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Sub Project:	User Guide	Page:	1 of 15
Revision:	V2.0	Confidential:	External Documentation

MEITRACK® MT80i



User Guide

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	2 of 15
Revision:	V2.0	Confidential:	External Documentation

Contents

1. Copyright and Disclaimer	3
2. Applications.....	3
3. Product Function and Specifications.....	3
3.1 Product Function	3
3.2 Specifications.....	4
4. MT80i and Accessories	4
5. View.....	5
6. First Use	5
6.1 Install SIM Card	5
6.2 Charging	5
6.3 LED Indications	5
6.4 Track by Calling.....	6
6.4.1 Multiple Phone numbers– A71.....	7
6.4.2 Listening-in (Voice Monitoring)– A72	7
6.4.3 Sleep Mode– A73	8
6.4.4 Time Zone– B35	8
6.5 Configure by Computer	8
6.5.1 SMS Tracking.....	10
6.5.2 GPRS Tracking	13

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	3 of 15
Revision:	V2.0	Confidential:	External Documentation

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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
- ☐ Small Size (61x42x15mm) and Lightweight 50g
- ☐ Low Power Consumption and Long Standby Time
- ☐ Belt Clip for watch belt or pet collar
- ☐ AGPS (with GSM Base Station ID)
- ☐ 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

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	4 of 15
Revision:	V2.0	Confidential:	External Documentation

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

3.2 Specifications

Items	Descriptions
Dimension	61x42x15mm
Weight	50g
Charging Voltage	Mini USB charging interface, DC4.2V~5.5V/400mA
Back-up Battery	950mAh/3.7V rechargeable and replaceable lithium-ion battery(NokiaBL-5C compatible)
Power Consumption	65mA standby current
Operating Temperature	-20℃~55℃
Humidity	5%~95%
Work Time	72 hours in power-saving mode and 10 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. MT80i and Accessories

- ☐ MT80i Main Unit with Clip
- ☐ Two Batteries
- ☐ USB Data Cable
- ☐ Travel Charger
- ☐ Car Charger
- ☐ Desktop Charger
- ☐ CD

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	5 of 15
Revision:	V2.0	Confidential:	External Documentation

5. 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 MT80i, please make sure the SIM installed supports displaying caller ID.

Before installing the SIM card, turn off the power for MT80i.

Take out the battery and insert a workable SIM card and put back the battery and back cover.

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 MT80i.

GPS LED (Blue)	
On	One button is pressed or charging.
Flashing (every 0.1 second)	Initializing
Flashing (0.1 second on and 2.9 seconds off)	MT80i has a GPS fix
Flashing (1 second on and 2 seconds off)	MT80i has no GPS fix
GSM LED (Green)	
On	One call is coming in / one call is being made
Flashing (every 0.1 second)	Initializing
Flashing (0.1 second on and 2.9 seconds off)	MT80i is connected to the GSM network
Flashing (1 second on and 2 seconds off)	MT80i is not connected to the GSM network

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	6 of 15
Revision:	V2.0	Confidential:	External Documentation

6.4 Track by Calling

Make a call to MT80i 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.

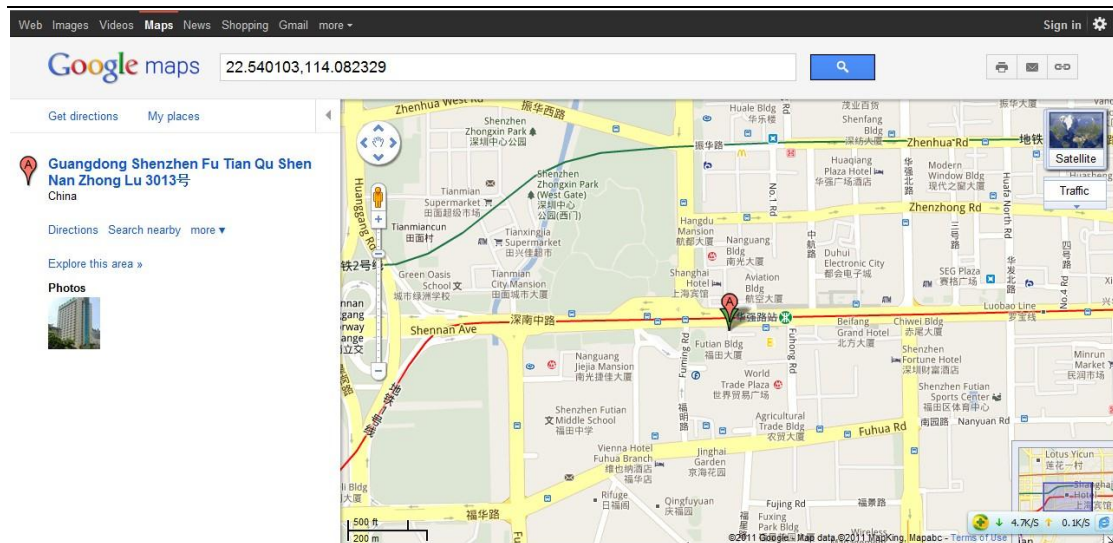
Report description:

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.

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

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	7 of 15
Revision:	V2.0	Confidential:	External Documentation



More SMS commands

You can configure MT80i 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. MT80i 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, MT90 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

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

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	8 of 15
Revision:	V2.0	Confidential:	External Documentation

allows the caller to listen in 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.

6.5 Configure by Computer

This part mainly shows you how to use the **MEITRACK Parameter Editor**.

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	9 of 15
Revision:	V2.0	Confidential:	External Documentation

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

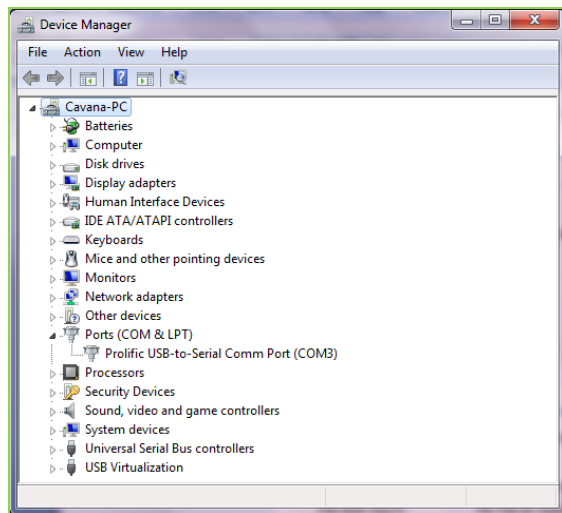
Run 'PL2303_Prolific_DriverInstaller' to install the driver for the USB data cable.

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

Connect the USB Data Cable between MT80i and PC.



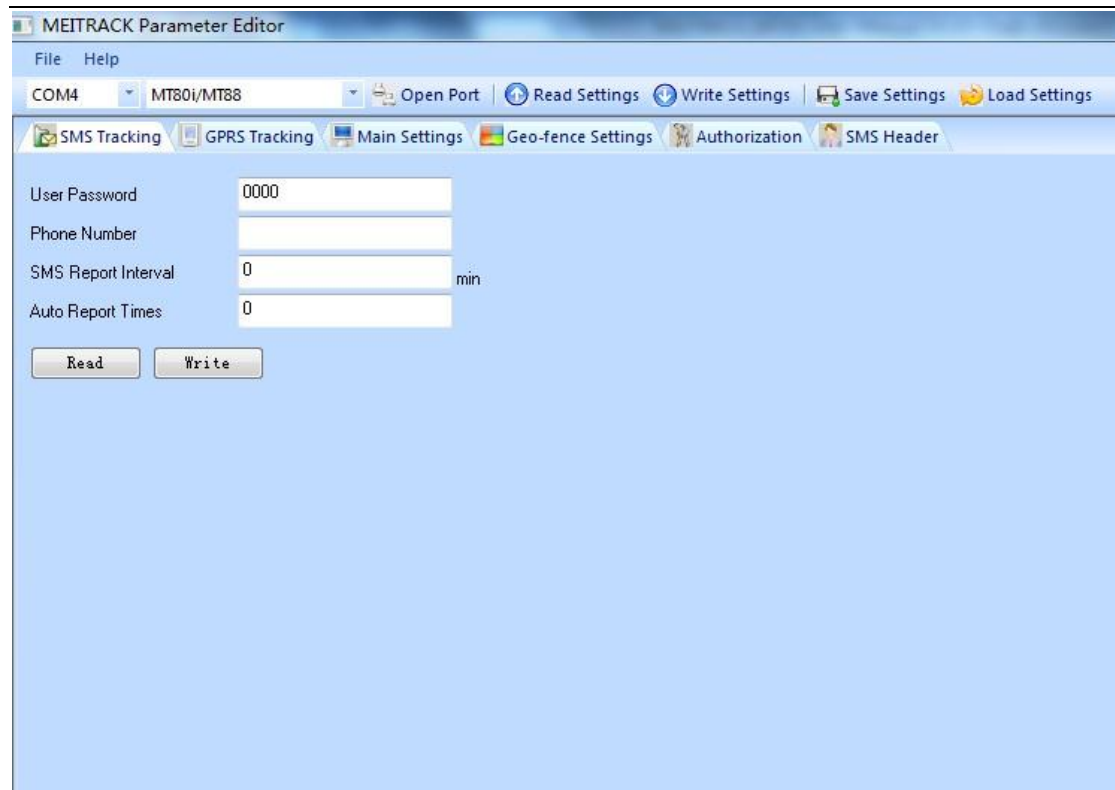
Open Device Manager (Device Manager is under Control Panel\System and Security\System). You can then find 'Prolific USB-to-Serial Comm Port' as the following picture shows.



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:

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	10 of 15
Revision:	V2.0	Confidential:	External Documentation



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 switch the language.

6.5.1 SMS Tracking

6.5.1.1 Track by Preset Interval

Click Tap I: SMS Tracking



File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	11 of 15
Revision:	V2.0	Confidential:	External Documentation

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

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	12 of 15
Revision:	V2.0	Confidential:	External Documentation

MEITRACK Parameter Editor

File Help

COM4 MT80i/MT88 Open Port Read Settings Write Settings Save Settings

SMS Tracking GPRS Tracking Main Settings Geo-fence Settings Authorization SMS Head

Authorization Phone

Event			
SOS/Input 1 Active	☐	☐	☐
Input 2 Active	☐	☐	☐
Input 3 Active	☐	☐	☐
Input 4 Active	☐	☐	☐
Input 5 Active	☐	☐	☐
SOS/Input 1 Inactive	☐	☐	☐
Input 2 Inactive	☐	☐	☐
Input 3 Inactive	☐	☐	☐
Input 4 Inactive	☐	☐	☐
Input 5 Inactive	☐	☐	☐
Low Battery	☐	☐	☐
Low External Power	☐	☐	☐
Speeding	☐	☐	☐
Enter Geo-fence	☐	☐	☐
Exit Geo-fence	☐	☐	☐
External Power On	☐	☐	☐
External Power Off	☐	☐	☐
No GPS Signal	☐	☐	☐
Get GPS Signal	☐	☐	☐
Enter Sleep	☐	☐	☐
Exit Sleep	☐	☐	☐
GPS Antenna Cut	☐	☐	☐
Device Reboot	☐	☐	☐
Impact	☐	☐	☐
Distance Interval Report	☐	☐	☐
Tow Alarm	☐	☐	☐
Press Input 1 (SOS) to Call	☐	☐	☐
Press Input 2 to Call	☐	☐	☐
Press Input 3 to Call	☐	☐	☐
Press Input 4 to Call	☐	☐	☐

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.

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	13 of 15
Revision:	V2.0	Confidential:	External Documentation

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 MT80i speeds higher than the pre-set value. Value can be changed on tap III Main Settings
Enter Geo-fence	Report when MT80i enters Geo-fence.
Exit Geo-fence	Report when MT80i exits Geo-fence. Geo-fence can be changed on tap III Main Settings .
No GPS Signal	Report when MT80i enters GPS blind area or no GPS signal.
Get GPS Signal	Report when MT80i exits GPS blind area or get GPS signal.
Enter Sleep	Report when MT80i enters sleep mode.
Exit Sleep	Report when MT80i exits sleep mode. Sleep mode can be changed on tap III Main Settings .
Device Reboot	Report when MT80i 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

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	14 of 15
Revision:	V2.0	Confidential:	External Documentation

MEITRACK Parameter Editor

File Help

COM4 MT80i/MT88 Open Port Read Settings Write Settings Save Settings Load Settings

SMS Tracking GPRS Tracking Main Settings Geo-fence Settings Authorization SMS Header

GPRS Disable

GPRS Interval 0 *10 s

GPRS Report Times 0

IP

Port 0

Secondary IP

Port 0

APN

APN Username

APN Password

Tracker ID

Read Write

Event	GPRS
Input 5 Active	☐
SOS/Input 1 Inactive	☐
Input 2 Inactive	☐
Input 3 Inactive	☐
Input 4 Inactive	☐
Input 5 Inactive	☐
Low Battery	☐
Low External Power	☐
Speeding	☐
Enter Geo-fence	☐
Exit Geo-fence	☐
External Power On	☐
External Power Off	☐
No GPS Signal	☐
Get GPS Signal	☐
Enter Sleep	☐
Exit Sleep	☐
GPS Antenna Cut	☐
Device Reboot	☐
Impact	☐
Heartbeat Report	☐
Heading Change Report	☐
Distance Interval Report	☐
Tow Alarm	☐
RFID	☐

Read Write

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, MT80i 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 losing data 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	MT80i's IMEI. It is the only ID in GPRS packet.
Read	Read current tracker's settings for above items.

File Name:	MEITRACK MT80i User Guide	Creator:	Cavana Cheung
Project:	MT80i	Creation Date:	2010-10-10
		Update:	2011-08-01
Sub Project:	User Guide	Page:	15 of 15
Revision:	V2.0	Confidential:	External Documentation

Write	Write above settings to the tracker.
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Tick the box for receiving GPRS report.

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 MT80i speeds higher than the pre-set value. Value can be changed on tap III Main Settings
Enter Geo-fence	Report when MT80i enters Geo-fence.
Exit Geo-fence	Report when MT80i exits Geo-fence. Geo-fence can be changed on tap III Main Settings .
No GPS Signal	Report when MT80i enters GPS blind area or no GPS signal.
Get GPS Signal	Report when MT80i exits GPS blind area or get GPS signal.
Enter Sleep	Report when MT80i enters sleep mode.
Exit Sleep	Report when MT80i 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 MT80i changes over the pre-set degree. Degree can be changed on tap III Main Settings .
Device Reboot	Report when MT80i is rebooting.
Distance Interval Report	Track by distance. Interval can be changed on tap III Main Settings .