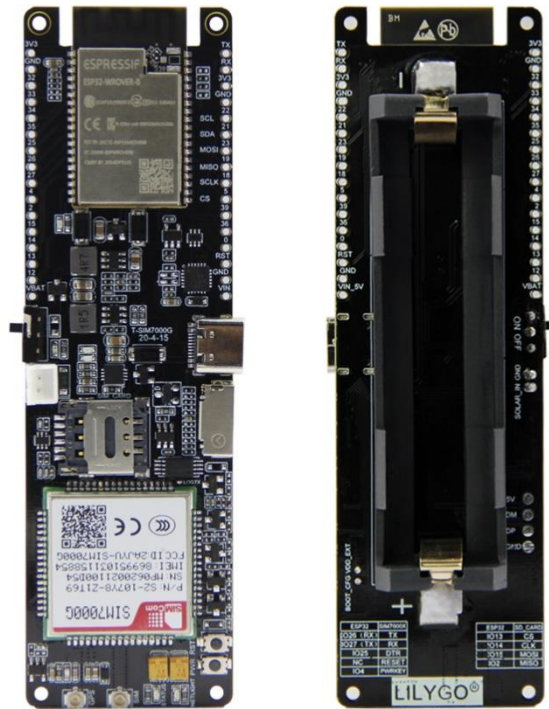


# TTGO T-SIM7000G Module

## ESP32-WROVER-B Chip WiFi Bluetooth

### 18560 Battery Holder Solar Charge

### Development Board



## Product Description

### Hardware Specifications

Main chip: ESP32

Module: ESP32-WROVER-B, SIM7000G

Interface: USB, SD Card, Solar Input interface

Flash Memory: 4M Flash / 8M PSRAM

Button: Reset, Power switch

USB to TTL: CP2104

Car Clock: 40MHz

SIM Card Size: Nano SIM Card

SIM Antenna

GPS Antenna

Operating Temperature Range: -40-85 degrees

Product Size: 111mm \* 37mm \* 20mm

Product Weight: 50g

### Power Specifications

Working Voltage: 5v input

Solar input voltage range: 4.4-6v

Working Current: About 200mA

Charging Current: 780mA

Battery Model: 18650

Battery Holder Model: 18650 battery holder

JST Connector: 2pin 2mm

USB: TYPE-C 3.0

### Wi-Fi

Standard : FCC/CE-RED/IC/TELEC/KCC/SRRC/NCC

Protocol : 802.11 b/g/n(802.11n, speed up to150Mbps)A-MPDU

and A-MSDU polymerization, support 0.4 $\mu$ S Protection interval

Frequency : range 2.4GHz~2.5GHz(2400M~2483.5M)

Transmit Power : 22dBm

Communication distance : 300m

## Bluetooth

Protocol meet Bluetooth : v4.2BR/EDR and BLE standard

Radio Frequency : with -97dBm sensitivity NZIF receiver

Class-1,Class-2&Class-3 emitter AFH

Audio Frequency : CVSD&SBC audio frequency

## Software Specification

Wi-Fi Mode : Station/SoftAP/SoftAP+Station/P2P

Security Mechanism : WPA/WPA2/WPA2-Enterprise/WPS

Encryption Type : AES/RSA/ECC/SHA

Firmware Upgrade :UART download/OTA (Through network/host to download and write firmware)

Software Development : Support cloud server development /SDK for user firmware development

Networking Protocol : IPv4、IPv6、SSL、

TCP/UDP/HTTP/FTP/MQTT

User Configuration : AT + Instruction set, cloud server,

android/iOSapp

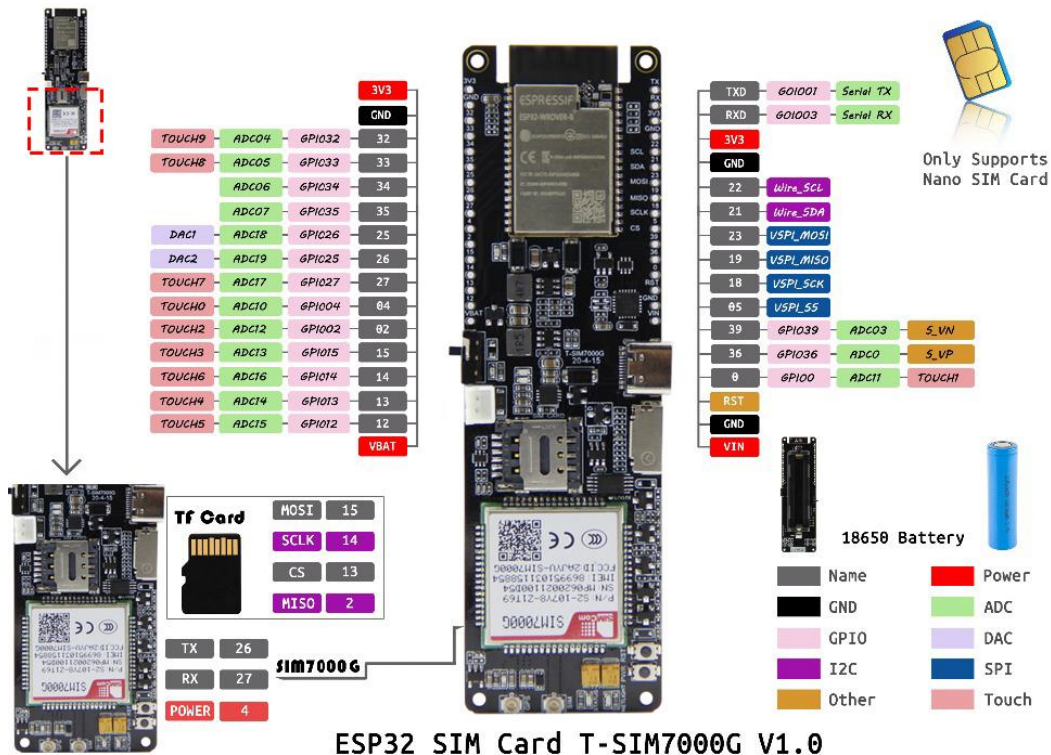
OS : FreeRTOS

## Version update function:

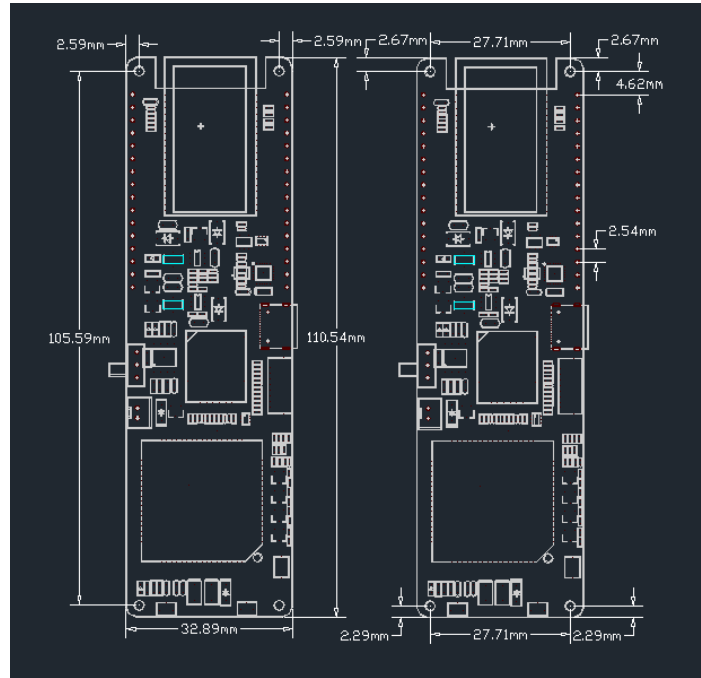
1. The battery's positive and negative poles are connected to the wrong protection, overcharge and over discharge protection
2. GPS power control, reduce power consumption, the lowest reaches 300uA when sleeping
3. Replacement of ordinary charging IC with solar charging IC

## Github:

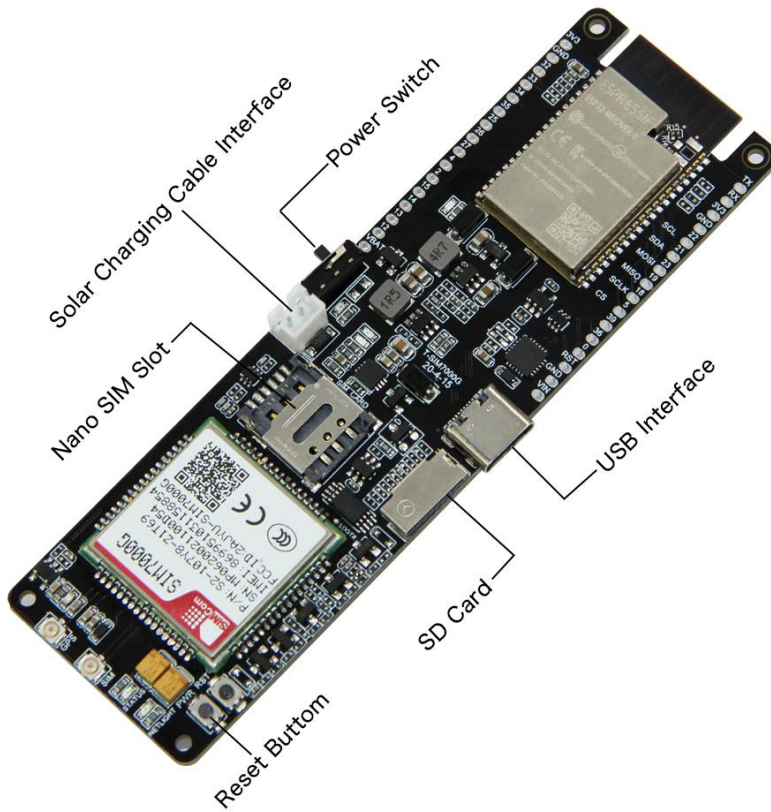
### Product Pin

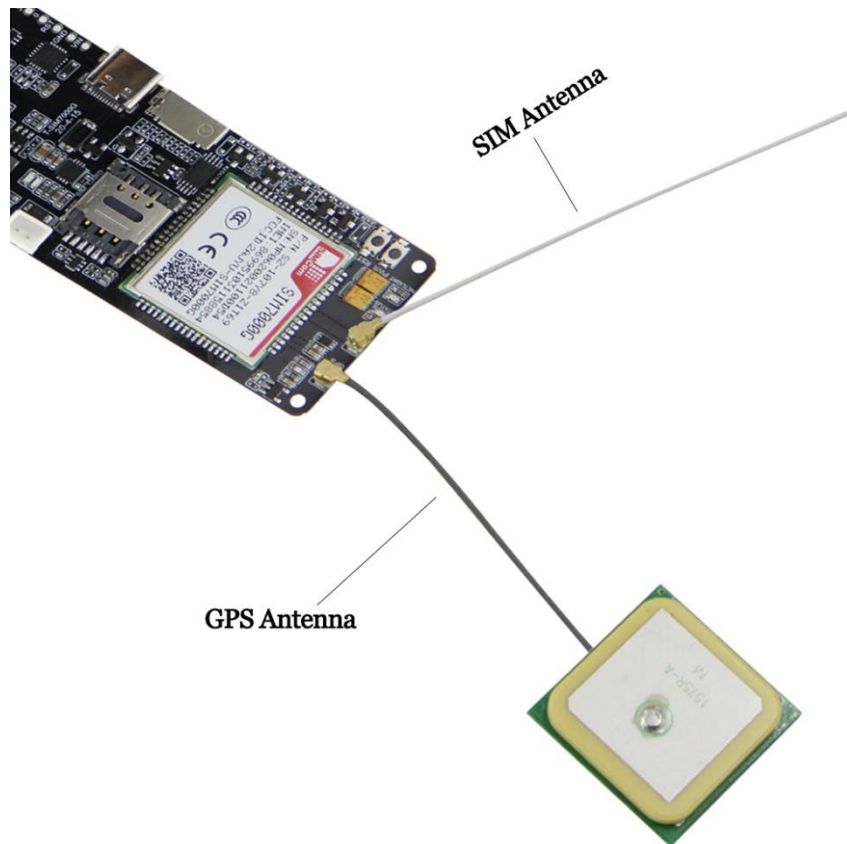
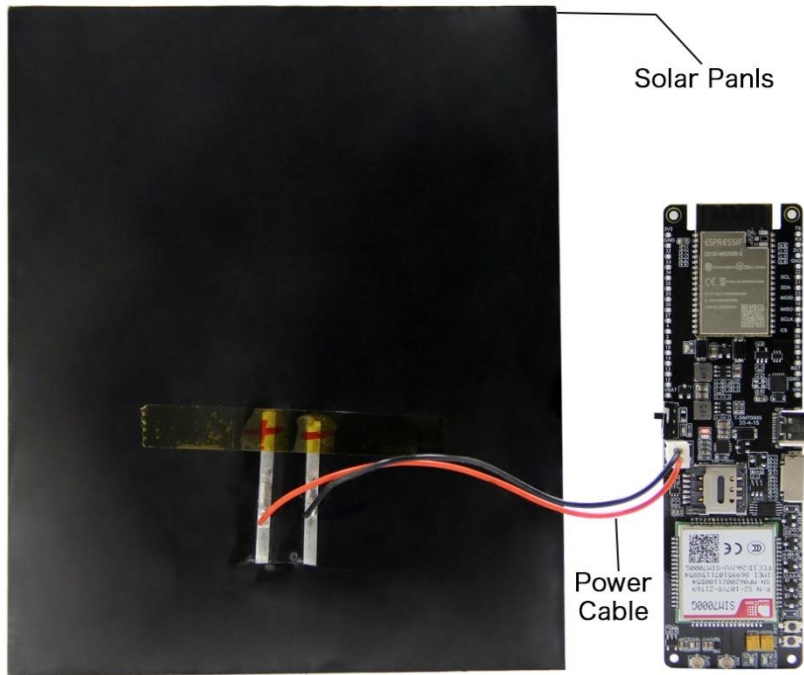


# Product Size



# Product Detail

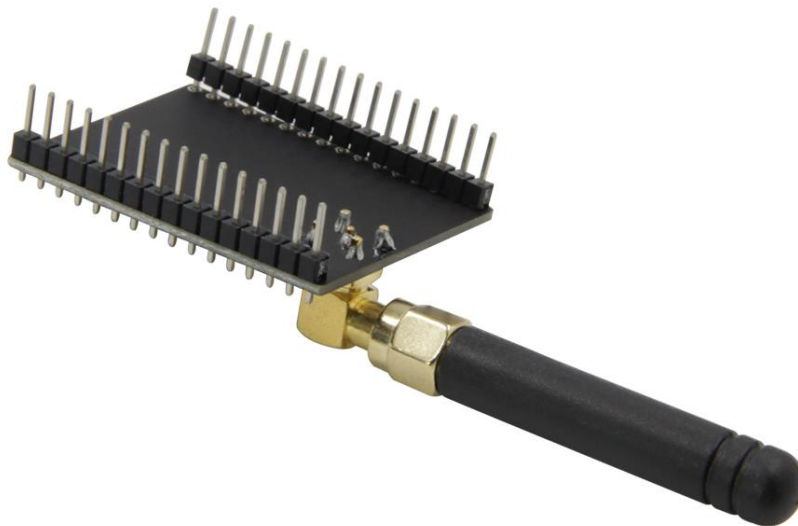


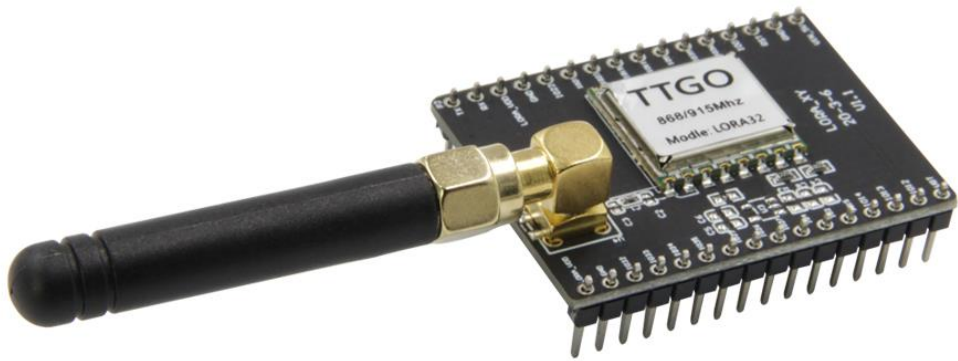


```
load:0x40080400,len:5828
entry 0x400806ac
/*****/
To initialize the network test, please make sure your GPS
antenna has been connected to the GPS port on the board.
/*****/

Start positioning . Make sure to locate outdoors.
The blue indicator light flashes to indicate positioning.
The location has been locked, the latitude and longitude are:
latitude:22.66
longitude:114.06
/*****/
After the network test is complete, please enter the
AT command in the serial terminal.
/*****/
```

**T-SIM7000G can be used with Lora 868/915Mhz  
function Shield**







# Shipping List

## T-SIM700G Option

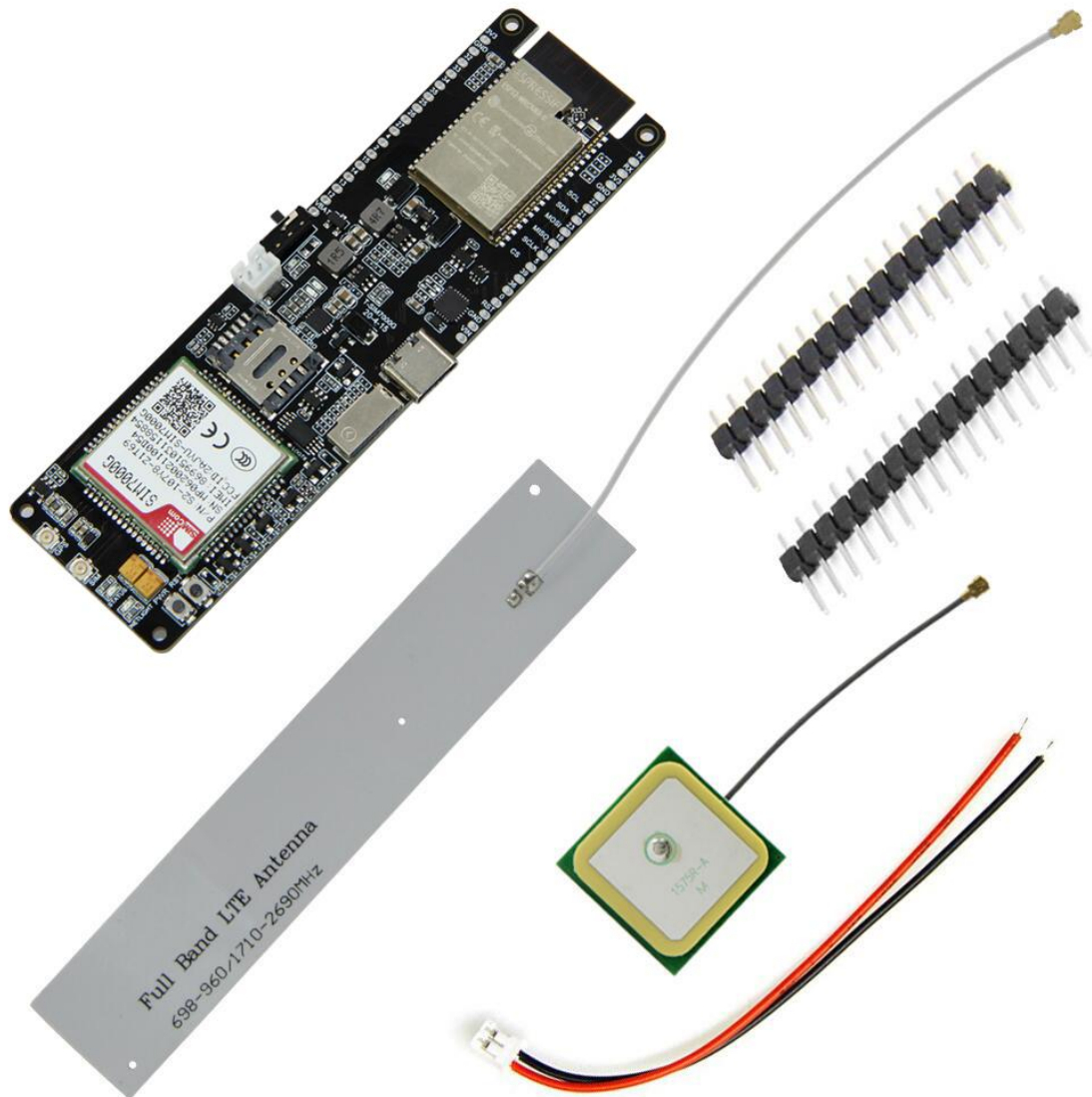
1 X T-SIM700G

1 X SIM antenna

1 X GPS antenna

1 X Power cable

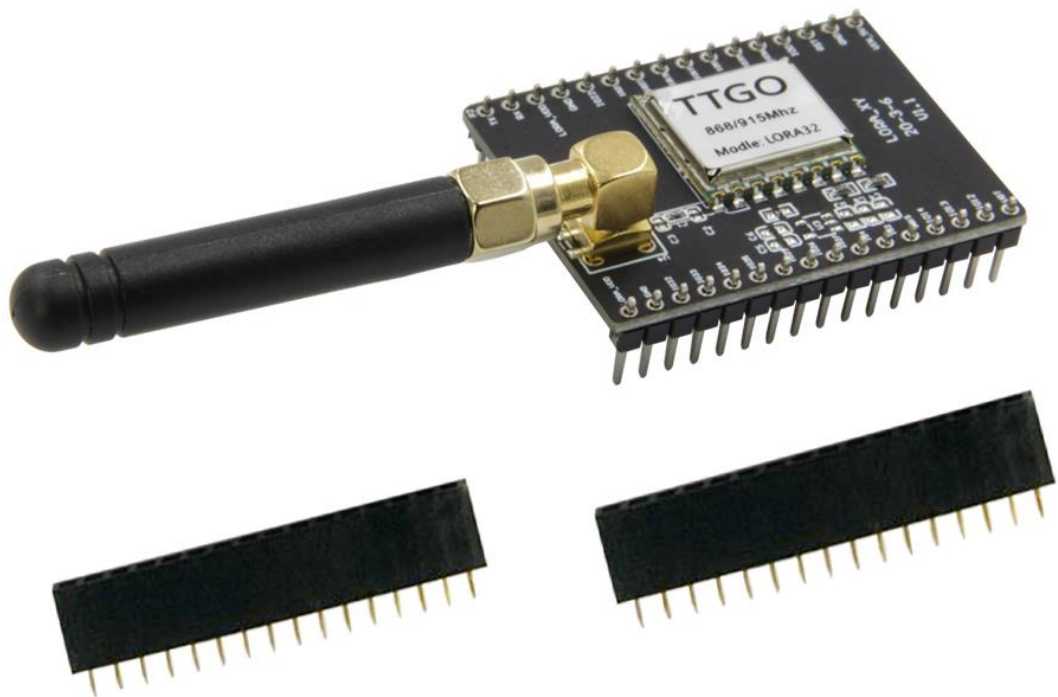
2 X Pin



## Lora 868Mhz Function Shield Option

1 X Lora 868Mhz function Shield

2 X Pin



## Lora 915Mhz Function Shield Option

1 X Lora 915Mhz function Shield

2 X Pin

