1. Overview

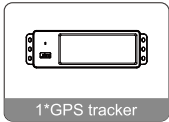## 1.1 Features
· GPS + LBS positioning
· Solar powered
· IPx7 protection (If device is dismantled, this feature may be affected.)
· G-sensor supported
· Tamper alert
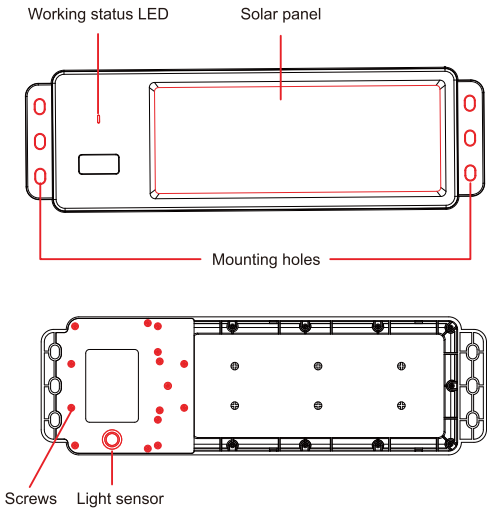· Built-in 10000mAh battery

1.2 Specifications

GSM frequency	850/900/1800/1900 MHz
Protection level	IPX7
Battery	10000mAh/3.7V Li-Polymer battery
LED	1 (Green for internet status; Red for power status)
Solar charging voltage/current	5.5V/400mA (face to sun at noon)
Standby time	2 years (in ultra-long standby mode)
Working time	30 days (real-time tracking 2 hours per day)
Operating temperature:	-20° ~ +70°
Dimension	35.5*11*3.3cm
Weight	637g

1.3 Accessories

1*GPS tracker	1*user manual

2. Device appearance

1.1 Features

Working status LED   Solar panel

Mounting holes

Screws   Light sensor

3. LED indications

Power (red)

Flashing quickly	Battery is low.

GSM (green)

Quick flashing	Device is not connected to the platform.
Slow flashing	Device connects to the platform normally.

4. Hardware Operation

(1)SIM Card installation

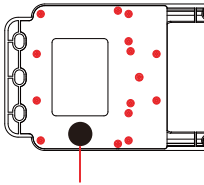SIM card should have access to GPRS and SMS.
Remove the cover, switch the device to OFF and insert the SIM card in correct direction.

☑   Micro ✖   Nano ✖

(2)Device power on/off
Power on
Tear the shading on the bottom side of device, then the GPS tracker will power on automatically.

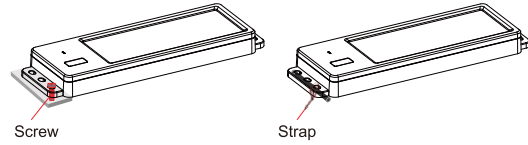### Power off
Send command: SHUTDOWN# by APP or platform to power off the device.

(3)Device installation
1) Drill holes according to the mounting holes of device.
2) Fix the device by screws or straps.

5. Basic features operations

The following operation can be achieved through the terminal platform or APP provided by the dealer.

5.1 SOS number

(1) Add SOS number via SMS command
Send SMS command: SOS, A,number1,number2,number3 #
(A means add number).
3 SOS numbers can be set. If set successfully, the terminal will reply "ok".
e.g. SOS,A, 13510****60,135116****6,136126****8# (set all 3 SOS numbers)
SOS,A, 13510****60# (set the first SOS number)
SOS,A, ,135116****6# (set the second SOS number)
SOS,A, , ,136126****8# (set the third SOS number)

(2) Delete SOS Numbers
Send SMS command: SOS, D,1,2,3# (D means delete SOS number)
e.g. SOS, D,1# means delete the first number
SOS, D,3# means delete the third number
If you don't know the sequence number, you can also delete the number by SMS command like this: SOS, D,number#
e.g. SOS, D, 13527852360# means delete this SOS number directly.
It will reply "OK" if the number is deleted successfully.

(3) Add SOS numbers via platform
You can set SOS number via the platform or APP when device is online.

Screw   Strap

5.2 Working modes

(1) Real-time tracking mode (default): GSM is always ON and location data uploaded in set time interval. Time interval can be set on APP or designated platform.
SMS command format: MODE, 1,T1,T2#
"1" means tracking mode
T1: upload interval of GPS data in moving status, unit: second, 10-3600s; default: 10s
T2: upload interval of GPS data in static status, unit: second, 180-86400s; default: 3600s

(2) Ultra-long standby mode: device wakes up and uploads location data in a fixed time.
Notice: In this mode, all command will NOT be executed until the device wakes up at preset time interval.
SMS command format: MODE, 2,T1,T2#
"2" means ultra-standby mode.
"T1" means the start time of sleeping period. Format: HH:MM.
"T2"is the time interval, and the value can be 1,2,3,4,6,8,12,24,48,72 hours. Default: 24 hours.
Note: SMS command takes effect after device wakes up. E.g.MODE,2, 12:00,8# (Meaning: Device starts to fall asleep at 12:00, and wakes up every 8 hours)

(3) Fixed interval upload mode: device updates GPS location based on a fixed time interval.
SMS command format: MODE,3,T1#
"3" means fixed interval upload mode
"T1" means the fixed time interval, ranges from 1 to 7200 minutes, if T1=0, meaning turn off GPS location upload.

5.3 Alerts
(1)Tamper alert
When the device is disassembled, the device will send alert message to the platform or SOS numbers.
In standby mode, alert message will be uploaded and tracking mode will be activated for 20 minutes if device dis-assembly is detected. After 20 minutes, device enters into ultra-long standby mode. Dis-assembly alert can be turned off by command: cancel#

(2)Low battery alert
If the device battery is low, the device will send low battery alert.

(3)Geo-fence alert
The geo-fence alarm only works in mode 1 and 3. When the tracker enters or exit preset geo-fence area, device will send alarm to the SOS numbers and platform when the geo-fence feature is on.

(4)Vibration alert
The vibration alarm only works in mode 1 and 3. To activate this feature, please send SMS command 111 to the device by SOS number and device will be in arming status. To turn on vibration alarm, please send command SENALM,ON#, to disarm the device, send command 000.

(5)Power on alert
Alarm will be sent when device starts. SMS command: BOOTALM,A,M#.
A= ON / OFF, default: OFF.
M=0~1, alarming way, 0 for GPRS only, 1 for SMS + GPRS, default M=0.
Command to turn off the power on alarm:
BOOTALM,OFF#.

(6)Power off alert
Alarm will be sent when the device power off, SMS command:
PWROFFALM,X,M#.
X=ON / OFF, default: ON.
M=0~1, alarming way, 0 for GPRS only, 1 for SMS + GPRS, default M=0.

6. Platform & APP

6.1 Login service platform
Please login the designated service platform to set and operate the device.

6.2 Download APP
Please download and install the APP in designated website, APP store or Google Play.

iOS   Android

7. Warning

Battery specified by manufacturer is recommended.
Maintenance or service arising from any other accessories is not guaranteed.
Manufacturer assumes no responsibility for any damage caused by non-original accessories.
Do not bend or open the battery.
Do not immerse or burn the battery.
Device dis-assembly is strongly forbidden.
Nonprofessionals'operation may cause device damage.

8. Troubleshooting

If you are having trouble with your device, try these troubleshooting procedures before contacting a service professional.

Problems	Causes	Solutions
Poor signal	The signal waves are unable to transmit when use the GPS tracker in the places that have poor signal reception, such as: tall building around or basement.	Using the GPS tracker in the places that have good signal condition.

Unable to boot	Power switch is off	Switch to ON
	Battery low	charge
	No SIM card	Insert SIM card
Unable to connect to the network	SIM card inserted incorrectly	Check SIM card
	Dirty things exist above the SIM card	Clean SIM card
	Invalid SIM card	Contact network supplier
	Not in GSM service area	Move to service area
	Poor signal	Move to area with strong signal
Fail to locate	SIM has no access to GPRS	Contact network supplier to get GPRS service
	Always reply "ddress inquiry failed"	Contact supplier

Date		Serviced by	
Product Model			
IMEI Number			
Fault Descriptions			
Comments			

Solar Powered GPS Tracker
User Manual
(V1.0)

⚠ The side with solar panel should face the sky to produce maximum power.