



# Ct-Tracker





## Introduction

**Ct-Tracker** is a small and powerful GPS/GSM/GPRS tracking device that is developed for personal remote positioning and emergency reporting. **Ct-Tracker** is suitable for many applications, such as human body or pet monitoring, vehicle security etc. Not only transmitting the longitude and latitude coordinate to your cell phone by SMS, but also transmitting the longitude and latitude coordinate to your PC by the Internet connection of GPRS and then displaying the location by specific map software. There are four quick dial buttons for the dialing to pre-set numbers.

With the superior sensitivity GPS chip on board, the **Ct-Tracker** can easily get a fix even in urban canyon condition. Users can also benefit from its compact size, lightweight, as well as long working hours. The track data can be downloaded to Google map for quick monitoring purpose. Also, the user can easily get the GPS data from the global internet server. The **Ct-Tracker** is your best companion for remote positioning and security purpose.

## Features

- GSM 900/1800/1900 ( default tri-bands )
- GPRS class 12
- 20 channels tracking
- Superior sensitivity: -159dBm tracking
- Built-in rechargeable 750 mA/h Li-Ion battery
- Tracking ( by time interval, speed interval )
- Emergency calls
- Geo-fencing control ( SMS )
- Low power alarm
- Voice communication
- Mini USB port for charging and data exchanging



## Specifications

### ■ Technical Performance

| Item  | DESCRIPTION   | Specification                          |
|---|---------------|--|
| <b>Chipset</b>                                | GSW3          | SiRFStar III technology                |
| <b>General</b>                                | Frequency     | L1,1575.42 MHz                         |
|   | C/A code      | 1.023 MHz chip rate                    |
|   | Channels      | 20                                     |
| <b>Datum</b>                                  | Default       | WGS-84                                 |
| <b>Accuracy</b>                               | Position      | 10 meters, 2-D RMS                     |
|   |               | 5 meters 2-D RMS,WAAS corrected        |
|   | Velocity      | 0.1 meters/second                      |
|   | Time          | 1 microsecond synchronized to GPS time |
| <b>Time to First Fix (TTFF)</b>               | Reacquisition | 0.1 sec., average                      |
| <b>Open Sky &amp; Stationary Requirements</b> | Hot start     | 1 sec., average typical TTFF           |
|   | Warm start    | 35 sec., average typical TTFF          |
|   | Cold start    | 42sec., average typical TTFF           |
| <b>Dynamic Conditions</b>                     | Altitude      | 1800 meters (60000 feet) max.          |
|   | Velocity      | 515 meters/second (1000 knots) max.    |
|   | Acceleration  | 4g, max.                               |

### ■ GSM / GPRS Technical Performance

| Item                             | DESCRIPTION    | Specification     |
|----------------------------------|----------------|-------------------|
| <b>Air Interface</b>             | GSM Tri-Band   | 900/1800/1900 MHz |
|                                  | Class 4        | 2W @900 MHz       |
|                                  | Class 1        | 1W @1800/1900 MHz |
| <b>Data Interface</b>            |                |                   |
| <b>GPRS packet Data features</b> | GPRS Multislot | Class 12          |
|                                  | Coding Scheme  | CS1~CS4           |

### ■ Software Specifications

|                              |                          |
|------------------------------|--------------------------|
| <b>Operating system</b>      | NuCleux                  |
| <b>Communication Network</b> | GSM / GPRS 900/1800/1900 |



## ■ Physical Specifications

| Item      | DESCRIPTION               | Specification |
|-----------|---------------------------|---------------|
| Dimension | Length                    | 88.5 mm       |
|           | Width                     | 40 mm         |
|           | Height                    | 19.95 mm      |
| Weight    | With Rechargeable battery | 72 g          |
|           | Without battery           | 57 g          |

## ■ Environmental Specifications

| Item        | DESCRIPTION              | Specification   |
|-------------|--------------------------|-----------------|
| Temperature | Operating range          | -10 °C to 50 °C |
|             | Storage range            | -20 °C to 60 °C |
| Humidity    | Up to 95% non-condensing |                 |

## ■ Interface Specifications

| Item             | DESCRIPTION         | Specification                   |
|------------------|---------------------|---------------------------------|
| Power key        | Power on            | Press 3 second and music        |
|                  | Power off           | Press 3 second and ring tone    |
| Key Pads         | 1 +OK               | Dial Pre-Set 1st Number         |
|                  | 2 +OK               | Dial Pre-Set 2nd Number         |
|                  | 3 +OK               | Dial Pre-Set 3rd Number         |
|                  | 4 +OK               | Dial Pre-Set 4th Number         |
| SOS              | SOS and +/sos key   | Press two keys at the same time |
| Power recharge   | Mini-USB connector  | USB 1.1                         |
| External antenna | MMCX                |                                 |
| Storage          | SD Card Slot        | Micro-SD                        |
| Microphone       | Build-in            |                                 |
| Speaker          | Build-in            | Mono                            |
| Ear-phone        | Ear-phone connector | φ 2.5mm                         |
| Volume control   | increasing volume   | + /SOS key                      |
|                  | decreasing volume   | - key                           |
| Antenna          | GSM, GPS            | Build-In                        |



## ■ LED lights Definitions

| Indication     | Conditions                            | LED display               |
|----------------|---------------------------------------|---------------------------|
| <b>Service</b> | limit service (no sim / sim with pin) | red light blink           |
|                | no service (no signal)                | red light always ON       |
| <b>Mode</b>    | GSM + GPS not to fix mode             | blue light blink          |
|                | GSM + GPS fix mode                    | greenish blue light blink |
|                | GPRS + GPS not to fix mode            | orange light short blink  |
|                | GPRS + GPS fix mode                   | green light short blink   |
|                | Tracking + GPS not to fix mode        | orange light fast blink   |
|                | Tracking + GPS fix mode               | green light fast blink    |
| <b>Battery</b> | Battery low mode                      | green, red lights blink   |
|                | Battery Charging mode                 | red light blink           |
|                | Battery full mode                     | green light always ON     |

## ■ Electrical Specifications

| Indication               | Conditions                        | LED display              |
|--------------------------|-----------------------------------|--------------------------|
| <b>Supply voltage</b>    | GSM                               | 4.2V                     |
|                          | GPS & other electronic components | TBD                      |
| <b>Power consumption</b> | Operation mode (GSM)              | 270mA                    |
|                          | Standby mode (Trace On)           | 130mA                    |
|                          | Power saving mode (Trace Off)     | 76mA                     |
| <b>Battery</b>           | Battery Cell                      | Li-ion (750mA)           |
|                          | Dimension (L x W x H)             | 43 mm x 31.7 mm x 6.9 mm |
|                          | Charging time                     | 3 hr.                    |
|                          | Output voltage                    | 4.2v                     |



## Accessories

| Item                           | Quantity |
|--------------------------------|----------|
| Main unit                      | 1        |
| Battery                        | 1        |
| CD-ROM(Software + User manual) | 1        |
| Ct-Tracker Quick Guide         | 1        |
| Power Adapter                  | 1        |
| Mini USB Cable                 | 1        |
| Warranty Card                  | 1        |