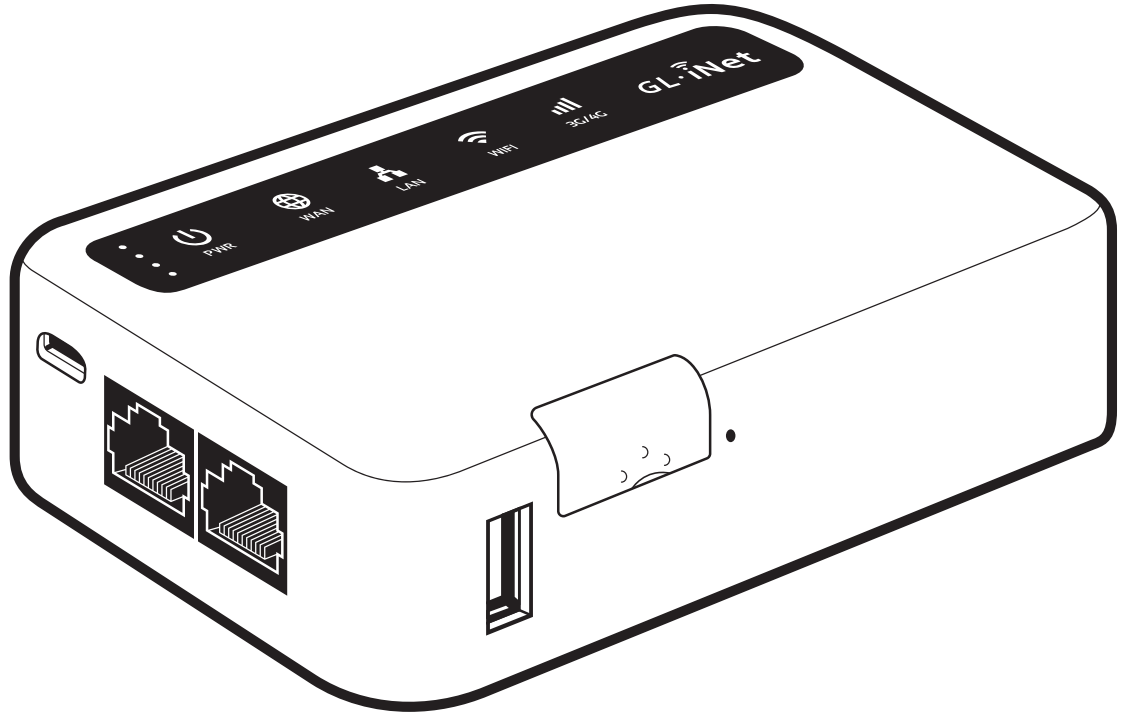



GL·iNet

# 4G SMART ROUTER

## USER GUIDE

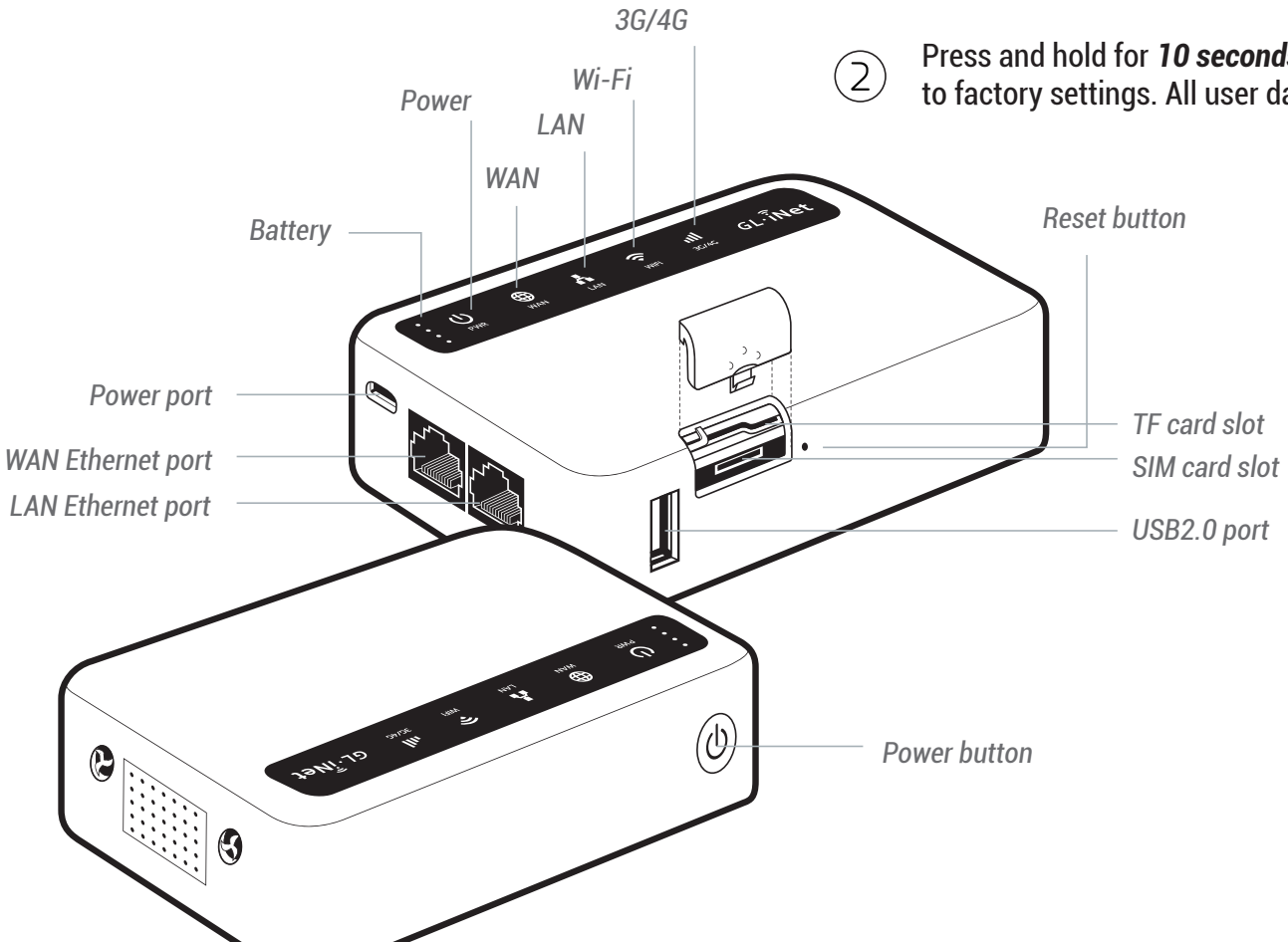
*ver. 20170929.1*

# 1 HARDWARE

## Repair / Reset

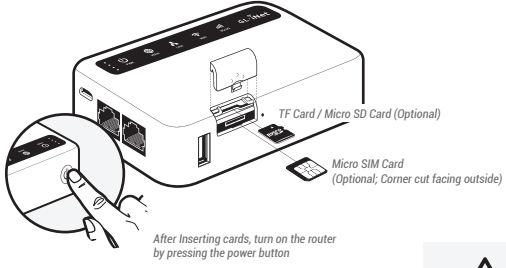
If you cannot access the web-based setup page or cannot connect to the router, you can use a pin to press the ***Reset*** button:

1. Press and hold for ***3 seconds*** then release to repair your network.
2. Press and hold for ***10 seconds*** then release to reset the router to factory settings. All user data will be cleared.



## 1 Insert Cards & Power On

When powered up, your Mi-Fi router will broadcast a Wi-Fi signal with the SSID: ***GL-XXXXX-xxx***.

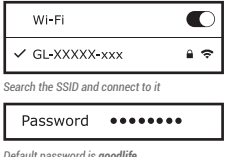



*After Inserting cards, turn on the router by pressing the power button*

(!) *Hot plug is not supported for this router.*

## 2 Connect via Wi-Fi

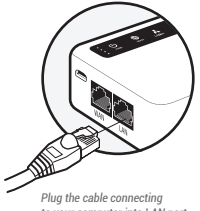
The default Wi-Fi password is ***goodlife,*** and it is also printed on the bottom of the router.




*Search the SSID and connect to it*

*Default password is* ***goodlife***

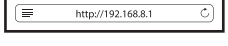
## or Connect via LAN



*Plug the cable connecting to your computer into LAN port*

## 3 Set up GL-MiFi

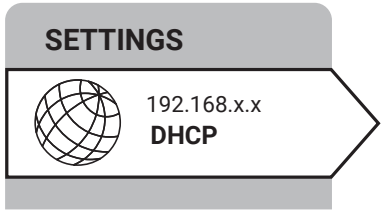
Visit ***http://192.168.8.1*** in your browser to set up your router; start by choosing your preferred language.




*Rechargeable Li-Pol Battery. Always use an original package charger or those with reliable performance.*
*Must be disposed of properly. Keep away from inflammables. May explode or burn if damaged or disposed of in fire.*
*Do not short-circuit. Do not disassemble. Do not expose to temperature higher than 60°C (140°F).*

# 3 INTERNET SETTING

After you have set up your mini router, you will see the main web interface. Find the ***Internet Settings*** icon, then click the ***New Connection*** button. The ***Internet Settings*** window will pop up showing four types of connection methods: ***Cable***, ***Repeater***, ***3G/4G modem*** and ***Tethering***.



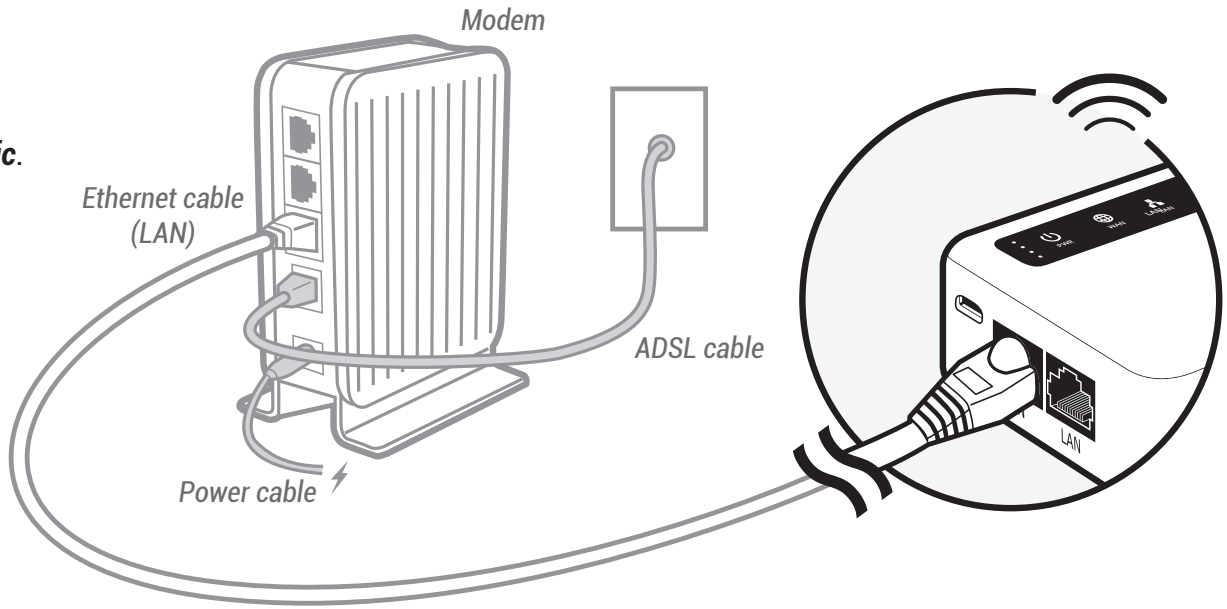

## A Cable (WAN)

### DHCP/Static

The default protocol is ***DHCP***. If your network needs a static setting, you can change it to ***Static***.

### PPPoE

Change to ***PPPoE*** protocol when you need to apply username and password provided by your Internet service provider.



## B Repeater

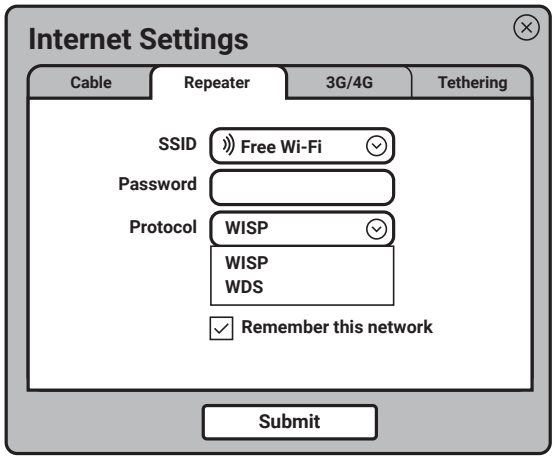
Using ***Repeater*** means connecting your mini router to another existing wireless network, e.g. when you are using Wi-Fi in hotels or other public locations.

Choose ***Repeater*** mode in your ***Internet Settings*** and the mini router will automatically search for SSIDs. Choose a SSID and input the Wi-Fi password.

### Mode

If you want your router to have its own subnet, you need to choose ***WISP*** mode. If you want to extend your existing network by bridging the mini router and your current router wirelessly, you can use ***WDS***.

*You have to make sure your existing Wi-Fi supports WDS. Using WDS only if you know what you are doing.*




### Saved Networks

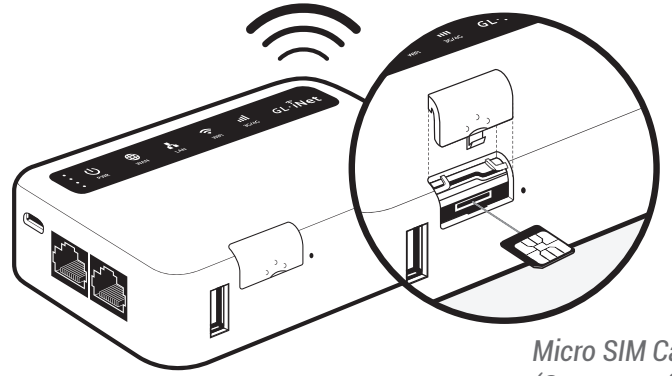
The repeater manager will work once you set up a repeater and it will automatically connect to your available networks. To disable repeater manager, uncheck the box ***Auto scan & reconnect*** on the Internet status page.

You can manage your saved networks by clicking ***Saved Stations***. Delete or choose one from the list to connect.

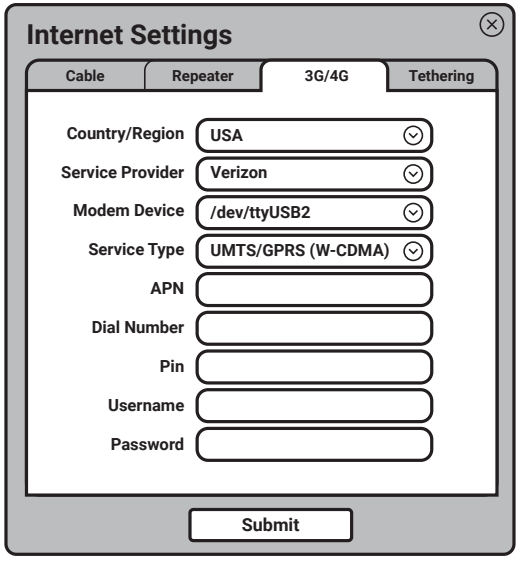
# C 3G/4G Modem

Plug your 3G/4G modem into the USB2.0 port of the router, and it can transfer the 3G/4G signal to Wi-Fi.

*Due to the high power consumption of 3G/4G modems, you need to use a 5V/2A or higher power supply.*



*Micro SIM Card*
*(Corner cut facing outside)*




After choosing your ***Region*** and ***Service Provider***, your carrier settings should be filled automatically. If you find that the setting information is incorrect, you will need to input it manually.

Generally, most modems work in TTY serial mode. You need to find out the correct device, e.g. using /dev/ttyUSB2.

*For a list of compatible 3G/4G modems, check our docs at www.gl-inet.com/docs*

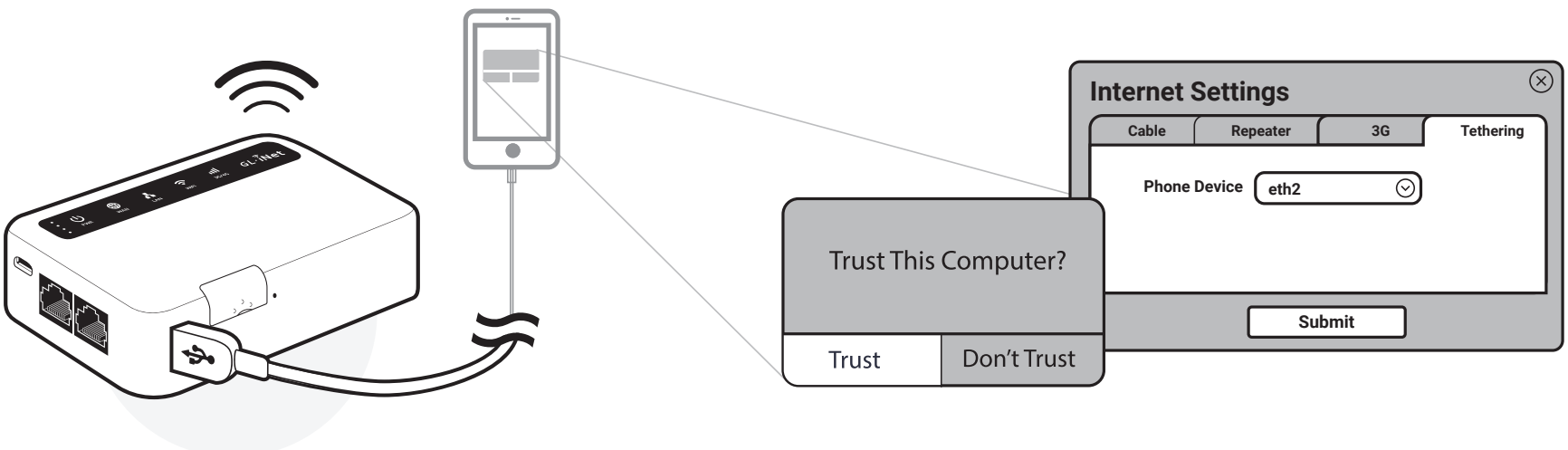
*Some modems work in Tethering (hostless) mode. Please see below:*

# D Tethering / Hostless Modem

Using the USB cable to share network from your smartphone or hostless modem to the mini router is called ***Tethering.***

Plug your phone into the mini router and click ***Trust*** to continue when the message pops up in your smartphone. Then turn on your phone's ***Personal Hotspot***. Choose your phone from the device list and submit your choice.

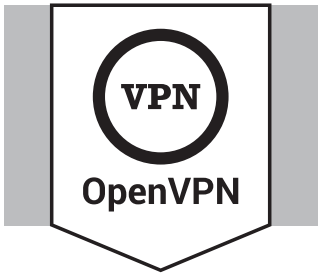
? *A newly-added phone will be named beginning with eth or usb, e.g. The device name could be eth2 or usb0).*



# 4 OPENVPN CLIENT

This router supports OpenVPN client. Using OpenVPN will slow down your Internet speed because of data encryption.

Click the ***OpenVPN*** icon and go to the VPN setting page. The first time it will ask you to upload your OpenVPN client configuration (ovpn files). Usually, you can download it from your OpenVPN service provider's website or console. Consult your service provider for more details.

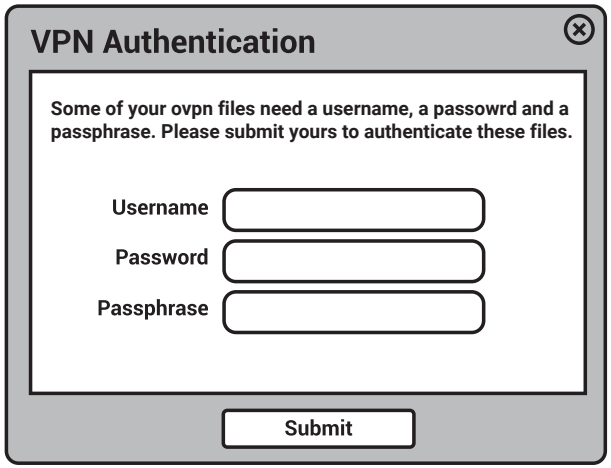



## 1 Upload OpenVPN configurations

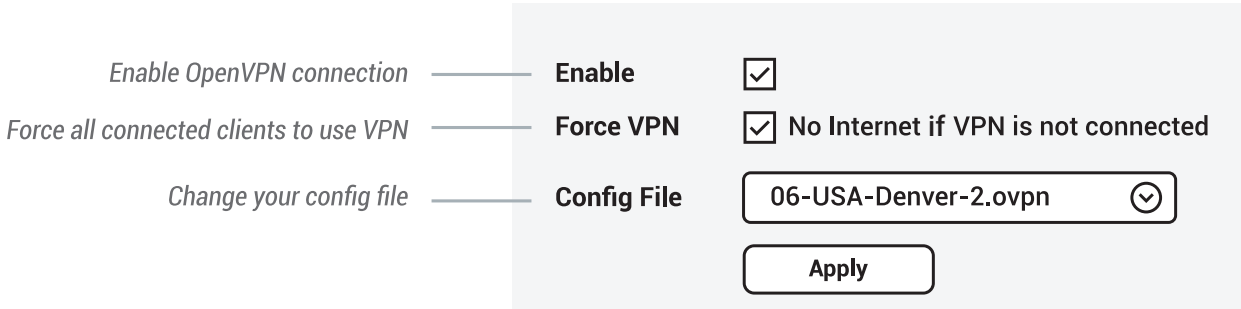
Click here to select files or drag and drop them here: .ovpn .zip .tar .gz

After uploading the ovpn files, the router will check them. If you are prompted for a username and password, or a private key passphrase, or both, a window for ***VPN Authentication*** will pop up so that you can ***Submit*** these information for all files you upload.

This may not be necessary for some service providers.

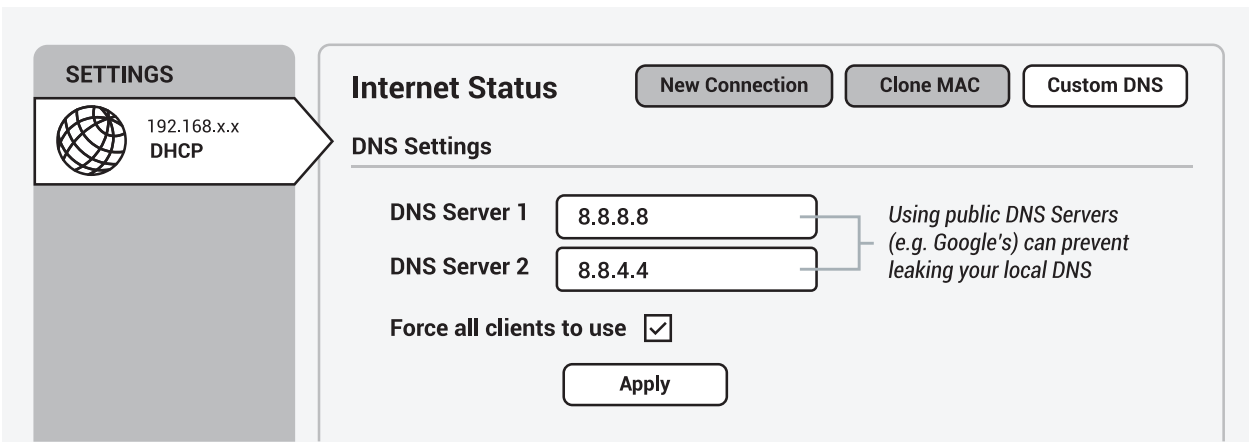


## 2 Connect to OpenVPN




Now you can choose from a list of configurations and apply your choice to connect as OpenVPN client.

To protect against DNS leaks, you must customize your DNS servers. You can enable ***Force all clients*** to override the DNS server settings for your client devices. To customize your DNS server, go to ***Internet Settings*** > ***Custom DNS***




*To get more detailed instructions or information about compatible VPN service providers, please visit http://gl-inet.com/docs/*

# 5 DIY GUIDANCE

**OpenWrt Firmware**

Our firmware is developed based on OpenWrt and you can download all the firmwares from our website: ***www.gl-inet.com/firmware***. Find the available firmwares from the folder according to your device model, and they are located in different sub-folders:

- ***v1*** folder contains release versions. It should be the default firmware shipped with the router.
- ***clean*** folder contains clean versions of OpenWrt firmware, with ***Luci*** software only. By default, Wi-Fi is disabled and you need to enable it in ***Luci***.
- ***tor*** folder contains Tor firmware for the device.

**DDWRT Firmware**

GL-AR150 has an official DDWRT firmware which you can download from DDWRT website. DDWRT firmware is not available for other GL models. For further information, please visit ***https://www.dd-wrt.com***

**Tor Firmware**

Each model has its own Tor firmware which you need to flash to the router. It is quite easy and you can refer to our online tutorial at ***www.gl-inet.com/docs/openwrt/tor/***

**Compile Your Own Firmware**

If you have sufficient technical skills, you can compile your own firmware and flash to the router. Please refer to our online docs at ***github.com/domino-team/openwrt-cc***

**Uboot Failsafe**

If you flash the wrong firmware, you would brick your router. But you still can recover it by using uboot failsafe. Please refer to the guide at ***www.gl-inet.com/docs/diy/uboot/***

*Using above DIY features might have a risk of bricking your router. We have no obligation to provide support, maintenance, upgrades, modifications, or new releases on DIY features. We reserve the rights of interpretation on above DIY contents without further announcement.*

# 6 SPEC

| | |
|---|---|
| **CPU** | Atheros AR9331, @400MHz |
| **Memory** | DDR2 64MB / FLASH 16MB |
| **Interfaces** | 1 WAN, 1LAN, 1 USB2.0, 1 micro USB (power),<br>SIM card slot, MicroSD card slot, Antenna SMA mount holes |
| **Frequency** | 2.4GHz |
| **Transmission rate** | 150Mbps |
| **Tx power (maximum)** | 18dBm |
| **Protocol** | 802.11 b/g/n |
| **Power supply** | 5V⎓ 2A |
| **Power consumption** | <3W |
| **Dimension, Weight** | 105*72*27mm, 170g |
| **Working Temperature** | 0 - 45°C (32 - 113°F) |

## FREQUENCY BANDS

| | |
|---|---|
| **EC25-V** | FDD LTE: B4/B13 |
| **EC25-J** | FDD LTE: B1/B3/B8/B18/B19/B26/B41<br>WCDMA: B1/B6/B8/B19 |
| **EC25-A** | FDD LTE: B2/B4/B12<br>WCDMA: B2/B4/B5 |
| **EC25-AU** | FDD LTE: B1/B3/B4/B5/B7/B8/B28<br>TDD LTE: B40<br>WCDMA: B1/B2/B5/B8<br>GSM: 800/900/1800/1900MHz |
| **EC25-E** | FDD LTE: B1/B3/B5/B7/B8/B20<br>TDD LTE: B38/B40/B41<br>WCDMA: B1/B5/B8<br>GSM: 900/1800MHz |

# 7 SUPPORT

## Warranty

- Each router has ***one-year warranty.*** Accessories have ***three-month warranty.***
- Please use standard USB power adapter, 5V/2A.
- Any damage to the router caused by not following the instructions will render this warranty null and void.
- Any damage to the router caused by modifying the PCB, components or case will render this warranty null and void.
- Issues caused by the use of third-party firmware may not get official support from us.
- Any damage to the router caused by inappropriate use, e.g. inappropriate voltage input, high temperature, dropping in the water or on the ground will render this warranty null and void.
- Pictures on the instructions are only for reference. We reserve the right to change or modify these materials without further notice.

## Technical Supports & General Enquiry

- For more detailed and updated instructions, please visit our website ***www.gl-inet.com/docs***
- For further questions, you can get help from the following ways:
    1. Send us an email at ***service@gl-inet.com***
    2. Open a ticket at ***www.gl-inet.com/tickets***
    3. Ask in our forum ***www.gl-inet.com/forums***
    4. Ask in other forums e.g. ***OpenWrt, LEDE or other professional websites***

- ***Hong Kong Office***
  GL Technologies (Hong Kong) Limited
  210D Enterprise Place, 5W Science Park, Hong Kong

- ***Shenzhen Office***
  深圳市广联智通科技有限公司
  深圳市宝安区石岩街道松白路创维数码大厦305-306室
  ( +86-0755-86606126 )

**FCC ID: 2AFIW-MIFIV1**

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. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Note 1: 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  articular 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.

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The Equipment named above is confirmed to comply with the requirements setout in the European Council Directive on the Approximation of the Laws of the Member States relating to RED (2014/53/EU). The equipment passed the test which was performed according to the following European standards:
EN 300 328 V2.1.1; EN 301 893 V2.1.0; EN 300 440 V2.1.1
EN 301 489-1 V2.1.1; EN 301 489-17 V3.1.1
IEC/EN 62368-1:2014 (Second Edition)
IEC/EN 60065:2014 (Eighth Edition)
EN 60950-1:2006 (Second Edition) + A1:2010 + A2:2013
This product uses WiFi
Operating Frequencies: 2412MHz～2462MHz; 2422MHz～2452MHz;
RF Exposure: The highest measured 1g (simultaneous transmission) Body SAR value is 0.26 W/Kg.
Manufacturer: GL Technologies (Hong Kong) Limited, Unit 210D, 2/F, Enterprise Place Hong Kong Science Park, Shatin, N.T,

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