



Shenzhen Qianfeng Communication Equipment Co., Limited

ADD.:Room 412 Building #1 Yochuang Space Qunhui Rd. No.1 Baoan District Shenzhen 518101

WEB.: www.qianfengtek.com TEL.:+86 755 2330 0250

Pet GPS Tracker

Instruction Manual

Product model: QP106

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



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II. Product parameters

Specification content	Specification parameters	
Power supply	Battery power	
Operating voltage range	DC 3.4V - 4.5V	
Working 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	EG915ULA	
Communication frequency band	LTE/4G	LTE-FDD: B2/B3/B4/B5/B7/B8/B28/B66
	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 second	
Tracking sensitivity	-162 dBm	
Positioning antenna	Built-in antenna	
Antenna Specifications	5mm×5mm×0.9mm	
GPS frequency band	L1: 1575.42±1.023MHz	
Beidou frequency band	B1: 1561.098±2.046MHz	
Number of satellite channels	32	
Positioning accuracy	<10m (1σ)	
Timing accuracy	<30ns (1σ)	
Speed measurement accuracy	<0.1m/s (1σ)	
Magnetic charging port + serial port	1 way	
Buzzer	1 way	
LED Light	Charging light (red) + GPS (yellow) + 4G (blue) + search pet light (red)	
Device size (length, width and height)	51mm*40mm (34mm without lugs)*17mm	
Shell material	ABS plastic	
IP protection grade	IP67	
Device weight	36 g	

III. Basic product functions

- GPS+BDS+AGPS+WiFi+LBS multiple positioning;
- 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.
- When an alarm occurs, an alarm SMS/call can be sent to the monitoring number, and the alarm will be uploaded to the platform at the same time;
- The terminal uses an industrial-grade high-stability 4G module from a well-known manufacturer, has a 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 pet is in a place with weak wireless signal or severe interference, the pet's walking data is temporarily stored 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 the pet's current posture and other conditions in real time;
- High-sensitivity GPS/BDS dual-star positioning module and anti-interference ceramic antenna make the satellite search signal more stable and support AGPS fast positioning tracking and synchronous timing;
- Support online remote upgrade and remote configuration of product parameters;
- The historical track platform is retained for 180 days.

IV. Indicator light description

Red light – charging indicator

Status of the light	Meaning
Always on	Charging
Not bright	Full

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Yellow light-GSM indicator

Status of the light	Meaning
Flash once within 2 seconds	GSM Initialization
Always on	GSM communication is normal
Not bright	GSM sleep/shutdown

Blue light - GPS indicator

Status of the light	Meaning
Flash once within 2 seconds	Searching for satellite signals
Always on	GPS/BDS has been positioned
Not bright	GPS/BDS Sleep

V. Working logic

① Status description:

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 instruction light is on, and the network module and positioning module are in working status.

Standby state: 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 mode by default. If vibration is detected, it will enter working mode and update the position every 10 minutes. If no vibration is detected, it will remain in standby mode.

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

Standby mode: The device is in standby mode by default. If vibration is detected during

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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 mode .

③Vibration alarm instructions:

After the platform issues the defense command, the device will enter the defense state after being stationary for three minutes. After detecting vibration, it will upload a vibration alarm. The defense will only take effect once.

VI. 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
Set server IP and port	IP password IP address(or domain name) port number IP 123456 27.aika168.com 8185	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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Certification: CE

Country of Origin: Made in China