



# Pet GPS Tracker

## Instruction Manual

Product model: QP103

Version number: V1.0




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.

3.

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.

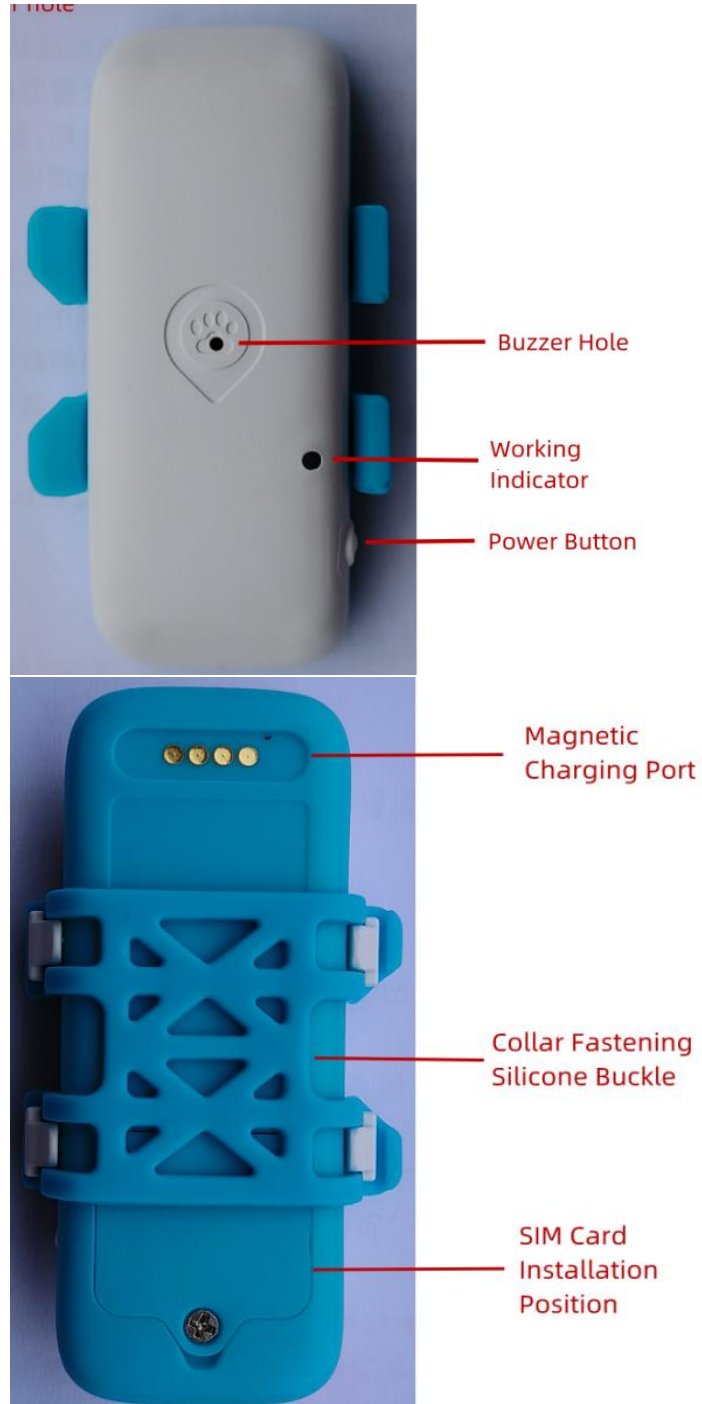


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## I. Product appearance





## II. Product parameters

Specification content	Specification parameters	
Power supply method	Battery Power	
Operating voltage range	DC 3.4V - 4.5V	
Operating state Voltage/ Current	4V/60mA average	
Standby voltage/current	4V/5mA average	
Built-in battery capacity	700 mAh (3.7V polymer battery)	
Operating temperature range	-20°C - 75°C	
Storage temperature range	-30°C - 80°C	
Operating Humidity Range	10% - 85% RH Non-condensing	
Communication module brand/chip model	SIMCOM A7670SA	
Communication frequency bands	LTE/4G LTE-FDD:B1/B2/B3/B4/B5/B7/B8/B28/B66	LTE/4G LTE-FDD:B1/B2/B3/B4/B5/B7/B8/B28/B66
	GSM/2G 850/900/1800/1900MHz	GSM/2G 850/900/1800/1900MHz
SIM card	Nona SIM card	
Communication antenna	Built-in FPC antenna	
Positioning module brand/chip model	AT6558R	
Positioning method	BDS/GPS/GLONASS	
Cold start time	Average 32 seconds	
Hot start time	Average 1 sec	
Tracking sensitivity	-162 dBm	
Positioning antenna	Built-in antenna	
Antenna Specification	5mm×5mm×0.9mm	



GPS band	L1: 1575.42±1.023MHz
BeiDou band	B1: 1561.098±2.046MHz
Number of satellite channels	64
Positioning accuracy	<2m (1σ)
Timing accuracy	<30ns (1σ)
Speed measurement accuracy	<0.1m/s (1σ)
Magnetic charging port + serial port	1 way
Buzzer	1 way
LED light	Charge light (red) + GPS (yellow) + 4G (blue) + Record pet light (white)
Host size (length, width and height)	75.8mm*37.6mm(30mm without lugs)*19mm
Housing material	ABS plastic
IP protection grade	IP65
Host weight	42.2g

### **III. Basic product functions**

- GPS+BDS+AGPS+LBS multiple positioning.
- Support electronic fence function, the user through the platform/APP delineate virtual electronic fence, when the device in and out of the fence can be identified by the platform and send out alarms.
- Can send alarm SMS/phone call to the guardian number when an alarm occurs, and the alarm is uploaded to the platform at the same time.
- Terminal using well-known manufacturers industrial grade high stability 4G module, built-in LTE high sensitivity antenna, support TCP/IP data transmission, support domain name/IP address to connect to the server.



- Built-in large-capacity storage chip, support data storage in offline state, blind area data replenishment transmission; when the pet is in a place with weak wireless signal or serious interference, the data of the pet walking is temporarily stored in FLASH, and when the wireless signal returns to normal, it can replenish these data to realize data not missing.
- Built-in 3-axis acceleration sensor, fusion of accurate acceleration algorithm, real-time access to the pet's current posture and other situation judgments.
- High-sensitivity GPS/BDS dual-star positioning module, anti-jamming ceramic antenna to achieve a more stable signal for star search, support for AGPS fast positioning tracking and synchronized timing.
- support online remote upgrade, remote configuration of product parameters.
- Historical track platform retains 180 days.

## IV. Indicator light description

### Red light - charging indicator

Status of the light	Meaning
Always on	Charging
Not on	Fully charged

### Yellow light - GSM indicator

Status of the light	Meaning
Flashing 1 time in 2 seconds	GSM initialization
Always on	GSM communication normal
No	GSM sleep/shutdown

### Blue light - GPS indicator

Status of the light	Meaning
Flashing 1 time in 2 seconds	Satellite signal search in progress
Always on	GPS/BDS positioned
No	GPS/BDS dormant



**① Status description:**

Power on/off status: The device is powered on and off by pressing the button for three seconds. No data will be uploaded after it is powered off by pressing the button for three seconds

Working status: The device command light is on, and the network module and positioning module are both in working status.

Standby status: The device network module is working (the platform remains online, and commands and text messages can be sent offline), and the positioning module is not working.

**② Working mode description:**

Continuous positioning: The device is in working state by default, and the position is updated every 30 seconds by default;

Normal mode: The device is in standby state by default. If vibration is detected during this period, it will enter the working state and update the position every 10 minutes. If no vibration is detected, it will remain in standby state;

Power saving mode: The device is in standby state by default. If vibration is detected during this period, it will enter the working state and update the position every 1 hour. If no vibration is detected, it will remain in standby state;

Standby mode: The device is in standby state by default. If vibration is detected during this period, it will enter the working state and update the position every 12 hours. If no vibration is detected, it will remain in standby state;

**③ Vibration alarm description:**

After the platform issues the defense command, the device will enter the defense state after being stationary for three minutes. After detecting vibration, the vibration alarm will be uploaded. Defense is effective only once

## V. SMS Commands

The user uses the mobile phone to send SMS command to the SIM card number of GPS device (note SIM card should be activated the text message function).

The comma in below SMS command format is in English input format, and the letters are upper and lower case according to the requirements of the instruction.

Common query functions	SMS command	Reply
Device status query	CXZT	Version, ID,IP, etc...
Reply to Google link	G1234	Google address link
Restore factory settings	FORMAT	Reply: OK
APN query	APN#	Reply: APN:cmnet,,
Set APN command format	apn,123456,cmnet	Reply: apn ok



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Set server IP and port	IP+space+IP address+space+port number	Reply: set IP OK
Switch English	109#	Reply: OK
Set location data upload interval	FREQ,123456,30(30 means 30 seconds)	Reply: OK



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Manufacturer: Shenzhen Qianfeng Communication Equipment Co., Limited

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District Shenzhen 518101

Certification: CE

Country of Origin: Made in China