User Guide
For AP Controller

Release version:V1.0

October 2022

Overview

AP controller series products provide wireless access point unified management solutions for small and medium-sized enterprises and families. It can also be bound to the cloud platform cloud platform to provide services for small and medium-sized enterprises. and home with a flexible, feature-rich, and easy-to-configure wireless network.

Applicable product models are as follows:

WI-AC50, WI-AC50 V2

Note: The software interface is based on v5.0.build20221010-2303 after.

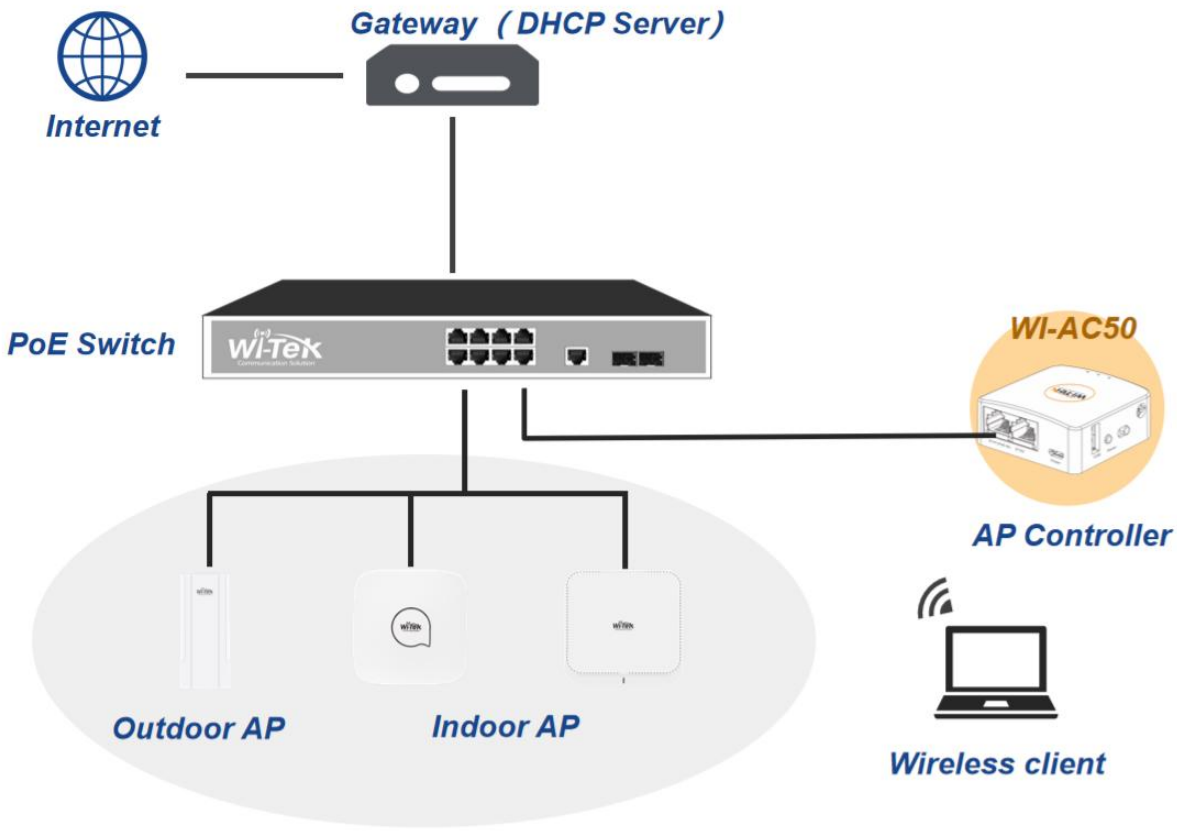
Revision History

Date	Doc Version	Description
October 2022	V1.0	Initial version

1. Quick Setup

1.1. Deploy the AC50

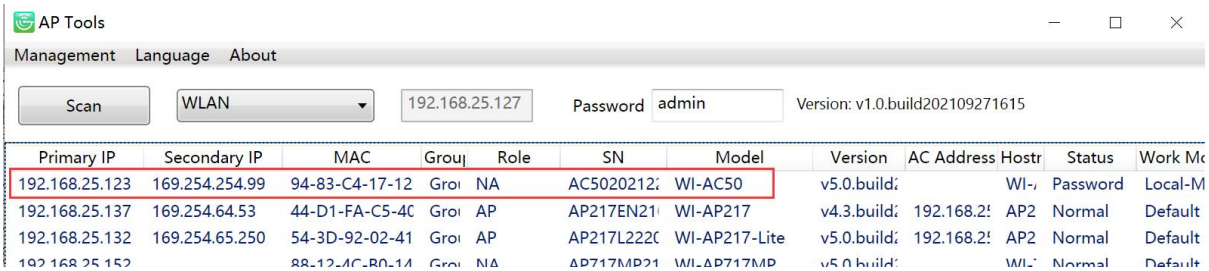
A gateway acts as a DHCP server to assign IP addresses to APs, clients and AC50. The AC50 and the APs are in the same subnet.



1.2. Log in to the AC50

1.2.1.Find IP address

Use AP Tools to scan IP addresses, as shown in the following figure.



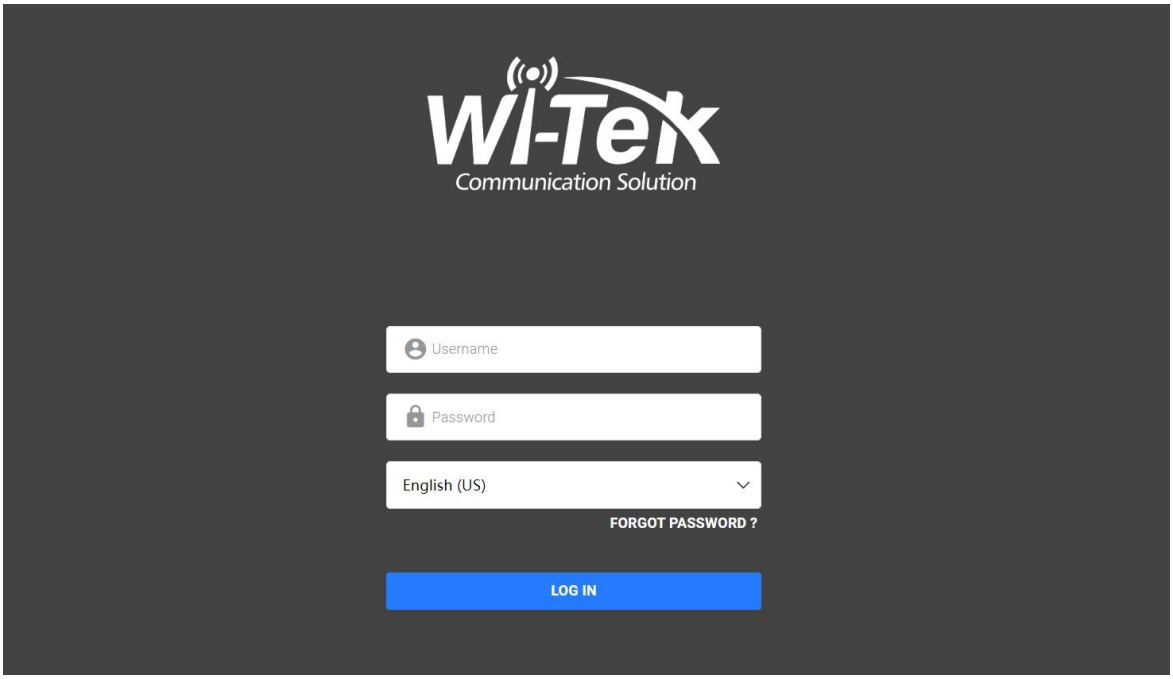
Note:

- Make sure your computer and AC50 are on the same subnet.
- AP Tools download link: http://www.wireless-tek.com/files_down.php?id=90

1.2.2.Log In

Open a web browser and enter 192.168.25.123 in the address field, then press Enter (Windows) or Return (Mac).

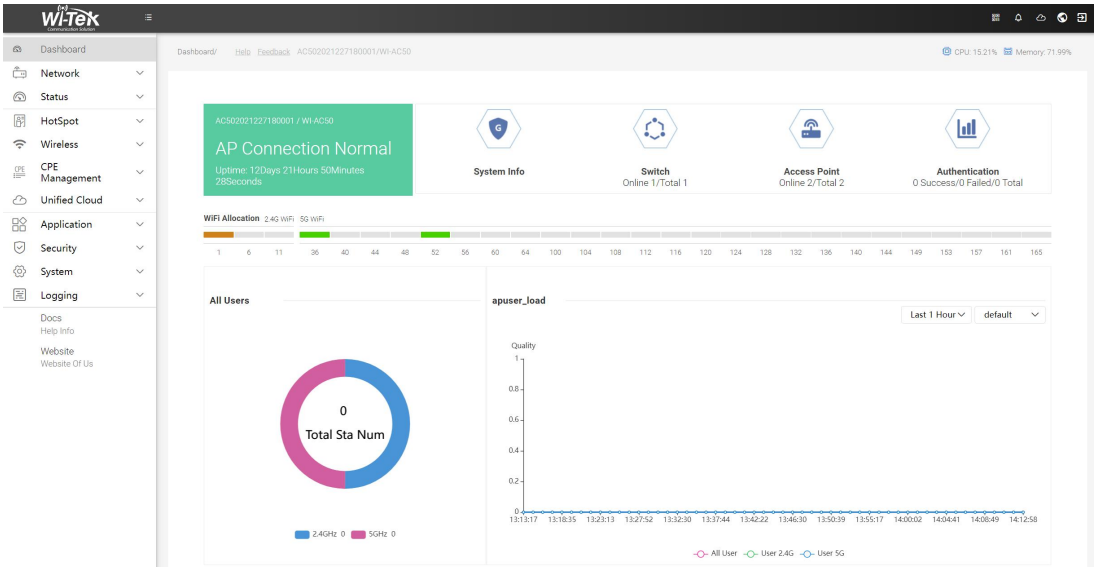
Enter your account and password, then click Login.



Note:

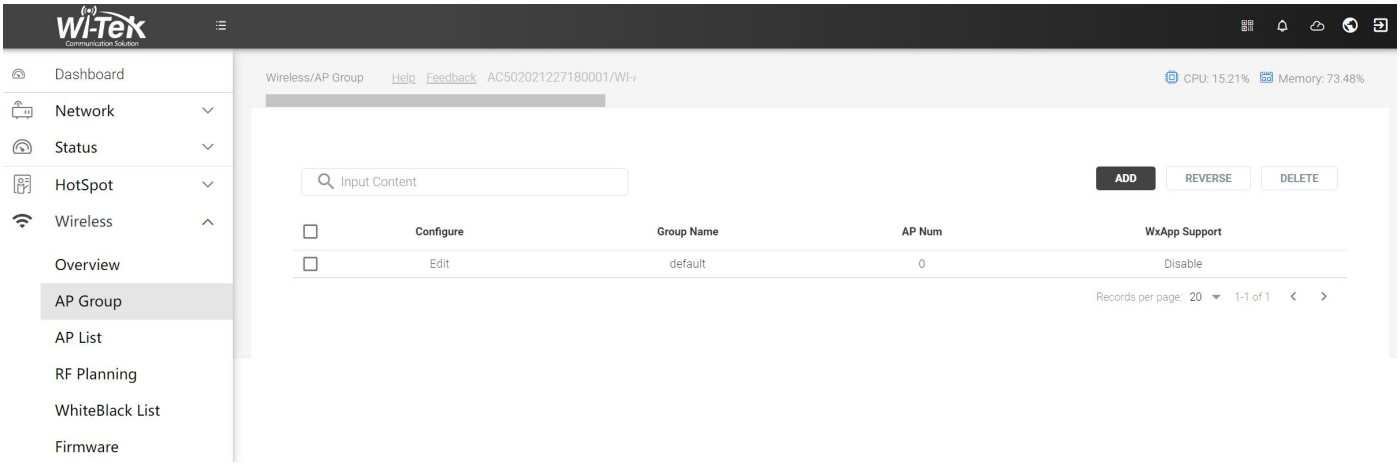
- The default fallback IP address of AC50 is 192.168.1.88.
- The default user name and password is admin.

After a successful login, the main page will appear as in the figure below.

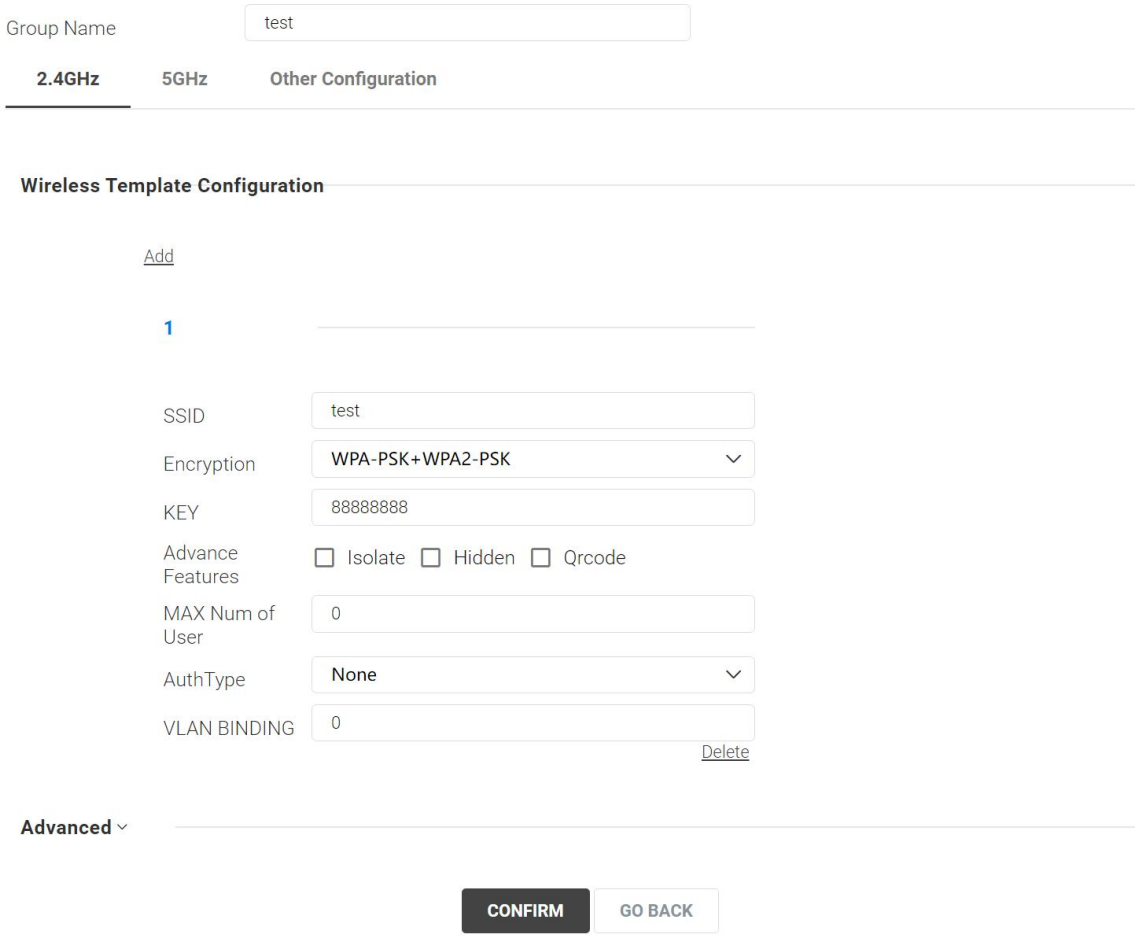


1.3. Create AP group

Go to the **Wireless > AP Groups** page.



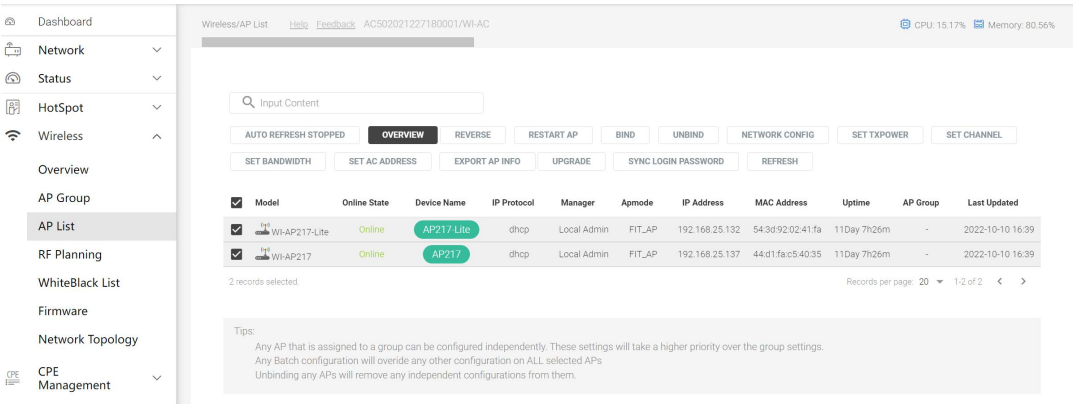
Click the **Add** button to create a wireless configuration.



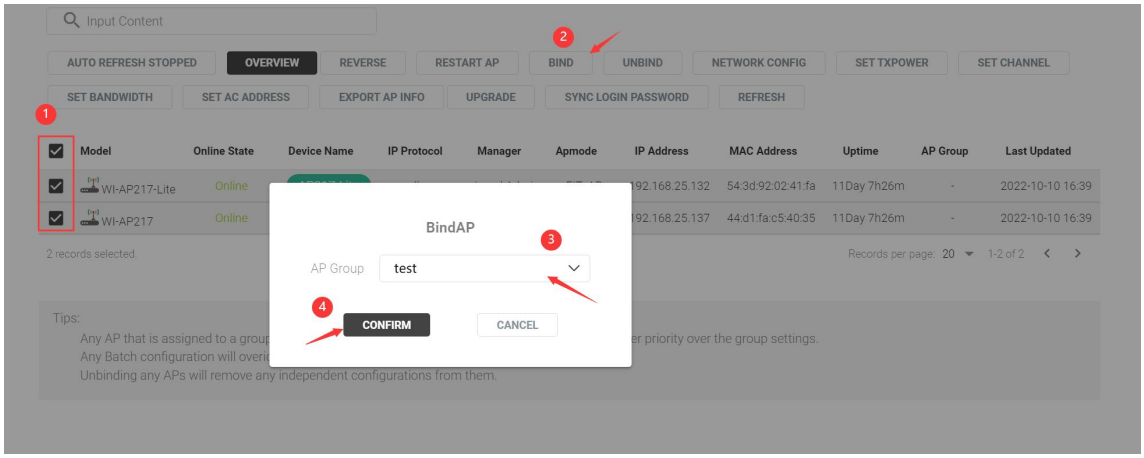
1.4. Bind the AP

AC50 can discover all currently connected ap in the network and display their co nnection status. When AC50 is discovered for the first time, all ap is in a pendin g state. To manage the AP, you need to bind them to the AP group.

Go to the Wireless > AP List page.



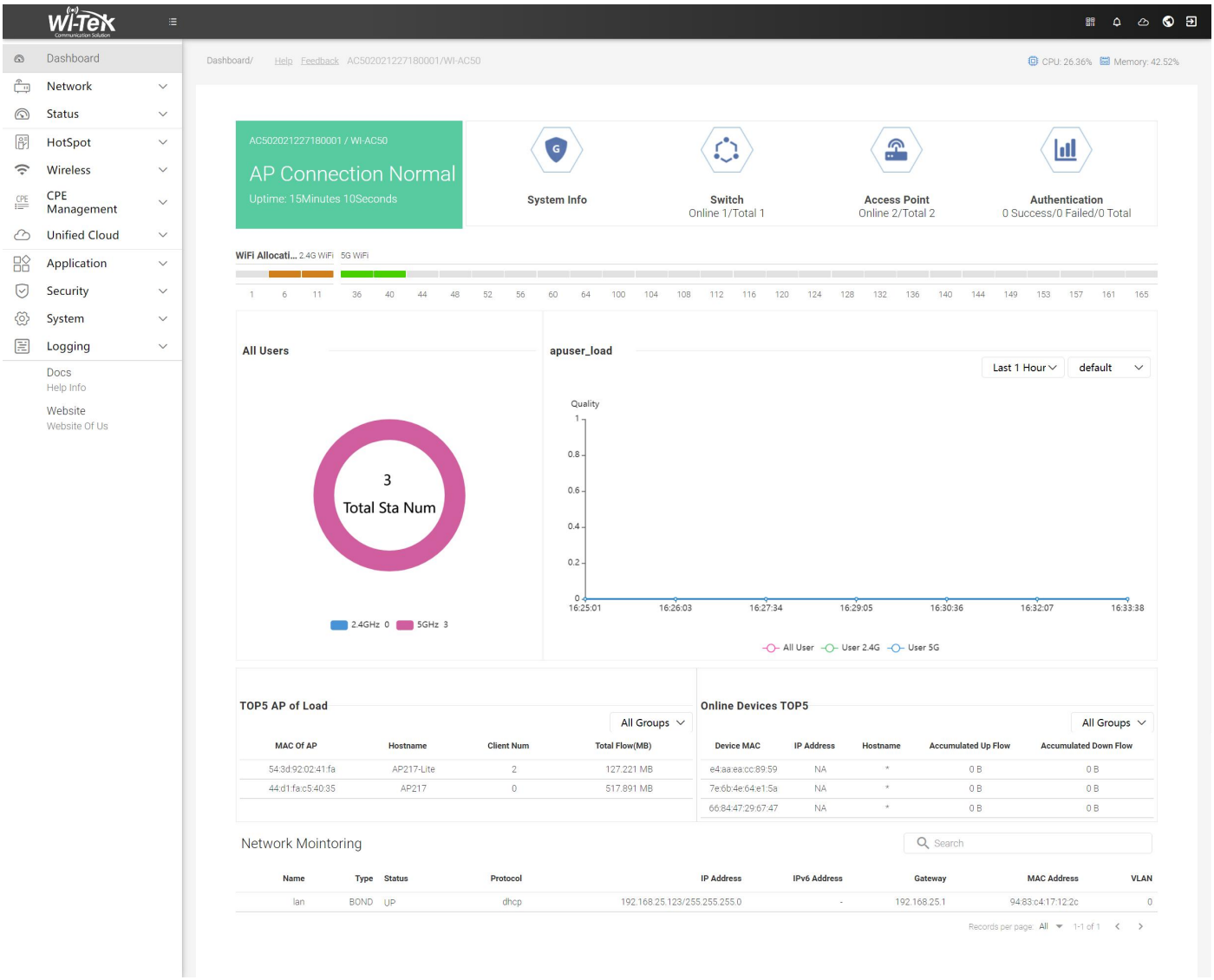
Please follow the steps below to bind the AP.



-END-

2. Dashboard

AP collects all statistics of managed APs and displays the statistics in graphs, providing an overview of your wireless network.



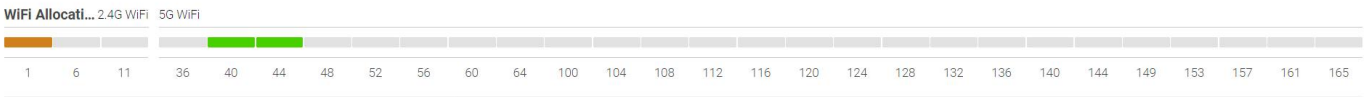
Parameter	Describe
	Click it to jump to the Unified Cloud option
	unread messages
	Click it to quickly jump to the cloud 2.0 platform
	Click it to switch the system language, including English and Chinese.
	Click it to log out.

2.1. Device statistics

This module displays the devices in the network. You can check their numbers and their st atistics.

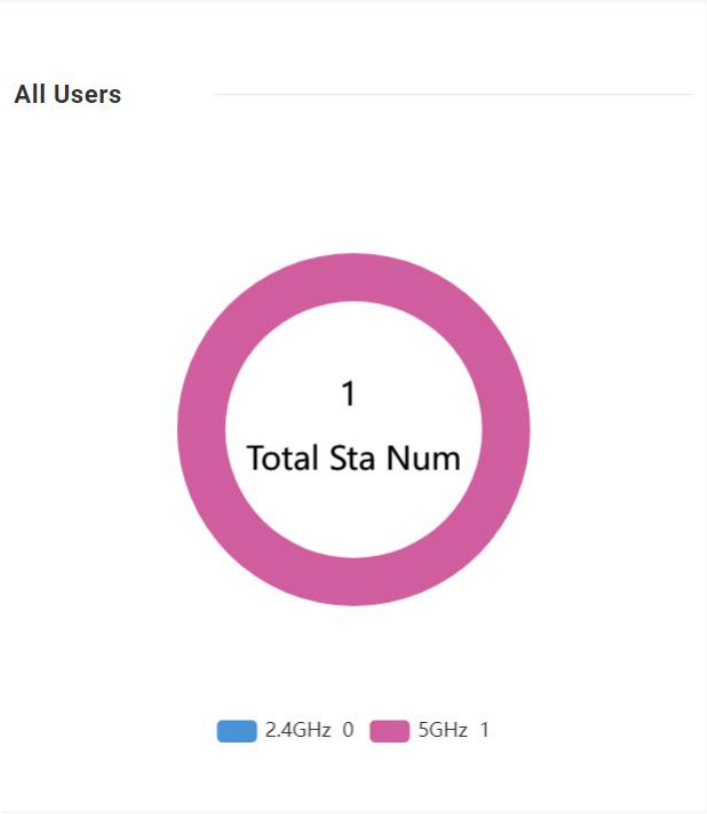
2.2. WiFi Allocation

This module displays the channels of 2.4 GHz and 5 GHz, and if you place the mouse over a channel, you can view the number of APs and clients of that channel.



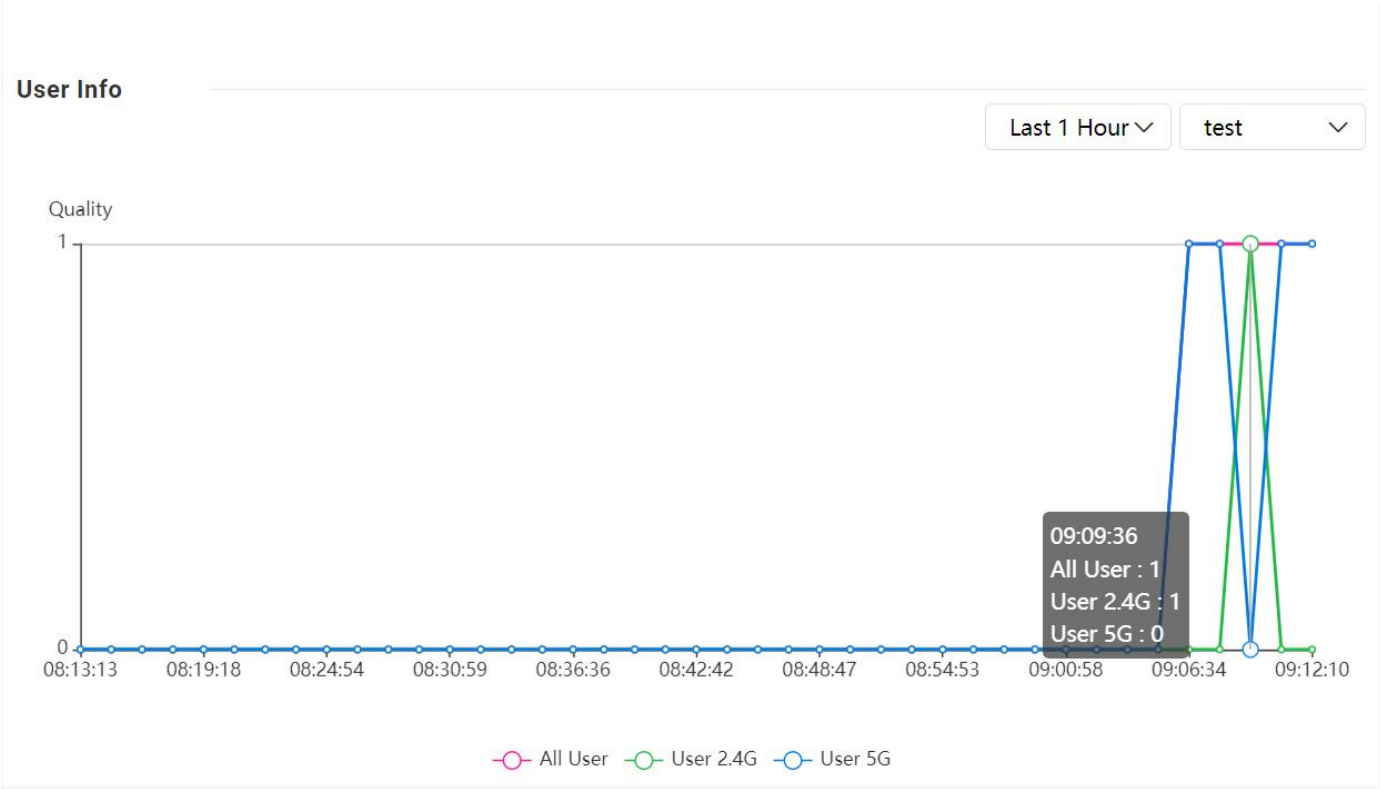
2.3. All Users

Displays the number of all wireless client users in a pie chart.



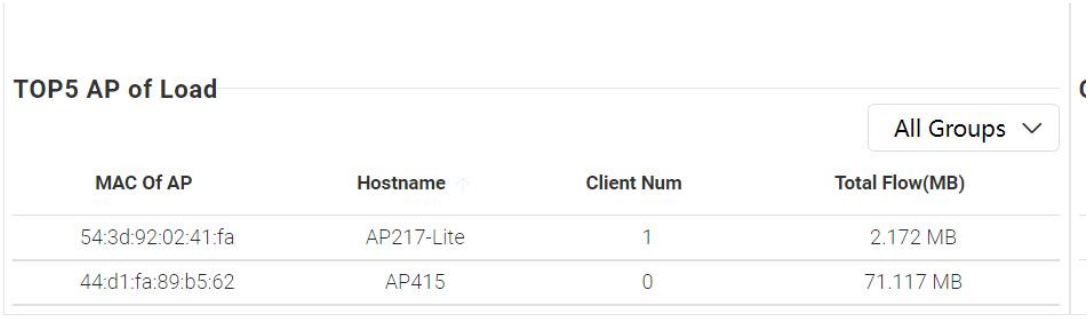
2.4. User Info

Display the number of users in the same AP group in different time periods.



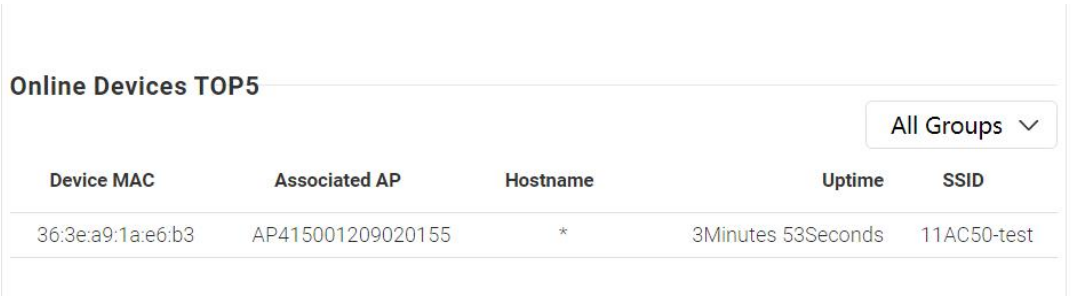
2.5. TOP5 AP of Load

Display the top 5 APs with traffic in the AP group.



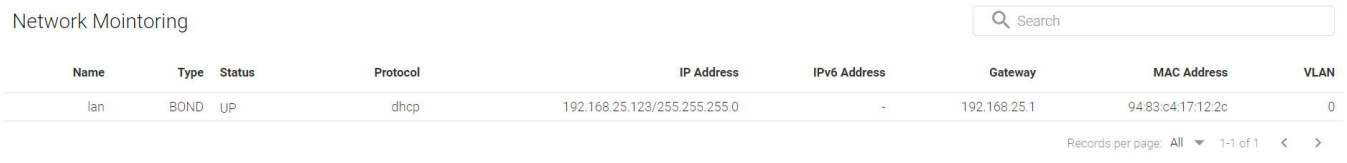
2.6. Online Devices TOP5

Display the top 5 wireless clients in the AP group.



2.7. Network Mointoring

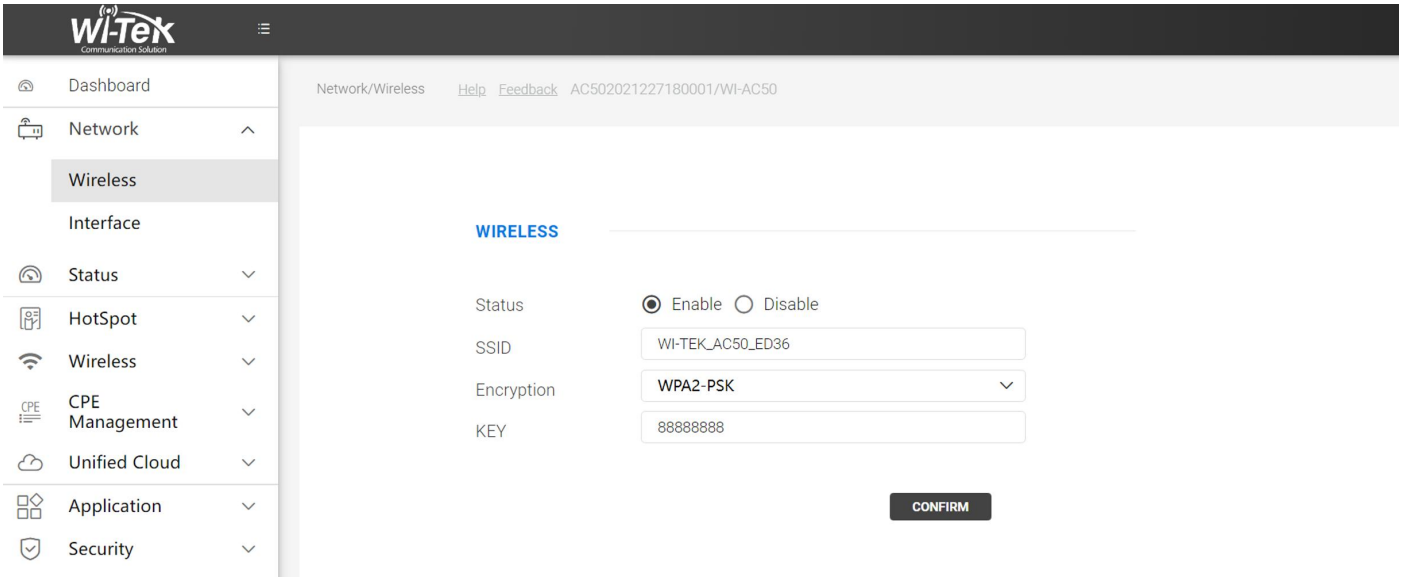
Display the basic information and status of the LAN port.



3. Network

3.1. Wireless

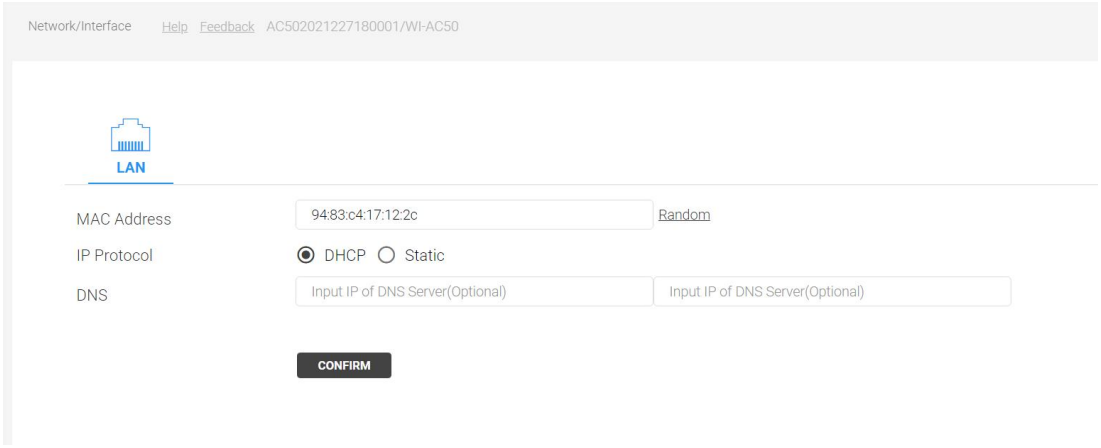
With this function, the wireless client can connect its own Wi-Fi. Click **Network > Wireless** to access this page.



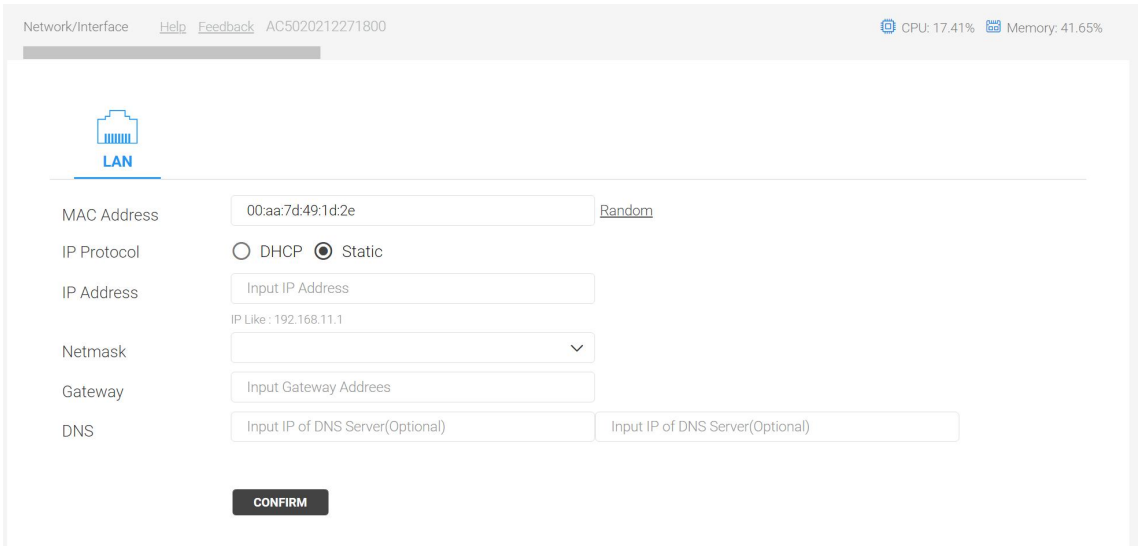
Parameter	Describe
Status	Display the wireless status of the device. * Enabled by default
SSID	Displays the SSID name of the AC.
Encryption	Display encryption of SSID. * Default SSID format: WI-TEK_ AC50_ XXXX
KEY	Display key of SSID.The default password is 8888888.

3.2. Interface

Click **Network > Interface** to access this page.



Parameter	Describe
MAC Address	Display MAC address of AC. (Click "Random" to generate MAC)
IP Protocol	DHCP:Get IP automatically from DHCP server (fallback IP: 192.168.1.88)
DNS	Configure DNS manually.

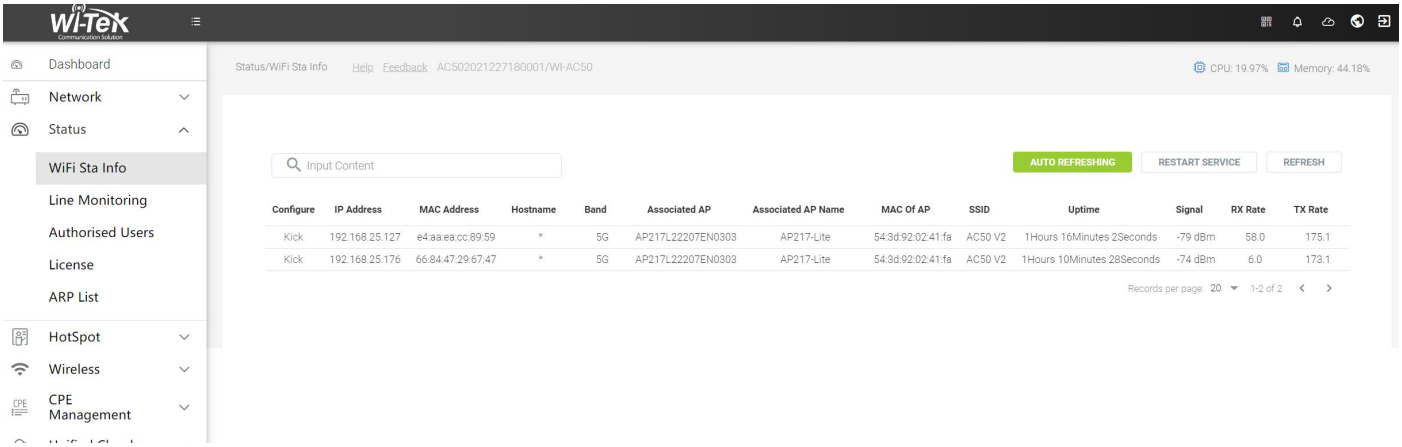


Parameter	Describe
MAC Address	Display MAC address of AC. (Click "Random" to generate MAC)
IP Protocol: Static	Configure IP, gateway, and other parameters manually.
IP Address	Configure the IP address manually.
Netmask	Configure netmask manually.
Gateway	Configure gateway and DNS manually.
DNS	Configure DNS manually.

4. Status

4.1. Wi-Fi Sta Info

Display the wireless client information connected to the AP. Click **Status > WiFI Sta Info** to access this page.

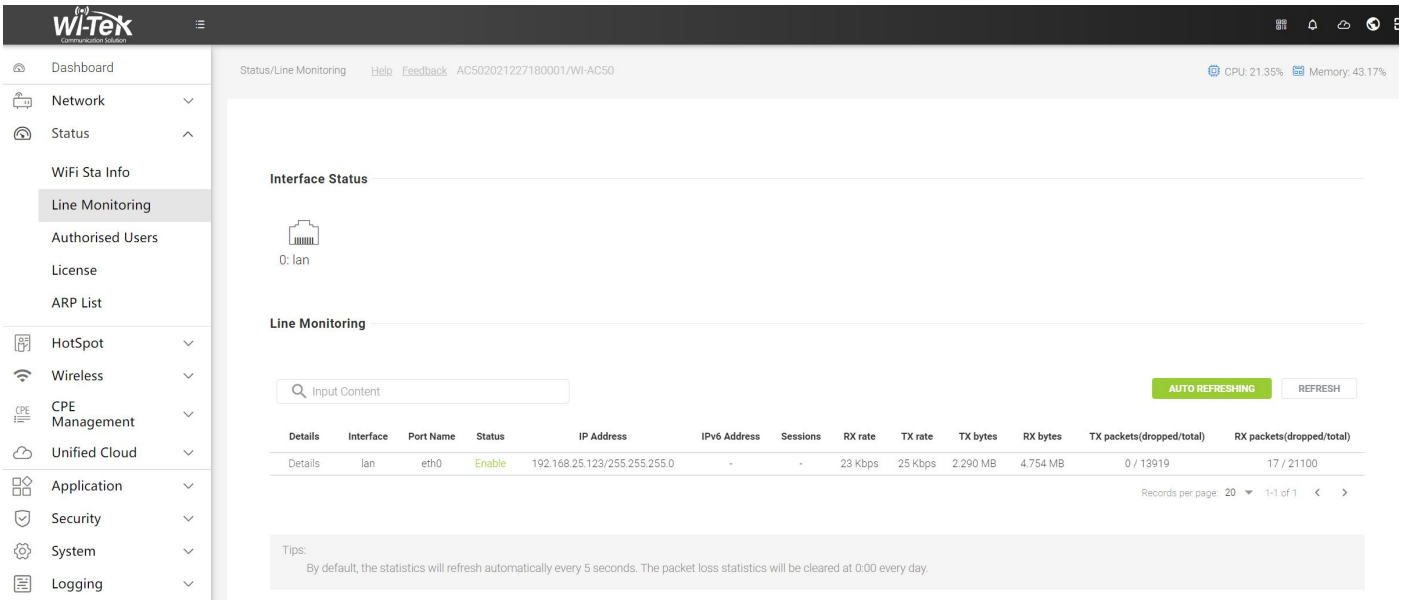


Parameter	Describe
Configure	Click the kick button to remove the wireless client.
IP Address	Display the IP address of the wireless client.
MAC Address	Display MAC address of wireless client.
Host name	Displays the host name of the wireless client.
Band	Display the band connected by the wireless client
Associated AP	Display the S/N of the AP.
Associated AP Name	Displays the name of the AP.
MAC Of AP	Displays the MAC address of the AP.
SSID	Display the SSID connected to the wireless client
Uptime	Display the time when the wireless client connects to the AP.

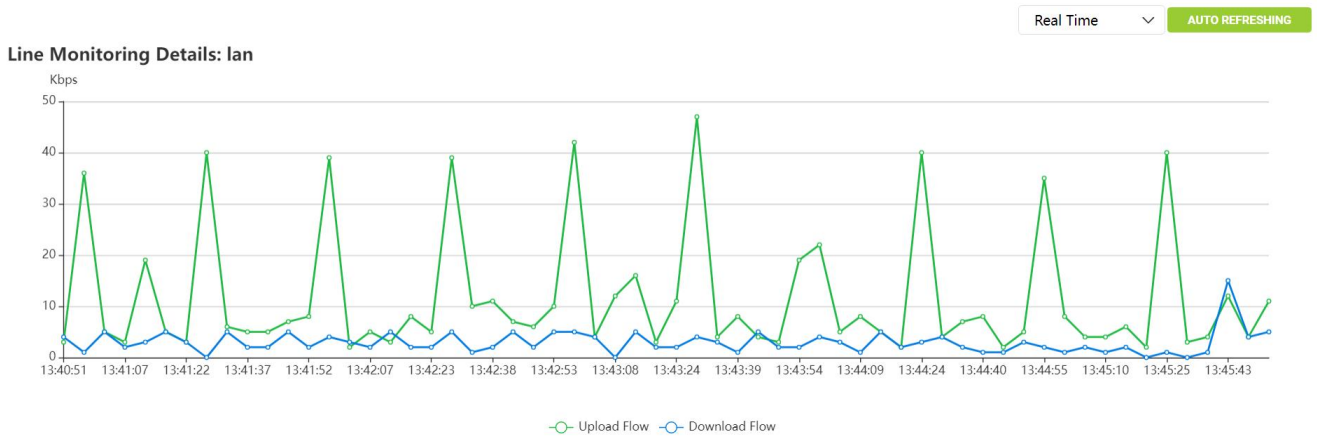
signal	Display the signal value of the wireless client connected to the AP.
RX Rate	Displays the rate of receiving data of the device.
TX Rate	Displays the rate of sending data of the device.

4.2. Lien Monitoring

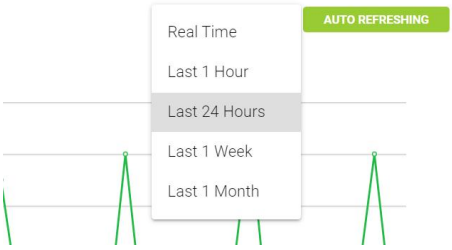
Display LAN port status information.Click **Status > Line Monitoring** to access this page.



Click Details to display the detailed traffic distribution map.

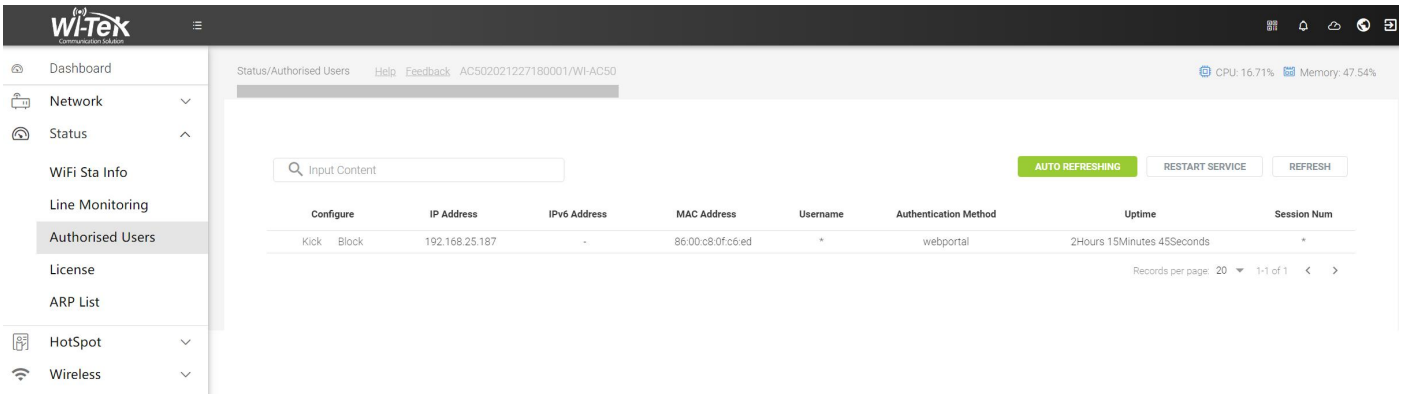


Filter according to different time



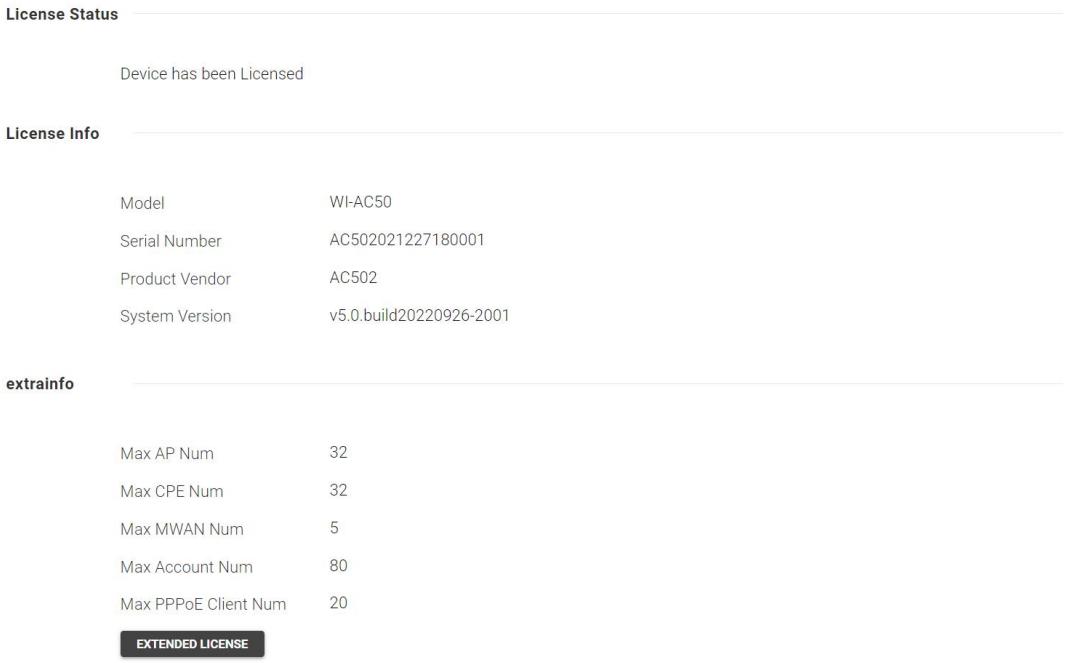
4.3. Authorised Users.

If you use the HotSpot function, the authenticated users will be counted in this list. Click **Status > Authorised Users** to access this page.



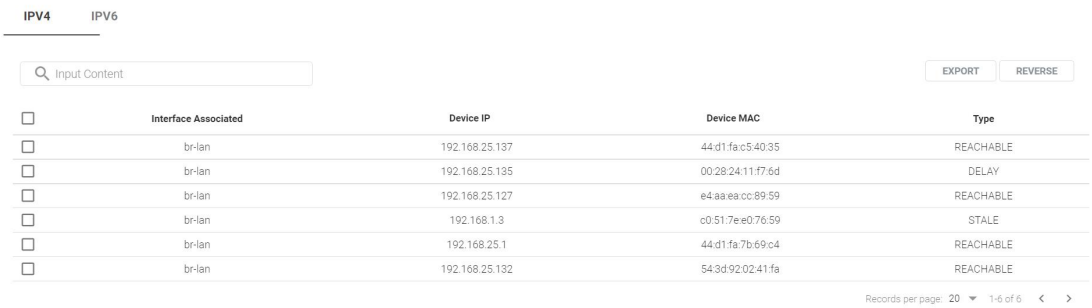
4.4. License

Display the license status and information of AC50. Click **Status > License** to access this page.



4.5. ARP List

The ARP list records the mapping relationship between IP addresses and MAC addresses. Click **Status > ARP List** to access this page.

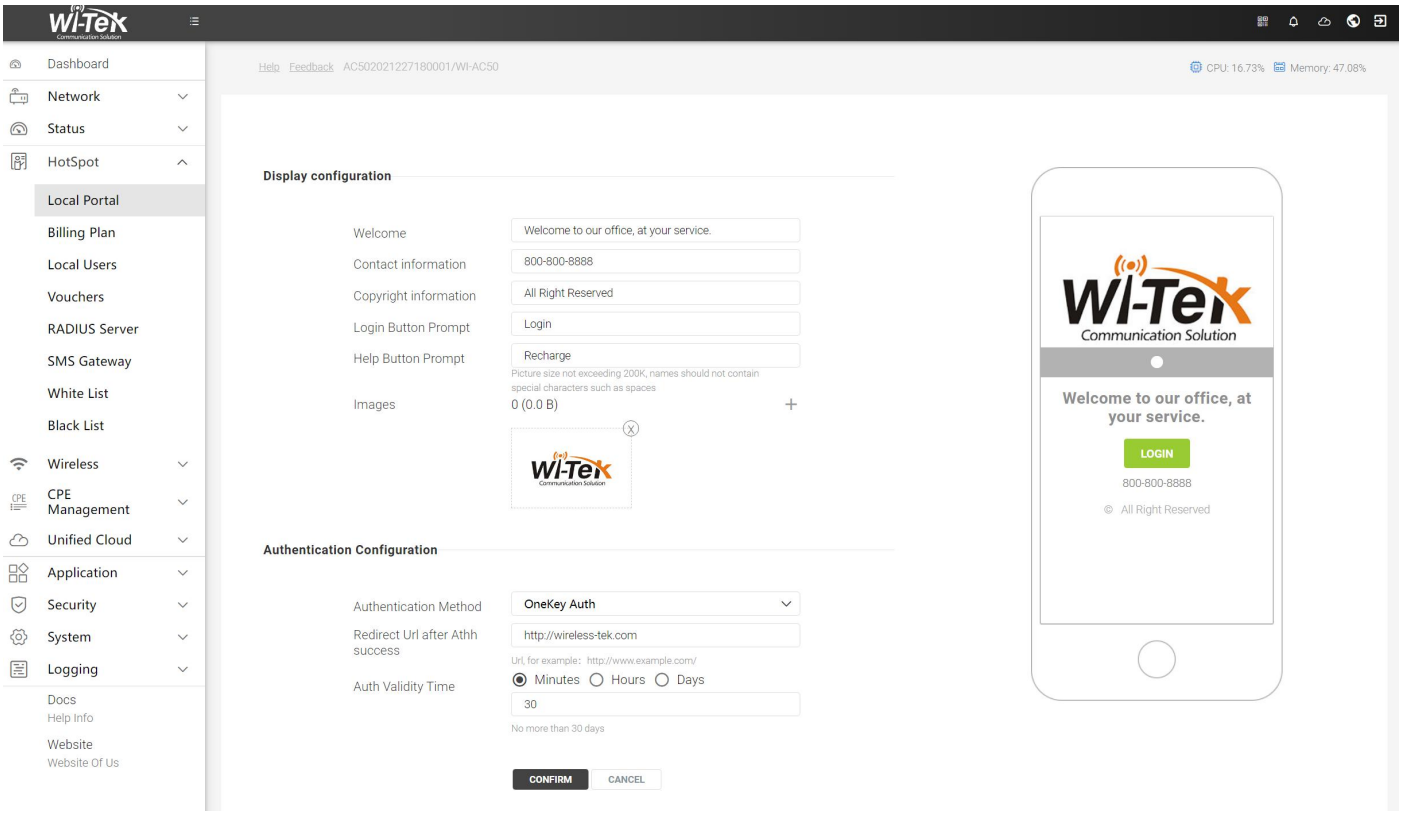


5. HotSpot.

Use this function to provide a convenient authentication service for users who only need te mporary access to the Internet. For example, users in shopping malls can enter the login p age after connecting to an open Wi-Fi, and use the correct login information to pass the au thentication.

5.1. Local Portal

Click Hot Spot > Local Portal to access this page.

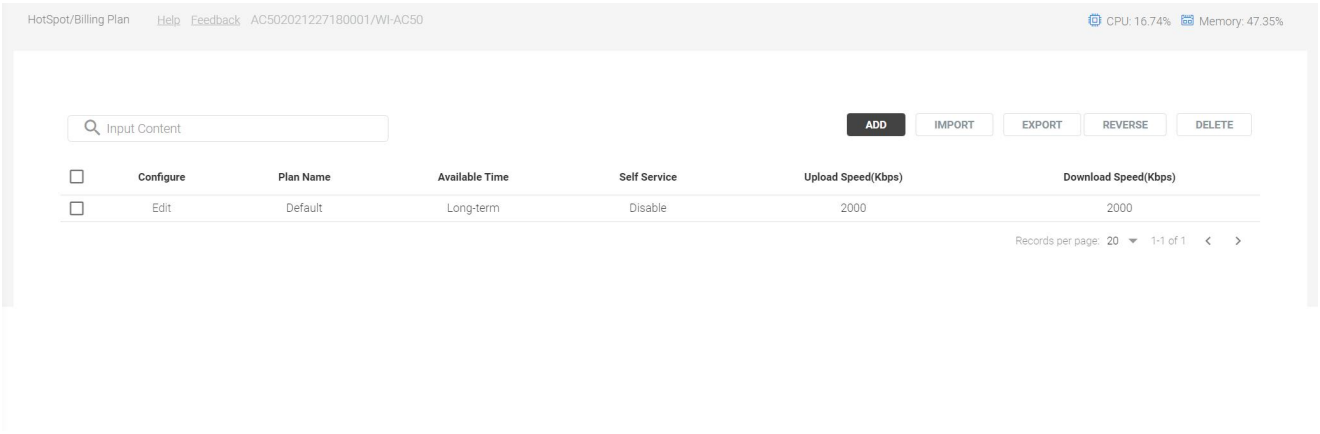


Parameter	Describe
Images	Up to 5 images can be uploaded. Recommended size: **300*200 pt.**
Authentication Method	**Local User Auth:** Check this method, clients are required to enter the correct username and password of the login account to pass the authentication. **RADIUS Auth:** If you have a RADIUS server, you can configure this modes.

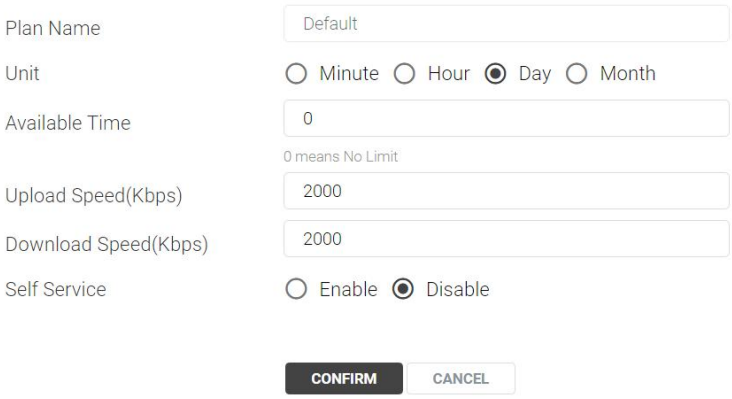
	Phone Num Auth: Enter your mobile phone number to log in. **SMS Auth:** Check this method, client can get verification codes using their mobile phones and enter the received codes to pass the authentication. **OneKey Auth:** Check this method,clients can access the network without any authentication. **Pre-Shared Password:** Check this method, clients are required to enter the correct password to pass the authentication. **Vouchers:** Check this method, you can distribute the vouchers automatically generated by the AC50 to the clients. Clients can use the vouchers to access the network.
Redirect Url after Athh success	With Redirect enabled, you also need to enter the URL in this field. The newly authenticated client will be redirected to this URL.
Auth Validity Time	Specify the value of authentication timeout.

5.2. Billing Plan

With this function, you can create a plan in advance for local user authentication speed limit.Click **Hot Spot > Billing Plan** to access this page.



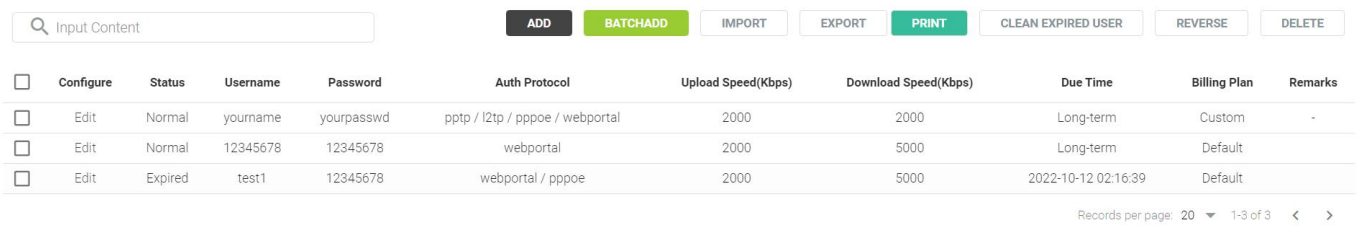
Click the **Add** button to create a plan to limit the speed of authenticated users.



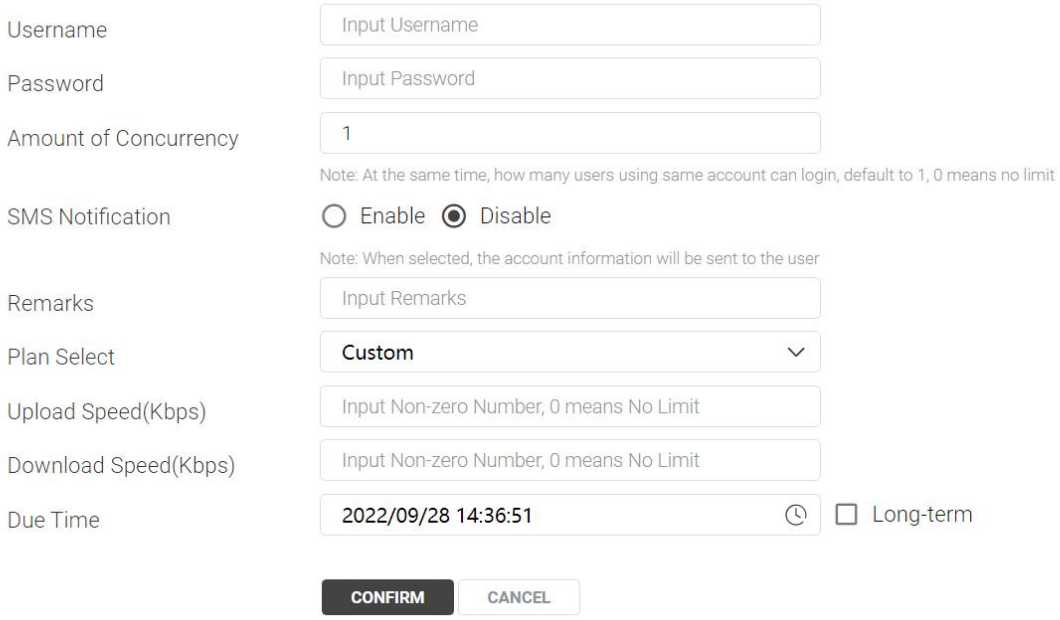
Parameter	Describe
Plan Name	Specify a name for the Portal.
Unit	Select time type.
Available Time	Specify the scheduled time.
Upload Speed(Kbps)	Specify Upload rate limit.
Download Speed(Kbps)	Select download rate limit.
Self Service	Enable it, users can register their own accounts on the portal page.It is disabled by default.

5.3. Local Users

With this Local Users configured, clients are required to enter the correct username and password of the login account to pass the authentication.Click **Hot Spot > Local Users** to access this page.



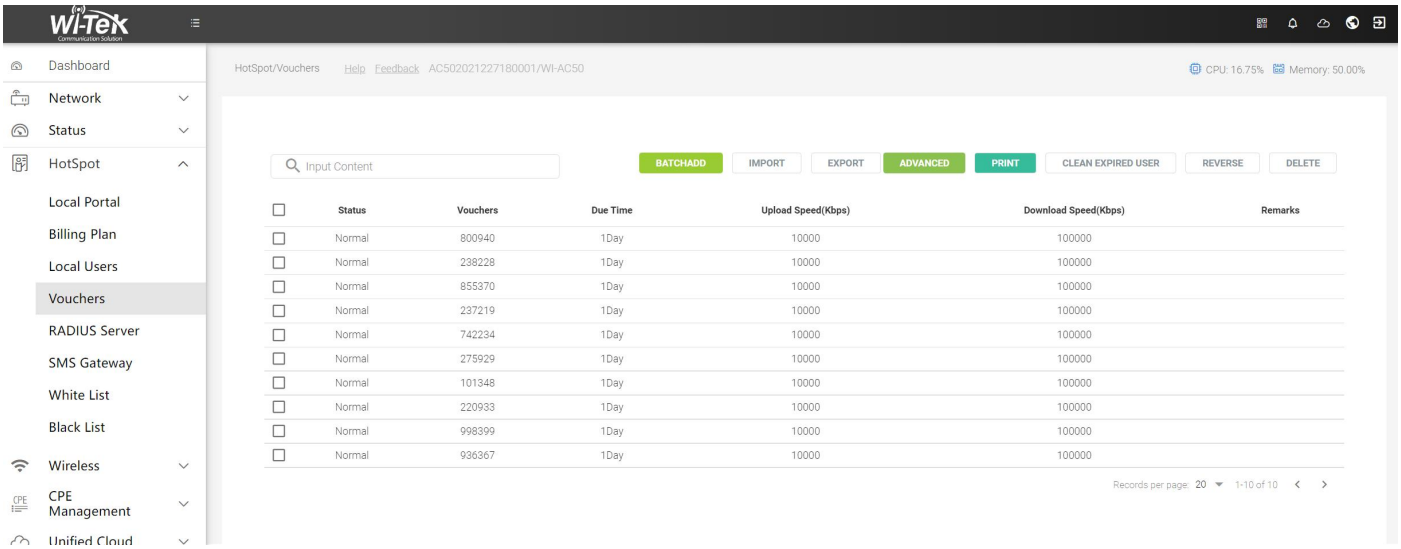
Click the **Add** button to create a user name and password for local authentication.



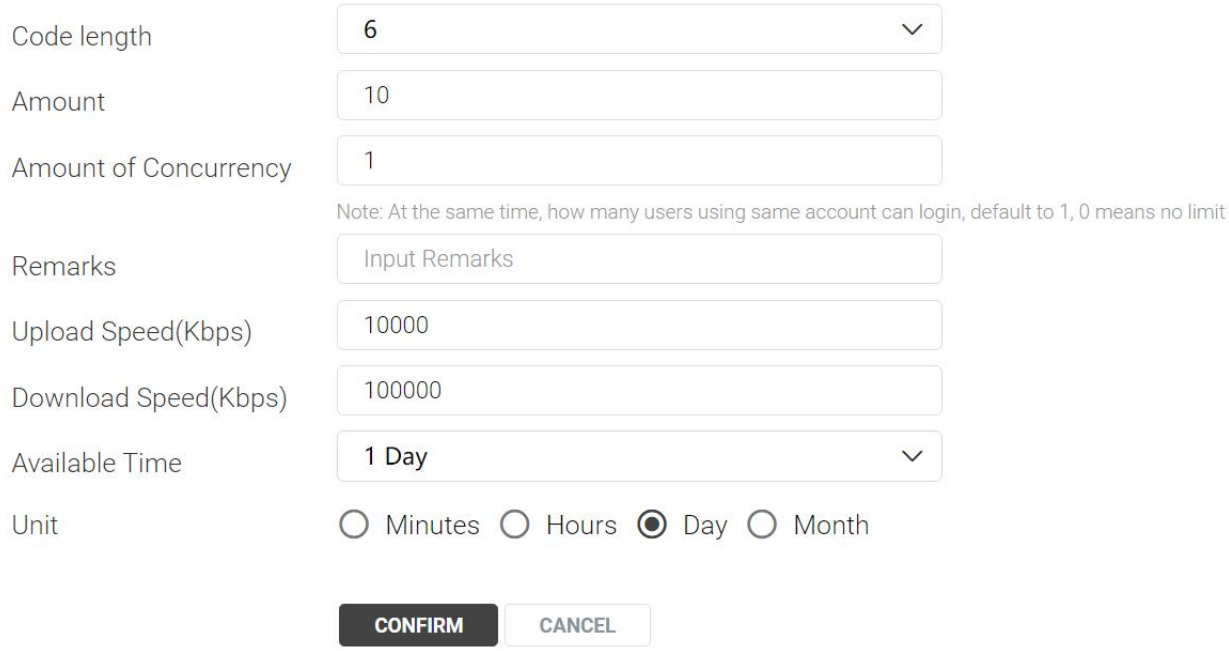
Parameter	Describe
Username	Specify a name.
Password	Select time type.
Amount of Concurrency	The specified account can be restricted at the same time.
SMS Notification	Whether to start the SMS service.
Remarks	Specify remarks.
Plan Select	Select an already created plan.
Upload Speed(Kbps)	Specify Upload rate limit.
Download Speed(Kbps)	Select download rate limit.
Due Time	Specify user usage time.

5.4. Vouchers

With Voucher configured, you can distribute the vouchers automatically generated by the AC50 to the clients. Clients can use the vouchers to access the network. Click **Hot Spot > Vouchers** to access this page.



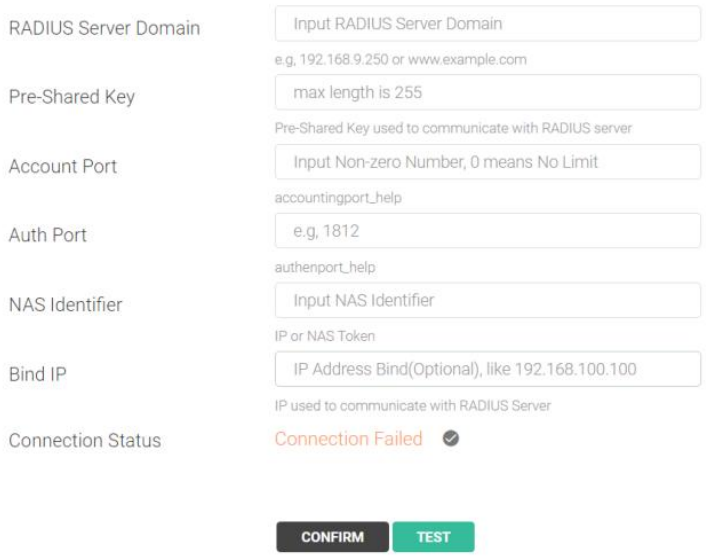
Click to create Vouchers.



Parameter	Describe
Code length	Specify character length.
Amount	Select time type.
Amount of Concurrency	Total number of accounts created at one time
Remarks	Specify remarks.
Upload Speed(Kbps)	Specify Upload rate limit.
Download Speed(Kbps)	Select download rate limit.
Available Time	Select the period of validity of the Voucher.
Unit	Select time type.

5.5. RADIUS Server

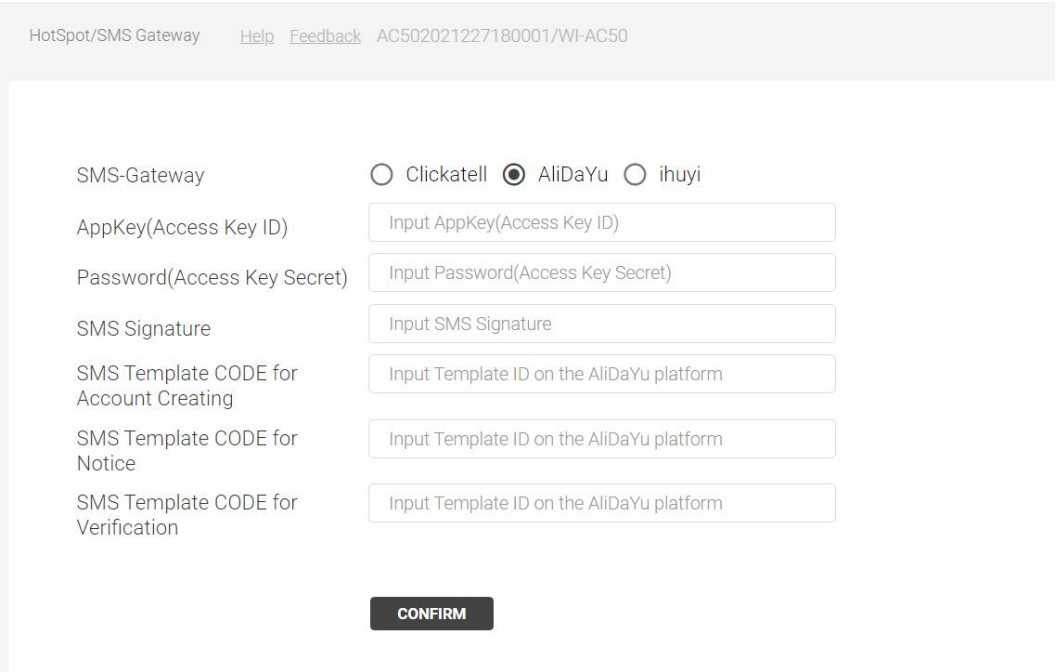
Click Hot **Spot > RADIUS Server** to access this page.



Parameter	Describe
RADIUS Server Domain	Enter the domain name or IP address of the RADIUS server.
Pre-Shared Key	Enter the password you have set on the RADIUS server.
Account Port	Enter the port number you have set on the RADIUS server.
Auth Port	Enter the port number of the accounting server. The default port number is 1812.
NAS Identifier	Enter NAS Identifier. (IP or NAS Token)
Bind IP	Enter Bind IP (optional) * IP used to communicate with RADIUS Server
Connection Status	Show connection status.

5.6. SMS Gateway

Clients can get verification codes using their mobile phones and enter the received codes to pass the authentication.Click **Hot Spot > SMS Gateway** to access this page.



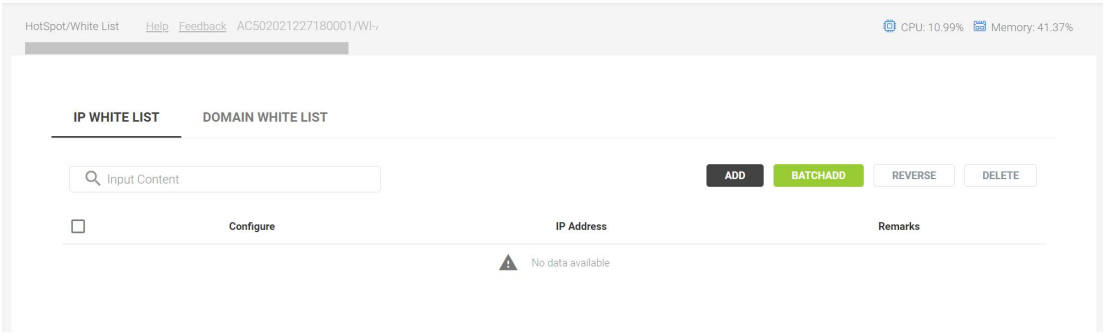
Parameter	Describe
SMS -Gateway	Select the specified SMS gateway.
App Key	The specified Access Key ID obtained from the SMS gateway.
Password	Get the specified password from the SMS gateway.
SMS Signature	Input SMS Signature.
SMS Template CODE for Account Creating	Input SMS Template C0DE for Account Creating.
SMS Template CODE for Notice	Input SMS Template CODE for Notice.
SMS Template CODE for Verification	Input SMS Template CODE for Verification.

5.7. White List

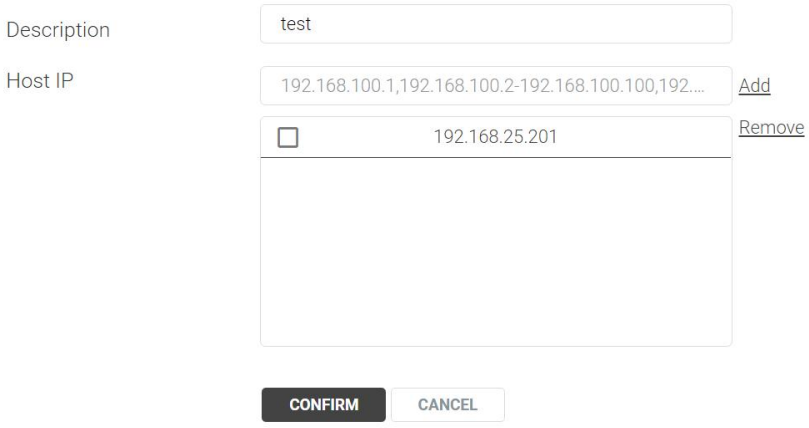
White List allows some specified IP or domain name to access the network resources without authentication. Click **Hot Spot > White List** to access this page.

5.7.1.IP WHITELIST

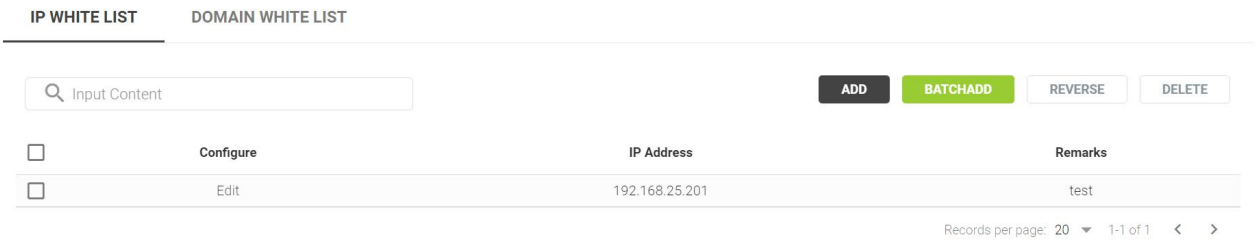
Allow specific user's IP address to access the Internet without Portal authentication.



Select **IP WHITELIST** and click the **Add** button to add an IP address.

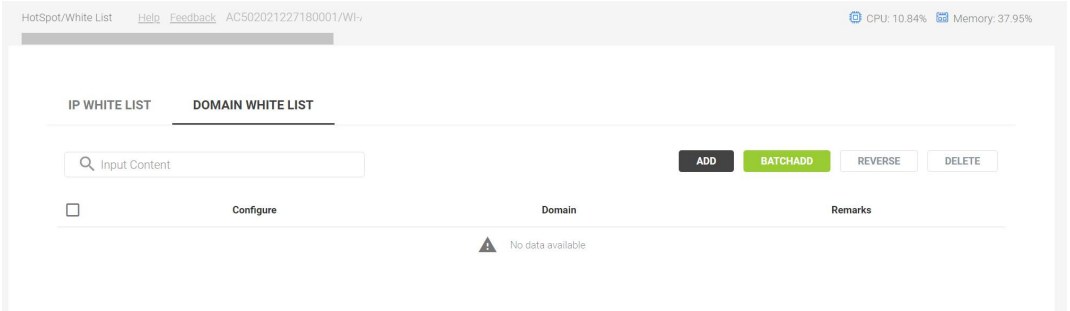


Click **CONFIRM** to add the IP address into rule.

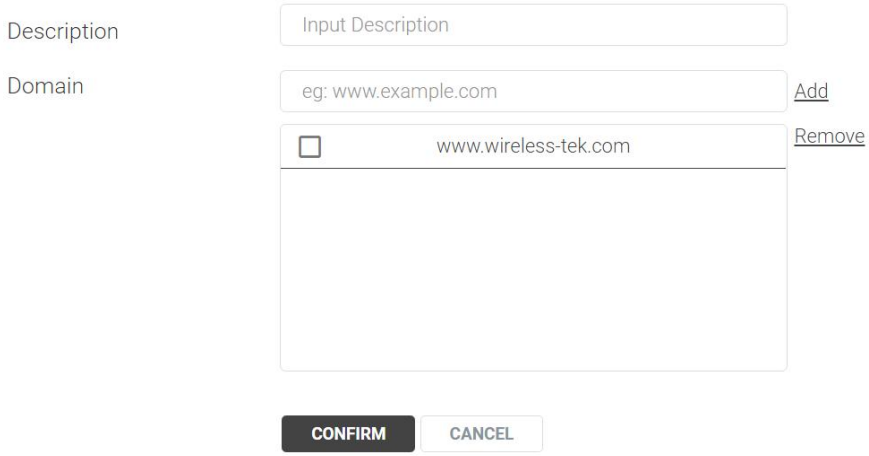


5.7.2.DOMAIN WHITELIST

Allow users to access specific websites before Portal authentication.Click **Hot Spot > White List** to access this page.



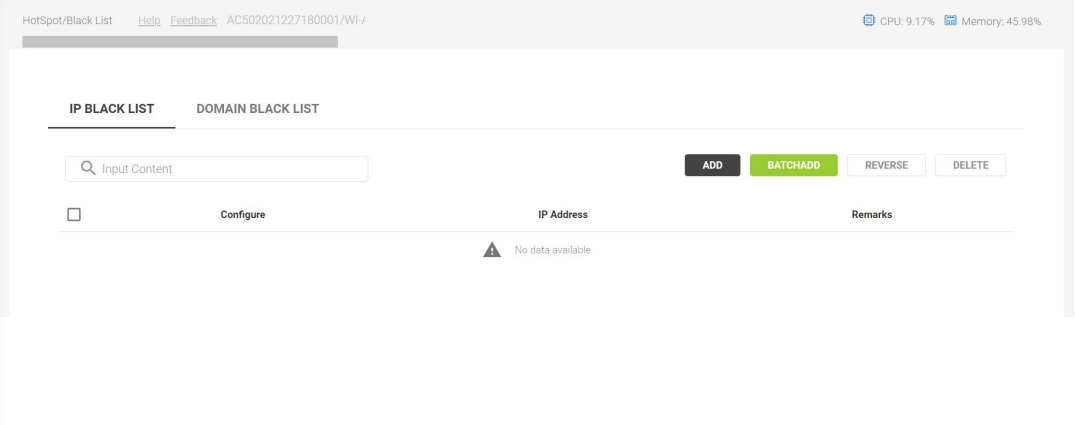
Select **DOMAIN WHITELIST** and click the **Add** button to Add domain.



Click **CONFIRM** to add the IP address into rule.

5.8. Black List

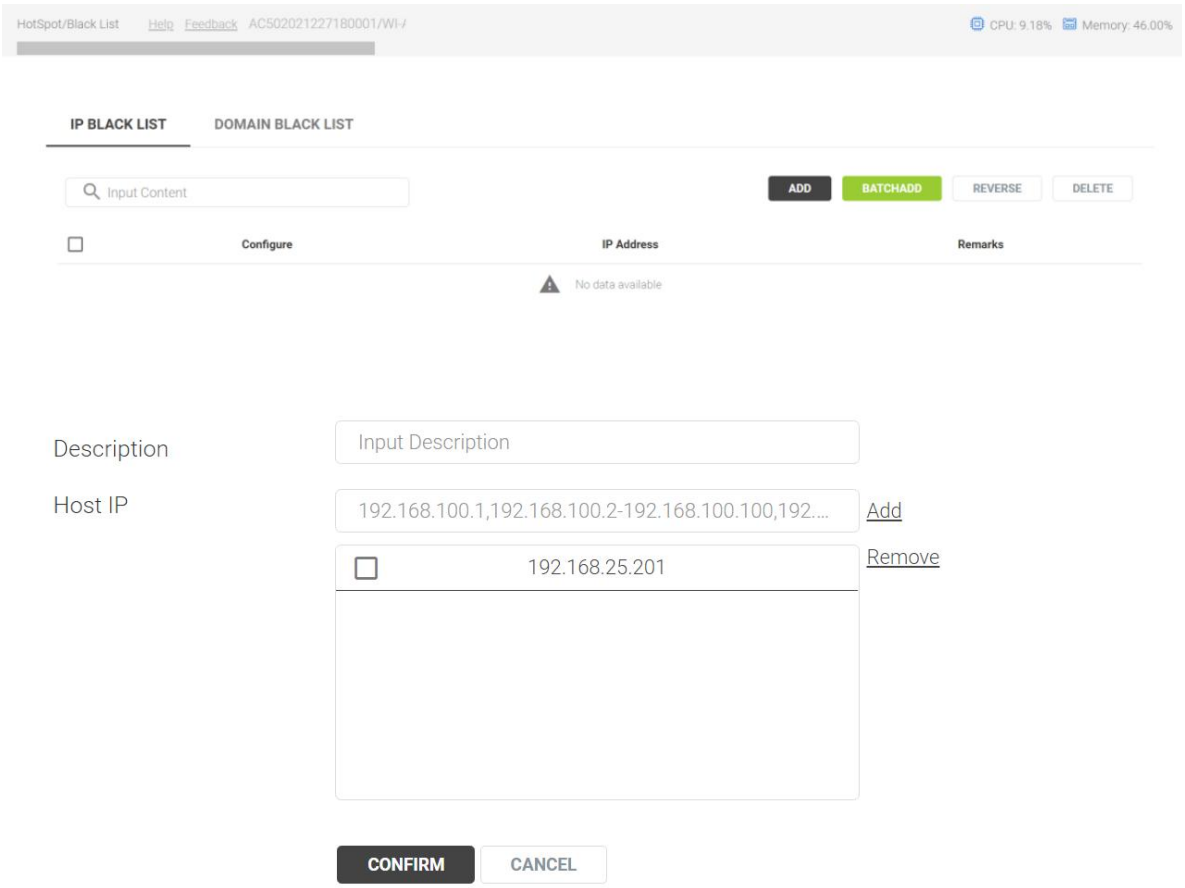
Black List block some specified IP or domain name to access the network resources without authentication.Click **Hot Spot > Black List** to access this page.



5.8.1.IP WHITELIST

Block specific user's IP address to access the Internet without Portal authentication.

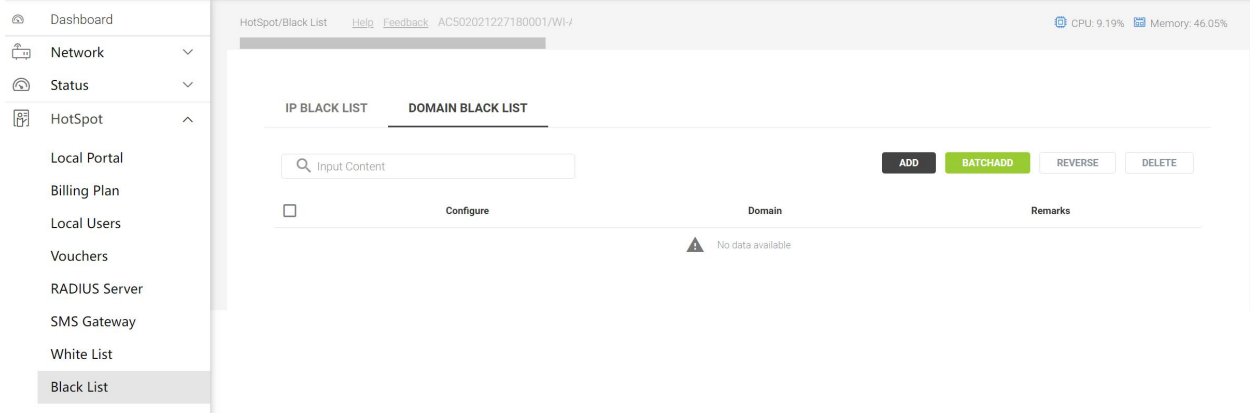
Select **IP WHITELIST** and click the **Add** button to add an IP address.



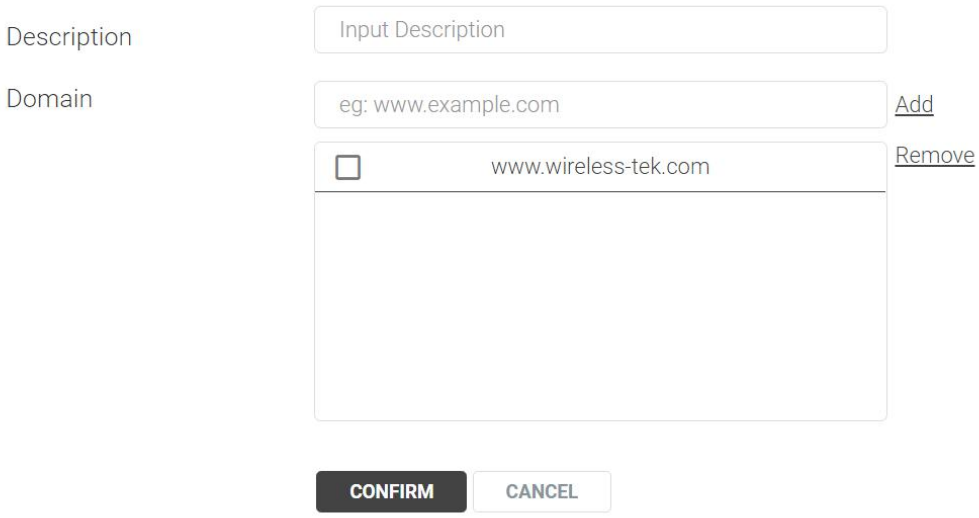
Click **CONFIRM** to add the IP address into rule.

5.8.2.**DOMAIN WHITELIST**

Block users to access specific websites before Portal authentication.



Select **DOMAIN WHITELIST** and click the **Add** button to Add domain.

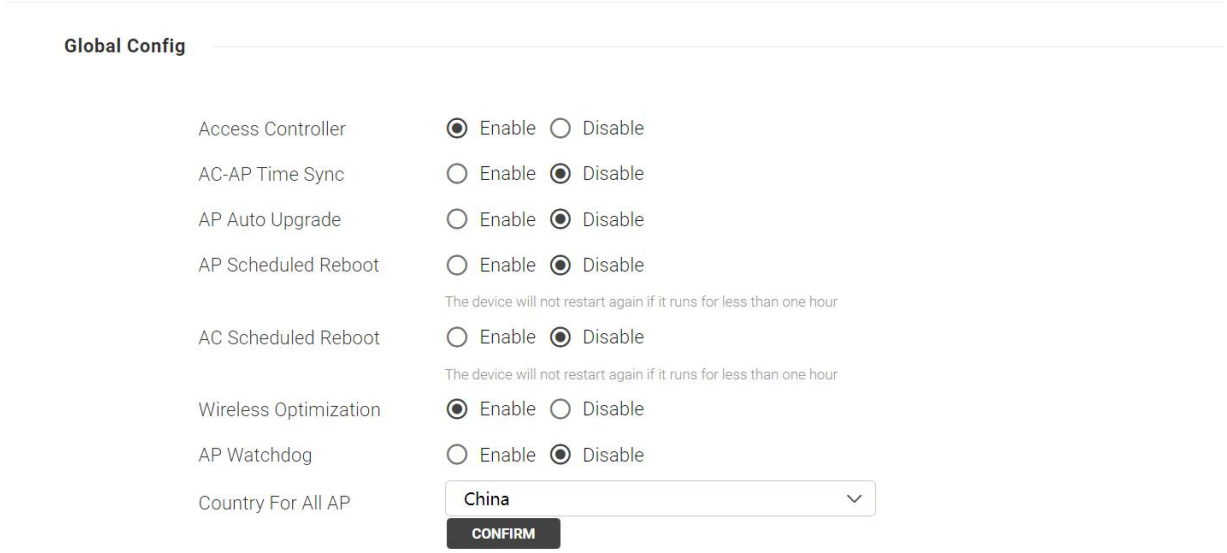


Click **CONFIRM** to add the IP address into rule.

-END-

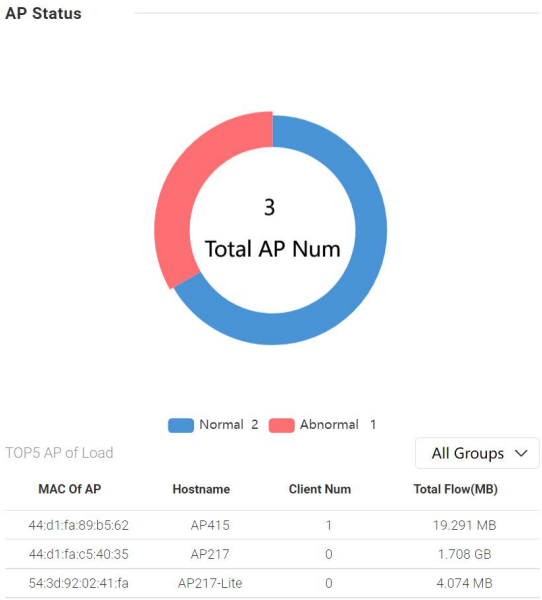
6. Wireless

6.1. Overview

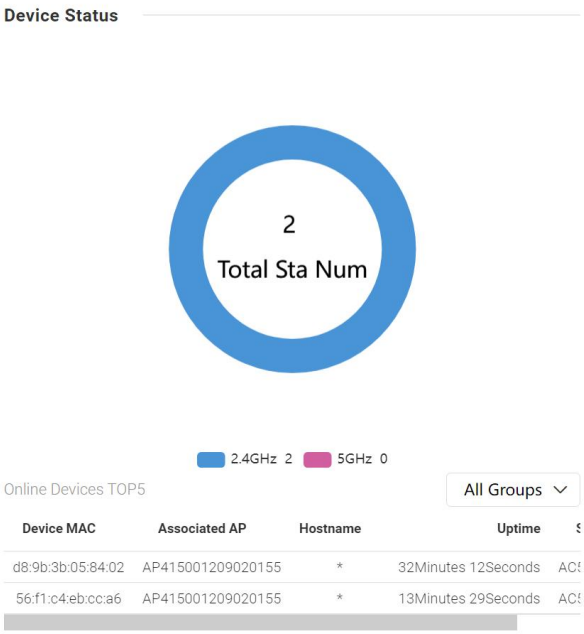


Parameter	Describe
Access Controller	Enabled by default,If this option is disabled, the Access Controller function will be turned off.
AC-AP Time Sync	Select time type.
AP Scheduled Reboot	Disabled by default,If this option is enabled, you can periodically reboot all APs in the network as needed.
AC Scheduled Reboot	Disabled by default, If this option is enabled, you can periodically reboot AC in the network as needed.
Wireless Optimization	Disabled by default,If this option is disabled, the wireless Optimization function will be turned off. Note: Using this function, when all the channels of the AP are set to be automatic, when there is no client connected to the AP, the AC will automatically optimize the channel.
AP Watchdog	Disabled by default, If this option is enabled, when the Address Do not Alive, AP will Open Rescue Network Automatically (SSID: RESCUE_99_XXXX, Password: 99999999)
Country For All AP	Select the corresponding country from the drop-down menu.

A visual pie chart shows the number of managed APs, with blue indicating normal and red indicating abnormal. And record the traffic of the top 5 APs.

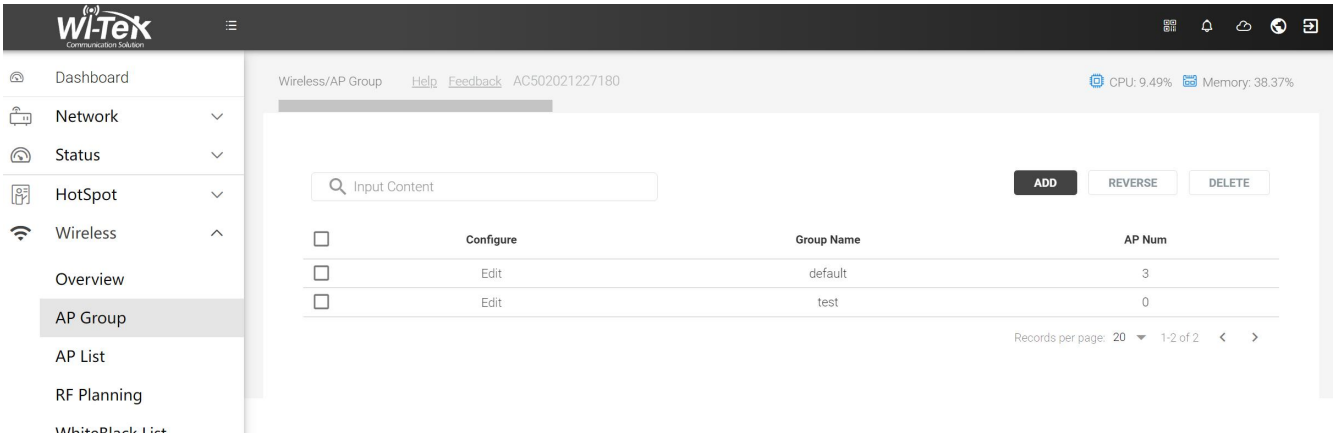


A visual pie chart shows the number of managed wireless clients, with blue for normal and red for abnormal. And record the duration of the top 5 wireless clients connecting to the AP.



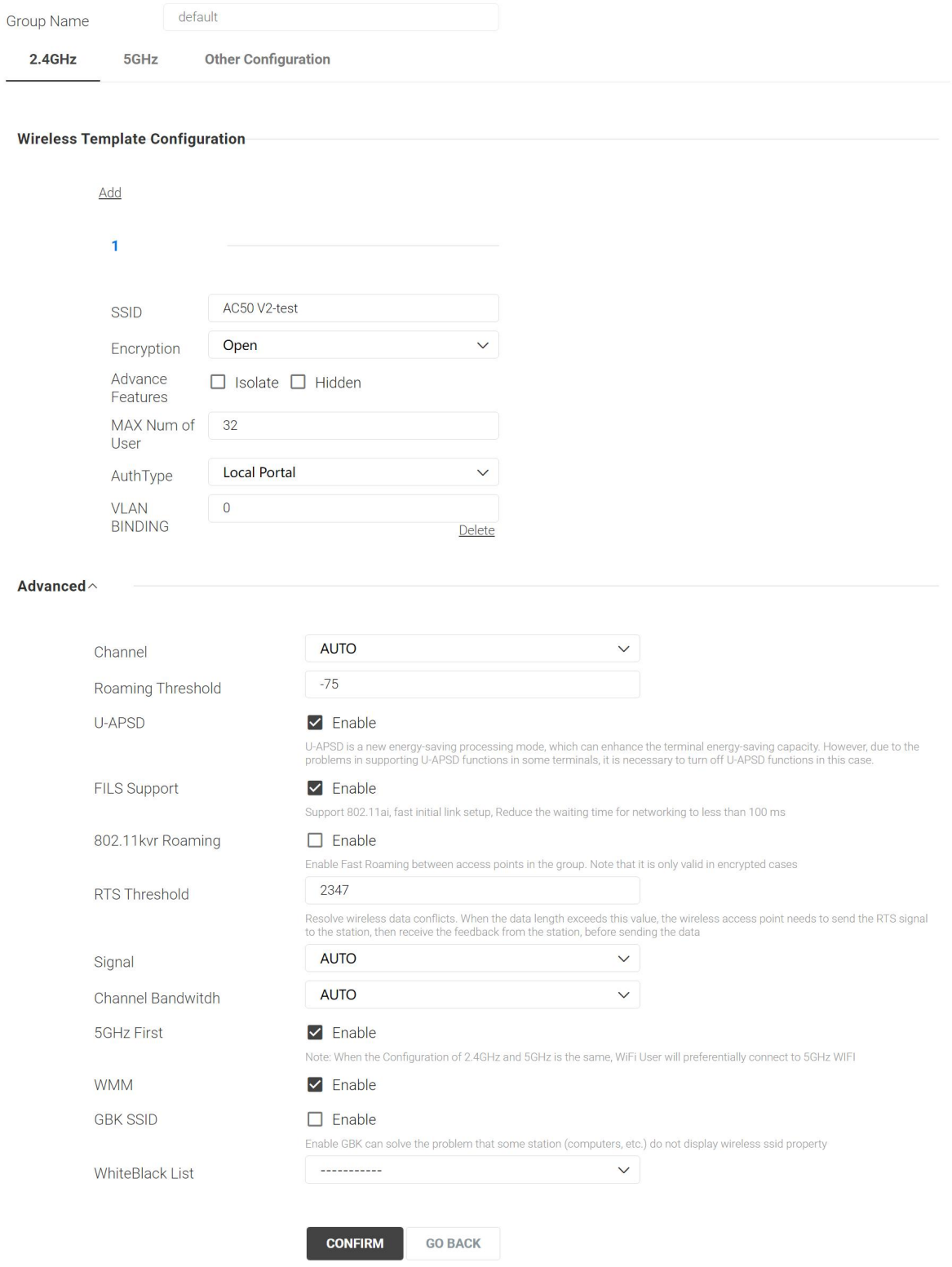
6.2. AP Group

The wireless parameters of APs can be synchronized in batches through AP groups.an ap can belong to one ap group at a time.Click **Wireless > AP Group** to access this page.



6.2.1.Add/Edit AP Group

Click Add an ap group and click the Edit button in the **Wireless > AP Group** table to display this page.

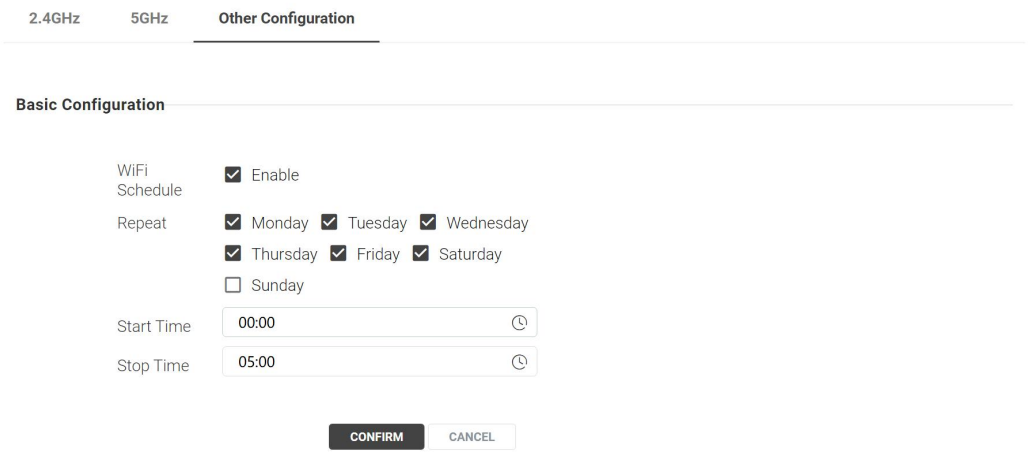


Parameter	Describe
Group Name	Specify a name for the group.
SSID	Enter an SSID name contains up to 32 characters. Note: A maximum of 8 SSID profiles can be created in each AP group.
Encryption	Select the security mode of the wireless network WPA-Enterprise / WPA2-Enterprise
KEY	Enter the password for the SSID.
Advance Features	**Isolate:**Check this option box, wireless clients connected to the same SSID cannot access each other. **Hidden:**Check this option box, the AP will not broadcast the SSID and wireless clients will not be able to scan and search for the SSID.
MAX Num of User	Number of users connected to this SSID.
AuthType	It is associated with authentication. The default is none.
VLAN BINDING	Enter a VLAN ID for the wireless VLAN. Wireless networks with the same VLAN ID are grouped to a VLAN.
delete	Delete wireless parameter profile.
Advanced	
Channel	Automatic by default,you can manually specify the channel. The range of available channels is determined by the radio mode and the country setting. If you select Auto for the channel setting, the AP scans available channels and selects a channel where the least amount of traffic is detected.
Roaming Threshold	minimum signal level required for a client to remain connected.
U-APSD	Enabled by default, U-APSD is a new energy-saving processing mode, which can enhance the terminal energy-saving capacity. However, due to the problems in supporting U-APSD functions in some terminals, it is necessary to turn off U-APSD functions in this case.

FILS Support	Enabled by default, supports 802.11ai, fast initial link setup, Reduce the waiting time for networking to less than 100 ms
802.11kvr Roaming	Enable Fast Roaming between access points in the group. Note that it is only valid in encrypted cases.
RTS Threshold	Resolve wireless data conflicts. When the data length exceeds this value, the wireless access point needs to send the RTS signal to the station, then receive the feedback from the station, before sending the data
Signal	Select the corresponding value according to the actual transmit power of the AP.
Channel Bandwidth	Select the wireless channel bandwidth.
5GHz First	Enabled by default, when the Configuration of 2.4GHz and 5GHz is the same, Wi-Fi User will preferentially connect to 5GHz Wi-Fi.
WMM	Enabled by default,the AP maintains the priority of audio and video packets for better media performance.
GBK SSID	Enable GBK can solve the problem that some station (computers, etc.) do not display wireless ssid property
WhiteBlack List	Select the created black/white list from the drop-down menu.

WiFi Schedule

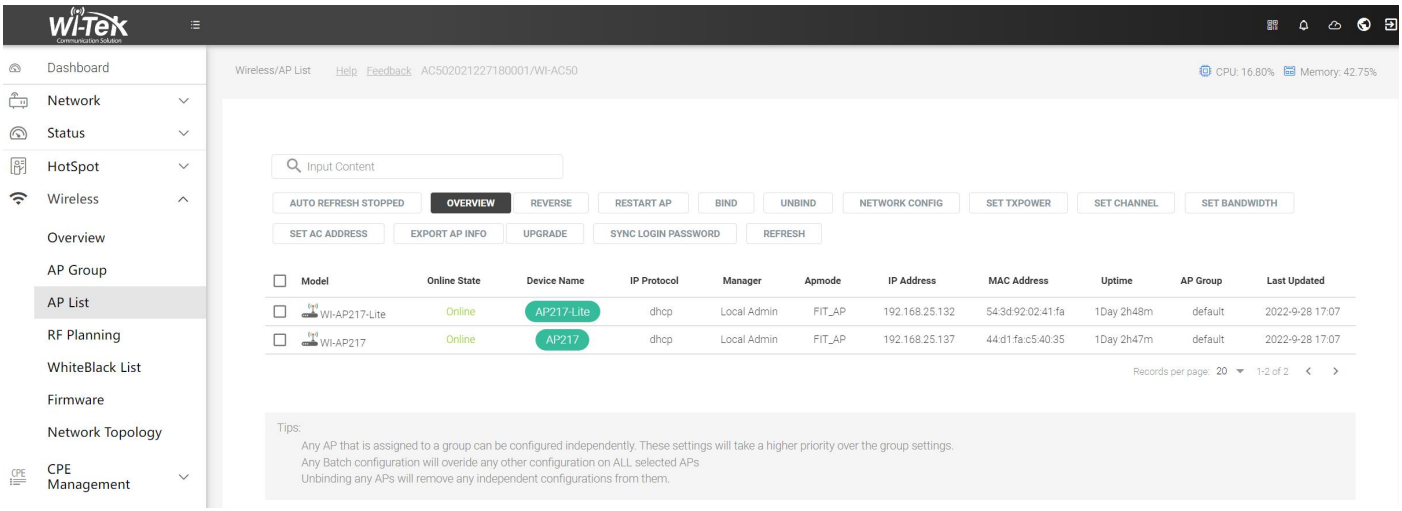
You can set the radio in the AP group to run at a specified time.Click **Wireless > AP Group > Other Configuration** to access this page.



6.3. AP List

By default, devices are displayed in a spread out form **OVERVIEW.**

Click **Wireless > AP List** to access this page.



Parameter	Describe
AUTO REFRESHING	Click to automatically refresh the AP list.
REVERSE	Select all APs and click REVERSE to quickly deselect AP.
RESTART AP	Select an AP and click it to restart the AP.
BIND	Select the AP and bind it to the specified AP group.
UNBIND	Select the AP to unbind it from the AP group.
NETWORK CONFIG	Select AP to set IP address
SET TXPOWER	Select AP to set TX power.
SET CHANNEL	Select AP to set bandwidth.
SET BANDWIDTH	Select AP to set bandwidth.
SET AC ADDRESS	Select AP to manually set AC address for AP.
EXPORT AP INFO	Select AP to export AP information
UPGRADE	Select AP to upgrade the firmware. * It needs to be matched with 6.6 Firmware
SYNC LOGIN PASSWORD	Select AP and click it to synchronize the same password as AC
REFRESH	Click it to refresh the AP list.

OVERVIEW: Display the most basic parameters of AP.

Model	Online State	Device Name	IP Protocol	Manager	Apmode	IP Address	MAC Address	Uptime	AP Group	Last Updated
WI-AP317	Offline	AP317	dhcp	Local Admin	FIT_AP	192.168.25.184	44:d1:fa:a3:7d:c9	1Day 1h17m	-	2022-9-29 11:30
WI-AP217-Lite	Online	AP217-Lite	dhcp	Local Admin	FIT_AP	192.168.25.132	54:3d:92:02:41:fa	0Day 2h16m	-	2022-9-29 11:30
WI-AP217	Online	AP217	dhcp	Local Admin	FIT_AP	192.168.25.137	44:d1:fa:c5:40:35	0Day 2h17m	default	2022-9-29 11:30

Records per page: 20 1-3 of 3

WiFI VIEW: Display parameters related to wireless.

Model	Online State	AP Group	WiFi User	Channel	Txpower	Upload Flow	Download Flow	Device Name	MAC Address
WI-AP317	Offline	-	0/ 1	9/ 56	26/ 26	33.851 MB	290.285 MB	AP317	44:d1:fa:a3:7d:c9
WI-AP217-Lite	Online	-	0/ 1	1/ 44	23/ 26	885.517 MB	2.138 GB	AP217-Lite	54:3d:92:02:41:fa
WI-AP217	Online	default	0/ 0	2/ 40	24/ 23	874.167 KB	10.092 MB	AP217	44:d1:fa:c5:40:35

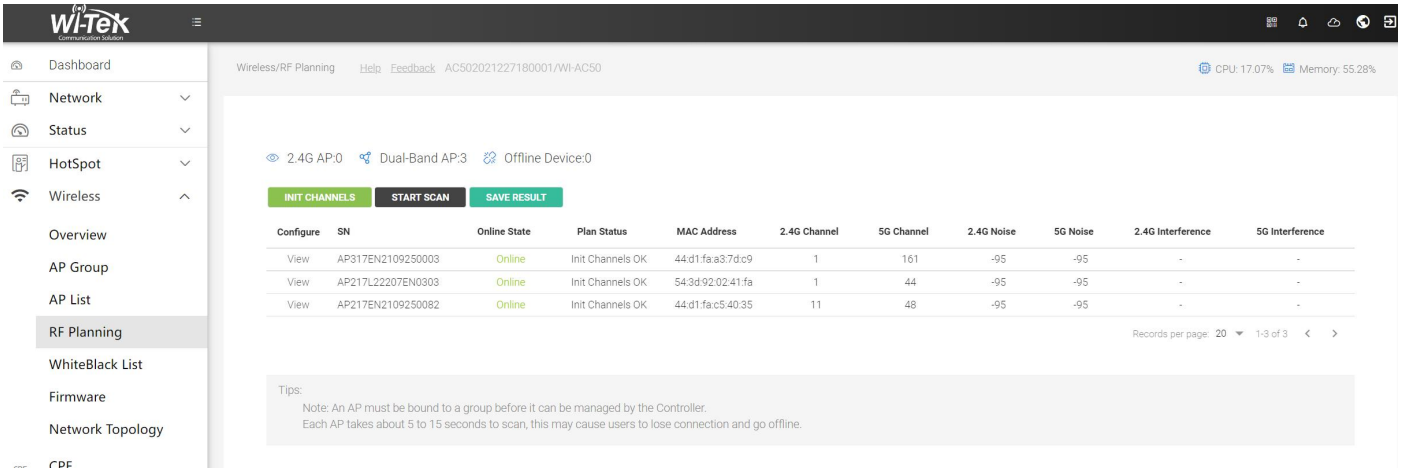
Records per page: 20 1-3 of 3

DETAILS VIEW: Display the most comprehensive parameters of AP.

Model	Online State	Device Name	SN	IP Protocol	IP Address	MAC Address	Uptime	AP Group	WiFi User	CPU Usage	Channel	Txpower	Upload Flow
WI-AP317	Offline	AP317	AP317EN2109250003	dhcp	192.168.25.184	44:d1:fa:a3:7d:c9	1Day 1h17m	-	0/ 1	7%	9/ 56	26/ 26	33.851 M
WI-AP217-Lite	Online	AP217-Lite	AP217L22207EN0303	dhcp	192.168.25.132	54:3d:92:02:41:fa	0Day 2h16m	-	0/ 1	7%	1/ 44	23/ 26	885.517 M
WI-AP217	Online	AP217	AP217EN2109250082	dhcp	192.168.25.137	44:d1:fa:c5:40:35	0Day 2h17m	default	0/ 0	7%	2/ 40	24/ 23	874.167 K

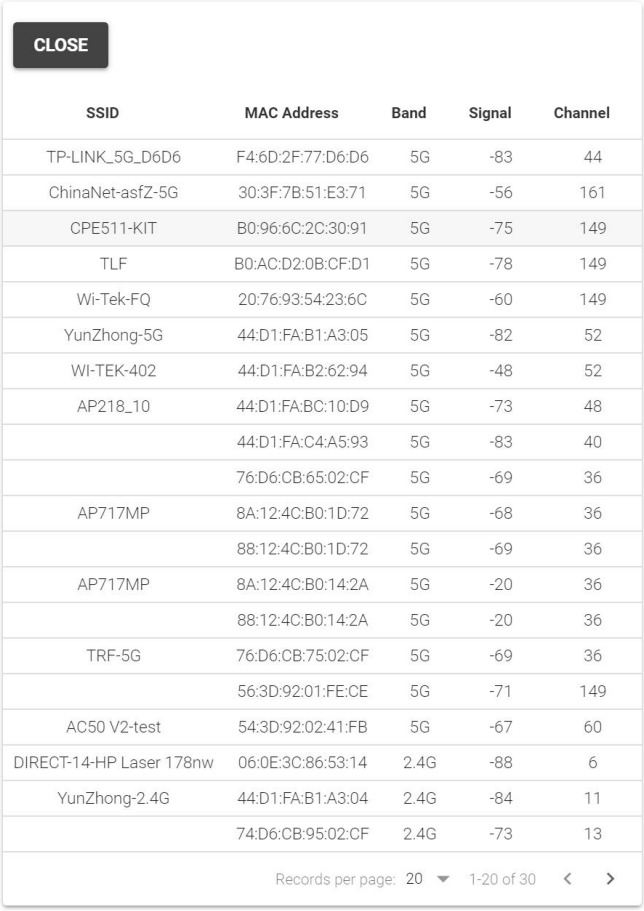
6.4. RF Planning

The purpose of this function is to assist in the rapid optimization of the wireless channel. Analyze and calculate the busyness of the channel according to the scanning situation, and choose the lower one first.Click **Wireless > RF Planning** to access this page.



Parameter	Describe
INIT CHANNELS	Click it to assign channels based on APs within the group.
START SCAN	Click it to automatically scan the Wi-Fi interference sources around the AP.
SAVE RESULT	After scanning, you need to click it to save the result.

Click **View** to view the surrounding Wi-Fi signals.



Note:

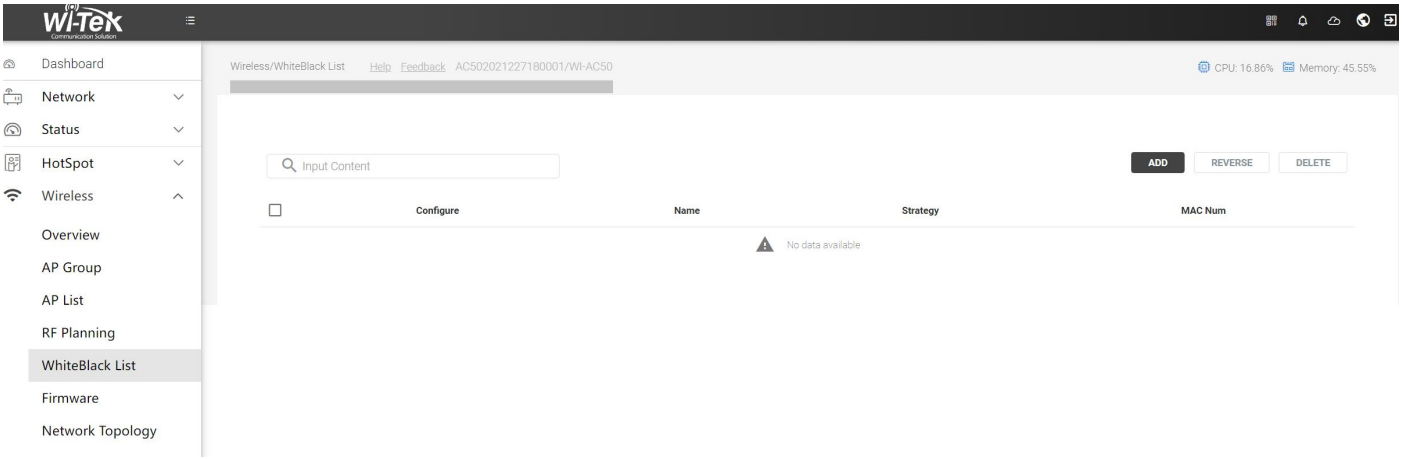
- An AP must be bound to a group before it can be managed by the Controller.
- Each AP takes about 5 to 15 seconds to scan, this may cause users to lose connection and go offline.

6.5. White/Black List

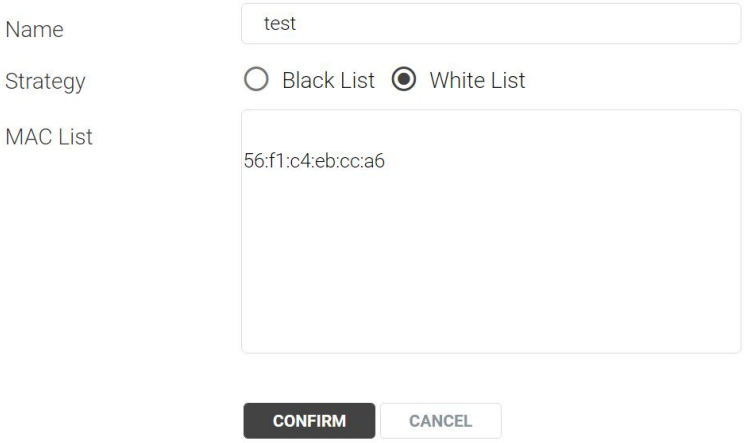
White/Black List can be used to allow or block the listed clients to access the network. The reby it can effectively control the client's access to the wireless network.

Whitelist: Only allow wireless clients in the list to connect to Wi-Fi. **Blacklist**: Except for the wireless clients in the blacklist, other wireless clients can connect to Wi-Fi.

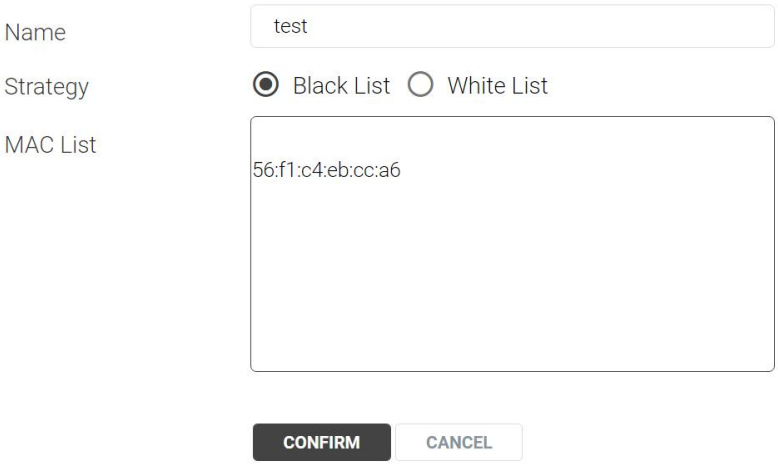
Click **Wireless > White Black List** to access this page.



6.5.1.Whitelist:



6.5.2.Blacklist



Note:

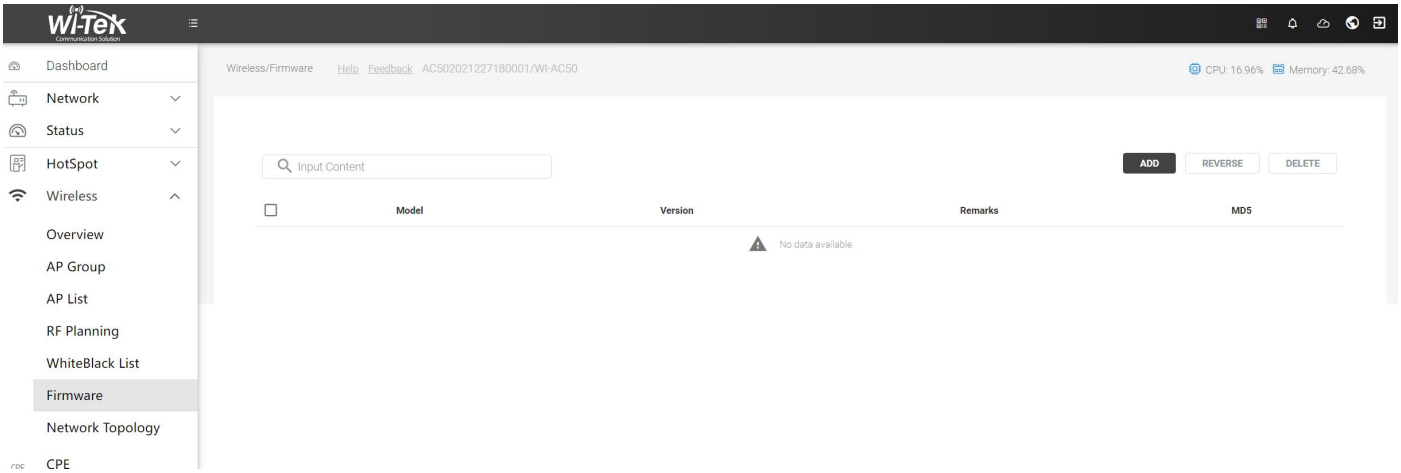
one MAC record takes up one line. It can be added with a note after it, separated by a space, or it can be added with no note.

e.g, AA:00:00:00:00:01 cleint1

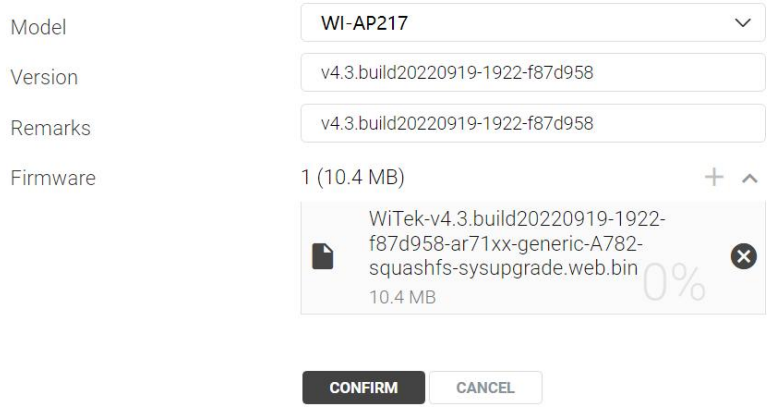
e.g, AA:00:00:00:00:02

6.6. Firmware

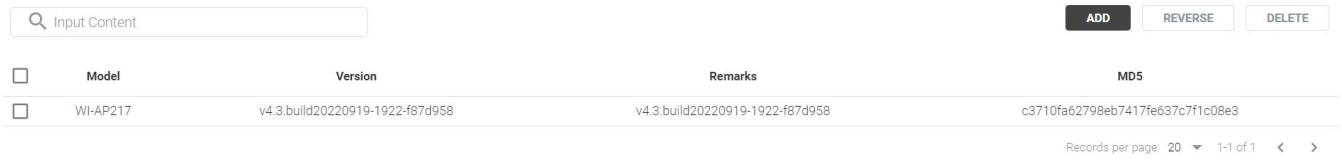
If AC manages multiple APs, you can use this function when you want to upgrade the APs in batches.Click **Wireless > Firmware** to access this page.



Click **ADD** button to upload the firmware file from a local disk.



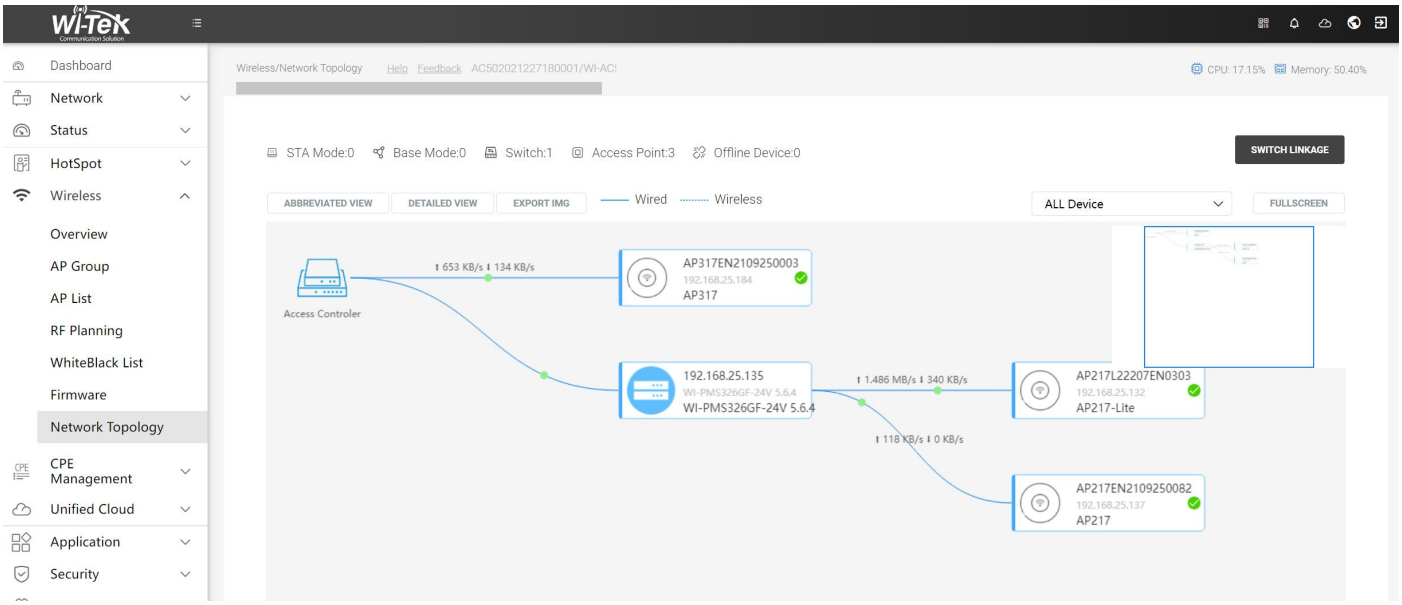
Upload succeeded.



Then go back to the **AP group option**, select the check box to access the point group fro m the list, and click Upgrade.

6.7. Network Topology

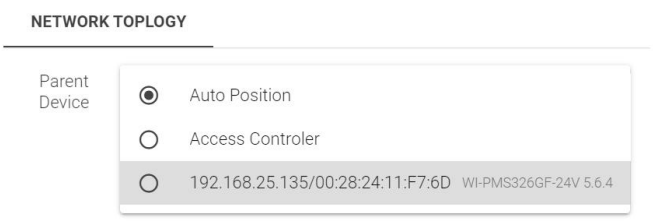
With this feature, if you have AP and Switch deployed in your network, you will be able to see a visual view of the topology of all supported devices in the network. Click **Wireless > Network Topology** to access this page.



Parameter	Describe
ABBREVIATED VIEW	Click it to display only the devices managed by AC.
DETAILED VIEW	Click it to display which AP is connected to the wireless client
EXPORT IMG	Click it to export the topology map as an image

Note: Only supports simple topology display.

If you click the AP on the topology diagram, the following interface will pop up, and manual ly adjust the uplink device of the AP.

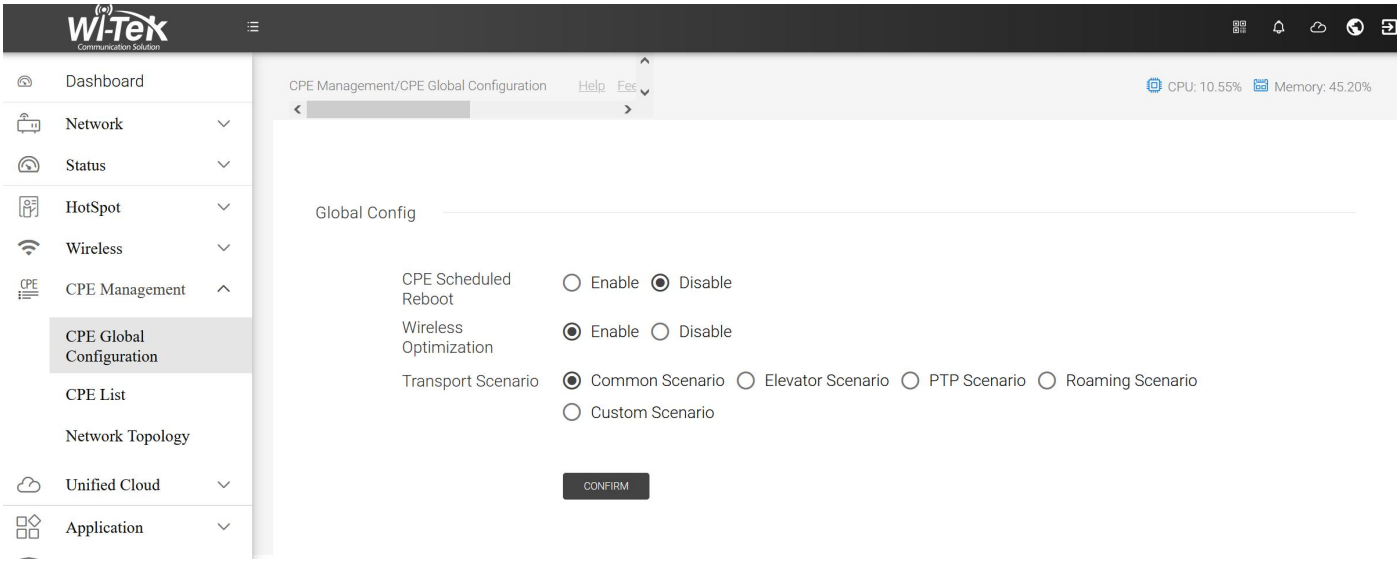


7. CPE Management

7.1. CPE Global Configuration

Using this function, once the wireless CPE is managed by AC50, the following configuration information will be automatically synchronized.

Click **CPE Management > CPE CPE Global Configuration** to access this page.



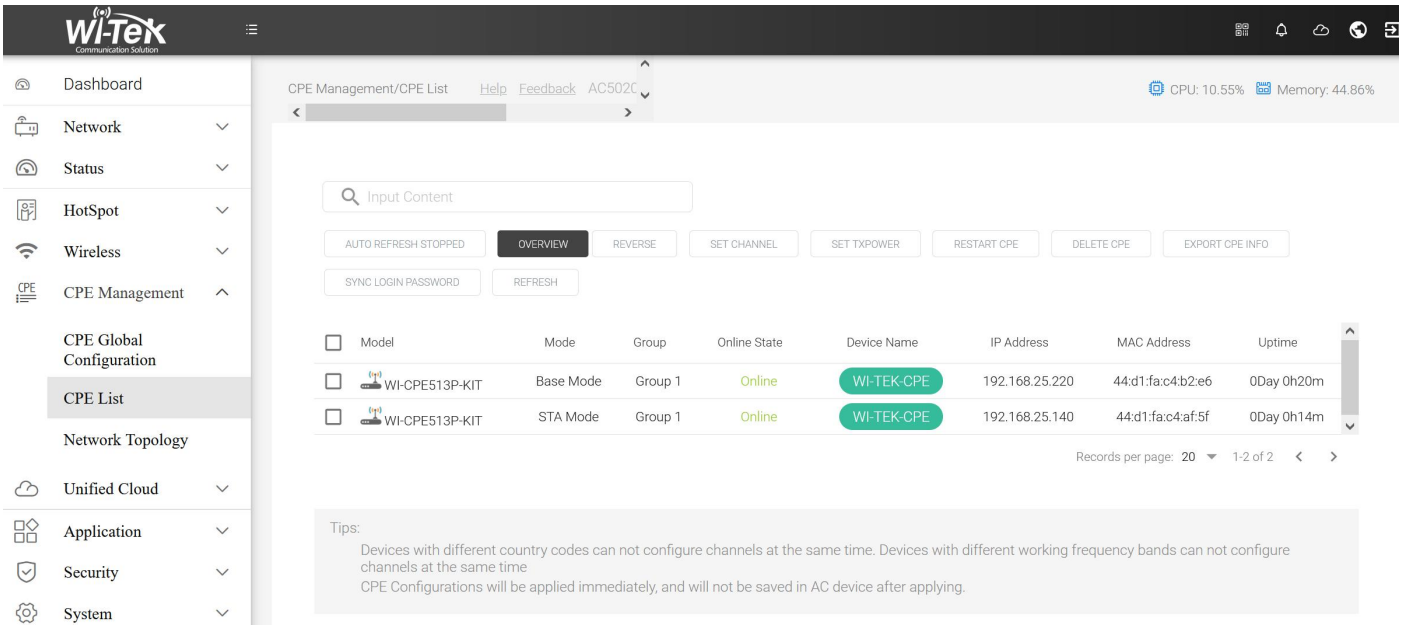
Select **Roaming Scenario** option, and the following content pops up.

Parameter	Describe
CPE Scheduled Reboot	Disabled by default,If this option is enabled, you can periodically reboot all CPE in the network as needed.
Wireless Optimization	Enable by default, it automatically optimize wireless CPE.
Transport Scenario	Select the scenario according to the actual application.
RTS/CTS Threshold	Keep the default value: 2347.
Ms Sta Signal(dBm)	Number of minimum received and transmitted signals between CPEs.
Distance(KM)	Select the corresponding value according to the actual transmission distance of the CPE.

7.2. CPE List

Using this function, multiple groups of CPEs in the network can be centralized. For the explanation of CPE List parameters, refer to 6.3 AP List.

Click **CPE Management > CPE List** to access this page.



Note:

- Only available for CPE that supports cloud management.
- Devices with different country codes can not configure channels at the same time. Devices with different working frequency bands can not configure channels at the same time
- CPE Configurations will be applied immediately, and will not be saved in AC device after applying.

8. Unified Cloud

You can bind your device to the cloud platform.

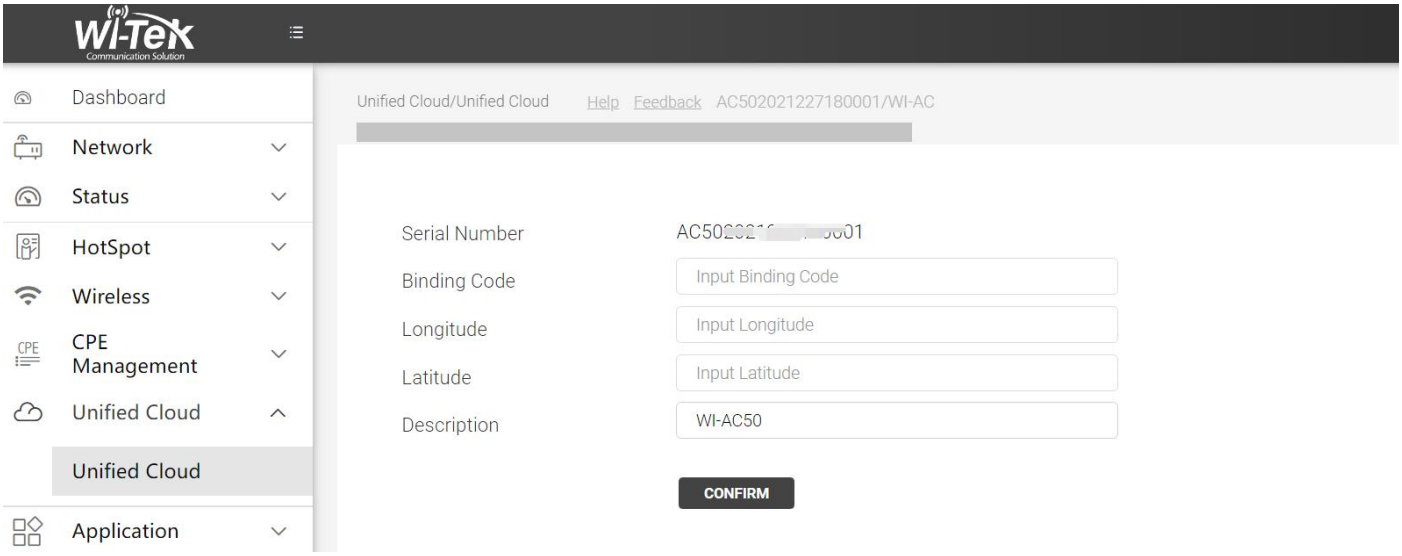
For Cloud1.0: http://cloud.wireless-tek.com/

Login the Unified Cloud Control Platform -> Obtain the Binding Code -> Input the Binding Code and Note Name On Device -> Save and complete the binding;

For Cloud2.0: http://cloud2.wireless-tek.com (**Recommend**)

Login the Unified Cloud Control Platform -> Add Group -> Add NetWork --> Add Device -> Input the Serial Number -> Save and complete the binding;

Click **Unified Cloud** to access this page.

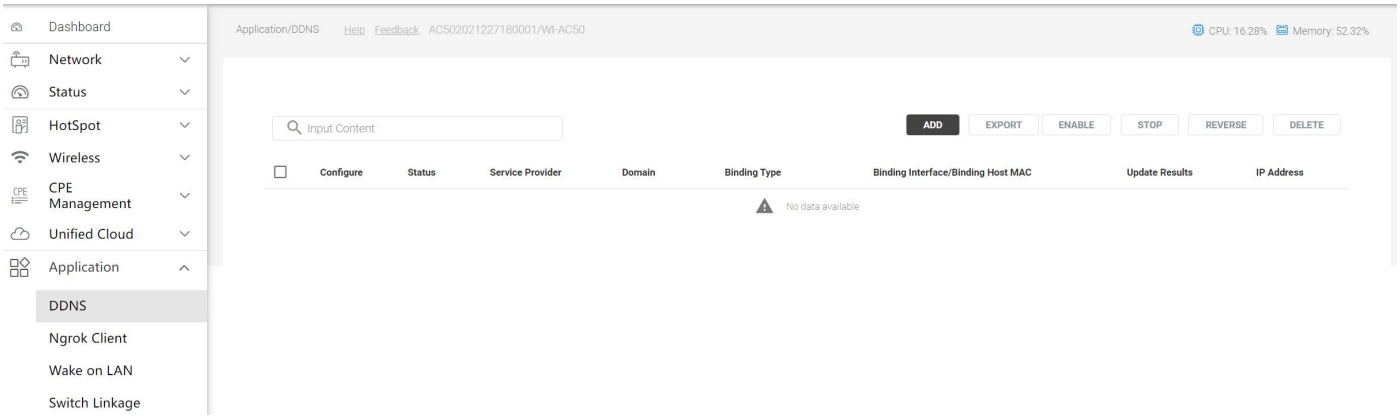


Note: We are continuously optimizing the Cloud 2.0 platform, and we recommend that user transition from the cloud1.0 platform to cloud 2.0. Quick Setting Guide for Cloud 2.0

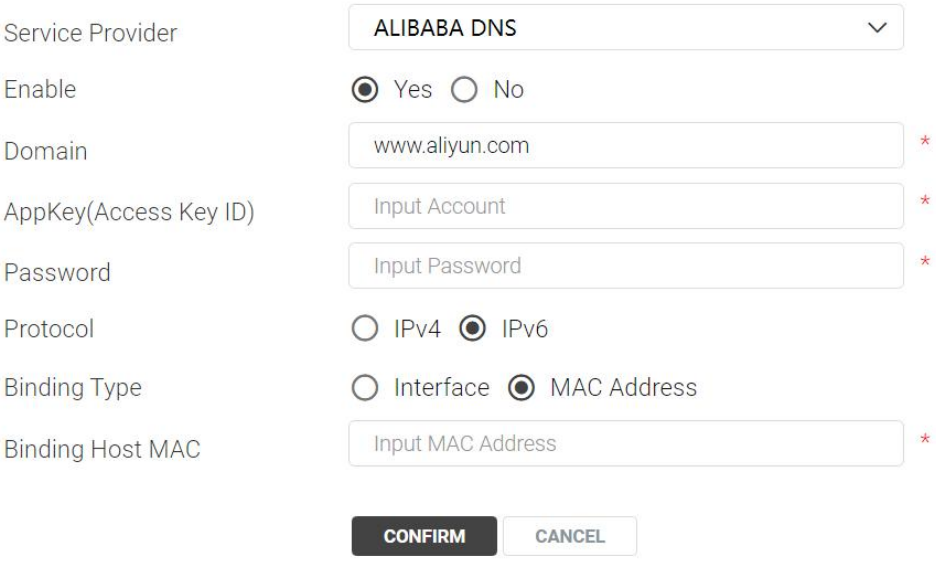
9. Application

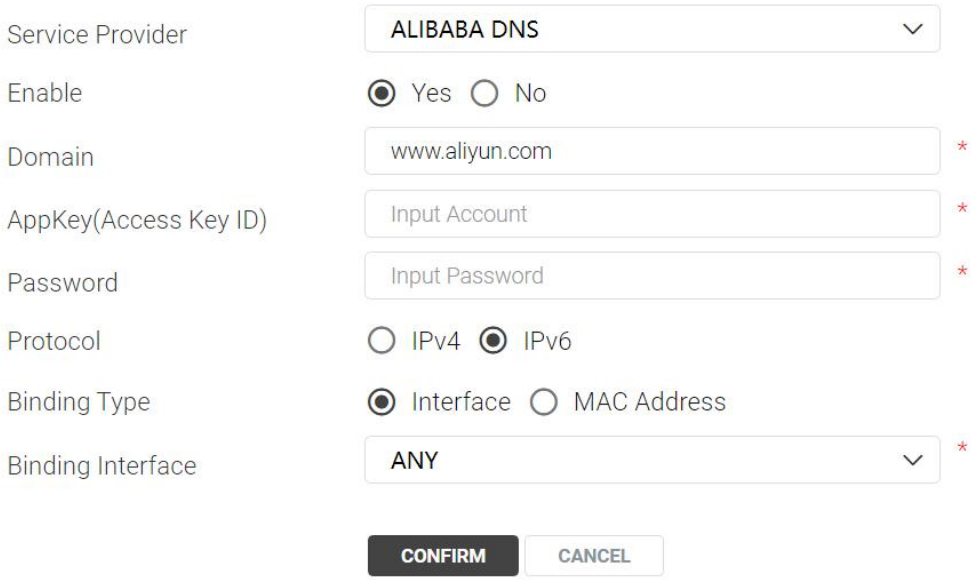
9.1. DDNS

Click **Application > > DDNS** to access this page.



Click the **Add** button to fill in the DDNS entry.



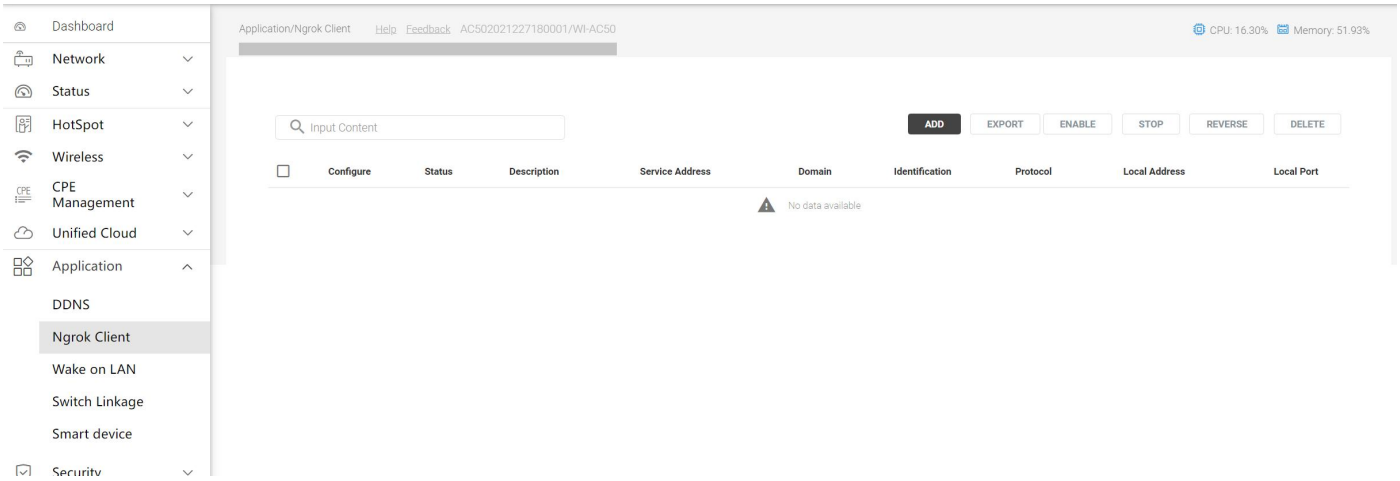


Parameter	Describe
Service Provider	Select the service providers, including Alibaba DNS, dynv6.com, dyndns org, Oray. net, 3322.org.
Enable	Enable or disable DNS entries.
Domain	Input Domain
AppKey	Get the secret key from the service provider.
Password	Enter the password from the service provider.
Protocol	Select IPV4 or IPv6.
Binding Type	Select interface or MAC.
Binding Host MAC	Enter the MAC mapping the intranet device.
Binding Interface	Enter the MAC mapping the intranet interface.

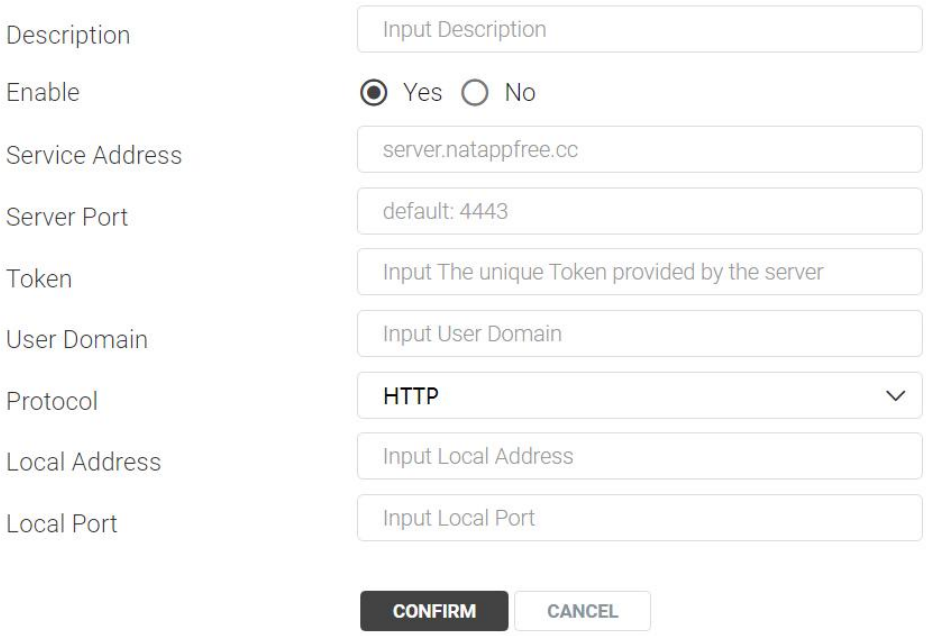
9.2. Ngrok Client

ngrok is a reverse proxy that establishes a secure channel between a public endpoint and a locally running web server. It needs to be connected to the ngrok server to use it.

Click **Application > Ngrok Client** to access this page.

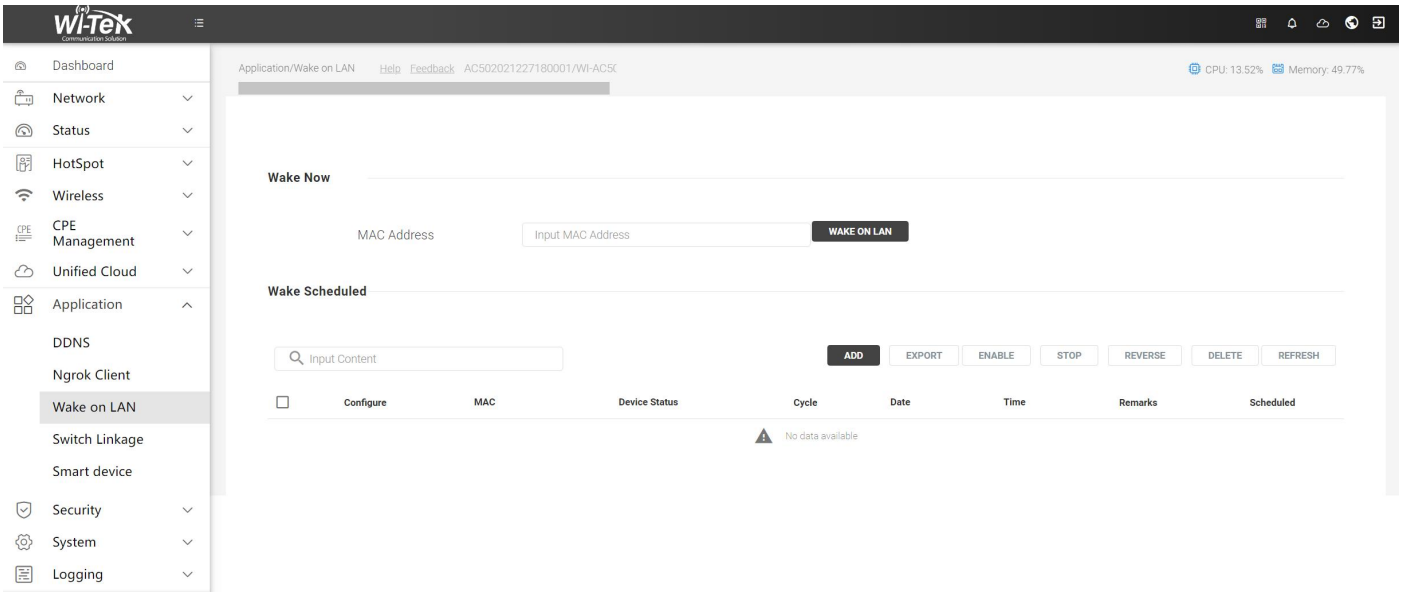


Click the **Add** button to fill in the Ngrok Client.

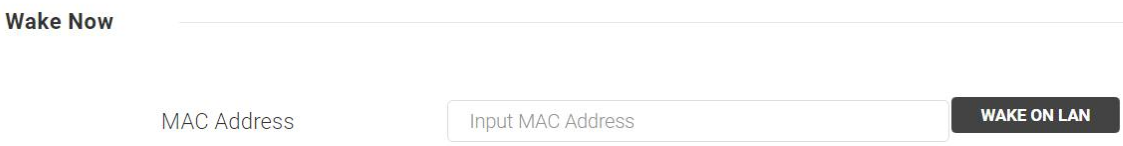


9.3. Wake on LAN

Wake-on-LAN (WoL) is an Ethernet or Token ring computer networking standard that allows a computer to be turned on or awakened by a network message. The message is usually sent by a program executed on another computer on the same local area network. It is al so possible to initiate the message from another network by using subnet directed broadcas ts or a WOL gateway service. Click **Application > Wake on LAN** to access this page.

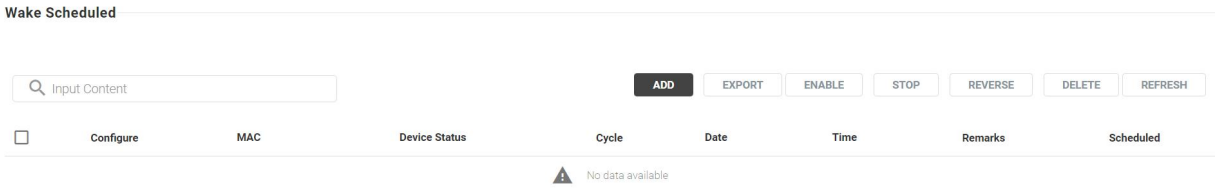


9.3.1.Wake Now

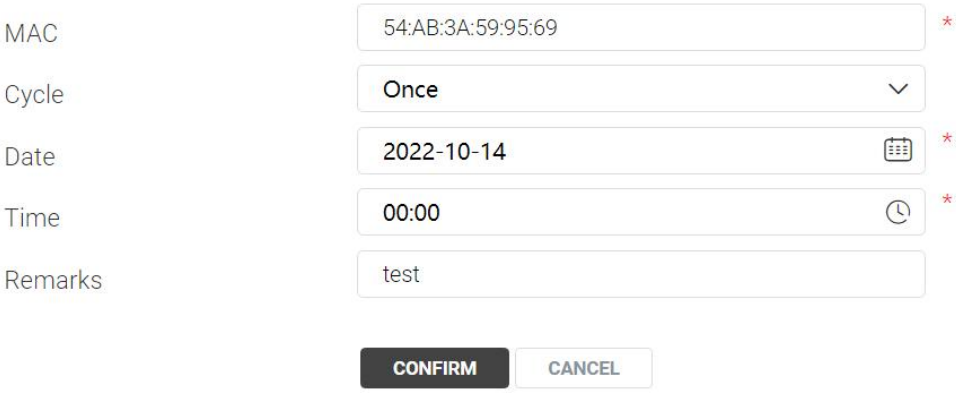


Parameter	Describe
MAC Address	Enter the MAC address, such as 54: AB: 3A: 59:95:69.
WAKE ON LAN	After entering the MAC address, tap it to wake up immediately.

9.3.2.Wake Scheduled



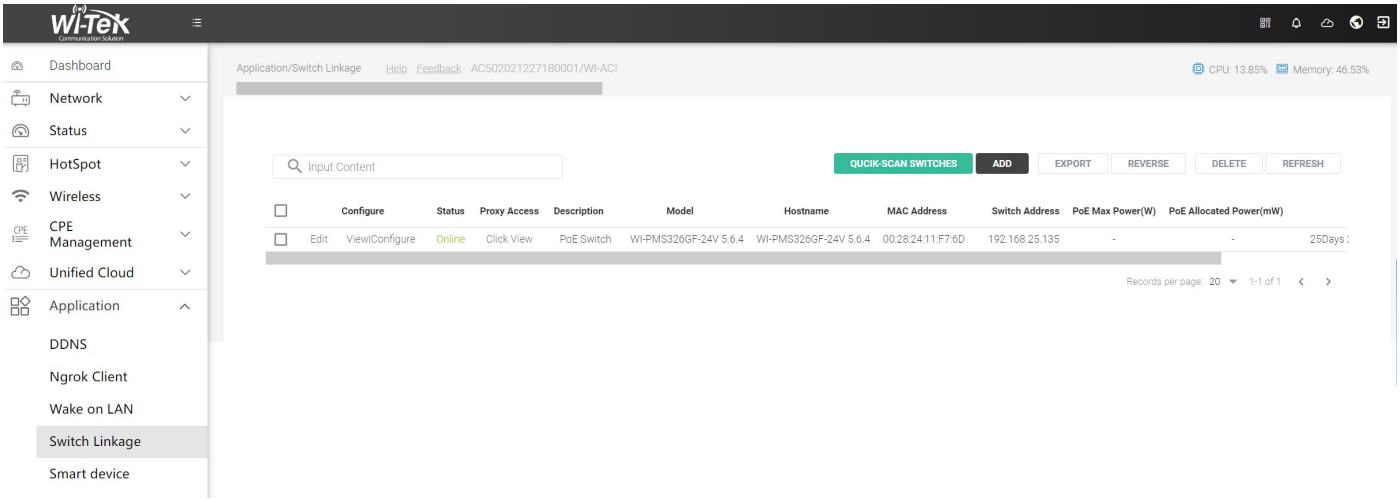
Click the **Add** button to add an entry.



Parameter	Describe
MAC	Specify MAC Address
Cycle	Specify cycle (Once / Daily / Weekly / Monthly).
Date	Specify date.
Time	Specify time range.
Remarks	Specify input comments.

9.4. Switch Linkage

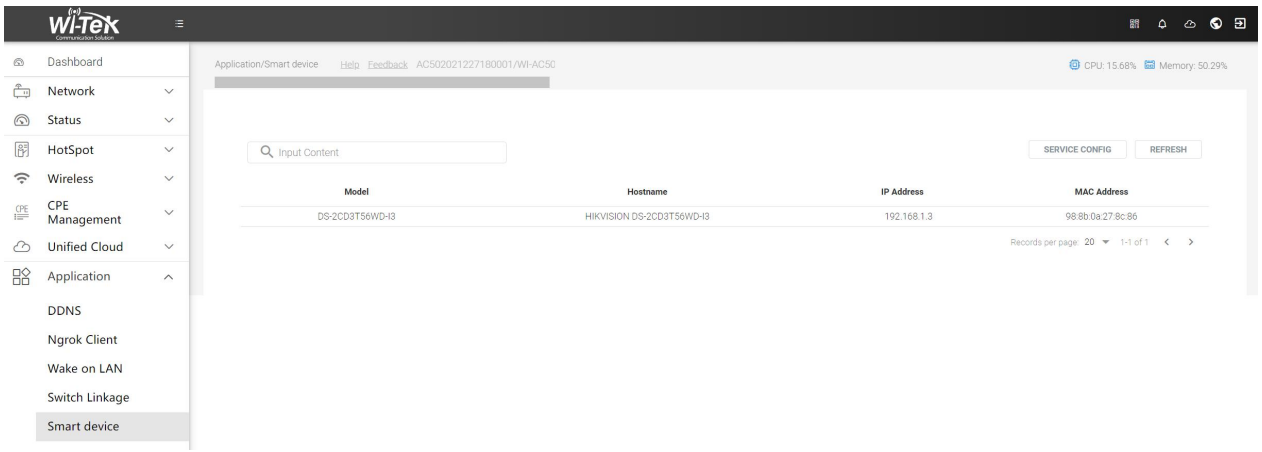
Use this function to manage switches that support the SNMP protocol through the AC, and only support reading simple port information.



9.5. Smart device

With this feature, the AC50 can automatically discover devices with Onvif in the same subn et, such as IP cameras. After the AC50 is bound to the cloud 2.0 platform, use the EWEB function to remotely access the web interface.

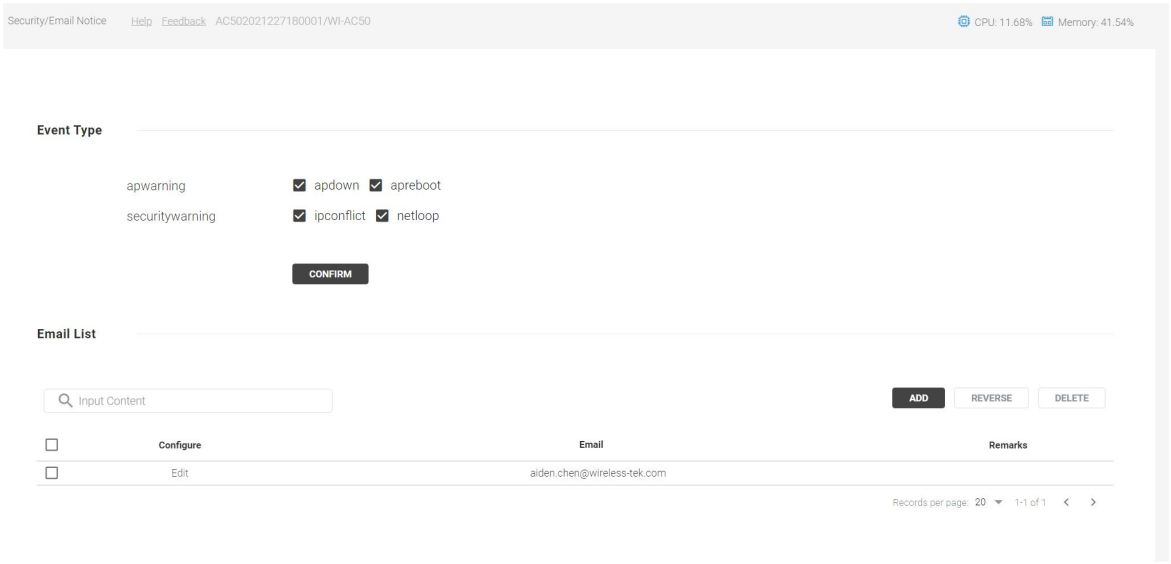
Click **Application > Smart device** to access this page.



10. Security

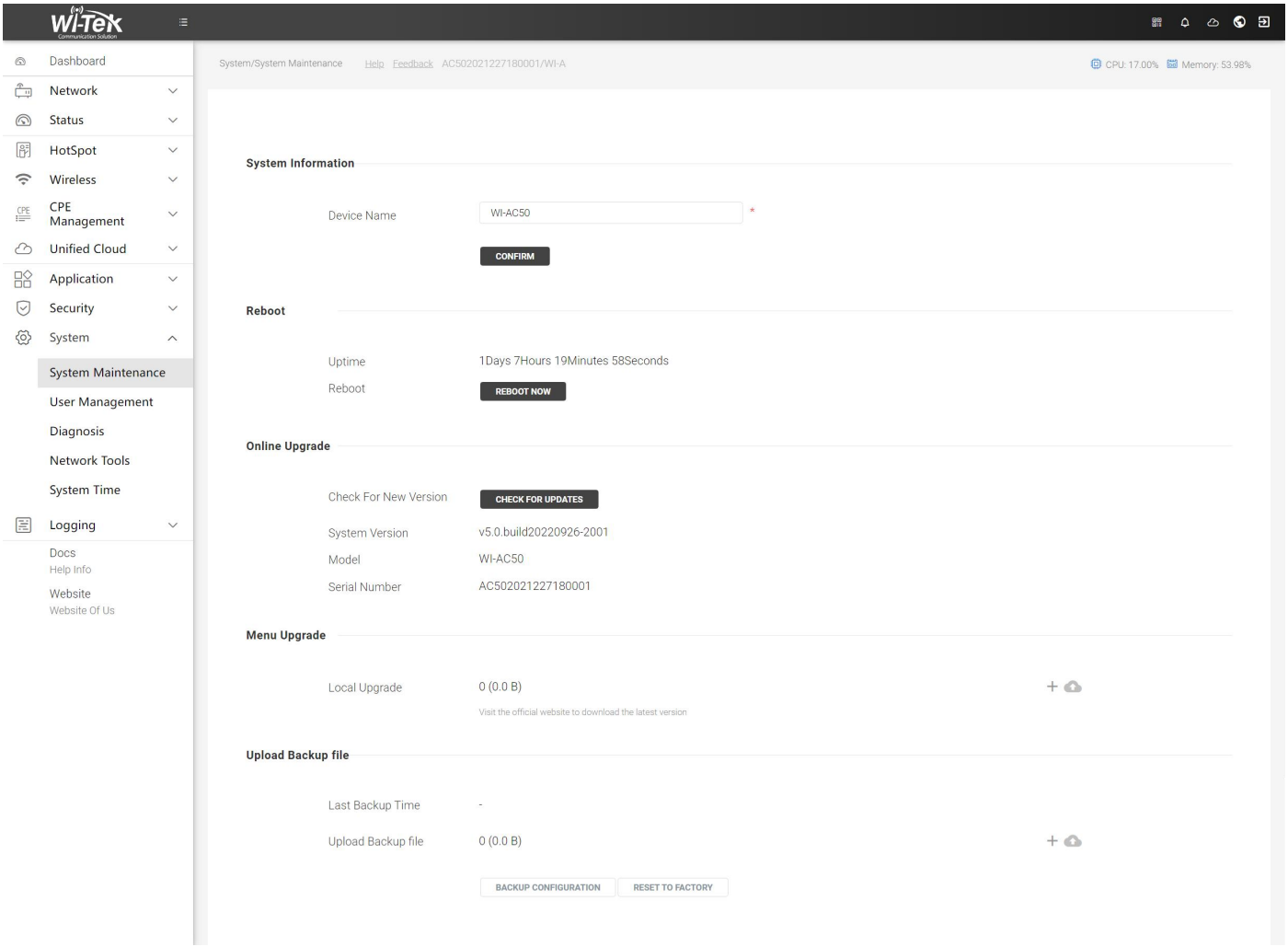
10.1. Email Notice

With this function, when the device has the following 4 states, send an alarm email through the bound mailbox.Click **System > Email Notice** to access this page.



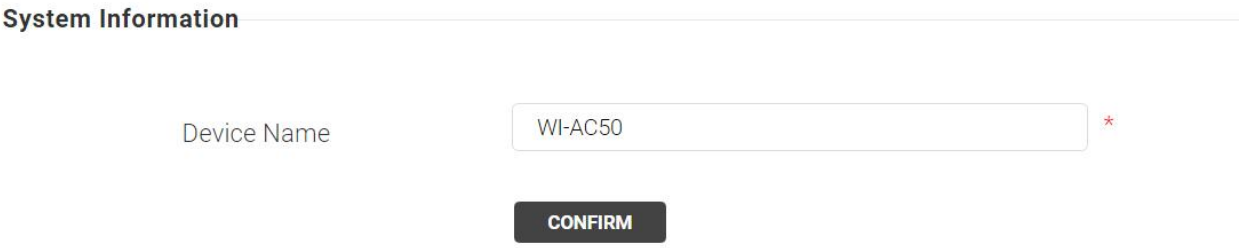
11. System

11.1. System Maintenance



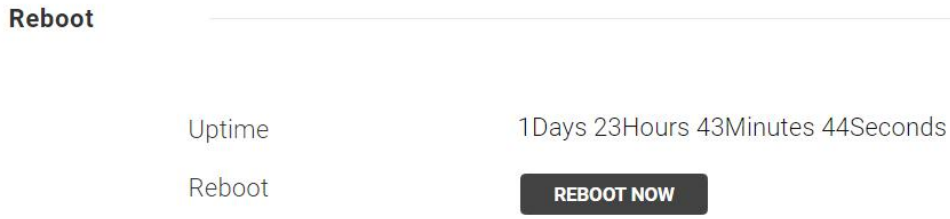
11.1.1. System Information

With this feature, you can modify the default host name of the device.Click **System > System Maintenance** to access this page.



11.1.2. Reboot

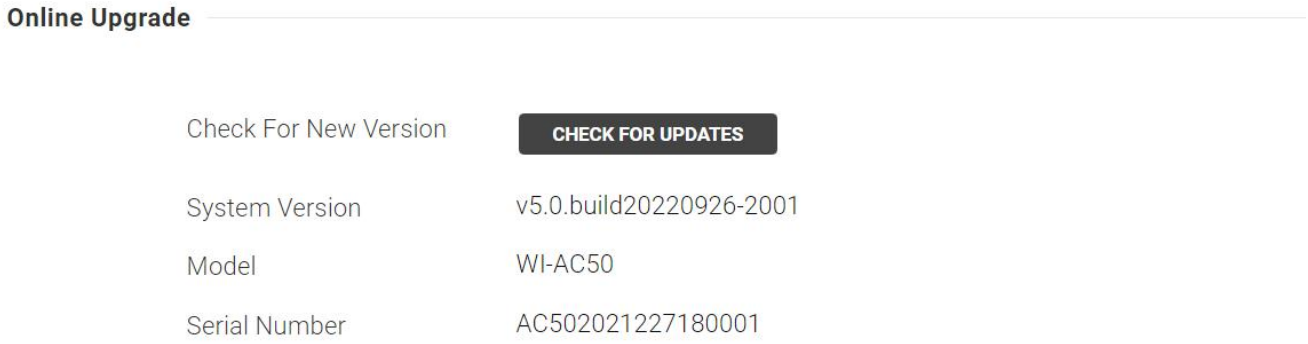
Using this feature allows you to restart the device.Click **System > System Maintenance** to access this page.



To reboot the AC, click the **REBOOT NOW** button, and the AC will be rebooted automatically. Please wait without any operation.

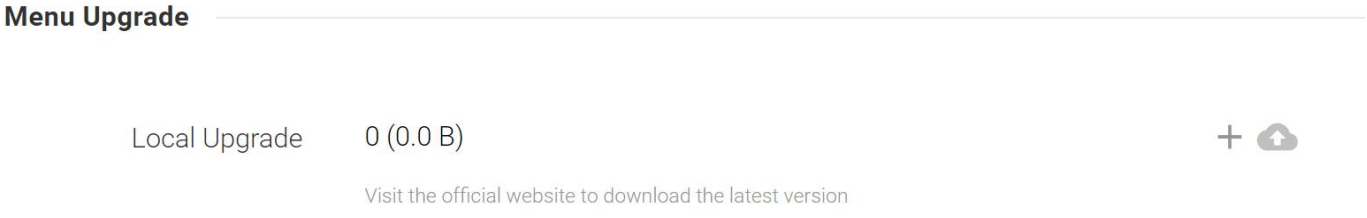
11.1.3. Online Upgrade

With this function, you can check the updated firmware version online.Click **System > System Maintenance** to access this page.



11.1.4. Menu Upgrade

With this function, you can upgrade the firmware version.Click **System > System Maintenance** to access this page.

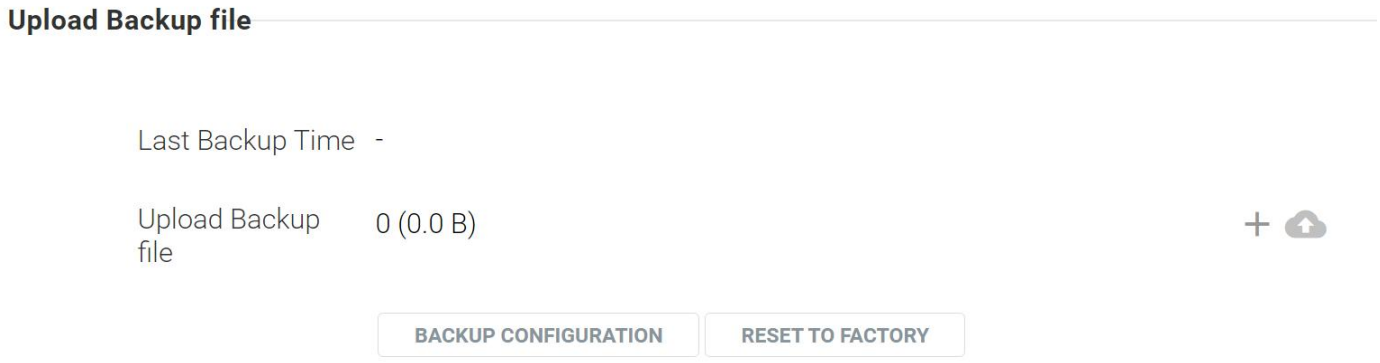


Parameter	Describe
+	Click it to locate and choose the correct firmware file from your host.

	Click it to update the firmware of the AC50. after updated,the AC50 will be rebooted automatically.

11.1.5. Upload Backup file

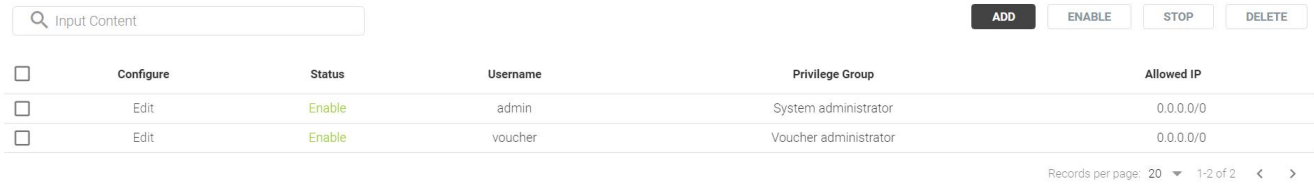
With this function, you can import the configuration, import the configuration, and restore the factory configuration.Click **System > System Maintenance** to access this page.



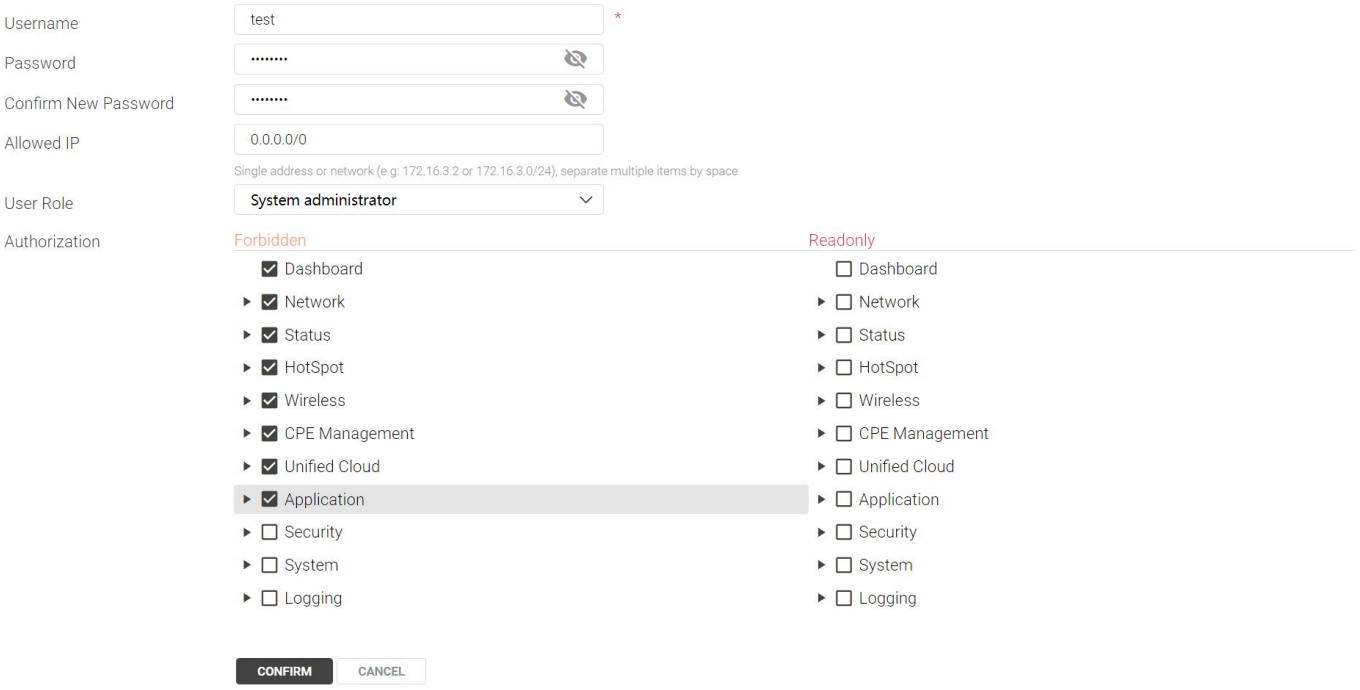
Parameter	Describe
BACKUP CONFIGURATION	Click it and the backup file will be saved to the host automatically
RESET TO FACTORY	Click it and the device will be reset to the factory defaults automatically.
+	Click it and choose the backup file from the host.
	Then click it to restore the configuration.

11.2. User Management

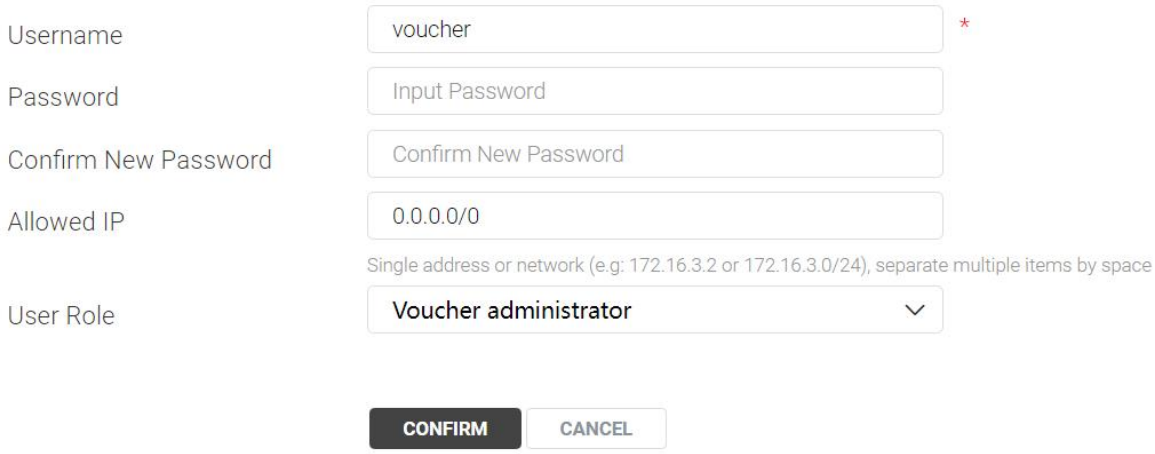
You can use different user account to log in to the AC50. The administration authority varies among different roles.Click **System > User Management** Notice to access this page.



For System administrator.



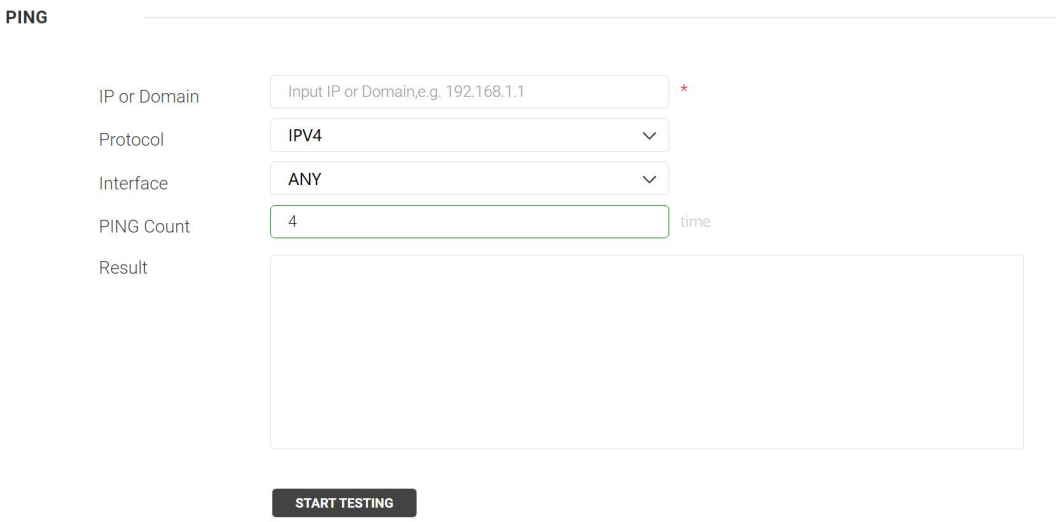
For Voucher administrator.



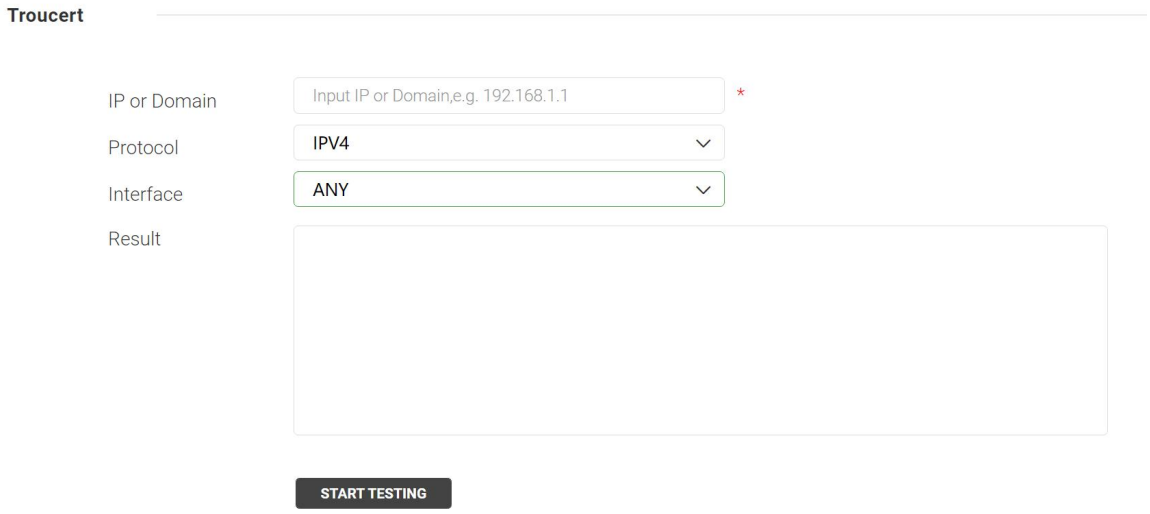
11.3. Diagnosis

Ping and traceroute are both used to test the connectivity between two devices in the netw ork. In addition, ping can show the roundtrip time between the two devices directly and trac eroute can show the IP address of routers along the route path.

11.3.1. PING



11.3.2. Troucert



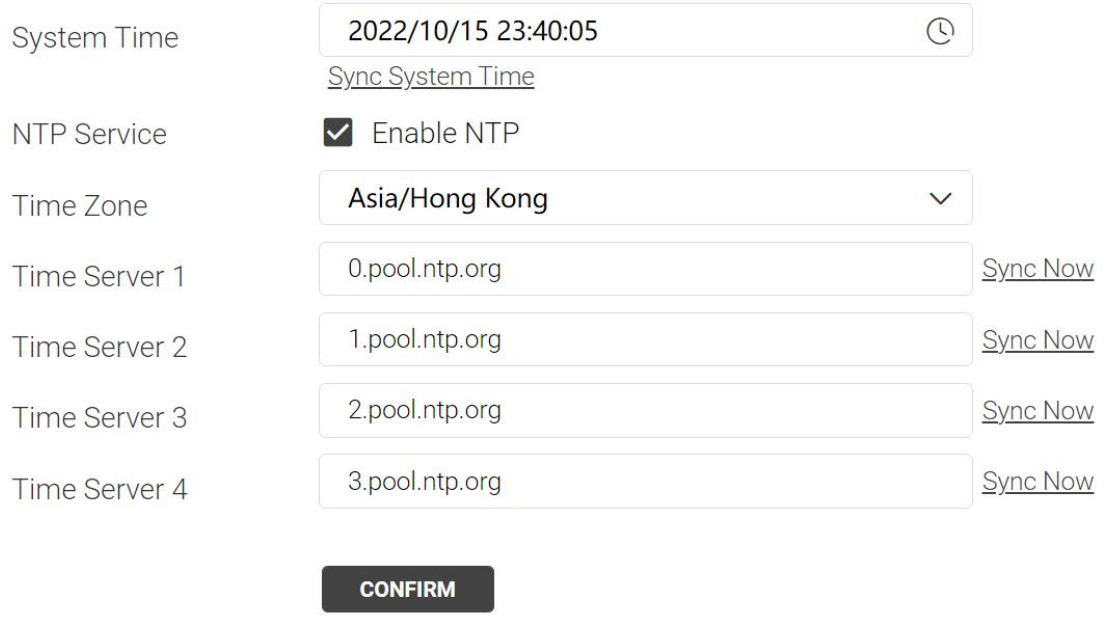
11.4. Network Tools

11.4.1. Telnet

With this feature, you can use telnet to access the command line interface.Click **System > Network Tools > Telnet** to access this page.

11.5. System Time

Click **System > System Time** to access this page.



Parameter	Describe
System Time	The device is automatically synchronized when connected to the Internet.
NTP Service	The system time is enabled by default.
Time Zone	Select your time zone from the drop-down list.
Time Server	Enter the domain name or IP address of the NTP server.