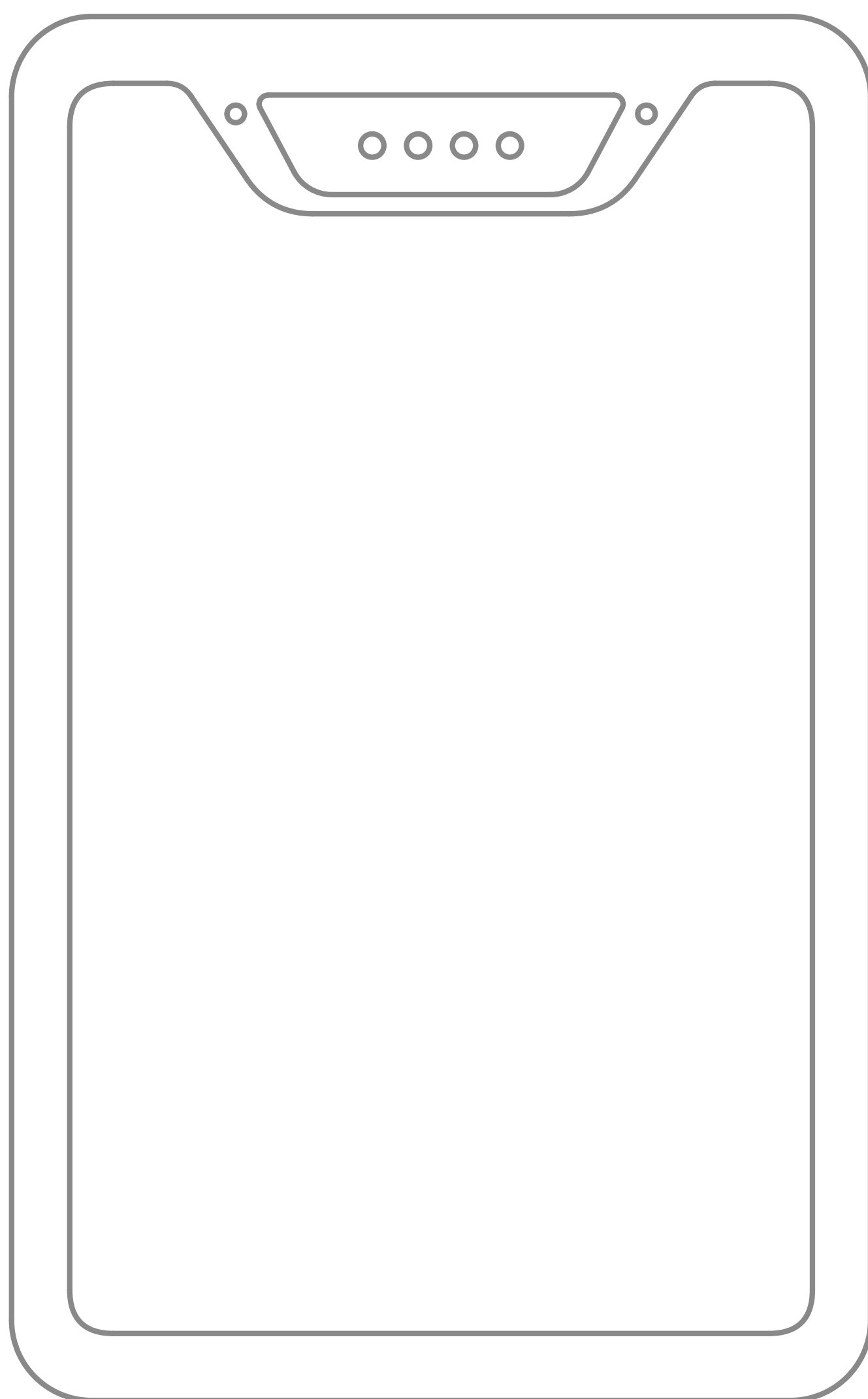


# LL302

# LTE CAT1 ASSET GNSS TRACKER

## User Manual V1.0



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# 01 / Introduction


## 1.1. Features



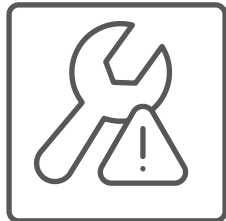
Power saving



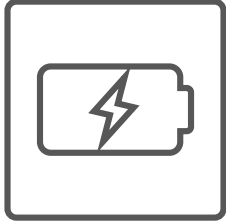
BDS/GPS/WiFi/LBS



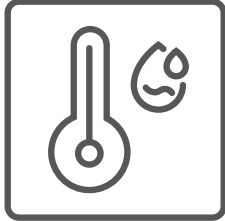
Vibrating alert



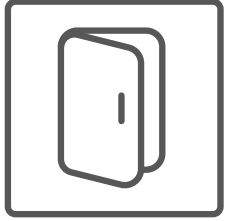
Tamper alert



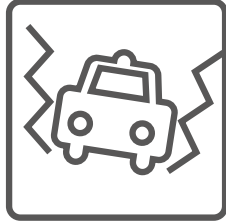
Battery strength display



Humidity/temperature exception alert



Door open and close alert



Angle exception alert

## 1.2. Specifications

GNSS accuracy	< 10m
Listen-in range	< 3m
Operating current	60mA
Service Life	20 days (Where the tracker fix positions for 2 hours per day)
Dimensions (LxWxH)	95x59x23.5mm (with no magnetic cover) 95x59x29.2mm (with magnetic cover)
Weight	161g (with no magnetic cover) 236g (with magnetic cover)
Temperature	Detection range: -20℃ to +85℃ combined error: 0.5℃
Humidity	Detection range: 5%RH to 100% combined error: 5%RH

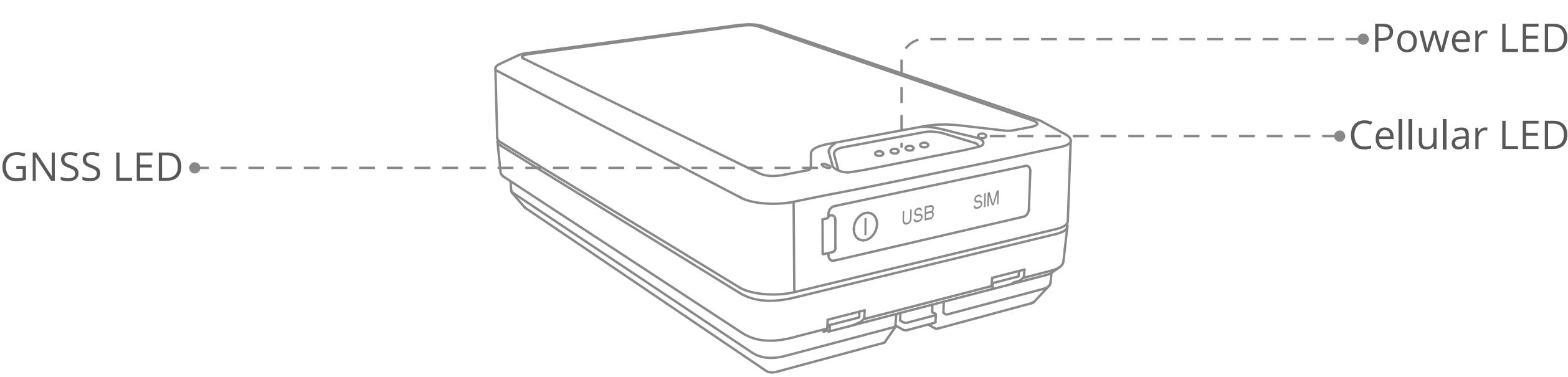
## 1.3. Accessories

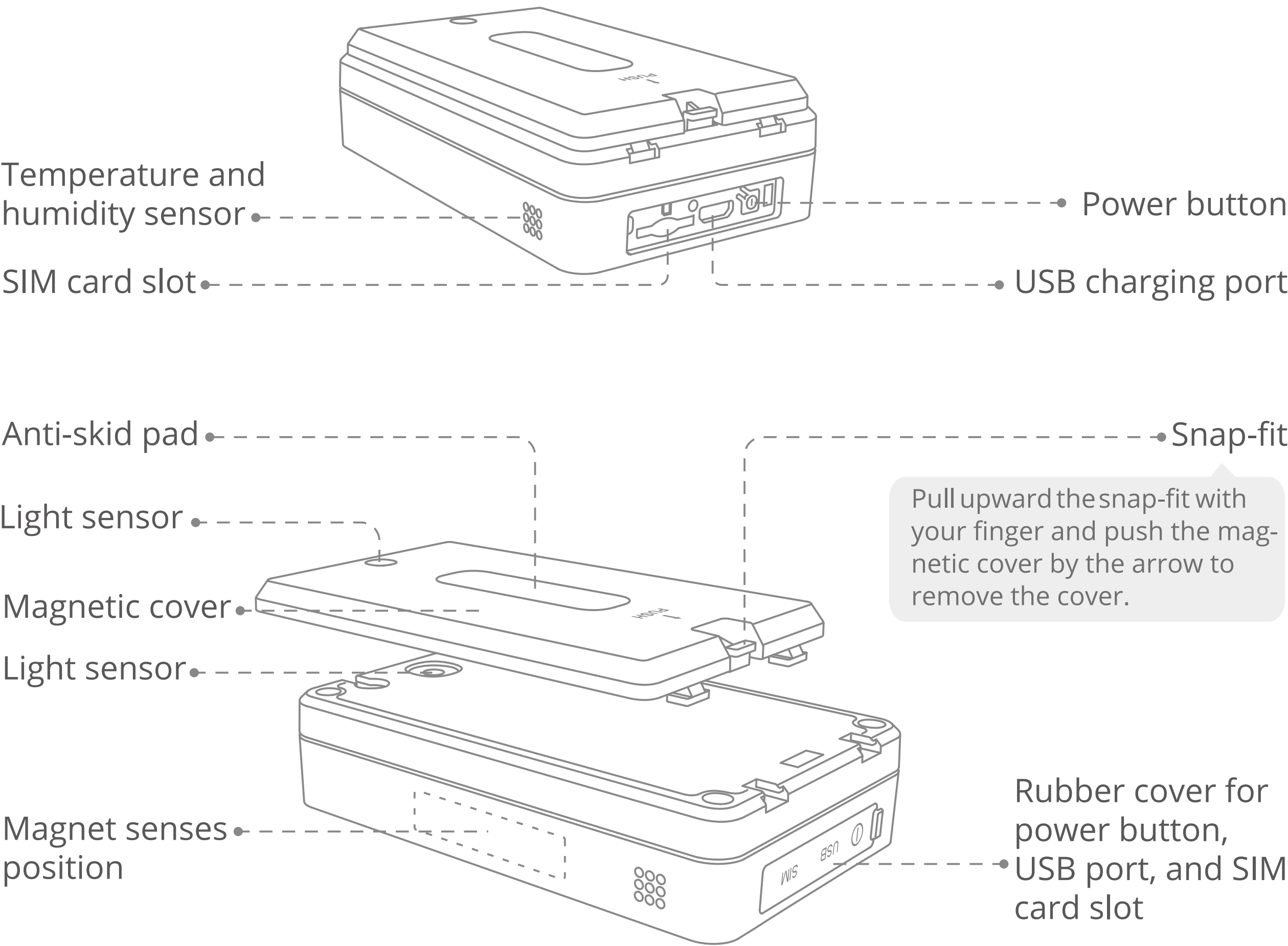
Tracker	PCS	1	/
User Manual	PCS	1	/
Magnetic cover	PCS	1	/
Charging cable	PCS	1	/
Charging adapter	PCS	1	Optional
Special magnet	PCS	1	Optional

**Note:**

Please check the received package to see if all accessories are included. The accessories are subject to actual items. As the product is in constant upgrade, no prior notification will be sent to you for any update in this User Manual.

## 1.4. Appearance





1.5. Status Indication

White LED (power/work status)  
If the device is charging, then:

Strength	LED1	LED2	LED3	LED4
0–25%	On-Off (1s-1s)	Off	Off	Off
25–50%	On	On-Off (1s-1s)	Off	Off
50–75%	On	On	On-Off (1s-1s)	Off
75–96%	On	On	On	On-Off (1s-1s)
Charging complete	On	On	On	On

If the device is not charging, then:

Strength	LED1	LED2	LED3	LED4
Undervoltage	Off	Off	Off	Off
0–25%	On	Off	Off	Off
25–50%	On	On	Off	Off
50–75%	On	On	On	Off
75–100%	On	On	On	On

Blue LED (GNSS)

Status	Meaning
Fast blink	Search for GNSS signals
Slow blink	Position fixed
Off	The GNSS module is in sleep mode or not operating

Green LED (Cellular)

Status	Meaning
--------	---------

Fast blink	Network initializing
Slow blink	Device online
Solid on	The device initiates, receives, or is in a call
Off	No cellular signal/No SIM card

**Note:**  
The LEDs light up for 2 minutes after the device is powered on. If you want to know the status of the power-on device after that, you can press the power button to light up the LEDs for 20 seconds.

1.6. Notes on Work Modes

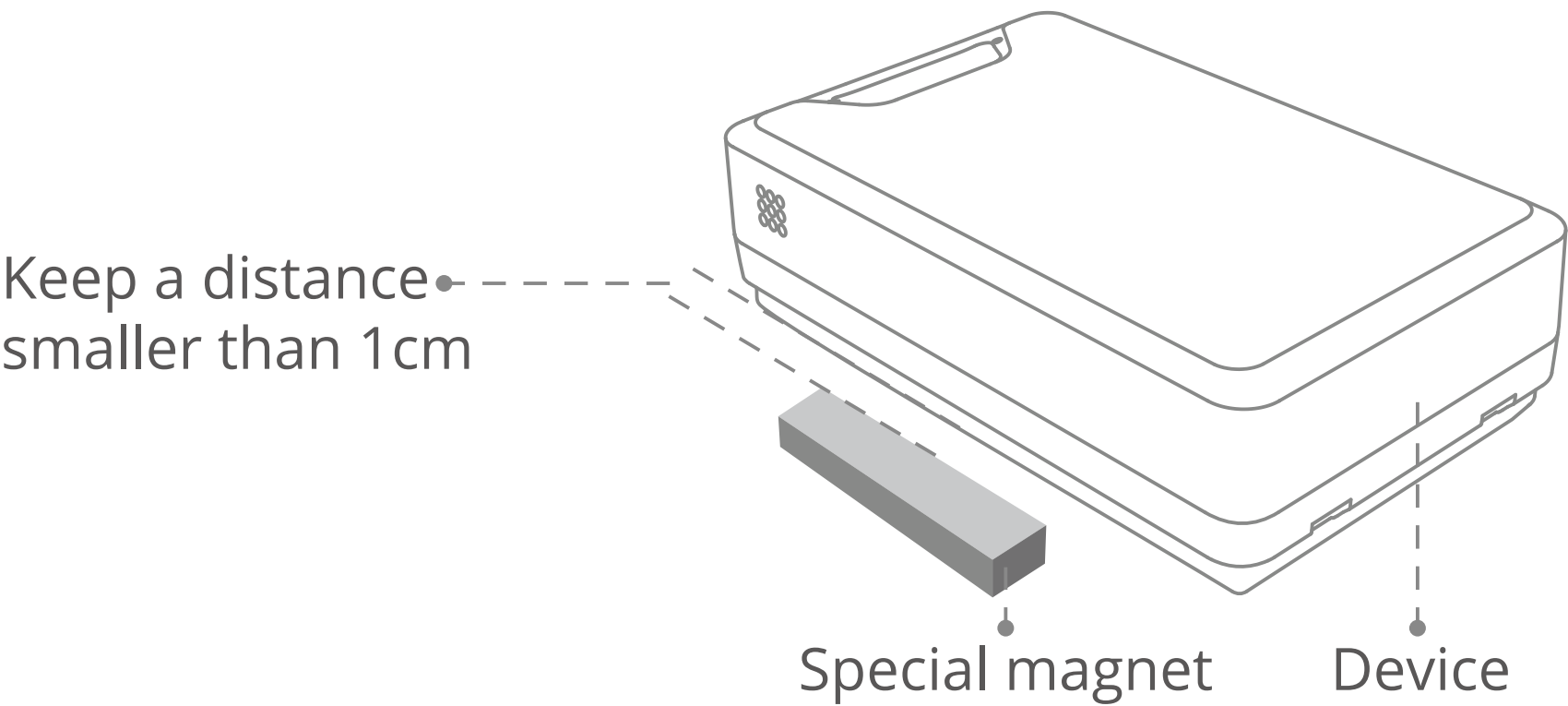
- **Regular GPS mode**  
In this mode, the device always has its network services enabled and will upload location data at a fixed interval, which can be configured via the location service platform or mobile app specified by your dealer.
- **Tracking mode (default)**  
In this mode, the device can automatically recognize current location conditions and activity status of the vehicle on which it is installed and intelligently choose a positioning system and an upload interval.
- **Power-saving mode**  
The device will wake up at a certain configured interval to upload location data. After each upload is complete, the device will enter deep sleep and will not execute any remote query or set actions.

1.7. Alert Functions

- **Tamper Alert**  
The light sensor will be blinded once the device is installed securely. Therefore, if the light sensor detects its ambient environment changes from dark to light, the device will upload a tamper alert.
- **Temperature Exception Alert**  
The device will upload a temperature exception alert if it detects the ambient temperature to be higher or lower than the preset threshold.
- **Humidity Exception Alert**  
The device will upload a humidity exception alert if it detects the ambient humidity to be higher than the preset threshold.

**Note:**  
By default, the device uploads temperature and humidity data every 5 minutes. The upload interval is configurable.

- **Door Open and Close Alert**  
The device will upload a door open or close alert if it detects a door open or close action.  
See the following figure for installation:





- 1.Check: Install by the above figure. After that, if the 4 battery strength indicators light up, the distance between the magnet and the device is proper and the installation is complete.
- 2.After the installation, open or close the door to see if the 4 indicators will light up or go off accordingly. If yes, the device will upload door open or close alerts to the platform.

● **Angle Exception Alert (Only Valid in Tracking mode)**

The device will upload an angle exception alert if it detects the vehicle has tilted or rolled over. The detection duration is about 5 minutes.

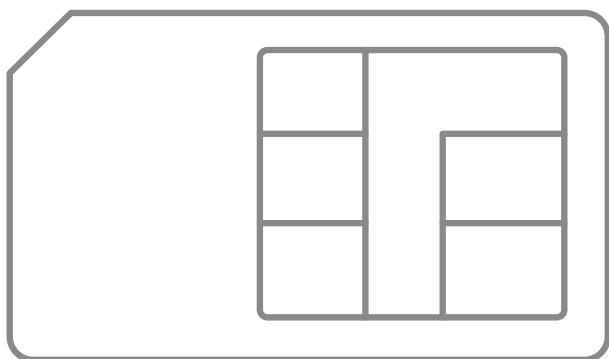
● **Collision Alert (Only Valid in Tracking mode)**

The device will upload a collision alert if it detects the vehicle has collided with another object.

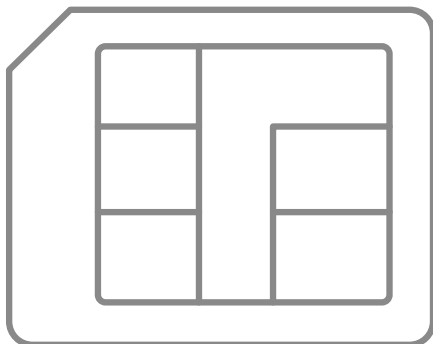
02 / Use Instruction

2.1. SIM Card Attachment

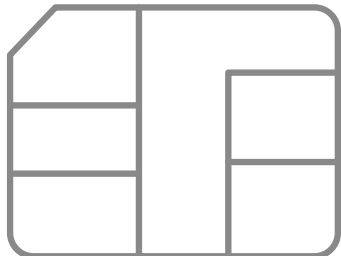
Step 1 Prepare a proper SIM card;  
The size of the card is as follows:



Standard ❌



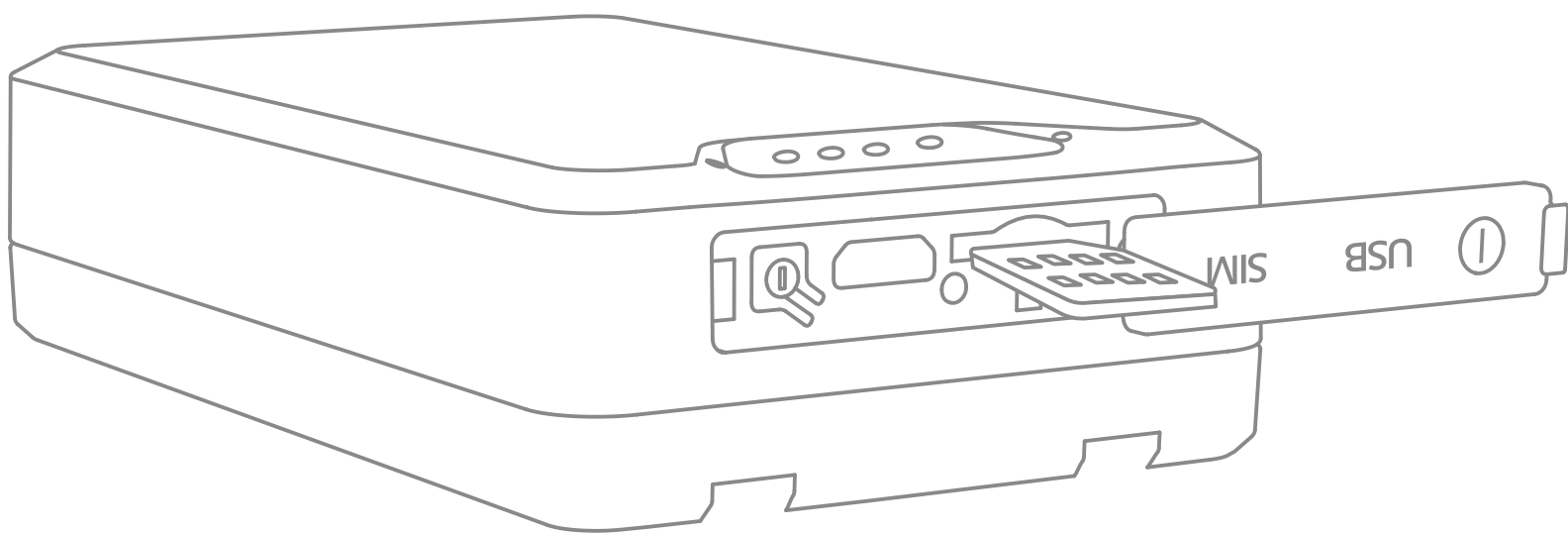
Micro ✔️



Nano ❌

Step 2 Open the rubber cover at the top and insert the SIM card in place, as the following figure shows:

(Note: The device must be powered off before removing the SIM; otherwise, the SIM may be burned.)



**Note:**

The SIM card must be inserted correctly, has GPRS services activated, and is not in arrears. If the SIM is identified and requires a PIN, please disable the PIN request.

2.2. Power-On and -Off

- Power-on: Long press the power key for 3s to turn the power-off device on;
- Power-off: Press the power button of the power-on device for 3 seconds.

**Note:**

To determine if the device is powered on, press the power button. If the LED lights on, the device is on; otherwise, the device is off.

## 03 / Device Installation and Charging

### 3.1. Installation

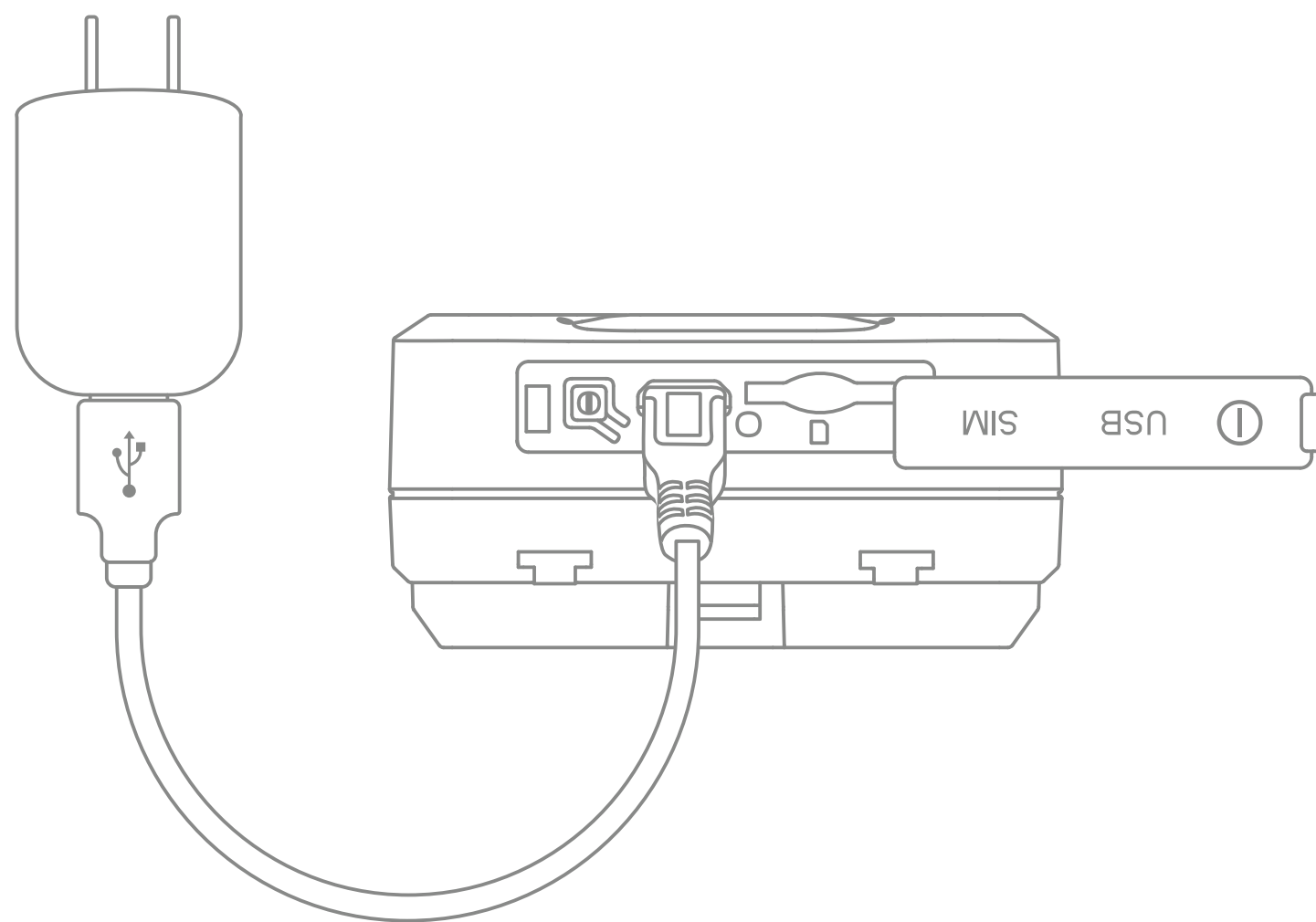
The device has a strong magnetic cover. It can attach to any ferromagnetic material. The magnet makes the installation easy.

### 3.2. Charging

Connect the device with a charger (which should be purchased separately). The white LED blinks when the device is charging and turns to solid-on when the charging is complete.

#### Note:

If the battery is exhausted, the charging will take about 6 hours to full. It is normal that the device will heat up slightly during charging.



### 3.3. Platform Operations

Power on the device and log in to the platform. You can query the location information, set familiarity numbers and SOS numbers, and more via the app or the service platform.

### 3.4. Logging In to Service Platform

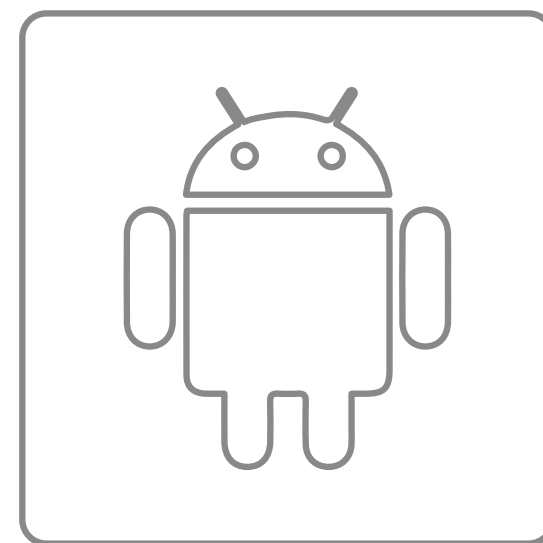
You can configure and control the device via the designated location service platform.

### 3.5. Downloading Mobile App

You can download the mobile app via the URL provided by your dealer.



IOS



Android

## 04 / Precautions About Battery

Please use batteries that are specified by the manufacturer of the device. The manufacturer will assume no repair liabilities for damages resulting from the use of non-original accessories.

- Avoid metal objects as they may cause short circuits on battery contacts.
- Do not bend or forcibly open the battery.

- Do not soak the battery in water or expose it to fire.
- It is forbidden to use batteries that are deformed, discolored, spilled, or pack-age-damaged.
- It is forbidden to disassemble or modify the battery.

05 / Troubleshooting

When a problem arises, you can troubleshoot it by the following solution. If the problem persists, please don't hesitate to contact your dealer or service provider.

Common Issues	Possible Causes	Solutions
Poor signal	The device is used in an area where radio waves cannot reach, such as near high-rise buildings or in a basement	Try it in a place where satellite signals can be well received
Power-on failure	No SIM	Insert a SIM
	The battery is exhausted	Charge the device
Failed to access the network	The SIM card may be attached improperly	Check the SIM
	The metal side of the SIM card is stained	Clean it with an eraser
	The SIM is invalid.	Please contact your network service provider
	The device is out of GSM service areas	Try it in a service area
	The signal is extremely weak	Try it in an area with strong signals
Failed to query a location	The SIM is not activated with the GPRS service	Please contact your network service provider and activate the GPRS service
	The device keeps replying with "No data found, please try again"	Please contact your dealer

06 /FCC warning

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device,pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception,which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one



or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with RF radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

The product specifications and information in this document are for reference only and no prior notice will be given if any change is made. Unless otherwise stated, the content of this document is not a guarantee in any form.

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