Tracker

Prime PT100V User Manual

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Contents

1 Introduction

Prime PT100V is a powerful GPS locator which is designed for vehicle, human, pets and assets tracking. It works on LTE B4/B13 with superior receiving sensitivity. Its location can be real time or schedule tracked by backend server or specified terminals. Based on the embedded wireless tracking protocol, Prime PT100V can communicate with the backend server through LTE network, and transfer reports of emergency, Geo-fencing, device status and scheduled GPS position etc… Service provider is easy to setup their tracking platform based on the functional wireless tracking protocol.

2 Product Overview

2.1 Appearance

Figure 1-1

2.2 Buttons/4PIN Interface Description

Button /12PIN Interface Description	
KEY/interface	Description
Power Key	Power on Prime PT100V Power off Prime PT100V (If power key is enabled)
Function Key	SOS mode
4 PIN interface	Connected to a charging dock can power on Prime PT100V Backend server developer or administrator can use the debug dock to configure Prime PT100V (by engineer not by end user).
Reset Key	Click the key will turn off internal VBAT when OS is abnormal, and then press Power Key to restart Prime PT100V.

2.3 LED Description

Figure 1-2

There are four LED lights in Prime PT100V device, the description as following.

Light	Event	State
GSM LED	Power on	Flash every 2 seconds
	Power off	Dark
	Power key was pressed and prepare to power on	Solid
Power LED	Power on and normal	Dark
	Fully charged	Solid
	In charging	Slow flash
	Power key was pressed and prepare to power off	Solid
	Power key was pressed and prepare to power on	Solid

3 Getting Started

3.1 Parts List

Name	Picture	Remark

Prime PT100V Locater		The LTE/GPS locator.
Prime PT100V charging Dock		It used to be charging for the Prime PT100V.

3.2 Battery Charging

The following items are suggestion for battery charge, please pay more attention.

- ◆ During the charging process, the Power LED light will slow flash. When the battery is fully charged, the Power LED light will be Ever-dark.
- ◆ You can charge the battery using charging dock which connects Prime PT100V device with the Adapter.
- ◆ Charging will last about 5 hours.

Note: If the Prime PT100V device is firstly used, please make sure the battery is fully charged, which will make the life of battery much longer.

3.3 Prime PT100V Charging Dock

Prime PT100V Charging Dock is a base with an AC Adapter.
The charging dock is used for device charging , which can be used for charging at the any time (by end user)..

Figure 2-1

Figure 2-2

3.4 Power on/Power off

Figure 2-2

Power on:

◆ Press the Power key at least 3 seconds and release it to power on Prime PT100V device. Note that, the Power LED light will light for a moment　and then turn off.

Power off:

◆ Press the power key about 3 seconds; Power LED light will light for a moment and then turn off, which indicates that Prime PT100V device has been powered off.

Note: the user can not power off Prime PT100V if the power key is disabled by protocol.

4 Frequency

LTE: Band4、Band13
GPS:1575.42MHz
WIFI:2.4GHz

4.1 WIFI

The device role of WIFI could be Master and Slave.
When the device role is Master, the device will provide below services: the others devices can read or use the above services after connecting devices, connect the designated device to read the data or related information of the designated WIFI devices. After reading the data, the server can be reported to the server by the corresponding message.

5 Trouble shooting and Safety info

5.1 Trouble shooting

Trouble	Possible Reason	Solution
Messages can't be reported to the	APN is wrong. Some APN can not visit the	Ask the network operator for the right APN.

backend server by Mobile network.	internet directly.	
	The IP address or port of the backend server is wrong.	Make sure the IP address for the backend server is an identified address in the internet.
Unable to power off Prime PT100V.	The function of power key was disabled by AT+GTFKS.	Enable the function of power key by AT+GTFKS.
Battery can not be charged	The battery has not been used for too long time and has been locked.	Using a external power source with 3.6V to 4.2V DC power supply to active the battery or apply for after sale help.
Prime PT100V can't fix GPS successfully.	The GPS signal is weak.	Please move Prime PT100V to a place with open sky.
		It is better to let the top surface face to the sky. (The same surface with indication LED)

5.2 Safety info

The following items are suggestion for safety use, please pay more attention.
- ◆ Please do not disassemble the device by yourself.
- ◆ Please do not put the device on the overheating or too humid place, avoid exposure to direct sunlight. Too high temperature will damage the device or even cause the battery explosion.
- ◆ Please do not use Prime PT100V on the airplane or near medical equipment.

FCC Caution.

FCC Statement

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

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.

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.

ISED RSS Warning:
This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Exposure Information (SAR) :
The SAR limit of USA (FCC) is 1.6 W/Kg averaged over one gram of tissue. Product Type: Tracker ,(FCC ID: ZKQ-PT100V) has also been tested against this SAR limit. The device was test for typical body-worn operations with the back of tracker kept 0 mm from the body and head face up operations with the front kepting 10 mm distance from the face.

The SAR limit of IC is 1.6W /Kg averaged over one gram of tissue. Product Type:Tracker, model number: Prime PT100V (IC: 8414B-PT100V) has also been tested against this SAR limit. The device was test for typical body-worn operations with the back of tracker kept 0 mm from the body and head face up operations with the front kept 10 mm from the face.
La limite SAR de IC est de 1.6 W/Kg en moyenne sur un gramme de tissu. Type de produit: Tracker, numéro de modèle: Prime PT100V (IC: 8414B-PT100V) a également été testé par rapport à cette limite en SAR. Le dispositif a été testé pour des opérations typiques portées sur le corps avec le dos du tracker maintenu à 0 mm du corps et la tête face à la face supérieure, à 10 mm de la tête. distance entre le corps de l'utilisateur et le dos du tracker.