

GL33CG User Manual

GSM/GPRS/LTE CAT1/GNSS Tracker

TRACGL33CGUM002

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0. Revision History

Version	Date	Author	Description of Change
1.00	2023-10-26	Willie Liu	1. Initial.
1.01	2024-05-17	Willie Liu	1. Added the information of adapter to Parts List.

1. Introduction

GL33CG, which is developed with the main purpose of cargo recovery, is a tracking device covered with a box. The device is ideal for recovering expensive merchandise which is packed mainly with cartoon boxes and might be stolen while the merchandise is being transported from the packing site to the destination. It transmits the GNSS/LBS location information to the server via GSM/GPRS, and it can also be detected by a search device (detector device) operating (433/434MHz) through the RF signal.

1.1. GL33CG Product

Table 1. GL33CG Product

Model No.	Technology	Operating Band (MHz)
GL33CG	LTE Cat1	LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B20/B28 EGPRS: 850/900/1800/1900MHz

1.2. Reference

Table 2. GL33CG Protocol Reference

SN	Document Name	Remark
[1]	GL33CG @Track Air Interface Protocol	The air protocol interface between GL33CG and backend server.

2. Product Overview

2.1. Check Parts List




Before starting, check whether all the following items have been included with your GL33CG. If anything is missing, please contact the supplier.



Figure 1. Appearance of GL33CG

2.2. Parts List

Table 3. Parts List

Name	Picture	Description
GL33CG Locator	 <p>97*45*21 mm</p>	GNSS Tracker
Micro_USB (Optional)		USB Data Cable, which can be used for firmware upgrade and configuration.
Adapter (Optional)		Adapter for GL33CG Output: 5.0V, 1000mA

2.3. LED Description



Figure 2. GL33CG LEDs

There are four LED lights on GL33CG. For details, please see the table below.

Table 4. GL33CG LED Description

LED	Device Status	LED Status
CEL (Note 1)	The device is searching for GSM network.	Fast flashing
	The device has been registered on the GSM network.	Slow flashing
	The SIM card needs PIN to unlock.	ON
GNSS (Note 2)	GNSS chip is powered off.	OFF
	GNSS sends no data or data format error occurs.	Slow flashing
	GNSS chip is searching for GNSS signal.	Fast flashing
	GNSS chip has received GNSS signal.	ON
	Upgrade the device firmware over the air.	ON
PWR (Note 3)	Hold down the on/off button for 3 seconds to turn it on.	Lights up for a few seconds.
	Hold down the on/off button for 3 seconds to turn it off.	Flashing twice
	Press the on/off button when the device is turned on.	Flashing thrice
BAT Behavior (Charge Note 4)	The battery is less than 20% of its total battery capacity.	The red LED flashes fast.
	The battery is between 20% and 90%.	The yellow LED flashes fast.
	The battery is between 90% and 100%.	The green LED flashes fast.
	The battery is 100%.	Solid Green

Note:

- CEL LED cannot be configured.
 - Fast flashing: About 64ms ON/ 800ms OFF
 - Slow flashing: About 64ms ON/ 3000ms OFF
- GNSS LED can be configured to be turned off by using the Manage Tool.
 - Fast flashing: About 100ms ON/ 100ms OFF
 - Slow flashing: About 100ms ON/ 600ms OFF

3. PWR LED can be configured to be turned off by using the Manage Tool.
 - Flashing once: About 500ms ON
 - Flashing twice: About 500ms ON/ 1500ms OFF
 - Flashing thrice: About 500ms ON/ 1500ms OFF
4. Fast flashing: About 100ms ON/ 100msOFF
 - When the battery is under discharge, Fast flashing: About 100ms ON/ 600ms OFF

3. Get Started

3.1. Open/Close the Case



Figure 3. Open/Close the Case

To open the case, please open the designated right side of the box and take out the device.

To close the case, please place the device in the box from the right side.

3.2. Install a SIM Card

Open the case and ensure the unit is not powered. Put the SIM card into the card holder, as shown below. Take care to align the cut mark. Close the SIM card holder. Close the case.



Figure 4. SIM Card Installation

3.3. Install the Internal Backup Battery



Figure 5. Backup Battery Installation

GL33CG has an internal backup Li-ion battery (4000mAh).

Note: The battery will not be inserted into the battery holder when the device is shipped on an aircraft.

3.4. Power Connection

You can configure GL33CG with Micro USB cable according to your needs.



Figure 6. Typical Power Connection

3.5. Power On

Hold down the power key for 3 seconds, and the device will be powered on.



Figure 7. Power On GL33CG

3.6. Check Working Conditions

When the device is working, you can press the Power Key to confirm the current operating status, the battery quantity and other information about the device through the LED status.

4. Installation Precautions

- Please use an adapter to charge the GL33CG device. The GL33CG battery can't be charged when it is connected to the computer via a USB cable.
- The device can only be powered by the battery, but cannot be powered directly by the USB.