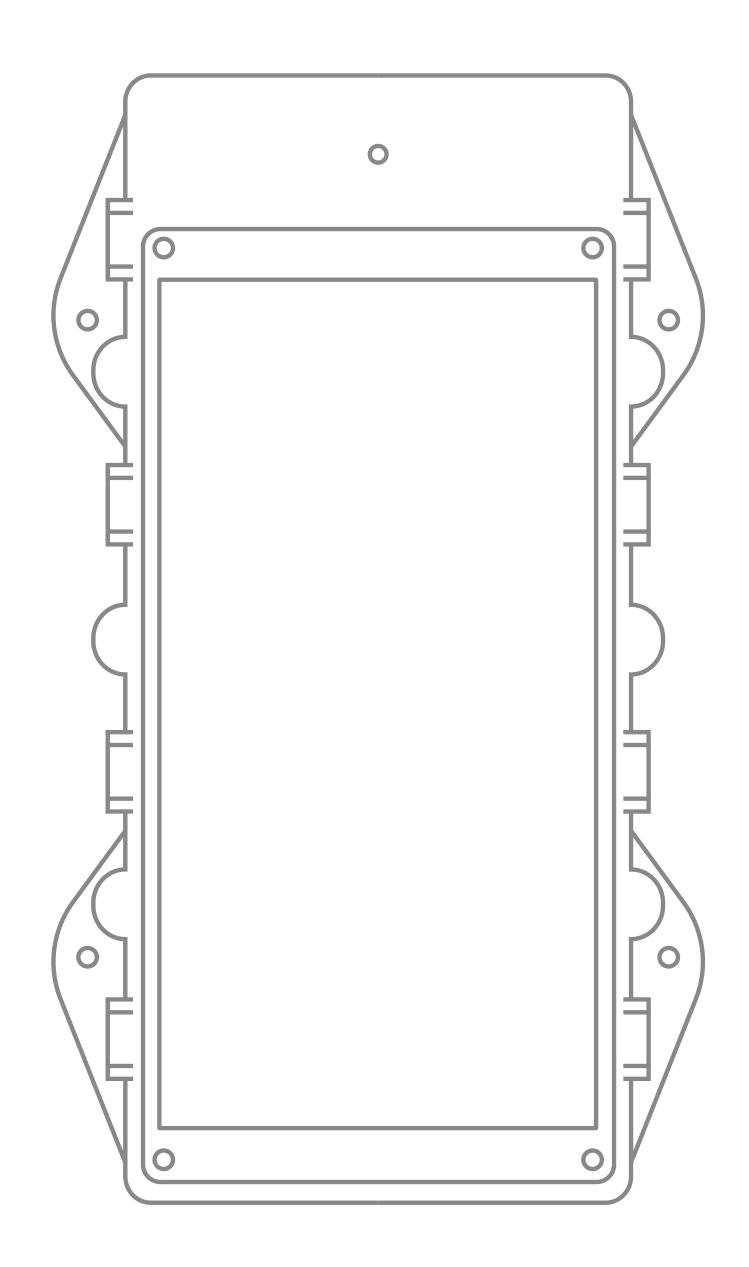
# LL303 Solar Powered Asset Tracker

User Manual V1.0



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## 01/Introduction

### 1.1. Features











GPS/BDS/WIFI/LBS

Tamper alert

Vibrating alert Low batter alert

Solar charging

### 1.2. Specifications

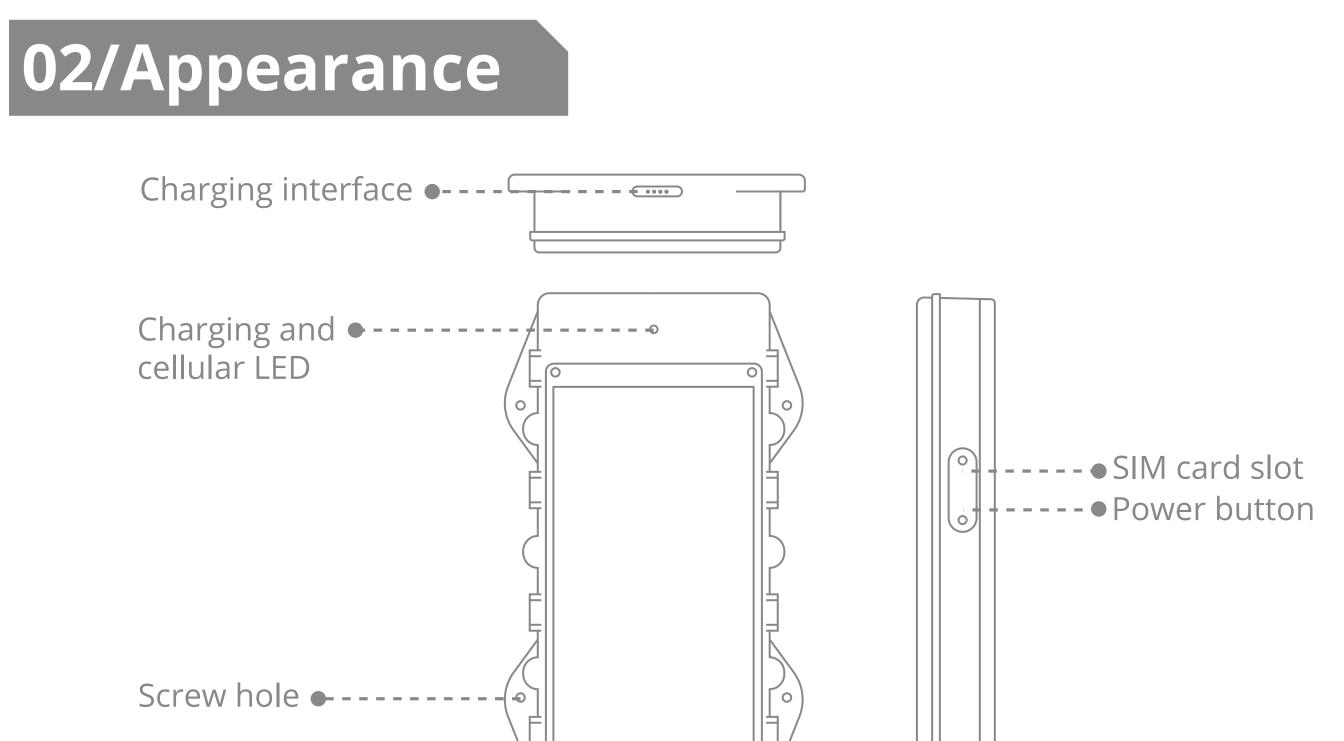
GNSS accuracy	< 10m
Weight	480g (excluding base)
Dimensions (LxWxH)	200x90x25mm (excluding mounting holes)
Operating current	120mA
Battery	Rechargeable Li-Polymer 10000 mAh/ 3.7V
Charging & Data Communication	Magnetic USB cable
Solar Panel	For charging the tracker battery
Waterproof	IP67
Operating Temperature	-25°C ~ +70°C (-13°F ~ 158°F)

1.3. Packing List

Tracker	Base	Charging cable	Waterproof glue	Screwdriver	Screws
1	1	1	1	1	8

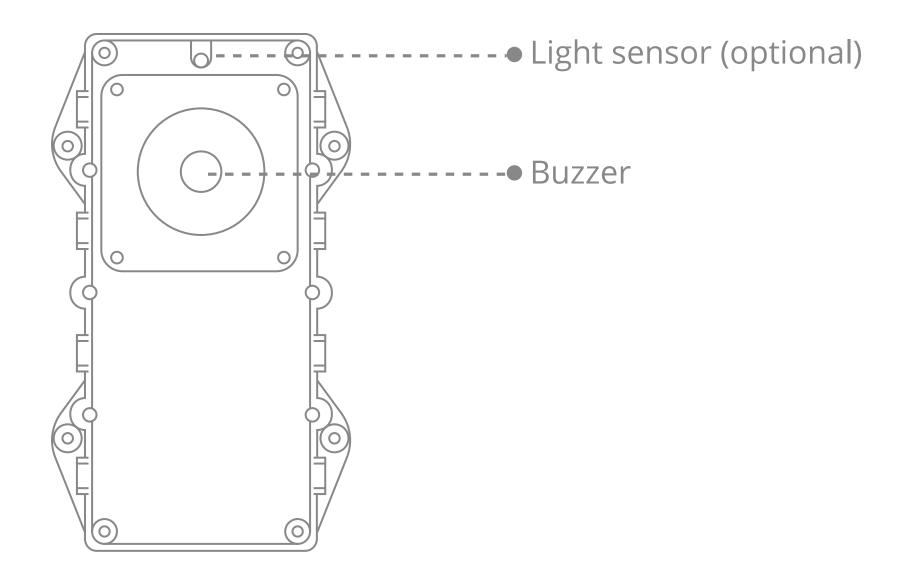
#### Tips:

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.









### 03/LEDs

#### 3.1. Green (Cellular)

Meaning
Network initializing
The device is in a call/online
No SIM card or SIM card error

#### 3.2. Red (Power/Work Status)

Status	Meaning
Fast blink [0.3s–0.3s (on–off)]	The battery is low
Slow blink [0.3s–3s (on-off)]	The device works properly/The charging is complete
Solid on	Device charging (via cable)
Slow blink [0.3s–5s (on-off)]	Device charging (via solar power)
Off	The battery is under voltage or encounters an internal failure

## 04/Use Instruction

#### 4.1. Installation

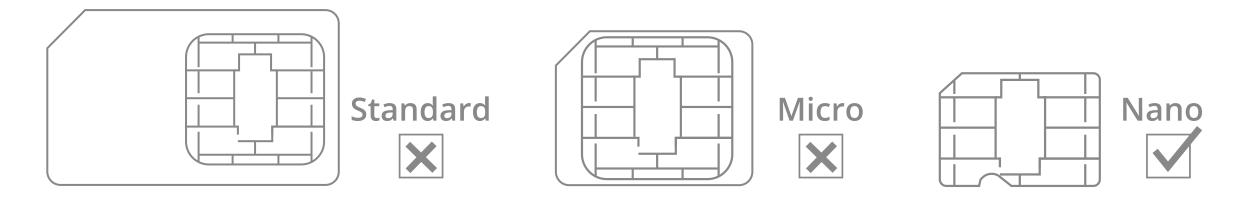
Fix the base to the install position with screws. Then mount the device to the base and fixate them together with screws.

#### 4.2. SIM Card Attachment

Step 1 Prepare a proper SIM card;

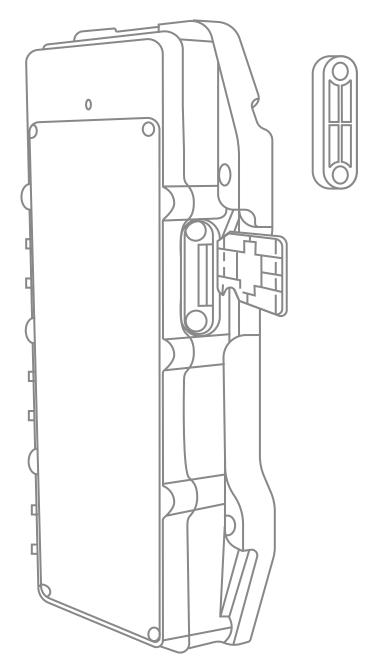
#### The size of the card is as follows:

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Step 2 Remove the waterproof rubber plug on the side 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.)



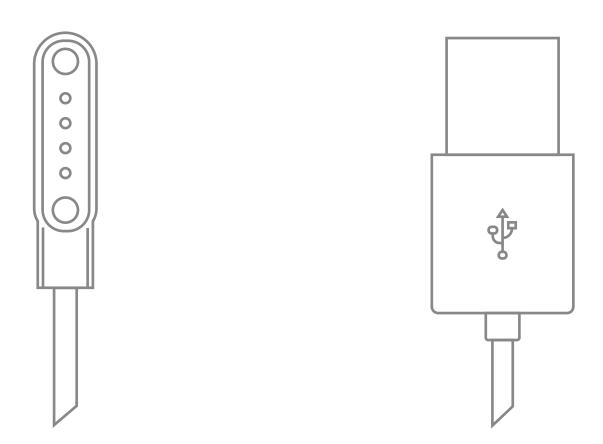
Note: The SIM card must be inserted correctly, has GPRS services activated, and is not in arrears. If the SIM is identified and requires a PIN, please disable the PIN request.

### 4.3. Power-On and -Off

Power the device on or off using the on/off switch.

### 4.4. Charging

Connect the device with a 5V/2A charger (which should be purchased separately). The LED is solid on when the device is charging and turns to blink slowly when the charging is complete.



Note: If the battery is exhausted, the charging will take about 5 hours to full. It is normal that the device will heat up slightly during charging.



#### 4.5. 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.

#### 4.6. Alert Functions

#### • Tamper alert

The device will upload a tamper alert if it is forcibly removed.

#### • Vibrating alert

The device will upload a tamper alert if it is forcibly removed.

#### • Low battery alert

The device will upload a low battery alert if it detects its battery strength to be lower than 20% .

## 05/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 packagedamaged.
- It is forbidden to disassemble or modify the battery.

## 06/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	No SIM.	Insert a SIM.
failure	The battery is exhausted.	Charge the device.
	The SIM card may be attached improperly.	Check the SIM.
	The metal side of the SIM card is stained.	Clean it with an eraser.
Failed to access the network	The SIM is invalid.	Please contact your network service provider.
	The device is out of GSM ser- vice areas.	Try it in a service area.
	The signal is extremely weak.	Try it in an area with strong signals.
Failed to query	The SIM is not activated with the GPRS service.	Please contact your network service provider and activate the GPRS service.
a location	The device keeps replying with "No data found, please try again".	Please contact your dealer.

## 07/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 opera-





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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