

iStartek 4G Ultra Long Standby Tracker PT60 User Manual V 1.0



Content

1. Copyright and Disclaimer.....	3
2. Product Overview.....	3
3、 Product function.....	3
3.1. Smart working mode.....	3
3.2. Hourly working mode.....	3
3.3. Real-time mode of operation.....	3
3.4 Interval Wake-up Mode.....	4
3.5. Drop alarm.....	4
3.6. Speeding alarm.....	4
3.7. Low battery alarm.....	4
3.8. Boot incident reports.....	4
3.9 FOTA remote upgrade.....	4
4. product specifications.....	4
5. products and accessories.....	5
6. product appearance.....	6
7. product use.....	6
7.1. Charging.....	6
7.2. Installation of SIM cards.....	6
7.3. Boot of equipment.....	7
7.4. Platform location tracking.....	7
8. working hours.....	7
8.1. Working hours in real-time mode.....	7
8.2 Smart Work Mode, Time Point Work Mode, Interval Wake Work Mode Working Hours.....	7
9. product installation.....	8

1. Copyright and Disclaimer



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2. Product Overview

PT60 is a 4G wireless installation-free GPS tracker, specially designed for pan-IoT applications, including vehicle, asset positioning, and unattended application scenarios. It has built-in high-sensitivity GPS module and 4G communication antenna, fast positioning, rechargeable use, built-in strong magnet for easy installation.

3. Product Function

3.1. Smart Working Mode

The device enters intelligent working mode according to user-defined "wake-up time ", " vibration interval wake-up time" and "static interval wake-up time "[note: vibration interval wake-up time must not be less than 10 minutes, otherwise once vibration is detected, The product will be activated immediately and will not be activated at the set vibration interval wake-up time].

Example: the working time after awakening is set to 3 minutes; the wake-up time of vibration interval is set to 30 minutes; the wake-up time of static interval is set to 120 minutes. According to the above parameter settings: the terminal continues to work for 3 minutes, the location of the report according to the set time interval upload data. After 3 minutes of dormancy, the terminal uploads data at 120 minutes interval. Then work for 3 minutes and go to sleep. Follow this cycle. However, in the case of dormancy, if there is vibration, the interval between terminal activation and uploading data is changed to 30 minutes of vibration dormancy, then working for 3 minutes, and then entering dormancy. Follow this cycle. The default is intelligent working mode.

3.2. Hourly working mode

The device according to the user-defined specific time node, to activate the work, the time node can set up a maximum of 24.

Example: the working time after wake-up is set to 3 minutes; the time point of wake-up is set to :09:00(GMT+0); the device will wake up at 9 o'clock and work for 3 minutes before going to sleep.

3.3. Real-time mode of operation

The device uploads data at user-defined intervals, and the device does not actively enter a dormant state. For this mode, only when the device battery is below 3.3 V will it go dormant.

Example: timing upload interval set to 60 seconds, device timing by 60 seconds upload location data, the device will not sleep.

3.4 Interval Wake-up Mode

The device enters the working and dormant state according to the user-defined working time and sleep time. In this mode of sleep, sleep is not activated according to movement or vibration.

For example: the working time after wake-up is set to 3 minutes; the timing sleep time is set to 30 minutes; the device automatically wakes up after 30 minutes of sleep for 3 minutes and then sleeps for 30 minutes.

3.5. Drop alarm

After the equipment falls, the light sensor induces the light to produce the alarm.

3.6. Speeding alarm

3.7. Low battery alarm

3.8. Boot incident reports

3.9 FOTA remote upgrade

4. product specifications

Project	Specifications
Size	110 x 77x 28mm
Weight	g 290
Input voltage	DC 5V/2A
Built-in battery	7800 mAh /3.7V
Average operating current	130 mA/h (MCU, GPS, GSM open at the same time)
Average dormant current	u A/h 70(MCU dormant, GPS、GSM off)
Working temperature	-25°Cto 75°C
Working humidity	to 95%5 per cent
Mode of communication	TCP
TDD/FDD/WCDMA /GSM frequency	PT60-LMN : Cat-M1: FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B85 Cat-NB2: FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B28/B66/B71/B85 GSM: B5/B8/B3/B2 PT60-LCN: Cat-4 FDD: B1/B3/B5/B8 TDD: B34/B38/B39/B40/B41 WCDMA: B1/B5/B8 GSM: B3/B8

	PT60-LEU: Cat-4 FDD: B1/B3/B7/B8/B20/B28A TDD: B38/B40/B41 WCDMA: B1/B8 GSM: B3/B8 PT60-LAU: Cat-4 FDD: B1/B2/B3/B4/B5/B7/B8/B28 TDD: B40 WCDMA: B1/B2/B4/B5/B8 GSM: B2/B3/B5/B8 PT60-LAF: Cat-4 FDD: B2/B4/B5/B12/B13/B14/B66/B71 WCDMA: B2/B4/B5
Location	Beidou/ GPS location/base station location
GPS sensitivity	165 dB
Positioning accuracy	2.5 m
LED lamp	Three LED lights indicate charging/ GPS/GSM status
Antenna	Built-in GSM 、GPS antenna
Data caching	5000 GPRS blind areas cache data, enable cache function in real-time mode, other modes do not cache
Vibration sensor	G-Sensor
shedding sensor	Light

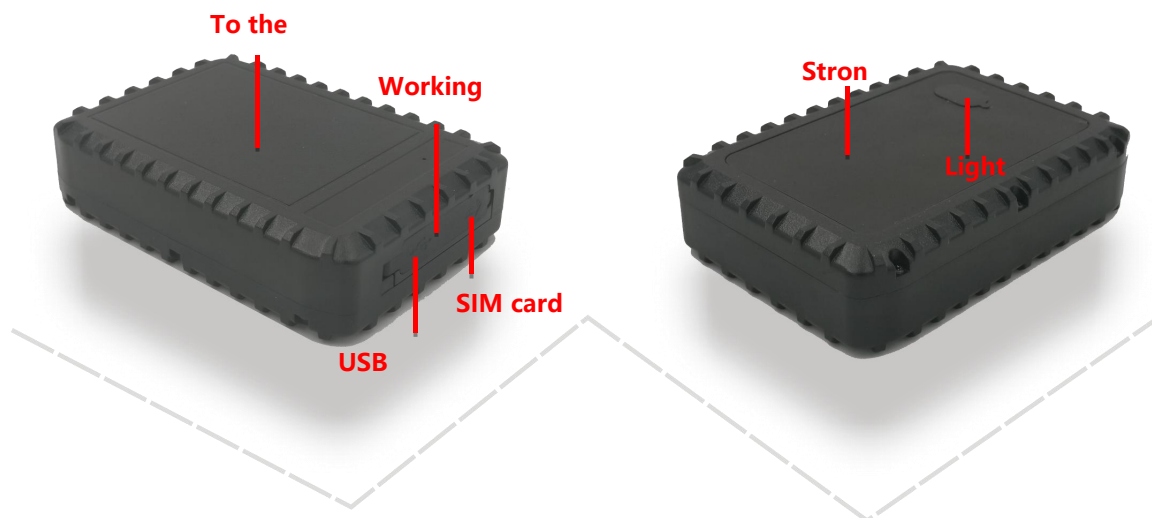
5. products and accessories



Host USB Charge Line Magic Stick



6. product appearance



7. product use

7.1. Charging

Charge the equipment with DC 5V/2A charger for more than 10 hours, charge indicator orange for charging, blue for charging.

7.2. Installation of SIM cards

Prepare a Micro SIM card, equipment support 2 G、 3G 、 4G network SIM card;

Please ensure that the SIM card has sufficient balance and has GPRS function and the correct APN; of the card
Please ensure that the PIN code lock function of the SIM card is off;

- Unplug rubber cover:



- insert the SIM card into the slot in the icon direction.



7.3. Boot of equipment

When the SIM card is inserted, the device will automatically boot (pull out the SIM card device will automatically shut down).

LED light indicator operation:

GPS light (green light)	
One second, one second	GPS no location
For long	GPS in place
GSM light (red light)	
One second, one second	No online platform
For long	Online platform
Power indicator (orange/blue)	
Orange	Charging
Blue	Full charge

7.4. Platform location tracking

<http://www.istartrack.com/> The device uses the platform by default, if you need to use other service platforms, you can set the server IP、Port and APN、 timing upload interval parameters by SMS instructions 100,102,109.

The device defaults to intelligent working mode and can set other working modes through SMS instruction 700.

Note: the device defaults to intelligent working mode and will go to sleep after 3 minutes of boot. If you need to set parameters through SMS instructions, please complete the operation within 3 minutes.

For more instruction functions and parameter configurations, see the iStartek GPS tracker PT60 Communications Protocol.

8. working hours

8.1. Working hours in real-time mode

Under this working mode, the MCU、 GSM module, the GPS module does not sleep throughout the work.

Timing upload intervals	About working hours
10 seconds	54 hours
1 minute	65 hours
10 minutes	70 hours

8.2 Smart Work Mode, Time Point Work Mode, Interval Wake Work Mode Working Hours

Under these working modes, sleep is MCU when dormant, GSM module and GPS module are closed. Calculate the working time by working 3 minutes at each wake-up.

Upload interval	About working hours
10 minutes	8.5 days
30 minutes	25 days
60 minutes	50 days
12 hours	180 days

24 hours	240 days
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9. product installation

Terminal installation is recommended for hidden installation, note the following:

a. concealed installation, pay attention to waterproof;

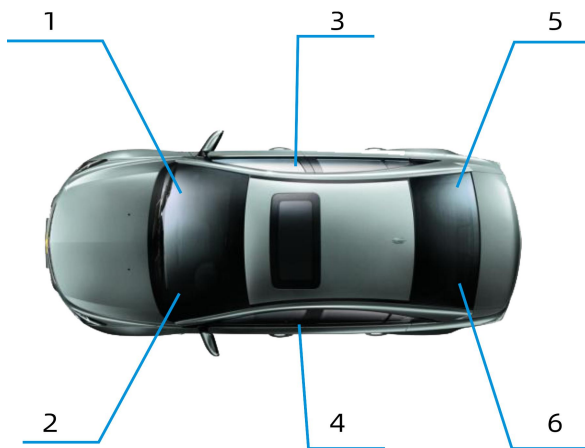
If the b. windshield has metal anti-explosion film, please avoid installation;

c. avoid being placed with launch sources, such as reversing radar, anti-theft devices and other on-board communication equipment;

d. equipment built-in GPS antenna, installed without light sensing function face up, and the main machine vertical above no metal cover;

Recommended location:

- The car front windshield under the decoration frame inside the hidden place;
- Car front dashboard (skin is non-metallic material) around the hidden place;
- The car rear windshield under the decoration board;
- Inside the car door or in the middle column;
- Electric vehicle / motorcycle dashboard or hidden under the back seat.



If you have any other questions, please send an email to our email info@istartek.com, we will serve you wholeheartedly.