

## Tracker GT-100

- Security mode by vibration detection
- Track and report device's position
- Can operate in continuous tracking
- All configurations can be set through Wireless SMS
- Direct show position of tracker on the google map via smart phone



### Introduction

GT-100 is combining with GPRS and high performance GPS. The device can be used to track and report device's position and status to back-end server, specific phone number. Also the operation modes include continuous tracking, vibration mode and position lock. Vibration buttons can be used to send emergency call when tracker is moved. All configurations can be done through SMS. Especially, the position of tracker can be found quickly and fast in google map via phone without complicated setting.

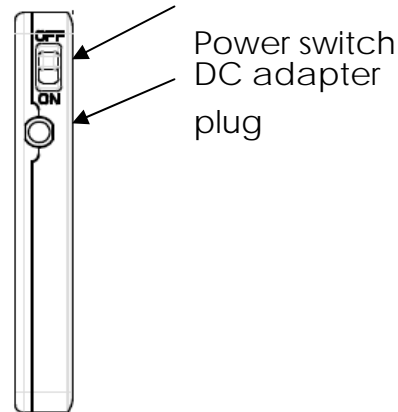
### Hardware Specification:

CPU	Silicon Lab C8051F330
GSM feature	Tilet GE864-QUAD GSM850/GSM900/DCS1800/PCS1900
GPS chip	Antenova M10326 GPS module (Morning Star M2122)
Dimension	50 (W)x 6.9 (D)x 80 (H)mm
Weight	34.4g
SIM	3V
Key	Silde Power switch*1
LED	3 (Green.Yellow,Red)
Battery	300 mAh, rechargeable, Li-ion battery, 2 hrs charging time. Standby time 72hrs
Power Adaptor	Input 100~240V~0.3A max DC output 5V/ 1A
GPRS Protocol	GPRS multi-slot class 10
SMS	activation and deactivation of device can be done through SMS
Socket	Support TCP/IP to transfer data to the data server

Environment  
Temperature



Operating Temp: 0°C to 55°C  
Storage Temp: -20°C to 75°C


## Device appearance



SIM CARD  
SLOT

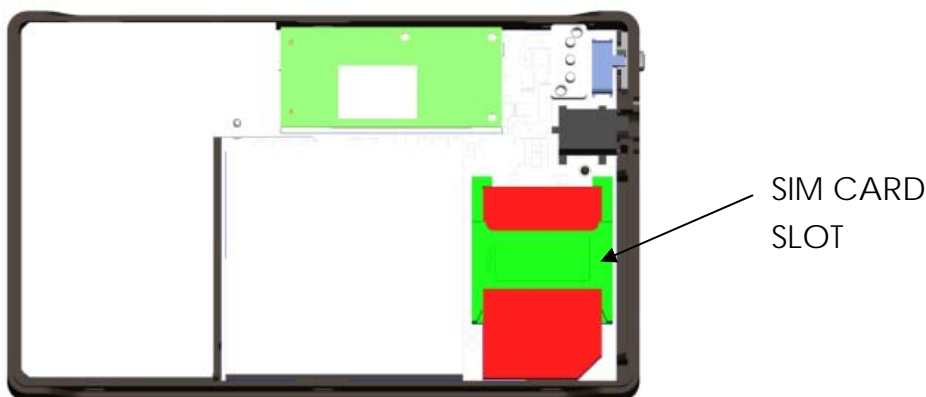
## LED indication -

LED	Display Status	Function and status
Green LED 	consistently flash every 1 sec	System in checking
	consistently flash every 4 sec	System boot up successfully
Yellow LED 	consistently flash every 4 sec	Vibration function on

	Consistently ON	1. Tracker receive SMS 2. Tracker is asked for position report
Red LED 	consistently flash every 4 sec	Low battery
	Consistently ON	In power charging mode Note: LED will be off automatically when battery is full

## Getting start --

1. Open the case of GT-100 and Insert SIM card into the SIM card holder as following drawing (please insert SIM card as right direction)



2. Close the case of GT-100
3. Turn on power switch, 3 LED will quick flash 12 times for system boot up
4. Only Green LED flash consistently when system boot up successfully (3 LED are on totally when GSM function is not available such as No SIM card inside, or SIM card didn't insert very well)
5. Set up your specific number of the SMS and Call out phone number into tracker via SMS (for example:ALARM:+886932000001/+886932000002)
6. For more application of Tracker, please see the table of GT-100 Application UI Protocol

## Software Specification

### Setting Protocol

GT-100 SMS format		
Set SMS & Call out phone number	ALARM:+886932000001/+886932000002	0932000001: SMS number , 0932000002: Call out number
Turn OFF Vibration sensor function	SHUTDOWN	SHUTDOWN : command
Turn ON Vibration sensor function	ACTIVE	ACTIVE : command
Ask for position	LOCATION	LOCATION : command
Set GPRS function	IP:220.128.220.133/PORT:2020/ID:GT100/TIME:120	IP : 220.128.220.133 Server PORT : 2020 Tracker ID : GT100 Interval Time : 120(mins)

GT-100 Application **UI Protocol**

Function	Operation	LED Status	Status
Vibration sensor ON	Send SMS : ACTIVE	Yellow LED Flash by 4 sec once	<p>When device keep moving over 3 sec, yellow LED will consistently on and device send out message to specific number</p> <ul style="list-style-type: none"> <li>• <b>Phone number for call out</b> Tracker will call out ring 5 second and hand up automatically</li> <li>• <b>Phone number for SMS</b> Tracker will send location SMS out</li> </ul> <p>Note: When GPS signal is valid SMS format : <a href="http://maps.google.com/maps?q=25.02880116,121.46919333">http://maps.google.com/maps?q=25.02880116,121.46919333</a> When GPS signal is invalid SMS format : CAN NOT GET GPS SIGNAL , CID:XXXX , LAC:XXXX</p>
Vibration sensor OFF	Send SMS : SHUTDOWN	Yellow LED off	Vibration sensor function OFF
Get Device Position	Send SMS : LOCATION	Yellow LED consistently ON	<p>After Get GPS signal send out the text SMS : <a href="http://maps.google.com/maps?q=25.02880116,121.46919333">http://maps.google.com/maps?q=25.02880116,121.46919333</a> If no GPS signal, SMS format : CAN NOT GET GPS SIGNAL , CID:XXXX , LAC:XXXX</p>
GPRS ON	Send SMS : GPRS ON		GPRS function Enable
GPRS OFF	Send SMS : GPRS OFF		GPRS function Disable

## Applications

### Position report in google map via phone

After Get GPS signal send out the text SMS :

<http://maps.google.com/maps?q=25.02880116,121.46919333>

### Security Mode

GT-100 is build-in a vibration sensor and user can operate GT-100 in Security Mode to secure their valuable item in any place. If GT-100 received vibration over 3 second, the GT-100 will report vibration warning with location to user right the way.

### Periodic Report (Continuous Tracking)

If user wants to get the tracker's position periodically, user can set the report frequency and enable this mode by SMS. The tracker will turn on GPS and report the current position, speed and time by SMS or GPRS to MDS periodically.

### Current Position Report

Current position and status can be request by SMS to tracking device. The tracker will turn on GPS instantly to get a position fix and reply position information. If it can't get a fix, it will reply the latest position and fix status.

### Battery Low Report

Device will auto reply battery low message event when voltage is below battery-low threshold. The threshold is configurable.