

TOP-12AC
Wi-Fi 5 AC 1200Mbps Ceiling Access Point

TOP-18AX
Wi-Fi 6 AX 1800Mbps Ceiling Access Point

inWall-U618AX
Wi-Fi 6 AX 1800Mbps inWall Access Point

Web Manual



Ver. 1.0

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Chapter 1. Product Introduction

1.1 Package Contents TOP-12AC and TOP-18AX

Before using this access point, please check if there is anything missing in the package, and contact your dealer of purchase to claim for missing items:

- TOP-12AC or TOP-18AX Ceiling Mount Access Point
- Patch Cord
- Installation Guide
- Mounting Screws

1.2 Package Contents inWall-U618AX

Before using this access point, please check if there is anything missing in the package, and contact your dealer of purchase to claim for missing items:

- TOP-12AC or TOP-18AX Ceiling Mount Access Point
- Installation Guide
- Mounting Screws

1.3 Product Specification TOP-12AC

Model	TOP-12AC AC1200 Access Point
<p>Device Interface</p> <ul style="list-style-type: none"> • Main Chip: MTK, Dual Core MT7621DAT • Flash:8MB • RAM:128MB • Ethernet (LAN): 1 x RJ45 10/100/1000mbps • WAN (PoE): 1x RJ-45 10/100/1000mbps • WiFi: 802.11b/g/n 2T2R(2.4Ghz), 802.11ac/a/n 2T2R (5Ghz) • Button: Reset x 1 • Power Input: 1 x 12VDC or 1 x 48V (802.3af PoE) • Antenna Connector: Internal Wireless Antenna 4dBi (5Ghz) Internal Wireless Antenna 5dBi (2.4Ghz) <p>WAN</p> <ul style="list-style-type: none"> • WAN: PPPoE, DHCP, Static IP, (Bridge (AP Mode)) <p>WiFi</p> <ul style="list-style-type: none"> • Standard: IEEE 802.11a/b/g/n/ac, 2x2, 20/40/80 MHz channels • Functions: Multi-SSID 8 (4 per radio), SSID hidden ,SSID isolation, Band Steering, RF power adjustable, Wi-Fi time on/off to save energy • Security: WEP, WPA, WPA2,WPA-PSK, WPA2-PSK • Modulation : OFDM, DSSS • Wi-fi Advanced: Wireless client isolation • Wireless Channel • 2.4G:1~13 (CE Channel) (region dependent) • 5.8G: (region dependent) 36~48, 36~64,100~140,149~165 • Wireless TX Power 2.4G: <20dbm, 5.8G: <23dbm <p>Security</p> <ul style="list-style-type: none"> • Filter Rule: URL Filter/Mac Filter/IP Filter • URL/MAC/IP filtering: White list/Black List. <p>DMZ</p> <ul style="list-style-type: none"> • DMZ <p>Port Forwarding Rule/Range</p> <ul style="list-style-type: none"> • TCP/UDP <p>VLAN</p> <ul style="list-style-type: none"> • VLAN support SSID Max 4 per Band <p>Cloud</p> <ul style="list-style-type: none"> • AirCloud access support in Gateway/AP Mode <p>FIT/FAT Operation Mode</p> <ul style="list-style-type: none"> • FIT Mode: AP works with AC Controller (Enterprise use) • FAT Mode: AP works standalone (Home use) 	<p>Management</p> <ul style="list-style-type: none"> • Web-UI, Remote Management, WLAN Controller, Cloud Management System AirCloud <p>DDNS</p> <ul style="list-style-type: none"> • Oray <p>Max Concurrent users</p> <ul style="list-style-type: none"> • 80 <p>Parental Control (Gateway Mode)</p> <ul style="list-style-type: none"> • Mac Address Filtering, URL Filtering, IP Filtering <p>AP/AP Gateway Mode</p> <ul style="list-style-type: none"> • AP: In this mode, the AP Wireless and Cable Interface are bridging together. Without NAT, Firewall and all network related functions. • AP Gateway: In this mode, the WAN page is enabled and PPPoE, DHCP or Static IP can be selected. NAT is enabled and PC's in LAN ports share the IP to ISP through WAN port. <p>VPN Pass Through (Gateway Mode)</p> <ul style="list-style-type: none"> • IPsec, PPTP, L2TP <p>Data Statistics</p> <ul style="list-style-type: none"> • WAN Down Stream, WAN UP Stream • Wi-Fi Analyzer (2.4 and 5Ghz) <p>Multiple Language</p> <ul style="list-style-type: none"> • English/Spanish <p>ESD Protection</p> <ul style="list-style-type: none"> • ±6KV <p>Environment</p> <ul style="list-style-type: none"> • Operating temperature : -20°C ~ +45°C • Storage Temperature : -40°C ~ +70°C • Storage Humidity : 5% ~ 95% (non-condensing) • Enclosure : ABS fireproof material <p>Standard package of switch</p> <ul style="list-style-type: none"> • Product size: 16.8 x 16.8 x 3.2 cm(L*W*H) • Package size: 24.5 x 23.5 x 7.5 cm(L*W*H) • Product Weight/Package Weight W: 0.65KGs; W: TBDKGs • Package content: TBD 1 x Access Point, <p>Ordering information</p> <ul style="list-style-type: none"> • AirLive TOP-12AC 11ac 1200Mbps Gigabit PoE Access Point supports FIT/FAT Mode, AP and Gateway Mode Central and Cloud management supported

1.4 Product Specification TOP-18AX

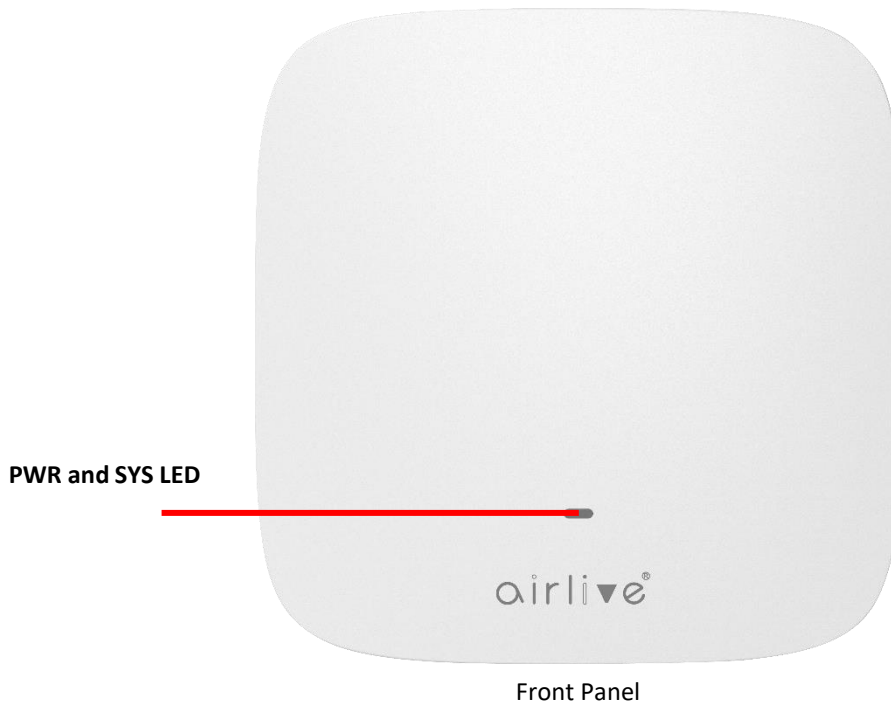
Model	TOP-18AX AX1800 Access Point
<p>Device Interface</p> <ul style="list-style-type: none"> • Main Chip: MTK, Dual Core MT7621AT • Flash:16MB • RAM:256MB • Ethernet (LAN): 1 x RJ45 10/100/1000mbps • WAN (PoE): 1x RJ-45 10/100/1000mbps • WiFi: 802.11b/g/n/n/ac/ax 2T2R(2.4Ghz), 802.11a/n/ac/ax 2T2R (5Ghz) • Button: Reset x 1 • Power Input: 1 x 12VDC or 1 x 48V (802.3af PoE) • Antenna Connector: Internal Wireless Antenna 4dBi (2.4/5Ghz) MIMO <p>WAN</p> <ul style="list-style-type: none"> • WAN: PPPoE, DHCP, Static IP, (Bridge (AP Mode)) <p>WiFi</p> <ul style="list-style-type: none"> • Standard: IEEE 802.11a/b/g/n/ac/ax, 2x2, 20/40/80 MHz channels • Functions: Multi-SSID 8 (4 per radio), SSID hidden ,SSID isolation, Band Steering, RF power adjustable, Wi-Fi time on/off to save energy • Security: WPA/WPA2PSK-TKIPAES, WPA3PSK-TKIPAES • Modulation : OFDMA, 1024QAM • Wi-fi Advanced: Wireless client isolation • Wireless Channel • 2.4G:1~13 (CE Channel) (region dependent) • 5.8G: (region dependent) 36~48, 36~64,100~140,149~165 • Wireless TX Power 2.4G: ≤20dbm, 5.8G: ≤18dbm <p>Security</p> <ul style="list-style-type: none"> • Filter Rule: URL Filter/Mac Filter/IP Filter • URL/MAC/IP filtering: White list/Black List. <p>DMZ</p> <ul style="list-style-type: none"> • DMZ <p>Port Forwarding Rule/Range</p> <ul style="list-style-type: none"> • TCP/UDP <p>VLAN</p> <ul style="list-style-type: none"> • VLAN support SSID Max 4 per Band <p>Cloud</p> <ul style="list-style-type: none"> • Cloud access support in Gateway/AP Mode <p>FIT/FAT Operation Mode</p> <ul style="list-style-type: none"> • FIT Mode: AP works with AC Controller (Enterprise use) • FAT Mode: AP works standalone (Home use) 	<p>Management</p> <ul style="list-style-type: none"> • Web-UI, Remote Management, WLAN Controller, Cloud Management System AirCloud <p>DDNS</p> <ul style="list-style-type: none"> • Oray <p>Max Concurrent users</p> <ul style="list-style-type: none"> • 120 <p>Parental Control (Gateway Mode)</p> <ul style="list-style-type: none"> • Mac Address Filtering, URL Filtering, IP Filtering <p>AP/AP Gateway Mode</p> <ul style="list-style-type: none"> • AP: In this mode, the AP Wireless and Cable Interface are bridging together. Without NAT, Firewall and all network related functions. • AP Gateway: In this mode, the WAN page is enabled and PPPoE, DHCP or Static IP can be selected. NAT is enabled and PC's in LAN ports share the IP to ISP through WAN port. <p>VPN Pass Through (Gateway Mode)</p> <ul style="list-style-type: none"> • IPsec, PPTP, L2TP <p>Data Statistics</p> <ul style="list-style-type: none"> • WAN Down Stream, WAN UP Stream • Wi-Fi Analyzer (2.4 and 5Ghz) <p>Multiple Language</p> <ul style="list-style-type: none"> • English/Spanish <p>ESD Protection</p> <ul style="list-style-type: none"> • ±6KV <p>Environment</p> <ul style="list-style-type: none"> • Operating temperature : -20°C ~ +45°C • Storage Temperature : -40°C ~ +70°C • Storage Humidity : 5% ~ 95% (non-condensing) • Enclosure : ABS fireproof material <p>Standard package of switch</p> <ul style="list-style-type: none"> • Product size: 16.8 x 16.8 x 3.2 cm(L*W*H) • Package size: 24.5 x 23.5 x 7.5 cm(L*W*H) • Product Weight/Package Weight W: 0.7KGs; W: TBDKGs • Package content: TBD 1 x Access Point, <p>Ordering information</p> <ul style="list-style-type: none"> • AirLive TOP-18AX 11ax 1800Mbps Gigabit PoE Access Point supports FIT/FAT Mode, AP and Gateway Mode Central and Cloud management supported

1.5 Product Specification inWall-U618AX

Model	inWall-U618AX AX1800 Access Point
<p>Device Interface</p> <ul style="list-style-type: none"> • Main Chip: MTK, Dual Core MT7621DAT • Flash:16MB • RAM:256MB • Ethernet (LAN): 4 x RJ45 10/100/1000mbps • WAN (PoE): 1x RJ-45 10/100/1000mbps • WiFi: 802.11b/g/n/n/ac/ax 2T2R(2.4Ghz), 802.11a/n/ac/ax 2T2R (5Ghz) • Button: Reset x 1 • Power Input: 1 x 48V (802.3af PoE) • Antenna Connector: Internal Wireless Antenna 2/4dBi (2.4/5Ghz) MIMO <p>WAN</p> <ul style="list-style-type: none"> • WAN: PPPoE, DHCP, Static IP, (Bridge (AP Mode)) <p>WiFi</p> <ul style="list-style-type: none"> • Standard: IEEE 802.11a/b/g/n/ac/ax, 2x2, 20/40/80 MHz channels • Support seamless roaming: 802.11kvr standard. • Functions: Multi-SSID 8 (4 per radio), SSID hidden ,SSID isolation, Band Steering, RF power adjustable, Wi-Fi time on/off to save energy • Security: WPA/WPA2PSK-TKIPAES, WPA3PSK-TKIPAES • Modulation : OFDMA, 1024QAM • Wi-fi Advanced: Wireless client isolation • Wireless Channel • 2.4G:1~13 (CE Channel) (region dependent) • 5.8G: (region dependent) 36~48, 36~64,100~140,149~165 • Wireless TX Power 2.4G: ≤20dbm, 5.8G: ≤19dbm <p>Security</p> <ul style="list-style-type: none"> • Filter Rule: URL Filter/Mac Filter/IP Filter • URL/MAC/IP filtering: White list/Black List. <p>DMZ</p> <ul style="list-style-type: none"> • DMZ <p>Port Forwarding Rule/Range</p> <ul style="list-style-type: none"> • TCP/UDP <p>VLAN</p> <ul style="list-style-type: none"> • VLAN support SSID Max 4 per Band <p>Cloud</p> <ul style="list-style-type: none"> • Cloud access support in Gateway/AP Mode <p>FIT/FAT Operation Mode</p> <ul style="list-style-type: none"> • FIT Mode: AP works with AC Controller (Enterprise use) • FAT Mode: AP works standalone (Home use) 	<p>Management</p> <ul style="list-style-type: none"> • Web-UI, Remote Management, WLAN Controller, Cloud Management System <p>DDNS</p> <ul style="list-style-type: none"> • Oray <p>Max Concurrent users</p> <ul style="list-style-type: none"> • 256 <p>Parental Control (Gateway Mode)</p> <ul style="list-style-type: none"> • Mac Address Filtering, URL Filtering, IP Filtering <p>AP/AP Gateway Mode</p> <ul style="list-style-type: none"> • AP: In this mode, the AP Wireless and Cable Interface are bridging together. Without NAT, Firewall and all network related functions. • AP Gateway: In this mode, the WAN page is enabled and PPPoE, DHCP or Static IP can be selected. NAT is enabled and PC's in LAN ports share the IP to ISP through WAN port. <p>VPN Pass Through (Gateway Mode)</p> <ul style="list-style-type: none"> • IPsec, PPTP, L2TP <p>Data Statistics</p> <ul style="list-style-type: none"> • WAN Down Stream, WAN UP Stream • Wi-Fi Analyzer (2.4 and 5Ghz) <p>Multiple Language</p> <ul style="list-style-type: none"> • English/Spanish <p>ESD Protection</p> <ul style="list-style-type: none"> • ±6KV <p>Environment</p> <ul style="list-style-type: none"> • Operating temperature: -20°C ~ +45°C • Storage Temperature: -40°C ~ +70°C • Storage Humidity: 5% ~ 95% (non-condensing) • Enclosure: ABS fireproof material <p>Standard package of switch</p> <ul style="list-style-type: none"> • Product size: 8.6 x 8.6 x 4.5 cm(L*W*H) • Package size: 12.0 x 11.0 x 6.5 cm(L*W*H) • Product Weight/Package Weight W: 0.25KGs; W: 0.25KGs • Package content: 1 x inWall Access Point <p>Ordering information</p> <ul style="list-style-type: none"> • AirLive inWall-U618AX 11ax 1800Mbps Gigabit inWall PoE Access Point supports FIT/FAT Mode, AP and Gateway Mode Central and Cloud management supported

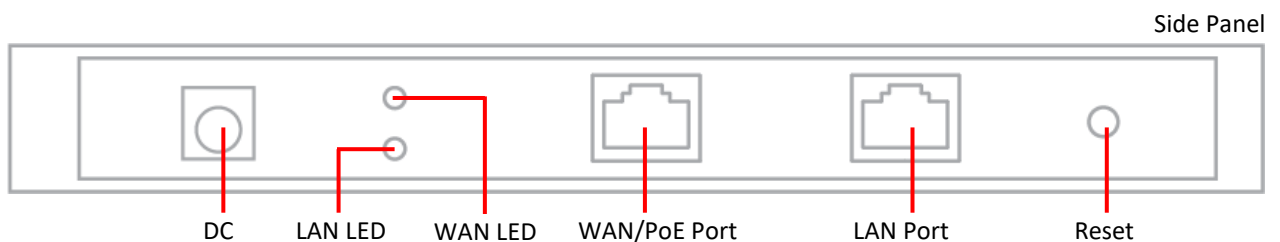
Chapter 2. Hardware Installation

2.1 TOP-12AC and TOP-18AX Port description.



LED Description.

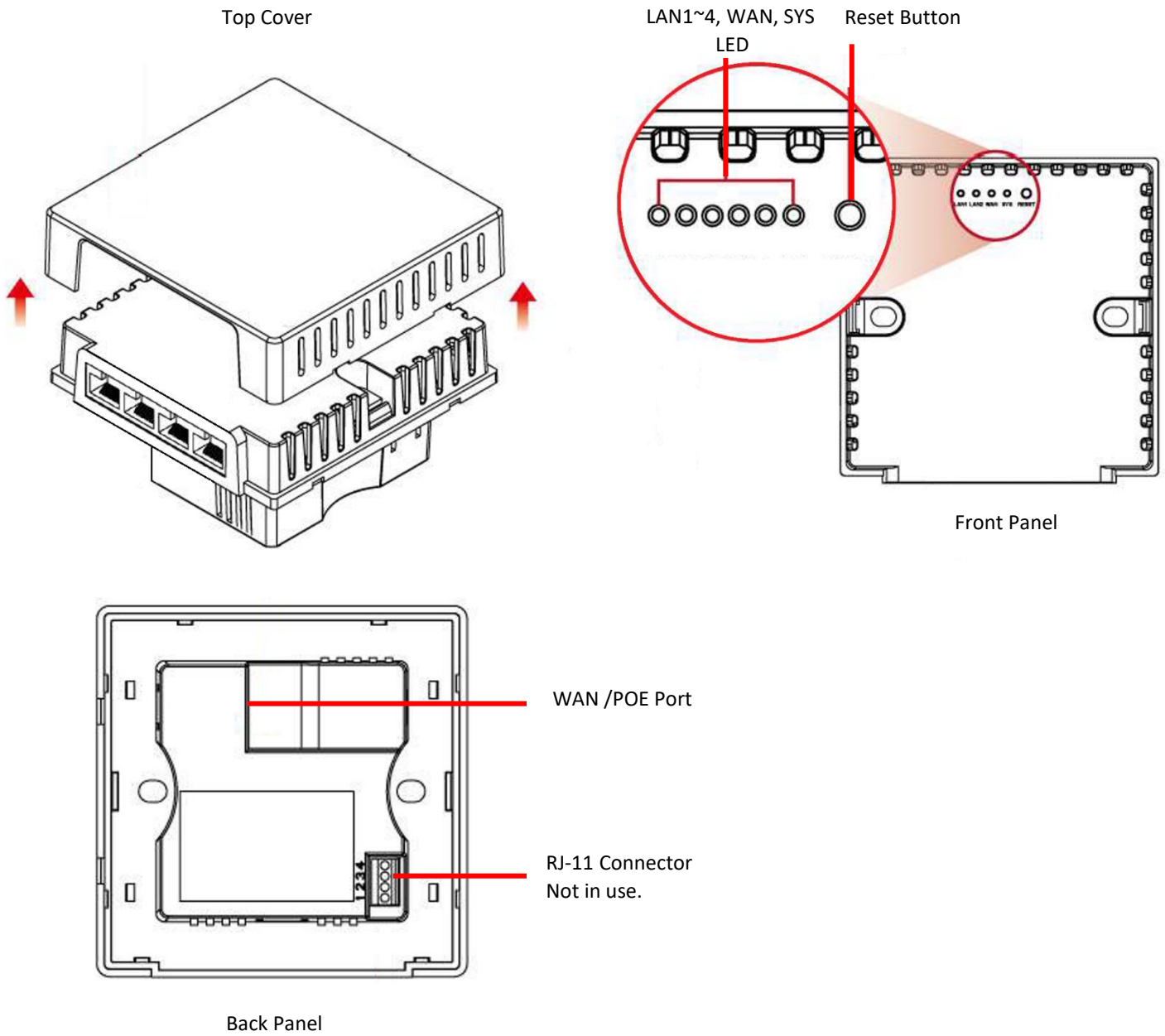
LED	Status	Function
PWR	On (Red)	The Access Point is powered on
	Off	System is operating.
SYS	On	Wireless LAN is initializing.
	Blinking (Blue/Green)	2.4GHz/5GHz wireless LAN is working.



Port Description.

Port	Description
12V DC	12V DC port for the power adapter(DC-Jack 5.5 x 2.1mm)
LAN/WAN LED	The LAN/WAN port is connected
WAN/PoE	LAN port with Power over Ethernet (PoE) IN (802.3at/af)
LAN	LAN port connecting to the network equipment.
Reset	To restore to the factory default setting, press and hold the Reset Button for about 15 seconds, and then release it.

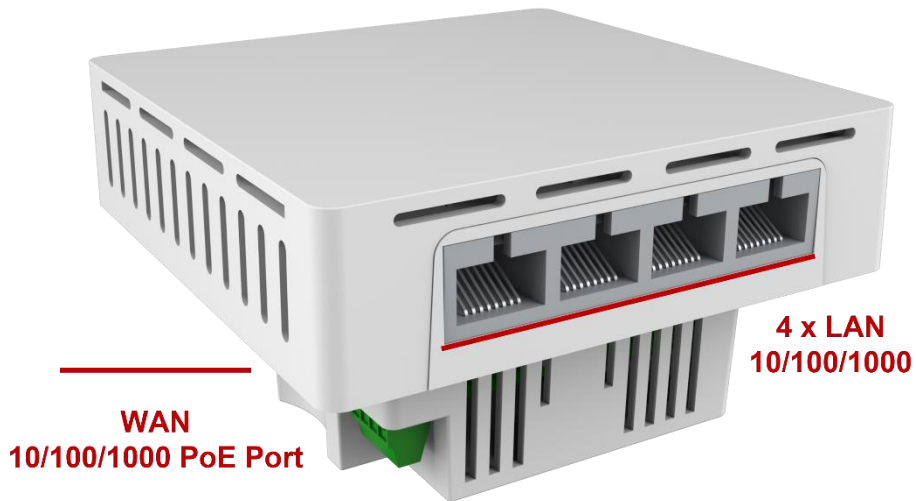
2.2 inWall-U618AX Port description.



LED/Reset Description.

LED	State	Function
SYS	On	Power On
	Off	Power Off
WAN	On/Flash	WAN connected / data transmitting
	Off	WAN disconnected
LAN 1~4	On/Flash	LAN 1 connected / data transmitting
	Off	LAN 1 port disconnected

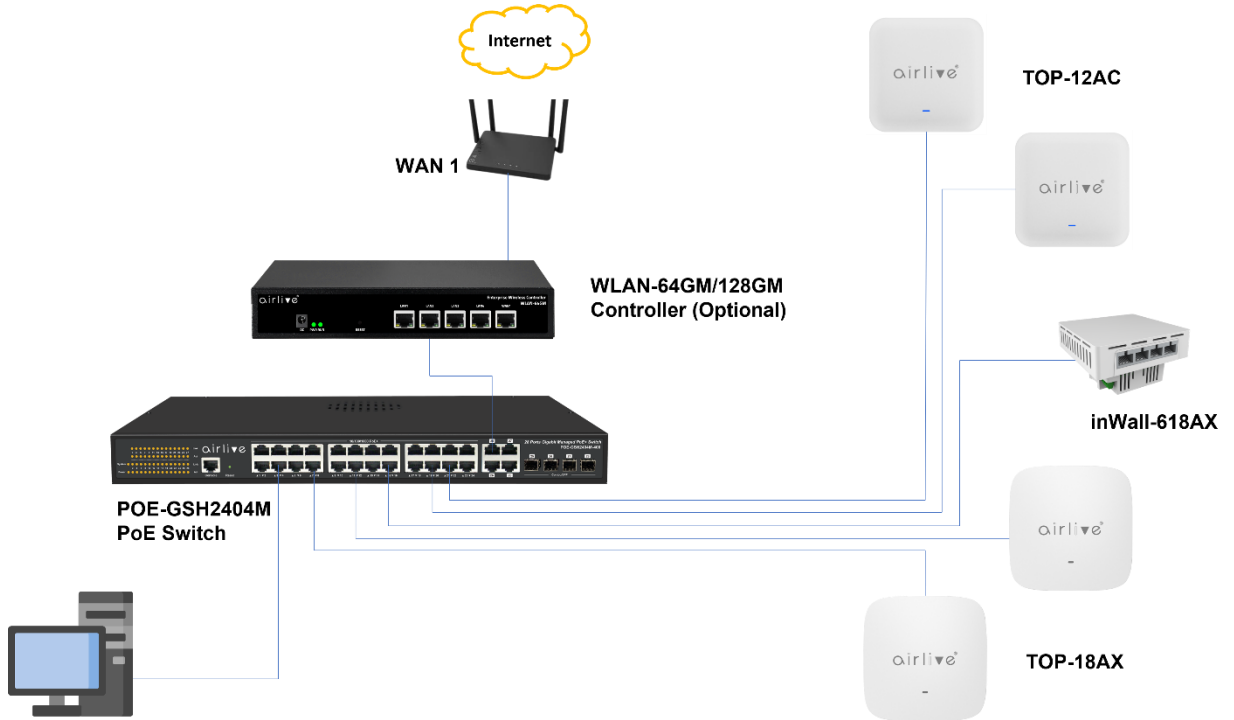
Object	Description
Reset	Press the Reset button for over 10 seconds and then release it to restore system to the factory default settings.



Object	Description
PoE Port (802.3af/at PoE+)	10/100/1000Mbps RJ45 port, auto MDI/ MDI-X Connect PoE port to the IEEE 802.3af/at PoE+ switch to power on the device.
LAN 1-4 Port	10/100/1000Mbps RJ-45 port, auto MDI/ MDI-X Connect this port to the network equipment.

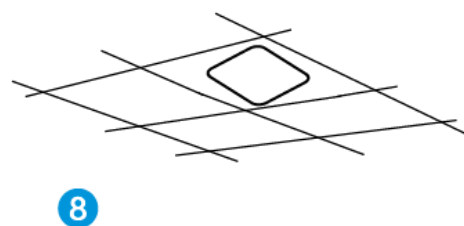
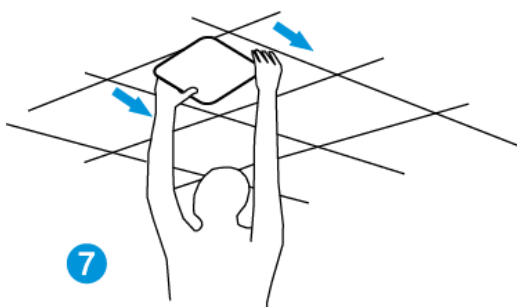
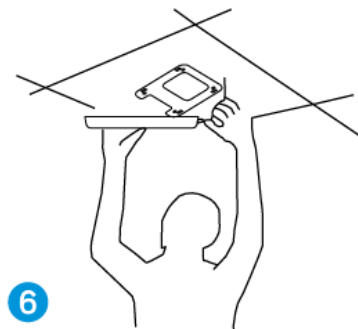
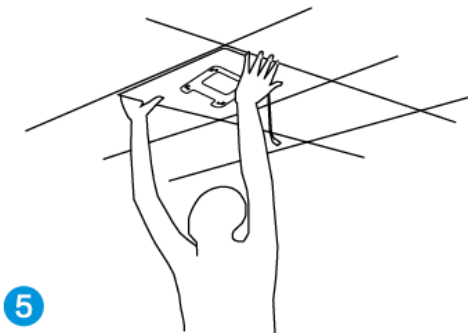
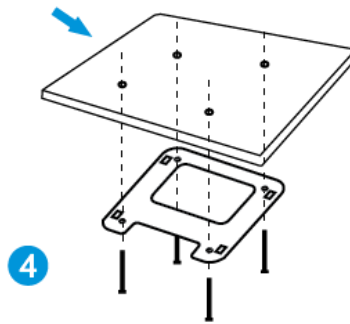
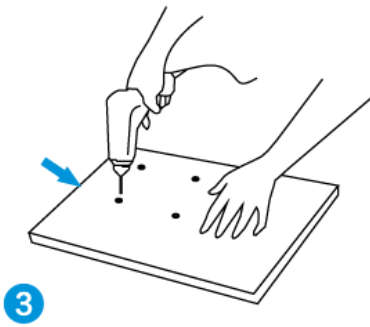
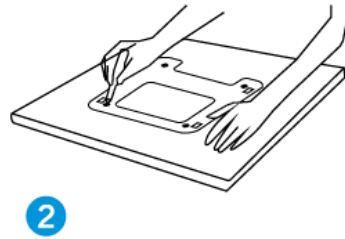
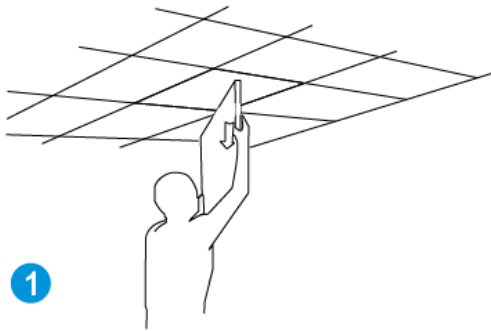
2.3 TOP-12AC, TOP-18AX, inWall-618AX Hardware installation.

Connect the Access Point to a PoE Switch via the WAN/PoE port to power it on, then connect your computer via the LAN port to the either LAN port on the Access Point or to the LAN port of your PoE switch. The Access points can also be powered on by a PoE Injector when a PoE switch is not used. For the Ceiling type Access Points these models also have a 12V DC power input and can be powered by a power adapter (not included).



2.4 TOP-12AC, TOP-18AX Installation.

For the Ceiling Wireless AP, they will be installed on the ceiling based on the following steps:
Take the mounting bracket from the back of the Ceiling Access Point, put it on the target place by aligning the holes and fix it with the supplied screws. Once the bracket is in place the Ceiling AP can be clicked into the bracket.
Do not forget to connect to PoE LAN cable to power on the Access Point.

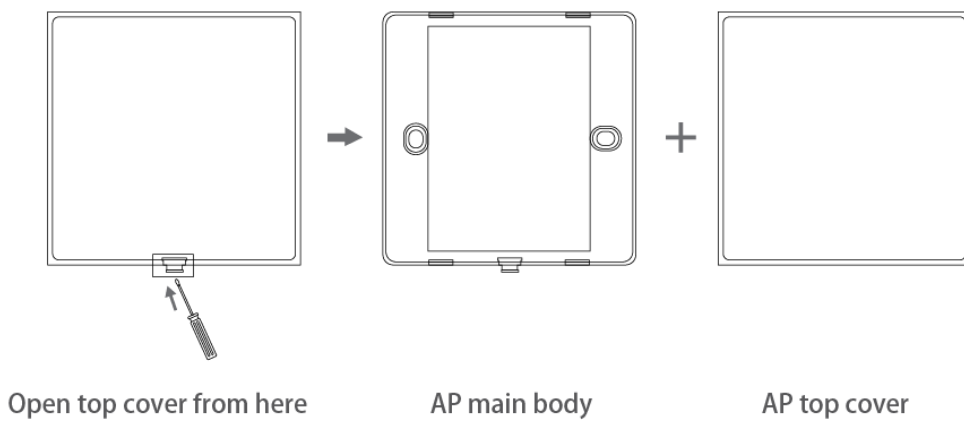


2.5 InWall-U618AX Installation.

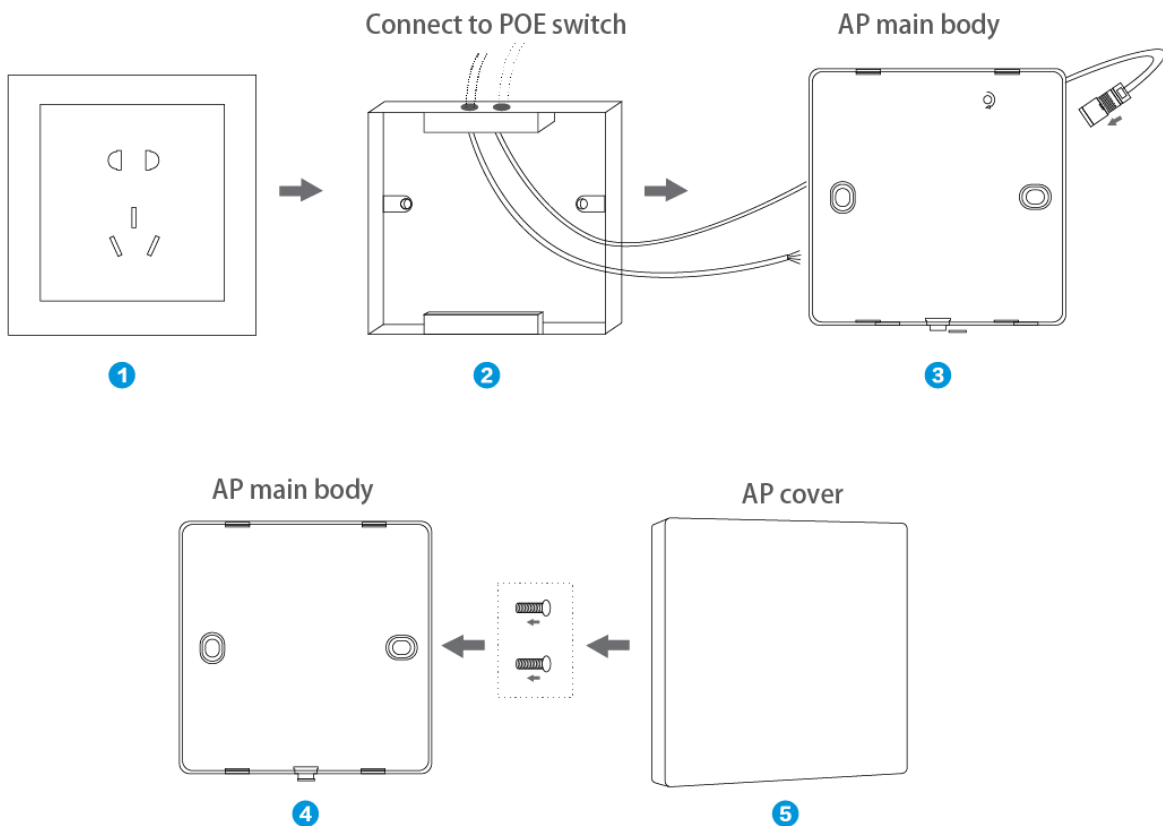
When installing the inWall Access Point please make sure your PoE LAN cable is already at the power socket location into which the inWall Access Point will be placed. Follow the following steps:

- ①. Open wall socket cover
- ②. Insert LAN cable into R-J45 port at backside of the AP
- ③. Put AP into the wall socket
- ④. Fix the AP with screws
- ⑤. Install the cover onto AP

• Step 1: Remove AP top cover with screw driver



• Step 2: Install AP



Chapter 3. Quick Installation Guide

3.1 TOP-12AC, TOP-18AX , Web login Management.

This chapter will show you how to configure the basic functions of your AP within minutes.

Manual Network Setup – TCP/IP Configuration.

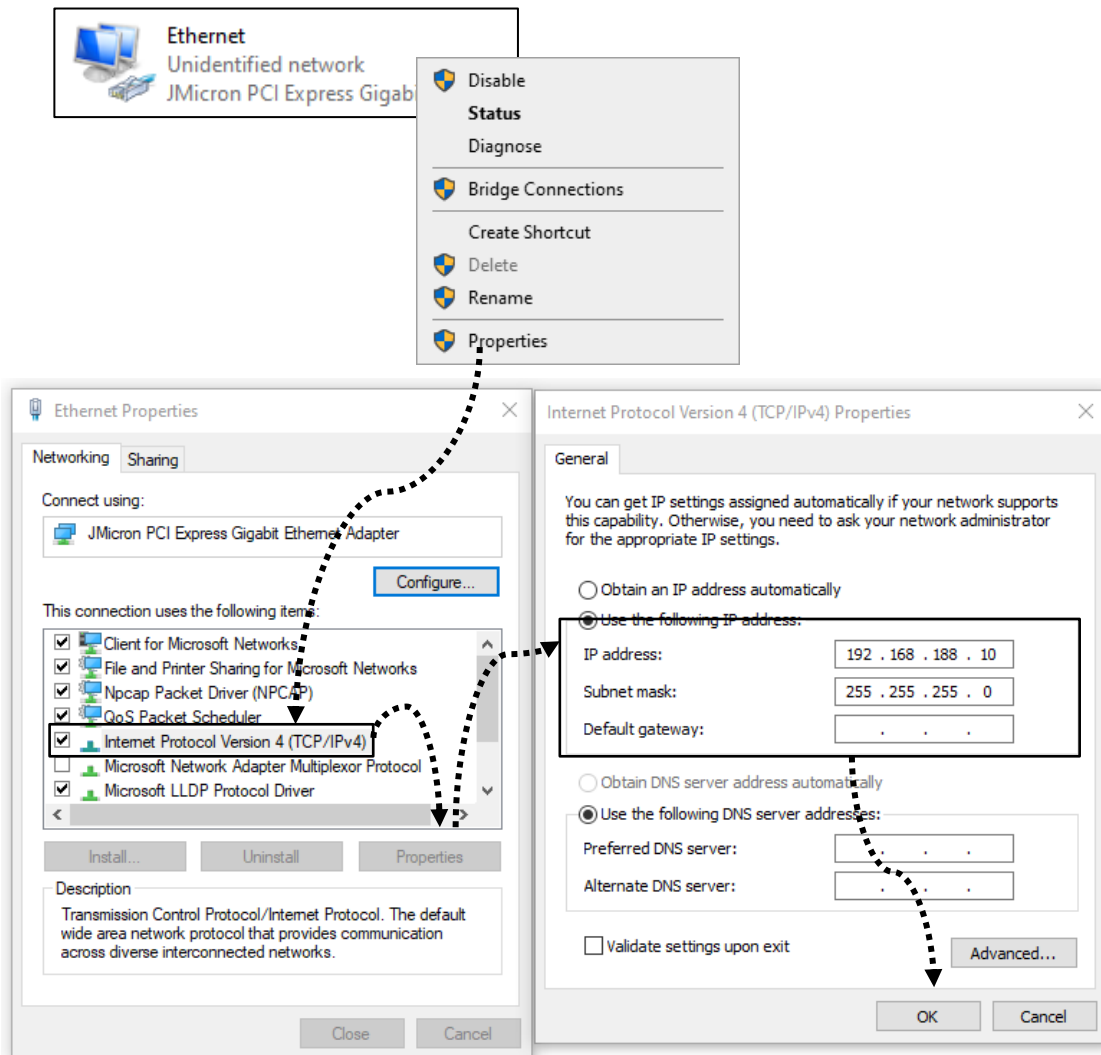
The default IP address of the Access Point is 192.168.188.253, and the default subnet is 255.255.255.0. These values can be changed as you want. For this guide we will use the default values to introduce the webui.

Connect the Access Point with your PC by plugging one end of an Ethernet cable in the LAN port of the Access Point or into a free port on the PoE switch to which the Access Point is also connected and the other end in the LAN port of PC. When the Access Point powered by a PoE switch, you can connect to the Access Point by connecting direct to LAN port of the Access Point or by connecting to the same PoE switch.

In the following sections, we'll introduce how to install and configure the TCP/IP correctly in Windows. And the procedures in other operating systems are similar. First, make sure your Ethernet Adapter is working, and refer to the Ethernet adapter manual if needed.

3.2 Configuring the IP Address Manually.

Using the LAN connection, you need to set the IP address of the TCP/IP property of the network card to 192.168.188.X (X is number of 2--252) first, so that the device and PC in the same IP segment, and set the subnet mask to 255.255.255.0, as shown in the following picture:



Now click OK to save your settings.

3.3 Starting Setup in the Web UI.

It is easy to configure and manage the Access Point with a web browser.

Input 192.168.188.253 into the browser, and the login page will appear, the default login password is: admin.

When the Access Point was connected to a PoE switch which also transfers IP address from a router connected to it. It could be that the IP Address of the Access Point has changed to an IP address in your local range.



To change the language settings from English to Spanish click on the “v” to open the menu.

The color and layout between the different models of Access Points can slightly differ, but the operation is the same.

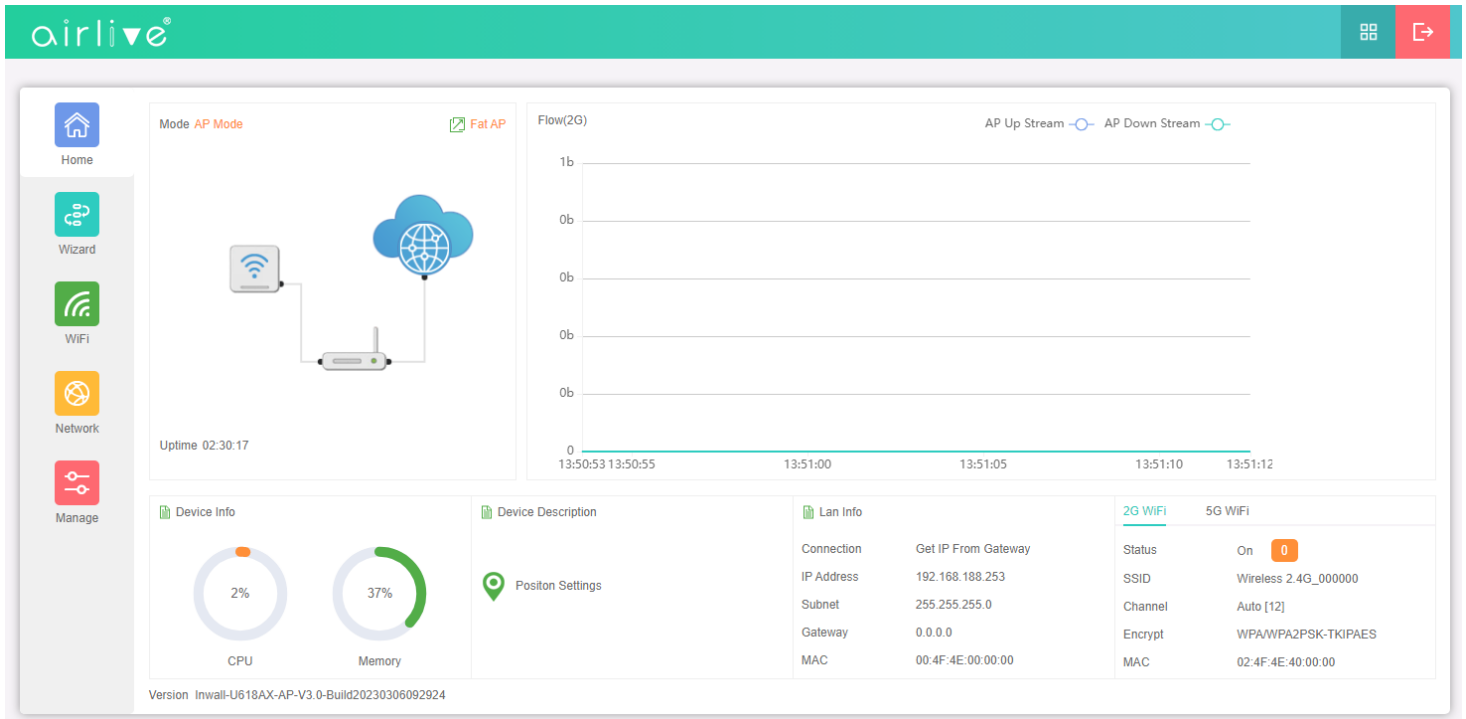
Chapter 4. Configure the Access Point

4.1 Main Home Page.

The below web GUI and the topology used in this guide uses the inWall-U618AX as an example.

It is easy to configure and manage the AP with the web browser. The default setting of the Access Point is AP Mode.

The default setting for operation is also FAT mode, to view the FIT mode please see chapter 5.



The page includes the following fields:

Object	Description
Mode	Shows the current mode status, AP or Gateway mode.
Fat AP/ Fit AP	Switch between Fat AP and Fit AP mode. (Fit mode is used with WLAN-64/128GM controller). The Fat and Fit mode is only available in AP Mode not Gateway Mode.
Device Info	Shows the CPU and Memory usage.
Device Description	You can enter the device description.
Flow (2.4/5G Wi-Fi) bps	Shows the Upstream/Downstream graph, select either 2.4G or 5Ghz
LAN Info	Shows the device IP mode, LAN IP, Subnet, Gateway and MAC address.
Wi-Fi Information	It shows the Wi-Fi status, SSID, Channel, Encryption, MAC address
Hardware accelerate	Only in Gateway Mode.
Version	Shows the current device firmware version.



Reboot and Password Change:

Click on the Green icon with the 4 squares in the top right corner and a pulldown menu will appear.

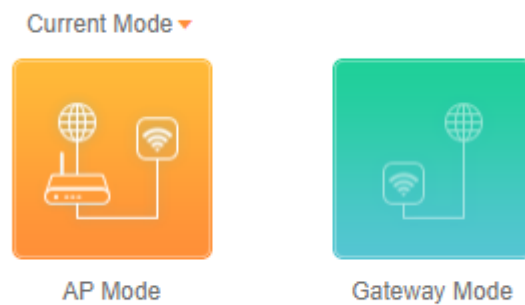
To change the Password, click on the lock icon and enter your new Password.

To Reboot the Access Point, click on the orange icon

4.2 Wizard Configuration.

Wizard: It instructs users to configure wireless AP's operation mode based on needs, there are two operation modes including AP and Gateway mode. Please confirm the operation mode first before starting the configuration. The default settings of the Access Point is AP mode.

Clicking on Wizard the status page will pop up, for each operation mode there is an explanation for better application.



AP Mode:

In this mode, the AP wireless interface and cable interface are bridging together. Without NAT, firewall and all network related functions.

Gateway Mode:

In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled, and PCs in the LAN ports share the same IP to ISP through WAN port. The connection type can be setup in WAN page by using PPPoE, DHCP client or static IP.

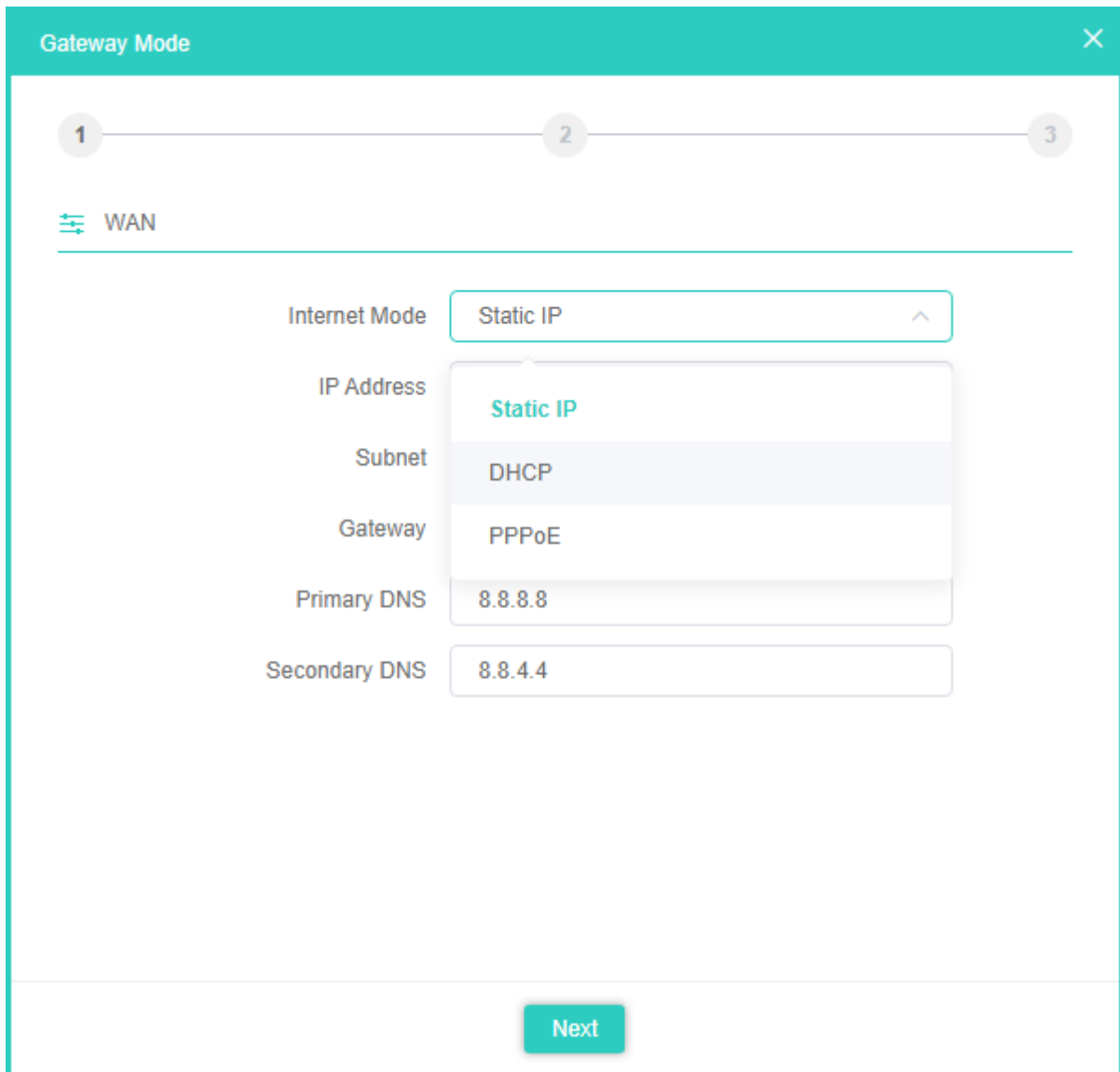
In Gateway mode an additional Firewall menu will also appear. This menu is not visible in AP mode.

4.3 Gateway Mode (Router).

Before changing the default AP mode to the Gateway mode, confirm your internet will be Static IP, PPPoE, or DHCP. Then click on the Gateway mode and the below image will pop-up. Please choose the right WAN settings mode, then click next to continue. Then configure the wireless parameters and click next.

Clicking next will complete the Gateway mode setting and show following picture:

Please Note: The Access Point will restart for the changes to take effect.



4.3.1 WAN Settings.

Static IP

If your ISP offers you a static IP Internet connection type, select "Static IP" and then enter IP address, subnet mask, default gateway and primary DNS information provided by your ISP in the corresponding fields.

The page includes the following fields:

Object	Description
IPAddress	Enter the WAN IP address provided by your ISP. Enquire your ISP if you are not clear
Subnet Mask	Enter WAN Subnet Mask provided by your ISP
Default Gateway	Enter the WAN Gateway address provided by your ISP
Primary DNS	Enter the necessary DNS address provided by your ISP
Second DNS	Enter the second DNS address provided by your ISP

4.3.2 WAN Settings.

PPPoE (ADSL)

Select PPPOE if your ISP is using a PPPoE connection and provided you wit an PPPoE username and password.

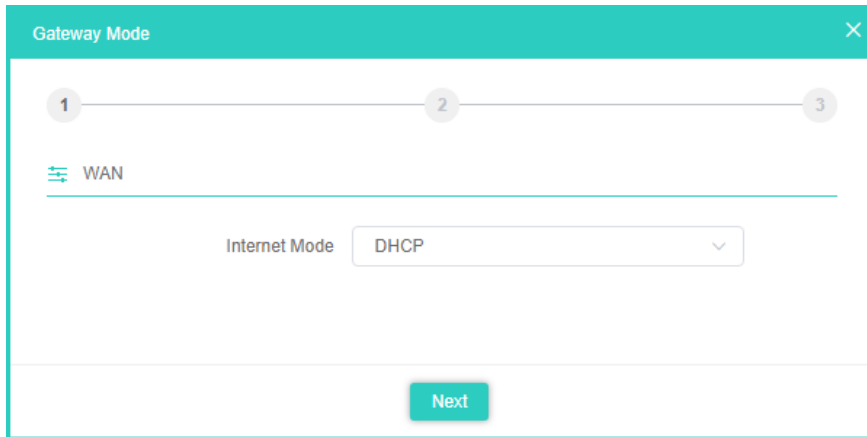
The page includes the following fields:

Object	Description
Username	Enter the PPPoE Username provided by your ISP
Password	Enter the PPPoE Password provided by your ISP
Server Name	No Need, Don't fill
Service Name	No Need, Don't fill

4.3.3 WAN Settings.

DHCP

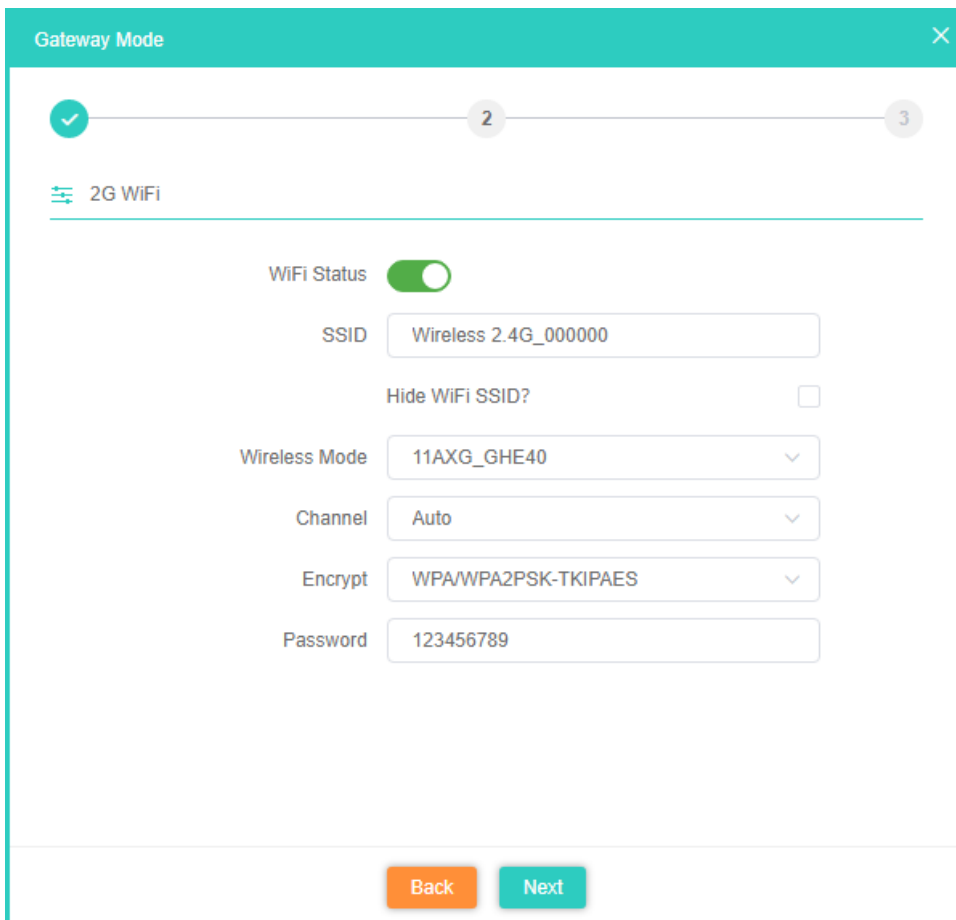
Choose "DHCP" and the router will automatically obtain IP addresses, subnet masks and gateway addresses from your ISP.

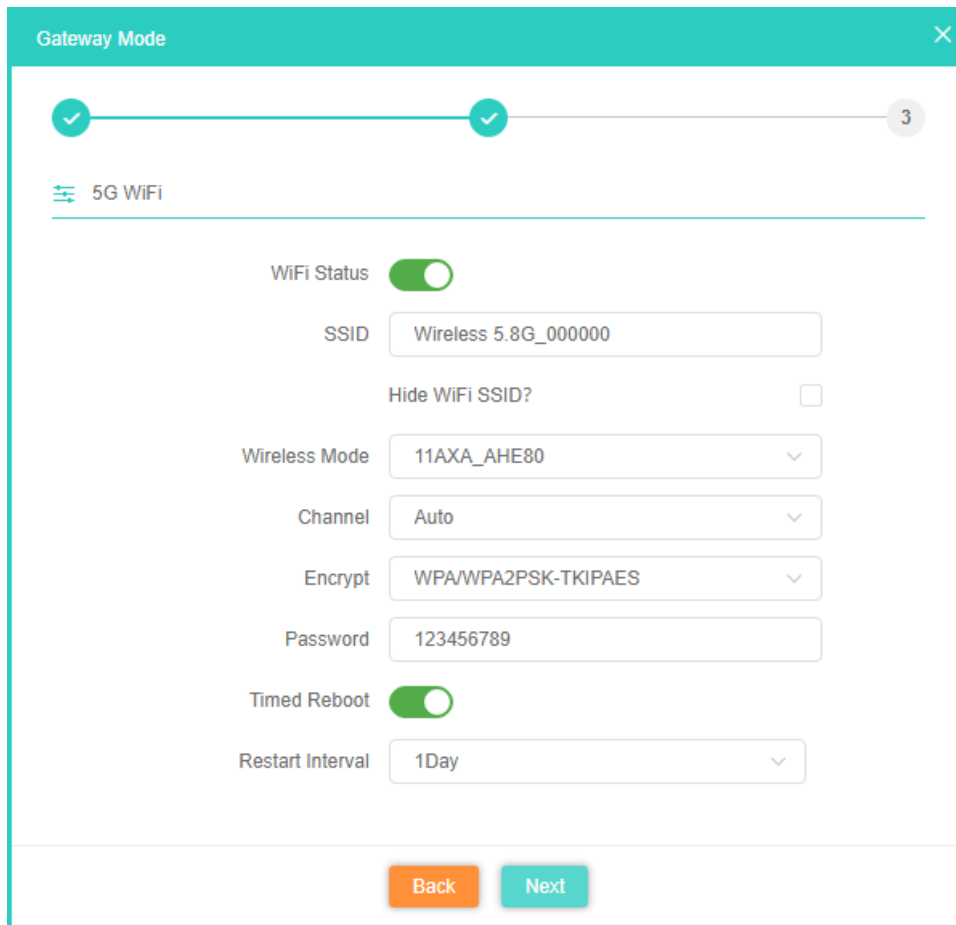


4.3.4 Wi-Fi Settings.

In the Wi-Fi settings the settings for the 2.4Ghz are first after these are done click next to setup the 5Ghz Wi-Fi settings.

Setup your own SSID, Wireless Mode, Channel, Encryption and Wi-Fi Password.





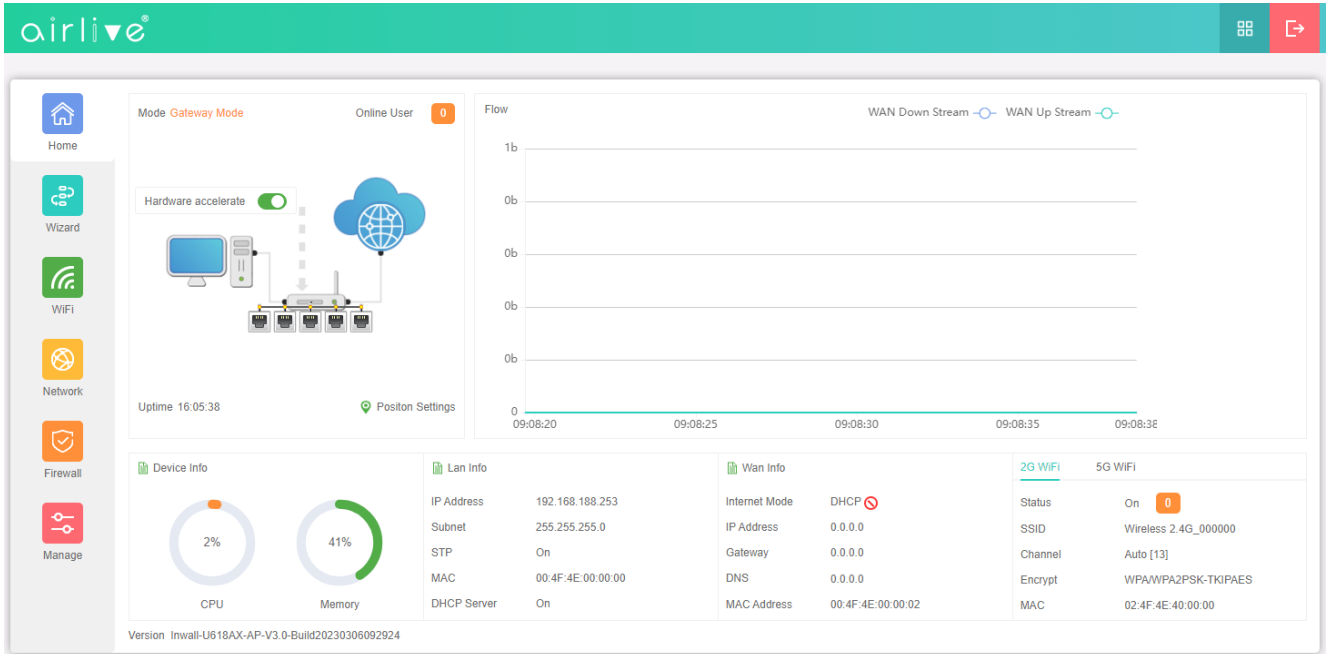
The page includes the following fields:

Object	Description
Wi-Fi Status	Select ON (Green) or OFF (Gray) to enable or disable Wireless LAN
SSID	This is the wireless network name. The default SSID is Wireless 2.4G_XXXXXX and Wireless 5.8G_XXXXXX. X is the last 6 numbers of the AP MAC address.
Hide your SSID	Select ON (Green) or OFF (Gray) to hide wireless LAN or not
Wireless Mode	Select the Wireless mode and Channel bandwidth, "20MHz" or "40MHz" or "80MHz".
Channel	Select the operating channel you would like to use. The channel range will be changed by selecting a different domain.
Encryption	Select the wireless encryption.
Timed Reboot	Set the after how many days the AP should automatically restart.

Router Mode:

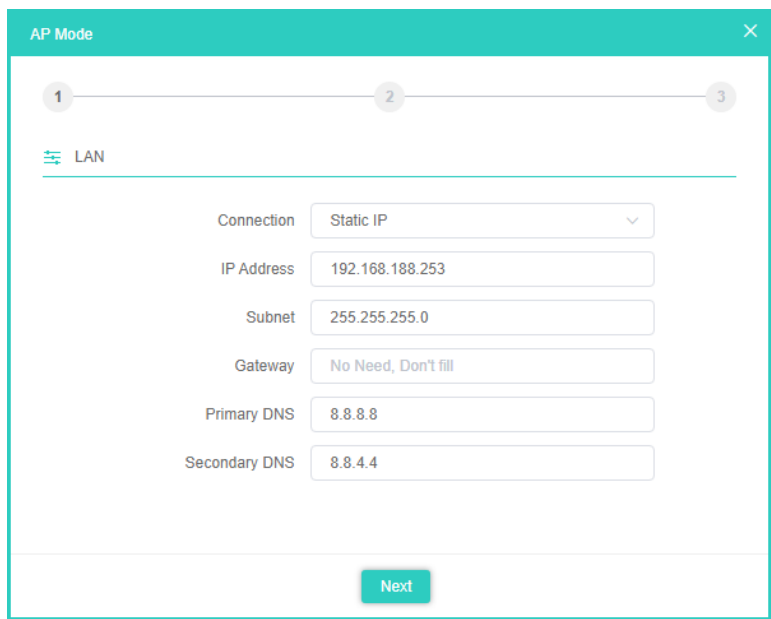
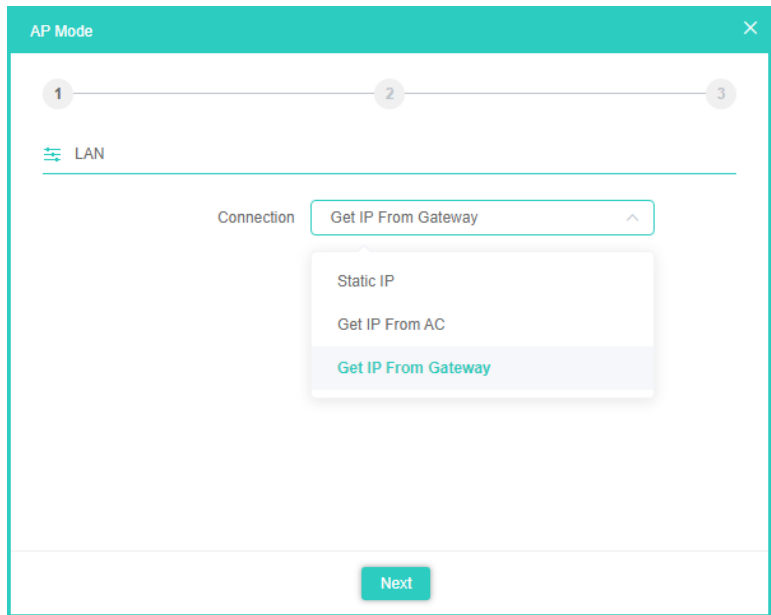
After the Access Point has restarted the Gateway mode will be active.

The web GUI will now display the Gateway Mode and will have an additional Firewall menu on the left side. See Chapter xx for information.



4.4 AP Mode.

The default mode of the Access Point is AP mode. Select Static IP, Get IP from Gateway or Get IP from AC. When selecting the Get IP from AC you would need an AirLive WLAN-64/128GM Controller (sold separately). In the AP mode, the AP wireless interface and cable interface bridge together.



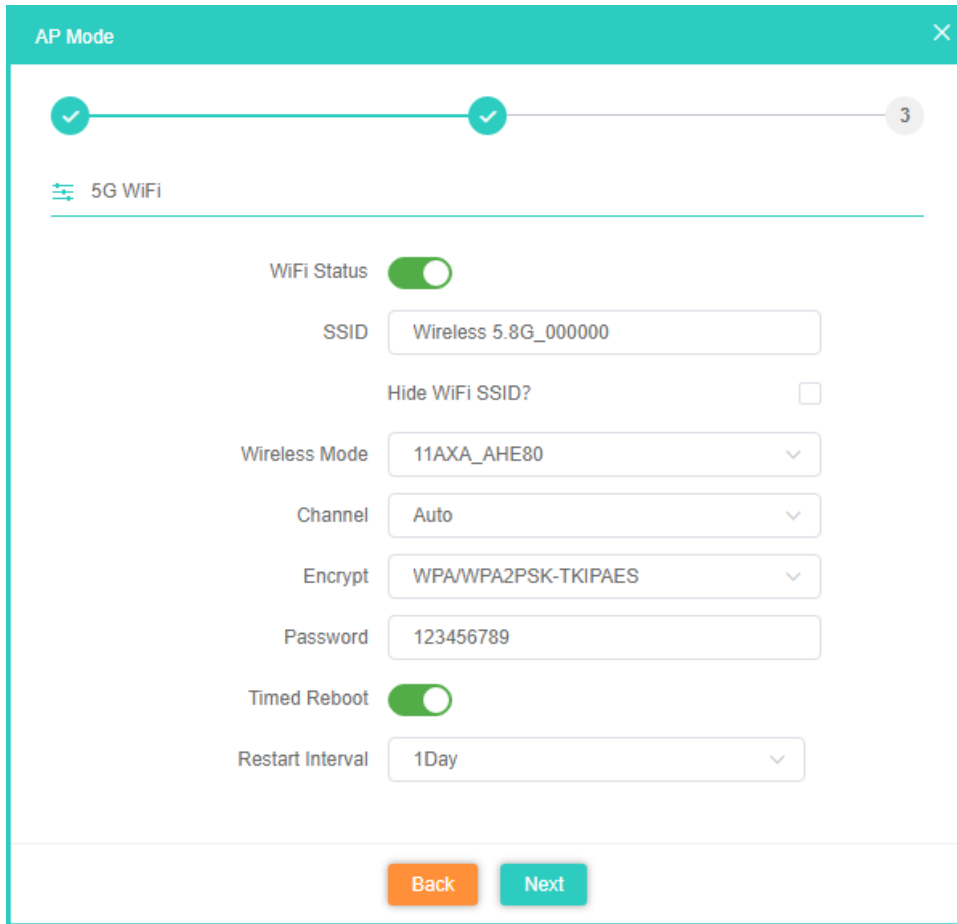
The page includes the following fields:

Object	Description
Connection	Select "Static IP", "Get IP from Gateway" or "Get IP from AC for setting up device IP.
IP Address	Enter the Access Point Static IP Address.
Subnet	Enter the network mask.
Gateway	Enter the default gateway IP Address.
Primary DNS	Enter the primary DNS IP Address, or not.
Secondary DNS	Enter the secondary DNS IP Address, or not.

4.4.1 Wi-Fi Settings.

In the Wi-Fi settings the settings for the 2.4Ghz are first after these are done click next to setup the 5Ghz Wi-Fi settings.

Setup your own SSID, Wireless Mode, Channel, Encryption and Wi-Fi Password.

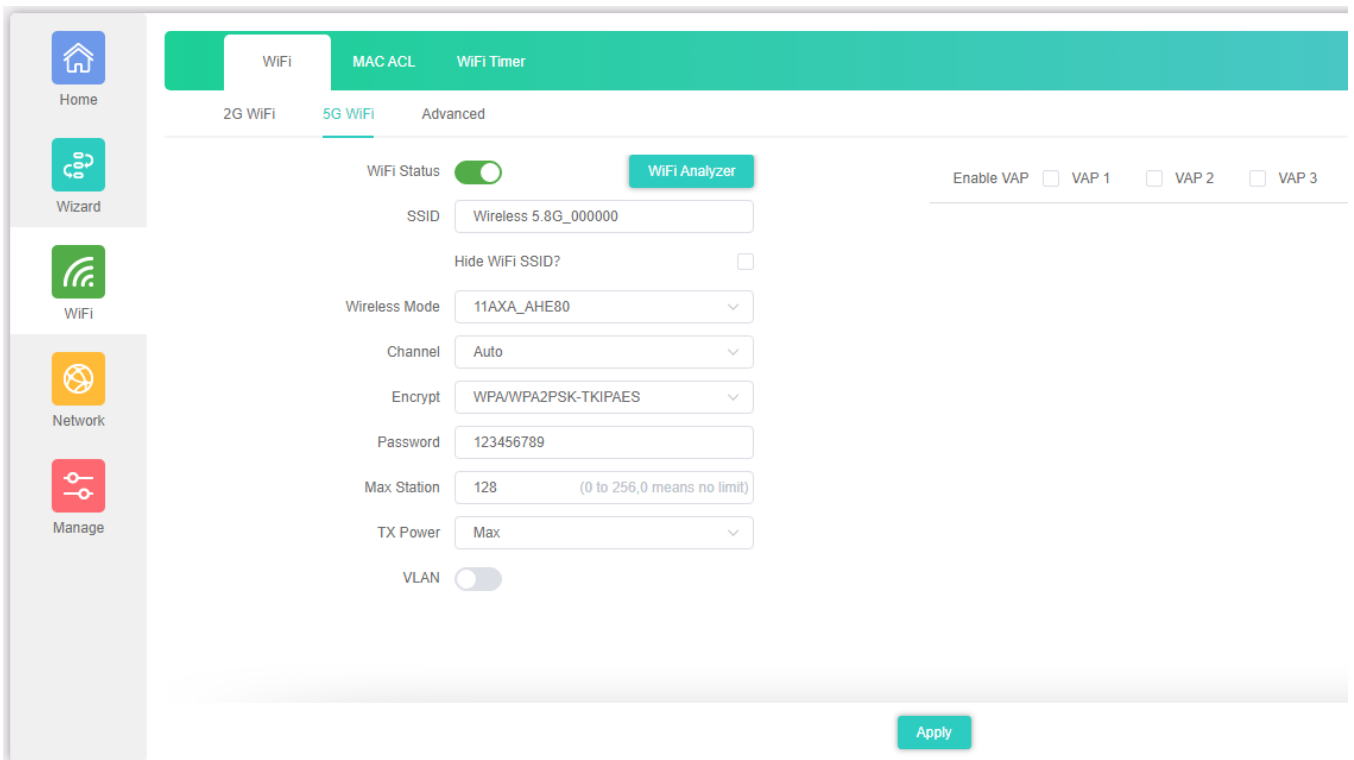
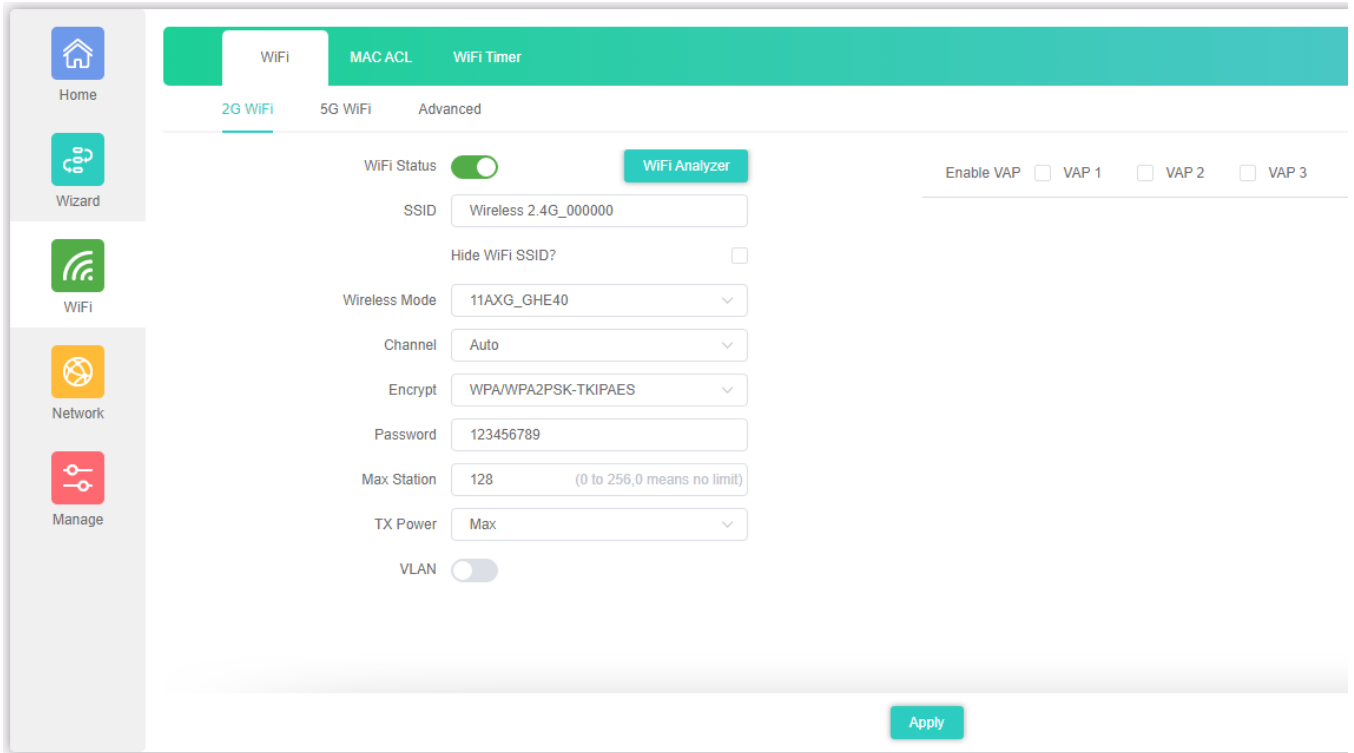


The page includes the following fields:

Object	Description
Wi-Fi Status	Select ON (Green) or OFF (Gray) to enable or disable wireless LAN.
SSID	This is the wireless network name. The default SSID is Wireless 2.4G_XXXXXX and Wireless 5.8G_XXXXXX. X is the last 6 numbers of the AP MAC address.
Hide your SSID	Select ON (Green) or OFF (Gray) to hide wireless LAN or not.
Wireless Mode	Select the Wireless mode and Channel bandwidth, "20MHz" or "40MHz" or "80MHz".
Channel	Select the operating channel you would like to use. The channel range will be changed by selecting a different domain.
Encryption	Select the wireless encryption.
Timed Reboot	Set the after how many days the AP should automatically restart.

4.5 Wi-Fi

In Wi-Fi setting you can setup the 2.4Ghz and 5Ghz setting, MAC ACL, Wi-Fi Timer and Advanced settings. Basic Wi-Fi settings for 2.4Ghz and 5Ghz. Setup your own SSID, Wireless Mode, Channel, Encryption and Wi-Fi Password, Max Station, TX Power and VLAN.



The page includes the following fields:

Object	Description
Wi-Fi Status	Select ON (Green) or OFF (Gray) to enable or disable wireless LAN.
SSID	This is the wireless network name. The default SSID is Wireless 2.4G_XXXXXX and Wireless 5.8G_XXXXXX. X is the last 6 numbers of the AP MAC address.
Hide your SSID	Select ON (Green) or OFF (Gray) to hide wireless LAN or not.
Wireless Mode	Select the Wireless mode and Channel bandwidth, "20MHz" or "40MHz" or "80MHz".
Channel	Select the operating channel you would like to use. The channel range will be changed by selecting a different domain.
Encryption	Select the wireless encryption.
Password	Enter your wireless password
Max Station	Set the maximum number of clients that can connect to the Access Point
TX-Power	Select the output power of the Access Point
VLAN	Set the VLAN-ID for the Access Point (between 3~4094)
Wi-Fi Analyzer	Press this button to analyze local area wireless signal.

4.5.1 VAP

Select VAP1~VAP3 to enable the virtual AP. Both the 2.4Ghz and 5Ghz have 3 virtual ap's

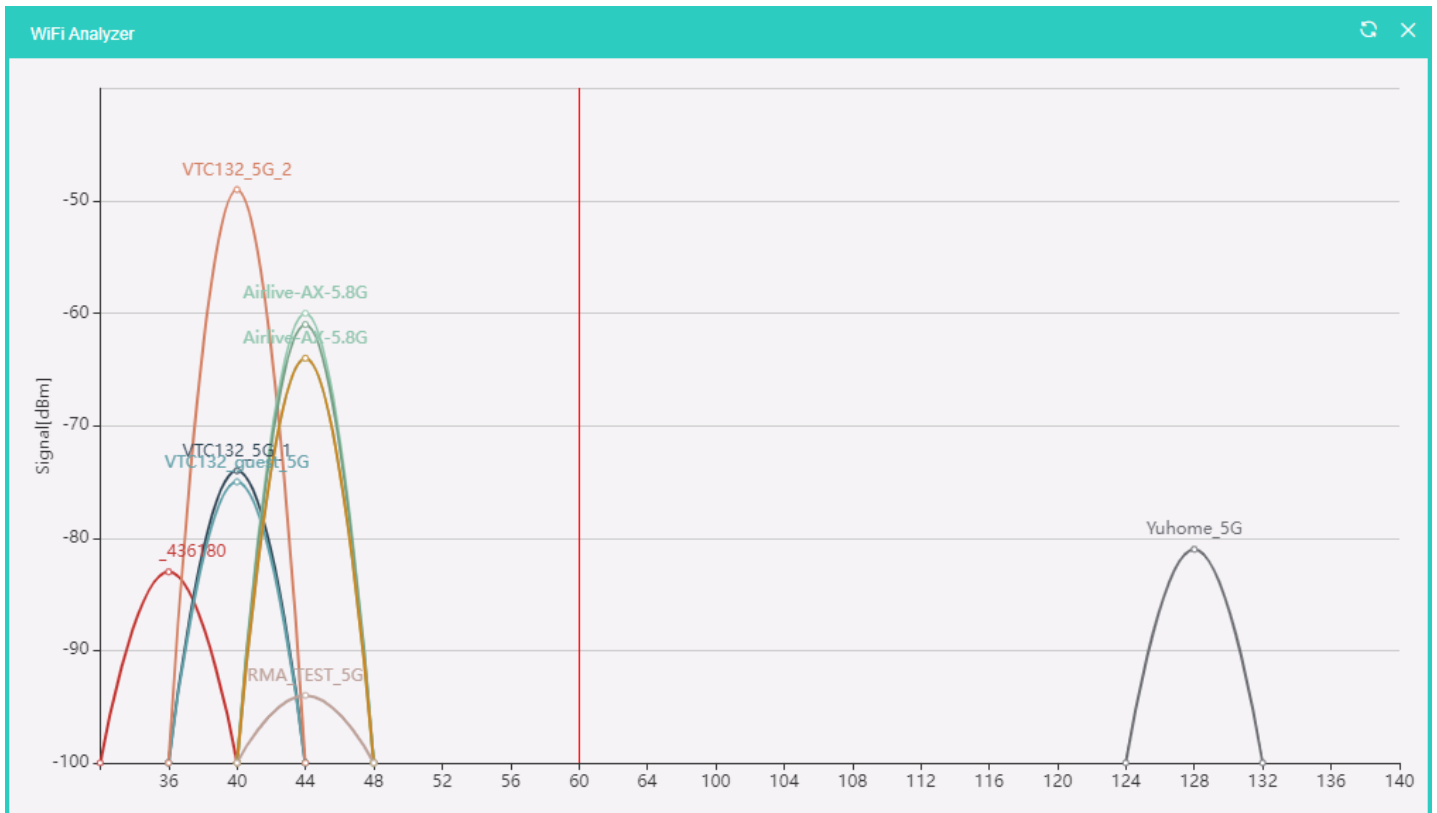
The screenshot shows a configuration interface for VAP 1. At the top, there are three checkboxes for 'Enable VAP': VAP 1 (checked), VAP 2 (unchecked), and VAP 3 (unchecked). Below this, 'VAP 1' is selected. The configuration fields for VAP 1 are: SSID (Wireless 2.4G Vap1_000000), Hide WiFi SSID? (unchecked), Encrypt (NONE), and VLAN (disabled).

The page includes the following fields:

Object	Description
Wi-Fi Status	Check mark VAP1~3 to enable them
SSID	This is the wireless network name. The default SSID is Wireless 2.4G Vap1_XXXXXX and Wireless 5.8G Vap1_XXXXXX. X is the last 6 numbers of the AP MAC address. The SSID will have Vap2/3 in its name when Vap2 and 3 are enabled
Hide your SSID	Select ON (Green) or OFF (Gray) to hide wireless LAN or not.
Encryption	Select the wireless encryption. The default is "None".
VLAN	Set the VLAN-ID for the Access Point (between 3~4094)

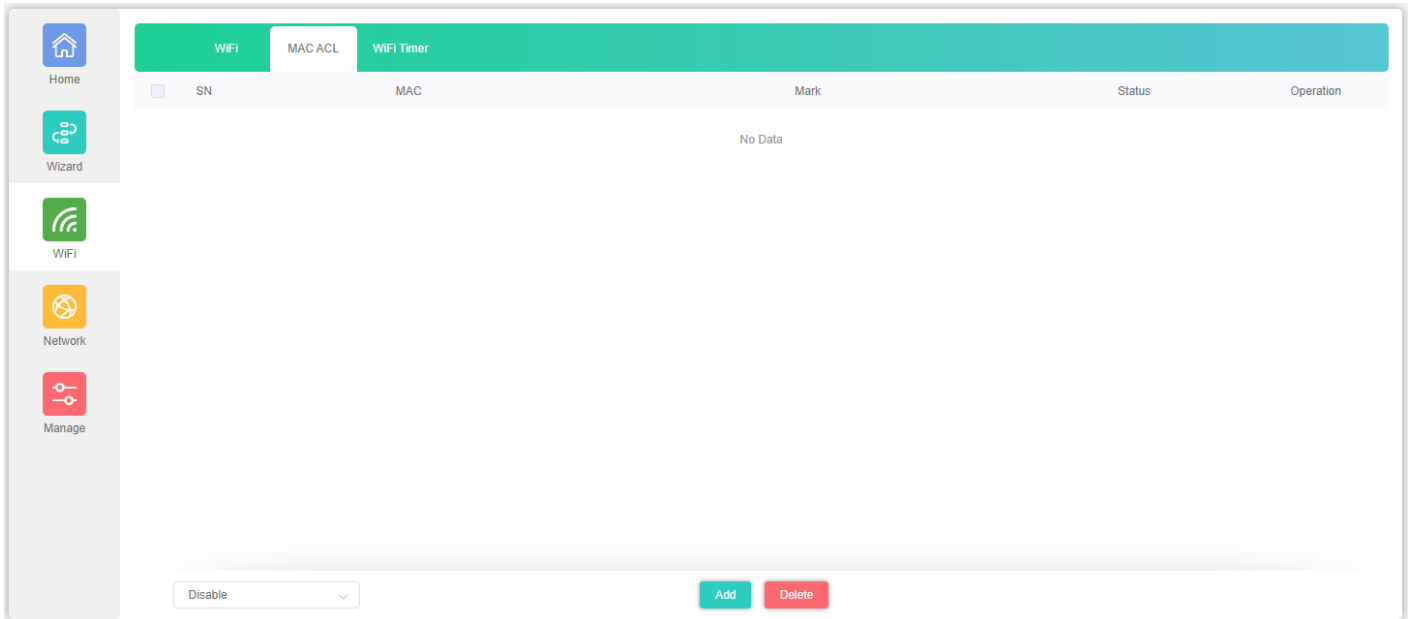
4.5.2 Wi-Fi Analyzer

Press this button to analyze the local area to see which wireless channels are in use. Both the 2.4Ghz and the 5Ghz have their own Wi-Fi Analyzer. The straight vertical red line indicate the current channel used by the Access Point.



4.5.3 MAC ACL

Allow or deny the users access into this Access Point based on MAC address.



The page includes the following fields:

Object	Description
Add	Press the “Add” button to add end-device that is scanned from wireless network and mark them.
Delete	Press the “Delete” button to delete device from list.
ACL Status	Select the rule of ACL, default is Disable. Blacklist: Prohibited rules within the device through

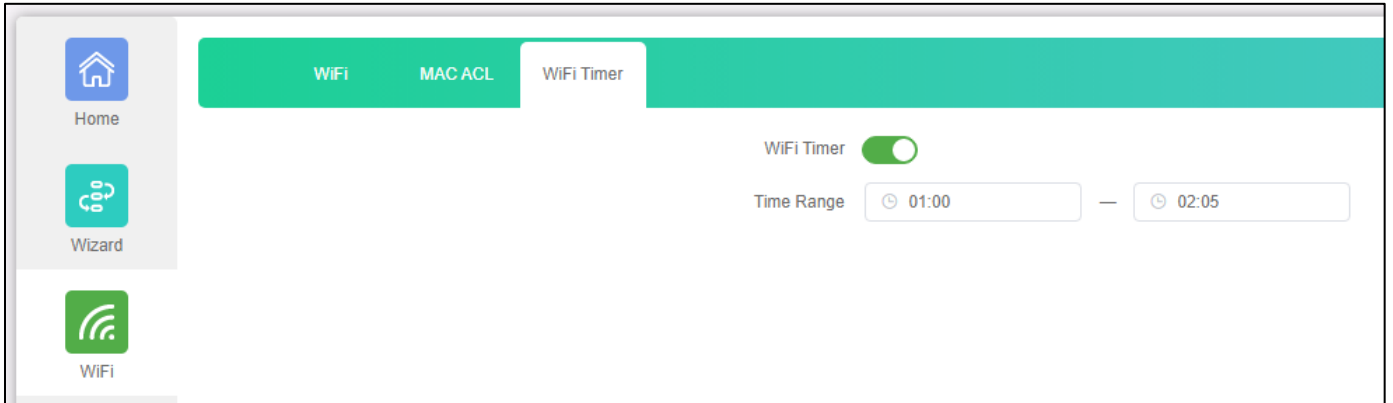
MAC ACL Status

Select to enable or disable the ACL rule.



4.5.4 Wi-Fi Timer

Enable Wi-Fi Timer to turn off the SSID on a specified time.

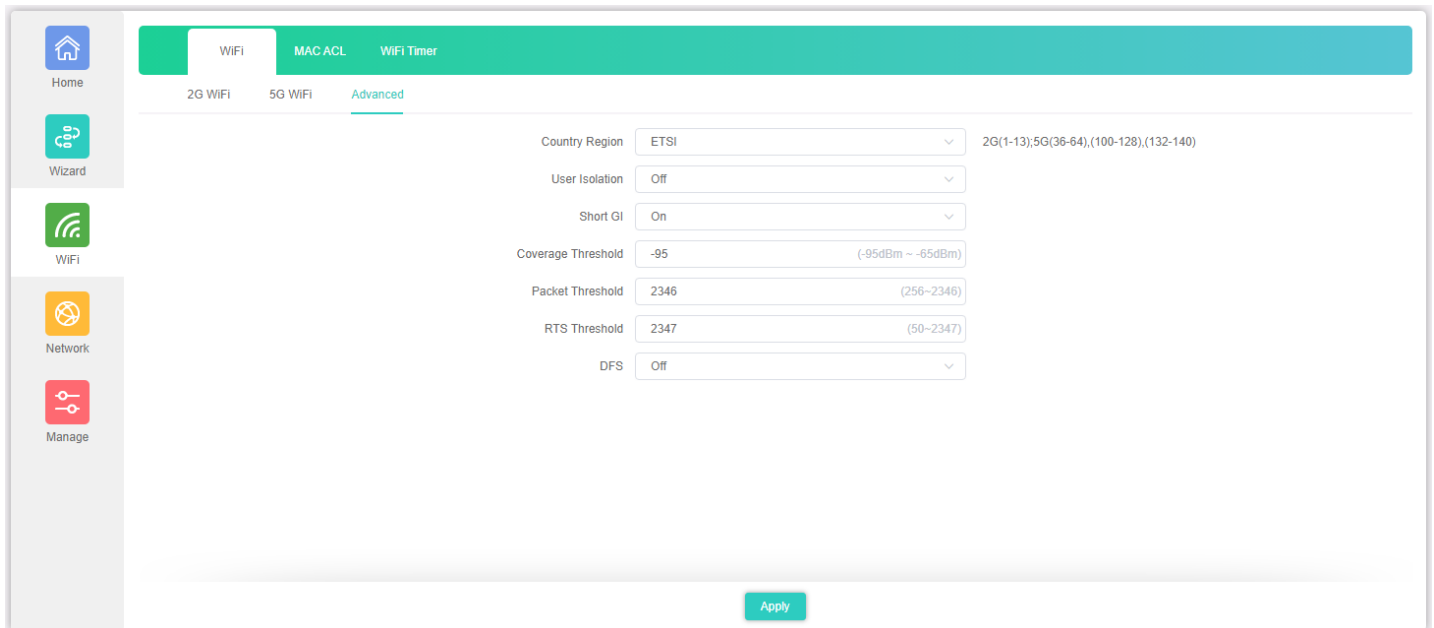


The page includes the following fields:

Object	Description
Wi-Fi Timer	Select ON (Green) or OFF (Gray) to enable or disable timer.
Time Frame	Choose the Start and End time frame

4.5.5 Advanced

Advanced Settings allows to change the parameters of the Access Points. Country Region lets you select there different Wi-Fi regions, please select the one which is valid in your country of use.



The page includes the following fields:

Object	Description
Country Region	Select your region valid in your area of use.
User Isolation	Enable it to isolate each connected wireless client so that they cannot access mutually.
Short GI	Guard intervals are used to ensure that distinct transmissions do not interfere with one another.
Coverage Threshold	The coverage threshold is to limit the weak signal of clients occupying session. The default is -95dBm.
Packet Threshold	When the length of a data packet exceeds this value, the router will send an RTS frame to the destination wireless node, and the latter will reply with a CTS frame, and thus they are ready to communicate. The default value is 2346.
RTS Threshold	Enable or Disable RTS/CTS protocol. It can be used in the following scenarios and used by Stations or Wireless AP. 1)When medium is too noisy or lots of interferences are present. If the AP/Station cannot get a chance to send a packet, the RTS/CTS mechanism can be initiated to get the packet sent. 2)In mixed mode, the hidden node problem can be avoided. The default value is 2347.
DFS	Enable or Disable DFS

4.6 Network (AP Mode)

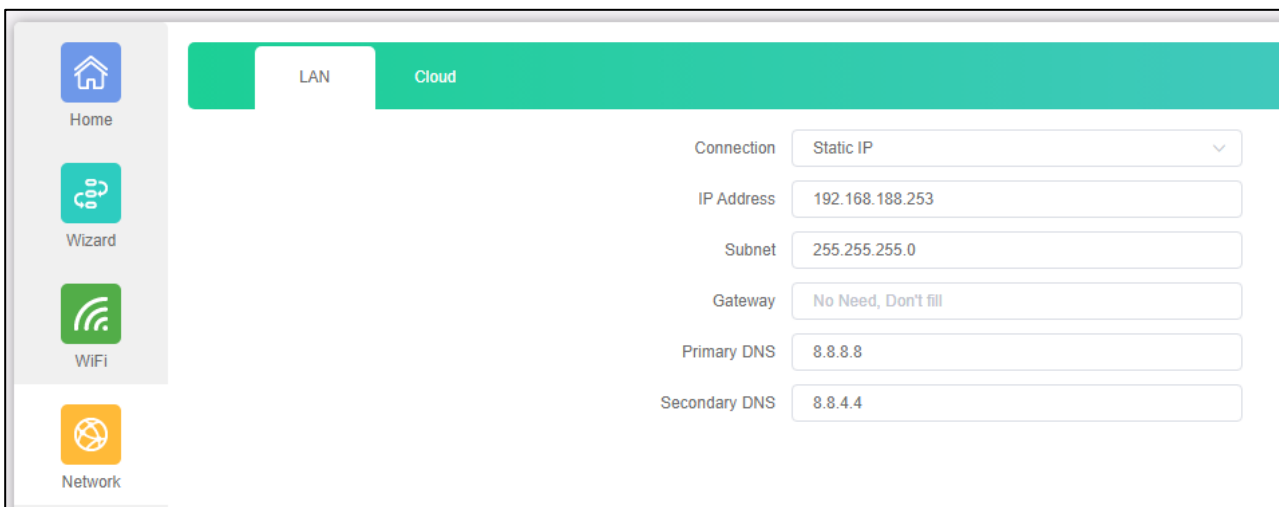
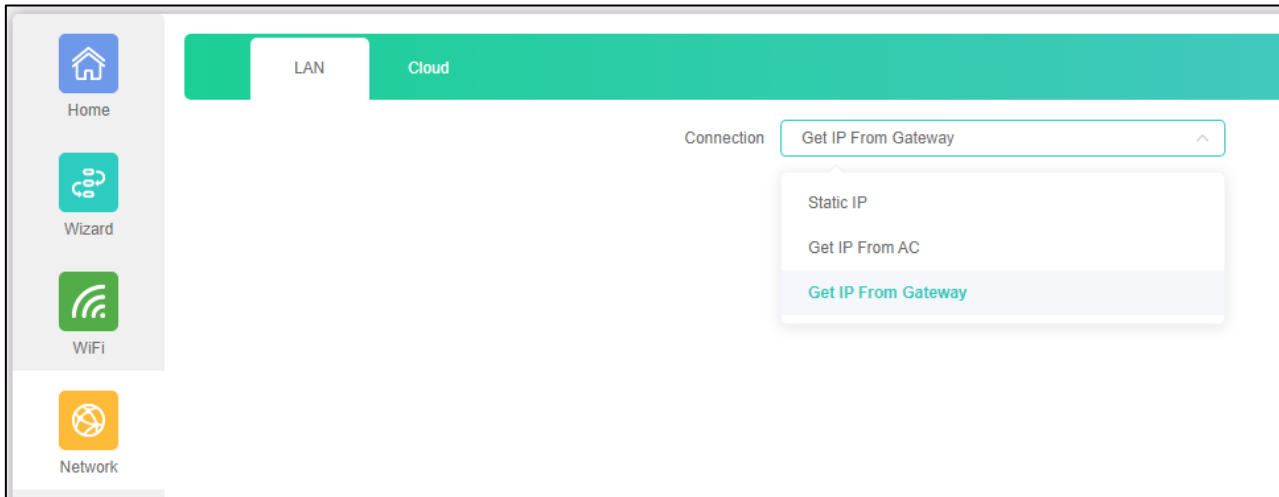
The Network settings for the AP Mode and Gateway Mode differ.

First shown is the AP Mode for the Network Settings for the Gateway Mode see chapter 4.7.

In AP mode only LAN Settings and Cloud are available.

4.6.1 LAN Settings

Select the Connection, Static IP, Get IP from Gateway, Get IP from AC. To use the option, Get IP from AC an AirLive WLAN-64/128GM Wireless Controller is needed.

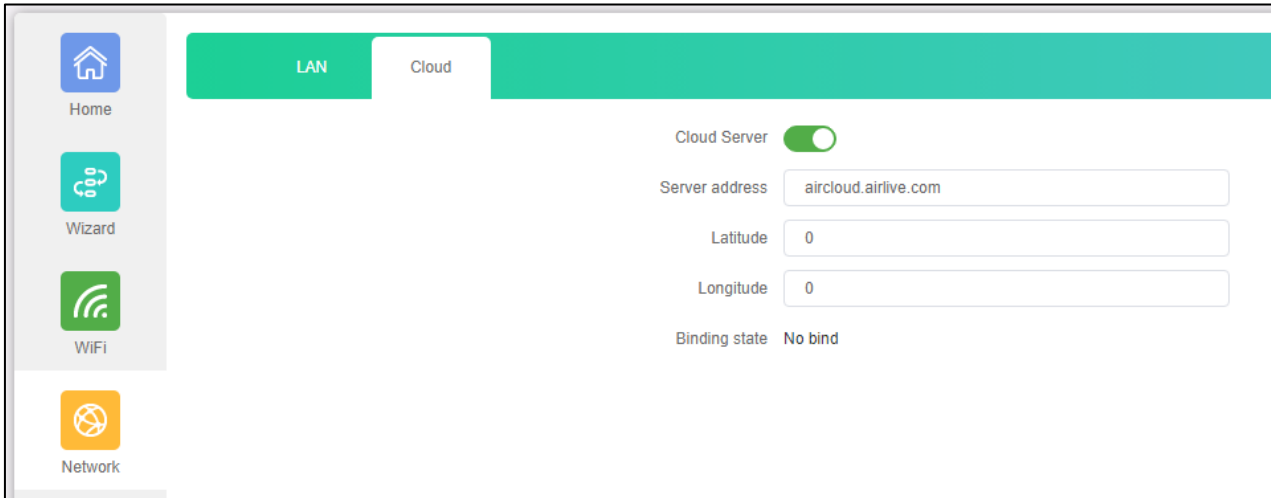


The page includes the following fields:

Object	Description
Connection	Select "Static IP", "Get IP from Gateway" or "Get IP from AC for setting up device IP.
IP Address	Enter the Access Point Static IP Address.
Subnet	Enter the network mask.
Gateway	Enter the default gateway IP Address.
Primary DNS	Enter the primary DNS IP Address, or not.
Secondary DNS	Enter the secondary DNS IP Address, or not.

4.6.2 Cloud

By default, the Cloud setting is turned on. When this settings is turned on the Access Point can be added to the AirCloud platform. The AirCloud platform allows you to remote control the Access Points via the Cloud. See www.airlive.com for more information about the AirCloud.

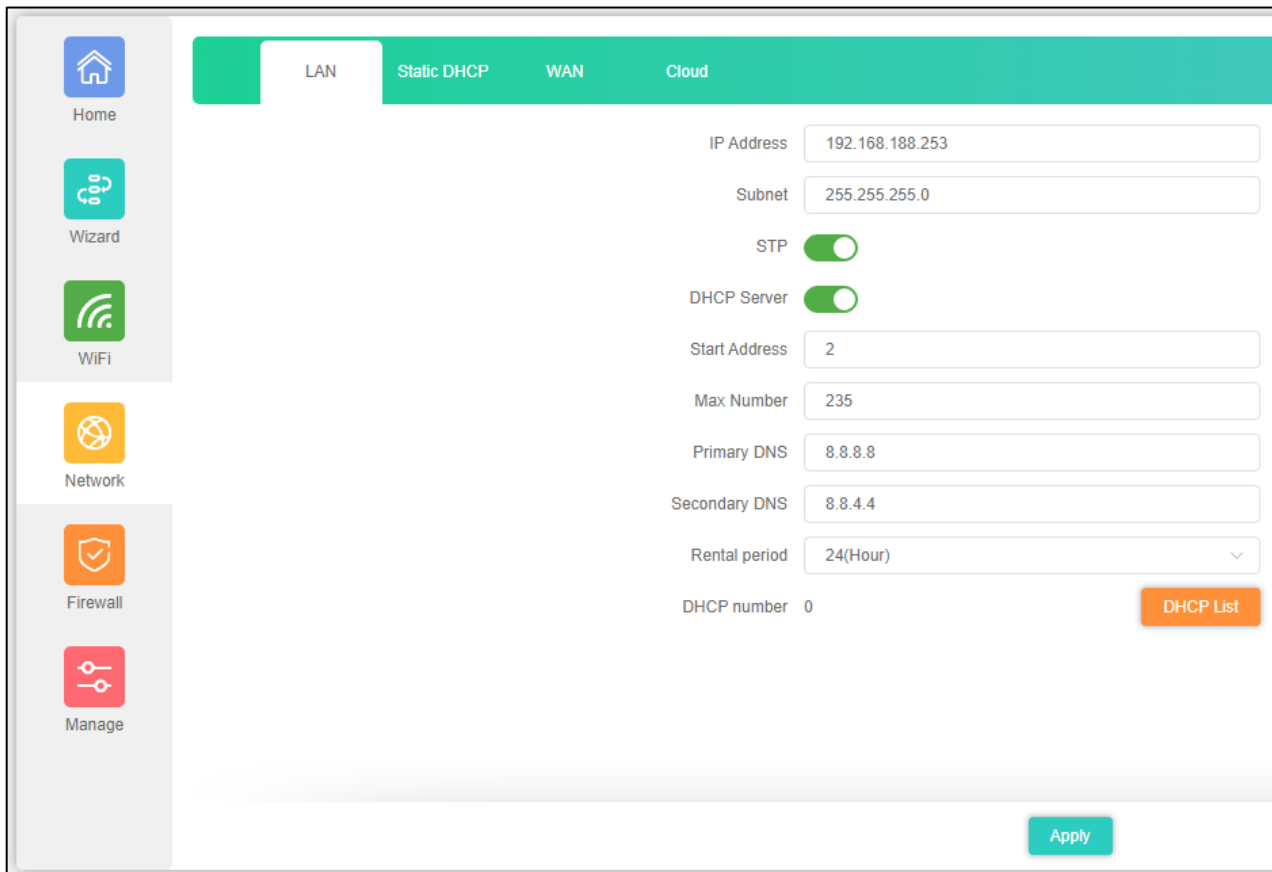


4.7 Network (Gateway Mode)

The Network settings for the AP Mode and Gateway Mode differ. In Gateway Mode next to LAN Settings and Cloud, Gateway Mode also has Static DHCP and WAN settings .

4.7.1 LAN Settings

Enter the IP setting for the Access Point.

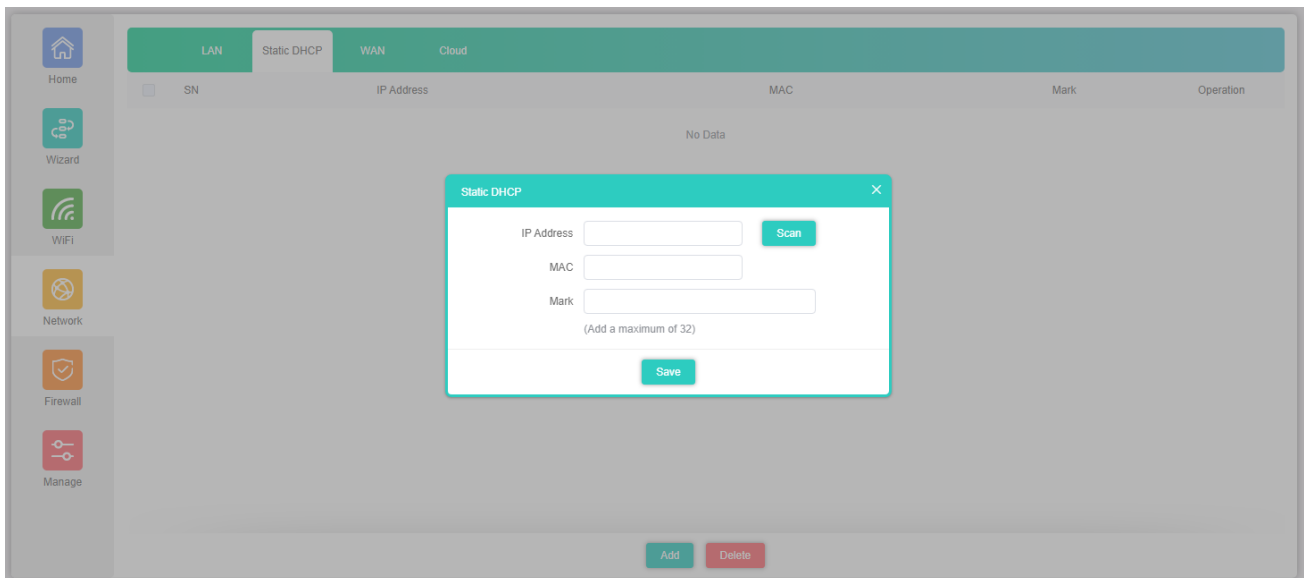


The page includes the following fields:

Object	Description
IP Address	Enter the Access Point Static IP Address.
Subnet	Enter the network mask.
STP	Enable or Disable Spanning Tree (Default is on)
DHCP Server	Enable or Disable the Access Point DHCP Server (Default is on)
Start Address	Start IP Address of DHCP Server
Max Number	Maximum number of IP Addresses given by the DHCP Server
Primary DNS	Enter the primary DNS IP Address, or not.
Secondary DNS	Enter the secondary DNS IP Address, or not.
Rental period	Lease time of a given IP Address
DHCP Number	Number of active clients
DHCP List	Detail list of active clients

4.7.2 Static DHCP

Give a client on the network a fixed Static IP Address. Press Add to open the pop-up window. Enter the IP Address of a client or press Scan to search the client on the network. Enter a name for the client in the Mark field.

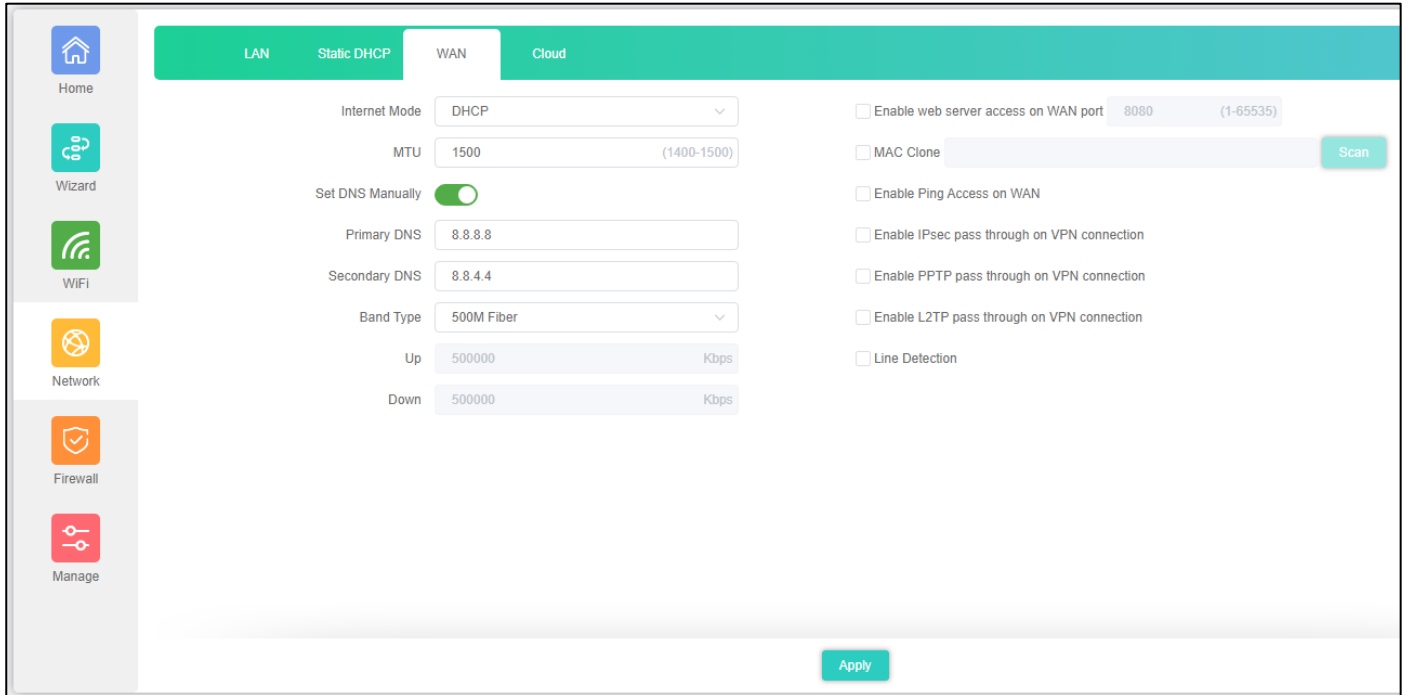


4.7.3 WAN

WAN Settings allows you setup the Internet Mode of the Access Point, When using the WAN settings make sure your WAN port is connected to your Modem. The Access Points has 3 WAN settings, DHCP, Static IP and PPPoE.

4.7.4 WAN DHCP

The default setting for the WAN port is DHCP. Choose “DHCP” and the Access Point will automatically obtain an IP Address, Subnet Mask and Gateway Address from your ISP.



The page includes the following fields:

Object	Description
Internet Mode	Select DHCP, Static IP or PPPoE
MTU	Maximum Transmission Unit. Default is 1500.
Set DNS Manually	Enable/Disable DNS Manually. Default is Enabled
Primary DNS	Enter the necessary DNS address provided by your ISP.
Secondary DNS	Enter the secondary DNS address provided by your ISP.
Band Type	Select the band type provided by your ISP.
Upstream	Enter limited upstream throughput, default is 500000 Kbps.
Downstream	Enter limited downstream throughput, default is 500000 Kbps.

4.7.5 WAN Advanced Settings

The WAN Advanced Settings are for 3 modes DHCP, Static IP and PPPoE.

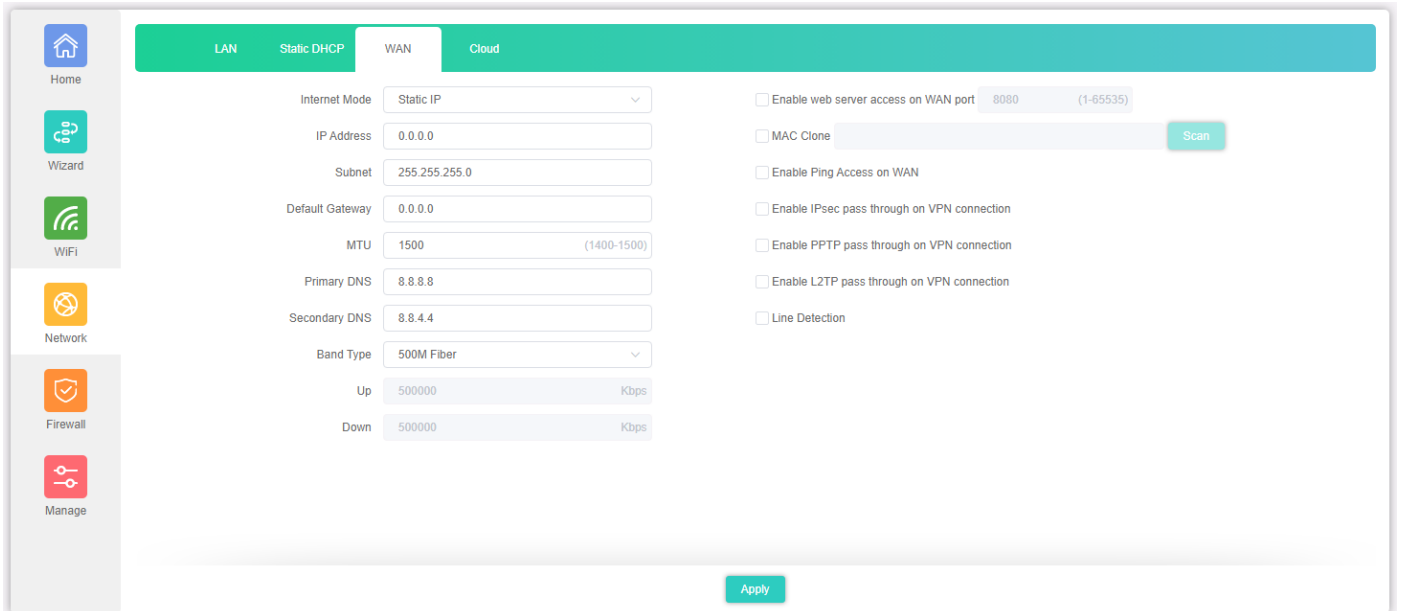
The page includes the following fields:

Object	Description
Enable web server access on WAN port	Enable to access from WAN, default port is 8080
MACclone	Enable and scan to clone the MAC address
Enable Ping Access on WAN	Enable or Disable this function
Enable IPsec passthrough on VPN connection	Enable or disable IPsec to pass through IPsec communication data.
Enable PPTP passthrough on VPN connection	Enable or disable PPTP to pass through PPTP communication data.
Enable L2TP passthrough on VPN connection	Enable or disable L2TP to pass through L2TP communication data.
Line Detection	Enable to ping Host 1 and Host 2 IP. If ping fails, the WAN will be disconnected.

4.7.6 WAN Static IP

The default setting for the WAN port is DHCP. If your ISP offers you static IP Internet connection type, select “Static IP” and then enter IP address, subnet mask, default gateway and primary DNS information provided by your ISP in the corresponding fields.

For the Advanced Settings see Chapter 4.7.5



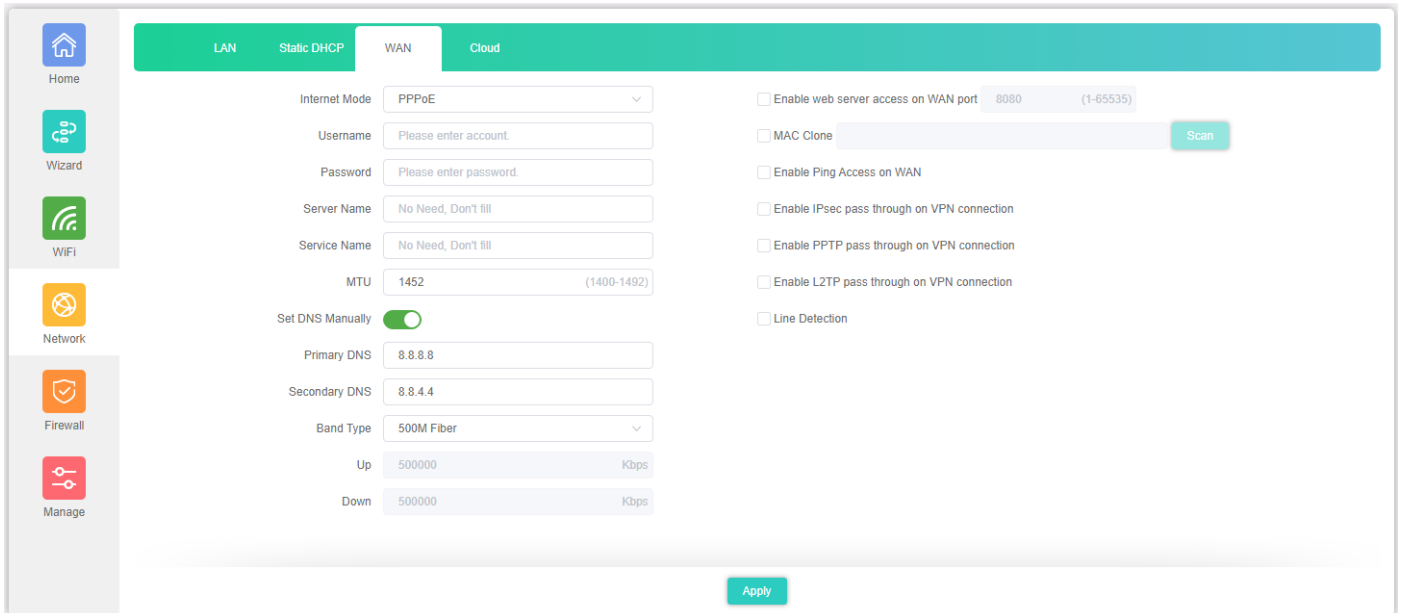
The page includes the following fields:

Object	Description
Internet Mode	Select DHCP, Static IP or PPPoE
IP Address	Enter the WAN IP Address provided by your ISP. Enquire your ISP if you are not clear.
Subnet	Enter WAN Subnet Mask provided by your ISP.
Default Gateway	Enter the WAN Gateway address provided by your ISP.
MTU	Maximum Transmission Unit. Default is 1500.
Primary DNS	Enter the necessary DNS address provided by your ISP.
Secondary DNS	Enter the secondary DNS address provided by your ISP.
Band Type	Select the band type provided by your ISP.
Upstream	Enter limited upstream throughput, default is 500000 Kbps.
Downstream	Enter limited downstream throughput, default is 500000 Kbps.

4.7.7 WAN PPPoE

The default setting for the WAN port is DHCP. Select PPPOE if your ISP is using a PPPoE connection and provided you with a PPPoE username and password.

For the Advanced Settings see Chapter 4.7.5

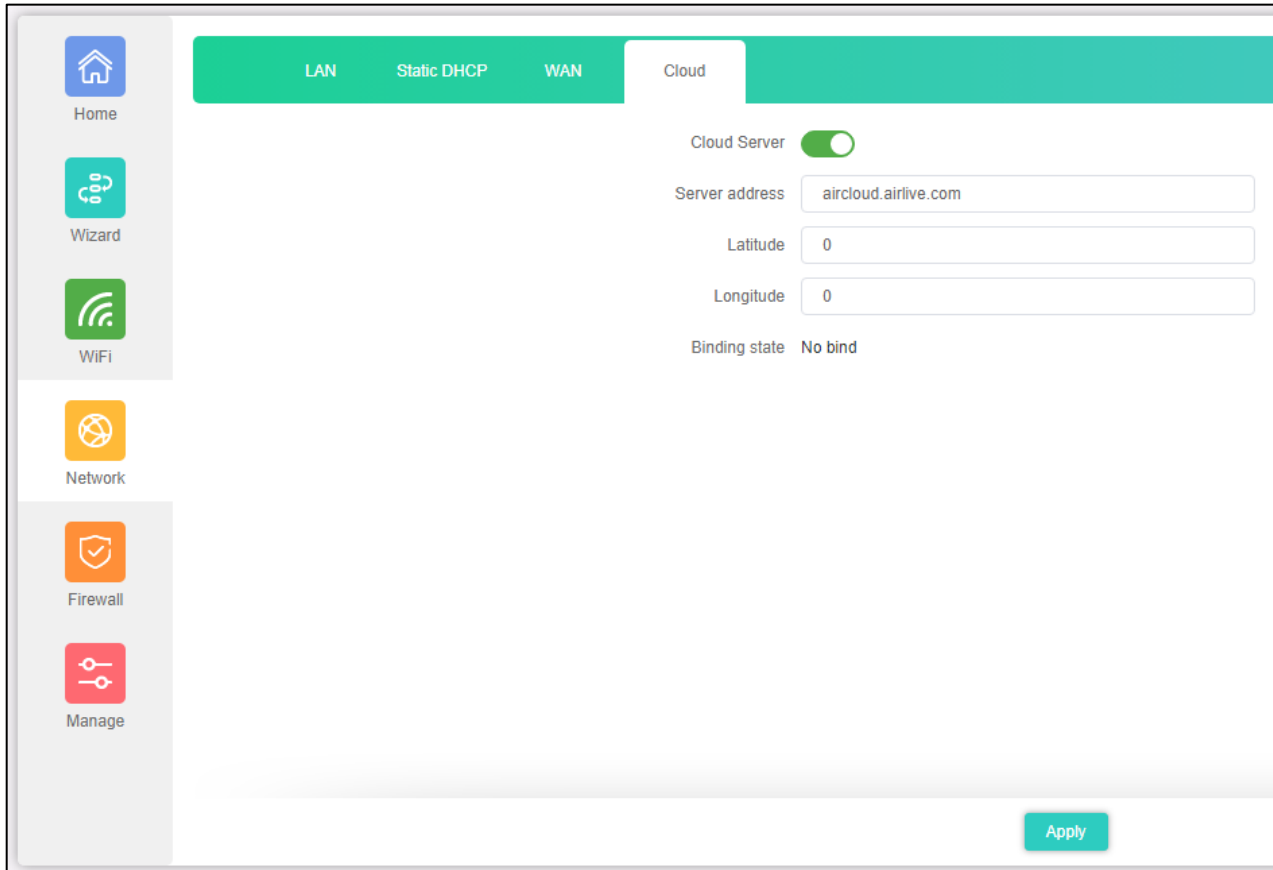


The page includes the following fields:

Object	Description
Internet Mode	Select DHCP, Static IP or PPPoE.
Username	Enter the PPPoE User Name provided by your ISP.
Password	Enter the PPPoE password provided by your ISP.
Server Name	Enter the server description or not.
Service Name	Enter the service description or not.
MTU	Maximum Transmission Unit. Default is 1452.
Set DNS Manually	Enable/Disable DNS Manually. Default is Enabled
Primary DNS	Enter the necessary DNS address provided by your ISP.
Secondary DNS	Enter the secondary DNS address provided by your ISP.
Band Type	Select the band type provided by your ISP.
Upstream	Enter limited upstream throughput, default is 500000 Kbps.
Downstream	Enter limited downstream throughput, default is 500000 Kbps.

4.7.8 Cloud

By default, the Cloud setting is turned on. When this settings is turned on the Access Point can be added to the AirCloud platform. The AirCloud platform allows you to remote control the Access Points via the Cloud. See www.airlive.com for more information about the AirCloud.

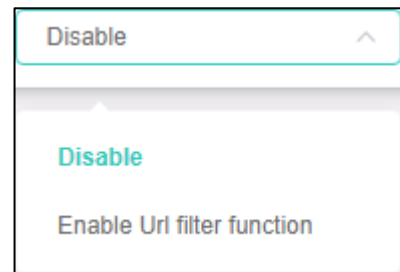
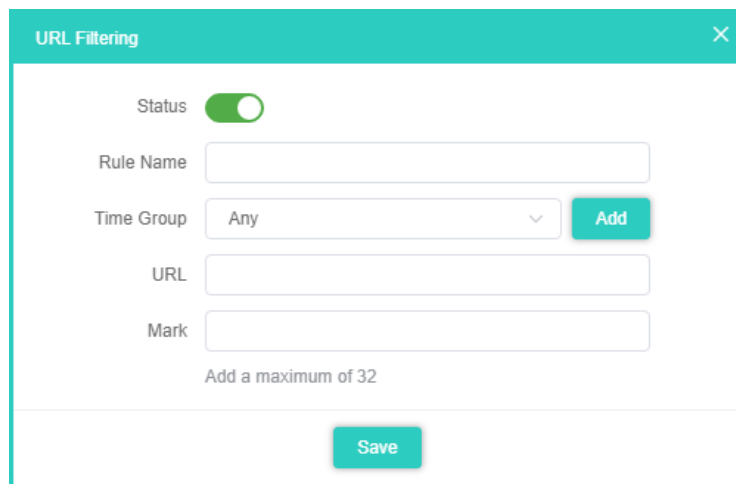
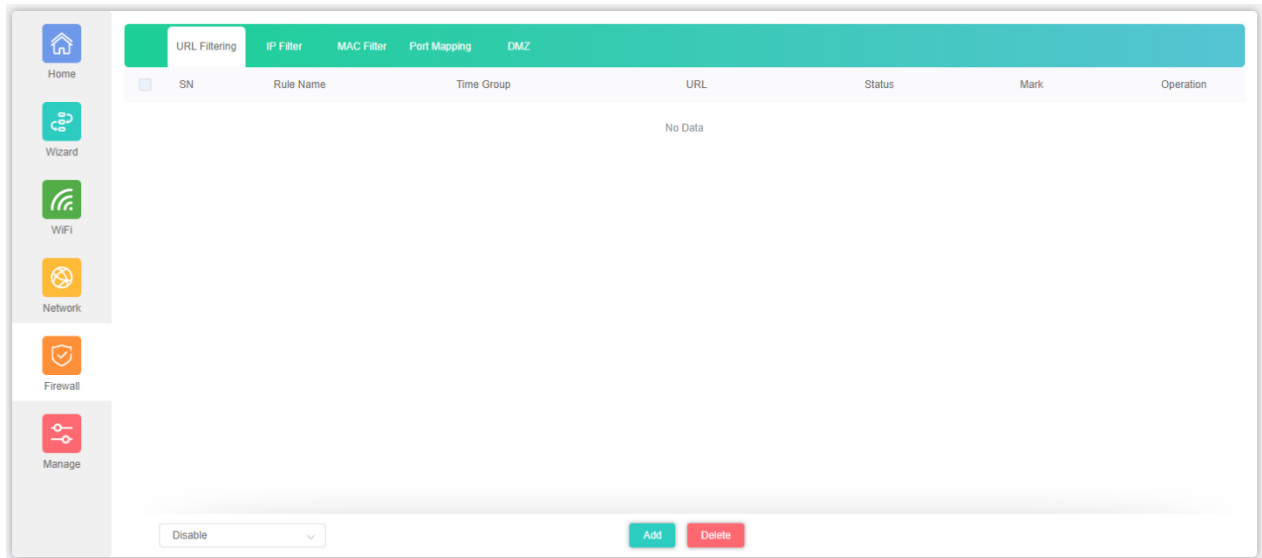


4.8 Firewall (Gateway Mode Only)

URL Filtering, IP Filter, MAC Filter, Port Mapping and DMZ will only appear when the Access Point is set to Gateway Mode. Setup for the IP Group and Time Group which can be used in some of the Firewall features can be done in the Management menu (see chapter 4.9.7 and 4.9.8).

4.8.1 URL Filter

URL Filtering can block certain webpage for the clients. When enabled clients connected to the network will not be able to browse webpages which have been added to the URL Filter.
Click Add to open the Pop-up window to enter the URL and Time information. To Delete a URL Filter, select the URL Filter which was made before and check mark it, then press Delete.



Enable/disable URL filter function

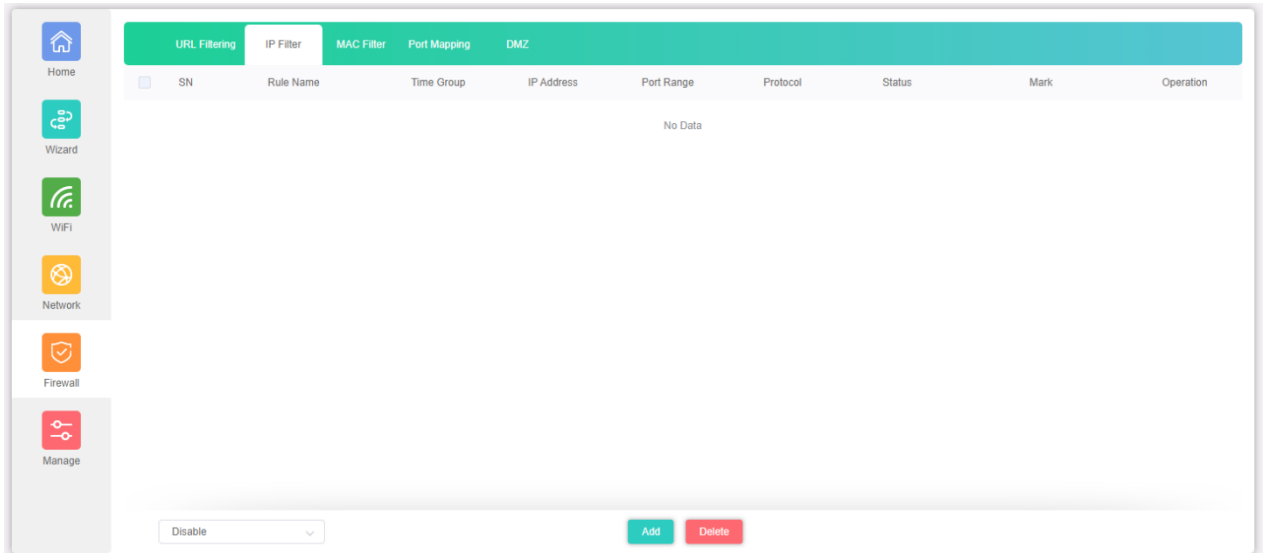
The page includes the following fields:

Object	Description
Status	Select ON (Green) or OFF (Gray) to enable or disable
Rule Name	Enter the rule name, e.g. Black list
Time Group	Select Any or Custom to set up time range and work data.
URL	Enter the URL that you need to put in black list
Mark	Enter the mark string, or not
Save	Press Save to save the settings

4.8.2 IP Filter

IP Filtering can block or allow certain clients based on the IP Address, also a port or port range can be set for the IP Address together with the Protocol.

Click Add to open the Pop-up window to enter the IP and Time information. To Delete an IP Filter, select the IP Filter which was made before and check mark it, then press Delete.



The page includes the following fields:

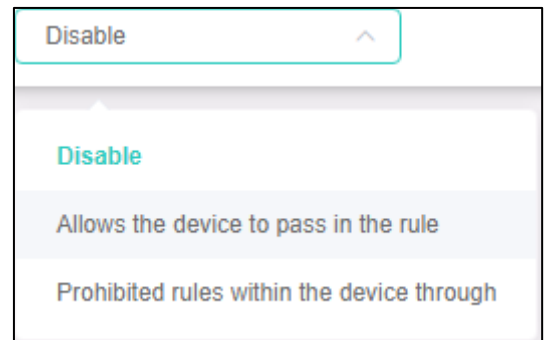
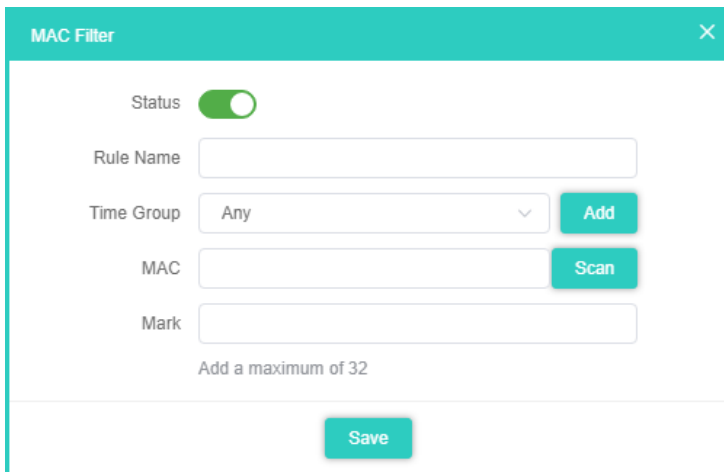
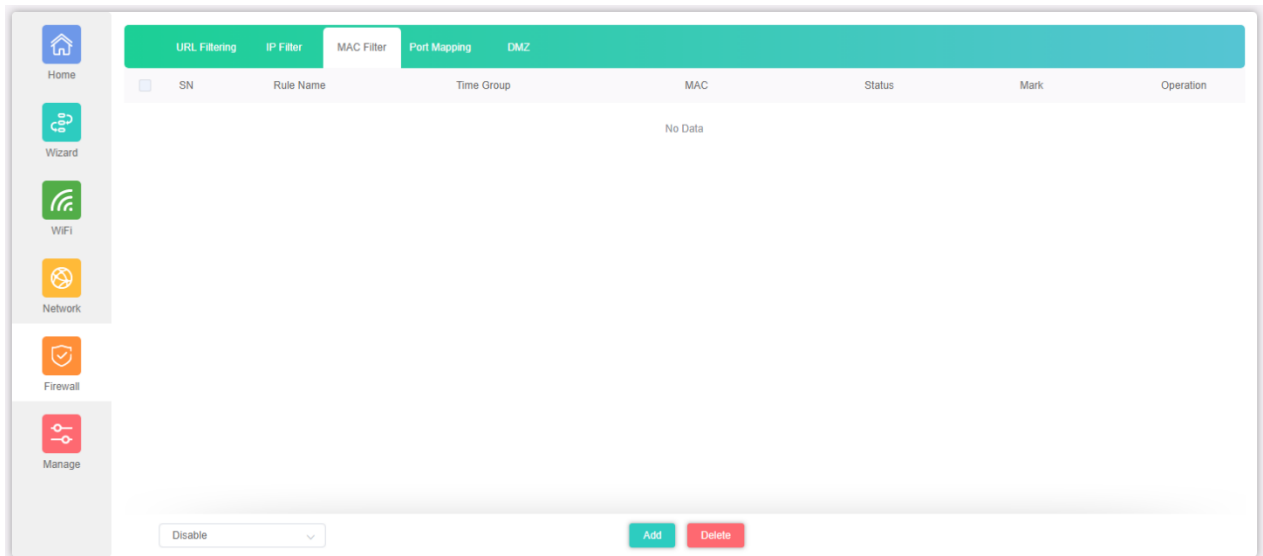
Object	Description
Status	Select ON (Green) or OFF (Gray) to enable or disable
Rule Name	Enter the rule name, e.g. Black list
Time Group	Select Any or Customer to set up time range and work data.
IP Group	Select IP Group for adding IP by entering IP range or by scanning devices
IP Address	Enter the IP that you need to put in black or white list
Port Range	Enter the web port to access
Protocol	Select TCP, UDP or TCP+UDP
Mark	Enter the mark string, or not
Save	Save the settings

Select the rule of IP Filtering, default is Disable.
 Whitelist: Allow the devices to pass in the rule
 Blacklist: Prohibited rules within the device through

4.8.3 MAC Filter

MAC Filtering can block or allow certain clients based on the MAC Address, also a port or port range can be set for the IP Address together with the Protocol.

Click Add to open the Pop-up window to enter the MAC and Time information. To Delete an MAC Filter, select the MAC Filter which was made before and check mark it, then press Delete.



Select the rule of IP Filtering, default is Disable.
 Whitelist: Allow the devices to pass in the rule
 Blacklist: Prohibited rules within the device through

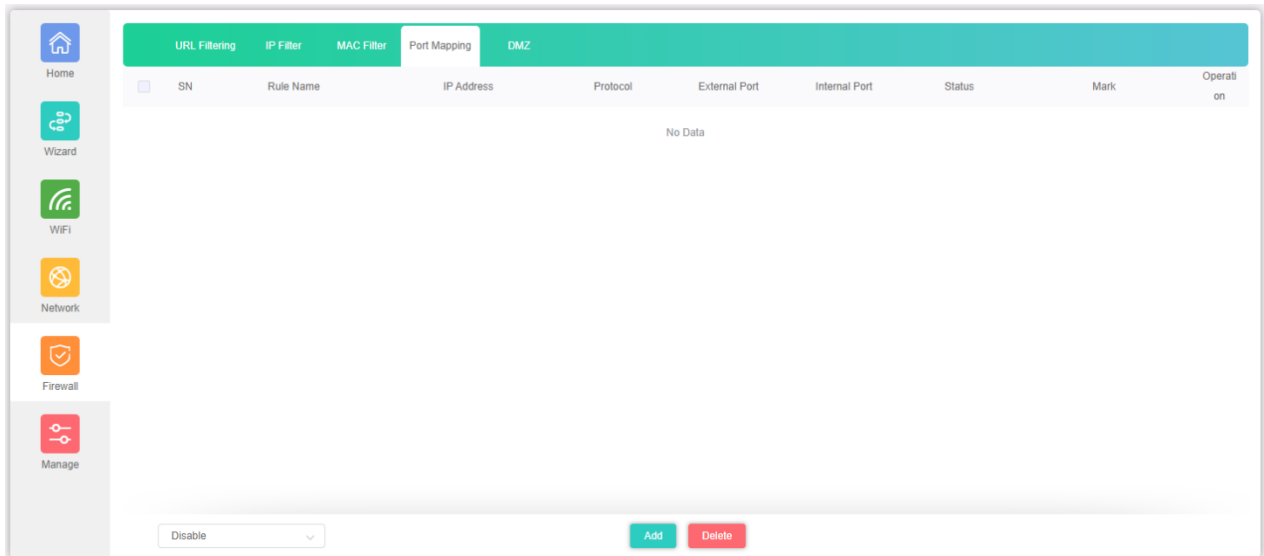
The page includes the following fields:

Object	Description
Status	Select ON (Green) or OFF (Gray) to enable or disable
Rule Name	Enter the rule name, e.g. Black list
Time Group	Select Any or Custom to set up time range and work data.
MAC Address	Enter the MAC address that you need to put in black or white list
Mark	Enter the mark string, or not
Save	Save the settings.

4.8.4 Port Mapping

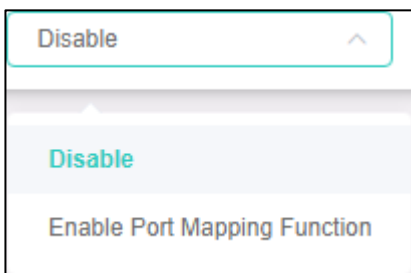
Port mapping allows extranet access to an intranet server. Enter the IP Address of the client for which you would like to open the External and Internal port.

Click Add to open the Pop-up window to enter the Port information. To Delete a Port Mapping, select the Port Mapping which was made before and check mark it, then press Delete.



The page includes the following fields:

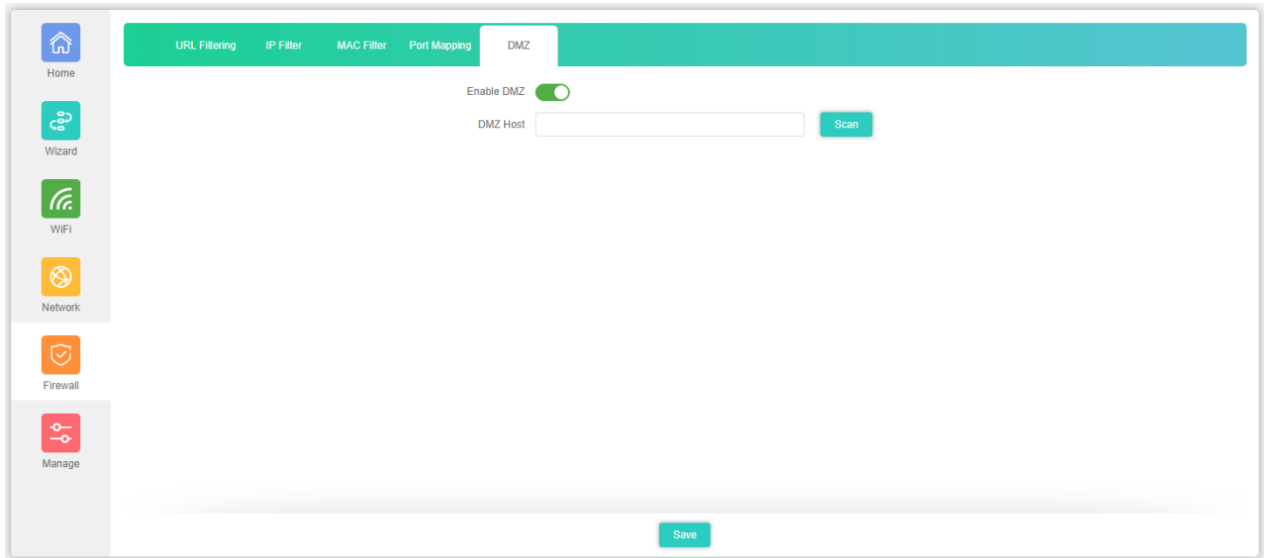
Object	Description
Status	Select ON (Green) or OFF (Gray) to enable or disable
Rule Class	Select the rule class, e.g. HTTP, HTTPS...
Rule Name	Enter the rule name, e.g. Black list
Protocol	Select TCP, UPD or TCP+UDP
IP Address	Enter the IP Address that you need for port forwarding
External Port	Enter the external port range
Internal Port	Enter the internal port range
Mark	Enter the mark string, or not
Save	Save the settings.



Enable/disable Port Mapping function

4.8.5 DMZ

Open the DMZ for a client IP Address.



The page includes the following fields:

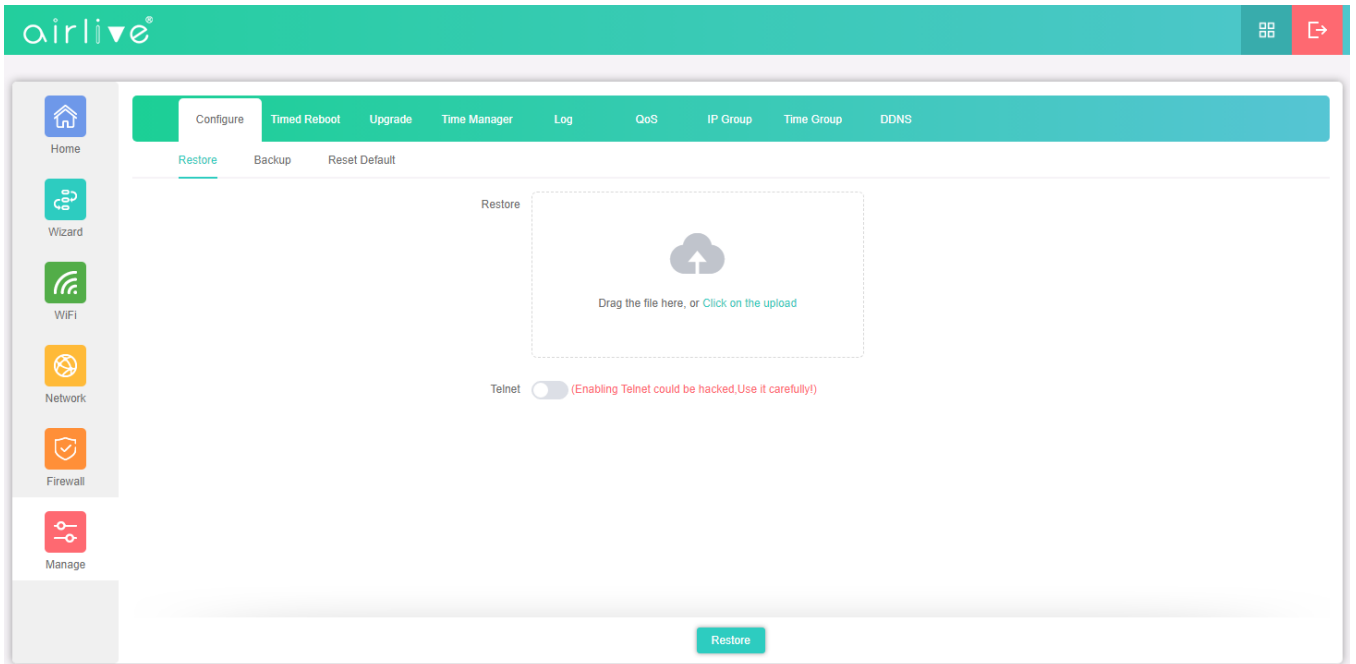
Object	Description
Enable DMZ	Select Enable DMZ Host or Disable
DMZ Host IP	Enter the DMZ LAN IP for which you would like to open DMZ
Save	Save the setting.

4.9 Manage

The Management page allows for a backup, reset or upgrade of the Access Point. Note that there is a difference between AP Mode and Gateway Mode. The functions QoS, IP Group, Time Group and DDNS will only appear when the Access Point is in Gateway Mode.

4.9.1 Configure

You can save the config or restore the previously saved config or reset the device to its default configuration. Telnet can also be enabled, Note use this function with care!

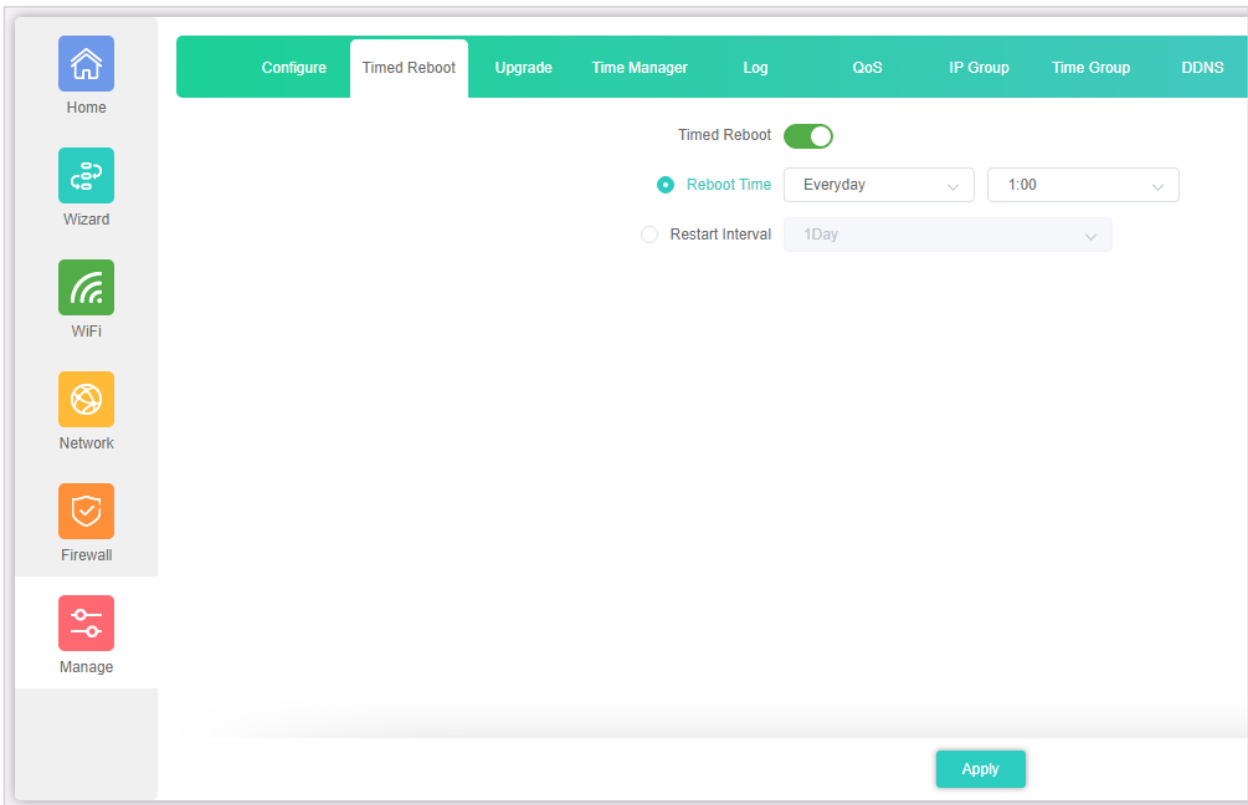


The page includes the following fields:

Object	Description
Backup	Save the configuration file to your computer
Restore	Reload the configuration from your computer
Reset Default	Restore the factory default settings, please press this button
Telnet	Enabling Telnet could be hacked, Use it carefully! Default is disable)

4.9.2 Timed Reboot

Set a schedule time on which the Access Point would reboot, this can be every day or on an interval



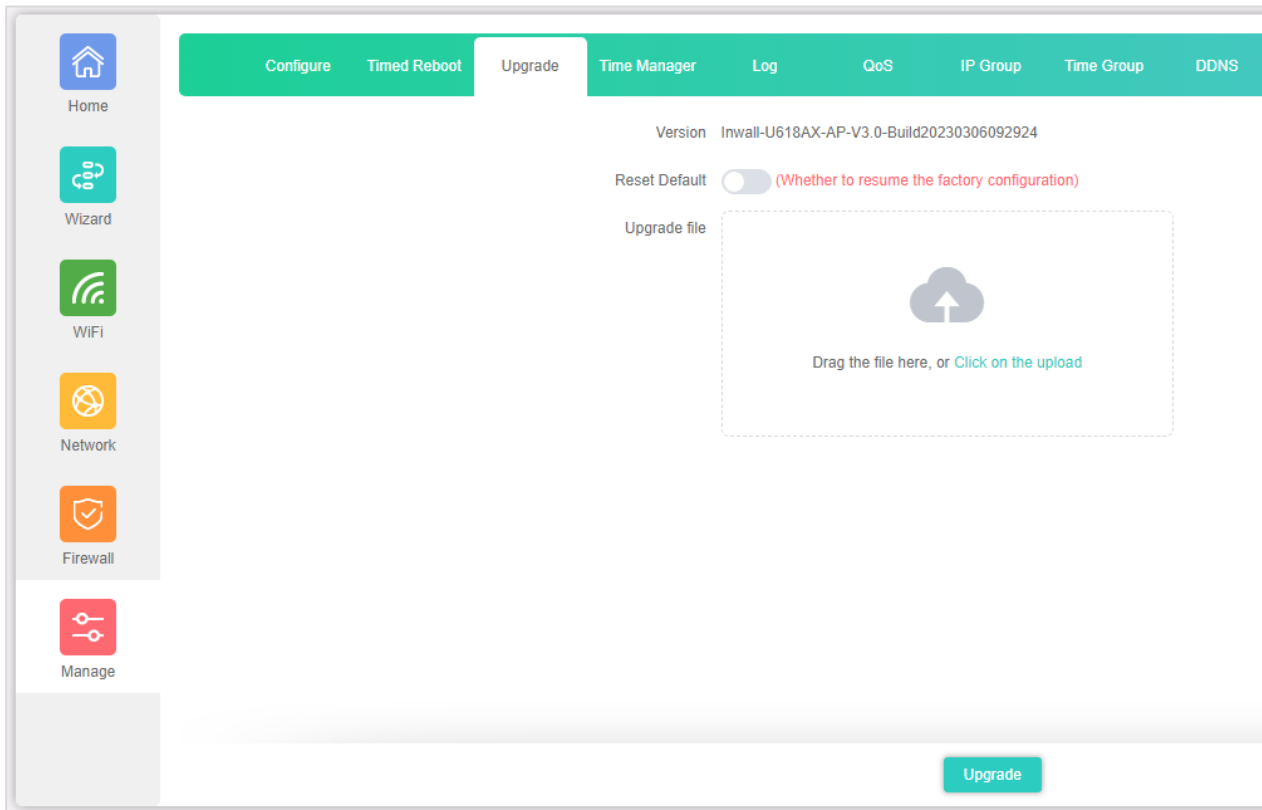
The page includes the following fields:

Object	Description
Timed Reboot	Select Enable or Disable to start schedule reboot
Reboot Time	Select reboot time form clock
Restart Interval	Select reboot duty by day

4.9.3 Upgrade

Browse the firmware file and click on upgrade. Wait till the upgrade is successful. The device will reboot automatically after successful firmware upgrade.

Version will show which firmware is currently on the Access Point.



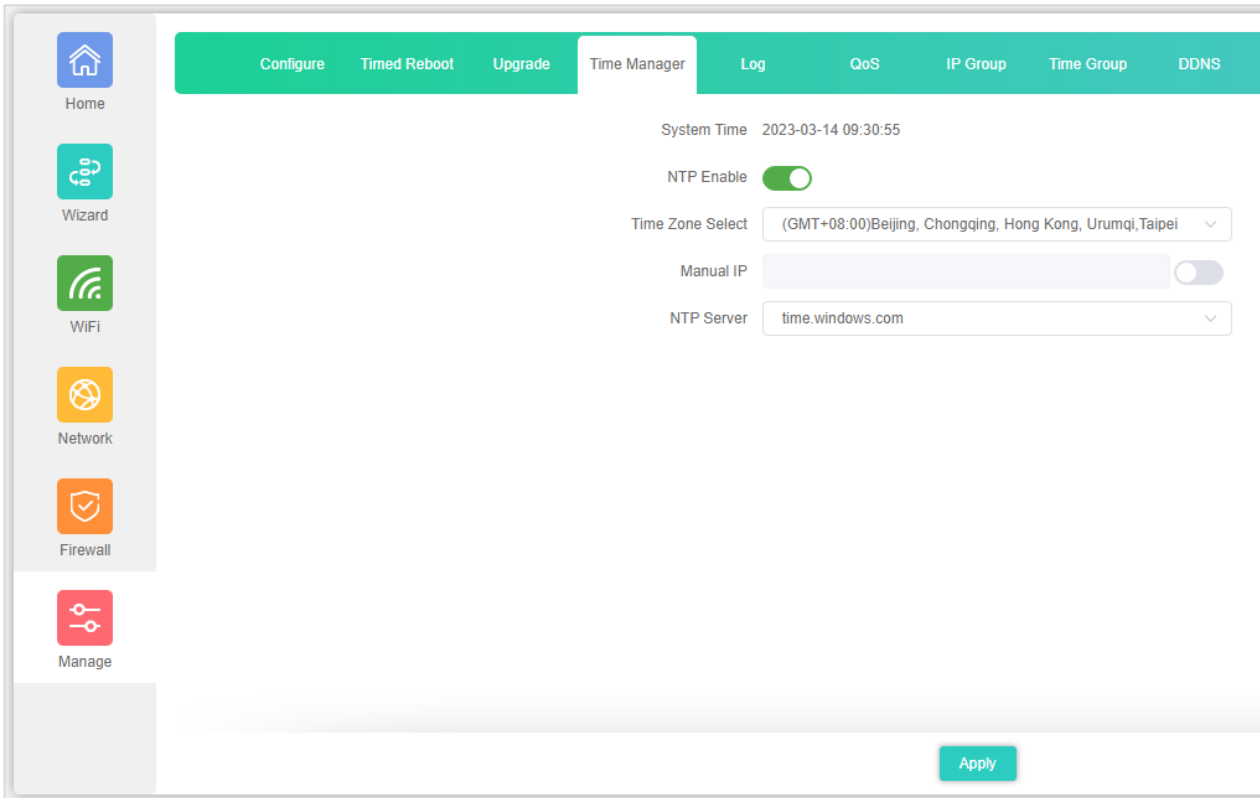
The page includes the following fields:

Object	Description
Choose File	Press to select the firmware file
Whether to resume the factory configuration	Select to reset the device to default when upgrading firmware
Upgrade	Press to upgrade the firmware

Note: Do not power off during the process of upgrading!!

4.9.4 Time Manager

Setup the system time, enable NTP Server and select the Time Zone for the Access Point.



The page includes the following fields:

Object	Description
System Time	Show system time of device
NTP Enable	Select Enable or Disable NTP function
Time Zone Select	Select time zone
Manual IP Settings	Enable to manual IP setting
NTP Server	Select NTP server

Note: If you want to use any function that needs scheduling, must enable NTP function.

4.9.5 Log

Review the Access Point log, you can also enable Remote Log Service or export the log file.

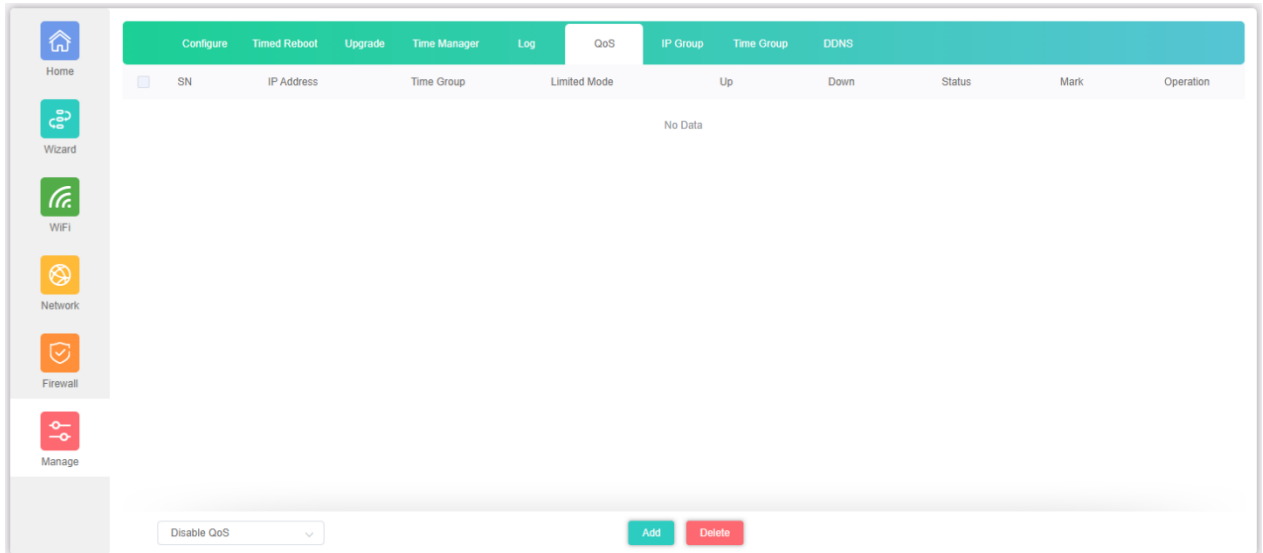
The page includes the following fields:

Object	Description
Log	Select ON/OFF to record log or not
Remote Log Service	Enable remote log server and enter the server IP Address
Export	Export a log.bin file to you PC
Delete	Press to delete all of the system log
Refresh	Press to refresh the system log

4.9.6 QoS (Gateway Mode only)

The QoS function only will work when the Access Point is in Gateway Mode. QoS can limited the bandwidth for an IP Address or IP Group also the Time Group can setup to limit the bandwidth only at a certain time. Click Add to open the Pop-up window to enter the IP and Time information. To Delete a QoS Rule, select the QoS Rule which was made before and check mark it, then press Delete.

Note when Hardware Accelerate is enabled on the Home Page of the Access Point, the QoS function will not function correctly. When using QoS please turn off Hardware Accelerate.



The page includes the following fields:

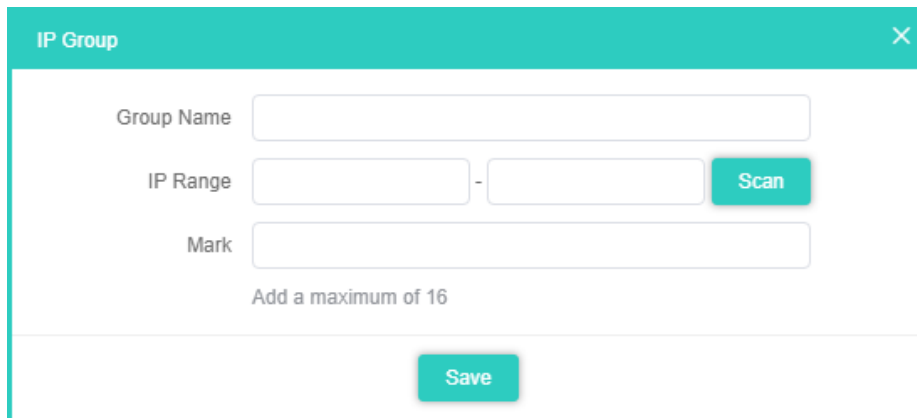
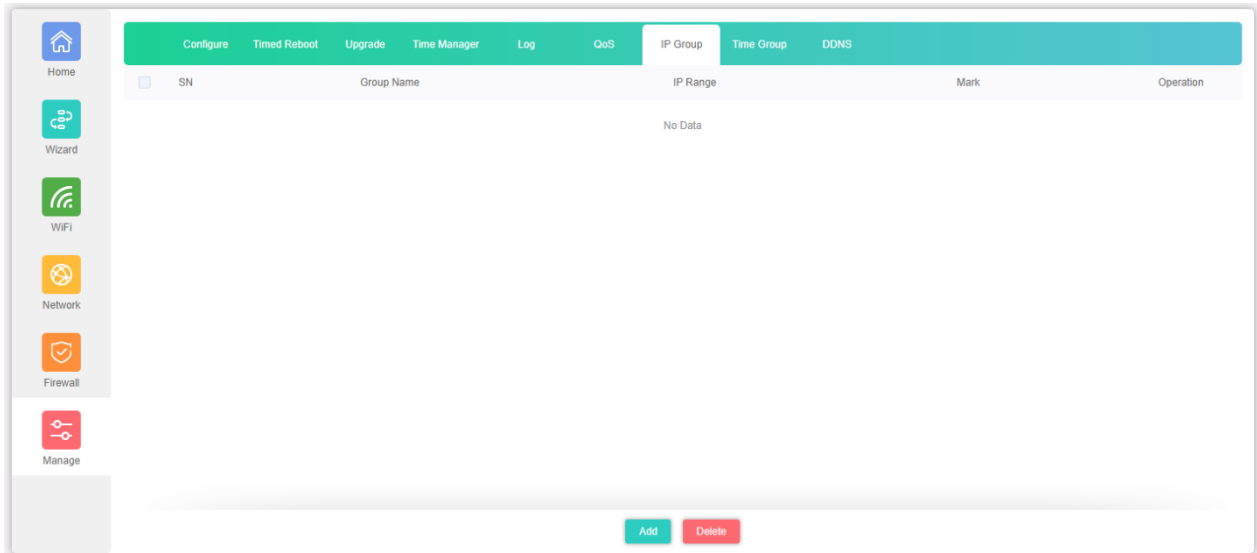
Object	Description
Status	Select enable or disable QoS control rule
IP Group	Select custom or Add an IP group
IP Address	Enter an IP address range or use scan to select
Time Group	Select any or custom or Add a Time group
Limited Mode	Select limited mode for shared limited bandwidth or exclusive limited bandwidth
Up	Enter the upstream limited for kbps
Down	Enter the downstream limited for kbps
Mark	Enter the mark string, or not
Save	Enter the mark string, or not

Enable/disable QoS function

4.9.7 IP Group (Gateway Mode only)

IP Group, Setup up an IP Group which can be used in the QoS as well as in the Firewall menu.

Click Add to open the Pop-up window to enter the IP information. To Delete an IP Group, select the IP Group which was made before and check mark it, then press Delete.

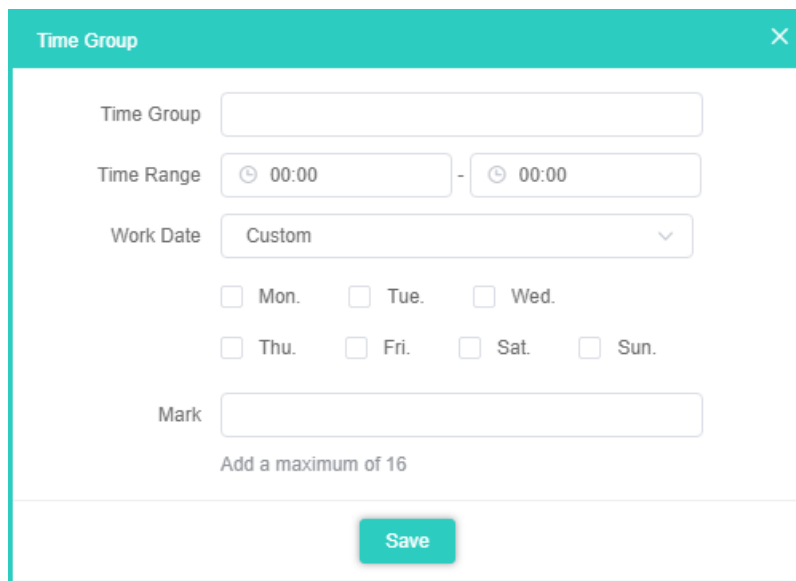
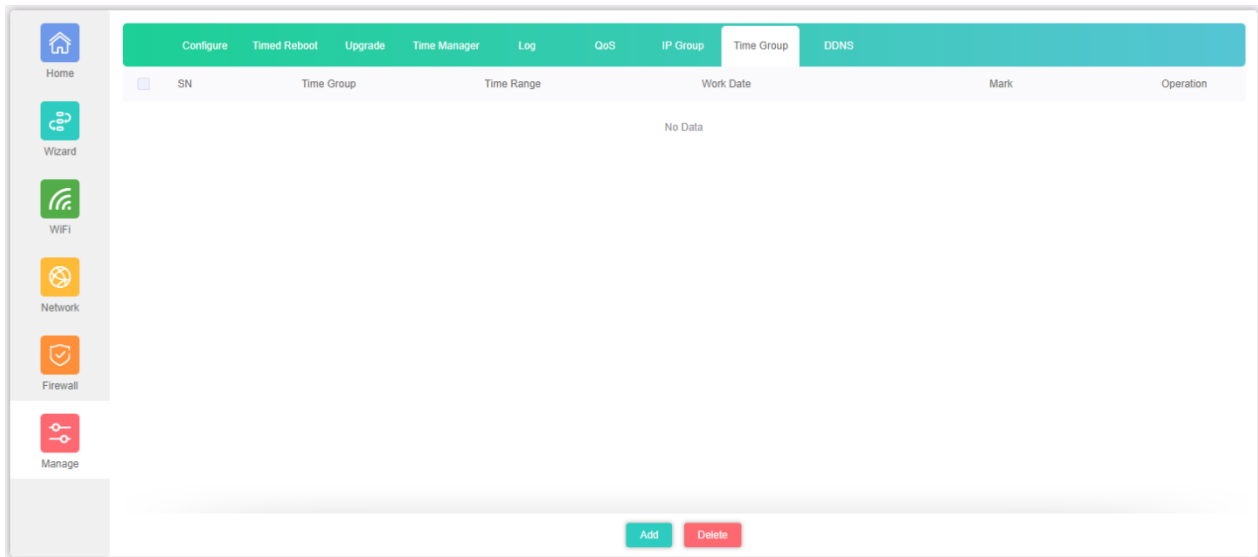


The page includes the following fields:

Object	Description
Group Name	Enter an IP group description
IPAddress Range	Enter an IP address range or use scan to select
Mark	Enter the mark string, or not
Save	Save the settings.

4.9.8 Time Group (Gateway Mode only)

Time Group, Setup up a Time Group which can be used in the QoS as well as in the Firewall menu. Click Add to open the Pop-up window to enter the IP information. To Delete a Time Group, select the Time Group which was made before and check mark it, then press Delete.



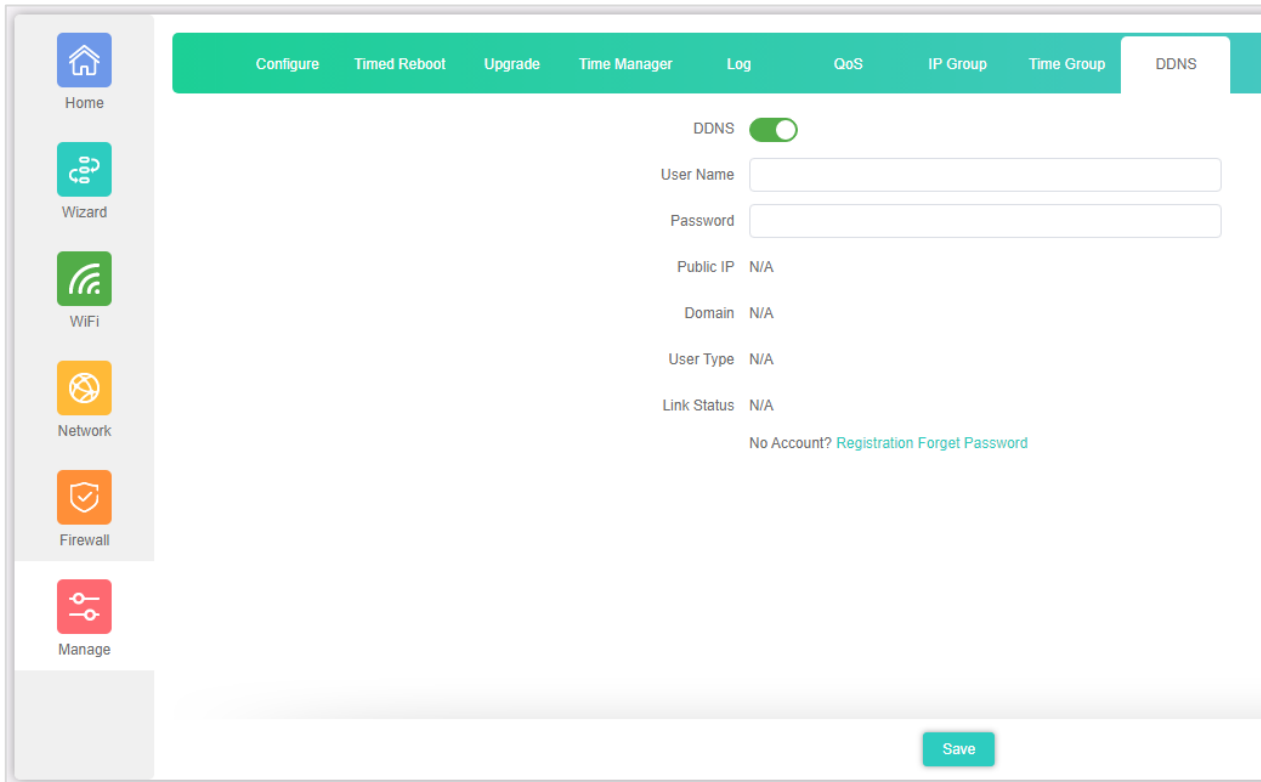
The page includes the following fields:

Object	Description
Time Group	Enter an time group description
Time Range	Select start time and end time for time range
Work Date	Select work day by option table
Mark	Enter the mark string, or not
Save	Save the settings.

4.9.9 DDNS (Gateway Mode only)

A DDNS can be setup using the build in DDNS. To make an DDNS account please click on Registration.

Note: the DDNS service is not related to AirLive Technology Corp, but a third party.

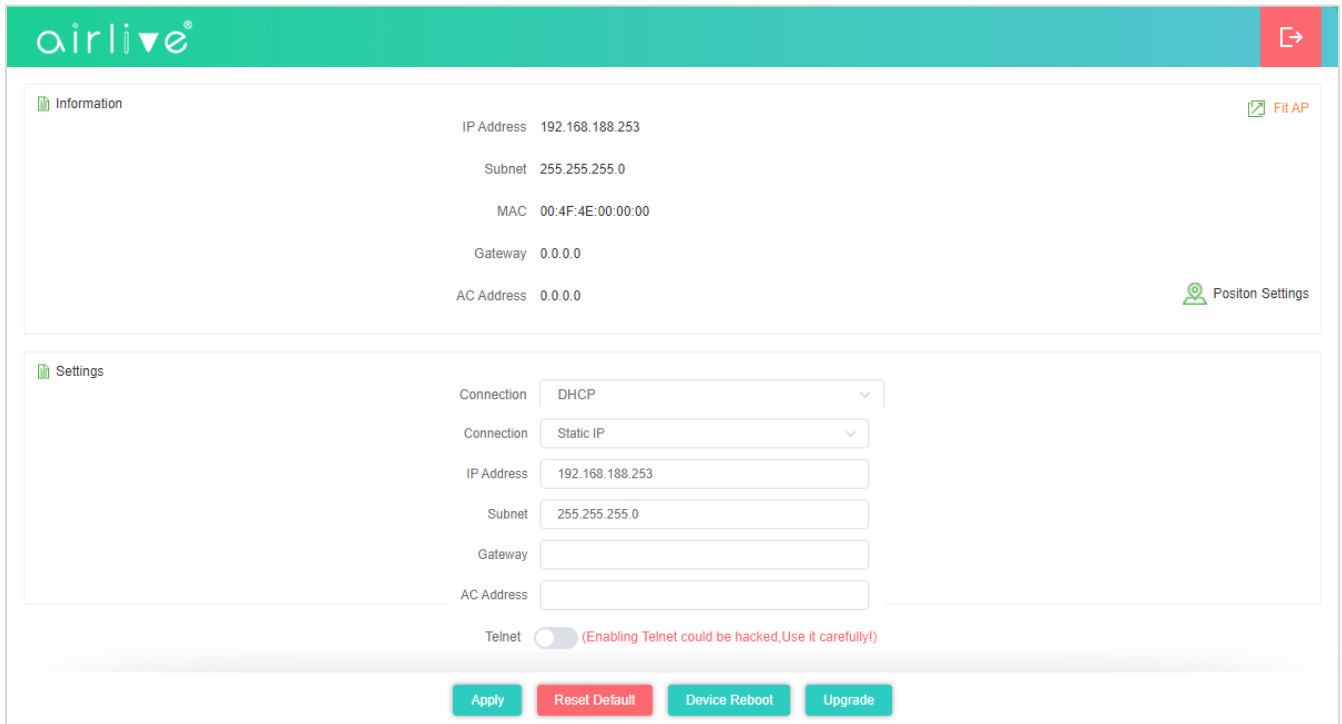


The page includes the following fields:

Object	Description
DDNS	Select ON (Green) or OFF (Gray) to enable or disable DDNS
User Name	Enter user account for the DDNS.
Password	Enter password for the DDNS
Public IP	Public IP address is necessary for WAN IP
Domain	Enter unique domain name for device.
User Type	DDNS User Type.
Link Status	DDNS Link Status
No Account Registration Forget Password	Follow the link to Oray to register a DDNS account.

5 **FIT Mode**

The main function of FIT Mode is to work with the AirLive Wireless Controller WLAN-64/128GM. When the Access Point is connected to the Wireless Controller, it will receive an IP Address from the Wireless Controller and the functions like SSID, Encryption and Channel are controlled via the Wireless Controller.



The page includes the following fields:

Object	Description
Information	Show the current network settings of the Access Point
Position Settings	You can enter the device description.
Settings	Select DHCP or Static IP
IP Address	Enter the IP Address
Subnet	Enter Subnet Mask
Default Gateway	Enter the Gateway address
AC Address	Enter the AC Controller IP Address
Telnet	Enabling Telnet could be hacked, Use it carefully! Default is disable)
Apply	Apply the Settings
Reset Default	Restore the factory default settings, please press this button
Device Reboot	Reboot the Access Point
Upgrade	Press to upgrade the firmware