



Shenzhen Qianfeng Communication Equipment Co., Limited

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Vehicle GPS Tracker

Instruction Manual

Product model: QH100R

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 elements					
	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

	function name	Project function description	
Electrical characteristics	Power supply	Battery powered	
	Working voltage range	DC 9V – 32V	
	Working current	12V / 65mA	
	Sleep current	12V / average 10mA	
	Built-in battery capacity	50 mAh (3.7V polymer battery)	
Environmental characteristics	Range of working temperature	-20 °C -75 °C	
	Storage temperature range	-30°C-80°C	
	Working humidity range	10 % -85 % RH Does not condense	
Communication characteristics	Communication module brand /chip model	SIMCOM 7670G	
	Communication band	LTE /4G	LTE-FDD:B1/B2/B3/B4/B5/B7/B8/B12/B13/ B18/B19/B20/B25/B26/B28/B66/ LTE-TDD:B34/B38/B39/B40/B41 GSM/GPRS/EDGE
		GSM /2G	850/900/1800 /1900MHz
	SIM card	Nano SIM card	
	Communication antenna	Built-in antenna	
GPS/BD positioning features	Locate module brand/chip model	Zhongke Micro AT6558 R	
	Targeting	Beidou +GPS+LBS	
	Cold start time	average 32 seconds	
	Hot start time	average 1 second	
	Tracking sensitivity	-162 dBm	
	positioning antenna	Built-in antenna	
	Antenna specifications	25mm*25mm*2mm	
	Number of satellite channels	32	
	Positioning accuracy	<10m (1σ)	
	Timing accuracy	<30ns (1σ)	
	Speed measurement accuracy	<0.1m/s (1σ)	
external interface	Charging interface TYPE-A	DC: 5V/2A; 9V/2A	
	Charging interface TYPE-C	DC: 5V/2A; 9V/2A	
	SOS	Support SOS button	
Form factor	Device size (length, width and height)	85mm*49.2mm*26mm	
	Shell material	ABS +PC	
	Device weight	41 grams	



III. Product usage introduction

1.4.1 SIM card installation method

The device uses a nano SIM card. The card slot is a self-elastic card slot, the chip is placed facing the direction of the USB charging port, and the card notch is inserted into the card slot inward.

1.4.2 Indicator light description

Red light – charging indicator light

light status	meaning
breathe	Power on is normal
not bright	Power is not connected

Yellow light-GSM indicator light

light status	meaning
Flashes once within 3 seconds	GSM initialization
often Bright	GSM communication is normal
not bright	GSM sleep /off

Blue light-GPS indicator light

light status	meaning
Flashes once within 3 seconds	Searching for satellite signal
often Bright	GPS/BDS positioned
not bright	GPS /BDS sleep

1.4.3 Working logic

After the equipment is installed, the equipment enters normal working status after the yellow and blue lights are on.

Stationary flameout state: the device generates one piece of data every 5 minutes.

Movement ignition status: The device has one piece of data every 20 seconds.

IV. Basic product functions

Content	Function	Explain
	4GallNetcom	Support 4G network, efficient transmission in 1 second, faster and more accurate.



Locate function	Regular tracking	Positioning information such as latitude and longitude according to the set interval time.
	Over - speed alarm	When speeding, the locator will send an alarm to your phone
	Shock alarm	Built-in vibration sensor, the vehicle has continuous vibration, the equipment immediately sends an alarm prompt
	Electronic fence	If the car travels beyond the prescribed area, an alarm information will be sent to the platform
	Historical trajectory	You can play back 365 driving days, replay the speed at that time, direction stay time and other content
	Displace alarm	When the vehicle encounters illegal operation or theft, it can be remotely cut off through the computer or mobile phone APP
	Fleet management	One phone can manage multiple devices, or one device for multiple phones

V. Common problem analysis and exclusion

This product shows that the yellow and blue lights are always on without flash as normal online positioning. If flashing, please analyze the fault according to the following steps.

Fault phenomenon	Fault analysis	Processing method
	Determine whether devices are used in areas with poor GPS signals, such as near tall buildings or underground parking lots	Drive the vehicle to a good signal position using the terminal



Blue lights flash slowly	Determine whether the vehicle front windshield has a metal insulation film affecting the signal reception	If there is a film, change the equipment to other vehicles to test whether the blue lights are often on. If it is fine on other membrane vehicles, it is caused by the film
	Determine whether there is a shield or a signal distractor on or around the car	If there is a shield or interference source, remove the shield or interference source and attempt to reinstall it
Blue lights flash	Chip failure	Return to the factory for maintenance
The yellow lights flash	Determine whether the SIM card is well installed	Check for the SIM card in place
	Determine whether the SIM card metal surface has dirt or poor contact	Wipe the metal chip surface with a clean cloth or plug the card several times
The yellow light flashed slowly	Determine whether the vehicle is in a mobile network such as an underground parking lot	Please drive the vehicle to places where the network signal is good and try to reinstall it
	Determine whether the server background is normal	Ask if the background management platform server is normal
	Determine whether the SIM card status is normal	Check whether the status of the card is normal through the SIM card query platform
	Determine whether there is a shield or a signal distractor on or around the car	If there is a shield or interference source, remove the shield or interference source



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	Sleep mode, Security mode, Vibration mode, ACC status etc...
Set IP	IP 106.3.230.234 8185	
Set APN (When it is not set, it can automatically identify APN. When the APN cannot be identified, the default is INTERNET. After setting APN, it will be fixed and cannot be automatically identified)	APN,123456,cmnet	
translated as "Set APN username	APNUSER,123456,user	



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Manufacturer: Shenzhen Qianfeng Communication Equipment Co., Limited

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