SC350MG User Manual

0. Introduction

The SC350MG is a series of compact waterproof GPS trackers designed for E-bike. Their built-in GPS receiver has superior sensitivity and fast initial positioning. Different models allow the SC350MG's location to be monitored in real time or periodically tracked by a backend server and mobile devices. System integration is straightforward as complete documentation is provided for the full featured @Track protocol. The @Track protocol supports a wide variety of reports including external power supply monitoring and scheduled GPS position reports.

0.1. Reference

Table 1. Protocol Reference

SN	Document name	Remark
[1]	SC350MG @Track Air Interface	The air protocol interface between SC350MG
	Protocol	and backend server.

1. Product Overview

2.1. SC350MG Product

Table 2. Product Model

Model No.	Region	Technology	Operating Band (MHz)
			GSM:
			GSM850/EGSM900/DCS1800/PCS1900
			LTE-FDD:
			Cat M1:
			B1/B2/B3/B4/B5/B8/B12/
SC350MG	Worldwide	GPRS/LTE	B13/B18/B19/B20/B25/B26/
			B27/B28/B66/B85
			Cat NB2:
			B1/B2/B3/B4/B5/B8/B12/
			B13/B18/B19/B20/B25/B28/
			B66/B71/B85

GPS Chipset	u-blox M8130	
	Autonomous: -147 dBm	
Consistivity	Hot start: -156 dBm	
Sensitivity	Reacquisition: -160 dBm	
	Tracking: -162 dBm	
Desition Assurably (CED)	Autonomous: < 2.5m	
Position Accuracy (CEP)	SBAS: < 2.0m	
	Cold start: 30s average	
TTFF (Open Sky)	Warm start: 27s average	
	Hot start: 1s average	

2. Getting Started

2.1. Inserting SIM Card

Step 1: Unfasten the four screws at the back cover of the case to open the device.

Step 2: Insert the SIM card in the card holder in alignment with cut mark.

2.2. Safety Info

- Do not disassemble the device by yourself.
- ◆ Do not put the device in the overheated or too humid place, and avoid exposure to direct sunlight. Too high temperature will damage the device or even cause battery explosion.

2.3. Major function

- ◆ Connect with ECU controller via cable then switch on
- Search E-bike by GPS
- Interactive data with backend system by network
- ◆ Control E-bike lock and unlock
- ◆ Control ECU and battery

FCC Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. FCC Radiation

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.