Global Sources QH415 Wireless GPS Tracker Instruction Manual

Contents

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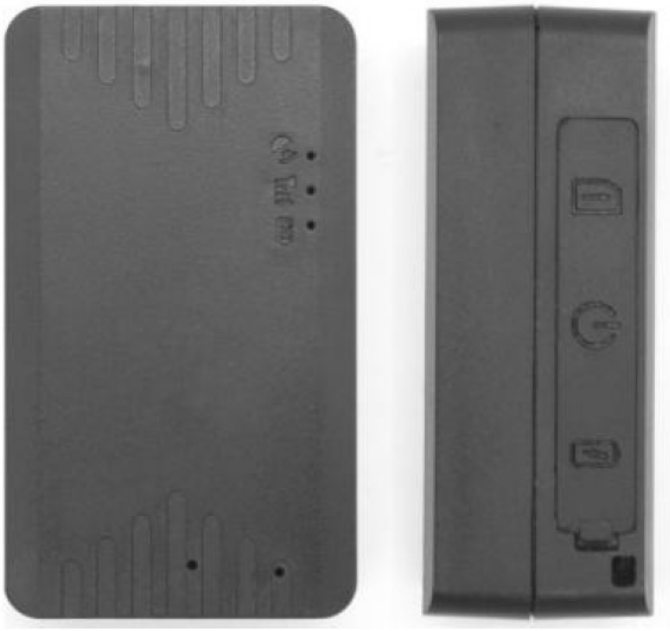


Please read this instruction manual carefully before using the product and keep it in a safe place.

Warning

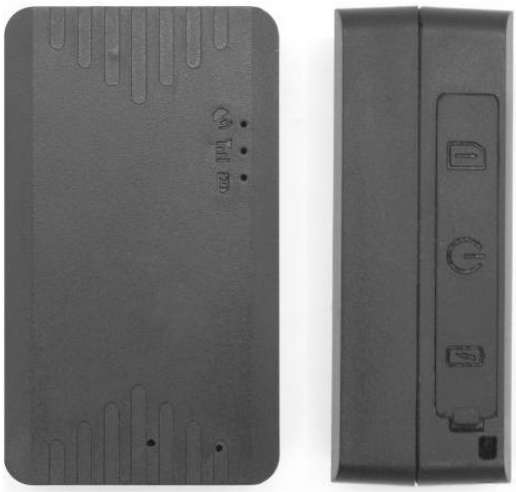
1. Please pay attention to be waterproof for electronic products. Do not contact the equipment with the liquid, or operate with wet hands.
2. Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer or service operator where the product was purchased. They can take this product for environmental safe recycling.

Part Name	Hazardous Substances or element					
	Pb	Hg	Cd	CR(VI)	PBB	PBDE
Cabinet assembly	○	○	○	○	○	○
Cable assembly	○	○	○	○	○	○
Lithium battery	×	○	○	○	○	○
Plastic and polymer	○	○	○	○	○	○
Metal part	○	○	○	○	○	○

- **O**: It indicates that content of toxic and hazardous substance in all homogeneous material are less than specified limit by Directive2011/65/EU (RoHS).
- ×: It indicates that at least one content of toxic and hazardous substance in all homogeneous material is beyond specified.
- This table shows the toxic and hazardous substance when manufacture this device, hazardous substance information is based on information from supplier as well as internal inspection. In some part, hazardous

substance cannot be replaced with current technologies, but Qianfeng is always doing its best to improve the quality of the product.

Product appearance



Product parameters

- Operating voltage range DC 3.4V – 4.5V
- Working current 4 V/ average 55 mA
- Sleep current 4 V/ average 6 mA
- Built-in battery capacity 1500 mAh/2500 mAh/5000 mAh
- Operating temperature range -20 ℃ -75 ℃
- Storage temperature range -30℃ – 80℃
- Operating humidity range 10 % -85 % RH No condensation
- SIM card Nona SIM Card
- Network 2G/4G
- Communication Antenna Built-in FPC antenna
- Positioning method Beidou +GPS
- Cold start time Average 32 seconds
- Hot start time Average 1 second
- Tracking sensitivity -162 dBm
- Positioning antenna Internal antenna
- Antenna Specifications 18mm * 18mm * 4mm
- Number of satellite channels 32
- Positioning accuracy <10m (1σ)
- Timing accuracy <30ns (1σ)
- Speed measurement accuracy <0.1m/s (1σ)
- Maximum acceleration 4g
- Maximum speed 515m/s
- Maximum height 18000m
- Shell material ABS plastic
- IP protection rating IP65

- Device weight and size
  - 1500 mAh: 42g, 53*31*21 mm (No magne t)
  - 2500 mAh: 96g, 78*54*14 mm
  - 5000 mAh: 132g, 78*54*21 mm

Product Usage Introduction

1. **SIM card installation method**
   The device uses a Nona SIM card . The card slot is a self-pop-up card slot, the chip is placed downward, and the card is inserted into the card slot with the notch facing inward.
2. **Indicator Light Description**
   Red light – charging indicator

Light status	meaning
often Bright	Charging
Not bright	Fully charged / power off

   Yellow light-GSM indicator

Light status	meaning
Flash once within 2 seconds	GSM Initialization
often Bright	GSM communication is normal
Not bright	GSM sleep /shutdown

   Blue light – GPS indicator

Light status	meaning
Flash once within 2 seconds	Searching for satellite signals
often Bright	GPS/BDS has been positioned
Not bright	GPS / BDS Sleep

3. **Working Logic**
   - **Normal mode:** In working state, the device transmits its location once every 30 seconds by default. It enters stand-by state after being stationary for 3 minutes. In standby state, the device transmits a heartbeat every 5 minutes to maintain server connection. Vibration can wake the device up to working state.
   - **Power saving mode:** In working state, the position is transmitted once every 30 seconds by default. After being stationary for 3 minutes, the device enters sleep state. In sleep state, the device does not transmit data and disconnects from the server to save power. Vibration can wake the device up to working state.
   - **Smart mode:** Set the data upload interval, and the device will work according to the set interval. During

non-working hours, the device is in sleep state and cannot be awakened by vibration.

The above default status description:

- **Working status**: The equipment working light is on, and GPRS and GPS are in working status.
- **Standby state:** the device transmits heartbeat, GPRS works (heartbeat data is uploaded), GPS does not work.
- **Sleep state:** The device is in sleep state, and GPRS and GPS are not working.

Features

- Adopt STM advanced 32-bit high-performance MCU processor;
- Support multiple functions such as vibration alarm, overspeed alarm, etc.
- Supports electronic fence function. Users can define virtual electronic fences through the platform/APP. When the device enters or leaves the fence, the platform can identify it and issue an alarm.
- The terminal adopts industrial-grade high-stability communication module, built-in LTE high-sensitivity antenna, supports TCP/IP data transmission, and supports domain name/IP address connection to the server.
- Built-in large-capacity storage chip, supports offline data storage and blind area data retransmission ; when the vehicle is in a place with weak wireless signal or severe interference, the vehicle will temporarily store the vehicle operation data in FLASH, and when the wireless signal returns to normal, the data can be retransmitted to ensure that no data is missed.
- Built-in 3-axis acceleration sensor, integrated with precise acceleration algorithm, to obtain vehicle status judgment such as current posture in real time.
- High-sensitivity GPS/BDS dual-star positioning module, anti-interference ceramic antenna, more stable satellite search signal, support AGPS fast positioning tracking, synchronous timing.
- Support online remote upgrade and remote configuration of product parameters.
- Three working modes can adapt to various scenarios.

SMS Commands

Common query functions	SMS command	Reply
Status query	STATUS#	ID,ACC status, network, GPS,etc…
Parameter query	PARAM#	id:862092063997534 ip:27.aika168.com 8185 apn:cmnet–,phone:- ,time:30-3600 heart:300-300
Version query	VERSION#	Reply VER:V6(70SALASE)_GT 06_V_1.1 2024/02/21
Location query	WHERE#	Reply ID:862092063997534 Spd:000 T:24/02/22 17:32 bat:14 http://maps.google.co m/maps?q=+22.60165 ,+113.86069

- Product Name: Wireless GPS Tracker
- Model: QH415
- Manufacturer: Shenzhen Qianfeng Communication Equipment Co., Limited
- Address: Room 412 Building #1 Youchuang Space Qunhui Rd. No.1 Baoan
- District Shenzhen 518101
- Certification: CE
- Country of Origin: Made in China

Documents / Resources

	Global Sources QH415 Wireless GPS Tracker [pdf] Instruction Manual QH415 Wireless GPS Tracker, QH415, Wireless GPS Tracker, GPS Tracker, Tracker

References

- Shenzhen Qianfeng Communication Equipment Co., Limited
- User Manual