

# **GL33 User Manual**

## **GSM/GPRS/GNSS Tracker**

TRACGL33UM001

Version: 1.00



<b>Document Title</b>	GL33 User Manual
<b>Version</b>	1.00
<b>Date</b>	2022-05-07
<b>Status</b>	Release
<b>Document Control ID</b>	TRACGL33UM001

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## 0. Revision History

Version	Date	Author	Description of Change
1.00	2022-05-07	Eden Cao	Initial

## 1. Introduction

GL33, 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 GPS/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. GL33 Product

Table 1. GL33 Product

Model No.	Technology	Operating Band (MHz)
GL33	GSM	GSM: 850/900/1800/1900 MHz

### 1.2. Reference

Table 2. GL33 Protocol Reference

SN	Document Name	Remark
[1]	GL33 @Track Air Interface Protocol	The air protocol interface between GL33 and backend server.

## 2. Product Overview

### 2.1. Check Parts List

Before starting, check whether all the following items have been included with your GL33. If anything is missing, please contact the supplier.



Figure 1. Appearance of GL33

### 2.2. Parts List

Table 3. Parts List

Name	Picture	Description
GL33 Locator	 <p>97*43.5*20 mm</p>	GSM Tracker
Micro_USB (Optional)		USB Data Cable, which can be used for firmware upgrade and configuration.

## 2.3. LED Description



Figure 2. GL33 LEDs

There are four LEDs on GL33. For details, please see the table below.

Table 4. GL33 LED Description

LED	Device Status	LED Status
CEL (Note 1)	Device is searching GSM network.	Fast flashing
	Device has registered to GSM network.	Slow flashing
	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 GPS signal.	Fast flashing
	GNSS chip has received GPS signal.	ON
	Upgrading the device firmware over the air.	Fast flashing
PWR (Note 3)	Hold down the on/off button for 2 seconds, then turn it on.	Flashing once
	Hold down the on/off button for 2 seconds, then 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 light flashing fast.
	The battery is between 20% and 90%.	The yellow light flashing fast.
	The battery is between 90% and 100%.	The green light flashing fast.
	The battery is 100%.	The green light stays on.

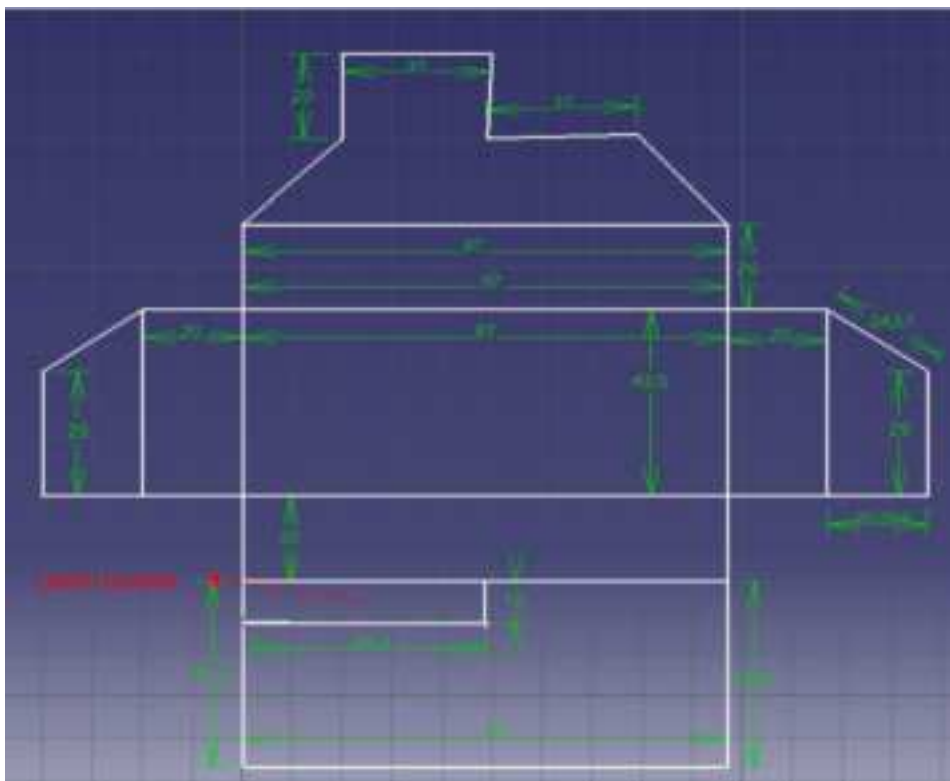
**Note:**

- 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

## 2.4 Shell and label location

Label size: 46.3\*10mm



### 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

GL33 has an internal backup Li-ion battery (2800mAh).

**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 GL33 with Micro USB cable according to your needs.



Figure 6. Typical Power Connection

### 3.5. Power On

Hold down the power key for 2 seconds, and the device will be powered on.



Figure 7. Power On GL33

### 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

- When the USB device is connected to the computer, it can only be configured but cannot be charged. An adapter is required to charge the device.
- The device can only be powered by the battery, but cannot be powered directly by the USB.

- **FCC Warnings:**

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.

- **FCC 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 & your body.

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