



User Guide For Mesh Wi-Fi

Release version:V1.0.0

August 2025

Overview	4
1. Quick Start	5
1.1. Start the device	5
1.2. Log in to the web interface	5
1.3. log out	7
2. Dashboard	8
2.1. Equipment information	8
2.2. Network	9
2.3. Running Status	9
2.4. Internet	10
2.5. Wireless	10
2.6. MESH	11
2.7. Port Status	11
3. Wizard	12
3.1. Access Point	12
3.2. Wireless Router Mode	17
4. Mesh	22
4.1. Mesh Node Addition Guidance	22
4.2. Mesh Client List	23
4.3. Uplink	23
5. Sysinfo	26
5.1. Network	26
5.2. Routing	27
5.3. WiFi Users	29
5.4. Host List	30
6. Network	32
7. LAN	34
8. Wireless	35
9. System	36
10. Advanced	37
10.1. Radio	37
10.2. Cloud	38
10.3. Firewall	39
10.4. Multiple SSID	45
10.5. DHCP Server	47
10.6. Wireless ACL	48
10.7. UPnP	49

10.8. WiFi Schedule	51
10.9. SD-LAN	52
10.10. Ping Watchdog	55
10.11. Scheduled Reboot	56
10.12. Password	57
10.13. Time	58
10.14. Diagnostic	59

Overview

Mesh WiFi systems feature powerful coverage, intelligent collaboration, and user-friendly deployment. They adopt a multi-node mesh architecture, which can eliminate wireless dead zones and achieve seamless roaming across large spaces. Wi-Tek Mesh WiFi supports flexible expansion (adding satellite nodes to extend coverage), unified network management, and automatic signal optimization, effectively solving problems such as uneven coverage, unstable connections, and difficult expansion of traditional single routers. Wi-Tek also offers free cloud management services for centralized monitoring and configuration.

Applicable product models are as follows:

WI-AP717MP(V2), WI-AX3000M, WI-AP718M(V2), WI-AX1800M(V2), WI-AP718M.

Revision History

Date	Doc Version	Description
August 2025	V1.0	Initial version

1. Quick Start

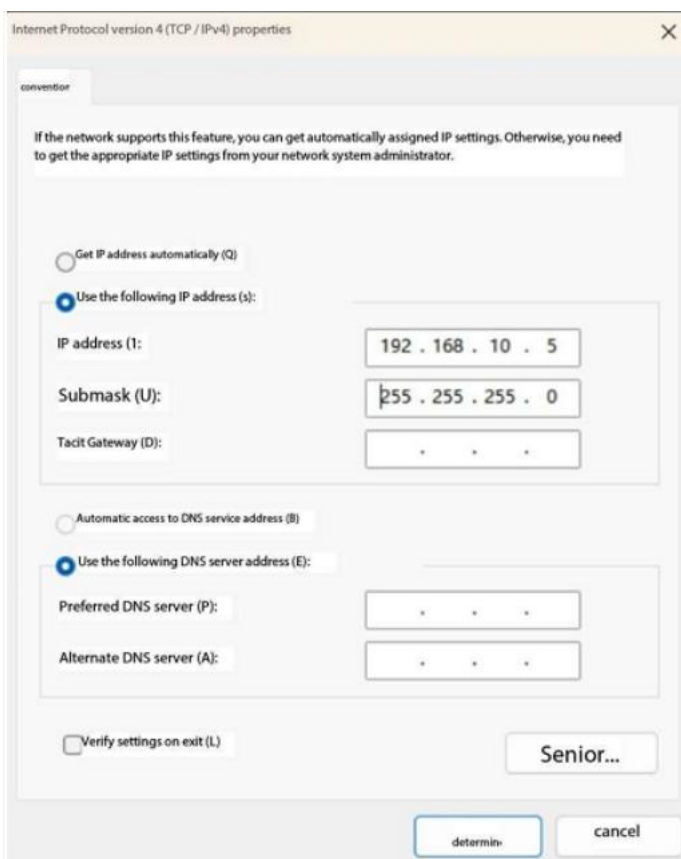
1.1. Start the device

Take WI-AX3000M as an example, use **12v DC** power supply, the **default IP address: 192.168.10.1**, and the computer can set a static IP to log in to the web page.

1.2. Log in to the web interface

Step 1 Connect your computer to the LAN port of your Mesh Wi-Fi with a network cable.

Step 2 Make sure that the IP address of the management computer is in the same network segment of the Mesh Wi-Fi. For example, if the IP address of the Mesh Wi-Fi device is **192.168.10.1**, the management computer can be configured with an IP address of **192.168.10.5**.



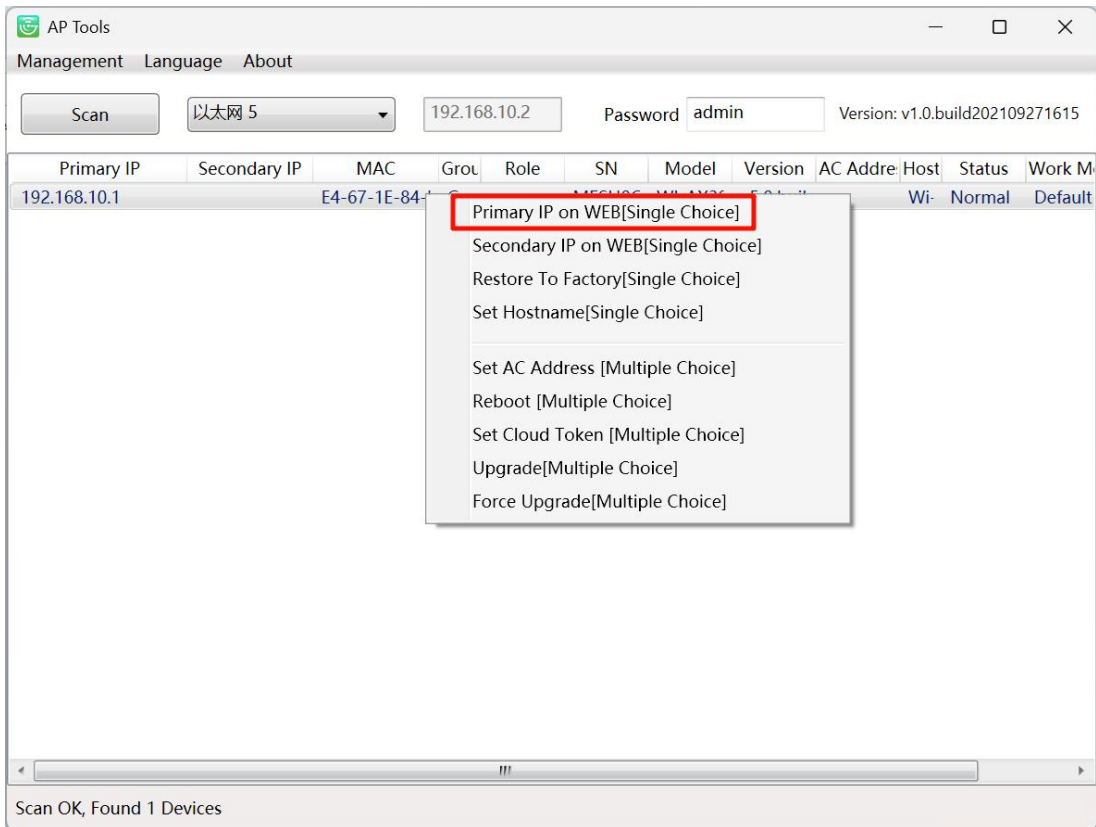
Step 3 Open the Scan Tools on computer.



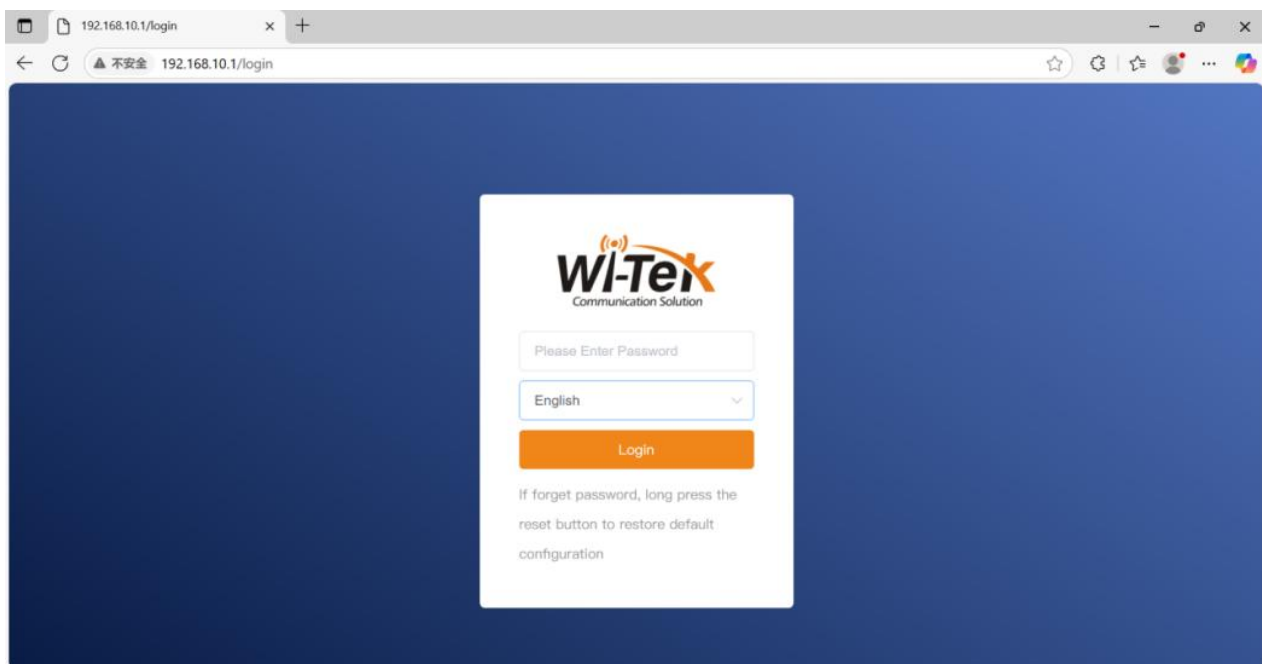
Note: Download Link https://www.wireless-tek.com/files_down.php?id=241

Step 4 Click the 'Scan' button to query the IP address of Mesh Wi-Fi, and the tool will use the

default browser to open the corresponding IP access device. As follows:



Step 5 After normal access opens, enter the default password admin for Administrator Login, as shown below:



1.3. log out

After logging in to the Mesh Wi-Fi web interface, the system will automatically log out if no operations are performed during the login timeout interval. Additionally, you can click "Sign Out" in the upper right corner to safely exit the web interface.

The screenshot displays the Wi-Tek web interface dashboard. The top navigation bar includes the Wi-Tek logo, the word "DASHBOARD", and a "Logout" button highlighted with a red box. The left sidebar contains a menu with options: Dashboard, Wizard, Mesh, Sysinfo, Network, Lan, Wireless, System, and Advanced. The main content area is divided into several sections:

- 设备信息 (Device Information):**

Model	WI-AX3000M
HostName	Wi-Tek-Mesh
Version	v5.0.build20250212-1024
SN	MESH0CWM24C160002
MAC Addr	E4:67:1E:84:F9:43
- Network:**

IP Addr	-
Netmask	-
Gateway	0.0.0.0
DNS	0.0.0.0
Protocol	dhcp
- Running Status:**

Uptime	3h 19min 25sec
System Time	2025-01-02 22:31:36
Support IPv6	NO
Working Mode	Wireless Router Mode
IPv6 Addr	-
- Internet:**

Internet Link	NG
DNS Service	NG
- Wireless:**

SSID	WI-TEK_F943
Security	WPA2-PSK(CCMP)
- MESH:**

Mesh Status	master
MESH Client	1
- Port Status:**

Diagram showing four ports: LAN (NA), LAN (NA), LAN (1000full), and WAN (NA). The LAN (1000full) port is highlighted in green.

-END

2. Dashboard

The Dashboard page allows you to check current system info of Mesh Wi-Fi.

The screenshot shows the Wi-Tek Dashboard interface. On the left is a navigation menu with options: Dashboard, Wizard, Mesh, SysInfo, Network, Lan, Wireless, System, and Advanced. The main content area is titled 'DASHBOARD' and contains several sections:

- 设备信息 (Device Information):**
 - Model: WI-AX3000M
 - HostName: Wi-Tek-Mesh (with edit icon)
 - Version: v5.0.build20250212-1024
 - SN: MESH0CWM24C160002
 - MAC Addr: E4:67:1E:84:F9:43
- Network:**
 - IP Addr: -
 - Netmask: -
 - Gateway: 0.0.0.0
 - DNS: 0.0.0.0
 - Protocol: dhcp
- Running Status:**
 - Uptime: 3h 18min 45sec
 - System Time: 2025-01-02 22:30:55
 - Support IPv6: NO
 - Working Mode: Wireless Router Mode
 - IPv6 Addr: -
- Internet:**
 - Internet Link: NG
 - DNS Service: NG
- Wireless:**
 - SSID: WI-TEK_F943
 - Security: WPA2-PSK(CCMP)
 - Mesh Staus: master
 - MESH Client: 1
- Port Status:**
 - Four port icons: LAN (NA), LAN (NA), LAN (1000full), WAN (NA).

2.1. Equipment information

Model	WI-AX3000M
HostName	Wi-Tek-Mesh
Version	v5.0.build20250212-1024
SN	MESH0CWM24C160002
MAC Addr	E4:67:1E:84:F9:43

Parameter	Describe
Model	Displays the specific model of the Mesh WiFi device
Device Name	Shows the custom or default name of the device, currently Wi-Tek-Mesh. Editable (indicated by the pencil icon).
Version	Displays the firmware version of the device
Serial Number	Presents the unique serial number assigned to the device
MAC Address	Shows the Media Access Control address of the device

2.2. Network

Network

IP Addr	-
Netmask	-
Gateway	0.0.0.0
DNS	0.0.0.0
Protocol	dhcp

Parameter	Describe
IP Addr	Displays the device's IP address in the network.
Netmask	Represents the subnet mask for network segmentation.
Gateway	Shows the default gateway IP for internet access.
DNS	Displays the DNS server address for domain resolution.
Protocol	Shows the network protocol used for IP configuration.

2.3. Running Status

Running Status

Uptime	3h 45min 35sec
System Time	2025-01-02 22:57:46
Support IPv6	NO
Working Mode	Wireless Router Mode
IPv6 Addr	-

Parameter	Describe
Uptime	The duration during which the equipment is operating normally
System Time	Shows the current system time of the device
Support IPv6	Indicates whether the device supports the IPv6 function.

Working Mode	Displays the current operational mode of the device.
IPv6 Addr	Shows the IPv6 address of the device.

2.4. Internet

Internet

Internet Link **NG**
DNS Service **NG**

Parameter	Describe
Internet Link	Indicates the status of the device's connection to the Internet.
DNS Service	Shows the status of the DNS (Domain Name System) service.

2.5. Wireless

Wireless

SSID **WI-TEK_F943**
Security **WPA2-PSK(CCMP)**

Parameter	Describe
SSID	Displays the name of the wireless network that the device broadcasts.
Security	Shows the security protocol used by the wireless network.

2.6. MESH

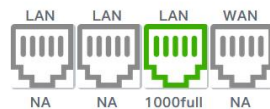
MESH

Mesh Status **master**
 MESH Client **1**

Parameter	Describe
Mesh Status	Indicates the role of the device in the Mesh network.
MESH Client	Shows the number of client devices connected to this Mesh node.

2.7. Port Status

Port Status

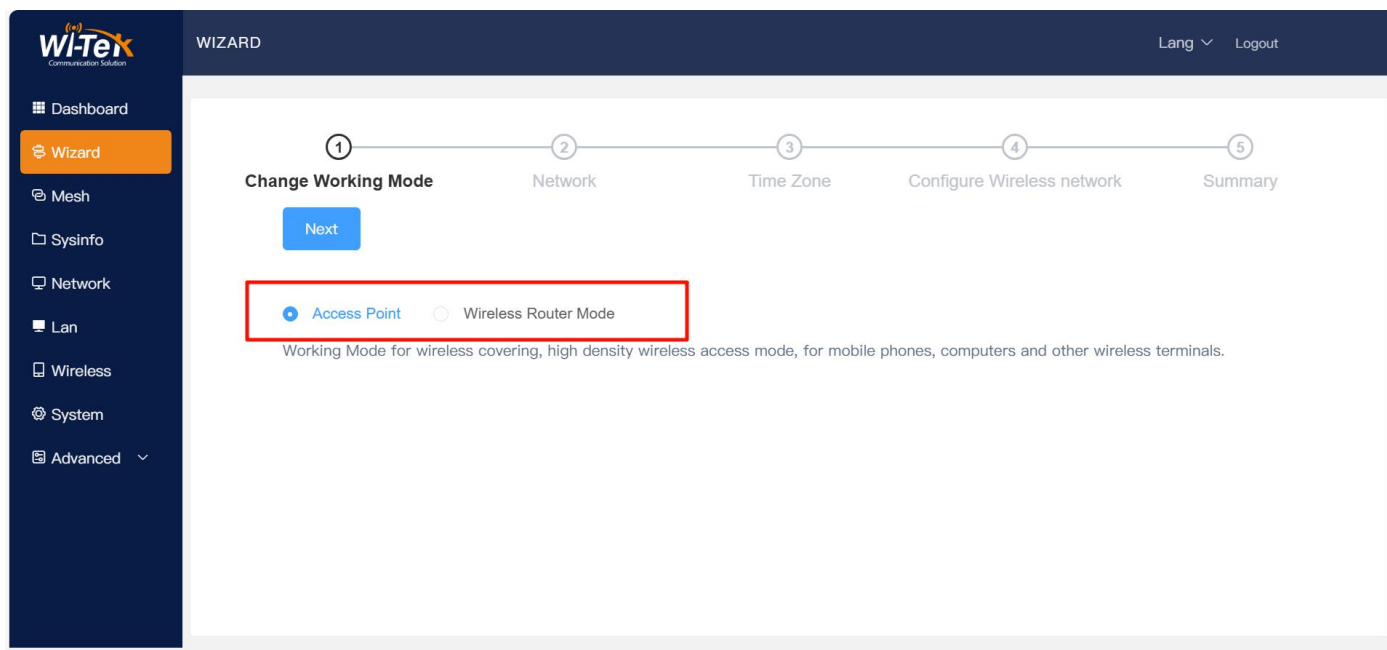


Parameter	Describe
Port Status	Displays the connection and speed status of each network port (LAN and WAN).

-END

3. Wizard

The Mesh WiFi device provides two working modes to fit diverse network deployment scenarios. Select the appropriate mode based on your actual needs:



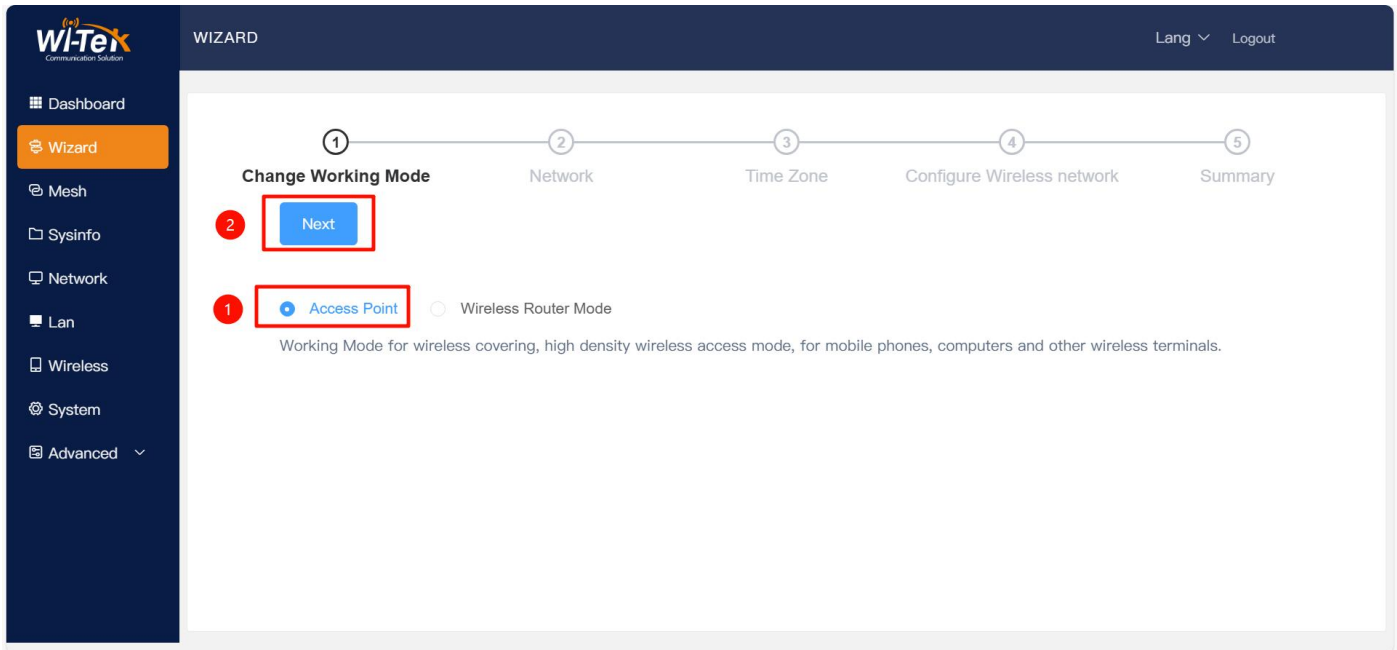
Parameter	Describe
Access Point	Working Mode for wireless covering, high density wireless access mode, for mobile phones, computers and other wireless terminals.
Wireless Router Mode	WAN port for wired connection, LAN port for wireless connection, WAN port support PPPOE, fixed IP, automatic access.

3.1. Access Point

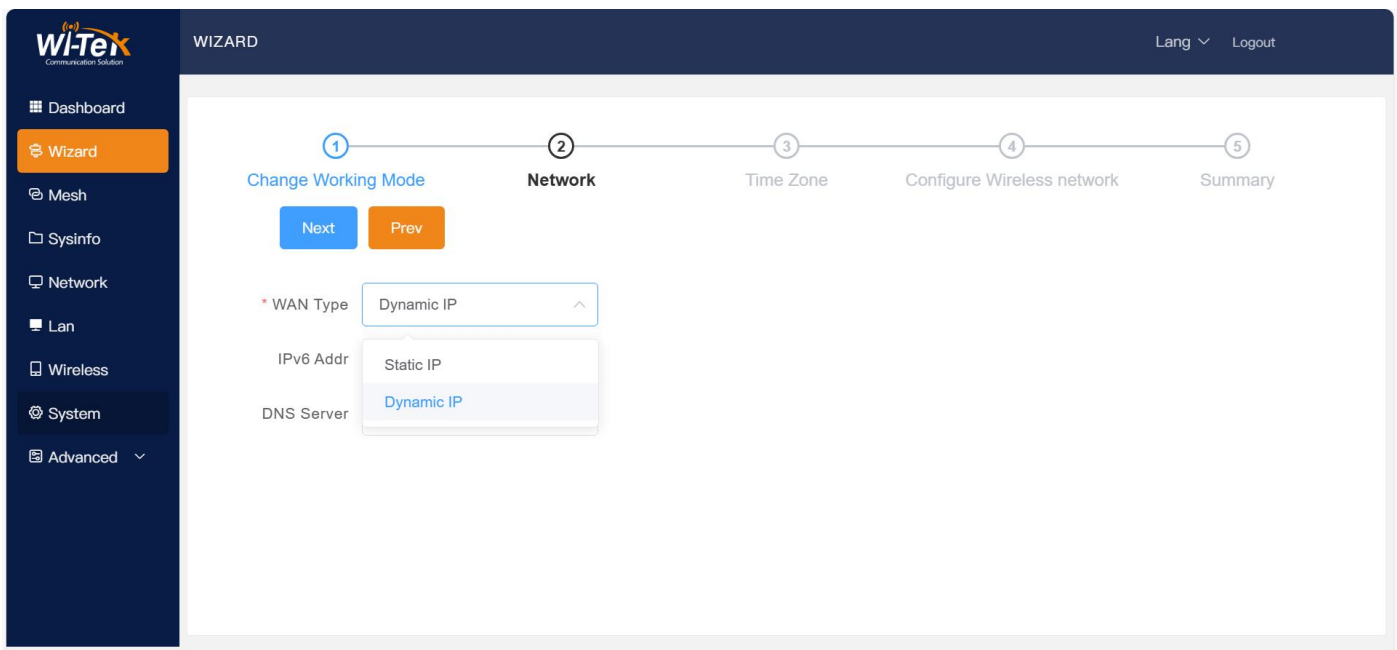
The Mesh device acts as a wireless access point, receiving signals from the main Mesh node or an upstream network and providing Wi-Fi access for wireless clients.

Note: In Access Point Mode, the Mesh device emits its own Wi-Fi signal to extend wireless coverage. It relies on an existing network (e.g., the main Mesh node or a router) for Internet access. Wired devices (such as computers, switches) can also connect to the Mesh device's LAN port via an Ethernet cable to access the Internet.

Step 1 Go to Wizard and select Access Point Mode.



Step 2 Select the type of connection network you want to configure, click the button to enter step 3



Step 3

If you choose the Dynamic IP method, Customize DNS Server is optional.

If you choose static IP mode, the configuration Parameters are as follows. IP Address and Netmask are required, and others are optional.

WIZARD

Lang Logout

Dashboard
Wizard
Mesh
Sysinfo
Network
Lan
Wireless
System
Advanced

1 Change Working Mode 2 **Network** 3 Time Zone 4 Configure Wireless network 5 Summary

Next Prev

* WAN Type Static IP

* IP Addr 192.168.10.1

* Netmask 255.255.255.0

Gateway 192.168.1.1

IPv6 Addr

DNS Server 223.5.5.5

Step 4 Configure the Mesh device's time zone and Network Time Protocol (NTP) settings to ensure accurate system time, which is critical for log tracking, scheduled tasks, and network synchroniz.

WIZARD

Lang Logout

Dashboard
Wizard
Mesh
Sysinfo
Network
Lan
Wireless
System
Advanced

1 Change Working Mode 2 Network 3 **Time Zone** 4 Configure Wireless network 5 Summary

Next Prev

System Time 2025-01-03 18:10:40

NTP

Time Zone Asia/Shanghai

Time Server 1 0.pool.ntp.org

Time Server 2 1.pool.ntp.org

Time Server 2 2.pool.ntp.org

Parameter	Describe
System Time	Displays the device's current time. Updates automatically if NTP is enabled.
NTP	Toggle to enable/disable automatic time synchronization via NTP servers.
Time Zone	Select your local time zone from the dropdown (e.g., Asia/Shanghai).
Time Server 1-3	Pre-filled with public NTP servers (0.pool.ntp.org, etc.). Custom servers can be entered.

Step 5 Configure Wireless Network

Define the wireless access settings for 2.4G and 5G bands, including network identity, security, and performance optimization options.

The screenshot displays the 'Configure Wireless network' step in the WIZARD configuration tool. It is divided into two sections for 2.4G and 5G bands. Each section includes a radio selection, an 'Enable Wireless' toggle, and fields for SSID, Security, and PSK Password. Additionally, there are toggles for WMM, Isolate, and HideSSID for each band.

Parameter	Describe
Enable Wireless	Toggle to activate/deactivate the respective WiFi band.
SSID	Enter the WiFi network name.
Security	Select an encryption protocol to protect the network.
PSK Password	Set a WiFi password.
WMM	Enable to prioritize multimedia traffic.
Isolate	Enable to make wireless clients independent of each other
HideSSID	Enable to conceal the WiFi network; clients must manually input the SSID to connect.

Step 6 Finally, confirm the configuration information, and click the Confirm button after confirming that it is correct. If the configuration information is incorrect, click Back to return to the previous step to reconfigure.

The screenshot displays the Wi-Tek WIZARD configuration interface. The top navigation bar includes the Wi-Tek logo, the word "WIZARD", and links for "Lang" and "Logout". A left sidebar menu lists various system options: Dashboard, Wizard (highlighted), Mesh, Sysinfo, Network, Lan, Wireless, System, and Advanced. The main content area shows a progress bar with five steps: 1. Change Working Mode, 2. Network, 3. Time Zone, 4. Configure Wireless network, and 5. Summary. Below the progress bar are "Prev" and "Confirm" buttons. A table displays the configuration details for the current step:

Protocol	dhcp
Time Zone	CST-8(Asia/Shanghai)
2.4G SSID	WI-TEK_F943
5G SSID	WI-TEK_F943

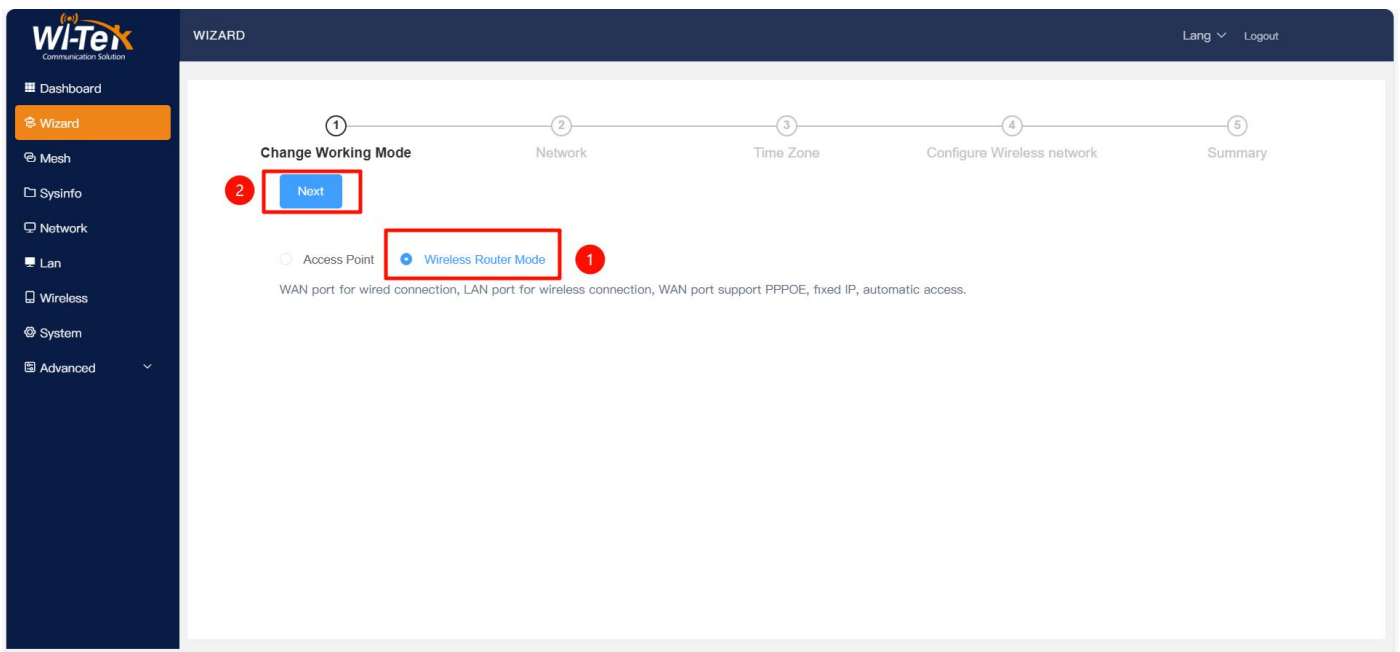
--END


3.2. Wireless Router Mode

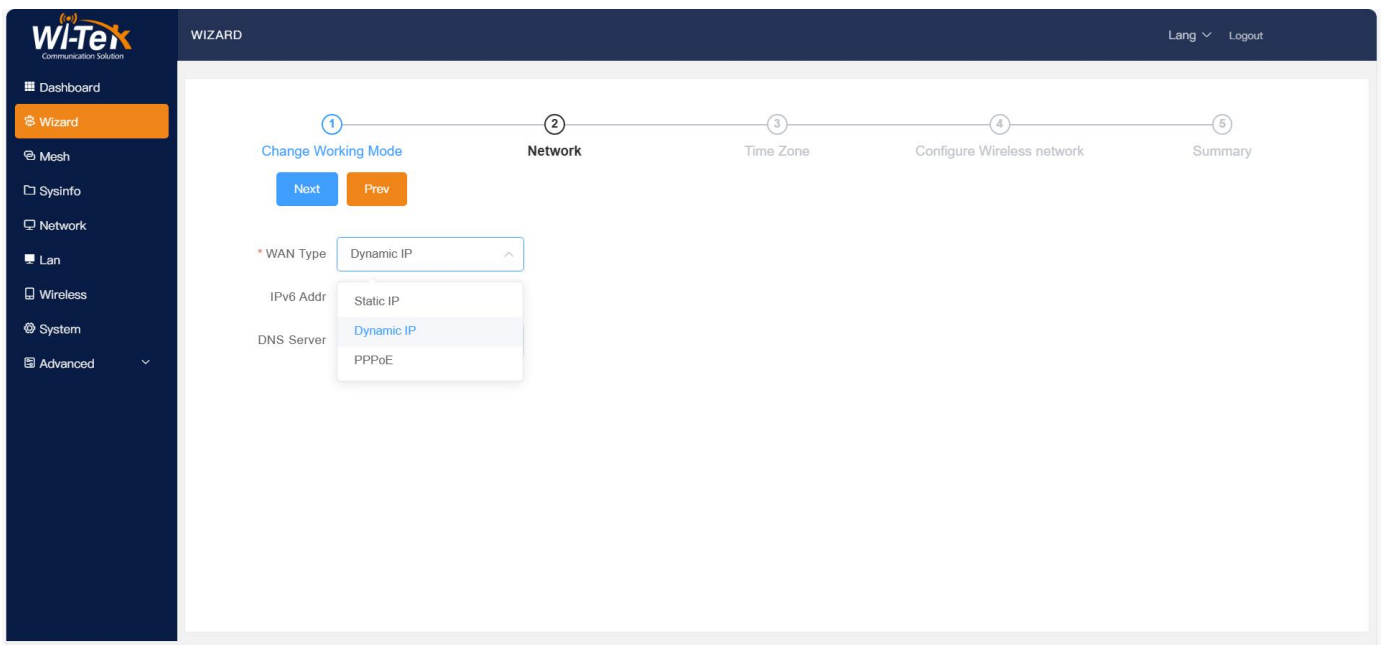
The Mesh device acts as the core of the Mesh network, connecting to the external network via its WAN port (e.g., from a modem or upstream network) and providing both Wi-Fi access and wired network connectivity through its LAN ports for internal devices.

Note: In Wireless Router Mode, the Mesh device handles Internet access tasks such as PPPoE dial-up, static IP configuration, or DHCP auto-acquisition. It manages IP address assignment for devices in the local network and can serve as the main node.

Step1 Go to Wizard and select Wireless Router Mode.



Step2 Select the type of connection network you want to configure, click the  button to enter step 3

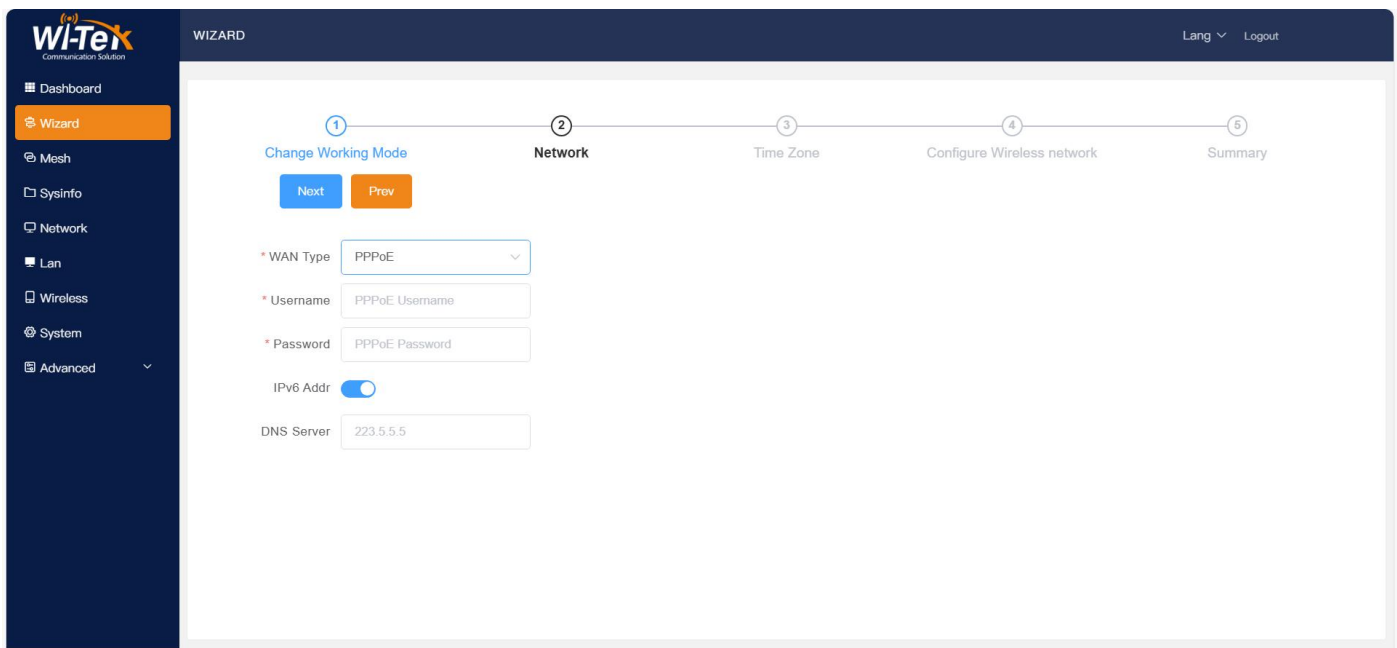


Step3

If you choose the Dynamic IP method , Customize DNS Server is optional.

If you choose static IP mode, the configuration Parameters are as follows. IP Address and Netmask are required, and others are optional.

If you choose PPPoE, you need to Input the PPPoE username and password for broadband dial-up.



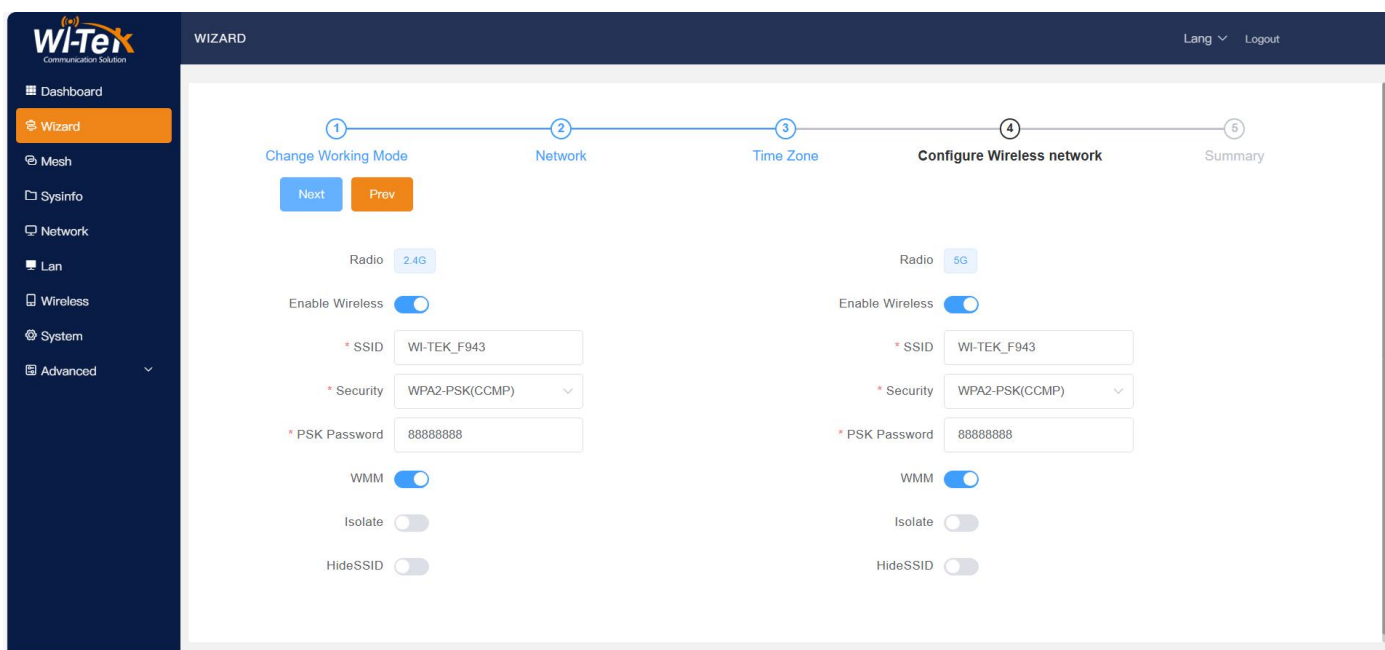
Step4 Configure the Mesh device's time zone and Network Time Protocol (NTP) settings to ensure accurate system time, which is critical for log tracking, scheduled tasks, and network synchroniz

The screenshot shows the Wi-Tex WIZARD configuration interface. The left sidebar contains navigation options: Dashboard, Wizard (selected), Mesh, Sysinfo, Network, Lan, Wireless, System, and Advanced. The main content area displays a progress bar with five steps: 1. Change Working Mode, 2. Network, 3. Time Zone (current step), 4. Configure Wireless network, and 5. Summary. Below the progress bar, there are 'Next' and 'Prev' buttons. The 'System Time' field shows '2025-01-03 18:27:33'. The 'NTP' toggle is turned on. The 'Time Zone' dropdown is set to 'Asia/Shanghai'. There are three 'Time Server' input fields with pre-filled values: '0.pool.ntp.org', '1.pool.ntp.org', and '2.pool.ntp.org'.

Parameter	Describe
System Time	Displays the device's current time. Updates automatically if NTP is enabled.
NTP	Toggle to enable/disable automatic time synchronization via NTP servers.
Time Zone	Select your local time zone from the dropdown (e.g., Asia/Shanghai).
Time Server 1-3	Pre-filled with public NTP servers (0.pool.ntp.org, etc.). Custom servers can be entered.

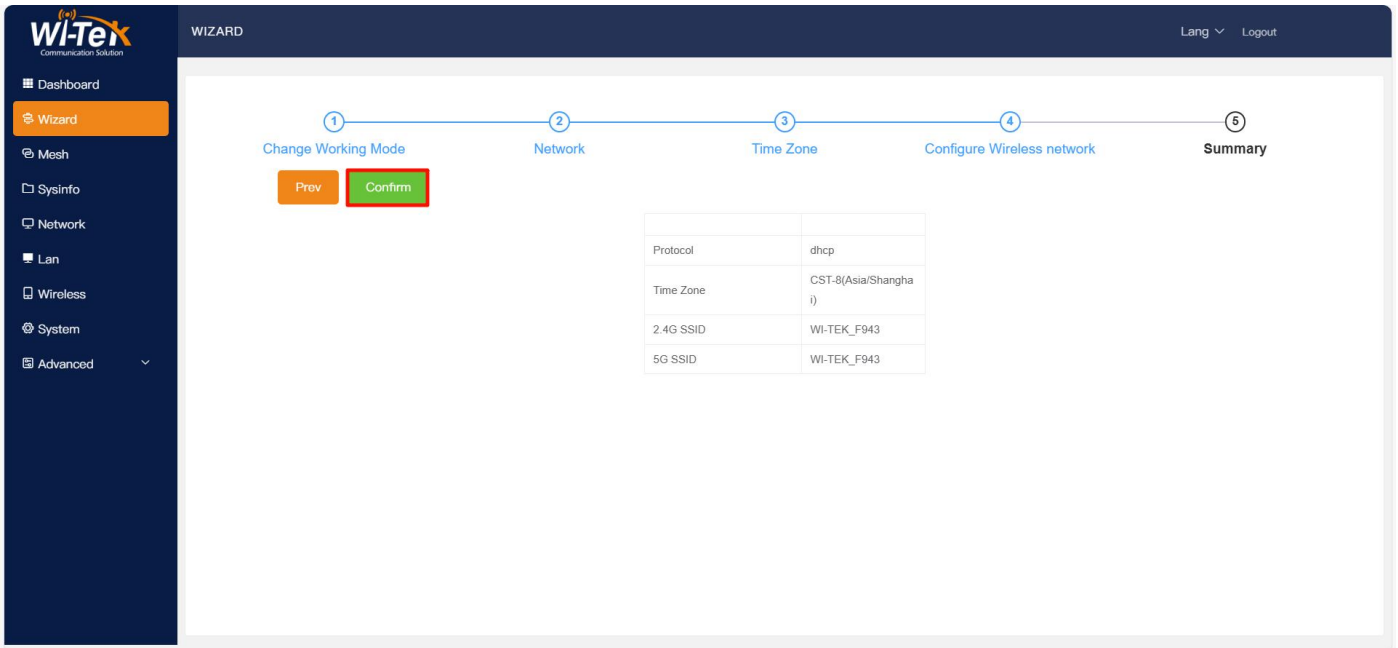
Step 5 Configure Wireless Network

Define the wireless access settings for 2.4G and 5G bands, including network identity, security, and performance optimization options.



Parameter	Describe
Enable Wireless	Toggle to activate/deactivate the respective WiFi band.
SSID	Enter the WiFi network name.
Security	Select an encryption protocol to protect the network.
PSK Password	Set a WiFi password.
WMM	Enable to prioritize multimedia traffic.
Isolate	Enable to make wireless clients independent of each other
HideSSID	Enable to conceal the WiFi network; clients must manually input the SSID to connect.

Step 6 Finally, confirm the configuration information, and click the Confirm button after confirming that it is correct. If the configuration information is incorrect, click Back to return to the previous step to reconfigure.



The screenshot displays the Wi-Tek WIZARD configuration interface. The progress bar indicates the current step is 4, "Configure Wireless network". The "Confirm" button is highlighted in red. The configuration details are as follows:

Protocol	dhcp
Time Zone	CST-8(Asia/Shanghai)
2.4G SSID	WI-TEK_F943
5G SSID	WI-TEK_F943

--END

4. Mesh

The Mesh interface allows you to set up, monitor, and manage Mesh nodes. It is divided into two core sections: Mesh Node Addition Guidance and Mesh Client List.

Status	IP Addr	HostName	SN	Model	MAC	Uplink	WiFi Users	Add Time
Online	192.168.10.137	Wi-Tek-Mesh	MESH0CWM24C3100 01	WI-AX3000M	E4:67:1E:84:F8:A2	Wireless Back	1	2025/1/3 19:19

4.1. Mesh Node Addition Guidance

Follow these steps to add new Mesh nodes to your network:

Step 1:

Main Router Preparation

The main router must complete initial configuration via the Wizard (select Wireless Router Mode). Ensure it connects to the Internet, with SSID, password, and basic network settings (e.g., PPPoE/DHCP) properly configured.

satellite Router Preparation

Ensure the satellite router is in factory default state

Step 2: Initiate Mesh Connection via Web Management

1. Log in to the main router's web UI, go to the Mesh section.
2. Click Search to let the main router scan for satellite routers.
3. Power on an unused (or factory - reset) satellite router; wait for its wireless indicator to stay on.

4.The main router will auto - detect and pair with the satellite router.

4.2. Mesh Client List

The table displays real-time details of connected Mesh nodes:

Status	IP Addr	HostName	SN	Model	MAC	Uplink	WiFi Users	Add Time
Online	192.168.10.137	Wi-Tek-Mesh	MESH0CWM24C3100 01	WI-AX3000M	E4:67:1E:84:F8:A2	Wireless Back	1	2025/1/3 19:19

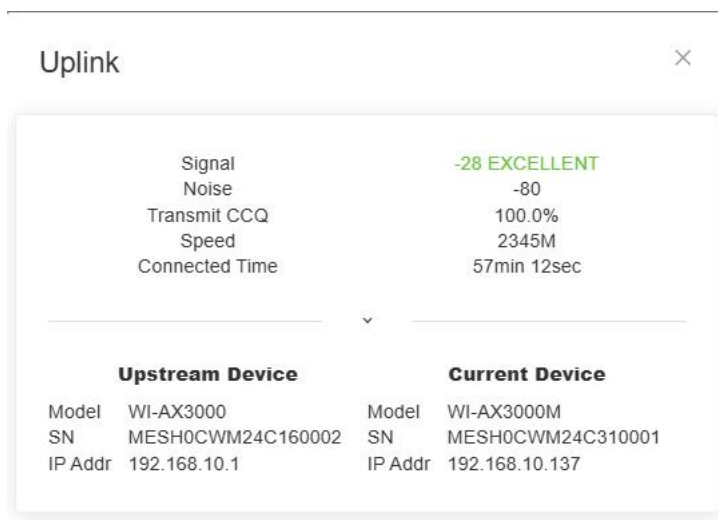
Parameter	Describe
Status	Node connectivity: Online or Offline.
IP Addr	The node's IP address on the local network.
HostName	Customizable name of the Mesh node (e.g., WI-Tek-Mesh).
SN	Device serial number (unique identifier)
Model	Device model (e.g., WI-AX3000M).
MAC	Hardware MAC address of the node.
Uplink	Backhaul type (e.g., Wireless Backhaul for WiFi, Wired Backhaul for Ethernet).
WiFi Users	Number of wireless devices currently connected to this Mesh node.
Add Time	Date and time when the node was added to the Mesh network.

4.3. Uplink

In a Mesh network, Uplink refers to the connection method and Wireless link between a satellite node (secondary router) and the main node (primary router).

Wireless Backhaul: Indicates the satellite node connects to the main node via wireless communication (if it shows "Wired Backhaul", the connection uses an Ethernet cable).

Status	IP Addr	HostName	SN	Model	MAC	Uplink	WiFi Users	Add Time
Online	192.168.10.137	Wi-Tek-Mesh	MESH0CWM24C3100 01	WI-AX3000M	E4:67:1E:84:F8:A2	Wireless Back	1	2025/1/3 19:19



Parameter	Describe
Signal	Signal strength between the satellite and main node.
Noise	Display amount of background noise in your environment. *If the noise level is too high, it can result performance for your wireless network. *The closer the value to 0, the greater the noise level.
Transmit CCQ	displays the wireless Client Connection Quality (CCQ), the value in percent that shows how effective the bandwidth is used regarding the theoretically maximum available bandwidth.
Speed	Negotiated data rate between the satellite and main node.
Connected Time	Duration of continuous connection, reflecting link stability.

Upstream & Current Device Information

hardware and network details of the upstream device (main node) and current device (satellite node)

Category	Upstream Device (Main Node)	Current Device (Satellite Node)
Model	Main router model	Satellite router mode
SN	Main node SN	Satellite node SN
IP Addr	Main node LAN IP	Satellite node IP

--END

5. Sysinfo

The Sysinfo page provides an overview of the device's network status, routing details, connected WiFi users, and host information. It is organized into four tabs: Network, Routing, WiFi Users, and Host List.

5.1. Network

The Network tab in the Sysinfo section provides technical details about the Mesh WiFi device's WAN (Wide Area Network) and LAN (Local Area Network) connections.

The screenshot shows the WITeX Sysinfo interface. The left sidebar contains navigation options: Dashboard, Wizard, Mesh, Sysinfo (highlighted), Network, Lan, Wireless, System, and Advanced. The main content area is titled 'SYSINFO' and has tabs for Network, Routing, WiFi Users, and Host List. The 'Network' tab is active, displaying two sections: 'WAN-IPv4' and 'LAN'.

WAN-IPv4

Port	Type	IP Addr	Netmask	Gateway	DNS	Connection Duration(second)
wan	dhcp	0.0.0.0	0.0.0.0	0.0.0.0	0.0.0.0	

LAN

Name	IP Addr	Netmask	Members
bridge	192.168.10.1	255.255.255.0	eth0 eth1 eth2

WAN-IPv4:

| WAN-IPv4

Port	Type	IP Addr	Netmask	Gateway	DNS	Connection Duration(second)
wan	dhcp	0.0.0.0	0.0.0.0	0.0.0.0	0.0.0.0	

Parameter	Describe
Port	Port type
Type	Method for obtaining a WAN IP address.
IP Addr	Unique IP assigned by the upstream network for Internet communication.
Netmask	Defines the WAN subnet range, used to distinguish local & external network traffic.

Gateway	IP of the upstream device (e.g., modem) that routes WAN traffic to the Internet.
DNS	IP of the server translating domain names to IP addresses.
Connection Duration	Time since the WAN connection was established.

LAN:

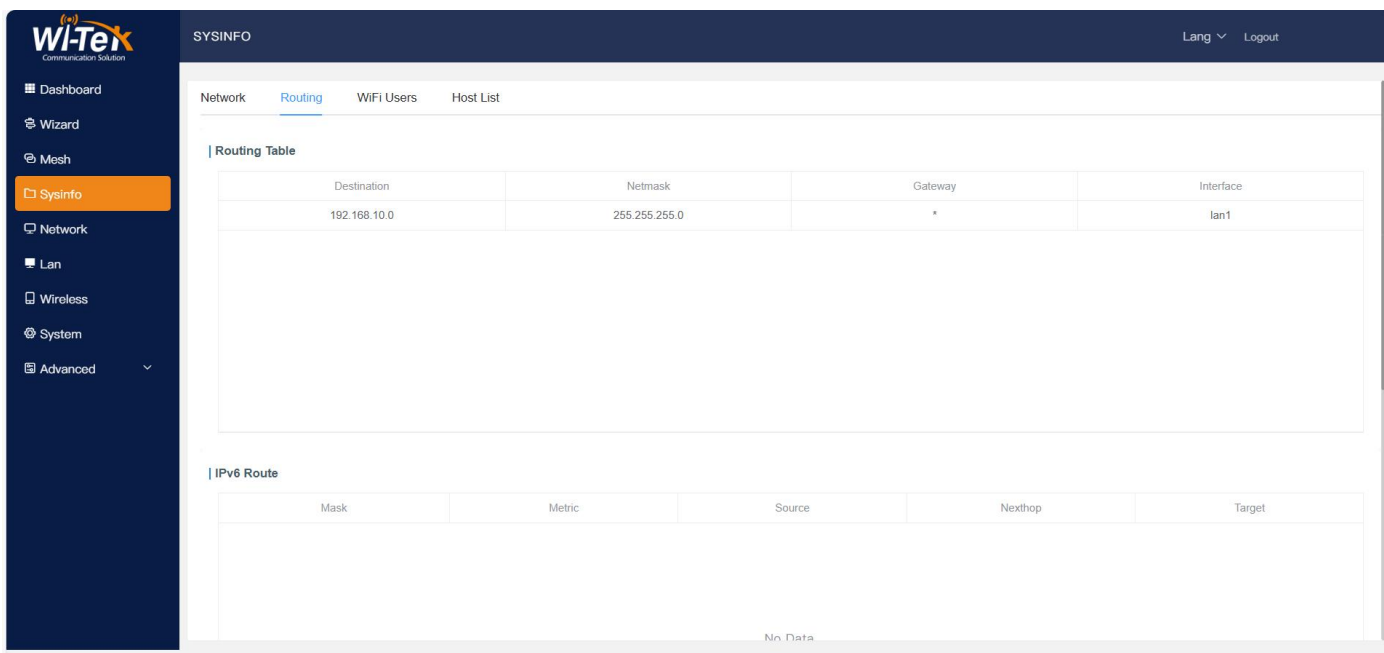
LAN

Name	IP Addr	Netmask	Members
bridge	192.168.10.1	255.255.255.0	eth0 eth1 eth2

Parameter	Describe
Name	Logical identifier for the LAN (e.g., bridge = combines ports into a single network segment).
IP Addr	Local management IP for accessing the device's web interface (used to configure the Mesh network).
Netmask	Defines the LAN subnet range .
Members	Lists physical Ethernet ports included in the LAN.

5.2. Routing

The Routing tab in the Sysinfo section displays the device's routing rules, which determine how network traffic is forwarded between subnets



Routing Table :

Routing Table

Destination	Netmask	Gateway	Interface
192.168.10.0	255.255.255.0	*	lan1

Parameter	Describe
Destination	The target network/subnet that traffic is sent to.
Netmask	Defines the range of the destination subnet .
Gateway	The next-hop IP for forwarding traffic.
Interface	The physical/logical port used to send traffic

IPv6 Route:

IPv6 Route

Mask	Metric	Source	Nexthop	Target

Parameter	Describe
Mask	Prefix length of the IPv6 subnet.

Metric	Cost/priority of the route (lower values = preferred for traffic).
Source	Origin of the route.
Nexthop	Next-hop IPv6 address for forwarding traffic.
Target	Destination IPv6 network/subnet.

ARP Cache:

The ARP (Address Resolution Protocol) Cache table maps IP addresses to MAC addresses and specifies the network interface used for communication.

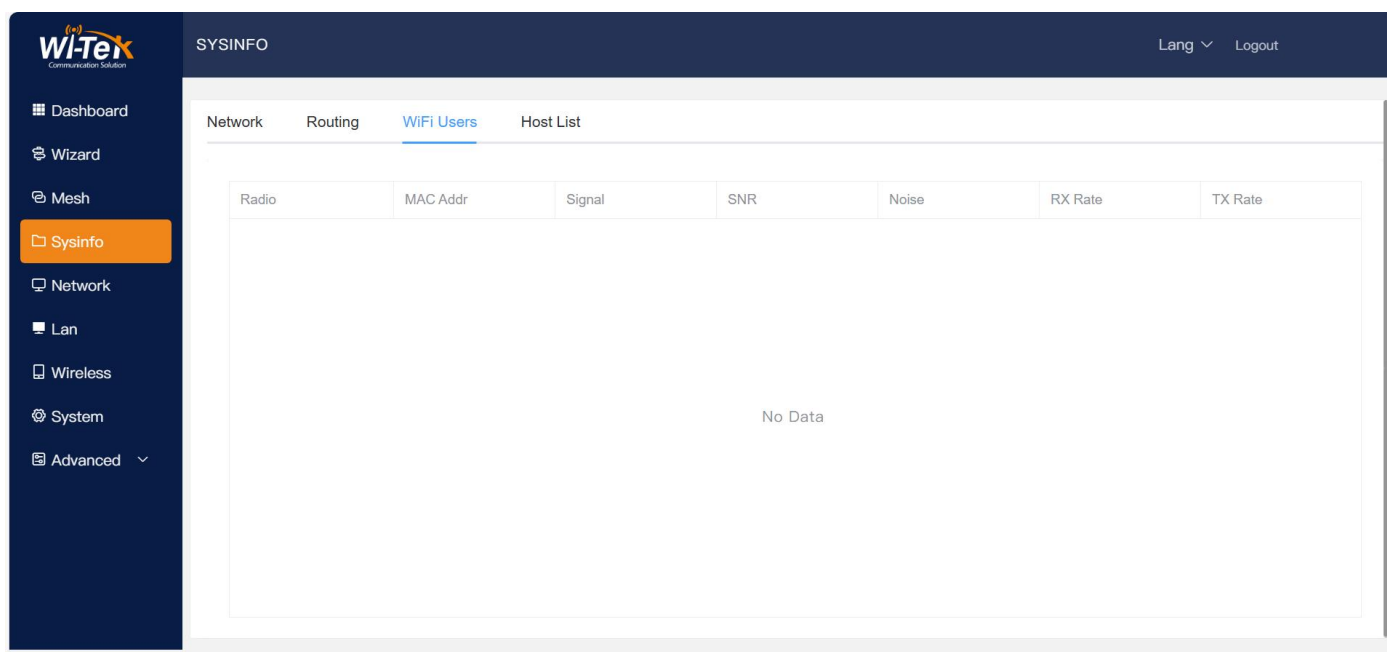
ARP Cache

IP Addr	MAC Addr	Interface
192.168.10.137	e4:67:1e:84:f8:a2	lan1
192.168.10.2	f8:e4:3b:eb:82:84	lan1

Parameter	Describe
IP Addr	The IP address of a device on the network
MAC Addr	The unique hardware address of the device corresponding to the IP address.
Interface	The network interface

5.3. WiFi Users

The WiFi Users tab in the Sysinfo section displays real-time details of devices connected to the Mesh WiFi network.



Parameter	Describe
Radio	Identifies the WiFi band/radio the client uses
MAC Addr	Unique hardware address of the connected device
Signal	Wireless signal strength between the client and the device.
SNR	Signal-to-Noise Ratio.(signal strength vs. background noise).
Noise	Background wireless interference level.
RX Rate	Data reception rate from the client to the device.
TX Rate	Data transmission rate from the device to the client.

5.4. Host List

The Host List tab in the Sysinfo section displays details of devices (hosts) connected to the Mesh WiFi network.

The screenshot shows the Sysinfo web interface. The top navigation bar includes the Wi-Tek logo, the text 'SYSINFO', and links for 'Lang' and 'Logout'. The left sidebar contains a menu with items: Dashboard, Wizard, Mesh, Sysinfo (highlighted), Network, Lan, Wireless, System, and Advanced. The main content area has tabs for 'Network', 'Routing', 'WiFi Users', and 'Host List' (selected). Below the tabs is a table titled 'Host List' with the following data:

IP Addr	MAC Addr	HostName	Remaining Lease Time
192.168.10.137	e4:67:1e:84:f8:a2	Wi-Tek-Mesh	11:49:17
192.168.10.172	00:0c:43:e1:78:68	WIKING-MESH	11:49:18

Parameter	Describe
IP Addr	The IP address assigned to the device on the local network.
MAC Addr	Unique hardware address of the device.
HostName	Device hostname
Remaining Lease Time	Time left before the device's IP address expires (DHCP lease).

-END

6. Network

The Network page configures WAN (Wide Area Network) settings, with options changing **based on the device's working mode**:

Key Behavior by Mode:

Working Mode	WAN Type Options
Access Point Mode	- Dynamic IP - Static IP
Wireless Router Mode	- Dynamic IP - Static IP - PPPoE

Parameter	Describe
WAN Type	Defines how the device connects to the upstream network: -Dynamic IP: Auto - obtains IP from the upstream network. -Static IP: Manually sets a fixed IP . -PPPoE:Uses broadband dial-up (requires username/password from the ISP).

IPv6 Addr	Enables or disables IPv6 for WAN
DNS Server	Custom DNS servers for resolving domain names (optional; auto - assigned by default).

-END

7. LAN

The LAN page configures the device's Local Area Network settings.

Parameter	Describe
MAC	Hardware address of the LAN interface. Used for device identification on the local network.
IP Addr	Static IP address for the LAN (e.g., 192.168.10.1). This is the address used to access the device's web interface locally.
Netmask	Defines the LAN subnet range.

-END

8. Wireless

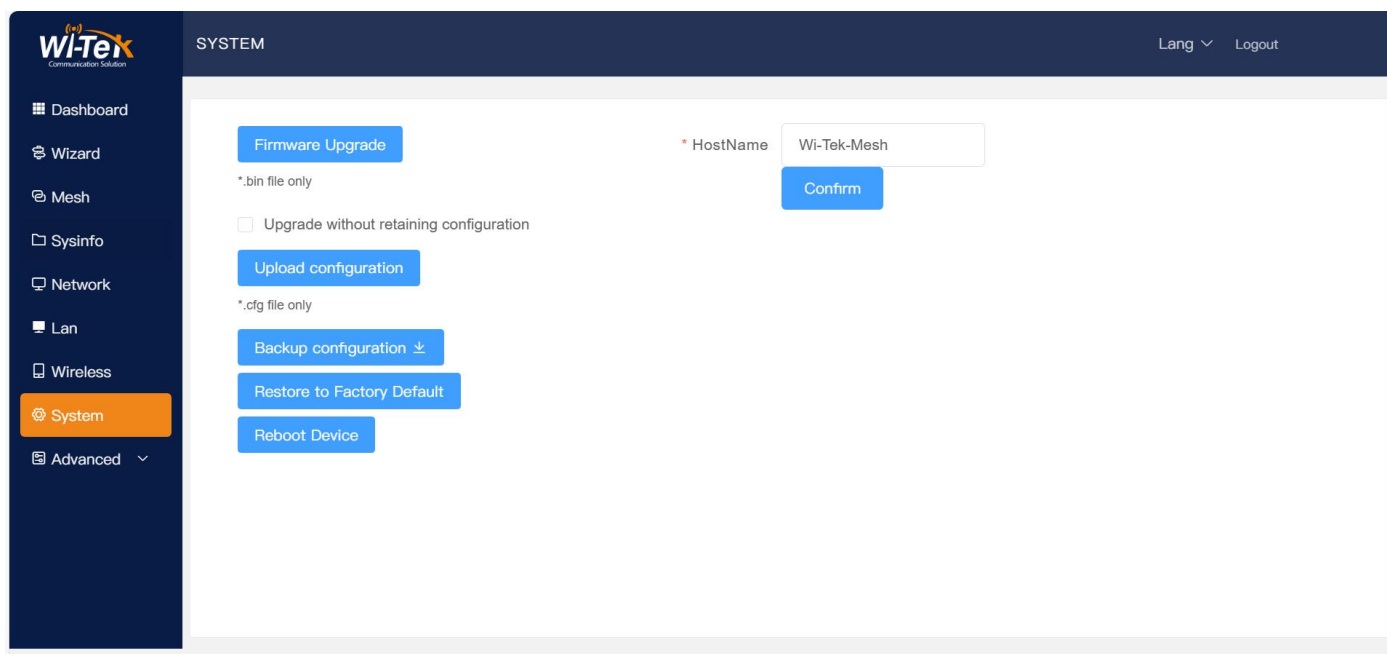
The WIRELESS page configures WiFi settings for both 2.4G and 5G radio bands.

Parameter	Describe
Enable Wireless	Toggle to activate/deactivate the respective WiFi band.
SSID	Enter the WiFi network name.
Security	Select an encryption protocol (e.g.,WPA2-PSK(CCMP)) to protect the network.
PSK Password	Set a WiFi password.
WMM	Enable to prioritize multimedia traffic.
Isolate	Enable to make wireless clients independent of each other
HideSSID	Enable to conceal the WiFi network; clients must manually input the SSID to connect.

-END

9. System

The SYSTEM page manages critical device operations like firmware updates, configuration backups, and network identity.



Parameter	Describe
Firmware Upgrade	Click Firmware Upgrade to upload the firmware upgrade version. * During the restoring process, do not power off or reset the router.
Upgrade without retaining configuration	Performs a “clean” firmware update (erases current settings). Use if facing persistent issues.
Upload configuration	Restores a saved configuration
Backup configuration	Click Backup configuration to save a copy of the current settings in your local computer.
Restore to Factory Default	Resets all settings to default.
Reboot Device	Restarts the device to apply changes
HostName	Custom device name.

-END

10. Advanced

The Advanced section houses specialized configuration tools for fine-tuning the Mesh WiFi network. It includes sub-menus like Radio (for wireless parameter optimization), Firewall (for network security), Multiple SSID (for creating virtual networks), and more. These tools allow users to go beyond basic settings, enabling customization for performance, security, and advanced network behaviors—ideal for power users or complex deployments.

10.1. Radio

The Radio page under the Advanced section configures fine-grained wireless parameters for both 2.4G and 5G bands.

The screenshot shows the 'RADIO' configuration page in the Wi-Tex interface. The page is divided into two sections: 'Radio 2.4G' and 'Radio 5G'. Each section contains the following parameters:

- Region:** United States (dropdown)
- Channel:** AUTO (dropdown)
- Channel Width:** 20MHz (dropdown for 2.4G, 160MHz/80MHz/40MHz/20MHz (dropdown for 5G)
- FILS Support:** Toggle switch (off)
- Tx Power:** Slider set to 30 (range - to +)
- Beacon Intval:** 100 (input field)
- RTS Threshold:** 2347 (input field)
- DTIM Intval:** 1 (input field)
- Max Associated:** 128 (input field)
- Weak Signal Threshold:** -95 (input field)

A 'Confirm' button is located at the bottom center of the configuration area.

Parameter	Describe
Region	Sets the regulatory domain
Channel	Selects the WiFi channel. "AUTO" allows the device to pick the least congested channel; manual selection is for troubleshooting interference issues.
Channel Width	Determines the bandwidth per channel (e.g., 20MHz for 2.4G, up to 160MHz for 5G). Wider bandwidth means faster speeds but shorter range; narrower bandwidth offers better range but slower speeds.

FILS Support	Toggles Fast Initial Link Setup, which speeds up device connection.
Tx Power	Adjusts transmission power
Beacon Interval	The time between WiFi beacon broadcasts (in milliseconds). It controls how often devices detect the network.
RTS Threshold	The packet size threshold for Request to Send (RTS). It manages network contention in busy environments to reduce collisions.
DTIM Interval	The Delivery Traffic Indication Message interval.
Max Associated	The maximum number of clients per radio.
Weak Signal Threshold	The signal strength (in dBm) below which a client is considered to have a "weak" connection. It helps identify devices with poor connectivity for troubleshooting.

10.2. Cloud

The Cloud page enables integration with a cloud management platform for centralized control of Mesh WiFi devices.

The screenshot shows the 'CLOUD' configuration page in the Wi-Tek management interface. The left sidebar contains navigation options like Dashboard, Wizard, Mesh, Sysinfo, Network, Lan, Wireless, System, Advanced, Radio, Cloud (highlighted), Firewall, Multiple SSID, DHCP Server, Wireless ACL, and UPnP. The main content area has a form with the following fields: Device ID (pre-filled with MESH0CWM24C160002), Binding, Code, Product (pre-filled with Wi-Tek-Mesh), Name, Latitude, and Longitude. A blue 'Confirm' button is located below the form. Below the form is a 'Cloud AC Platform Q&A' section with the following content:

Cloud AC Platform Q&A

Question: What is the cloud AC platform?
 Cloud AC platform is a cloud platform for centrally managing our devices (including gateways, billing, cloud AP). You can view and manage your devices in the cloud, such as checking device running and modifying the configuration.

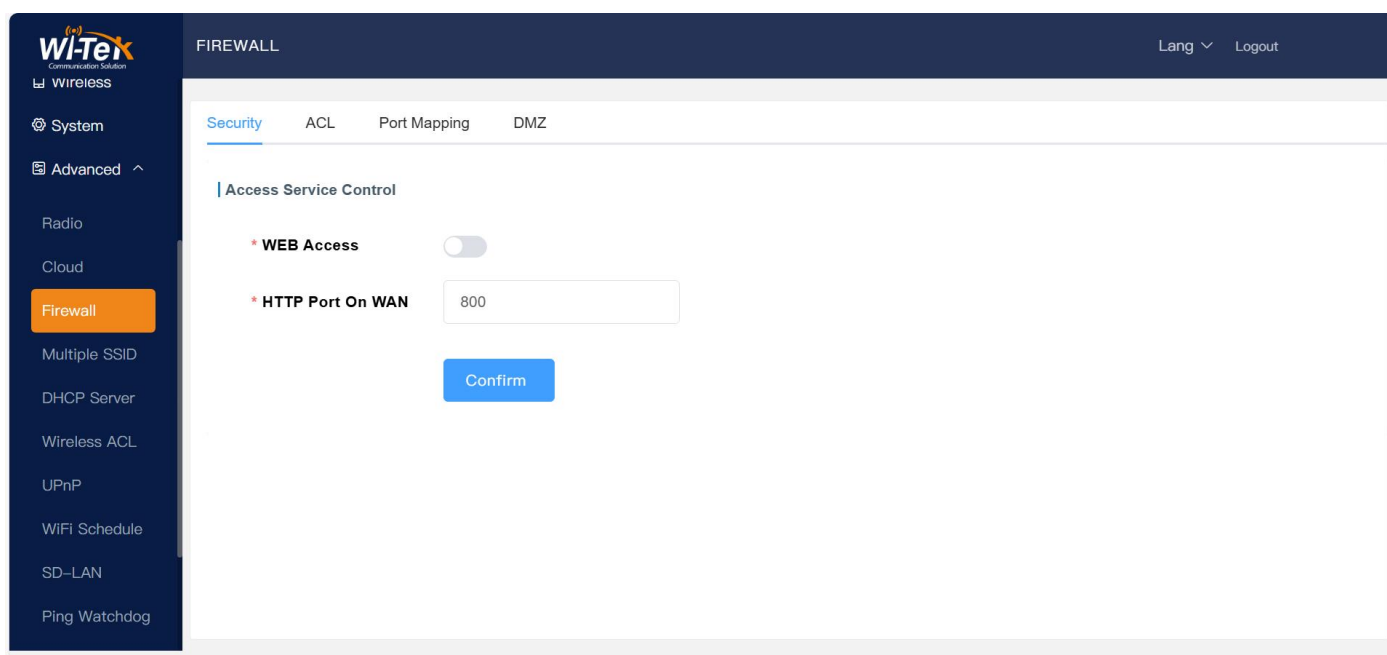
Question: How to bind the cloud AC platform?
 Bindina Method 1:

Parameter	Describe
Device ID	Unique identifier for the Mesh device (e.g., MESH0CWM24C160002). Used to register the device on the cloud platform.
Binding	Field for entering a cloud account binding code (links the device to your cloud account).

Code	Displays or accepts a verification code for cloud account authentication.
Product	Device model identifier (e.g., Wi-Tek-Mesh). Helps the cloud platform recognize the device type.
Name	Custom device name for easier identification in cloud management dashboards.
Latitude/Longitude	Geolocation coordinates (optional). Useful for mapping device locations in large-scale deployments.
Confirm	Submits cloud binding/configuration changes.

10.3. Firewall

The FIREWALL page enhances network security and manages traffic for the Mesh WiFi network. It has multiple tabs: Security, ACL (Access Control List), Port Mapping, and DMZ (Demilitarized Zone).



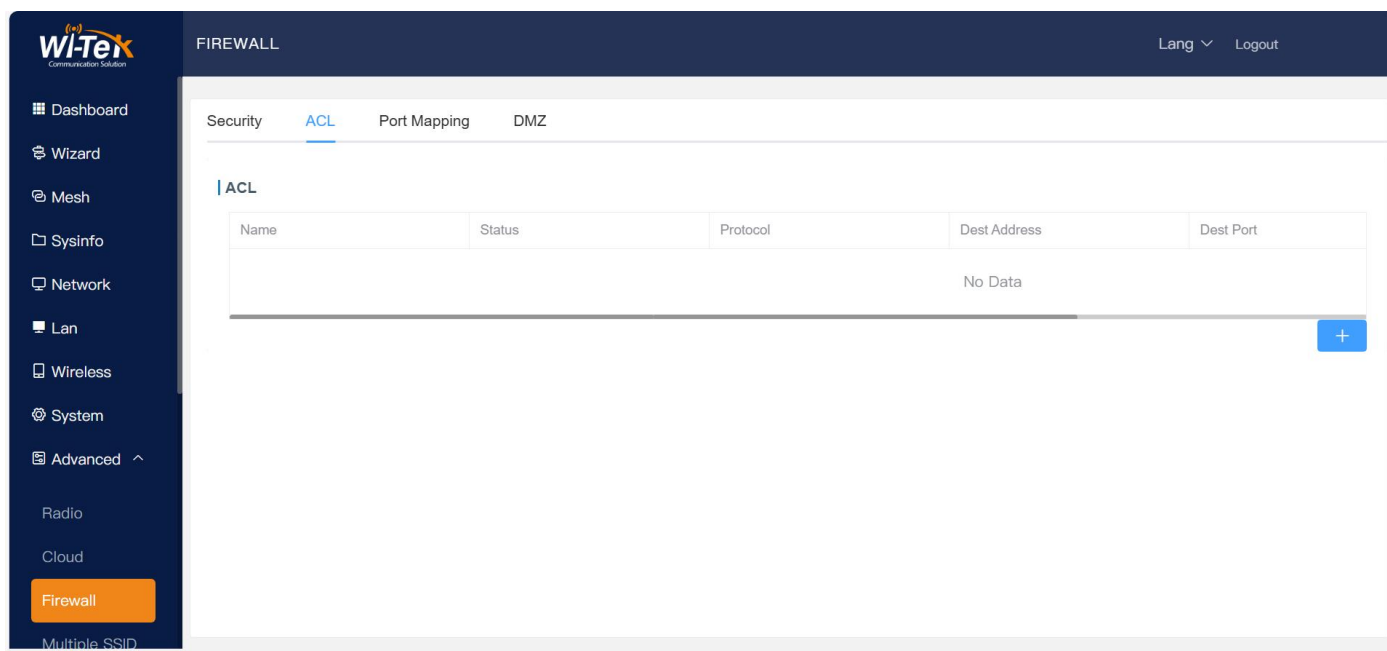
Security:

Parameter	Describe
WEB Access	Toggles whether the device's web management interface can be accessed from the WAN (Wide Area Network). Disabling it enhances security by blocking external access to settings.

HTTP Port On WAN	Specifies the port used for WAN web access (default 800).
------------------	---

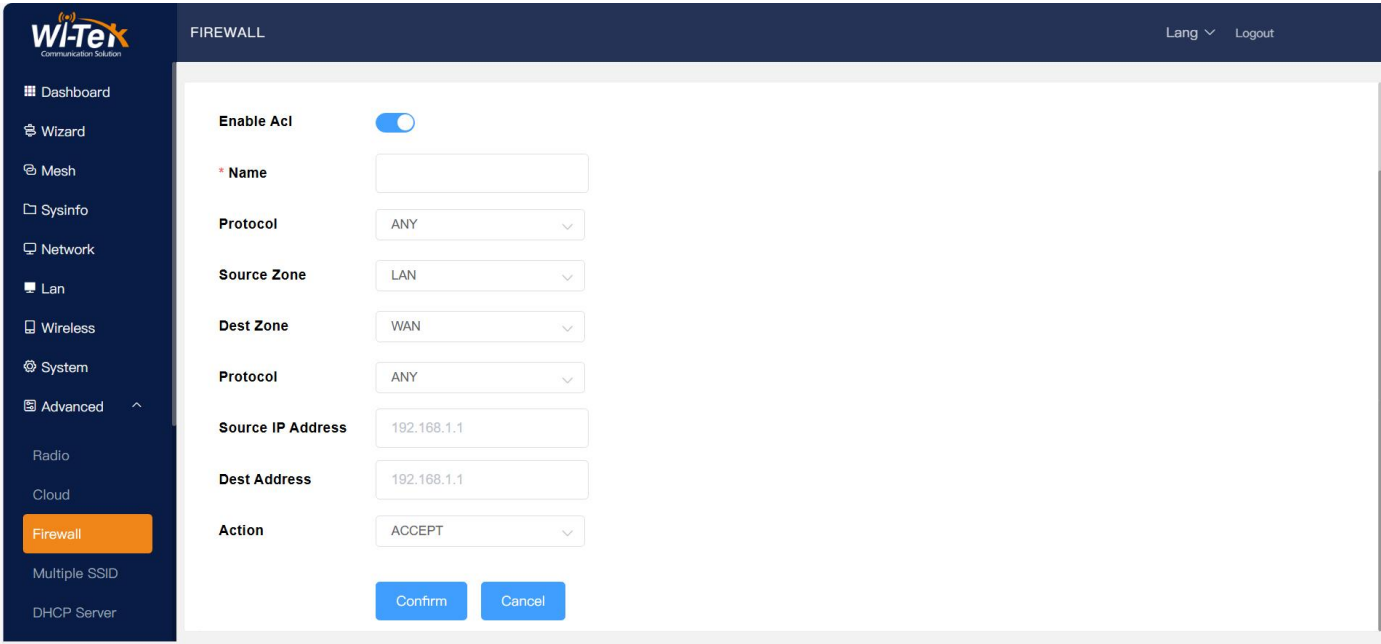
ACL:

The ACL (Access Control List) tab in the Firewall section manages network traffic rules.



Parameter	Describe
Name	Custom label for the ACL rule.
Status	Toggles the rule on/off (active/inactive).
Protocol	Specifies the network protocol (e.g., TCP, UDP, ICMP) for matching traffic.
Dest Address	Target IP address(es) the rule applies to (e.g., a server's IP or a Mesh node's IP).
Dest Port	Target port(s) the rule applies to (e.g., 80 for HTTP, 443 for HTTPS)
+ Button	Adds a new ACL rule.

Click  to Add a new ACL rule.



The screenshot shows the 'FIREWALL' configuration page in the Wi-Tex interface. The 'Enable Acl' toggle is turned on. The form fields are: Name (empty), Protocol (ANY), Source Zone (LAN), Dest Zone (WAN), Protocol (ANY), Source IP Address (192.168.1.1), Dest Address (192.168.1.1), and Action (ACCEPT). There are 'Confirm' and 'Cancel' buttons at the bottom.

Parameter	Describe
Name	Custom label for the ACL rule.
Protocol	Choose the IP version: - ANY: Applies to both IPv4 and IPv6. - IPv4: Only IPv4 traffic. - IPv6: Only IPv6 traffic.
Source Zone	The network zone where traffic originates: - ROUTER: Traffic from the router itself. - LAN: Traffic from local devices (Mesh nodes, connected clients). - WAN: Traffic from the internet.
Dest Zone	The network zone where traffic is headed (same options as Source Zone).
Protocol	The network protocol to filter: - ANY: All protocols (TCP, UDP, ICMP, etc.). - TCP: Transmission Control Protocol (web, email). - UDP: User Datagram Protocol (streaming, gaming). - TCP+UDP: Both TCP and UDP. - ICMP: Internet Control Message Protocol (ping, network diagnostics).
Source IP Address	The source IP address (or range) to filter. Use ANY for all sources.
Dest Address	The destination IP address (or range) to filter. Use ANY for all destinations.

Action

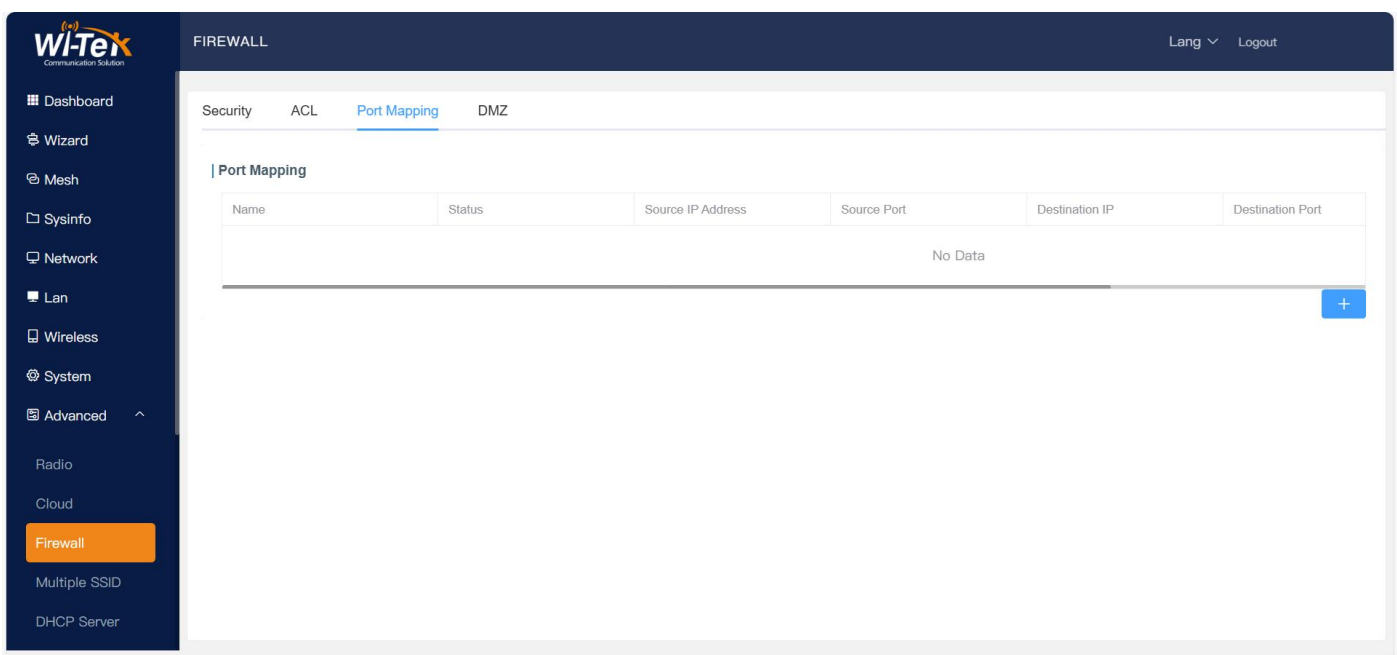
What to do with matching traffic:


- ACCEPT: Allow the traffic.
- DROP: Block the traffic silently (no response).
- REJECT: Block the traffic and send a "rejected" response.

Port Mapping:

The Port Mapping tab under the Firewall section is used to configure port forwarding rules.

Port mapping (also known as port forwarding) allows external network traffic to access specific services on devices within your Mesh network. For example, you can set up port mapping to let external users access a web server or a game server running on a device in your LAN.



Click  to Add a new Port Mapping.

The screenshot displays the 'Port Mapping' configuration interface within the 'FIREWALL' section. The interface includes a sidebar with navigation options and a main configuration area. The 'Port Mapping' tab is selected, showing a form with the following fields and values:

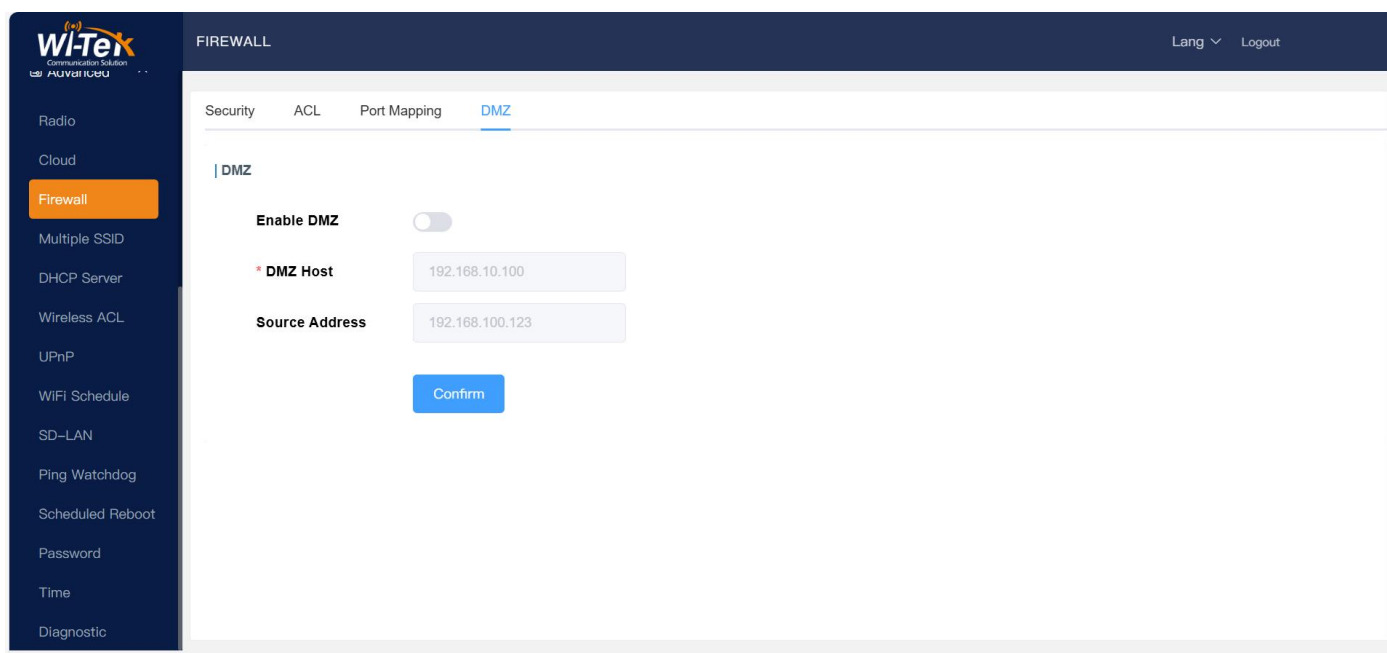
- Enable Map:** Toggled on (blue switch).
- Name:** (Empty text input field).
- Source IP Address:** 192.168.1.1
- Source Port:** (Empty text input field).
- Dest Address:** 192.168.1.1
- Dest Port:** (Empty text input field).
- Protocol:** TCP (Dropdown menu).

At the bottom of the form, there are two buttons: 'Confirm' and 'Cancel'.

Parameter	Describe
Name	A custom name for the port mapping rule (for easy identification).
Status	Toggles the rule on or off. When active, the port mapping takes effect; when inactive, the rule is disabled without deletion.
Source IP Address	The IP address of the external device initiating the connection. Leave blank or set to a specific IP as needed (blank allows all external IPs).
Source Port	The port number on the external device used for the connection.
Destination IP	The IP address of the device within the Mesh network that the external connection should forward to (e.g., an IP camera or NAS device).
Destination Port	The port number on the internal device that the traffic should be forwarded to (e.g., 80 for a web server).
Protocol	The network protocol for the traffic, such as TCP, UDP, or TCP+UDP. Choose the protocol that matches the application's requirements (e.g., TCP for web servers, UDP for gaming).

DMZ:

The DMZ tab in the Firewall section configures a Demilitarized Zone to expose a device to the WAN while isolating it from the LAN.



Parameter	Describe
Enable DMZ	Toggles DMZ functionality on/off. When enabled, the specified DMZ Host becomes accessible from the WAN.
DMZ Host	The LAN IP address of the device to expose (e.g., 192.168.10.100). Use for devices like servers or cameras that need WAN access.
Source Address	Optional: Restricts DMZ access to a specific WAN IP (e.g., 192.168.100.123). Adds an extra layer of security.

-END

10.4. Multiple SSID

The MULTIPLE SSID page enables the creation and management of multiple WiFi networks (SSIDs) for both 2.4G and 5G bands.

The screenshot shows the 'MULTIPLE SSID' configuration page in the Wi-Tek management interface. The page includes a sidebar with navigation options like Radio, Cloud, Firewall, and Multiple SSID (which is highlighted). The main content area displays a table with the following data:

SSID	Encryption	PSK Password	HideSSID	Radio	Operation
WI-TEK_F943	WPA2-PSK(CCMP)	88888888	NO	2.4G	Delete
WI-TEK_F943	WPA2-PSK(CCMP)	88888888	NO	5G	Delete

Click [Add](#) to Add a new SSID.

Please Enter new wireless information ×

* SSID

* Encryption

HideSSID

Radio

WMM

Isolate

Parameter	Describe
SSID	The name of the new WiFi network (required). Devices use this to find the network.
Encryption	Security type for the network. Choose from options like OPEN (no password) or WPA2-PSK (with password) to protect access.
HideSSID	Toggles whether the SSID is hidden. If set to YES, the network won't appear in public scans (devices must manually enter the SSID to connect).
Radio	Selects the WiFi band (2.4G for wider coverage, 5G for faster speeds).
WMM	Controls WiFi Multimedia (QoS). Enabling it prioritizes traffic like video calls or streaming for better performance.
Isolate	With this function enabled, the device isolates all the connected clients within the same wireless network from each other.

-END

10.5. DHCP Server

The DHCP SERVER page manages Dynamic Host Configuration Protocol settings to automate IP address assignment for devices in the Mesh network.

The screenshot shows the DHCP SERVER configuration page. On the left is a dark blue sidebar with the Wi-Tex logo and navigation menu items: Radio, Cloud, Firewall, Multiple SSID, DHCP Server (highlighted in orange), Wireless ACL, UPnP, WiFi Schedule, SD-LAN, Ping Watchdog, Scheduled Reboot, Password, Time, and Diagnostic. The main content area has a dark blue header with 'DHCP SERVER' and 'Lang' and 'Logout' options. Below the header, there is a form with the following elements:

- 'Enable DHCP' toggle switch, currently turned on.
- 'Server' label.
- 'DHCP Pool Start' input field with a value of 100 and minus/plus buttons.
- 'DHCP Pool Size' input field with a value of 150 and minus/plus buttons.
- 'DHCP Lease Time(min)' input field with a value of 720 and minus/plus buttons.
- 'Primary DNS Server' input field.
- 'Secondary DNS Server' input field.
- 'Confirm' button at the bottom.

Parameter	Describe
Enable DHCP	Toggles the DHCP server on/off. When enabled, devices automatically receive IP addresses; when disabled, manual IP configuration is required.
DHCP Pool Start	Defines the first IP address in the DHCP pool (e.g., 100 for a base IP like 192.168.1.100).
DHCP Pool Size	Sets the number of available IP addresses in the pool (e.g., 150 means addresses from DHCP Pool Start to DHCP Pool Start + DHCP Pool Size - 1 are usable).
DHCP Lease Time(min)	Specifies how long (in minutes, e.g., 720) an IP address is assigned to a device before renewal.
Primary DNS Server	Sets the primary DNS server IP for resolving domain names.
Secondary DNS Server	Sets a backup DNS server IP, used if the primary DNS fails.

-END

10.6. Wireless ACL

The WIRELESS ACL page manages wireless device access control.

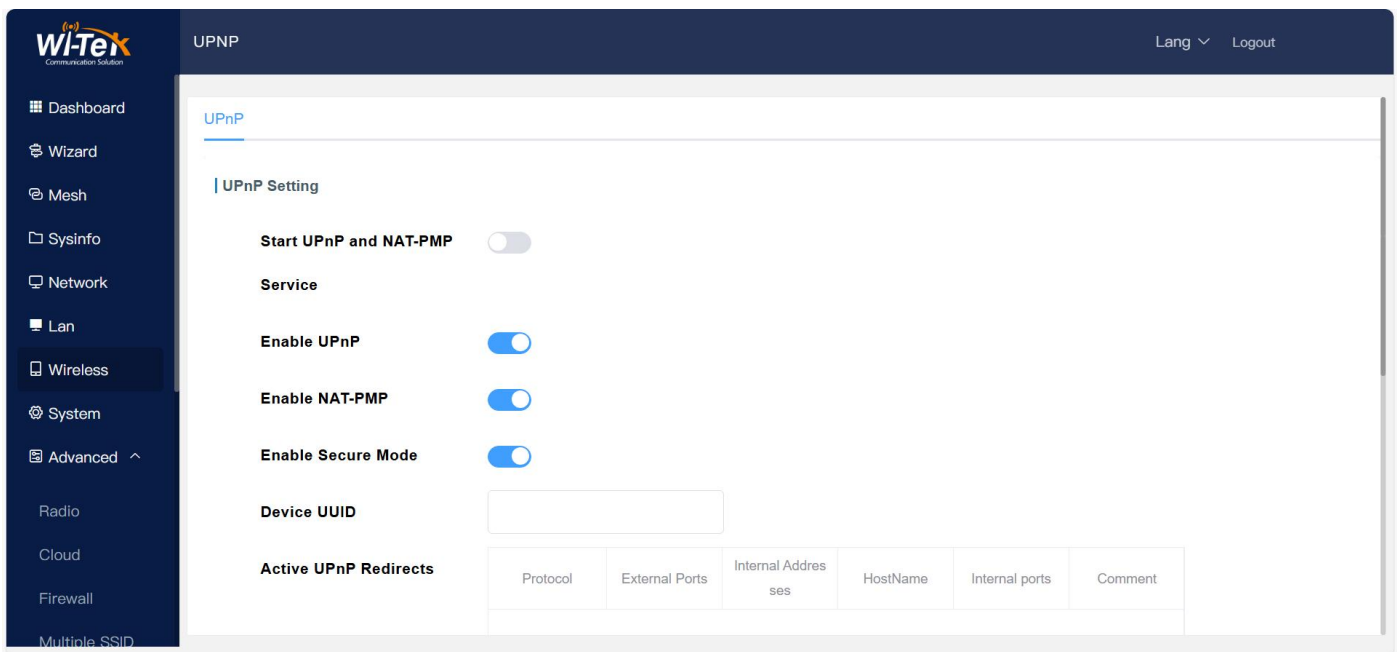
The screenshot shows the 'WIRELESS ACL' configuration page. On the left is a dark blue sidebar with the 'WITeX' logo and a list of menu items: Radio, Cloud, Firewall, Multiple SSID, DHCP Server, Wireless ACL (highlighted in orange), UPnP, WiFi Schedule, SD-LAN, Ping Watchdog, Scheduled Reboot, Password, Time, and Diagnostic. The main content area has a title 'WIRELESS ACL' and a sub-header 'Sta Access Aontrol'. Under 'Mode', there are three radio buttons: 'No limit' (selected), 'BlackList--Only those outside the list are allowed to access wireless', and 'Whitelist--Only those in the list can access wireless devices'. Below this is a 'MAC List' section with a table that has two columns: 'MAC' and 'Action'. The table is currently empty, displaying 'No Data'. At the bottom of the MAC List section are two blue buttons: 'Offline Add' and 'Confirm'.

Parameter	Describe
Mode	<ul style="list-style-type: none"> - No limit: All devices can access the wireless network without restriction. - BlackList: Only devices not in the list are allowed to access the wireless network. - Whitelist: Only devices in the list can access the wireless network.
MAC List	Displays the list of MAC addresses that are subject to access control.
Offline Add	Button to add MAC addresses to the access control list when offline.
Confirm	Button to save and apply the configured wireless access control settings.

-END





10.7. UPnP

The UPnP page enables configuration of Universal Plug and Play settings, which simplifies network device discovery and port mapping for applications like media streaming or online gaming.



Parameter	Describe
Start UPnP and NAT-PMP	Master toggle to enable or disable both UPnP and NAT-PMP protocols at once.
Enable UPnP	Toggle to enable/disable UPnP, allowing devices to automatically open ports.
Enable NAT-PMP	Toggle to enable/disable NAT-PMP (Network Address Translation - Port Mapping Protocol), an alternative to UPnP for port mapping
Enable Secure Mode	Toggle to enable a more secure UPnP mode, restricting device access to specified UUIDs.
Device UUID	Input field to specify a device's UUID for secure UPnP access.
Active UPnP Redirects	Table displaying currently active UPnP port mappings (protocol, ports, addresses, etc.).

The screenshot displays the 'MiniUPnP ACLs' configuration interface. At the top, there's a 'UPnP' header and 'Lang' and 'Logout' options. A sidebar on the left contains navigation items like Dashboard, Wizard, Mesh, Sysinfo, Network, Lan, Wireless, System, Advanced, Radio, Cloud, Firewall, and Multiple SSID. The main content area shows a table with the following data:

Comment	External Ports	Internal Addresses	Internal ports	Action	Action
Allow high ports	1024-65535	0.0.0.0/0	1024-65535	allow	 
Default deny	0-65535	0.0.0.0/0	0-65535	deny	 

Below the table is a blue '+', a blue 'Confirm' button, and a 'No Data' message above the table.

Parameter	Describe
Comment	Descriptive label for the ACL rule (e.g., "Allow high ports")
External Ports	Range of external ports affected by the rule (e.g., 1024-65535).
Internal Addresses	Internal IP address range the rule applies to (e.g., 0.0.0.0/0 for all).
Internal ports	Range of internal ports affected by the rule.
Action	Specifies if the rule "allows" or "denies" UPnP for the defined ports/ranges.
Edit/Delete Buttons	Icons to modify or remove a specific ACL rule.
+ Button	Adds a new ACL rule.
Confirm Button	Saves changes made to MiniUPnP ACLs.

-END

10.8. WiFi Schedule

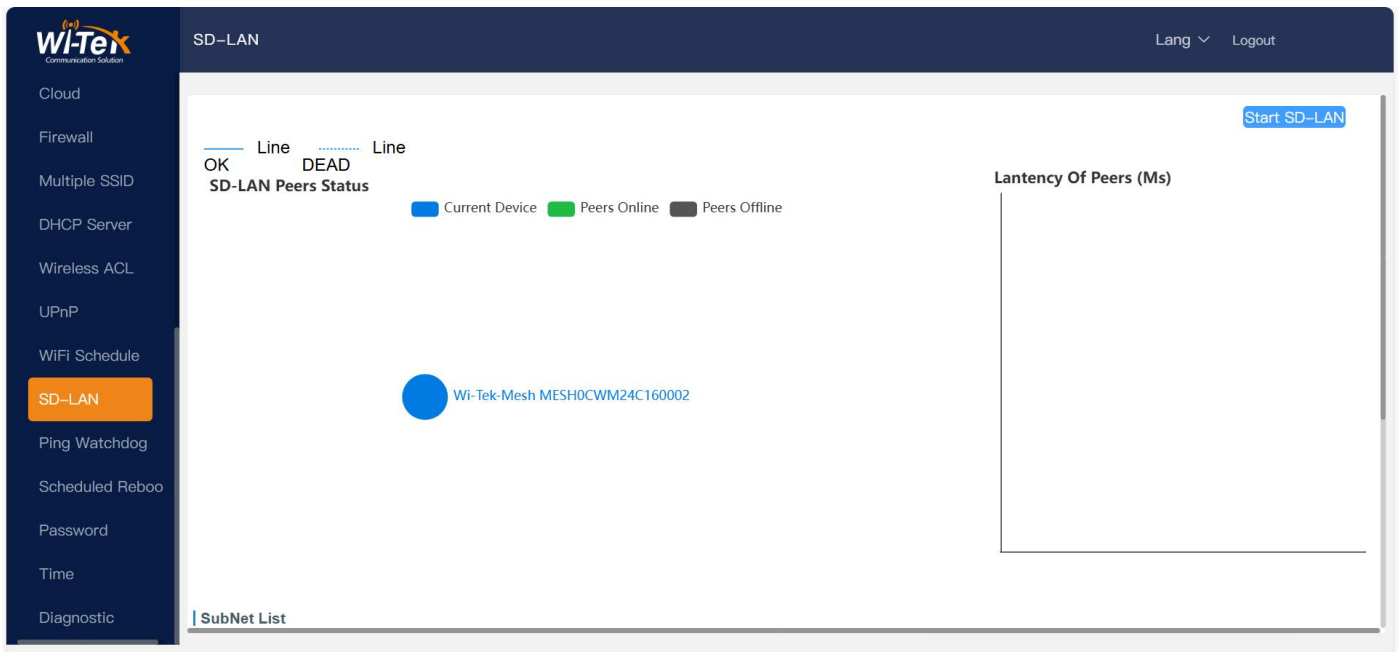
The WiFi Schedule page enables you to set automatic on/off times for the wireless network.

Parameter	Describe
WiFi Schedule	Toggle to enable or disable the WiFi schedule feature.
Repeat	Select the days of the week (Monday - Sunday) when the schedule repeats.
Start Time	Set the time when the WiFi network starts working (required field).
Stop Time	Set the time when the WiFi network stops working (required field).
Confirm	Button to save the configured schedule settings.

-END





10.9. SD-LAN

The SD-LAN interface in the Wi-Tek system provides a comprehensive view for managing and monitoring Software-Defined LAN functionalities.



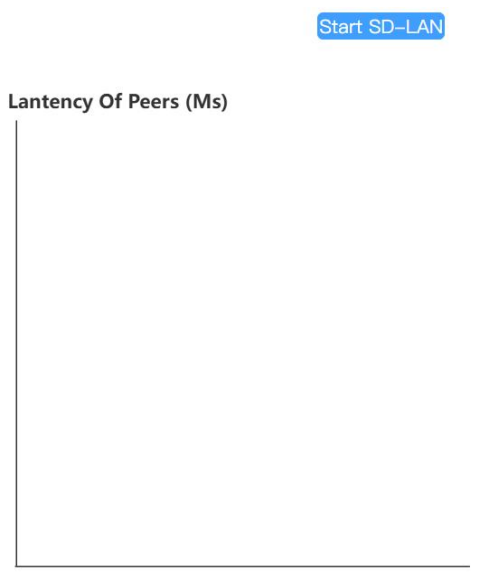
SD-LAN Peers Status Section:

This area visually represents the status of SD-LAN peers.

Parameter	Describe
 Current Device	Current Device (the device you're currently interacting with).
 Peers Online	Peers Online (remote devices in the SD-LAN that are connected and operational).
 Peers Offline	Peers Offline (remote devices in the SD-LAN that are disconnected or non-operational).
 Wi-Tek-Mesh MESH0CWM24C160002	Displays the device name.

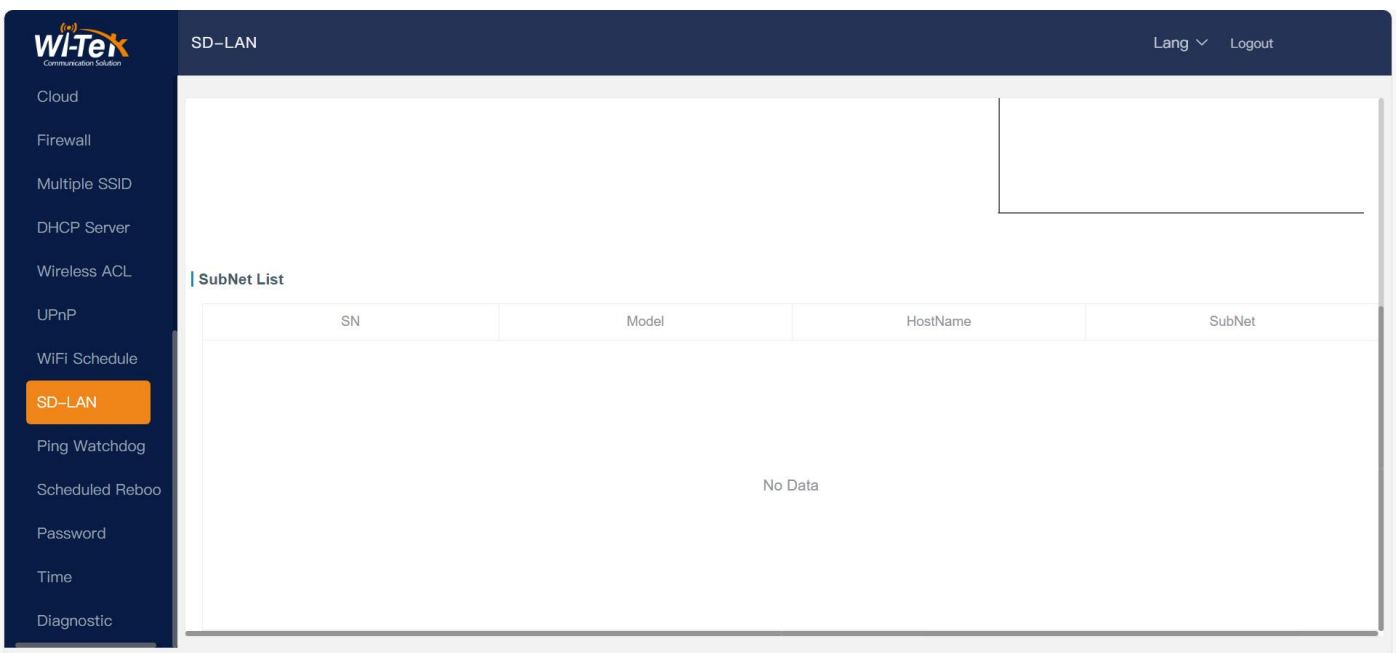
Latency Of Peers (Ms) Graph:

This graph is designed to show the latency (in milliseconds) between the current device and its SD-LAN peers over time.



SubNet List Section:

This table is intended to list subnets within the SD-LAN environment.



Parameter	Describe
SN	Serial number for identifying each entry.
Model	The model of the device associated with the subnet.

HostName	The hostname of the device in the subnet.
SubNet	Subnet address.

-END

10.10. Ping Watchdog

Ping Watchdog allows the access point to continuously ping a specific remote host for connection status using a user-defined IP address (or an internet gateway).

Parameter	Describe
Enable Ping Watchdog	Click the button to enable or disable.
Address	Specify the reachable IP address or domain name
Checking Interval	Specify the time interval between two continuous ping packets.
Number of Failure	Specify the number of failed Ping packets.
Ping Timeout	Specify the times of Ping timeout.
Action	<p>After the above conditions are met, the following actions are performed.</p> <ul style="list-style-type: none"> * Reboot *Close wireless *Restart Network *Enable Rescue SSID *NO Action

-END

10.11. Scheduled Reboot

Configure the parameters of the scheduled restart plan for the Mesh Wi-Fi.

Parameter	Describe
Scheduled Reboot	Click the button to enable or disable.
Reboot Cycle	Specify the reachable IP address or domain name *Every Day/ Every Week/Every Month
Date Select	Specify the date of scheduled reboot(Week&Month).
Reboot Time	Specify the time point for scheduled reboot.

-END

10.12. Password

This interface is used for modifying the device's login password and managing the hostname.

Parameter	Describe
Old Password	Enter the current login password of the device. Required for verification.
New Password	Set a new login password. Ensure it meets the device's password complexity requirements.
Confirm-Password	Re-enter the new password to confirm. Must match the "New Password" exactly.
HostName	Displays the current hostname of the device (shown as "Wi-Tek-Mesh" here). You can modify it to a custom name for easier identification in the network.
Confirm (for HostName)	Click to save the modified hostname.
Confirm (for Password)	Click to save the new password after filling in all password-related fields correctly.

-END

10.13. Time

This page allows you to set the time manually or to configure automatic time synchronization. The Mesh Wi-Fi can automatically update the time from an NTP server via the Internet.

The screenshot shows the 'TIME' configuration page in the Wi-Tex web interface. The page has a dark blue header with the Wi-Tex logo and navigation links for 'Lang' and 'Logout'. A sidebar on the left lists various system settings, with 'Time' highlighted in orange. The main content area contains the following configuration options:

- System Time:** A text input field showing '2025-01-05 21:26:38'.
- NTP:** A toggle switch that is currently turned on (blue).
- Time Zone:** A dropdown menu currently set to 'Asia/Shanghai'.
- Time Server 1:** A text input field containing '0.pool.ntp.org'.
- Time Server 2:** A text input field containing '1.pool.ntp.org'.
- Time Server 2:** A text input field containing '2.pool.ntp.org'.
- Confirm:** A blue button at the bottom of the configuration area.

Parameter	Describe
System Time	Display the current system time of the device.
NTP	Enable or disable NTP function.
Time Zone	Select your local time zone from this pull down list.
NTP Server	The server addresses used for NTP synchronization. The device will connect to these servers to get accurate time. Multiple servers improve the success rate of time synchronization.

--END

10.14. Diagnostic

Go to Advanced>Diagnosis page, and then you can transact Ping or Trace function to check connectivity of your network in the following page.

Parameter	Describe
Ping Testing Address	Specify the IP or domain name of the reachable network. * This diagnostic tool troubleshoots connectivity, reachability, and name resolution to a given host or gateway.
TRACERT Testing Address	Specify the IP or domain name of the reachable network. * This diagnostic tool tests the performance of a connection.

--END