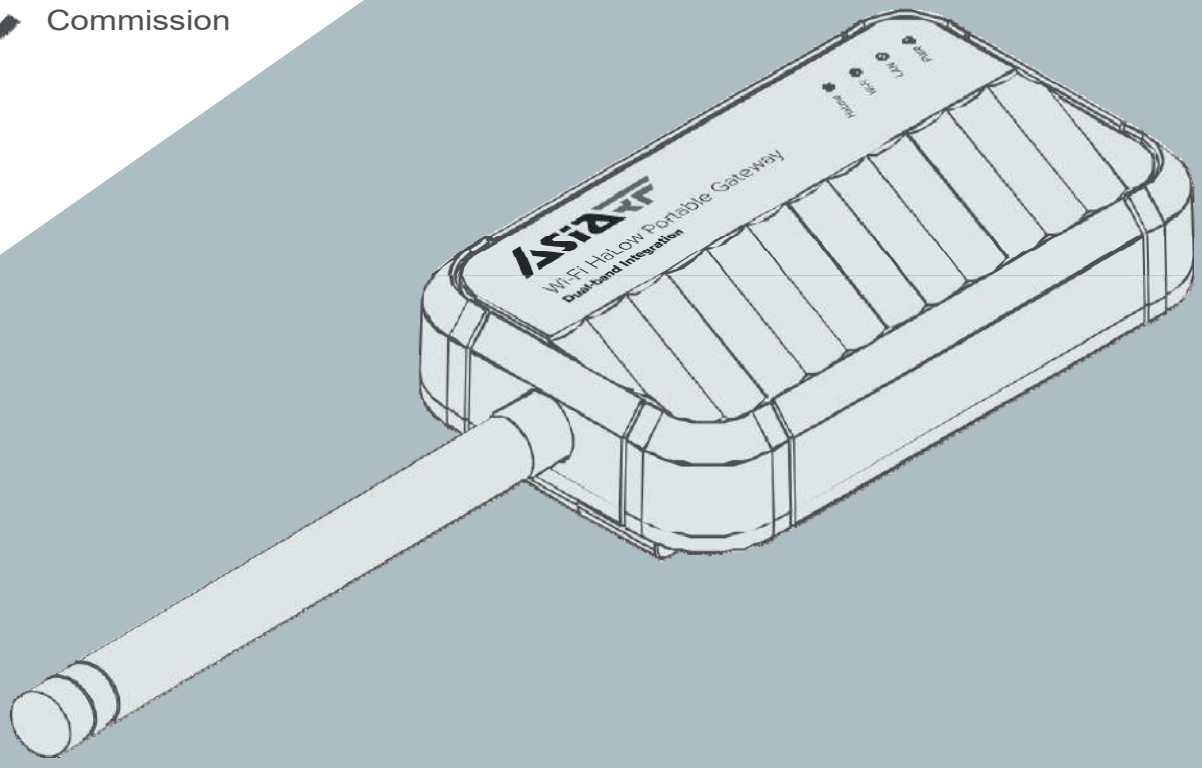
Wi-Fi HaLow Portable Gateway

PN: ARFHL-UM

Federal Communications Commission



HaLow + 2.4 GHz

IEEE 802.11ah and IEEE 802.11b/g/n
Dual-band Integration

User Manual V.2

http://www.asiarf.com/

CONTENT

01 Getting to Know Your HaLow Gateway - ARFHL-UM

1.1 **Package Contents** P2
1.2 **Your HaLow Gateway** P3
1.3 **LED Indicators** P3
1.4 **Long range, Low power Wi-Fi® for IoT** P4
1.5 **Network Typology** P4

02 Wi-Fi HaLow Bridge Mode Settings P5

2.1 **Connect to your Wi-Fi HaLow Gateway as AP** P6
2.2 **Bridge Mode Access Point (AP) Setting** P8
2.3 **Managing Bridge Mode HaLow Gateways** P11
2.4 **Bridge Mode Client (CLI) Setting** P14
2.5 **2.4GHz Wi-Fi Managing** P17
2.6 **Switching the Bridge Mode to Router Mode** P20

03 Wi-Fi HaLow Router Mode Settings P21

3.1 **Connect to your Wi-Fi HaLow Gateway as AP** P22
3.2 **Router Mode Access Point (AP) Setting** P24
3.3 **Router Mode Client (CLI) Setting** P27
3.4 **2.4GHz Wi-Fi Managing** P27
3.5 **Switching the Router Mode to Bridge Mode** P27

** The settings for sections 3.3 and 3.4 are identical to those in Bridge Mode.*

04 Firmware Upgrade

4.1 **First, confirm your current firmware version** P28
4.2 **Upgrade your Firmware version** P30

05 FAQ & Troubleshooting

5.1 Issue: **System Reboot and Reset (Return to factory default)** P33
5.2 Issue: **Unable to access the settings webpage** P33
5.3 Issue: **The AP SSID does not appear in the scan list** P34

** Compliance Statements.* P35

Getting to Know Your HaLow Gateway - ARFHL-UM

1.1 Package Contents

Checklist for HaLow Gateway Setup:

- ☐ A. **HaLow Portable Gateway ARFHL-UM x 1**
- ☐ B. **Wi-Fi HaLow Antenna x 1**
- ☐ C. **USB Type-A to Type-C Cable x 1**

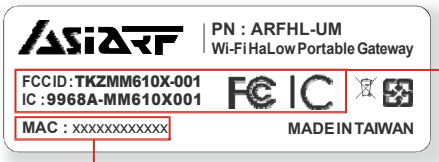
Please keep the original packaging.

A. 

B. 

C.

To identify the MAC ID and regulatory certification information, check the label located on the back of the Wi-Fi HaLow Gateway.



Regulatory Certification Info

Depending on the product's regulatory compliance, relevant information will be provided accordingly.

MAC ID

The product cannot be placed close to the human body (ex. cannot be placed in pockets,backpacks, or clipped to belts)

Notes:

- *Please keep the original packaging in case you need to return the product due to issues; it will make the return and exchange process smoother.*
- *The MAC address information is printed on the label on the back of the gateway.*
- *If any of the accessories listed above are damaged or missing, please contact AsiaRF technical support as soon as possible. You can refer to the AsiaRF technical support hotline: +886 2 2940-7880 *18 or contact to our sales team: sales@asiarf.com*

1.2 Your HaLow Gateway

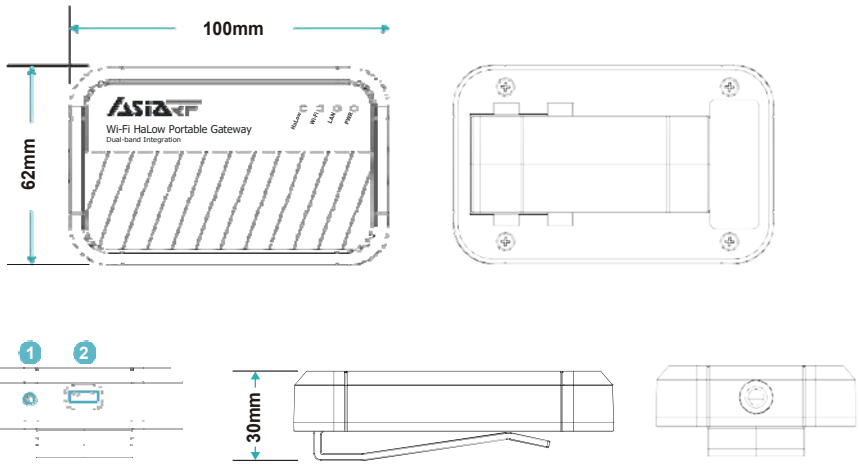
ARFHL-UM is a Wi-Fi HaLow CERTIFIED, small-size 10 (L) x 6 (W) x 1.9 (H) cm, Dual-Band Wi-Fi 2.4GHz and Wi-Fi HaLow portable gateway, ideal for warehouses, factories, retail stores, and other large campus environments.

Wi-Fi HaLow CERTIFIED Gatewat

HaLow + 2.4 GHz Dual-band Integration

Multi-national Regulation Certified

1 RESET 2 USB



How to remove your "back clip"

1.3 LED Indicators

	NAME	STATUS	INDICATION
	HaLow (Green)	ON/Off/Flashing	Connected / Disconnected / Speedy: Data Transfer Slowly: System Booting
	Wi-Fi (Orange)	ON/Off/Flashing	Connected / Disconnected / Speedy: Data Transfer Slowly: System Booting
	LAN/Eth (Green)	ON/Off/Flashing	Connected / Disconnected / Speedy: Data Transfer Slowly: System Booting
	PWR (Blue)	ON /Off	Power is on / Power is off

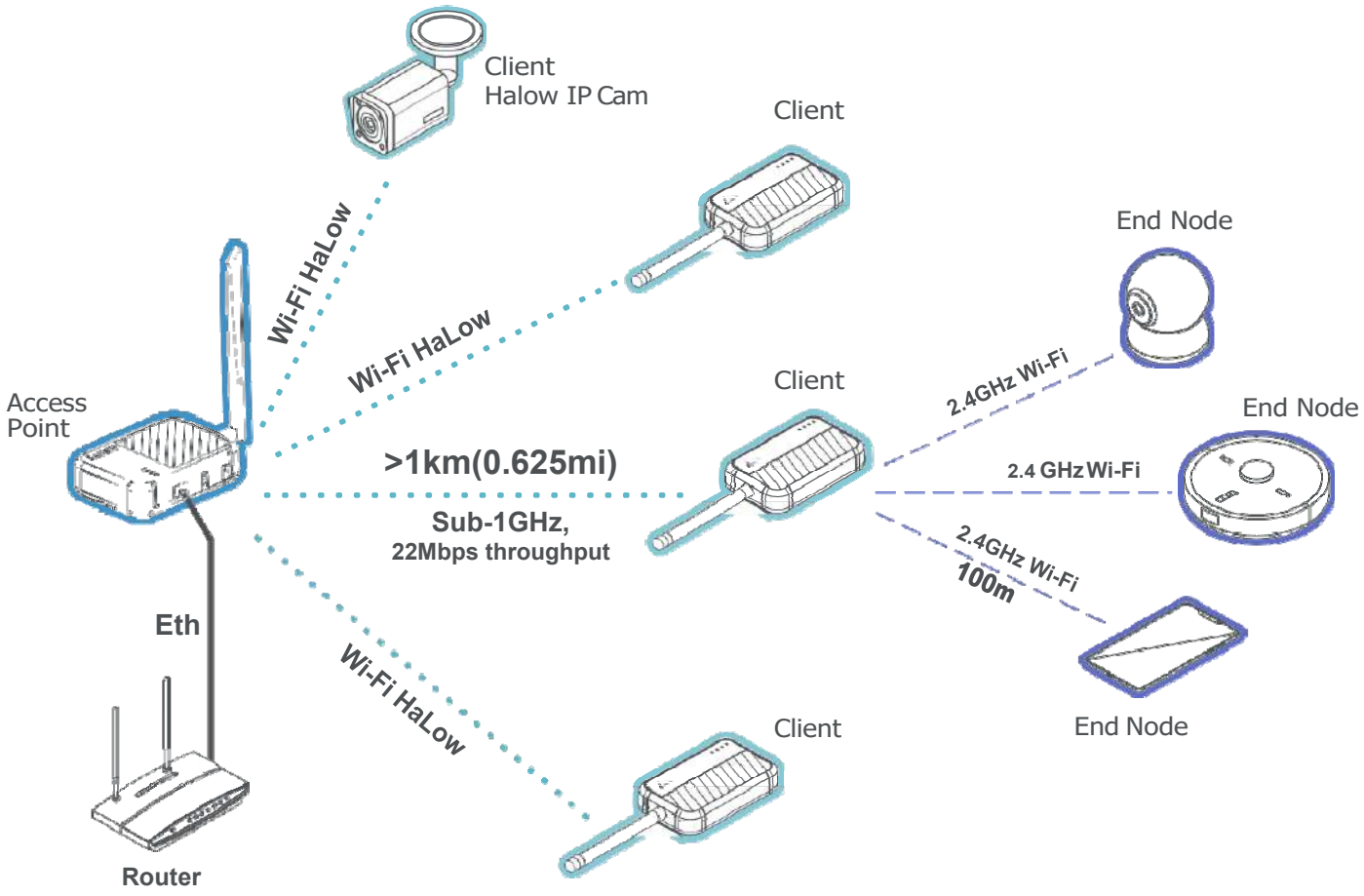
1.4 Long range, Low power Wi-Fi® for IoT

Wi-Fi HaLow, is a sub-1GHz technology designed for IoT, **offering extended range and efficient power usage. Ideal for industrial application and remote areas, it ensures stable connections in tough settings and coexists with existing Wi-Fi, providing secure, high-performance connectivity for diverse IoT applications.**

Long range : Sub-1GHz | More Connections : > 8,000 nodes | Extended Range : 100 times coverage | Greater Penetration : 10 times greater

1.5 Network Topology

The Wi-Fi HaLow IoT Gateway supports both Wi-Fi 2.4GHz and HaLow bands, capable of connecting up to 8191 nodes through HaLow**. Using a star topology, it can place multiple client nodes within a 1 km radius of the access point (AP) center, ensuring comprehensive coverage. Additionally, it offers internet access for personal mobile devices via Wi-Fi 2.4GHz, making it especially suitable for IoT applications in large spaces and high-rise buildings.**



Wi-Fi HaLow Bridge Mode Setup

To optimize the performance of the Wi-Fi HaLow Portable Gateway ARFHL-UM, it's advisable to set it up as a 'Client' role. Therefore, you will need to have a HaLow Gateway that is capable of acting as an 'AP' (Access Point). **Suitable examples include the Wi-Fi HaLow MESH Gateway: ARFHL-AP or the Wi-Fi HaLow Outdoor Gateway: ARFHL-OD.**

Note: All AP gateway illustrations in this manual are based on the ARFHL-AP as an example.

This section offers guidance on configuring your AP Gateway. Should your AP Gateway already be configured, feel free to proceed directly to Section 2.4.

Recommended as the AP role Wi-Fi HaLow Gateways

Wi-Fi HaLow Gateway

PN: ARFHL-AP

Scan this QRcode for more details of ARFHL-AP

Wi-Fi HaLow Outdoor Gateway

PN: ARFHL-OD

Scan this QRcode for more details of ARFHL-OD

21 Connect to your Wi-Fi HaLow Gateway as AP

1. Powering On and Connecting to Network:

   · **Begin by plugging the DC adapter into the ARFHL-AP to turn it on.**

   · **Next, connect an Ethernet cable between the router and the ARFHL-AP.**

2. Understanding the LED Indicators:

   a. PWR LED : **Once you've connected the DC plug, the PWR (Power) LED will light up continuously, indicating that the device is powered on.**

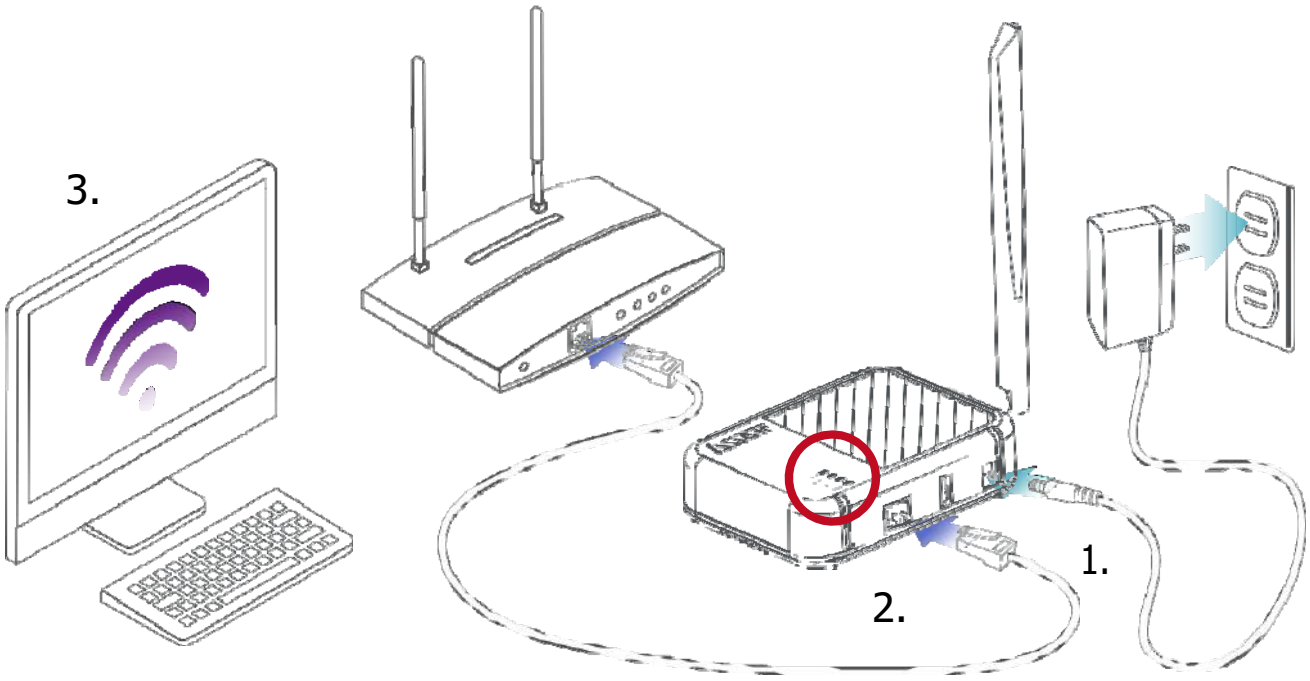
   b. LAN LED : **Shortly after, the LAN LED will briefly illuminate and then turn off. This is normal behavior.**

   c. HaLow LED : **Following the LAN LED, the HaLow LED will start blinking. On the device's first startup, this blinking lasts about 200 seconds, signaling that the device is initializing. For subsequent startups, the blinking duration reduces to around 30 seconds.**

   d. Wi-Fi LED : **Once the HaLow LED stops blinking, the Wi-Fi LED stays on, meaning the system has fully booted and is ready for use.**

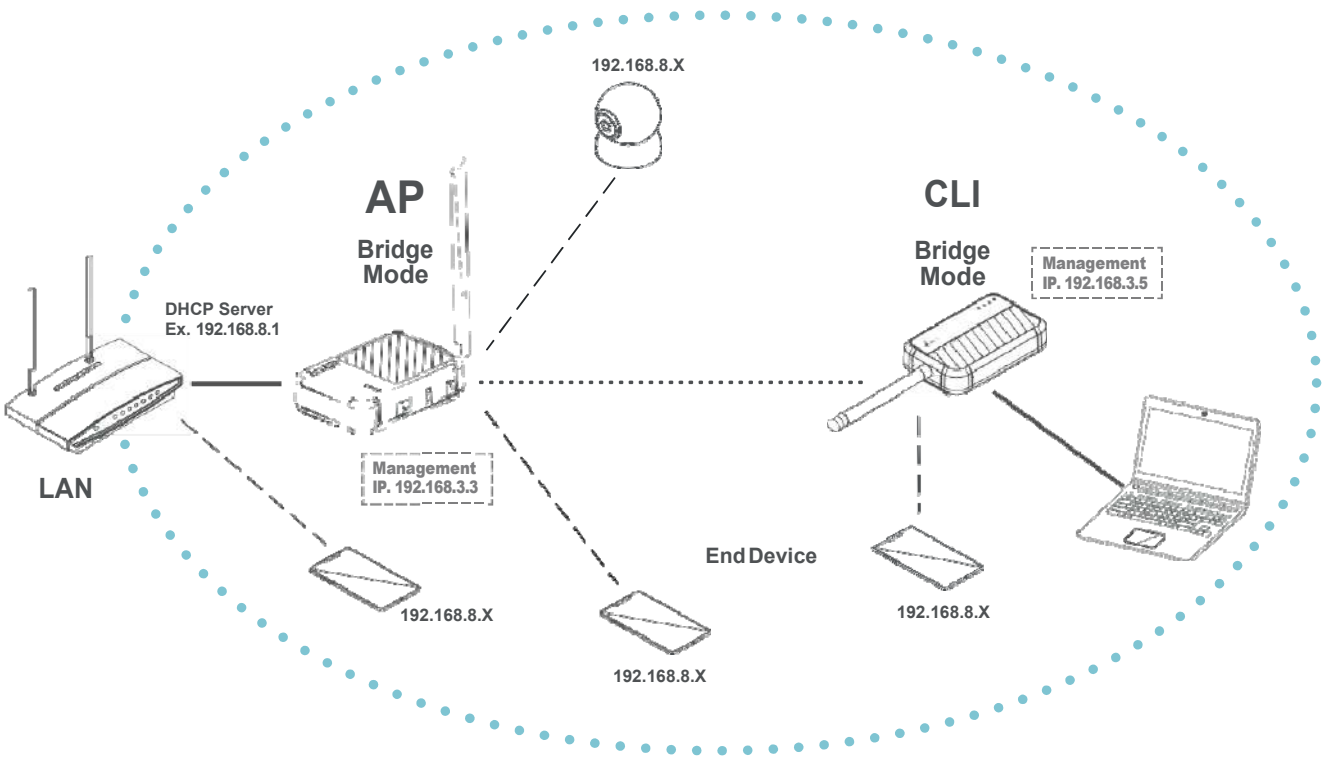
3. Connecting and Configuring:

   With the system ready, connect a PC or mobile device to the router and AP7688-WHM using Wi-Fi. This connection allows you to configure the gateway and start using the network services provided by the AP7688-WHM.



Bridge Mode scenario

Single Network Segment



In Bridge Mode scenario, **the use of HaLow is transparent to the rest of the devices on the network. The HaLow connection serves as a means to provide a virtual Ethernet link between two points where running a physical cable may not be feasible.**

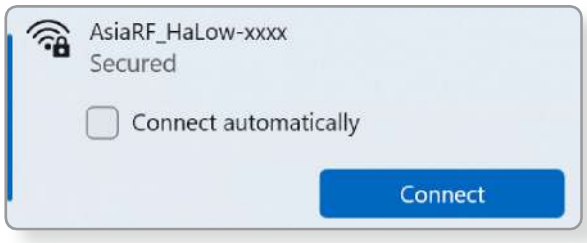
The advantage of this approach **is that it offers a convenient way to expand your network coverage or connect networks in two separate buildings without isolating them into smaller sub-networks, especially when employing bridge mode.**

Notes:

- ***In the bridge mode of a HaLow Gateways, DHCP services are not available for IP address allocation. This necessitates manual configuration of IP addresses for devices to ensure they are on the same network segment for access. For detailed configuration methods, please see section 2.3 Managing Bridge Mode HaLow Gateways.***

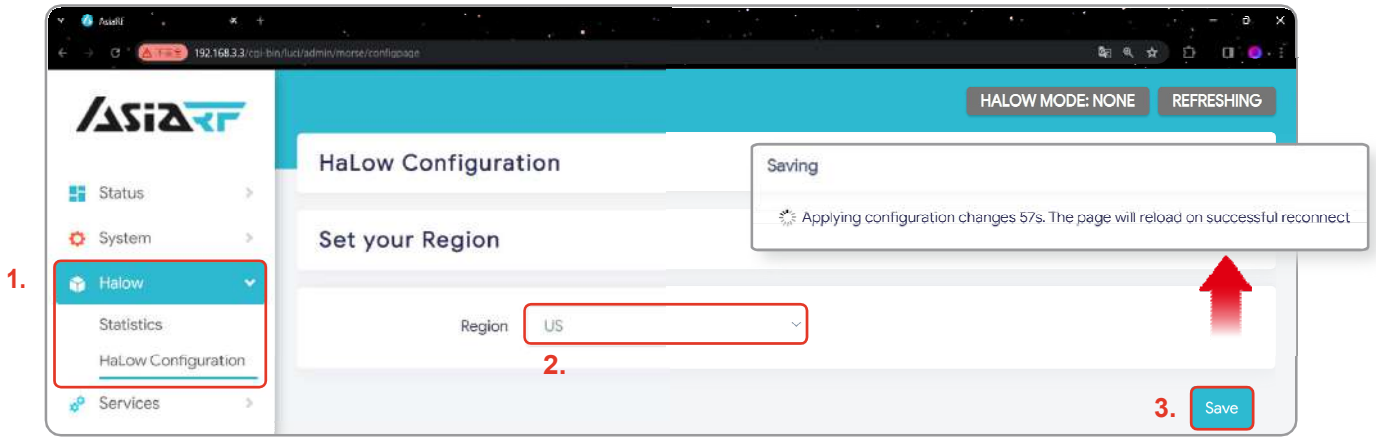
22 Bridge Mode Access Point (AP) Setting

Use PC or mobile phone connect to the Wi-Fi.
(SSID: AsiaRF_Halow-xxxx, Password: 12345678).

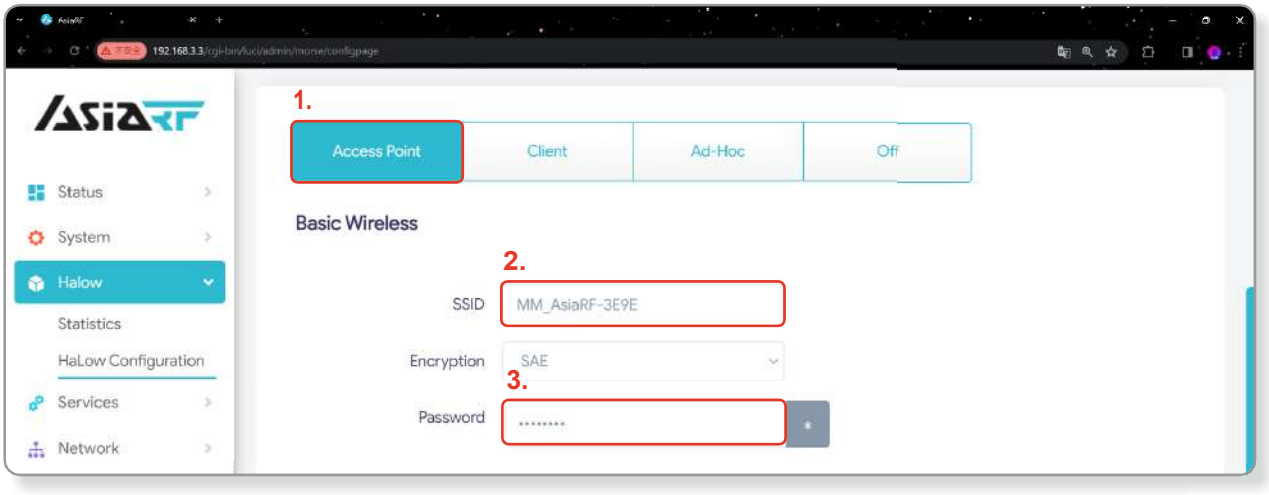


Open your browser and enter "192.168.3.3", the default factory IP address, into the address bar. Click on "Login" (there is no password by default). If you encounter issues accessing the settings webpage, refer to FAQ & Troubleshooting 5.2 for assistance.

Click on 'HaLow Configuration' in the 'HaLow' tab, then set your 'Region' and click 'Save'.

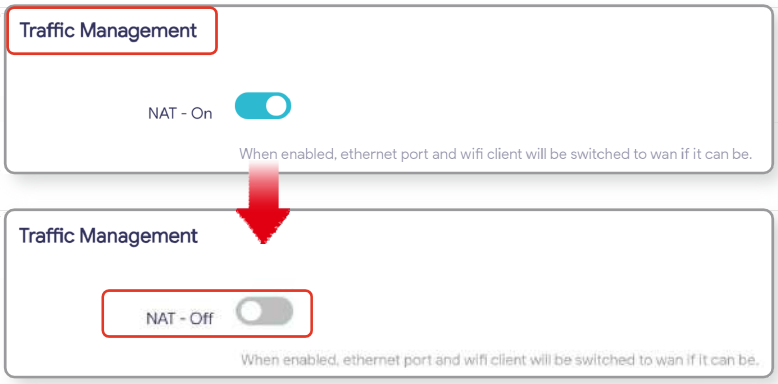


Press the 'Access Point' button, and then enter your 'Wi-Fi HaLow SSID' and 'Password'.



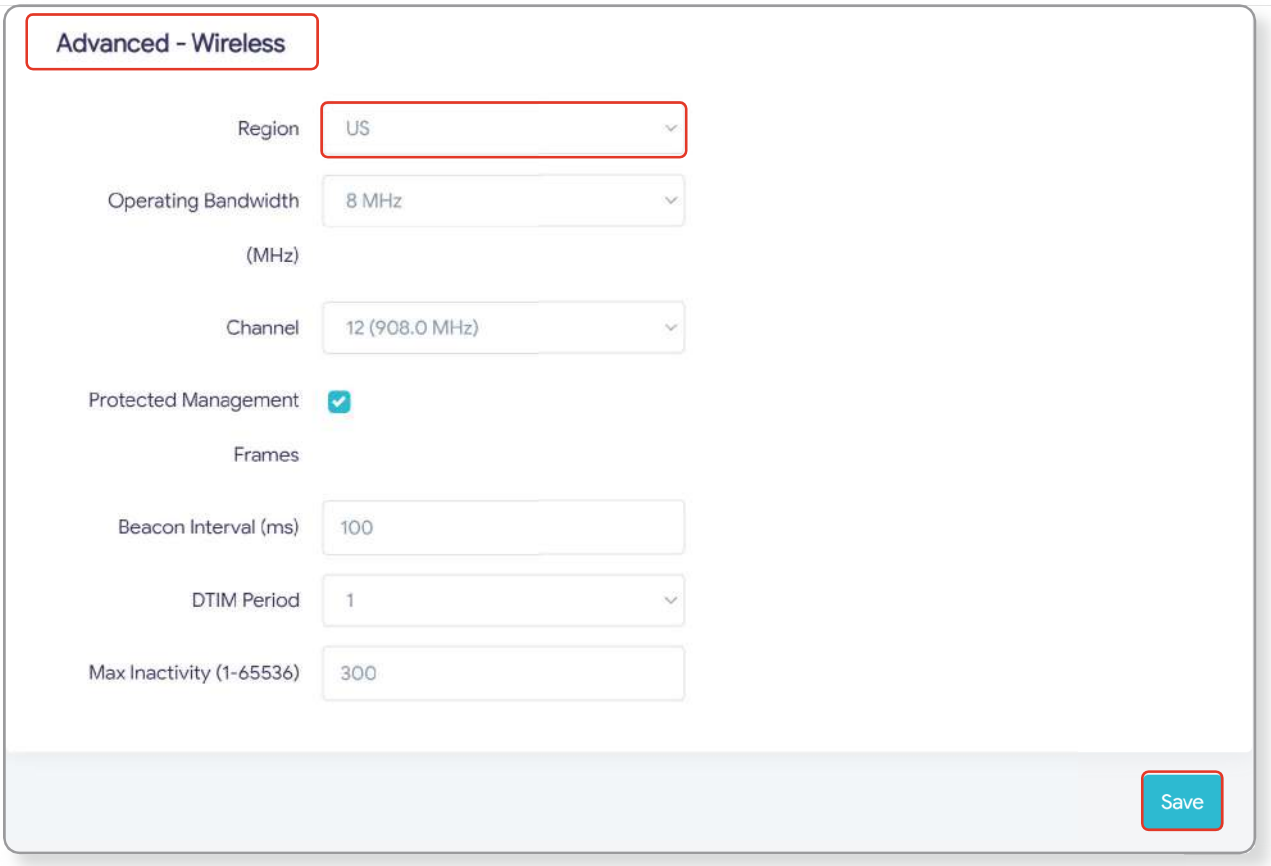
Remember, our default IP address is "192.168.3.3," with the default Wi-Fi 2.4 GHz SSID being "AsiaRF_HaLow-xxxx" and the password "12345678."

Disable NAT in the "Traffic Management" section.



Set your own 'static' IP address in the 'IP Setting' section and fill in the 'Gateway' with your AP's IP address.

In the "Advanced - Wireless" settings, the region you initially selected will be displayed. If you wish to change the region, you can do so here. Remember to click "Save" after making any adjustments.

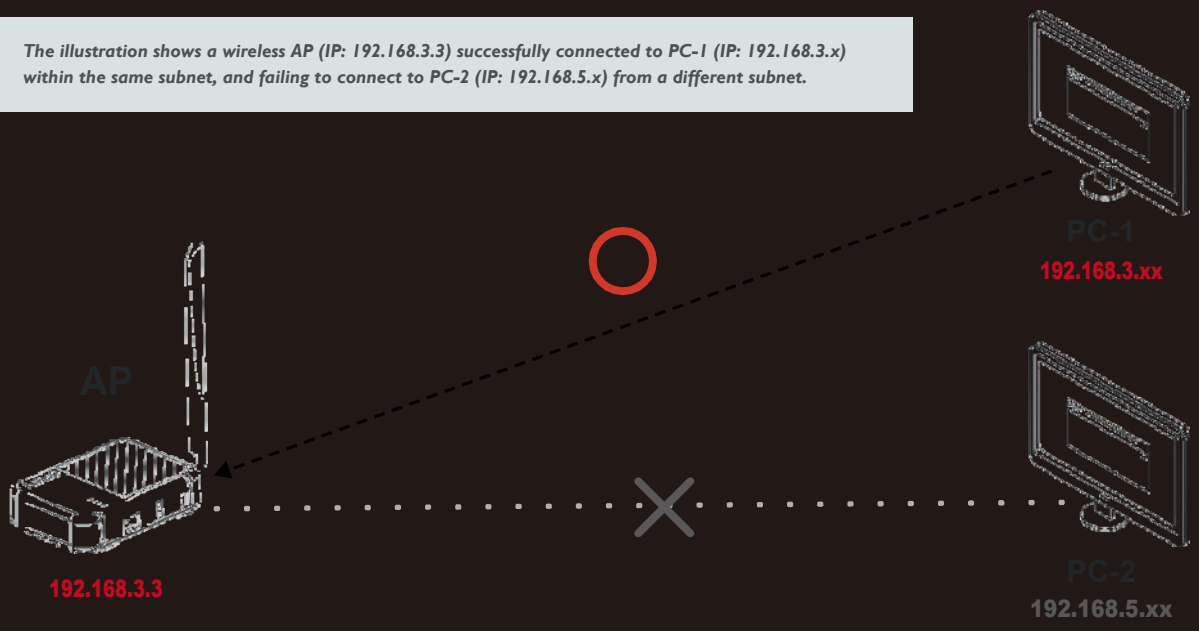


23 Managing Bridge Mode HaLow Gateways

In the bridge mode of a HaLow Gateways, DHCP services are not available for IP address allocation. This necessitates manual configuration of IP addresses for devices to ensure they are on the same network segment for access.

Here's a straightforward example: if the management IP of an Access Point (AP) is the default 192.168.3.3, any device you wish to connect must have its IP address configured within the 192.168.3.x subnet. This enables access to the AP's configuration settings, and the principle similarly applies to devices on the Client (CLI) side.

The illustration shows a wireless AP (IP: 192.168.3.3) successfully connected to PC-1 (IP: 192.168.3.x) within the same subnet, and failing to connect to PC-2 (IP: 192.168.5.x) from a different subnet.



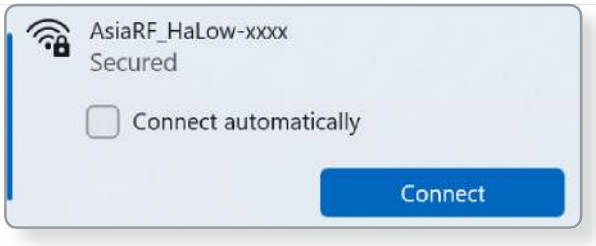
Setting a Static IP on a Windows PC for HaLow Gateway Access:

To connect and configure your device in a Windows environment, follow these steps:

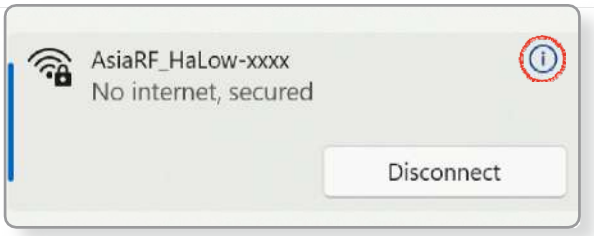
1. Connect to the Wi-Fi Network: **Look for the SSID named "AsiaRF_Halow-xxxx" and use the password "12345678" to connect.**
2. Set a Static IP Address: **Once connected, you'll need to manually set your PC's IP address to be within the 192.168.3.x range, matching the network segment of the HaLow Gateway's bridge mode configuration.**

This process ensures that your devices can communicate with the HaLow Gateway in bridge mode, facilitating seamless management and configuration. *Please follow the instructions on the next page step by step.*

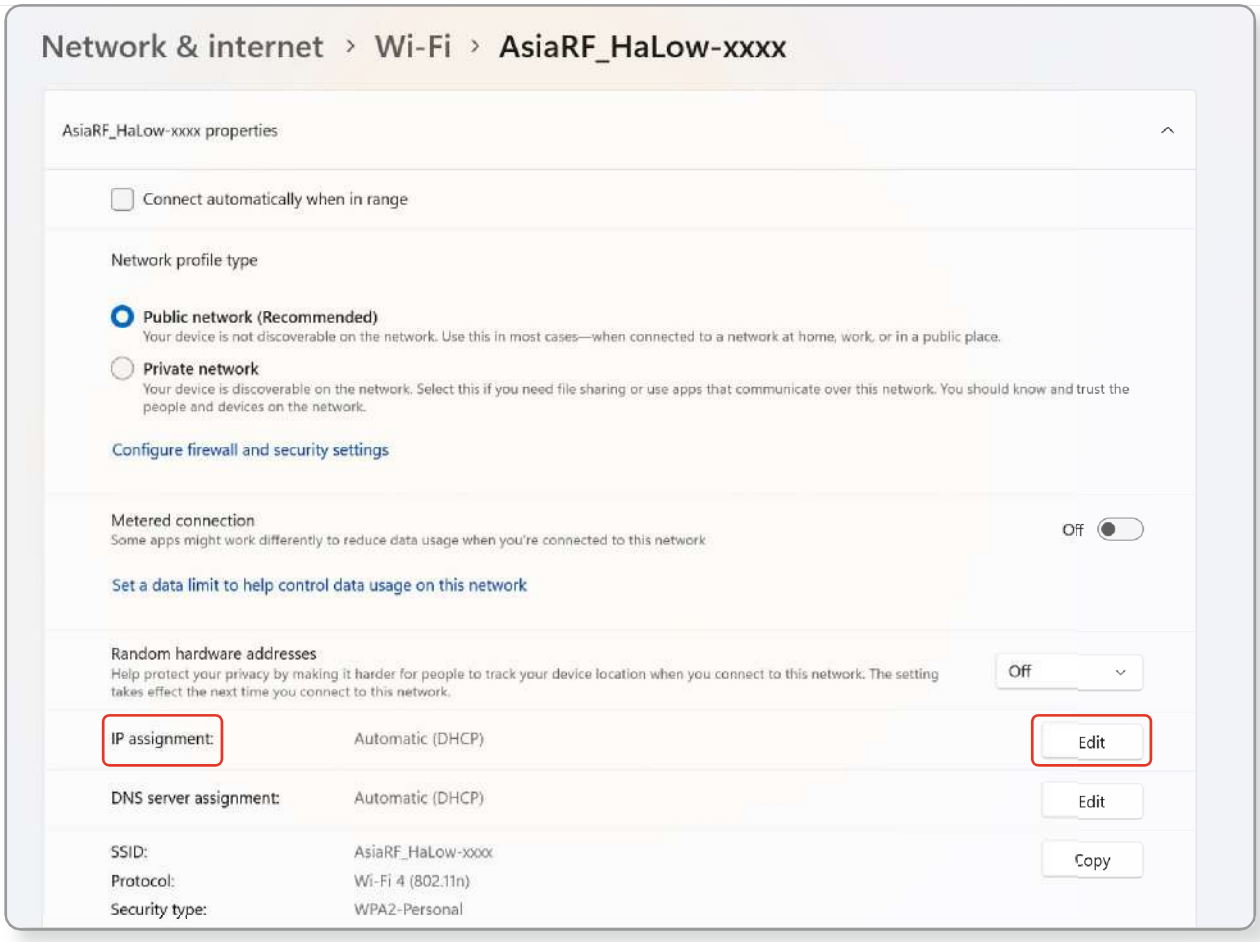
Use PC or mobile phone connect to the Wi-Fi.
(SSID: AsiaRF_Halow-xxxx, Password: 12345678).



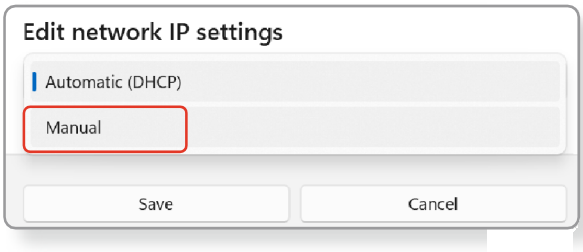
Click the 'Properties' button to access the settings screen.



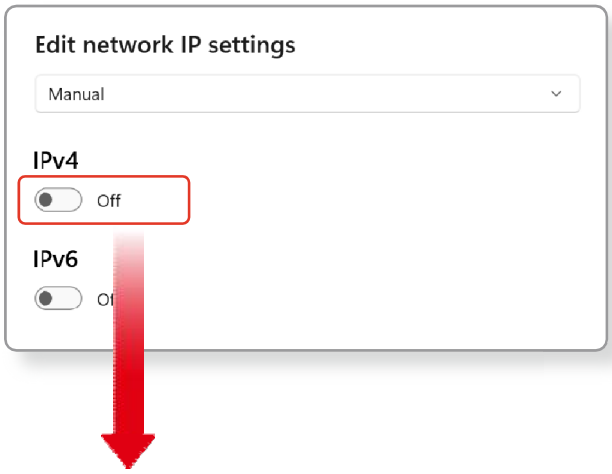
Click “Edit” button in “IP assignment” to set static IP.



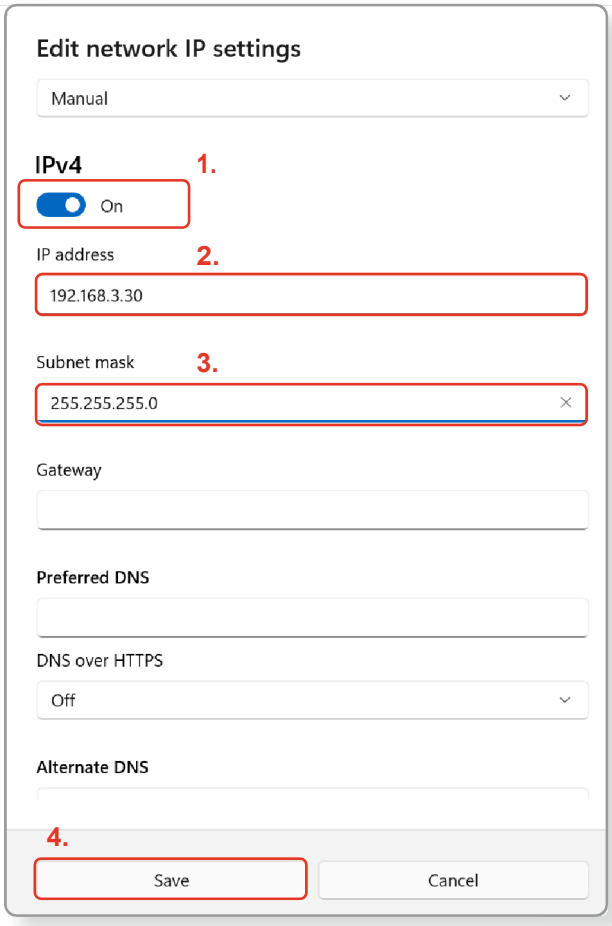
Choose “Manual”.



Turn on the IPv4 radio button.



Enter an IP address that belongs to the same network segment (192.168.3.x), input '255.255.255.0' as the Subnet mask, and finally, click 'Save' to apply the settings.



By adhering to the steps provided, you should be able to effectively manage the Bridge Mode HaLow Gateway. For accessing the settings webpage, simply input the IP address of the target gateway into your browser.

Should you encounter the issues of ‘The AP SSID does not appear in the scan list, please refer to "Troubleshooting Case 2" for solutions.

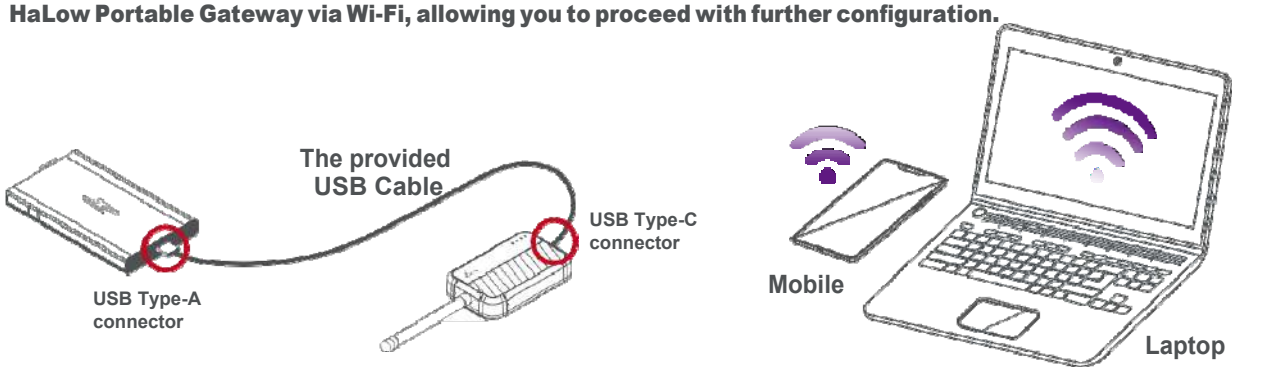
24 Bridge Mode Client (CLI) Setting

Wi-Fi HaLow Client Bridge Mode Setup

Setting up your Wi-Fi HaLow Portable Gateway: ARFHL-UM as a Client role can be powered in the following two ways:

1. Powerbank Supply

Use the provided USB Type-A to Type-C Cable to connect the ARFHL-UM to your powerbank. When the PWR LED light turns on, it indicates a successful power connection. Next, you can use your mobile or laptop to connect to your Wi-Fi HaLow Portable Gateway via Wi-Fi, allowing you to proceed with further configuration.

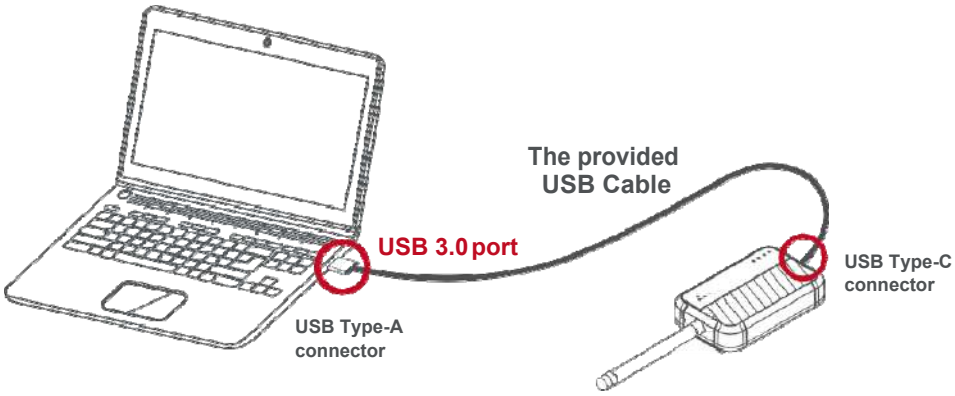


Continue configuration using your mobile or laptop.

2. PC or Laptop Supply

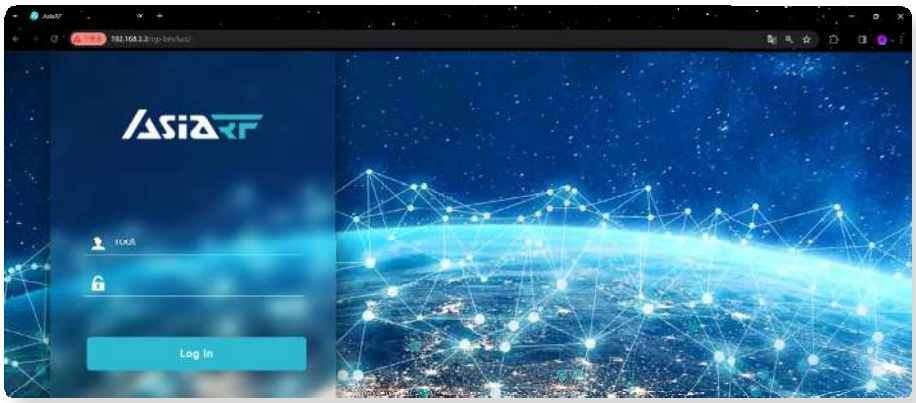
Use the provided USB Type-A to Type-C Cable to connect the ARFHL-UM to your PC or laptop's USB 3.0 port. Once the PWR LED light is on, it signifies a successful power connection. This method not only powers your Wi-Fi HaLow Portable Gateway but also connects your PC or laptop to the Wi-Fi HaLow frequency band, and you to proceed with further configuration.

Continue configuration using your PC or laptop.

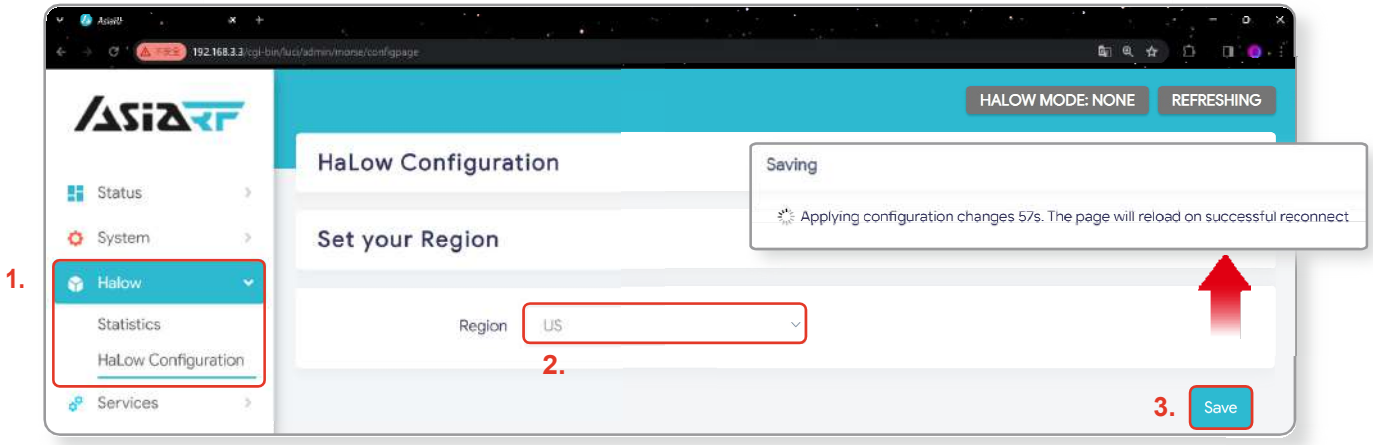


Use PC or mobile phone and connect to the Wi-Fi or connect by ethernet cable.
(Wi-Fi SSID: AsiaRF_Halow-xxxx, Password: 12345678)

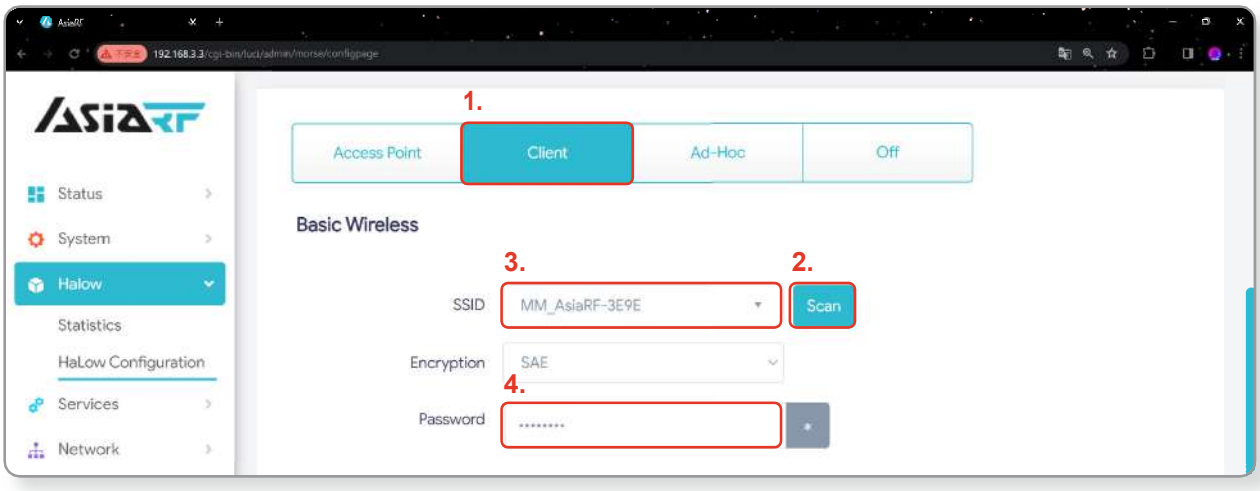
Open the browser and type “192.168.3.3”. Click “Login” (No password in default).



Click on 'HaLow Configuration' in the 'HaLow' tab, then set your 'Region' and click 'Save'.

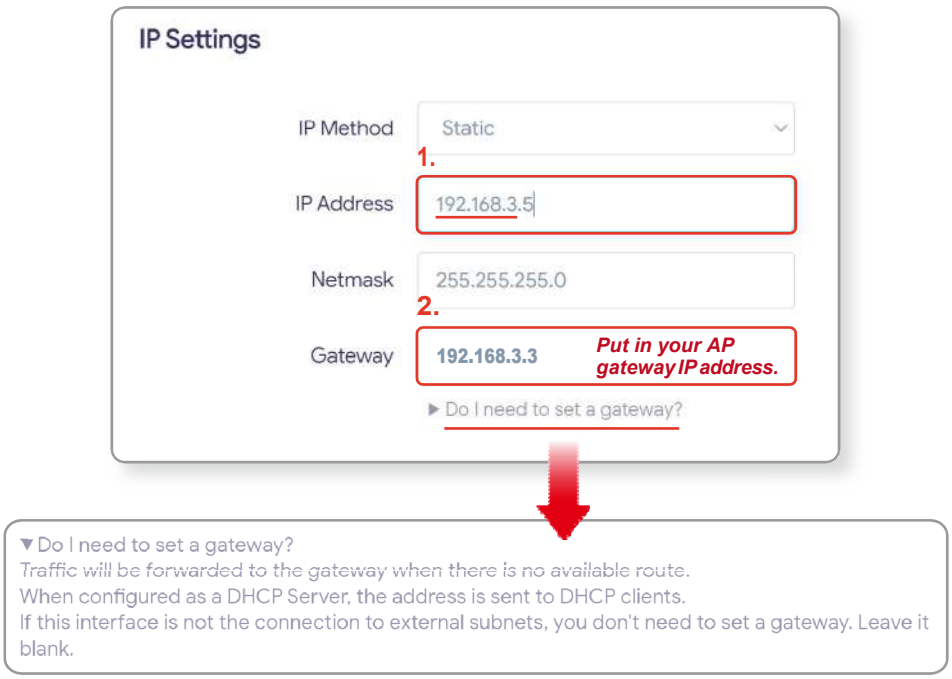


Click the “Client” mode and press ‘Scan’ botton.
It will automatically select a Wi-Fi HaLow AP nearby, or you can manually choose one from the list.
Remember to enter the password, for example, SSID: MM_AsiaRF_New.
If your SSID does not appear in the list of scanned APs, please refer to Troubleshooting Case 3.

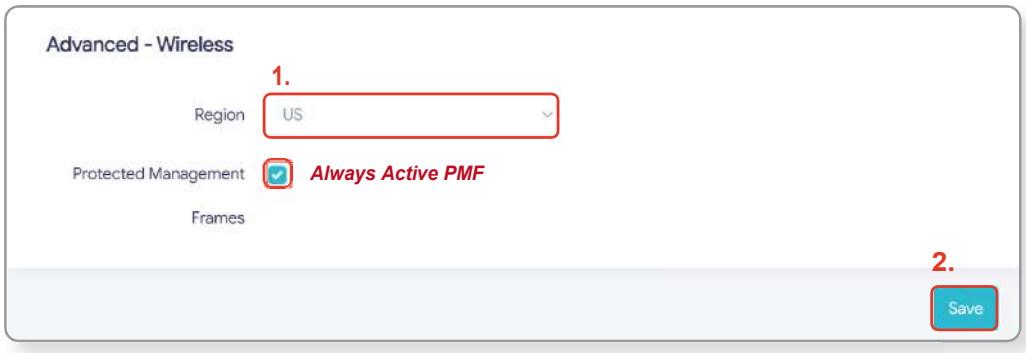


To activate bridge mode, choose a static IP setting and adjust your IP address accordingly. For optimal management in conjunction with the Access Point (AP), it is recommended to select an IP from the 192.168.3.x range.

Ensure not to use an IP address that is identical to those of other HaLow devices.

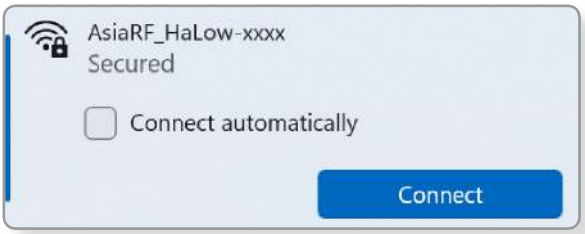


Select your region according to the AP settings. Click "Save" button to save the configuration.



25 2.4GHz Wi-Fi Managing

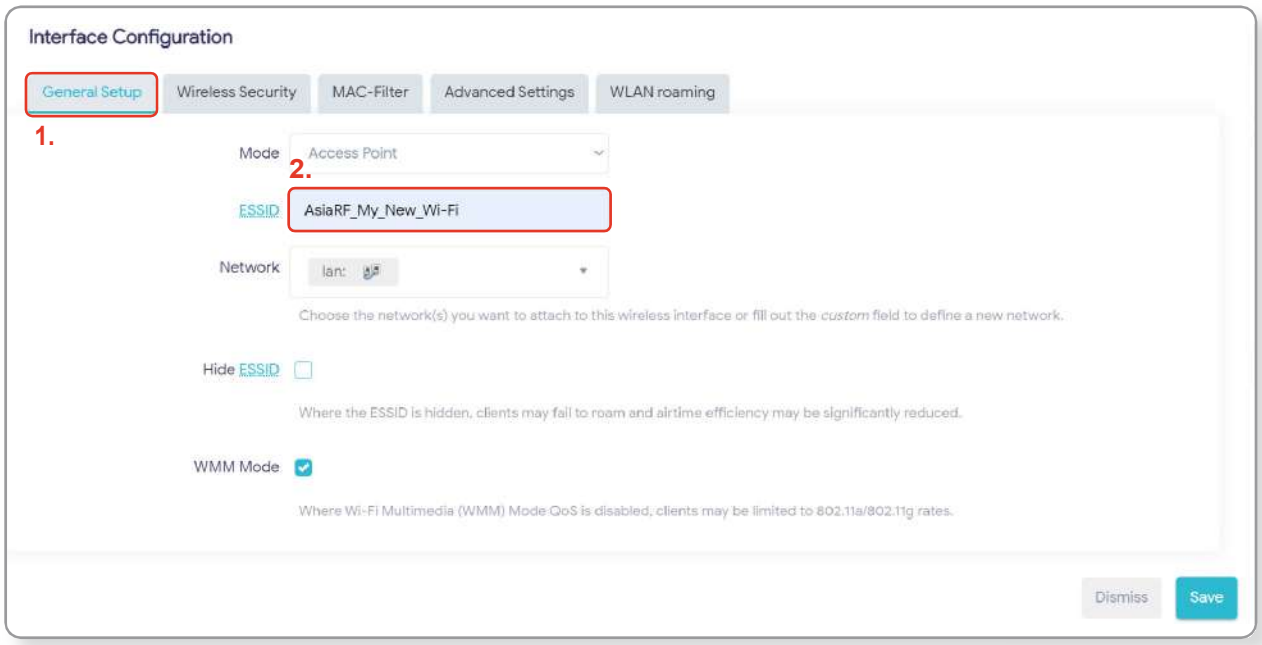
Use PC or mobile phone and connect to the Wi-Fi 2.4 GHz.
(SSID: AsiaRF_Halow-xxxx, Password: 12345678)



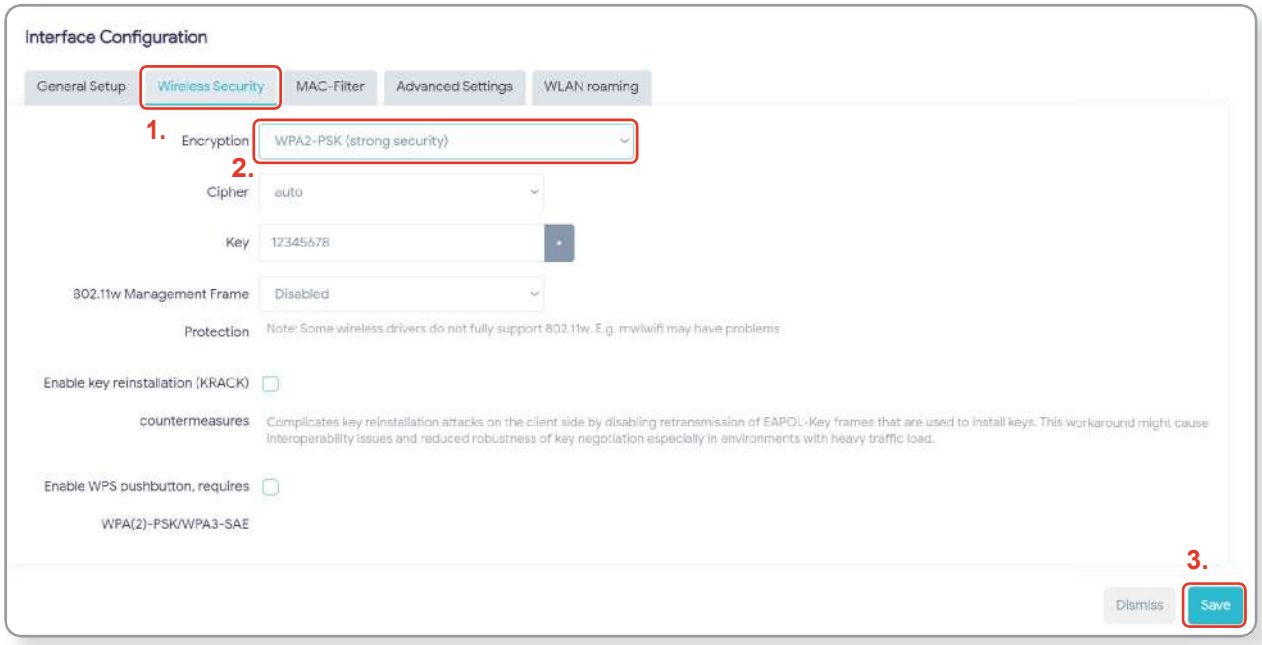
Open your browser and enter "192.168.3.3", the default factory IP address, into the address bar. Click on "Login" (there is no password by default). If you encounter issues accessing the settings webpage, refer to FAQ & Troubleshooting 5.2 for assistance.

Click the "Wireless" in the "Network" tab. Find your 2.4GHz Wi-Fi and click the "Edit" button.

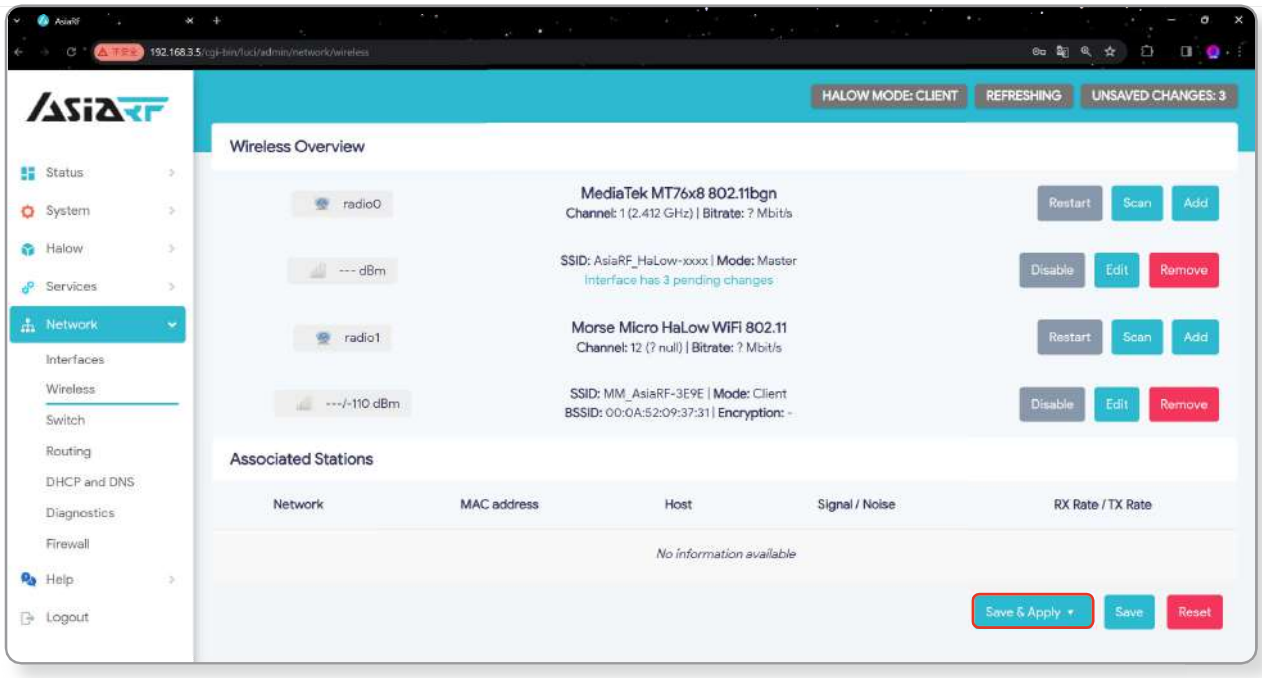
Change the ESSID in the 'General Setup' section of the Interface Configuration to your new name.



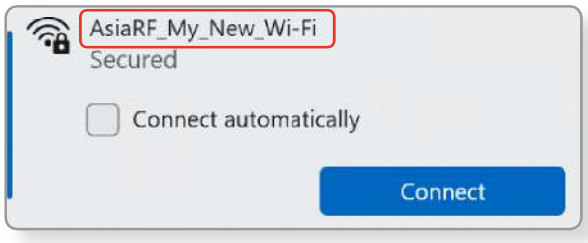
Click “Wireless Security” and choose one of the encryption types. Ex. “WPA-PSK/WPA2-PSK Mixed Mode (medium security)” Input your Wi-Fi password in “Key” field and don’t forget it.
Click the “Save” button to save your configuration.



Click the "Save & Apply" button to save the configuration.



The above settings will reset your Wi-Fi interface.



26 Switching the Bridge Mode to Router Mode

1. Perform a factory reset by pressing and holding the reset button for more than 5 seconds, until you see the "HaLow", "Wi-Fi", and "PWR" LEDs flash briefly, then release the button.

2. Wait for approximately 3 minutes. The "Wi-Fi" and "PWR" LED will blink intermittently, indicating that the system is rebooting. This process will continue until the system has fully restarted.

3. To configure the device in Router Mode, please refer to **Chapter 3**, which provides a detailed step-by-step setup procedure.

1.

2.

Wi-Fi HaLow Router Mode Setup

To optimize the performance of the Wi-Fi HaLow Portable Gateway ARFHL-UM, it's advisable to set it up as a 'Client' role. Therefore, you will need to have a HaLow Gateway that is capable of acting as an 'AP' (Access Point). **Suitable examples include the Wi-Fi HaLow MESH Gateway: ARFHL-AP or the Wi-Fi HaLow MESH Outdoor Gateway: ARFHL-OD.**

Note: All AP gateway illustrations in this manual are based on the ARFHL-AP as an example.

This section offers guidance on configuring your AP Gateway. Should your AP Gateway already be configured, feel free to proceed directly to Section 2.4.

Recommended as the AP role Wi-Fi HaLow Gateways

Wi-Fi HaLow Gateway

PN: ARFHL-AP

Scan this QRcode for more details of ARFHL-AP

Wi-Fi HaLow Outdoor Gateway

PN: ARFHL-OD

Scan this QRcode for more details of ARFHL-OD

3.1 Connect to your Wi-Fi HaLow Gateway as AP

1. Powering On and Connecting to Network:

   · **Begin by plugging the DC adaptor into the ARFHL-AP to turn it on.**

   · **Next, connect an Ethernet cable between the router and the ARFHL-AP.**

2. Understanding the LED Indicators:

   a. PWR LED : **Once you've connected the DC plug, the PWR (Power) LED will light up continuously, indicating that the device is powered on.**

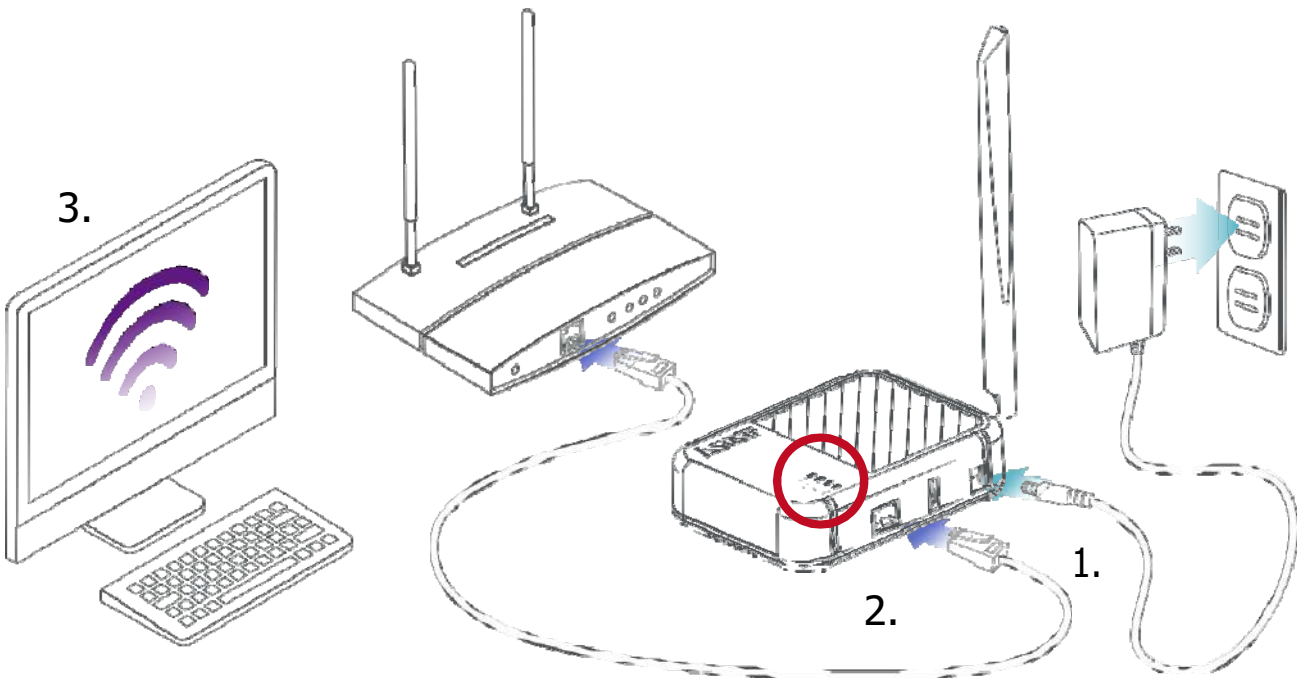
   b. LAN LED : **Shortly after, the LAN LED will briefly illuminate and then turn off. This is normal behavior.**

   c. HaLow LED : **Following the LAN LED, the HaLow LED will start blinking. On the device's first startup, this blinking lasts about 200 seconds, signaling that the device is initializing. For subsequent startups, the blinking duration reduces to around 30 seconds.**

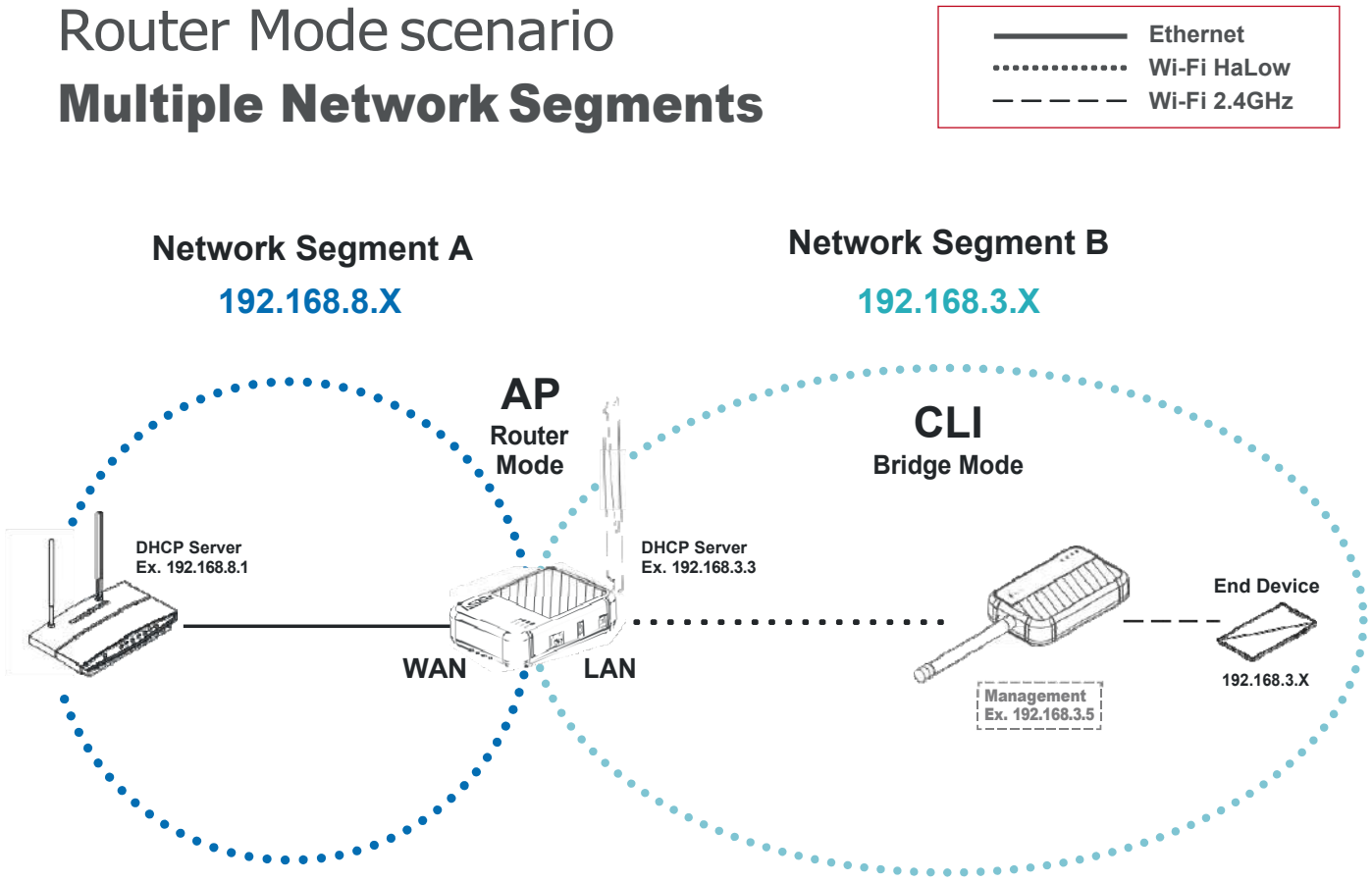
   d. Wi-Fi LED : **Once the HaLow LED stops blinking, the Wi-Fi LED stays on, meaning the system has fully booted and is ready for use.**

3. Connecting and Configuring:

   With the system ready, connect a PC or mobile device to the router and AP7688-WHM using Wi-Fi. This connection allows you to configure the gateway and start using the network services provided by the AP7688-WHM.



Router Mode scenario
Multiple Network Segments

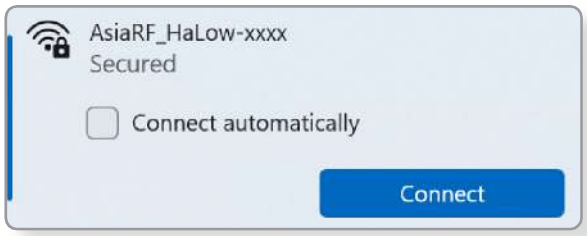


In Router Mode, **the router is used to connect different IP network segments together, with each segment having its own range of IP addresses and subnet mask. The router forwards packets allowing devices from different network segments to communicate with each other, while also providing network layer isolation and security controls (such as firewall rules).**

The advantage of this method **lies in its ability to organize the network into multiple manageable segments, enhancing network security and traffic management. It allows for the creation of dedicated network areas within a broader network infrastructure, such as areas designated for visitor access or IoT devices. Employing router mode with HaLow technology ensures that, even in environments where physical cable wiring is impractical, the network can maintain segmented control and integrated communication.**

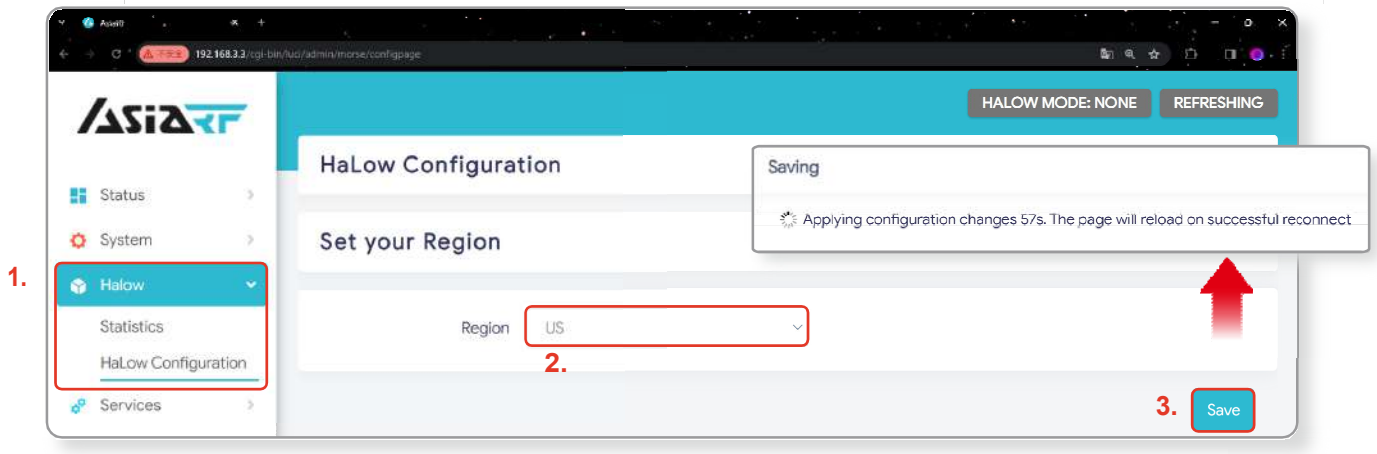
32 Router Mode Access Point (AP) Setting

Use PC or mobile phone connect to the Wi-Fi.
(SSID: AsiaRF_Halow-xxxx, Password: 12345678).

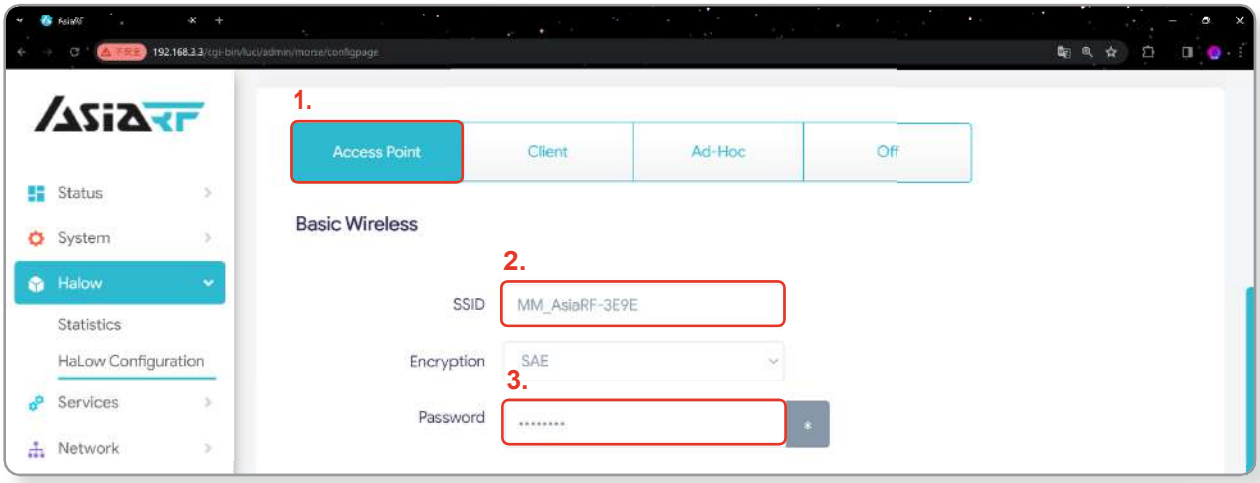


Open your browser and enter **"192.168.3.3"**, the default factory IP address, into the address bar. Click on "Login" (there is no password by default). If you encounter issues accessing the settings webpage, refer to Troubleshooting Case 2 for assistance.

Click on 'HaLow Configuration' in the 'HaLow' tab, then set your 'Region' and click 'Save'.

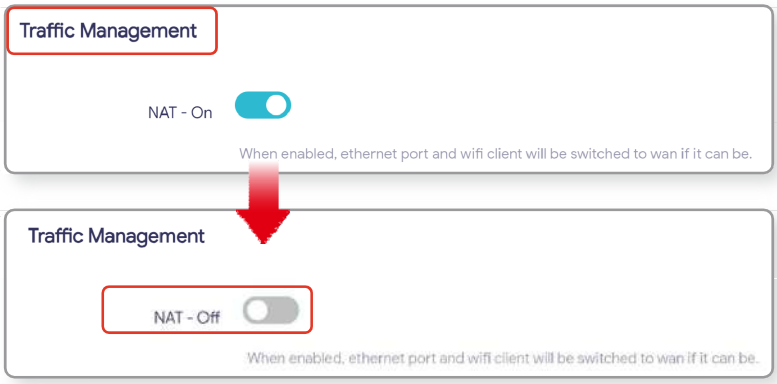


Press the 'Access Point' button, and then enter your 'Wi-Fi HaLow SSID' and 'Password'.

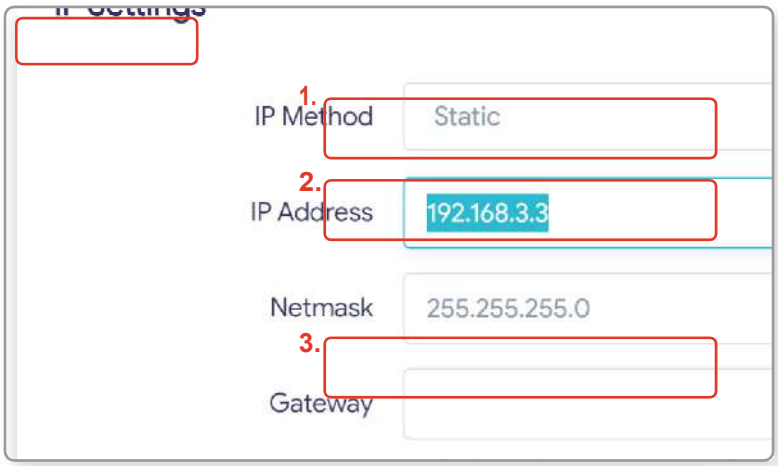


Remember, our default IP address is "192.168.3.3," with the default Wi-Fi 2.4 GHz SSID being "AsiaRF_HaLow-xxxx" and the password "12345678."

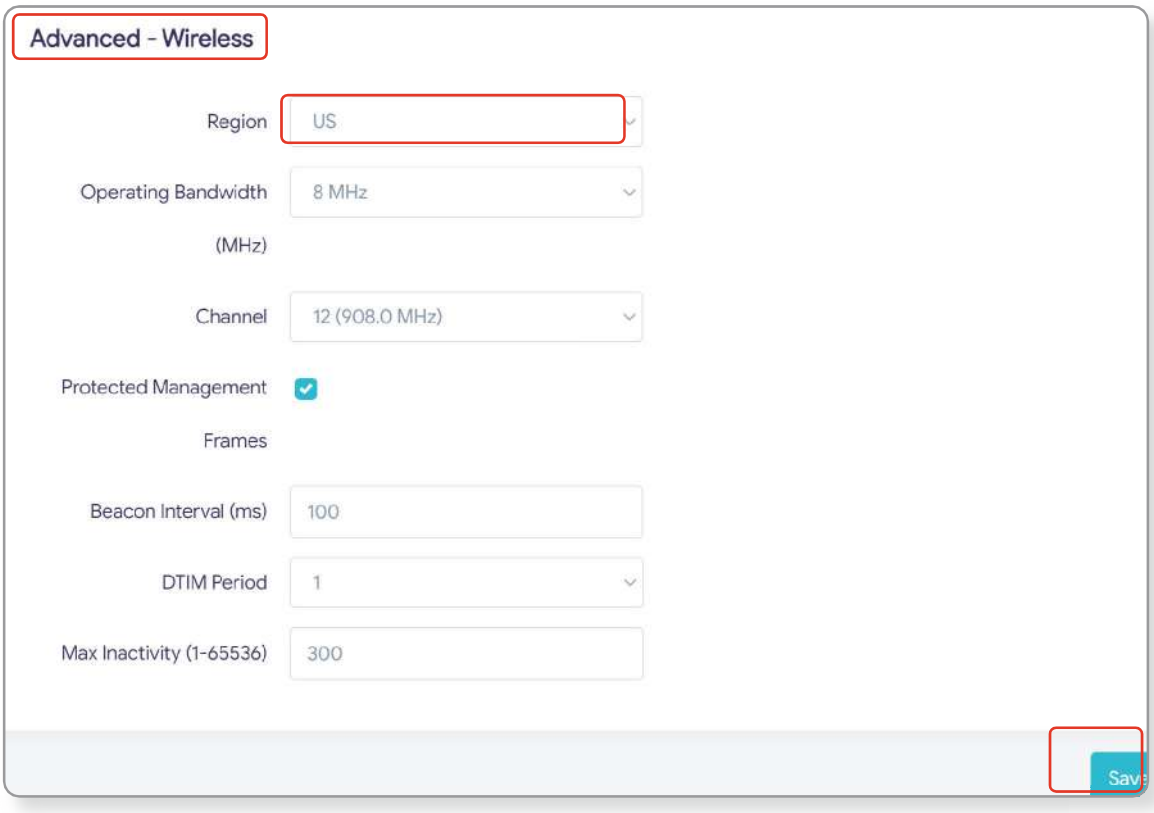
Enable NAT in the "Traffic Management" section.



Set your own DHCP Server' IP address in the 'IP Setting' section and fill in the 'Gateway' with your AP's IP address.



In the 'Advanced - Wireless' settings, the region you initially selected will be displayed. If you wish to change the region, you can do so here. Remember to click "Save" after making any adjustments.



3.3 Router Mode Client (CLI) Setting

The HaLow Gateway Client configuration is identical in both Router Mode and Bridge Mode. For setup instructions, please see Section 2.4, "Bridge Mode Client (CLI) Setting."

3.4 2.4GHz Wi-Fi Managing

The HaLow Gateway 2.4GHz Wi-Fi configuration is identical in both Router Mode and Bridge Mode. For setup instructions, please see Section 2.5, "2.4GHz Wi-Fi Managing."

3.5 Switching the Router Mode to Bridge Mode

1. Perform a factory reset by pressing and holding the reset button for more than 5 seconds, until you see the "HaLow", "Wi-Fi", and "PWR" LEDs flash briefly, then release the button.

2. Wait for approximately 3 minutes. The "Wi-Fi" and "PWR" LED will blink intermittently, indicating that the system is rebooting. This process will continue until the system has fully restarted.

3. To configure the device in Bridge Mode, please refer to Chapter 2, which provides a detailed step-by-step setup procedure.

1.

2.

Firmware Upgrade

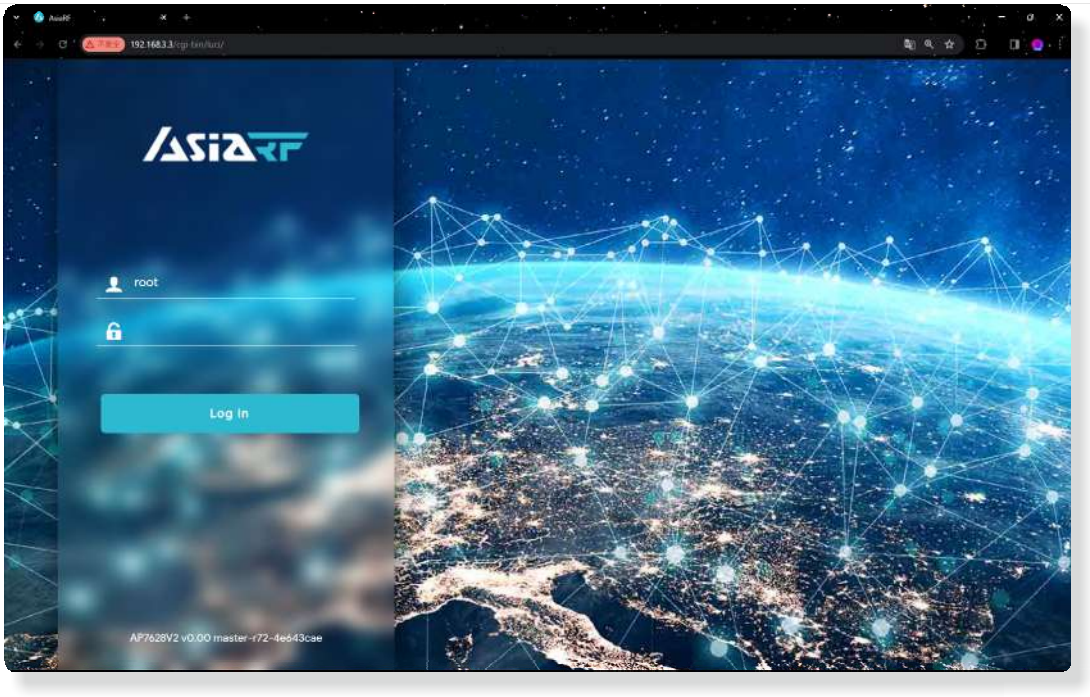
4.1 First, confirm your current firmware version.

This section provides guidance on how to determine your current firmware version. Please follow the instructions provided below.

Should you encounter any issues with our product, please provide us with your firmware version to ensure the most effective after-sales service.

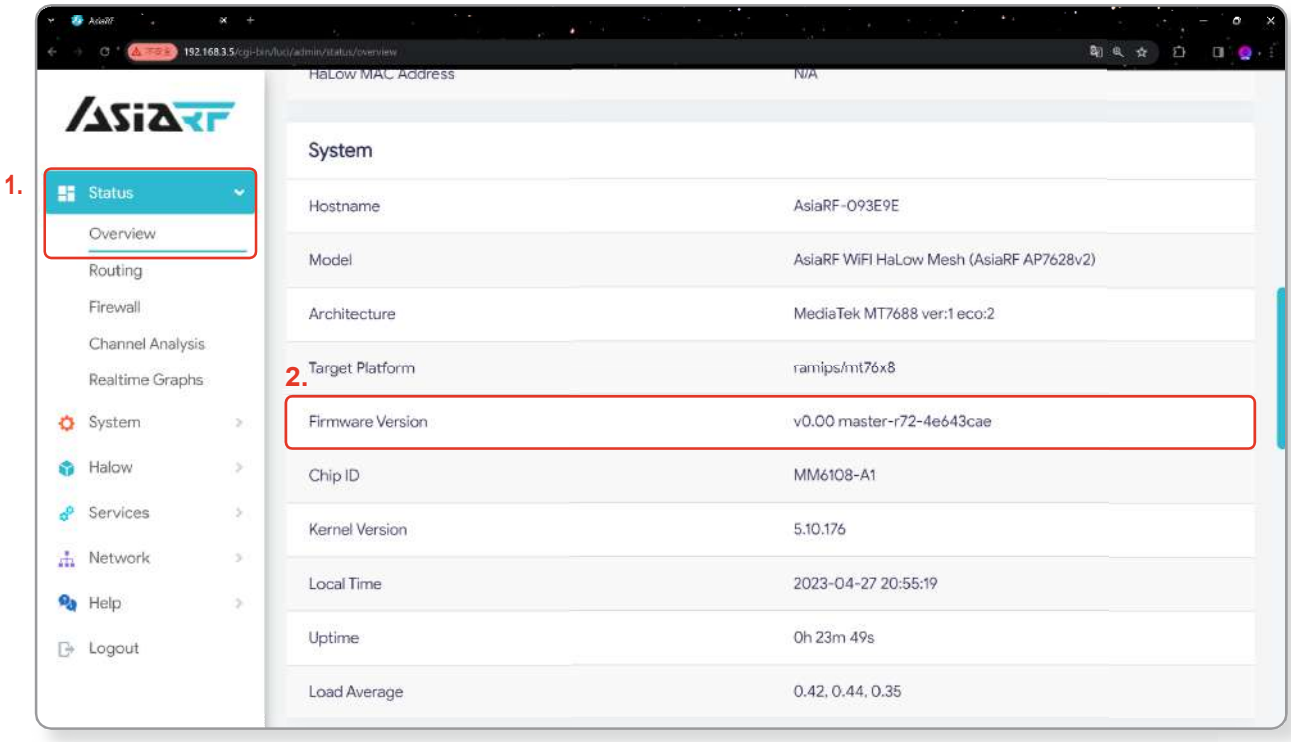
Connect to the Wi-Fi 2.4 GHz network using a PC or mobile phone. Look for the SSID "AsiaRF_Halow-xxxx" and use the password "12345678" for access.

Open a web browser and enter the default IP address "192.168.3.3". Then click "Login" (no password is required by default). If you encounter any issues accessing the settings webpage, refer to Troubleshooting Case 2 for assistance.



Click “Overview” in the “Status” tab.

Then, you can determine your firmware version. For example, it could be listed as "AsiaRF AP7688 WHM 22.03.5 SDK222-master-55-d274ef3b." Please refer to the screenshot below for further clarification.

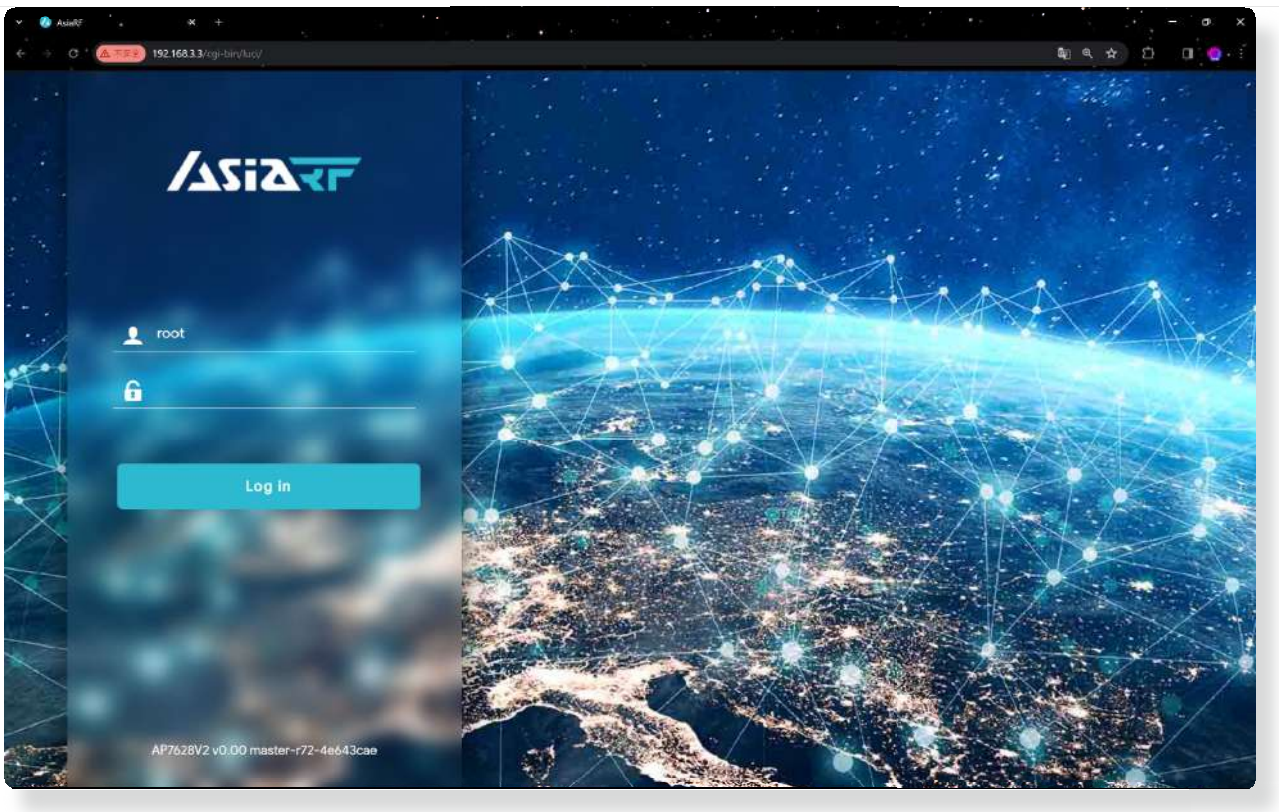


42 Upgrade your Firmware version

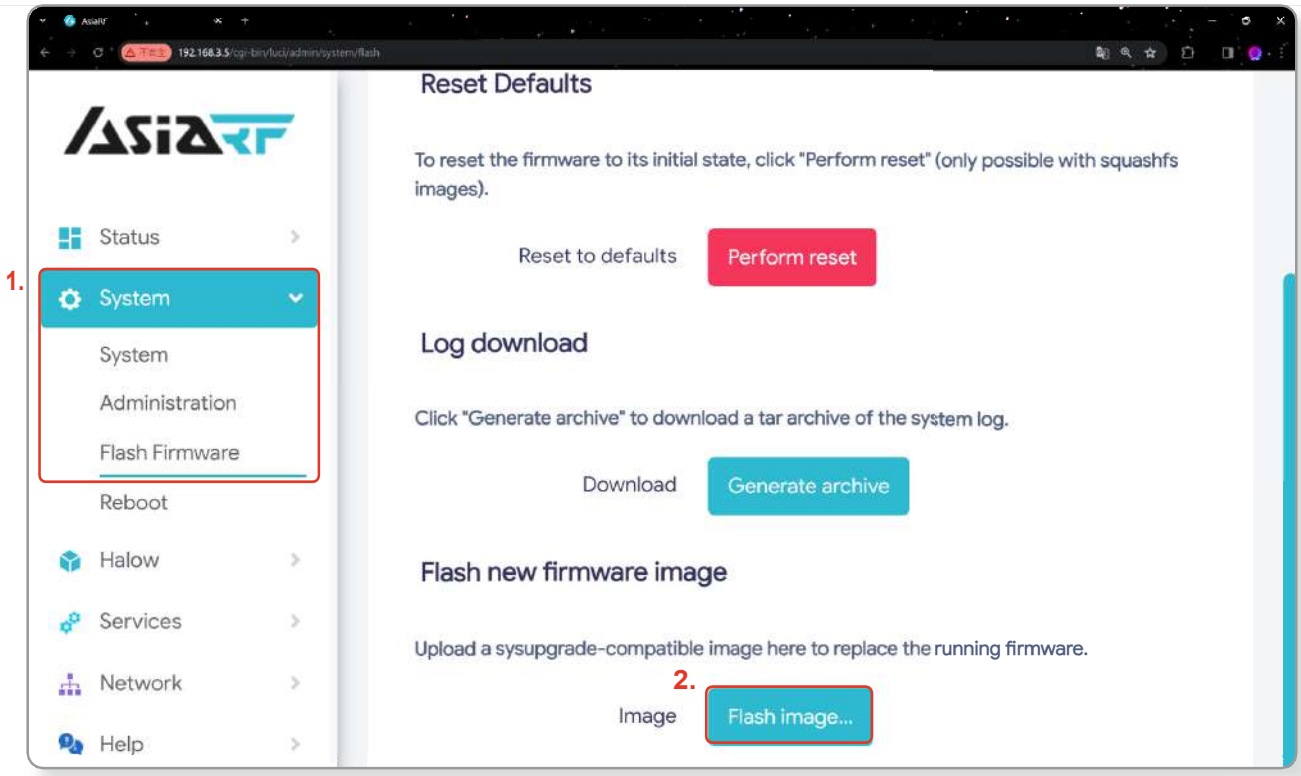
To ensure you have the best experience with our product, follow the instructions in this chapter to upgrade your device whenever new firmware becomes available.

Connect to the Wi-Fi 2.4 GHz network using a PC or mobile phone. Look for the SSID "AsiaRF_HaLow-xxxx" and use the password "12345678" for access.

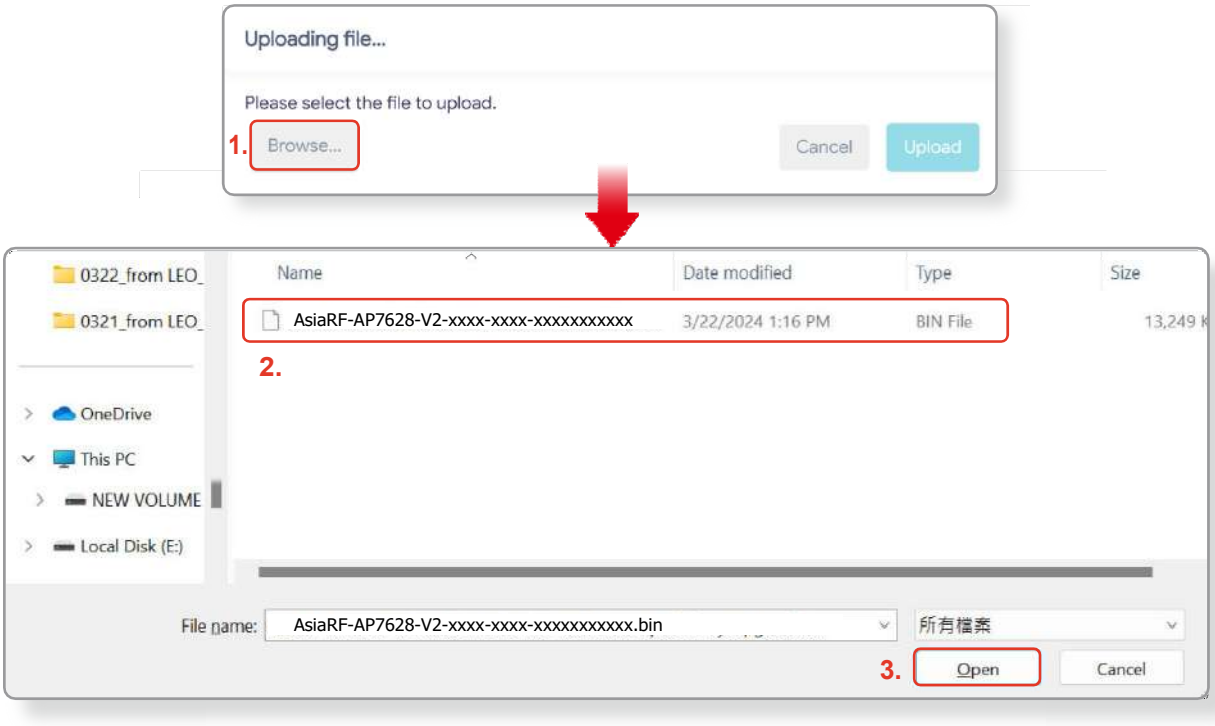
Open a web browser and enter the default IP address "192.168.3.3". Then click "Login" (no password is required by default). If you encounter any issues accessing the settings webpage, refer to Troubleshooting Case 2 for assistance.



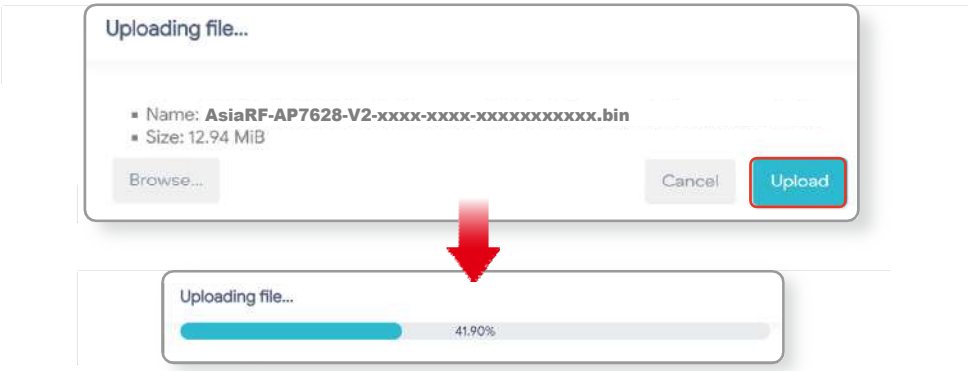
Click 'Flash Firmware' in the "System" tab, then Click 'Flash image'.



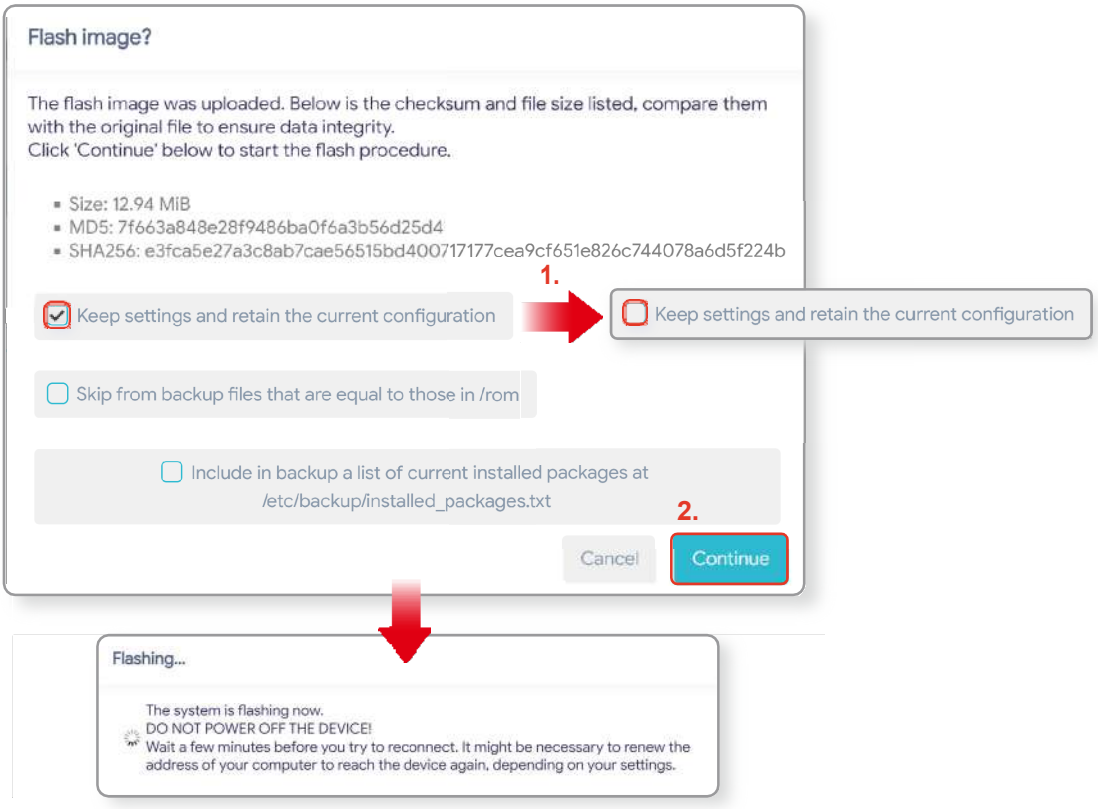
Click on 'Browse' to select the firmware you need. Choose the desired version and then click 'Open' to proceed.



After selecting the firmware, it will be displayed on your screen. Click 'Upload' to proceed, and the system will automatically verify if the version is compatible.



Once your firmware upload is successful, you'll see a screen like the one in the image. The default setting will have the option "Keep settings and retain the current configuration" already selected. Make sure to deselect this option by removing the checkmark. After that, click on "Continue" to start the upgrade.



Once the flashing process on the screen completes, the device will automatically restart. Please refer to section 2.2 for guidance on the indicator lights during boot-up. The reboot process usually takes about four minutes.

Remember, the default IP address is "192.168.3.3." The default Wi-Fi 2.4 GHz SSID is "AsiaRF_HaLow-xxxx," with the password "12345678."

FAQ & Troubleshooting

5.1 Issue: System Reboot and Reset (Return to factory default)

Before proceeding, prepare a pin to press the RST (Reset) button:

- System Reboot:
  A quick press and release will reboot the device, which then restarts automatically.
- System Reset:
  A 5-second press will trigger a factory reset, restoring the default settings. Be aware that all previous settings will be erased; you will need to reconfigure your device.

For details on the LED indicators, refer to Section 2.2.

5.2 Issue: Unable to access the settings webpage

When your Wi-Fi HaLow Gateway is set to operate in Bridge Mode, either as an AP or a Client, and you are unable to access the settings webpage from your PC or mobile device, please follow these steps:

1. **To successfully access the settings page, ensure that the IP address of your PC or mobile device is on the same network segment as the Wi-Fi HaLow Gateway you wish to control.**

   Remember, our default IP address is "192.168.3.3," with the default Wi-Fi 2.4 GHz SSID being "AsiaRF_HaLow-xxxx" and the password "12345678."

2. **If access remains blocked, try resetting the device.**

3. **If the issue persists, please contact the** AsiaRF technical support hotline at +886 2 2940-7880, extension 18**, or contact our sales team via email at** sales@asiarf.com.

5.3 Issue: **The AP SSID does not appear in the scan list**

When you're configuring your device in Client mode and the AP SSID does not appear in the scan list, you might want to try the following:

1. **Attempt to** press the 'scan' button multiple times **to refresh the list.**
2. It's possible that the Client Gateway and the AP Gateway are set to different regions. **Please verify and adjust both to the same region, then press 'Scan' again. This should make the AP SSID appear in your configuration screen.**
3. **If the issue still isn't resolved,** consider resetting your device.
4. **If the issue persists, please contact the** AsiaRF technical support hotline at +886 2 2940-7880, extension 18**, or contact our sales team via email at** *sales@asiarf.com.*

FCC Compliance Statement:
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.

Federal Communication Commission Interference Statement

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 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.

FCC Caution:

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

Industry Canada Statement

This device complies with Industry Canada licence-exempt RSS standard.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limit set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

Cet équipement est conforme aux CNR-102 d'Industrie Canada. Cet équipement doit êtreinstallé et utilisé avec une distance minimale de 20 centimètres entre le radiateur et votrecorps. Cet émetteur ne doit pas être co-localisées ou opérant en conjonction avec autreantenne ou émetteur. Les antennes utilisées pour cet émetteur doivent être installés etfournir une distance de séparation d'au moins 20 centimètre de toute personne et doit pas être co-située ni fonctionner en conjonction avec une autre antenne ou émetteur.