,23Km/h,61%,http://maps.google.com/maps?f=q&hl=en&q=22.540103,114.082329&ie=UTF8&z=16&iwloc=addr&om=1

Click on the link then the location can be shown directly on Google Maps on your mobile phone.

Report description:

Now,110727 02:48,V,16,23Km/h,61%,http://maps.google.com/maps?f=q&hl=en&q=22.540103,114.082329&ie=UTF8&z=16&iwloc=addr&om=1

Content	Description	Note
Now	Current Location	Alarm Type
110721 16:40	Date & Time: 21 July, 2011, 16:40pm	Date & Time in YYMMDD HH:MM
V	No GPS fixed	GPS Status Indicator: A = valid, V = invalid
10	GSM signal=10	GSM Signal. Decimal Digit (0~31)
0Km/h	Speed=0	KM/h. Decimal digit
97%	Battery Power: 97%	Battery Power Balance (Percentage)
http://maps.google.com/maps?f=q&hl=en&q=22.540103,114.082329&ie=UTF8&z=16&iwloc=addr&om=1	Latitude: 22.513015 Longitude: 114.057235	Google Maps Web Link with Latitude and Longitude. Click on the link to get the location.

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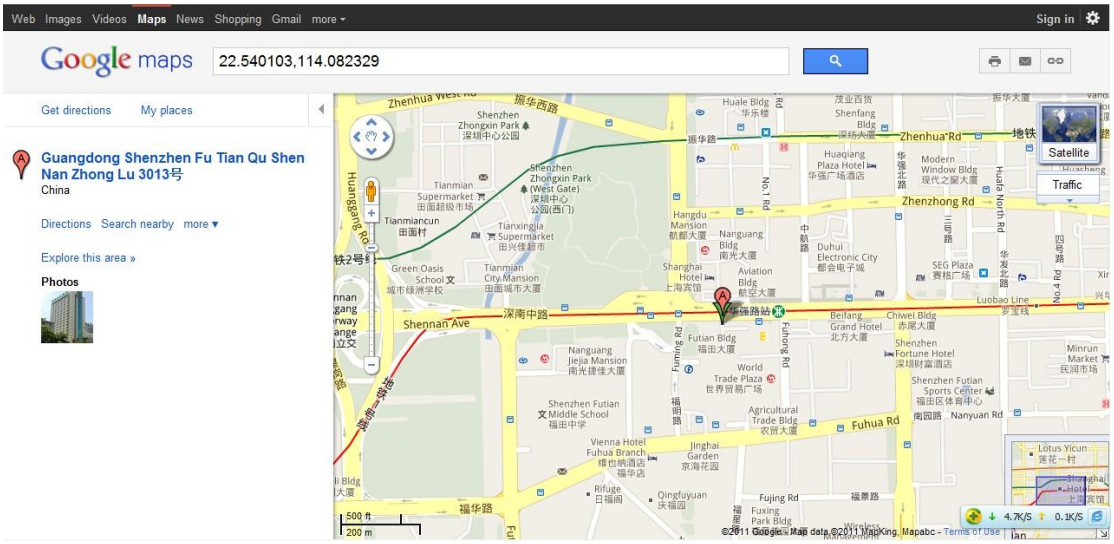
If your mobile cannot visit HTTP websites, input the latitude and longitude into Google Maps as the following picture shows to get the position:



More SMS commands

You can configure MT88 by mobile phone or by computer using the MEITRACK Parameter Editor.

For more details, please refer to part 6.5 **Configure by Computer**.

Note:

1. *Password is 4 digits only and defaulted as 0000. You can change the password by Parameter Editor and SMS command.*
2. *M88 will only accept commands from a user with the correct password and report SMS report to the user. If preauthorized phone number was set, only this phone number can receive SMS reports.*

6.4.1 Multiple Phone numbers– A71

Command: 0000, A71, phone number 1, phone number 2, phone number 3

SMS Get: IMEI, A71, OK

Note：

Authorize a phone number for SOS alarm, calling for location report, geo-fence alarm, and low battery alarm.

Phone Number: Max 16 characters.

If no preset phone number, it is empty (default is empty).

Send command “0000, A71” to delete all phone numbers.

When the SOS button is pressed, MT88 will make a call to phone number 1, 2 and 3. It will stop calling when one number answers.

Example:0000,A71,13811111111,13822222222,13833333333

SMS Get:353358017784062,A71,OK

6.4.2 Listening-in (Voice Monitoring) – A72

Command: 0000, A72, phone number 1, phone number 2

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SMS Get: IMEI, A72, OK

Note:

Authorize a phone number to make a silent call to the tracker. The tracker will answer the call automatically and allows the caller to listen to what is happening around the tracker. There is no sound when the tracker is working.

Phone Number: 2 monitoring numbers at the most can be set, 16 characters per number.

If no preset phone number, it is empty (default).

If no phone number, but has ",", the number related to this "," is deleted.

Send command "0000, A72" to delete all phone numbers.

Example:0000,A72,13844444444,13855555555

SMS Get: 353358017784062,A72,OK

6.4.3 Sleep Mode– A73

Command: 0000,A73,X

SMS Get: IMEI,A73,OK

Note:

This setting is for power saving.

X= 0, turn off sleep mode (default).

X=1, normal sleep.

X=2, deep sleep.

Example: 0000,A73,2

SMS Get: 353358017784062,A73,OK

6.4.4 Time Zone – B35

Command:0000,B35,T

SMS Get:IMEI,B35,OK

Note:

Default time of the tracker is GMT. You can use this command to change the time on your tracker to your local time. This command is for SMS tracking only.

Time zone of SMS report is separated with that of GPRS data. If you need to set time zone in GPRS data, please use SMS command: 0000, B36, T

T=0, to turn off this function.

T=[-32768,32767] to set time difference in minutes to GMT.

For those ahead of GMT, just input the time difference in minutes directly. For example, GMT+8, W000000,032,480

'-'is required for those behind GMT. For example, W000000,032,-120.

Example:0000,B35,480

SMS Get: 353358017784062,B35,OK

For more details regarding SMS commands, please refer to MEITRACK SMS Protocol.

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6.5 Configure by Computer

This part shows the basic steps in how to use the **MEITRACK Parameter Editor.**

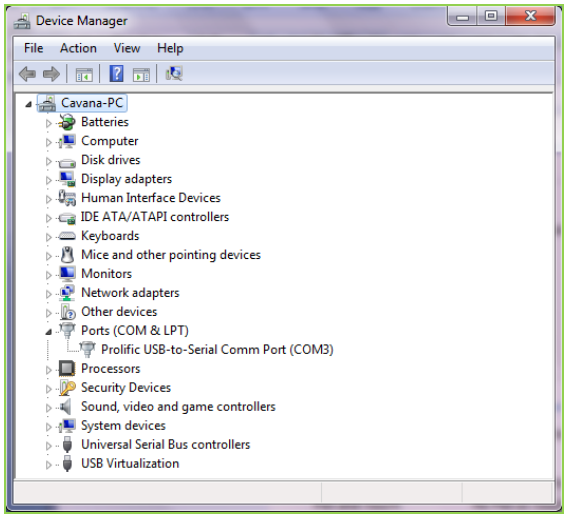
Please refer to the **MEITRACK Parameter Editor User Guide** for more information regarding configuration and functions.

Run 'PL2303_Prolific_DriverInstaller' to install the driver for the USB data cable.

Note: PL2303_Prolific_DriverInstaller is in the folder 'USB-232 Driver' in the CD.

Connect the USB Data Cable between MT80i and PC.

Open Device Manager (Device Manager is under Control Panel\System and Security\System). You can then find 'Prolific USB-to-Serial Comm Port' as the following picture shows.



Note: Remember this Com number. It needs to be input into the MEITRACK Parameter Editor. It is COM3 in this example and it would be COM4 or COM5… in your computer.

Run 'MEITRACK Parameter Editor.exe' and the following configuration window will pop up:

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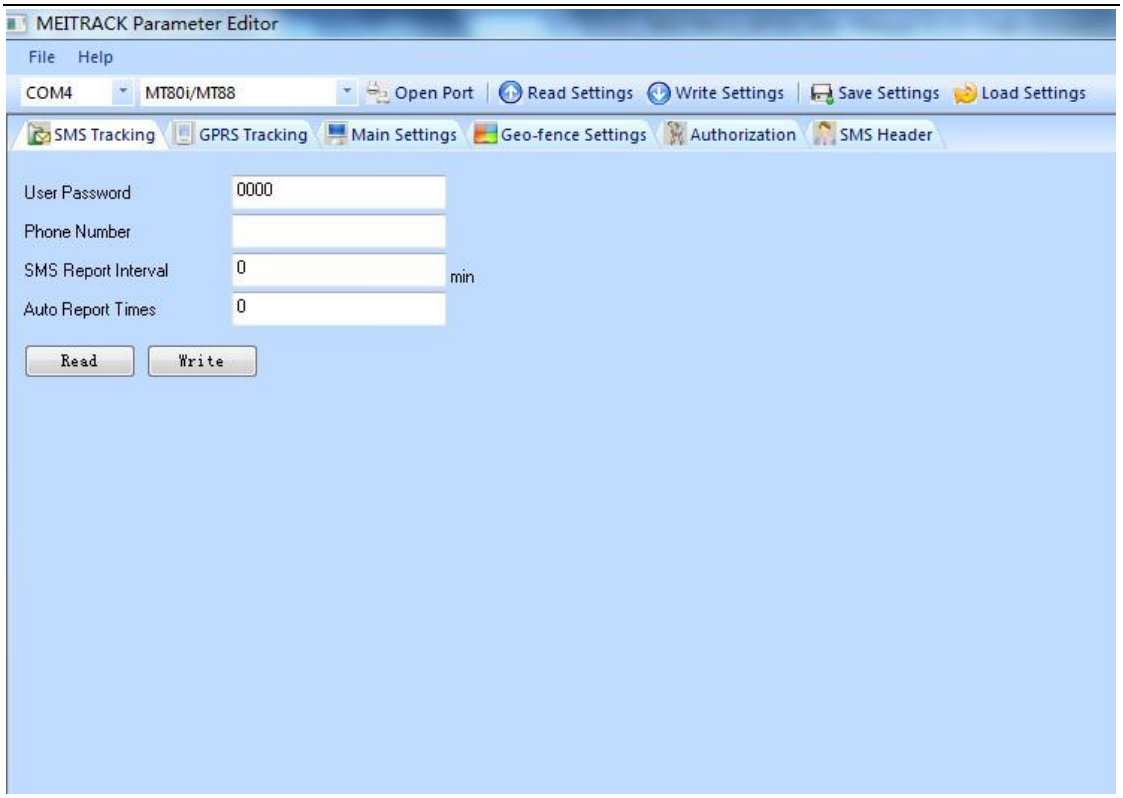

Choose the correct Com number and terminal type in previous Device Manager then click the 'Open Port' button. Click 'Read Settings' button to show the default or previous settings of the tracker.

Note: MEITRACK Parameter Editor is in the CD. The language will be automatically adjusted to be the same as your PC operation system's language. Please use "Ctrl+L" to change the language.

6.5.1 SMS Tracking

6.5.1.1 Track by Preset Interval

Click Tap I: SMS Tracking

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Item	Description
User Password	SMS password for sending SMS commands and defaulted as 0000.
Phone Number	A phone number to receive SMS location reports.
SMS Report Interval	Track by time interval via SMS. Set time interval for SMS location report. = 0, stop tracking by time interval (default); = [1,65535], track by interval in minute.
Auto Report Times	= 0, unlimited times for report. = [1,255], it will stop reporting when reaching preset times
Read	Read current tracker's settings for above items.
Write	Write above settings to the tracker.

6.5.1.2 SMS Report

Click Tap V: Authorization

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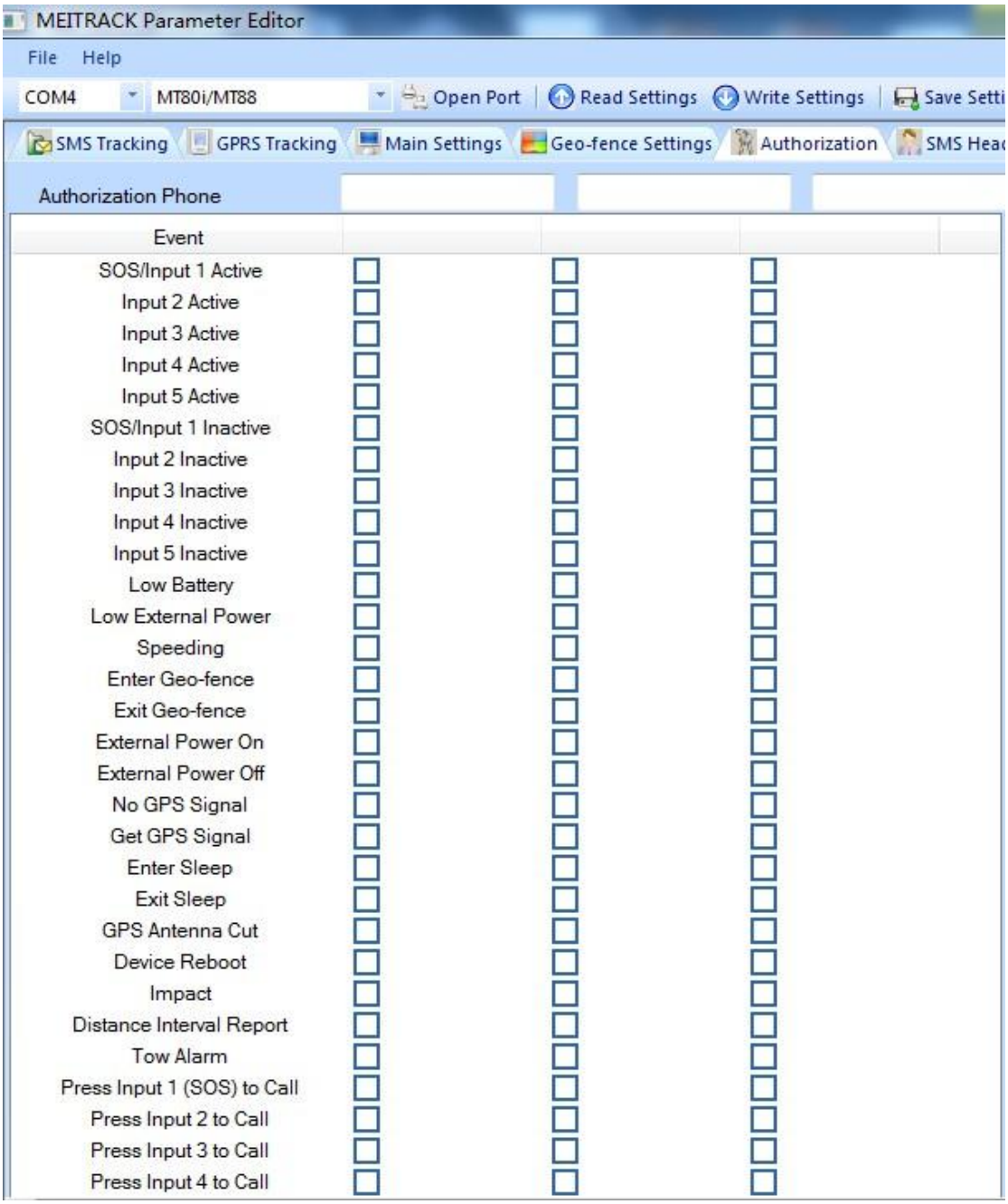

Item	Description
Authorization Phone	A phone number to receive selected event's SMS reports.
Event	Selected event's SMS reports will be sent to authorized phone number. For more details, please refer to MEITRACK GPRS/SMS Protocol. For description of events from SOS/Input 1 Active to Tow Alarm, please refer to tap II **GPRS Tracking**. Other events description, please refer to below chart.
Read	Read current tracker's settings for above items.
Write	Write above settings to the tracker.

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Event Description:

Event	Description (If the box is ticked, authorized phone number will get event report by SMS or calling)
SOS/Input 1 Active	Report when input1 (SOS) is pressed.
SOS/Input1 Inactive	Report when input 1 inactive (SOS released).
Low Battery	Report when backup battery's voltage is below 3.5V.
Speeding	Report when MT88 speeds higher than the pre-set value. Value can be changed on tap III **Main Settings**
Enter Geo-fence	Report when MT88 enters Geo-fence.
Exit Geo-fence	Report when MT88 exits Geo-fence. Geo-fence can be changed on tap III **Main Settings**.
No GPS Signal	Report when MT88 enters GPS blind area or no GPS signal.
Get GPS Signal	Report when MT88 exits GPS blind area or get GPS signal.
Enter Sleep	Report when MT88 enters sleep mode.
Exit Sleep	Report when MT88 exits sleep mode. Sleep mode can be changed on tap III **Main Settings**.
Device Reboot	Report when MT88 is rebooting.
Distance Interval Report	Track by distance. Interval can be changed on tap III **Main Settings**.
Press Input 1 (SOS) to call	Make a call to authorized phone number when press input 1 (SOS).
Reject Incoming Call	Hand up automatically incoming call from correspondent authorized phone number.
Call for SMS Location Report	Reject incoming call or report SMS location when no answer.
Listen-in (Voice Monitoring)	Auto answer incoming call and enable listen-in (voice monitoring).

6.5.2 GPRS Tracking

Click Tap II: GPRS Tracking

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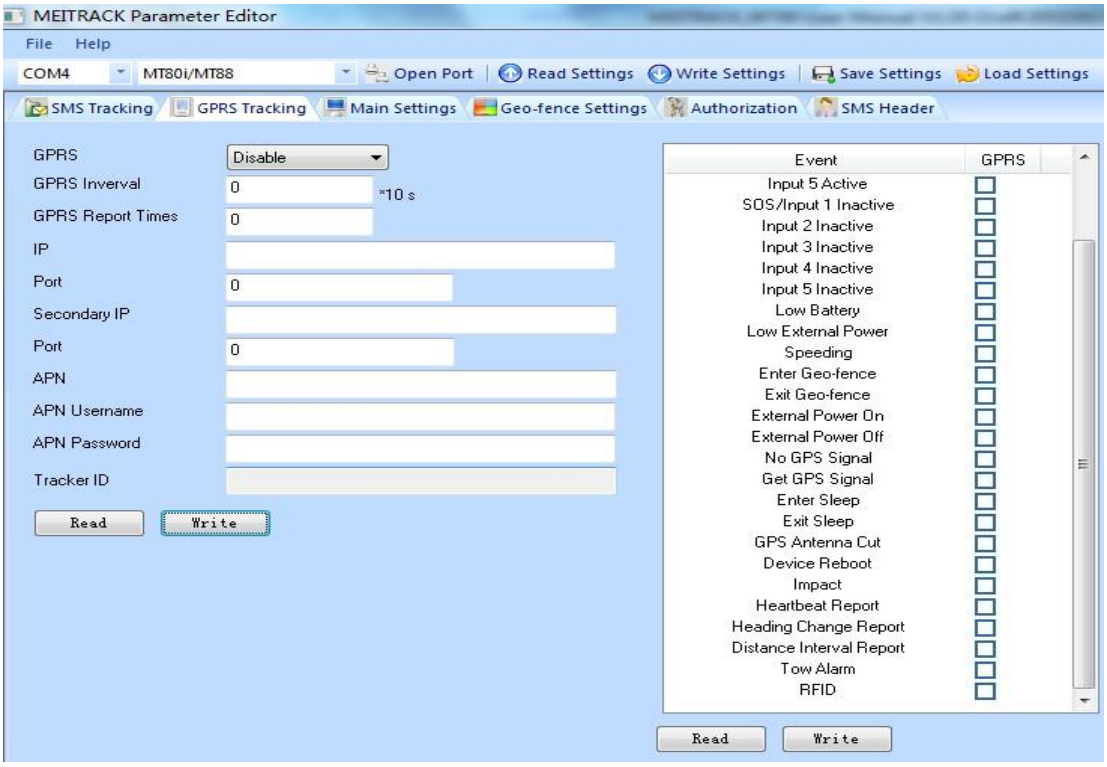

Item	Description
GPRS	Select TCP/UDP to enable GPRS communication.
GPRS Interval	Track by time interval via GPRS. Set time interval for GPRS tracking. Interval is in unit of 10 seconds. Interval = 0, stop tracking by time interval. Max time interval = 65535*10 seconds
GPRS Report Times	= 0, report without limit. = [1,65535], set report times, MT88 will stop reporting when reaching the times.
IP & Port	Input server's IP address and port number.
Secondary IP and Port (Backup Server)	Input backup server's IP address and port number to avoid data losing when main server is down. The backup server will receive data automatically.
APN **APN user name** **APN password**	APN, APN username, APN password: max 32 bytes. If no username and password required, leave them blank.
Tracker ID	MT88's IMEI. It is the only ID in GPRS packet.
Read	Read current tracker's settings for above items.
Write	Write above settings to the tracker.

Tick the box for receiving GPRS report.

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Event Description:

Event	Description (If the box is ticked, the server will get event report by GPRS)
SOS/Input 1 Active	Report when input1 (SOS) is pressed.
SOS/Input1 Inactive	Report when input 1 inactive (SOS released).
Low Battery	Report when backup battery's voltage is below 3.5V.
Speeding	Report when MT88 speeds higher than the pre-set value. Value can be changed on tap III **Main Settings.**
Enter Geo-fence	Report when MT88 enters Geo-fence.
Exit Geo-fence	Report when MT88 exits Geo-fence. Geo-fence can be changed on tap III **Main Settings**.
No GPS Signal	Report when MT88 enters GPS blind area or no GPS signal.
Get GPS Signal	Report when MT88 exits GPS blind area or get GPS signal.
Enter Sleep	Report when MT88 enters sleep mode.
Exit Sleep	Report when MT88 exits sleep mode. Sleep mode can be changed on tap III **Main Settings**.
Heartbeat Report	Enable heartbeat report. Heartbeat interval can be changed on tap III **Main Settings**.
Heading Change Report	Report when the heading direction of MT88 changes over the pre-set degree. Degree can be changed on tap III **Main Settings**.
Device Reboot	Report when MT88 is rebooting.
Distance Interval Report	Track by distance. Interval can be changed on tap III **Main Settings**.

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