GSM/GPRS/WCDMA/HSPA GPS Mini Tracker

MT-900CM for Mobile Phone

Data Sheet

UniTraQ International Corp. All right reserved, © 2012

2F., No.136, Ziqiang S. Rd., Zhubei City, Hsinchu County 30264, Taiwan (R.O.C.)

TEL：886-3-6578491 FAX：886-3-6578492

MADE IN TAIWAN

Content

1. Introduction

The MT-900CM is a portable compact tracking device for personal safety and asset monitoring. It combines high sensitivity GPS and GSM/GPRS/EDGE/WCDMA/HSPA to perform the powerful security application.

The MT-900CM can, based on quad band GSM/GPRS and WCDMA/HSPA network, and GPS satellite positioning system, track far-way objects conveniently by Short Message or internet. With the compact size and powerful functions, it can be used for child protection, anti-kidnapping, vehicle tracking; pets go out tracking, panic assistant for the aged people, and much more.

MT-900CM is specially designed to work with smartphone. With the APP software, the smartphone will be your tracking center to manage the trackers, MT-900CM. The MT-900CM and smartphone will communicate and transfer data by SMS. Without backend server or service provider, the user can save cost and monthly fee. It will also keep your privacy in safety. MT-900CM will be your best choice in tracking applications.

2. Features

- ❖ 3.75G WCDMA/UMTS/HSPA communications
- ❖ Available Quad band GSM/GPRS 850/900/1800/1900 MHz
- ❖ GPS 50 channels all-in-view tracking with AGPS supported.
- ❖ GPS high sensitivity -162 dBm.
- ❖ Real time dynamic reporting based on time interval.
- ❖ Remote command control by SMS.
- ❖ Emergency call and notification, plus SMS sending location.
- ❖ Cell ID positioning supporting
- ❖ Geo-fence capability with out of fencing notification.
- ❖ Over speed notification capability.
- ❖ Low battery notification capability.
- ❖ Power management for low power consumption.
- ❖ Mini USB for charging and data exchanging.
- ❖ Data logger capability built in with 4Mega bytes flash memory to record time stamp, position and event status.
- ❖ Surrounding audio monitoring capability.(option for MT-900CE, CA, not CF)
- ❖ 3D G-sensor to report motion sensing, accident from ±4G.
- ❖ Smartphone APP software to manage

3. Applications

- Personal safety: Child monitoring, anti-kidnapping, locate missing kids.
- Disables' safety.
- Seniors' safety, locate lost seniors, emergent alarm.
- Security: Locate assets.
- Asset unauthorized movement detection.
- Vehicle tracking.
- Animal tracking – track pets' location.

4. Specifications

4.1 General Specification

Parameter	Specification
Operating Voltage	3.4 V
Operating Temperature	-20 ℃ ~ +60 ℃
Storage Temperature	-40 ℃ ~ +85 ℃
Power Consumption	Normal 180mA
	Idle mode< 3mA (with mobile idle)
Battery	500mAh
USB Power	Input 5V, 500mA
Battery Voltage	Min:3.4V, Typ:3.7V, Max:4.2V
SIM card type	1.8V, 3V
SIM card Holder type	Push-Push type
LED Status Indicator	Emergent Alarm/Charge/Power/Mobile/GPS
Dimension	53 x 37 x 20 mm
Weight	39g

4.2 Wireless Interface Specifications

Parameter	specification
UMTS/WCDMA/HSPA	900/2100 MHz (MT-900CE)
	850/1900 MHz (MT-900CA)
	800/850/900/1700/1900/2100 MHz (MT-900CF)
	Up to 5.76 Mb/s uplink, 7.2 Mb/s downlink
GSM	850 / 900 / 1800 / 1900 Mhz
	Class B Mobile Station
	PBCCH, USSD support

GPRS	Multislot Class 12, CS1-CS4 up to 85.6 kb/s
EDGE	Multislot Class 12, MCS1-MCS9 up to 236.8 kb/s
SMS	MT/MO, Text and PDU mode supported
Protocol support	TCP/UDP
Current consumption (at VCC=3.8V)	Idle mode :<2 mA GSM:< 250 mA GPRS < 660mA EDGE < 460 mA HSDPA < 670 mA

4.3 GPS Specifications

Parameter	specification
Protocol	NMEA 0183 Ver2.3
Receiver channels / Fixing method	50 channels all in view
Acquisition sensitivity	-148 dBm
Tracking sensitivity	-162 dBm
Receiver frequency	1575.42MHz L1 C/A Code
Accuracy (1)Position (2)Datum	 2.5m CEP WGS-84
Time To First Fix (1)Cold start (2)Hot start	 26 Sec(typ) 1 Sec(typ)
Dynamic condition	4G ($39.2m/sec^2$)

5. USB Interface

5.1 Battery Charging

1. Charging by a computer USB port:

   Connect the supplied USB cable between the computer USB port and the mini USB connector of the MT-900CM device.

2. Charging by a cigarette lighter power adapter:

   a. Plug the USB connector of the supplied USB cable to the USB connector of the cigarette lighter power adapter.

---

b. Connect the mini USB plug of the USB cable to the mini USB port of the MT-900CM device.

3. Charging by AC adapter:

Connect the supplied AC adapter to the mini USB port of the MT-900CM device.

5.2 Parameters Setting

Connect the supplied USB cable between the computer USB port and the mini USB connector of the MT-900CM device.

The USB interface is also a command and data interface which allows users to download the firmware and set configurations.

6. Button/Switch Indication

6.1 Slide switch

A micro switch for turning on or turning off MT-900CM.

6.2 Panic Button

Press and hold the Panic button for 3 seconds to activate the device to perform the emergency notification and followed the pre-defined setting LED Indicator (Emergency Alarm).

7. LED Indicator

7.1 Power On/Off/Idle status

For LED indicator uses green color LED to instruct the power status:

LED mode	Operation status
On	Main power on
Off	Main power off or Idle mode

7.2 GPS Status

For the GPS status indicator through green LED, detailed information is shown in the following table:

LED mode	Operation status
OFF	un-fixed
FLASH	fixed

7.3 Mobile Status

For the WCDMA/GPRS/GSM status indicator through blue LED, detailed the information is shown in the following table:

LED mode	Operation status

| OFF | WCDMA/GPRS/GSM is not running |
| FLASH | Indicates WCDMA/GPRS/GSM data transfer |

Charging Status

For the charging status indicator through Red LED, detailed information is shown in the following table

LED mode	Operation status
ON	Charging
OFF	Finish
Flashing	Emergency Alarm

Emergency Alarm

For the Emergency Alarm indication, the power, GPS, and GPRS LEDs will light on for 3 seconds.

LED mode	Operation status
Power, GPS, GPRS light ON 3seconds	SOS emergency alarm

UniTraQ International Corp

2F., No.136, Ziqiang S. Rd., Zhubei City, Hsinchu County 30264, Taiwan (R.O.C.)

TEL：886-3-6578491　　FAX：886-3-6578492

Email　　support@unitraq.com
Website　www.unitraq.com

© 2012 UniTraQ International Corp.　　All rights reserved.
Not to be reproduced in whole or part for any purpose without written permission of UniTraQ International Corp ("UniTraQ") Information provided by UniTraQ is believed to be accurate and reliable. These materials are provided by UniTraQ as a service to its customers and may be used for informational purposes only. UniTraQ assumes no responsibility for errors or omissions in these materials, nor for its use. UniTraQ reserves the right to change specification at any time without notice.

These materials are provides "as is" without warranty of any kind, either expressed or implied, relating to sale and/or use of UniTraQ products including liability or warranties relating to fitness for a particular purpose, consequential or incidental damages, merchantability, or infringement of any patent, copyright or other intellectual property right. UniTraQ further does not warrant the accuracy or completeness of the information, text, graphics or other items contained within these materials. UniTraQ shall not be liable for any special, indirect, incidental, or consequential damages, including without limitation, lost revenues or lost profits, which may result from the use of these materials.

UniTraQ products are not intended for use in medical, life-support devices, or applications involving potential risk of death, personal injury, or severe property damage in case of failure of the product.