# Configuration Guide

## Model: G1

## Version: V1.01
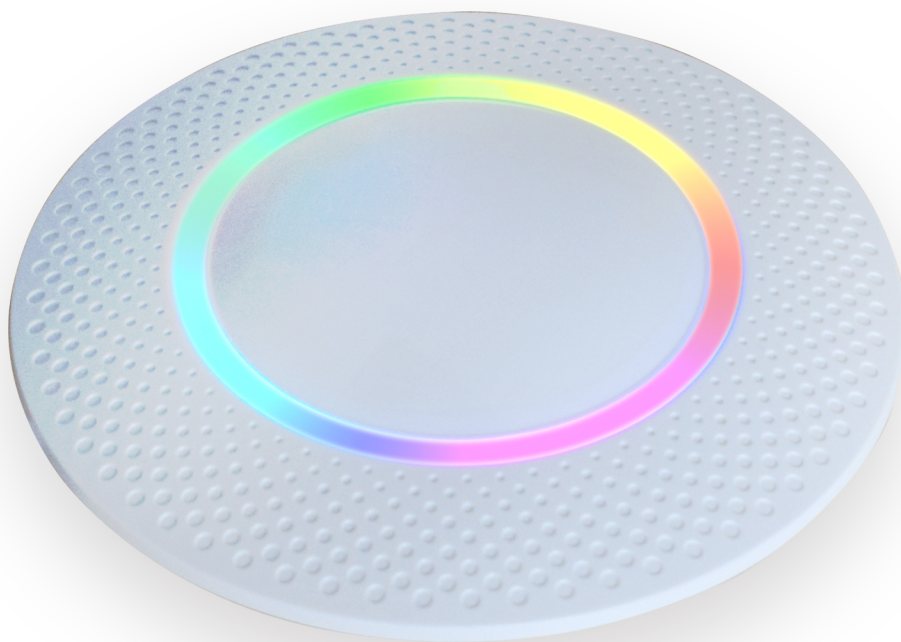
## Overview

G1 BLE & WiFi gateway achieves device configuration through AP mode and providing a simple WEB configuration interface. G1 can support connection of 100 devices in maximum.

## Deploy by using AP Mode

AP mode is only applicable to gateway configuration without influencing the networking method that current gateway is used as client.

AP mode provides WIFI hotspot with SSID name of "GW-XXXXXXXXXXXX", where XXXXXXXXXXXX is hexadecimal capital character corresponding to MAC address. Users may scan and connect via computer or cell phone. In default, no password is needed for connecting this WIFI. For the sake of access control, it is available to modify AP SSID name in WEB configuration interface with setting IP address into the format of 192.168.X.1 (segment of gateway subnet shall not be the same as segment of network switched in route), and then set WIFI connecting password.

After connecting gateway WIFI, please open the link http://192.168.99.1 through computer or cell phone to access configuration interface (see picture below).
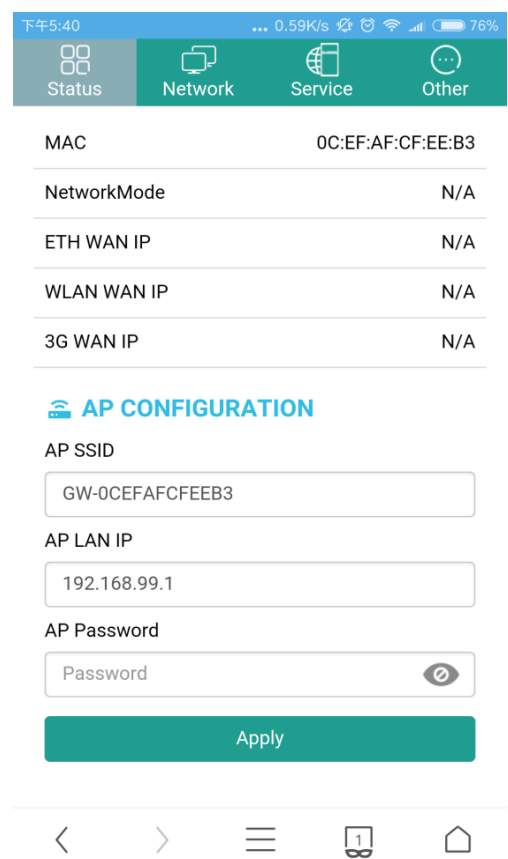


The detailed description of interface fields is as follows:

| Field | Name | Description |
|---|---|---|
| MAC | Gateway MAC | Hexadecimal capital character of gateway MAC address |
| Network Mode | Network Mode | Displays the modes of networking, including router, repeater and 3g; displays N/A when disconnected |
| ETH WAN IP | IP address of Ethernet outer network | IP acquired when connecting client to Ethernet; displays N/A when disconnected |
| WLAN WAN IP | IP address of WLAN outer network | IP acquired when connecting client to WLAN; displays N/A when disconnected |
| 3G WAN IP | IP address of 3G outer network | IP acquired when connecting client to 3G; displays N/A when disconnected |
| AP SSID | AP SSID | SSID of AP mode for configuration |
| AP LAN IP | IP address of AP intranet | IP of AP mode for configuration, the default is 192.168.99.1 |
| AP Password | AP Password | Connecting password of AP mode for configuration |

* If IP: 192.168.X.1, X is the same, it means the same segment of network; otherwise is different segment

## Change Password

In the AP setting column in gateway WEB configuration interface, users may set the connecting password in AP mode (see picture above). It will ask whether to restart gateway after licking "Apply" button (see picture below), the gateway will apply the configuration after restarting.
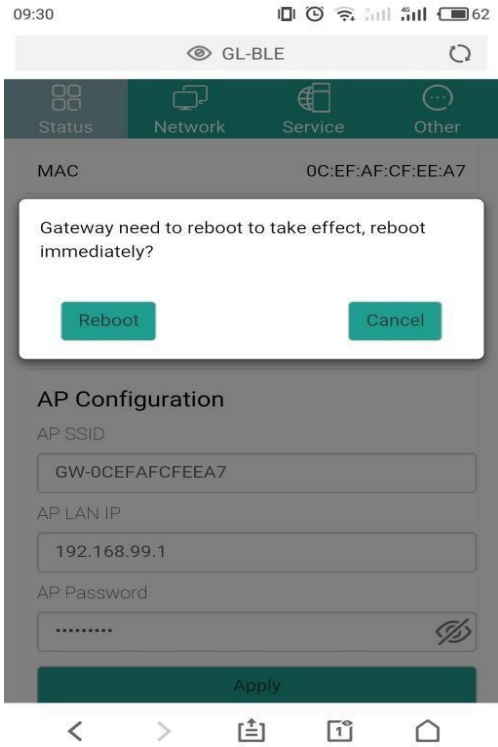
## Network Connection

G1 BLE gateway realizes network connection through three methods (router, repeater, 3G) as shown in following picture.
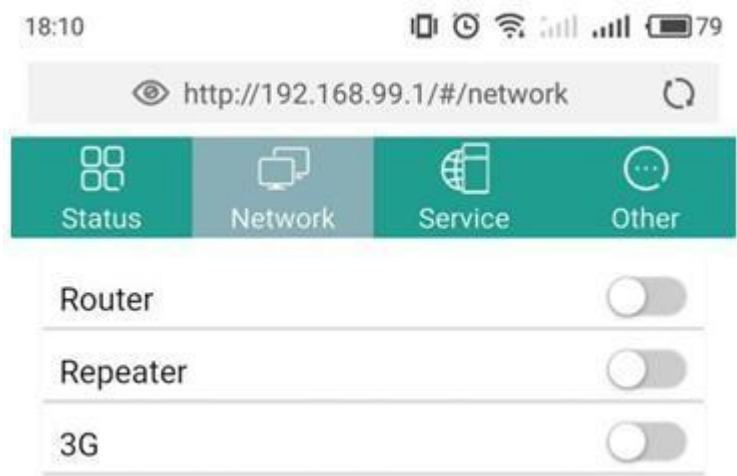


## Router Connection

G1 BLE gateway can also connect to Ethernet directly to realize data communication with server.

It will ask whether to restart gateway after licking "Apply" button in Router setting column as shown in gateway configuration interface, the network setting will take effect after restarting gateway. You may click "Cancel" to restart manually later, or click "Reboot" to restart gateway immediately. G1 BLE gateway connects to superior router reticle; after restarting, it automatically acquires IP address from superior router through DHCP protocol, so as to connect network. See picture below.

The state item in gateway WEB configuration interface will display current connection state and gateway address.
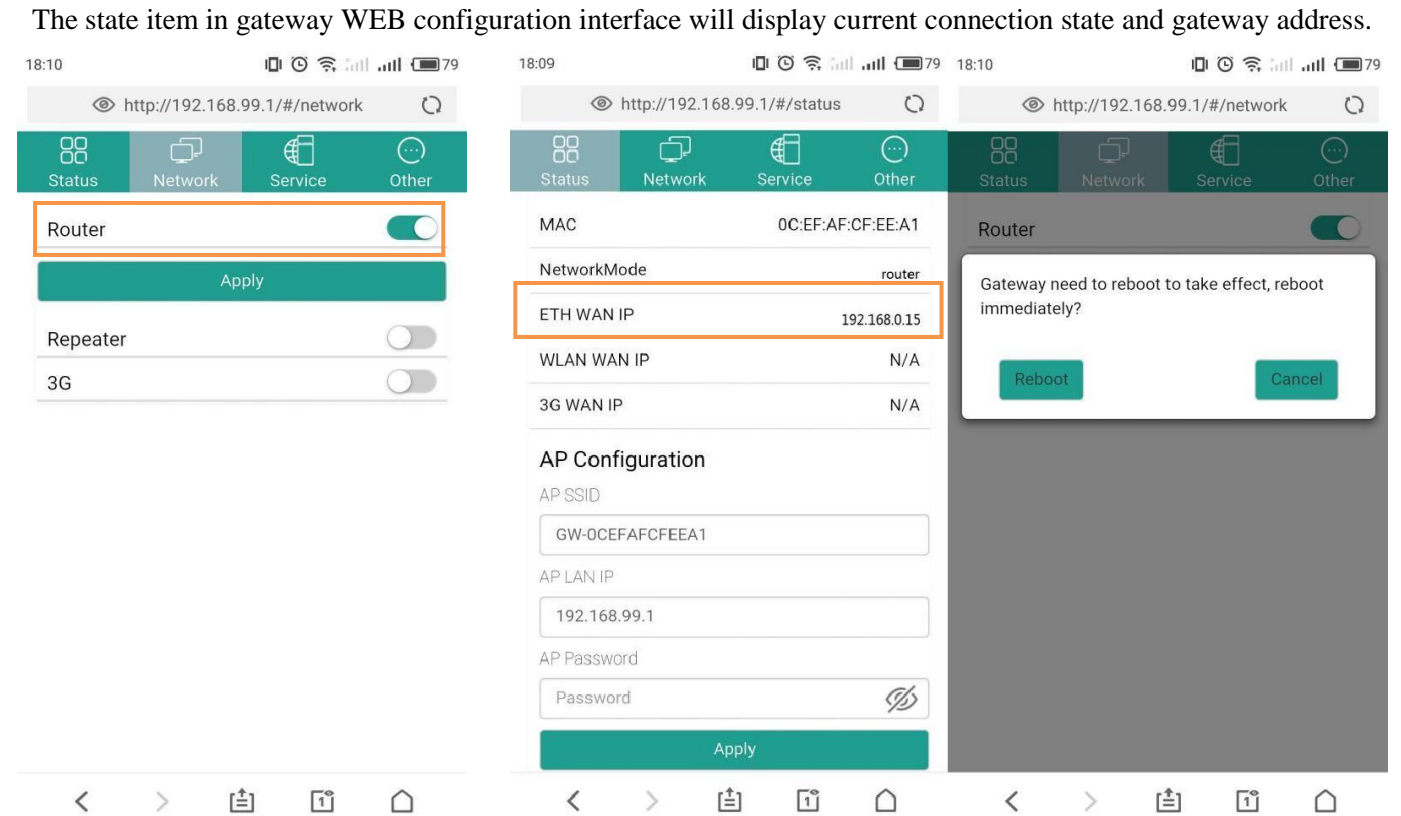
## Repeater Connection

G1 BLE gateway can be connected to WLAN AP as WLAN client to realize the data communication with server. In the Repeater setting column of gateway configuration interface, select the WLAN SSID to be connected to gateway from instantly undated peripheral WLAN list and fill in the password, then click "Connect" (see picture below).

It will ask whether to restart gateway and the network setting takes effect after restarting. You may click "Cancel" to restart manually later, or click "Reboot" to restart gateway immediately. It will connect to designated WLAN upon finishing restarting gateway. If has connected to designated WLAN, the state item will display the IP of WLAN connected; otherwise, it displays N/A.
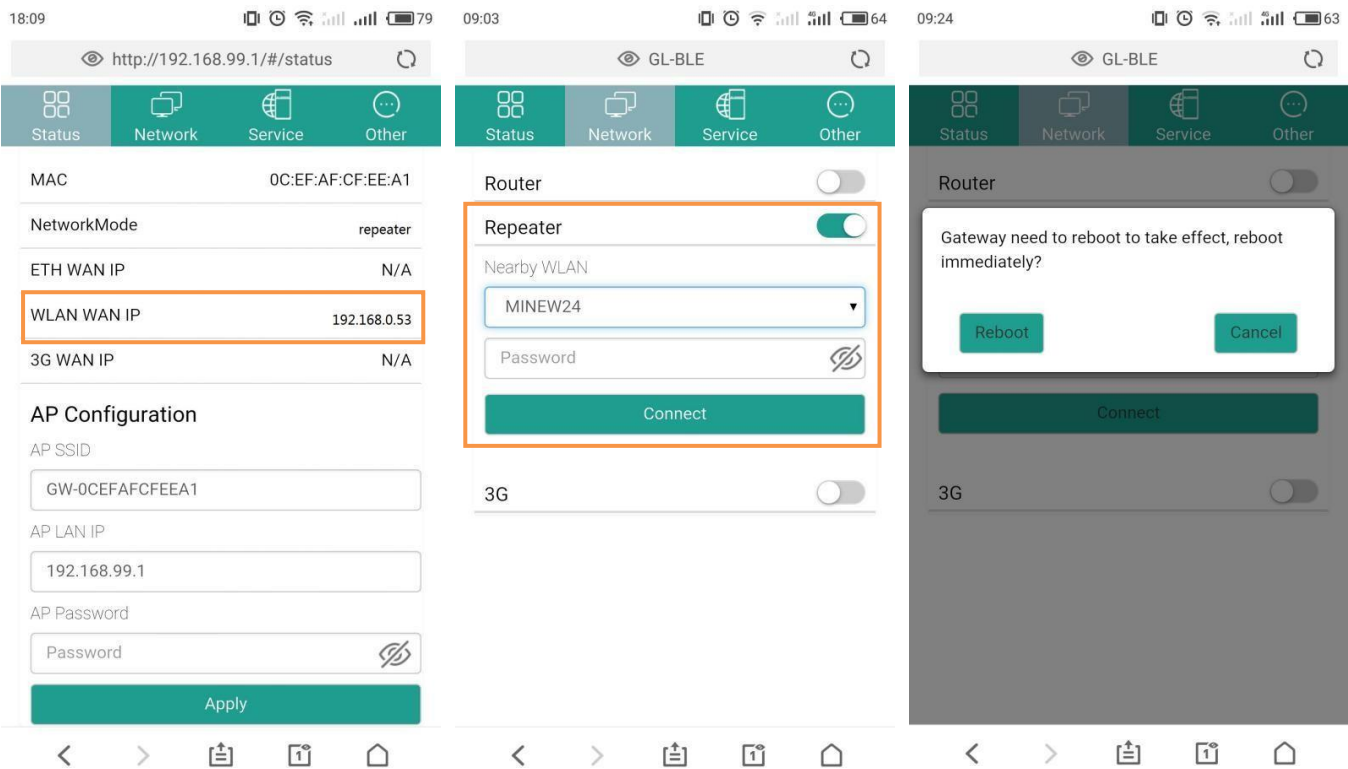


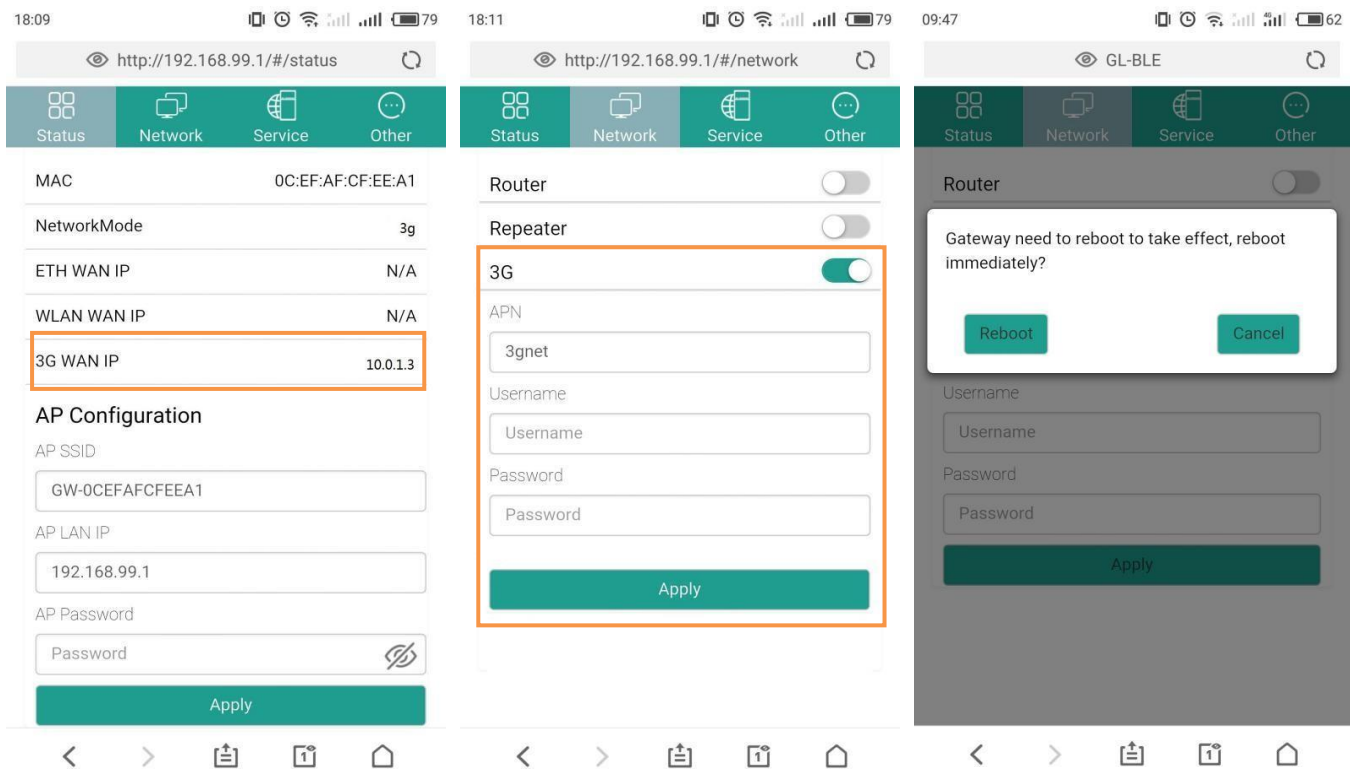The detailed description of interface fields is as follows:

| Field | Name | Description |
|---|---|---|
| Nearby WLAN | Applicable WLAN nearby | Automatically acquire applicable WLAN SSID nearby as client |
| WLAN Password | Password for connecting WLAN | Password for connecting designated WLAN |

## 3G/4G Connection

This connection method is not ready on the G1-B model; it only works on G1-E model.

G1 BLE gateway can also apply optional built-in 3G WCDMA / 4G module to realize data communication with server. The 3G connection column in gateway WEB configuration interface will display current connection state; meanwhile, users may set the parameters such as APN (see picture below). After licking "Apply" button, it will ask

whether to restart gateway and the network setting takes effect after restarting. You may click "Cancel" to restart manually later, or click "Reboot" to restart gateway immediately. The gateway will connect to network automatically through 3G dial-up connection.

The detailed description of interface fields is as follows:

| Field | Name | Description |
|---|---|---|
| APN | APN | Please set according to accessed operator's parameter |
| Username | User Name | Please set according to accessed operator's parameter |
| Password | Password | Please set according to accessed operator's parameter |

## Firmware Upgrade

BLE gateway G1 provides 3 different ways to upgrade the firmware, USB, OTA and Customization.

### 1. USB

Rename the firmware to " thingoo-upgrade.bin", then copy thingoo-upgrade.bin to the root directory of USB-Stick, and last, insert the USB-Stick into gateway device, choose "USB Upgrade" from Upgrade Type list in Others of Web interface, and then click " Upgrade" and " OK" to confirm your upgrade.

If the colorful LED on the top of gateway is turned off, this indicated that the upgrade is running.

Do not cut off the power supply in the process of upgrade, after about 2 minutes; if the LED on the top of gateway is turned on, which indicates that the upgrade is done successfully.

## 2. OTA

After gateway connected with external network, choose "Air Upgrade" from Upgrade Type list in Others of Web interface, and then click "Upgrade" and "OK" to confirm your upgrade.

If the colorful LED on the top of gateway is turned off, this indicated that the upgrade is running.

Do not cut off the power supply in the process of upgrade, after about 2 minutes; if the LED on the top of gateway is turned on, which indicates that the upgrade is done successfully.

## 3. Customization

After gateway connected with external network, choose "Customization Upgrade" from Upgrade Type list in Others of Web interface, fill in the version of customization firmware, and then click "Upgrade", and "OK" to confirm your upgrade.

If the colorful LED on the top of gateway is turned off, this indicated that the upgrade is running.

Do not cut off the power supply in the process of upgrade, after about 2 minutes; if the LED on the top of gateway is turned on, which indicates that the upgrade is done successfully.



USB          OTA          Customization
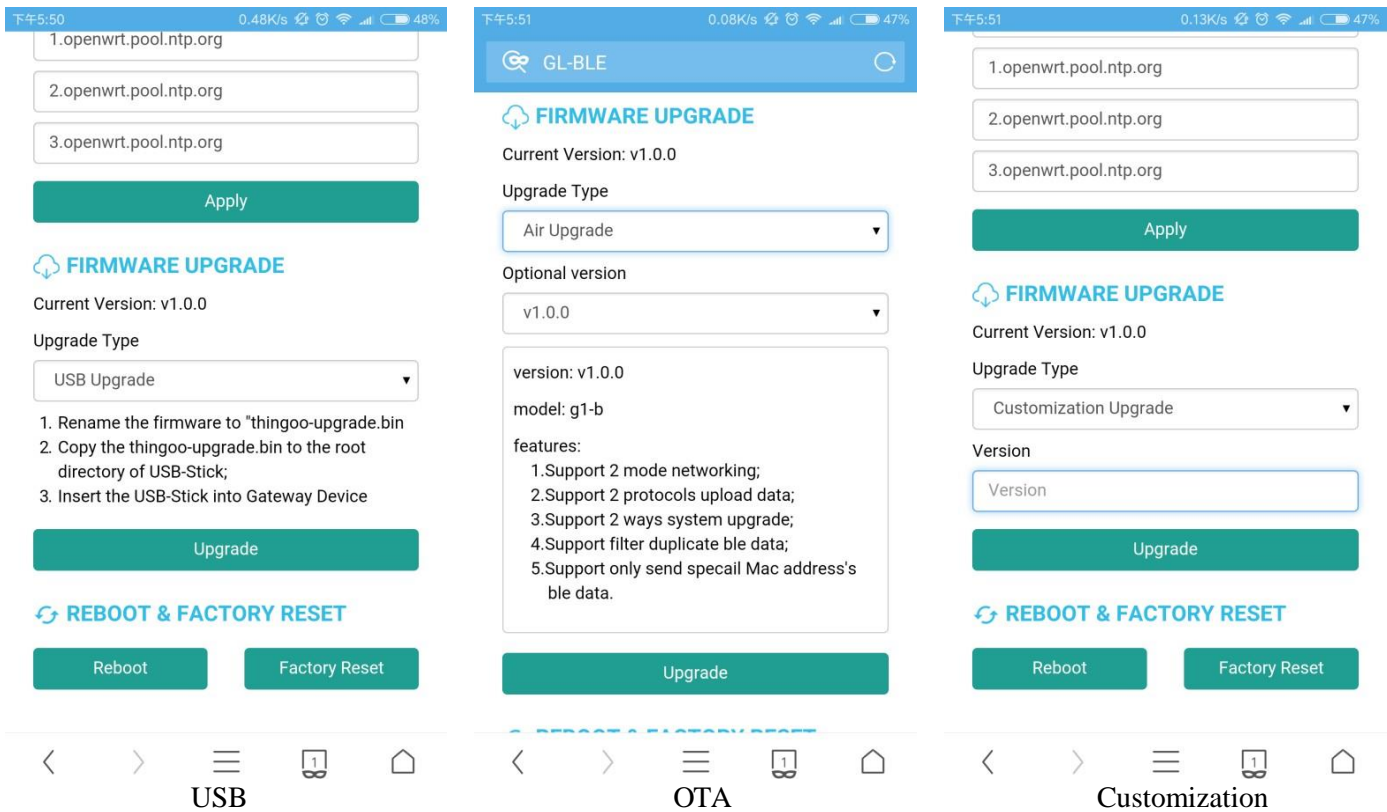
## Device Reset and Reboot

Short press the RESET and loosen with a tip article into the RESET hole, then the device will restart; press RESET for more than 5s to recover the device back to defaults.

The use can also reset / reboot the device by Web interface as below.

Please take care to operate since the previous configuration will disappear after device reset.

## Colorful LED String Setting

In default, the BLE gateway G1 works in normal (breathing status), after 1 minute, the colorful LED string will be closed automatically. You can set the status of colorful LED string by Web interface as below.



Reboot & Reset      Colorful LED String
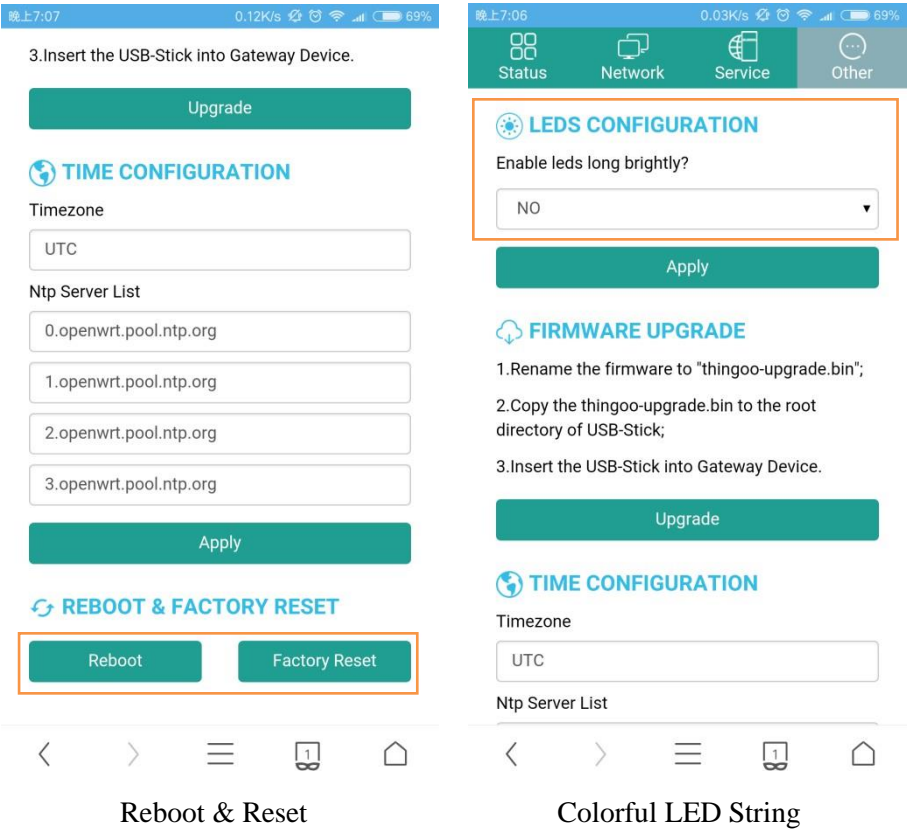
**Notes:** It is subject to any changes without prior notification. MINEW reserves the final right of interpretation.