



# LTE Cat M1/NB1 TRACKER

<GNSS+WIFI+GPRS+LTE CAT M1/NB1+GPIO>



## cc521 User Manual

Real-Time Vehicle Tracking System

# CATLOG

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Welcome to use our device, please read this manual carefully to install and operate device exactly. This user manual is for reference only. If some contents and operation steps are inconsistent with those for the actual product, the latter will prevail.

## **I. Product Features**

- Supports GSM/LTE CAT M1/NB-IoT.
- Super Wide Input Voltage: 5-55V DC.
- GPS precise positioning, Support A-GPS, uploaded by LTE/GPRS regularly, real-time tracking and history track playback.
- Serial port,
- Built-in G-sensor, vibration, alarm.
- Relay command.
- Waterproof level IP65

## Basic Specifications

Voltage	5/12/ 24/ 36/ 48/ 55 VDC
Standby Current	IDLE(22uA@3.8V)
GPS Accuracy	5-15m
GPS Band	1575MHz
GSM Band	850/900/1800/1900MHz
WIFI Band	2.4 GHz (receive only)
LTE Band(catm1&nbiot)	Global bands Europe
Working Temperature	Arrange -20℃~75℃
Hot/warm/cold Start	<3s, <15s, <60s
Dimensions (mm)	64.6(L) x 35(w) x 12.5mm(H)
Work Humidity	20%~80%RH
Net Weight	33g

## II. Components

### ■ Components



-Top Front-  
(Towards sky)



-Bottom -

### III. SIM Card Installation

Open the packing case, check if device is OK and accessories are intact,

You need a suitable SIM card for using device, contact your dealer if any question;



Open SIM Card cover

Put SIM Card and waterproof rubber

Press cover and close

#### Note:

- Please cut off the power before installing or uninstalling SIM card.
- SIM card should have GPRS/LTE function.

## IV. Device Installation

### 4.1 Install device

4.1.1 Please install device concealed by professional person

Please make sure to install device with this side upward, and use wide strong double-sided adhesive sponge to fix it.

#### 4.1.2 Installation Notice

- Keep device away from RF emission sources.
- Device Built-in GSM/LTE antenna and GPS antenna, Please ensure that signal receiving side is facing up(towards the sky) when doing installation, without any metal material covered on the top.It may weaken signal and results in not work properly.



## 4.2 device wiring definition



This male connector is from cc521.

To power cable from vehicle will be terminated with female connector

### Total schematic wiring device

#### 4.2.1 Power cables and interface

The standard input voltage of device is 5v-55v DC, .

### V. Power On / Off

#### 5.1 Power on

Power on: insert a valid SIM card and wire all the cables, device will power on.

#### 5.2 LED Indicators

The green LED blinks quickly when the device is searching for a GSM/LTE network, and intermittently when the device successfully registers for a GSM/LTE network.

The blue LED flickers fast when device is searching for the GPS satellite signal, it flickers intermittently when device has searched the satellites and can be positioned.

the device enters the charging state, the red light is on. When the external battery of the device is full or not in the charging state, the red light is off.



1. **Red LED**(indicates charging status)

light up	be charging
OFF	The battery is in the full or uncharged state

2. **Blue LED**(indicates GPS signal state)

fast blink	Searching GPS Satellites
Slow flicker	GPS works normally

3. **Green led**(indicates GSM/LTE working state)

fast blink	Searching GPRS/CATM network
Slow flicker	The GPRS/CATM network is connected

Note: After the device works normally for 10 minutes, the GPS and network indicators will go to sleep and turn off

## 5.3 Power off

Disconnect 2the external power device will shut

down.

## **VI.Trouble shooting**

### **6.1 Cannot connect platform**

device is never online on the position server when installed at the first time. Please check device:

- 1) If power cables are wired correctly?
- 2) If SIM card is installed correctly? Please refer to the installation instructions.
- 3) Check the status of LED indicators. If device is OK, Green LED and blue LED will intermittently flick.
- 4) Inquiry parameters of device via dealer support team.

## **FCC Statement**

1. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. 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.

To comply with RF exposure requirements, a minimum separation distance of 20cm must be maintained between the user's body and the handset, including the antenna.