# LTE-M，NB-IoT TRACKER

# For ASSET/Vehicle

MODEL: GPT48-X

# User Manual

<LTE-M，NB-IoT>

## Years Standby Tracking System

# CATLOG

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Welcome to use our device， please read this manual carefully to install and operate device exactly. This user manual is for reference only. If some contents and operation steps are inconsistent with those for the actual product, the latter will prevail.

GPT48-X Ultra-long standby GPS tracker for Vehicle,Pallet,Container,Trailer, iOT, with a maximum standby time of up to 5 years.
Supports LTE-M
NB-IoT networks, GPS, GLONASS, BDS positioning,. Realize vehicle location monitoring through a powerful GPS tracking platform. It has a great effect on the security of vehicles and property, helping customers achieve the goals of transparent management, cost reduction, safety assurance, and efficiency improvement.

# Ⅰ. Product Features

■ Support LTE-M，NB-IoT networks

■ GNSS: GPS/Beidou/Glonass

■ Smart and easy to hide for installation

■ Built-in 8000mAh zero self-discharge lithium Manganese battery

■ Built-in Motion Sensor, Wake the device when the movement is detected

■Super-long standby Working mode
Standby more than 5 years
(low-power standby, fast wake-up)

■ Emergency Mode
Start real-time tracking(user-defined time)

■ Vibration Alarm
Detecting shock/collision/acceleration etc

■ Support EELINK 2.0, OTA Firmware upgrade

■ Third party platform integration

■ SMS command
wake up device in advance by SMS command during sleep.

# Basic Specifications

| | |
|---|---|
| Dimension | 101.26*60.26*25.5mm |
| Color | Black |
| LED | GPS (Blue)，GSM /LTE(Red) |
| Battery | CP1105065 （8000mAh/3V） |
| Weight | 130 g |
| Voltage | 3.0V |
| Temperature | -20°C~65°C |
| Antenna | Built-in LTE-M/NB-IoT antenna, ceramic GPS antenna |
| Network Type | LTE-M，NB-IoT |
| GNSS Band | BDS/GPS/GLONASS |
| LTE-M，NB-IoT Band | B1, B2, B3, B4, B5, B8, B12, B13, B14, B17,B18, B19, B20, B25, B26, B28, B66 |
| GNSS Accuracy | 2m（(Depend GPS Signal) |
| LBS Accuracy | > 100m (Depend Density of Base Stations) |
| Hot/warm/cold fix time | <3s,<26s,<35s ;(Toward sky) |
| USB Interface | Type-C |
| SIM Card | Nano |

# Ⅱ. Components and Accessories

## Components

-Top Front-(Towards sky)

-Bottom -

- Accessories

## Ⅲ. SIM Card Installation

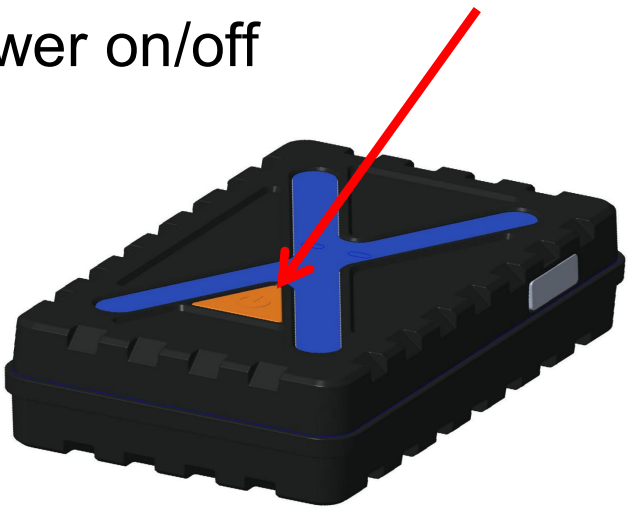
Open the back door case, check if device is OK and accessories are intact

Note:

- Please power off device before installing or uninstalling SIM card.
- Open SIM's traffic transmission to send data.
- If the PIN code of SIM card enable, please use your mobile phone to disable the PIN code.
- Please make sure SIM card has sufficient balance.

## Ⅳ. Test & Installation

### 4.1 Power on/off



After sim card installation, press the button to power on. Text SMS command to power off the device.

## 4.2 LED Indicators

The **Red LED** flickers fast when device is searching for LTE-M/NB-IOT/GSM network, it flickers slowly when device has registered network successfully.

The **Blue LED** flickers fast when device is searching for the GNSS satellite signal, it flickers slowly when device has searched the satellites and can be positioned.

1. **RED LED**(indicates Network working state)

| | |
|---|---|
| Fast blinking | Searching for LTE-M/NB-IOT/GSM network |
| Slow blinking | GSM/WCDMA/LTE FDD/LTE TDD works normally |

2. **BLUE LED**(indicates GNSS Satellite signal state)

| | |
|---|---|
| Fast blinking | Searching GNSS Satellites |
| Slow blinking | GNSS works normally |

## 4.3 Install Device

Insert sim card, Power on the device. Put t he device at the suitable place.

# Ⅴ. Setting & Inquiry

5.1 Web Platform & APP

5.1.1 Web Browser platform

Login the service platform to set or track device, ask your dealer for the WWW address

5.1.2 Smart phone application

Use smart phone APP, ask your dealer to get installation package.

Example, Remotely configuration by Keelin APP

## 5.2 SMS

You can write a positioning SMS sending to device to inquiry position, device will reply position SMS or map link once it wake up. You also can set administrator number to get remove alarm.

The SMS commands please refer to the Operation Commands.

# Ⅵ. Device Alarm

## 6.1 Vibration Alarm

Detecting shock/collision/acceleration etc

## 6.2 Geo-fence Alarm

Conditions: when the vehicle entry / exit / across the Geo-fence.

Note: You need to set the conditions of crossing fence, fence types and so on.

## 6.4 Motion Sensor Alarm

Wake the device when the movement is detected

Note: Alarm parameters must be set before work in 6.2, Please refer to the <**Operation Commands**>

Note: When above alarm occurs, device will send alarm to service platform, meanwhile send a SMS message to the administrator number if the number is set in advance.

# Ⅶ. Trouble shooting

## 7.1 Cannot connect platform

Device is never online on the position server when installed at the first time. Please check device:

1）If power cables are wired correctly? Pay attention to not connect them to controlling

cables of vehicle.

2）If SIM card is installed correctly? Please refer to the installation instructions.

3）Check status of LED indicators. If device is OK, red and blue LED will intermittently and slowly flick.

4）Inquiry parameters of device via commands and check replied parameters.

## 7.2 Offline status

First check if LED indicators are OK, if cannot check them, you can check SIM card following next steps:

1）call SIM card of device and check if you can hear connecting ring.

2）Check if vehicle is in the area where there is no GSM/WCDMA/LTE signal.

3）Check if one device or all devices are offline in the area . If all devices are offline, you should ask operator If network is OK.

4）Check if SIM card has enough balance.

5）If device becomes offline on the last day of one month, please check data transferring is closed or not.

6）Inquiry parameters of device via commands and check replied parameters.

## 7.3 No positioned

If the GNSS is active, but device cannot be positioned for long time, please check device:

1）If the vehicle is in the place where there is no GNSS signal.

2）The upside of device should be installed with face toward the sky.

3）The GSM/WCDMA/LTE FDD/LTE TDD and GNSS signal may be weakened if device is installed in the place with electromagnetic wave absorption material(such as metal blocks), special attention should be paid if there is metal thermal insulation layer or heating layer on the front windshield, so that the position accuracy will decline, and the severe ones will not be positioned.

## 7.4 Position drift

Serious position drift will be found in places where GNSS signal is poor. Please drive the vehicle to the open places.

## 7.5 Commands receiving abnormally

1）Check the commands format.

2）Check if the vehicle is in the places where there is GSM signal.

3）Check if the SIM card is properly installed.

# Ⅷ. Warranty Rules

## 8.1 Special statement

1）Technology change without notice.

2) If the color and appearance are inconsistent with those for the actual product, the latter will prevail.

3）Warranty card is only valid for devices with the following IMEI.

4）Please take care of the warranty card and show it with the original purchase receipts when enjoying the warranty service.

## 8.2 Warranty period

Since the date of purchase, passive waste host has one year warranty.

## 8.3 After sales

Any of the following circumstances not covered by the warranty, but may be appropriate to pay repair:

1）More than the warranty period.

2）Unauthorized removal or repair damaged.

3）Damage caused by improper installation, use, maintenance, custody.

4）IMEI label is torn or Obscure.

5）Warranty certificate and product models do not match or warranty certificate be altered.

6）Damage caused by force majeure.