User Guide
For WI-GP1412

Release version:V1.0.0

December 2025

Table of Contents

Product Specifications

Hardware Features	
Chipset	RTL9607C-VB+RTL8812FR+RTL8192FR+SI32280
CPU frequency	Dual core 1GHz
Memory	256MB DDR
Flash	128MB nand
Interfaces	1 x SC/APC GPON Port 4 x RJ45 10M/100M/1000M LAN Ethernet 1 x reset button 1 x WPS button 1 x Power jack 1 x Power switch 2 x RJ11 Phone jack
Power Supply	12V/1A
Wireless Features	
Standards	IEEE 802.11b/g/n/ac
Frequency	2.4G: 2.4~2.4835GHz 5G: 5.150GHz~5.825GHZ *Please follow national regulations to select the appropriate frequency.
Data Rates	2.4GHz: up to 300Mbps 5GHz: up to 867Mbps
MIMO	2.4GHz: 2x2 MIMO 5GHz: 2x2 MIMO
WIFI Antenna	2.4GHz: 2 x 5dBi External antennas 5GHz: 2 x 5dBi External antennas
Modulation schemes	OFDM - BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
	DSSS - DBPSK, DQPSK, CCK
Transfer Rate	HT20: up to 144 Mbps HT40: up to 300 Mbps VHT80: up to 867Mbps
Software Features	
General Protocols	**Wireless main Protocols:** ● IEEE 802.11a ● EEE 802.11b ● IEEE 802.11g ● IEEE 802.11n ● EEE 802.11ac **Network main Protocols** ● RFC 826 – ARP

	● RFC 4638 support - automatic MTU/MRU negotiation in PPPoE; ● RFC 1305 - NTP and/or RFC 4330 – SNTP ● RFC 791 – ICMP ● RFC 1305 - NTP and/or RFC 4330 - SNTP ● RFC0791 IP ● RFC0792 ICMP ● RFC0793 TCP ● RFC0826 Ethernet ARP ● RFC0894 IP over Ethernet ● RFC0922 Broadcasting Internet Datagrams ● RFC0950 Internet Standard Subnetting ● IEEE802.3 Ethertype ● IEEE802.1p ● RFC2516 PPP Over Ethernet (PPPoE) ● RFC1662 PPP in HDLC-like Framing ● RFC1332 PPP Internet Protocol Control Protocol ● RFC1042 A standard for the Transmission of IP Datagrams over IEEE 802 Networks ● IPoE (a.k.a IP over Ethernet over AAL5)
Network Features	● DHCP server、client ● NAT,NAPT and ALG ● DMZ and Port forwarding(Virtual server)PPTP、L2TP VPN、IPSEC VPN ● IGMP proxy and MLD for IPTV
Wireless Features	● Embedded AP with 4 SSIDs on each Radio ● Separate authentication for each SSID ● Wmm ● AutoChannel ● BSD ● WPA3/SAE Security
Other Features	● Flexible and secure SPI Firewall, Denial of Service (DoS) protection ● Port filtering、IP filtering and MAC filtering ● URL filter ● QOS Flow Control ● DDNS ● IPV6 ● Static route ● SNTP Data/time update from Internet Time Server
Management	● WEB GUI ● TR-069 remote management

Environment Requirement	
Operating Temperature	0°C~48°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5%~95% (typical)
EMC/Safety	
Regulation Compliance	CE
Safety Regulations	UL
Green Standard	RoHS

Chapter 1. Hardware Overview

The following section provides a detailed hardware description of the WI-GP1412 device, including information about the LED indicators and the casing panel.

1.1 Hardware Description

Diagram :

Figure A

Figure B

1.1.1 Front LED

The front LED provides a simple interface for monitoring the WI-GP1412. Figure 1-1-1 illustrates the front LED of the WI-GP1412.

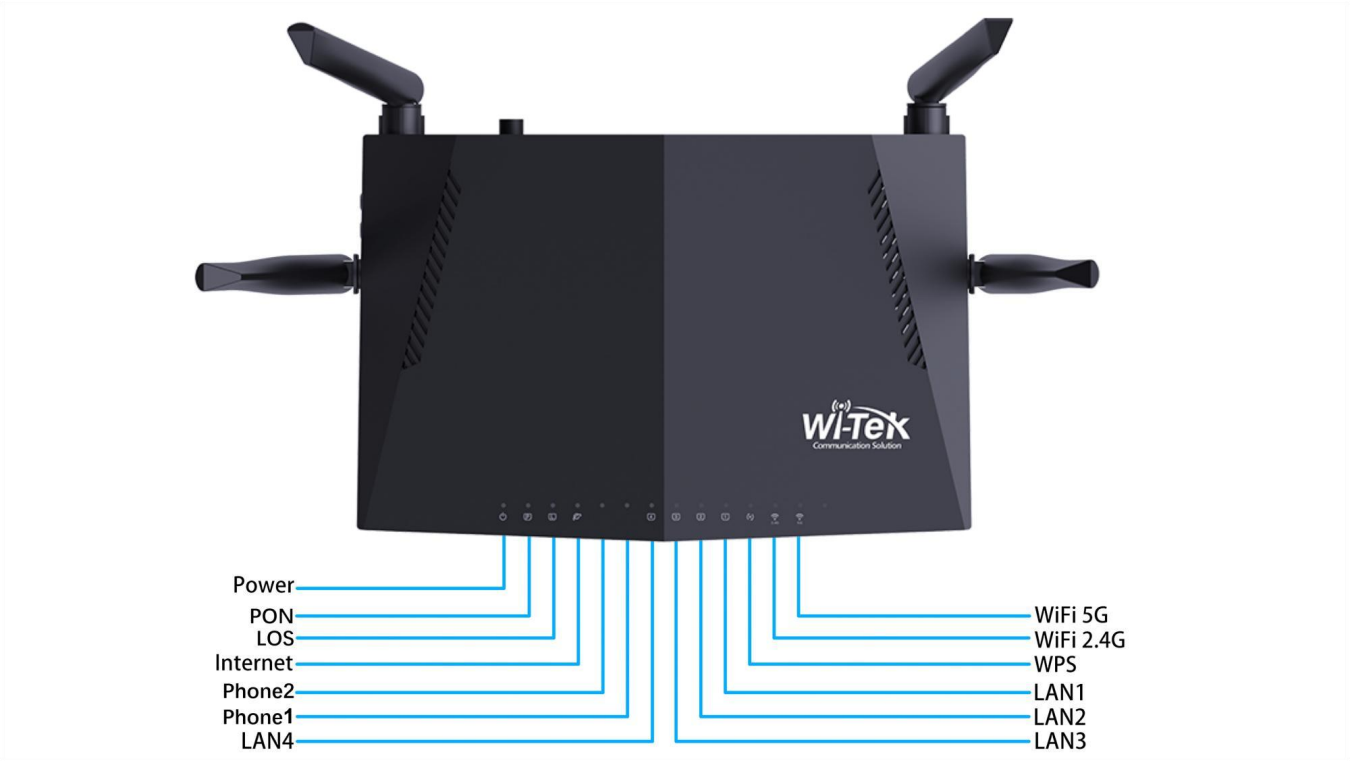


Figure 1-1-1 WI-GP1412

Top View

1.1.2 LED Indications

The LEDs on the front panel indicate the real-time status of port links, wireless data activity, system power, phone status, and WPS, helping with monitoring and troubleshooting when necessary. Figure 1-1-1 and Table 1-1-2 illustrate the LED indications for the WI-GP1412 device.

LED	STATE	FUNCTION
POWER	On	Device power on
	Off	Device power off
PON	On	PON registration is complete
	Flash	PON registration is ongoing
	Off	No PON registration initiated
LOS	Flash	Optical signal loss
	Off	Optical signal is without fault
Internet	On	Internet wan is connected
	Off	Internet wan is not connected
Phone1	On	VOIP is running
	Off	VOIP is not yet ready
Phone2	On	VOIP is running
	Off	VOIP is not yet ready
LAN1-4	On	Link is established.
	Flash	Packets are transmitting or receiving
	Off	LAN port is not connected
WPS	Flash	WPS is triggered
	Off	WPS is connected or disable
2.4G	On	The 2.4GHz Wi-Fi is activated
	Flash	Device is transmitting data wirelessly over 2.4GHz
	Off	The 2.4GHz Wi-Fi is disabled
5G	On	The 5GHz Wi-Fi is activated
	Flash	Device is transmitting data wirelessly over 5GHz

	Off	The 5GHz Wi-Fi is disabled

Table 1-1-2 LED Indications

1.1.3 Rear Panel

The rear panel provides the physical connectors for connecting to the power adapter and any other network devices. Figure 1-1-3 illustrates the rear panel of the WI-GP1412 device.

Figure 1-1-3-1 Rear Panel of the WI-GP1412 Device

Interface	Description
PON	Facilitates internet access by connecting to a fiber-optic network for optical communication
LAN1-4	Connect to the user's PC or network devices
Phone1-2	To use VOIP services, insert the telephone handset into this port.
Power Button	Power on and off equipment
Power Jack	Connect to the power adapter provided in the package

Table 1-1-3-2 Interface Indications

1.1.4 Side Panel

The side panel provides the RESET and WPS buttons. Figure 1-1-4 illustrates the side panel of the WI-GP1412 device.

Figure 1-1-4 side panel of the WI-GP1412

Interface	Description
WPS	A short press of over 1 second activates WPS, while a long press of more than 3 seconds turns the wireless on or off
Reset	Press the Reset button gently for 3 seconds and then release it. The system restores to the factory default settings

Chapter 2. Connecting to the Router

2.1 System Requirements

- Fiber Broadband Internet Access Service
- PCs with a working Ethernet Adapter and an Ethernet cable with RJ45 connectors
- PC subscribers use Windows XP, Windows Vista, Windows 7/8/10, MAC OS 9 or later, or Linux, UNIX or other platforms compatible with TCP/IP protocols
- The above PC is installed with a Web browser

2.2 Installing the Router

Before you begin the installation of the optical network unit (ONU), also known as the optical network terminal (ONT) or simply the "optical modem," make sure that the fiber-optic service from your ISP is properly connected and operational. If you face any issues with the service or are uncertain about its status, please contact your ISP for assistance. Once you have confirmed that the fiber-optic line is active, you can proceed with the installation of the optical modem as per the following steps. Please ensure that the power is unplugged and that your hands are dry during the installation process.

Step 1. Power off your PC, optical network unit (ONU), and any other network equipment.

Step 2. Find an optimal location for your optical network unit (ONU). The best location is usually at the center of your wireless network coverage area.

Step 3. Use an Ethernet cable to connect your PC or network switch/hub in the LAN to the LAN ports of the optical network unit (ONU).

Step 4. Connect the power adapter to the power socket on the optical network unit (ONU) and plug the other end into an electrical outlet. Then, power on the optical network unit (ONU).

Step 5. Power on your PC and any other network equipment.

Chapter 3. Quick Installation Guide

This chapter will show you how to configure the basic functions of your WI-GP1412.

	A computer with wired Ethernet connection to the WI-GP1412 is required for the first-time configuration.

3.1 Manual Network Setup - TCP/IP Configuration

The default IP address of the WI-GP1412 is 192.168.1.1 and the default Subnet Mask is 255.255.255.0. These values can be altered according to your preferences within the web UI of the WI-GP1412. In this section, we utilize all the default settings for illustration purposes.

Regardless of whether the WI-GP1412 is set up through a wired or wireless connection, the PC must first be assigned an IP address. Prior to connecting your local PC to the WI-GP1412 via a wired or wireless connection, please initially configure the IP address for your PC using one of the following two methods.

- **Obtaining an IP address automatically**
- **Configuring the IP address manually**

In the following sections, we'll introduce how to install and configure the TCP/IP correctly in **Windows 11**. And the procedures in other operating systems are similar. First, make sure your Ethernet Adapter is working, and refer to the Ethernet adapter's manual if needed.

3.1.1 Obtaining an IP Address Automatically

Summary:

- Set up the TCP/IP Protocol in "**Obtain an IP address automatically**" mode on your PC
- Then the WI-GP1412 built-in DHCP server will assign an IP address to the PC automatically.

If you are certain that the DHCP server of the WI-GP1412 is enabled, you can configure the TCP/IP protocol on your PC to "**Obtain an IP address automatically.**" Subsequently, the built-in DHCP server of the WI-GP1412 will automatically assign an IP address to the PC.

PC configuration automatically obtains IP address

1) Use the search bar on your PC to search for and open the Control Panel.
2) Select "Network and Sharing Center," then choose "Change Adapter Settings."

Figure 3-1-1-1 Open Network and Sharing Center

Figure 3-1-1-2 Open the "Change Adapter Settings" option

3) Right-click on the network adapter that is directly connected to the WI-GP1412, and then click on the "**Properties**" option

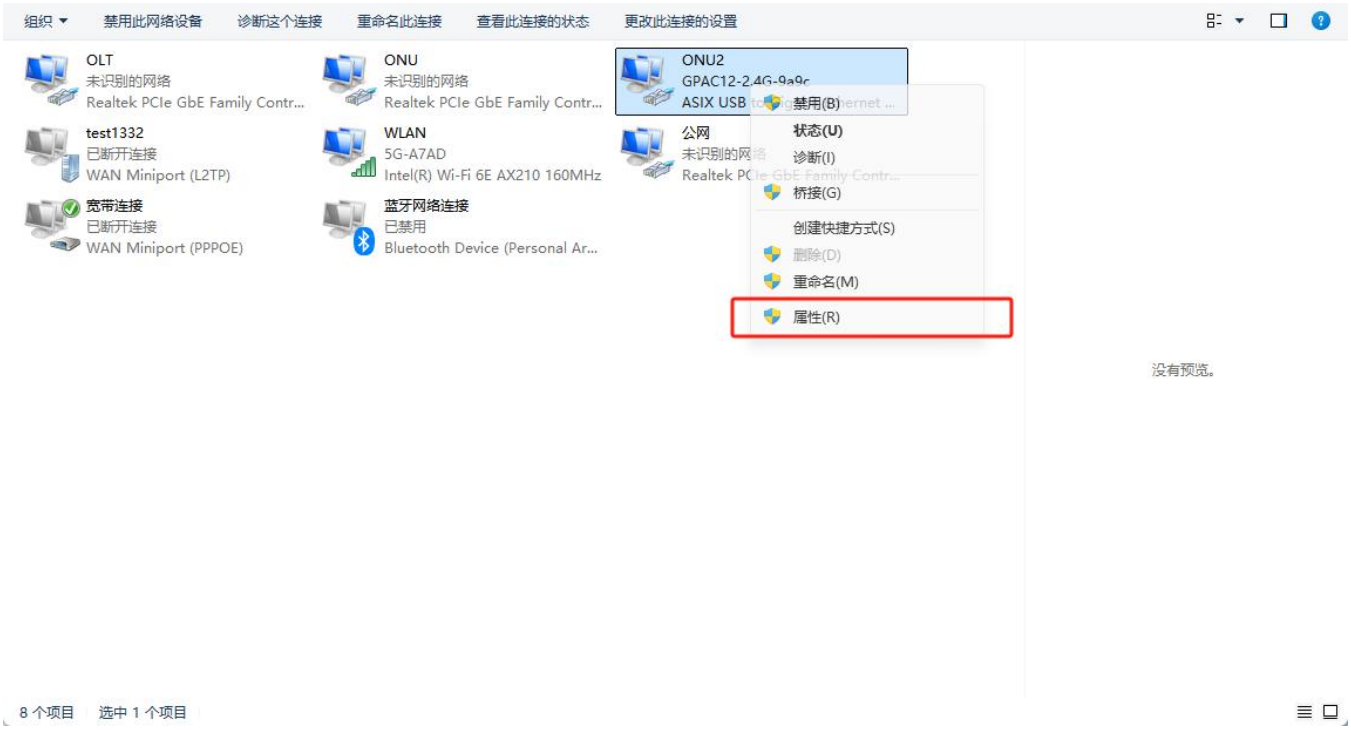


Figure 3-1-1-3 Right-click and select "Properties."

4) In the prompt window shown below, double-click on the **Internet Protocol Version 4(TCP/IPv4)**

Figure 3-1-1-4 Select Protocol

5) Choose Obtain an IP address automatically, and Obtain DNS server address automatically as shown in the figure below. Then click OK to save your settings

Figure 3-1-1-5 Configure automatic retrieval

3.1.2 Configuring the IP Address Manually

Summary:

- Set up the TCP/IP Protocol for your PC
- Configure the network parameters. The IP address is ***192.168.1.xxx*** ("xxx" is any number from 2 to 254), Subnet Mask is ***255.255.255.0***, and Gateway is ***192.168.1.1***(The Router's default IP address)

If you are certain that the DHCP server of the WI-GP1412 is disabled, you can manually configure the IP address. The IP address for your PC should be 192.168.1.xxx (within the same subnet as the IP address of the WI-GP1412, where "xxx" is any number from 2 to 254), the Subnet Mask should be 255.255.255.0, and the Gateway should be 192.168.1.1 (the default IP address of the WI-GP1412).

1) Continue the settings from the last figure. Select **Use the following IP address** radio button

2) If the LAN IP address of the WI-GP1412 is 192.168.1.1, enter an IP address of 192.168.1.x (where x is a number from 2 to 254), and a Subnet mask of 255.255.255.0.

3) Enter the LAN IP address of the WI-GP1412 (the default IP is 192.168.1.1) into the default gateway field.

4) Select **Use the following DNS server addresses** radio button. In the preferred DNS Server field, you can enter the DNS server IP address provided by your local ISP. Then click OK to save your settings.

Figure 3-1-2-1 IP and DNS Server Addresses

Now, you can run the Ping command in the **command prompt** to verify the network connection between your PC and the WI-GP1412. The following example is in **Windows 11** OS. Please follow the steps below:

1. Press the Win+R keys on your keyboard, type "cmd" in the Run dialog box, and then click "OK."

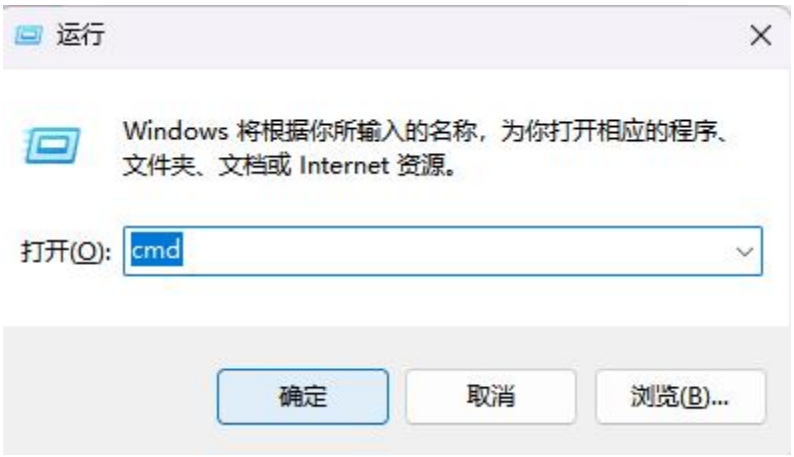


Figure 3-1-2-2 Enter cmd

2. Open a command prompt, and type ping **192.168.1.1**, and then press **Enter**

- If the result displayed is similar to Figure 3-1-2-3, it means the connection between your PC and the WI-GP1412 has been established well.

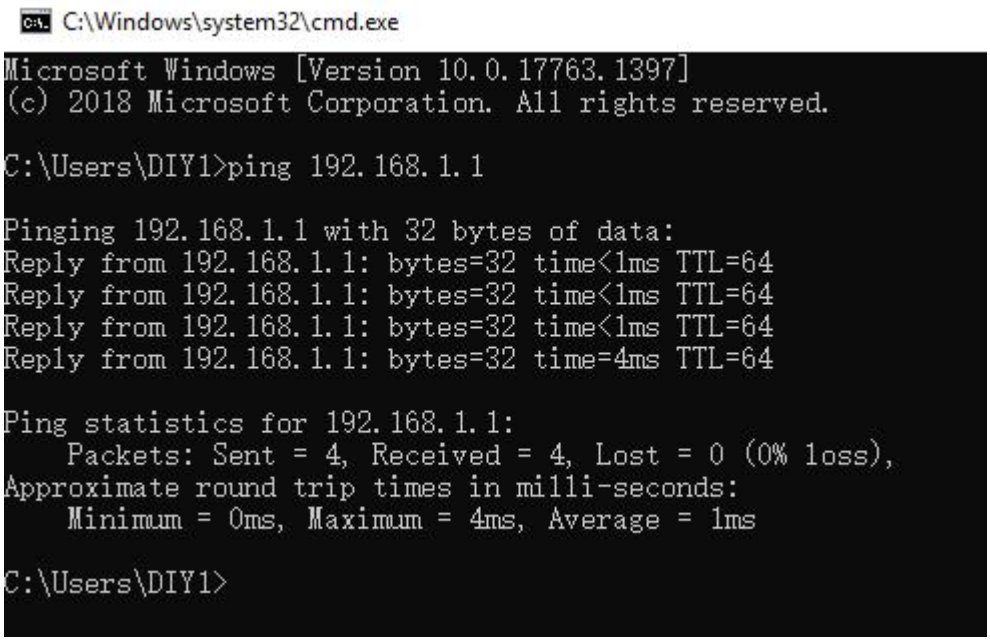


Figure 3-1-2-3 Successful Ping Command

- If the result displayed is similar to Figure 3-1-2-4, it means the connection between your PC and the Router has failed

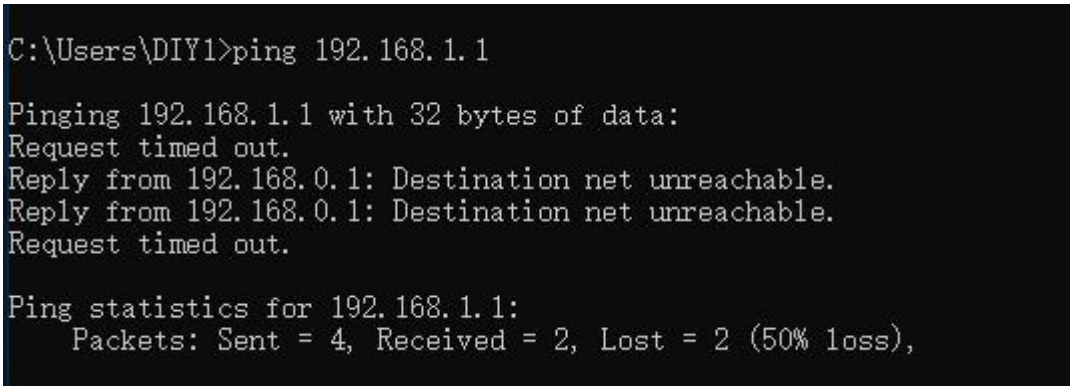


Figure 3-1-2-4 Failed Ping Command

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.

	If the Router's IP address is 192.168.1.1, your PC's IP address must be within the range of 192.168.1.2 ~ 192.168.1.254.

3.2 Starting Setup in the Web UI

It is easy to configure and manage the WI-GP1412 device with the web browser.

Step 1. To access the configuration utility, open a web-browser and enter the default IP address http://192.168.1.1 in the web address field of the browser

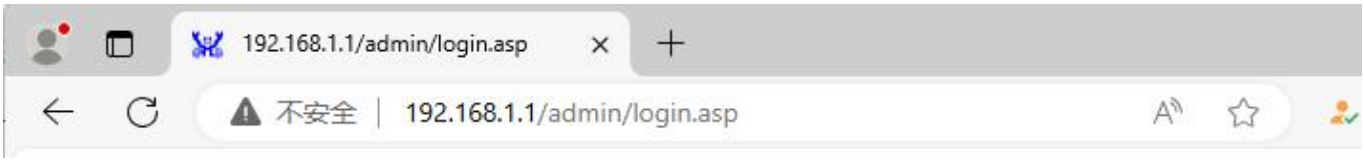


Figure 3-2-1 Login the Router

Enter "admin" and "admin" as your User Name and Password in the login window, or use the account and password provided by your service provider. Click **Log In** or press **Enter**.

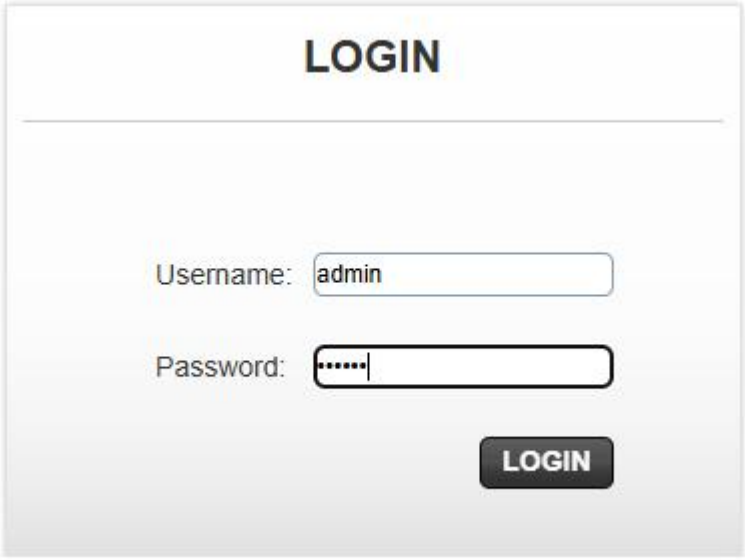


Figure 3-2-2 Login Window

	If the above screen does not pop up, it may mean that your web-browser has been set to a proxy. Go to Tools menu>Internet Options>Connections>LAN Settings in the screen that appears, cancel the Using Proxy checkbox, and click OK to finish it.

After entering the user name and password, click the “login” button,enter the home page screen appears as Figure 3-2-3

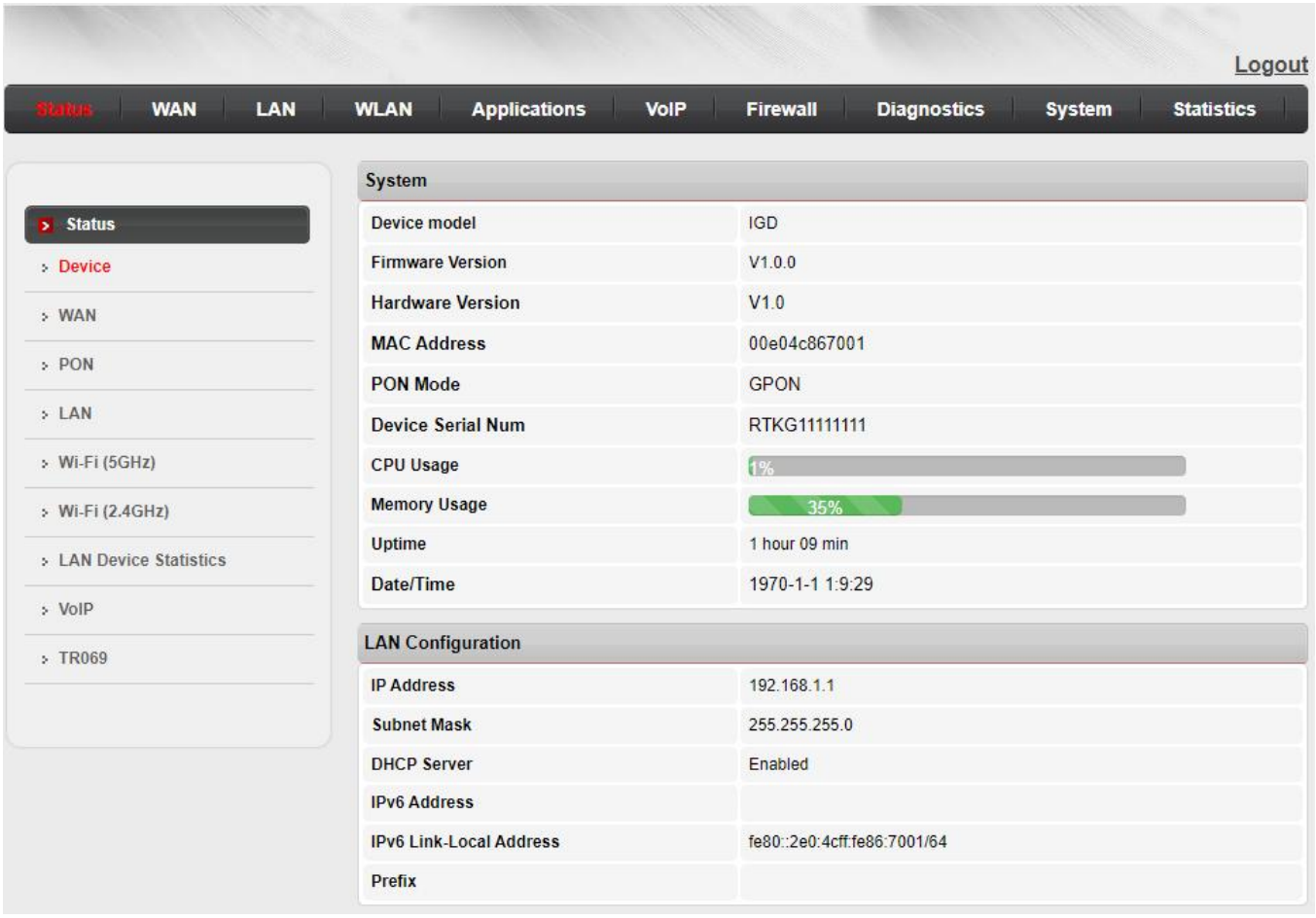


Figure 3-2-3 WI-GP1412 Web Home Page

Step 2. Select "WAN," and you can create or modify the WAN connection yourself.

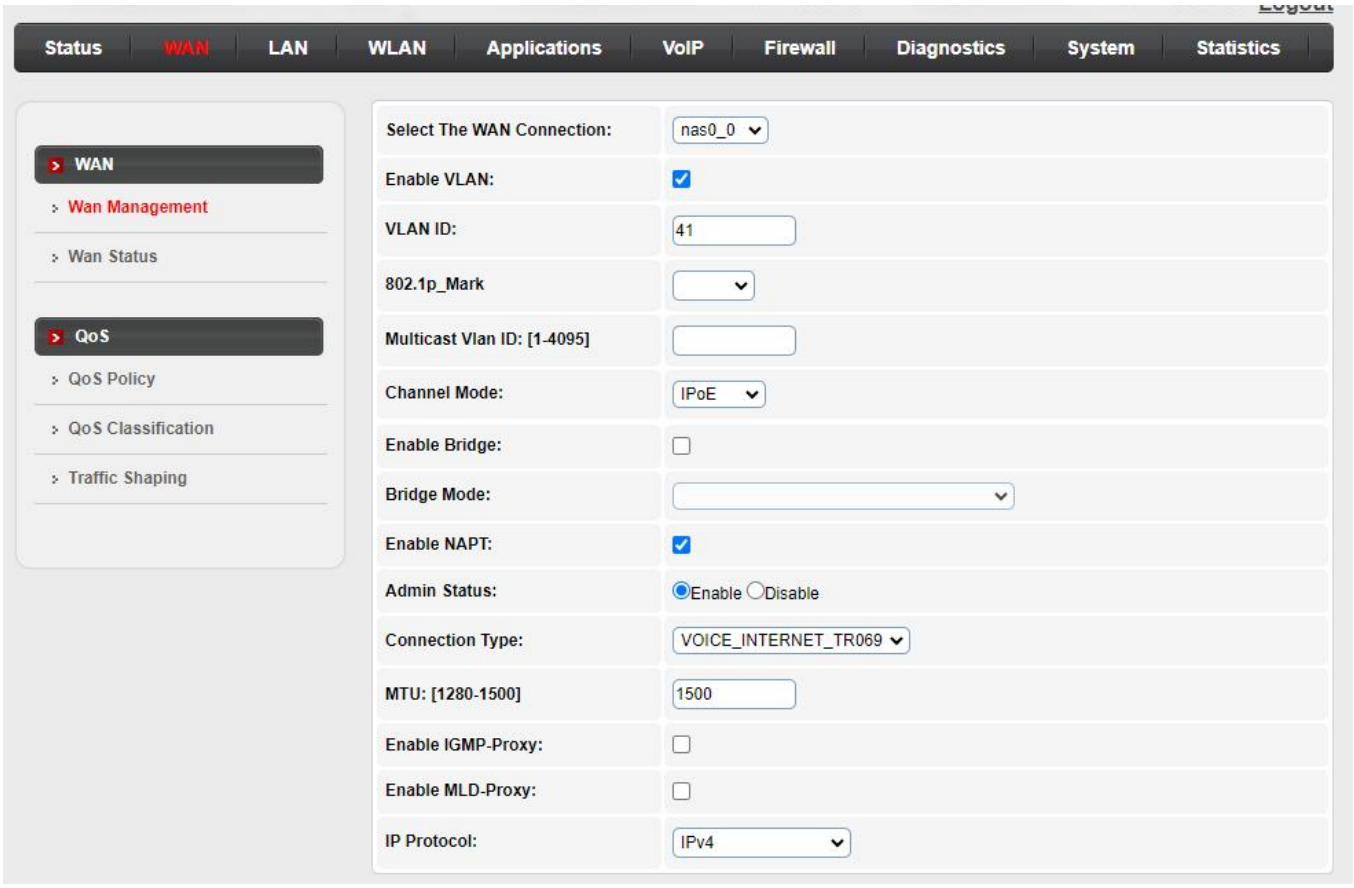


Figure 3-2-4 Configure the WAN Priority Mode.

Step 3. Choose "**WLAN**" and you can configure the WIFI information.

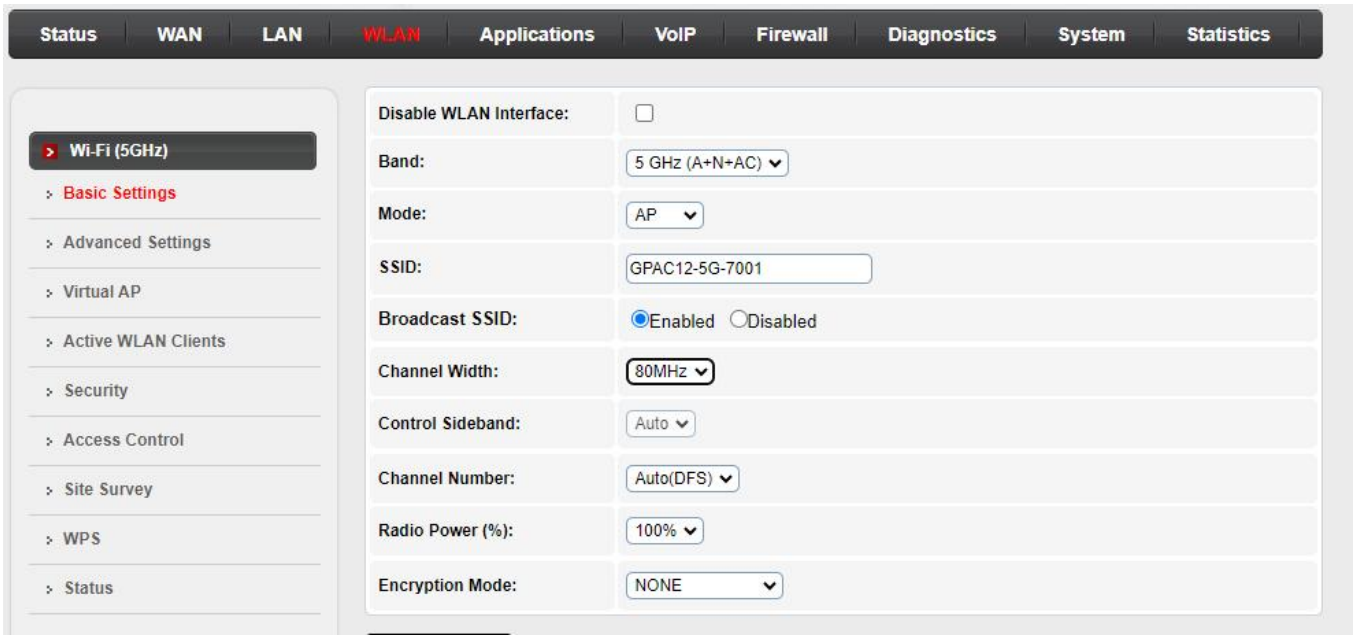


Figure 3-2-5 Configure the WIFI Information

Step 4. Choose "**LAN**" and you can configure the LAN Interface Setup.

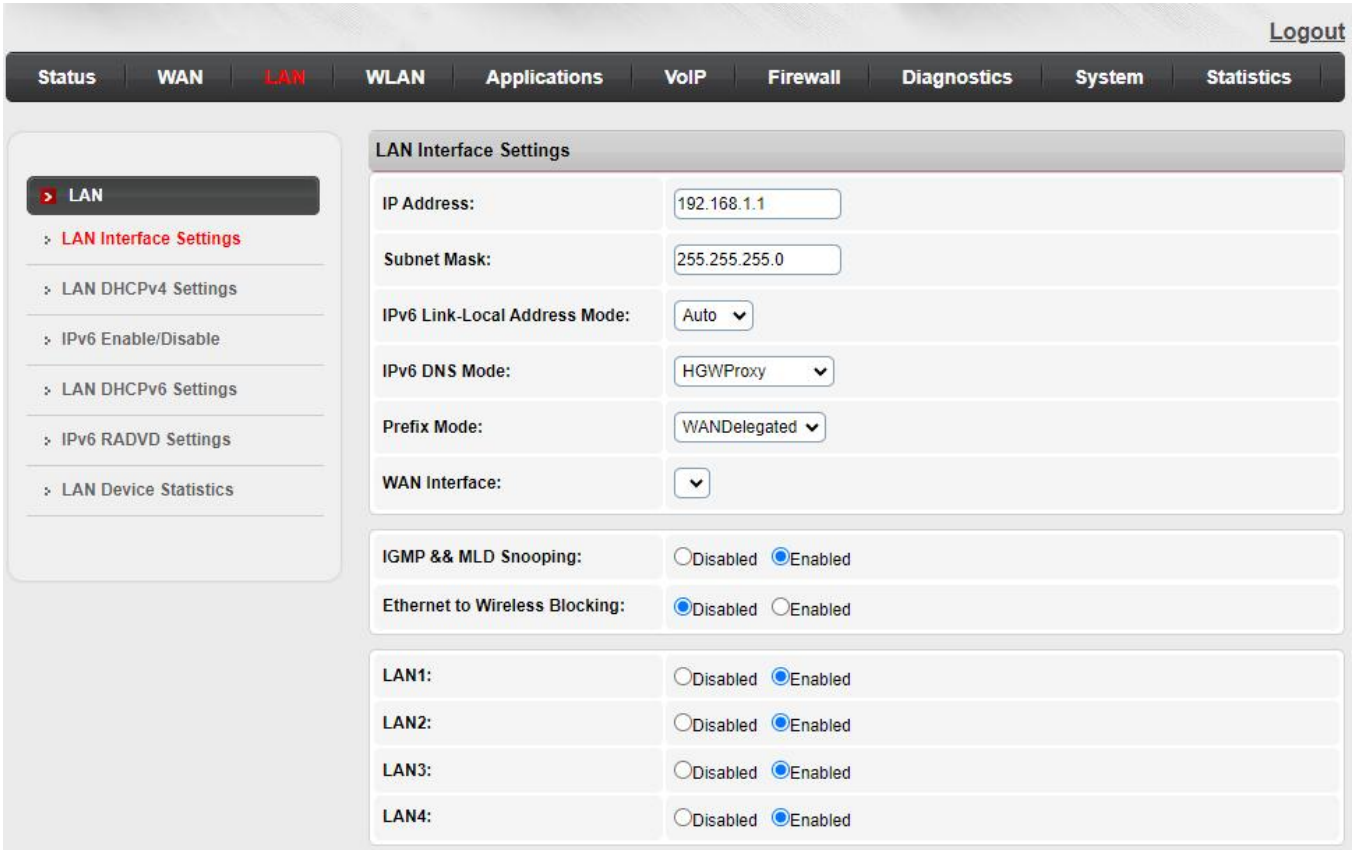


Figure 3-2-6 Configure LAN Interface Setup

Step 5. In the "System" configuration, you can set the authentication data reported to the OLT, such as the Serial Number (SN), Logical Operator Identifier (LOID), LOID password, and PASSWORD.

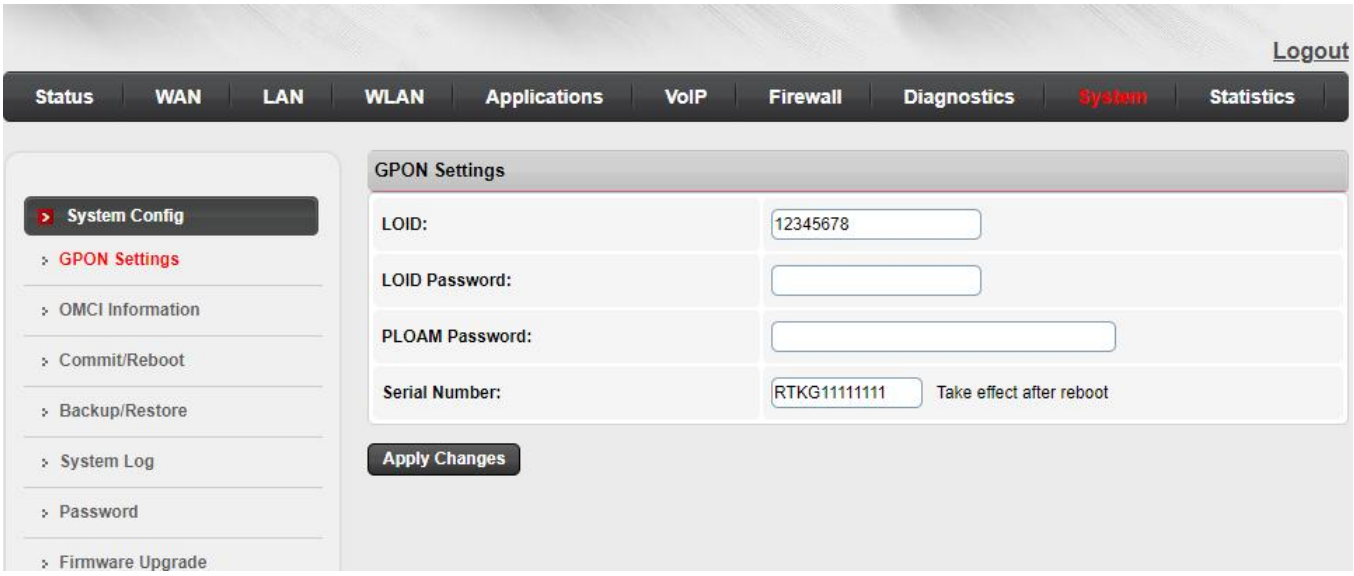


Figure 3-2-7 GPON Configuration Page

Chapter 4. Configuring the ONU

This chapter provides a comprehensive overview of the main functions and features of the WI-GP1412, enabling you to manage it with ease.

4.1 Home

4.1.1 Device status

On this page, you can view information about the WI-GP1412 device's CPU usage status, memory usage status, operating time, and local area network (LAN) configuration.

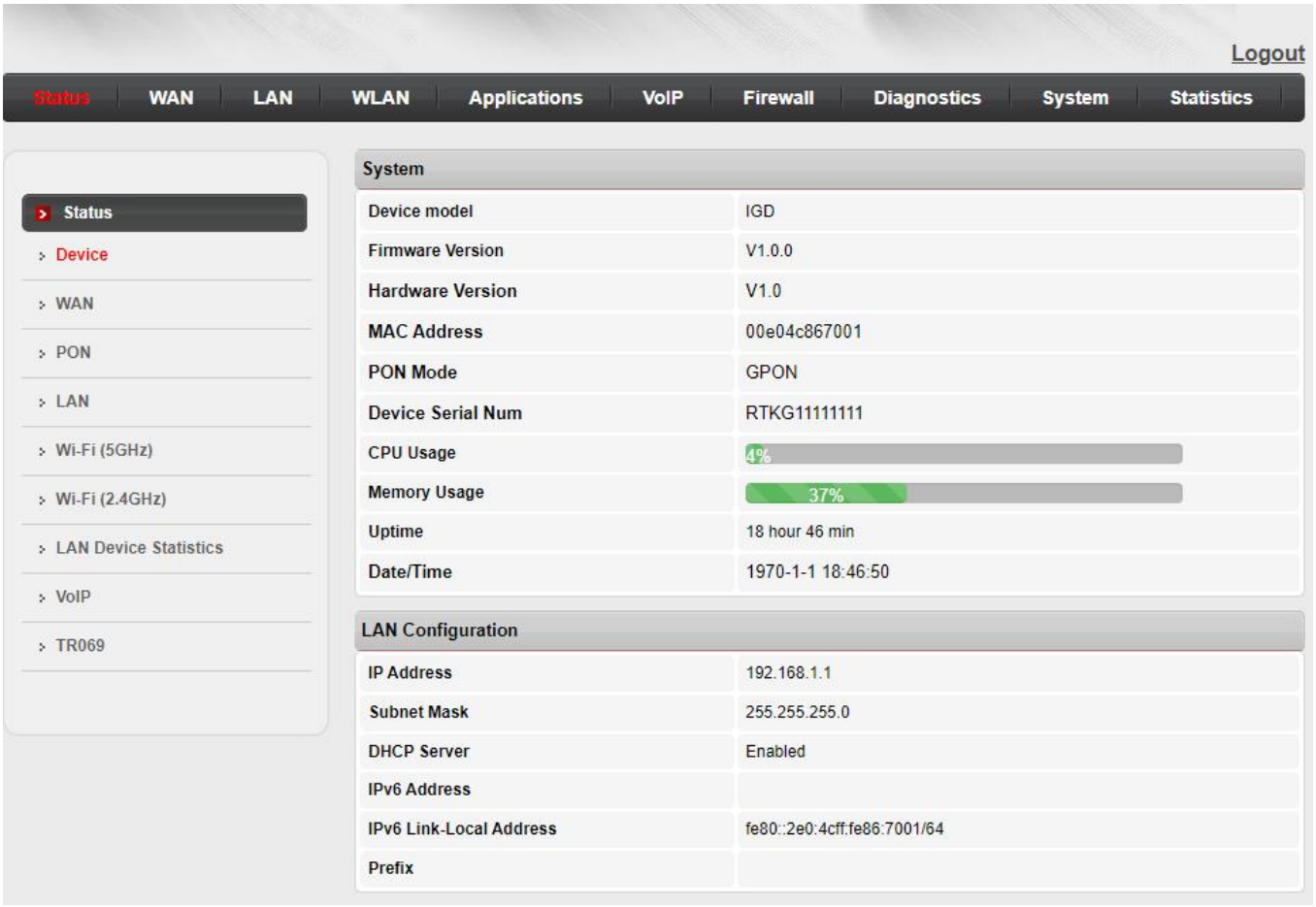


Figure 4-1-1 Device status

4.1.2 WAN Port Status

On this page, you can view the current WAN connection network information for the WI-GP1412 device.

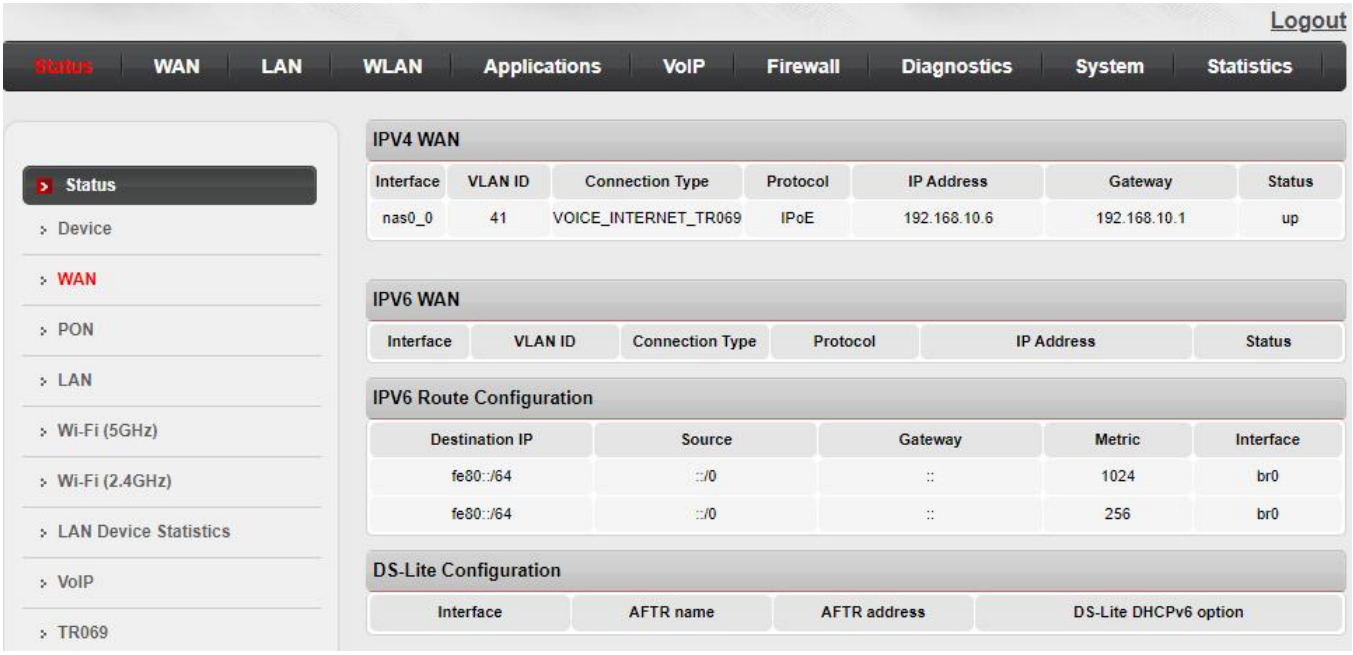


Figure 4-1-2 WAN Port status

4.1.3 PON Port Status

On this page, you can view the current PON status information for the WI-GP1412 device.

Figure 4-1-3 PON Port status

4.1.4 LAN Port Status

On this page, you can view the current LAN connection information for the WI-GP1412 device.

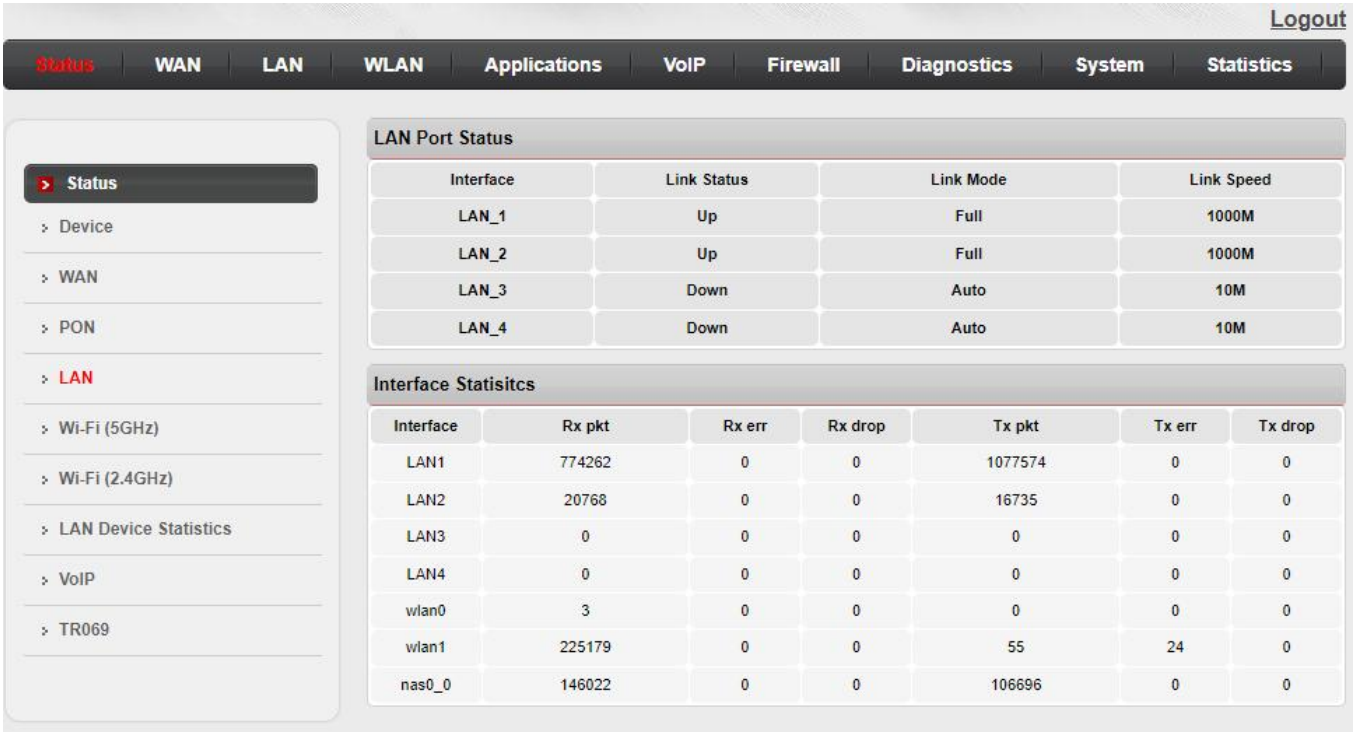


Figure 4-1-4 LAN Port status

4.1.5 Wi-Fi Status

On this page, you can view the current wireless mode, channel, and other related information.

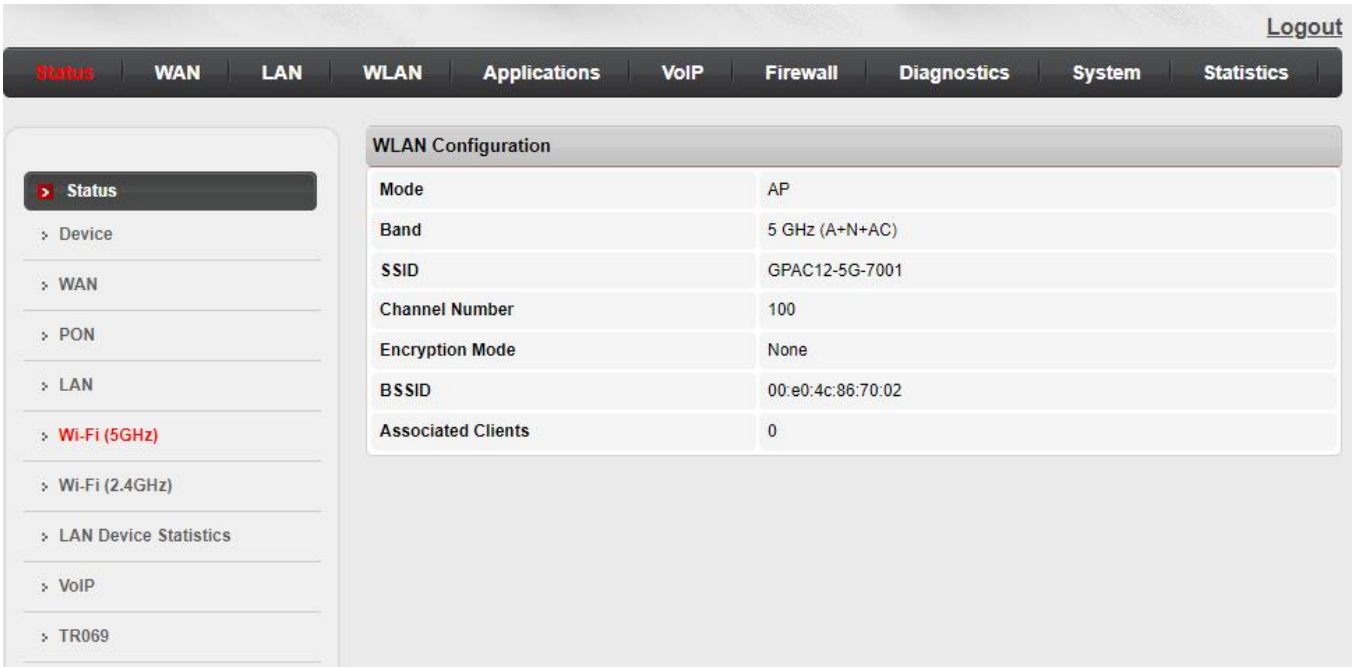


Figure 4-1-5-1 Wi-Fi(5GHz) Status

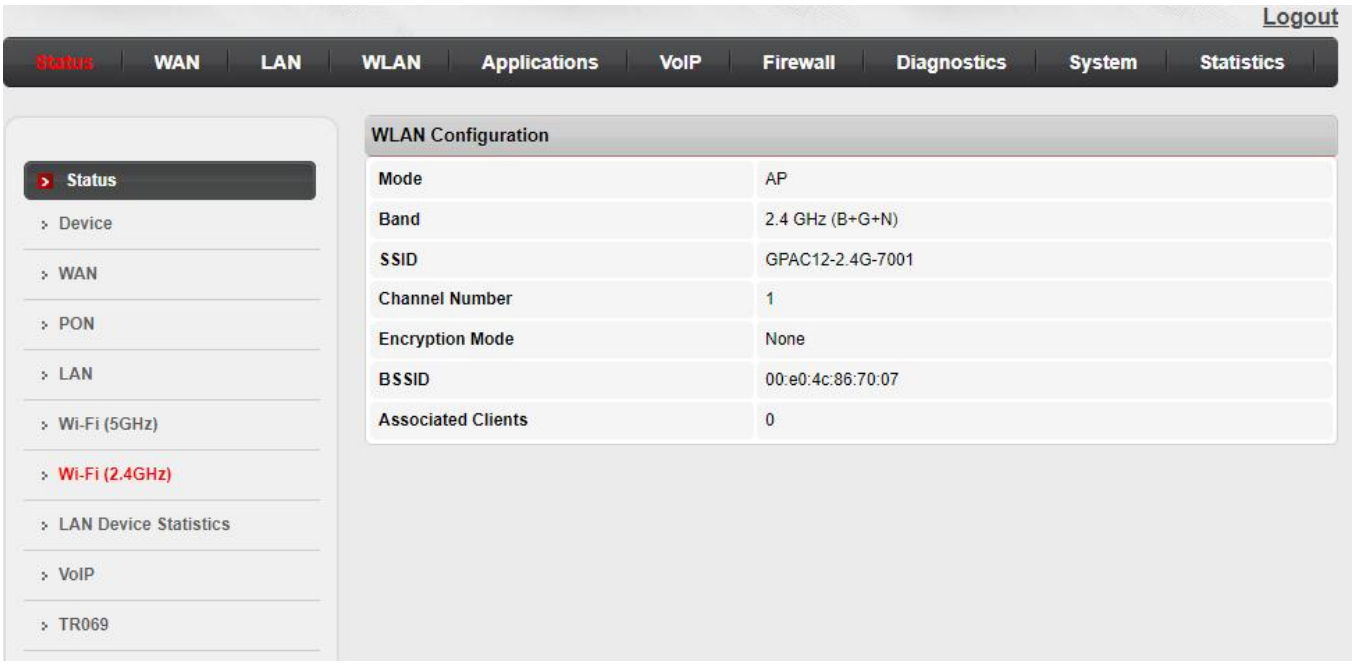


Figure 4-1-5-2 Wi-Fi(2.4GHz) Status

4.1.6 LAN Device Status

On this page, you can view information about the terminal devices connected to the LAN side.

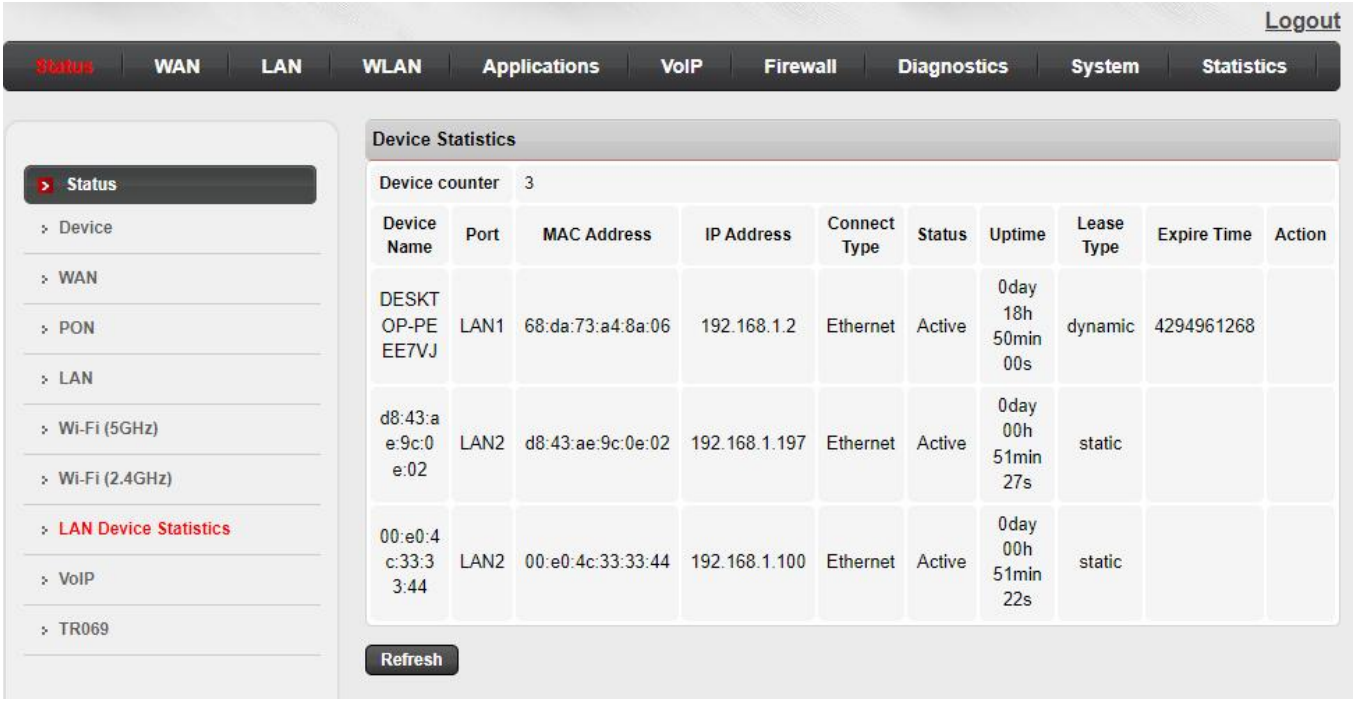


Figure 4-1-6 Wi-Fi(2.4GHz) Status

4.1.7 VOIP Status

On this page, you can view the current VOIP registration status of the WI-GP1412 device.

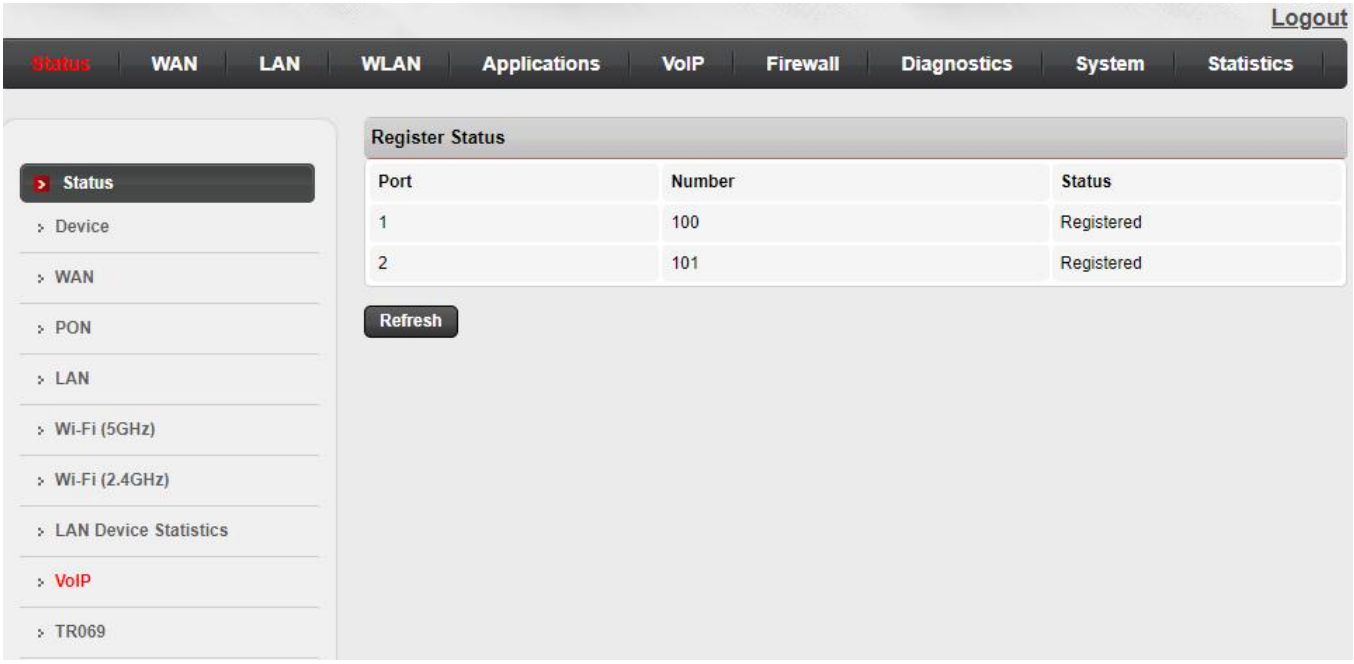


Figure 4-1-7 VOIP Status

4.1.8 TR069

On this page, you can view the current TR069 status information for the WI-GP1412 device.

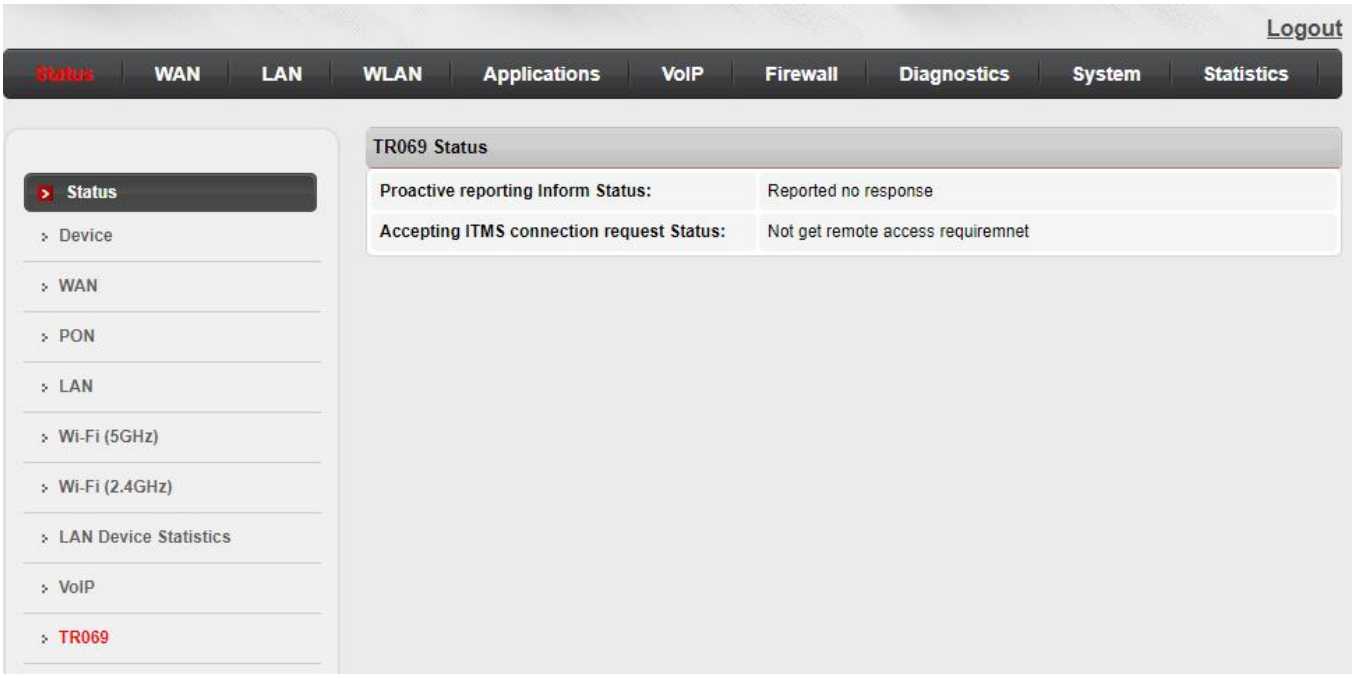


Figure 4-1-8 TR069 Status

4.2 Settings

4.2.1 WAN

On this page, you can configure the parameters of the WAN interface.

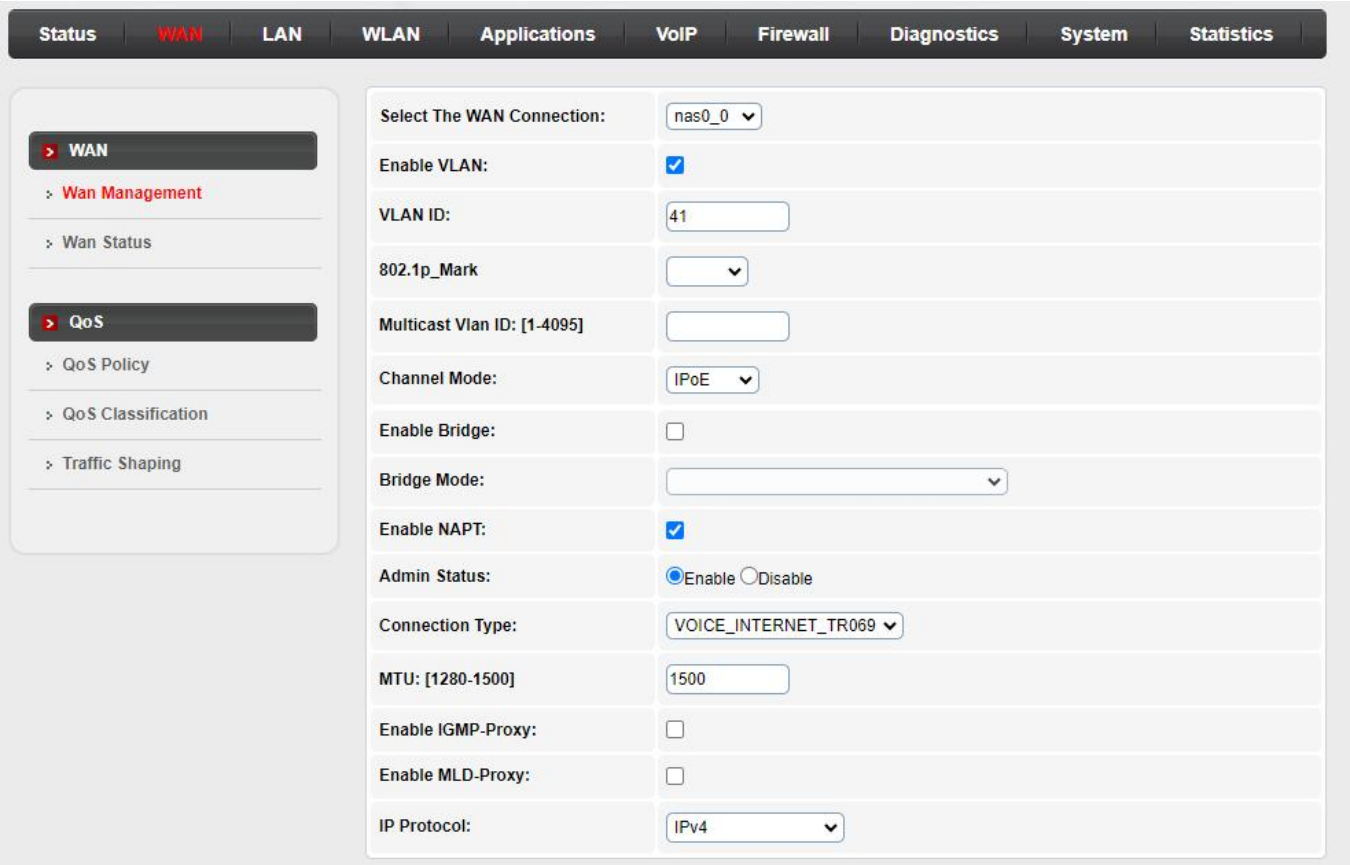


Figure 4-2-1 WAN

4.2.1.1 WAN Management

On this page, you can establish or modify WAN connection configurations. Each WAN connection can be set up in different modes, such as DHCP Router mode, PPPoE Router mode, and Static Router mode. Additionally, VLAN tagging can be configured for each WAN connection, which can be more helpful for users to adapt to different environmental needs.

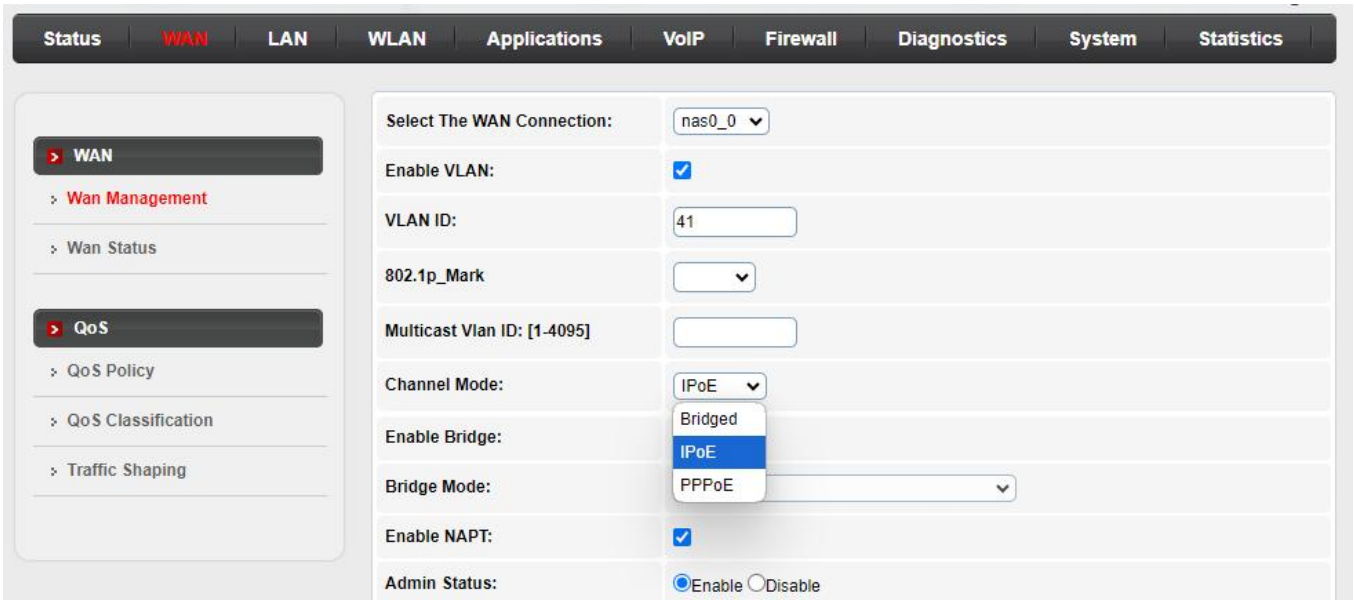


Figure 4-2-1-1-1 WAN Management

DHCP

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

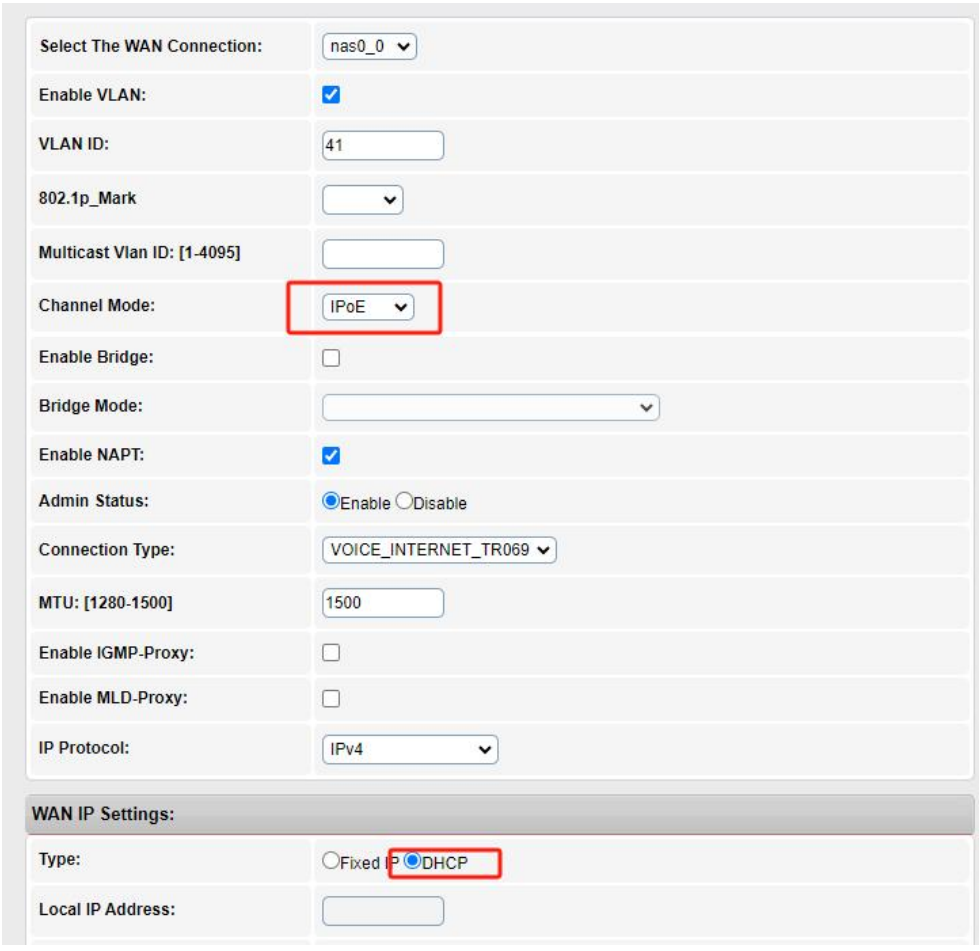


Figure 4-2-1-1-2 WAN DHCP

Object	Description
MTU	You can keep the maximum transmission unit (MTU) as default.
VLAN ID	Enter the VLAN ID value provided by your ISP.
Connection Type	From this feature, user can distinguish different services.

Static IP

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

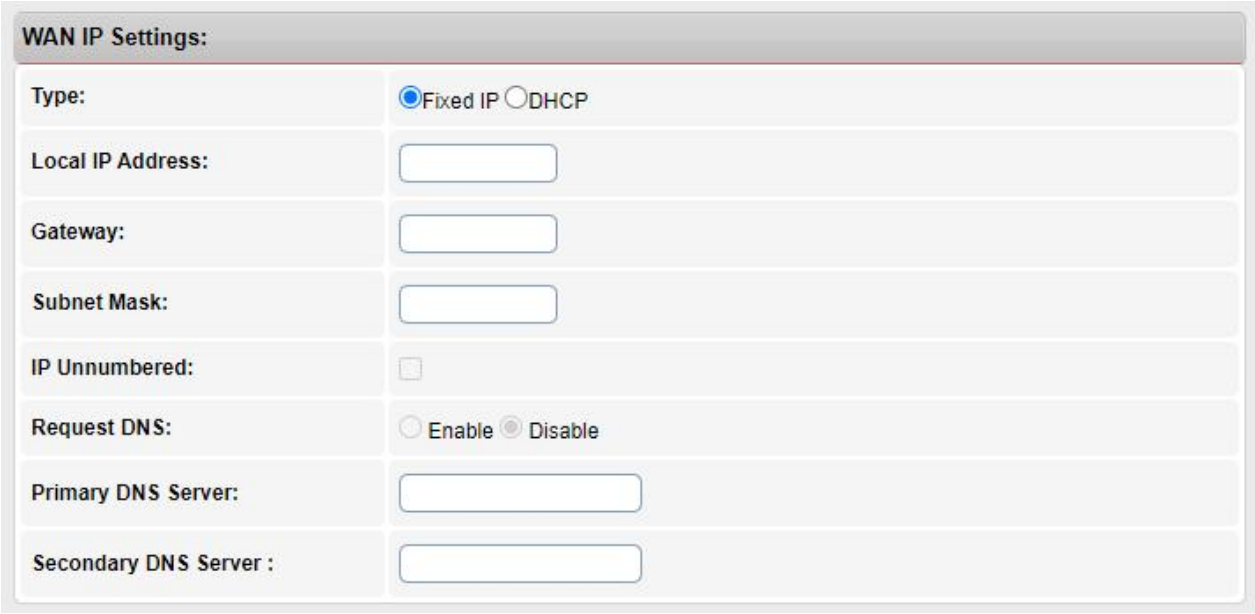


Figure 4-2-1-1-3 WAN Static IP

Object	Description
Local IP Address	Enter the WAN IP address provided by your ISP. Inquire your ISP if you are not clear.
Subnet Mask	Enter WAN Subnet Mask provided by your ISP.
Gateway	Enter the WAN Gateway address provided by your ISP.
Primary DNS Server	Enter the necessary DNS address provided by your ISP.
Secondary DNS Server	Enter the other DNS address if your ISP provides you with 2 such addresses, and it is optional.
MTU	You can keep the maximum transmission unit (MTU) as default.
VLAN ID	Enter the VLAN ID value provided by your ISP.
Connection Type	From this feature, user can distinguish different services.

PPPoE

Select PPPoE, if your ISP is using a PPPoE connection and provide you with PPPoE user name and password information.

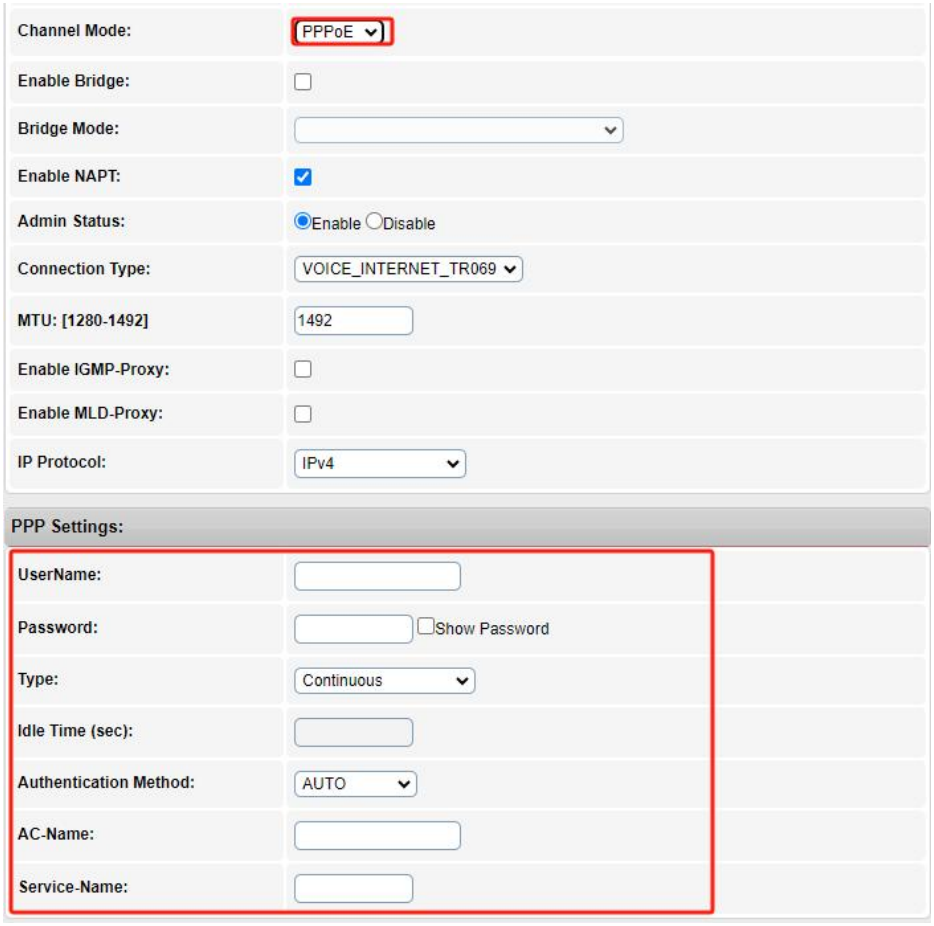


Figure 4-2-1-1-4 WAN PPPoE

Object	Description
Username	Enter the User Name provided by your ISP.
Password	Enter the password provided by your ISP.
VLAN ID	Enter the VLAN ID value provided by your ISP.
Connection Type	From this feature, user can distinguish different services.
Service Name	Type the name of this router.
MTU	You can keep the maximum transmission unit (MTU) as default.
Type	Select “Continuous”, “Connect on Demand” or “Manual”.

4.2.1.2 IPv6

You can configure IPv6 in this page. It's support 4 kinds of IPv6 Address Mode.

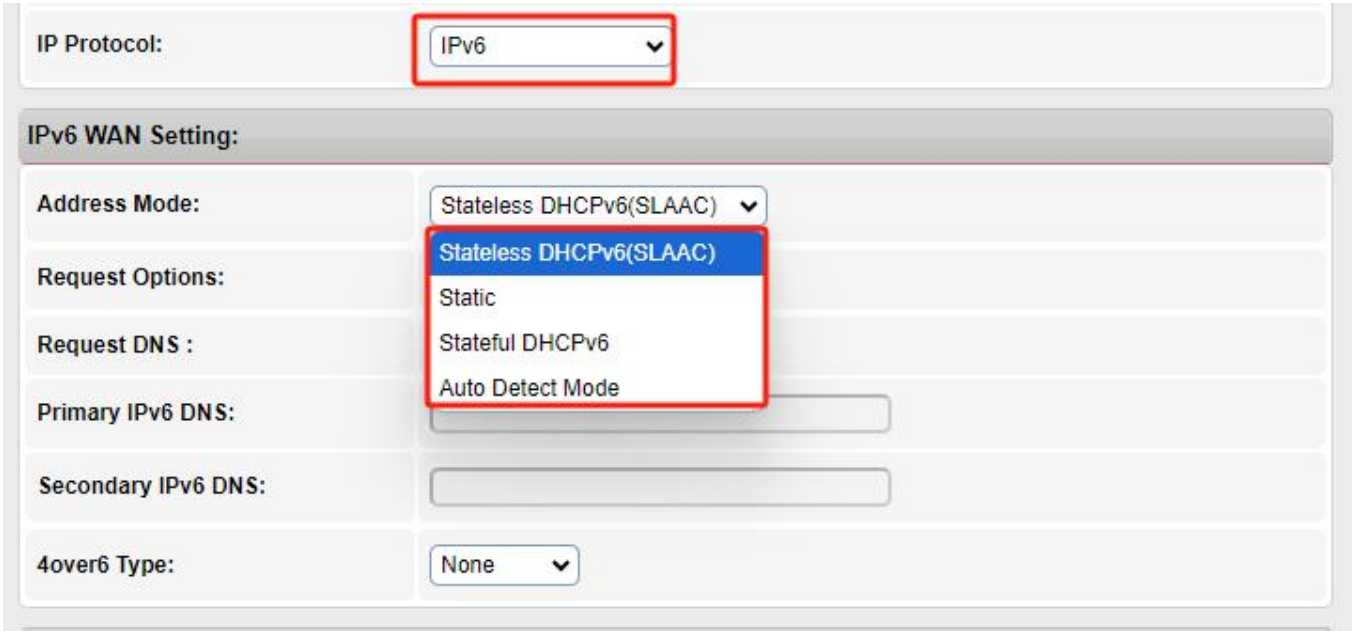


Figure 4-2-1-2-1 IPv6 Address Mode

IPv6 Stateless DHCPv6(SLAAC)

Object	Description
Address Mode	Current Address Mode Stateless DHCPv6(SLAAC).
Request Options	WAN IPv6 Prefix address request.
Request DNS	WAN IPv6 DNS automatic or manual write.

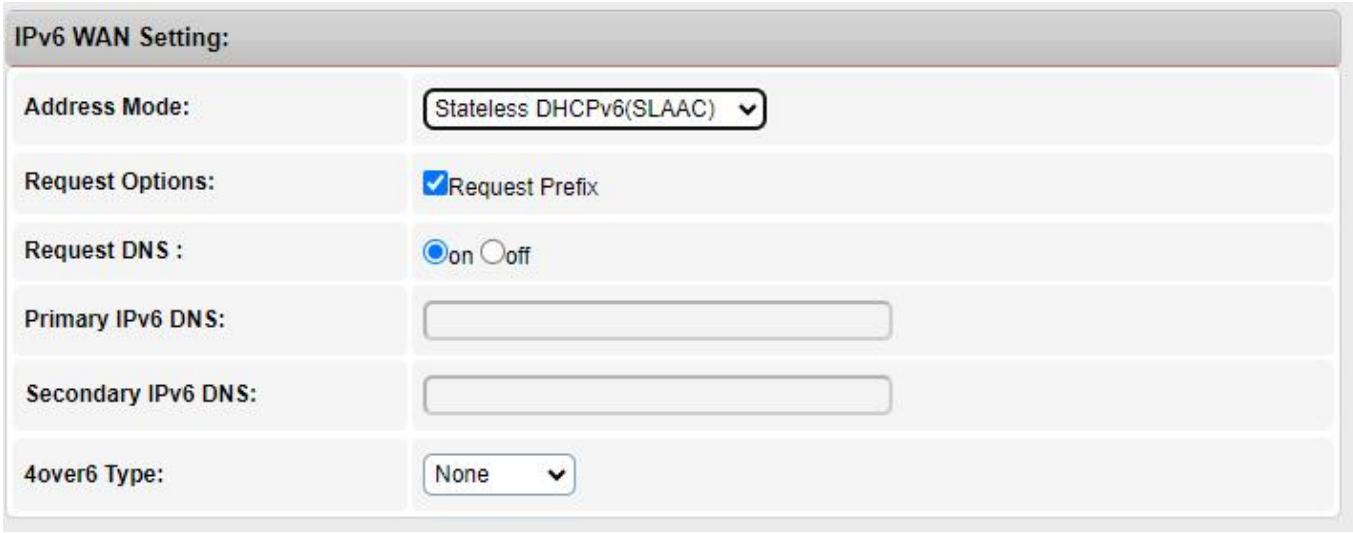


Figure 4-2-1-2-2 IPv6 Stateless DHCPv6(SLAAC)

IPv6 Stateful DHCPv6

Object	Description
Address Mode	Current Address Mode Stateful DHCPv6.
Request Options	WAN IPv6 Prefix address request.
Request DNS	WAN IPv6 DNS automatic or manual write.

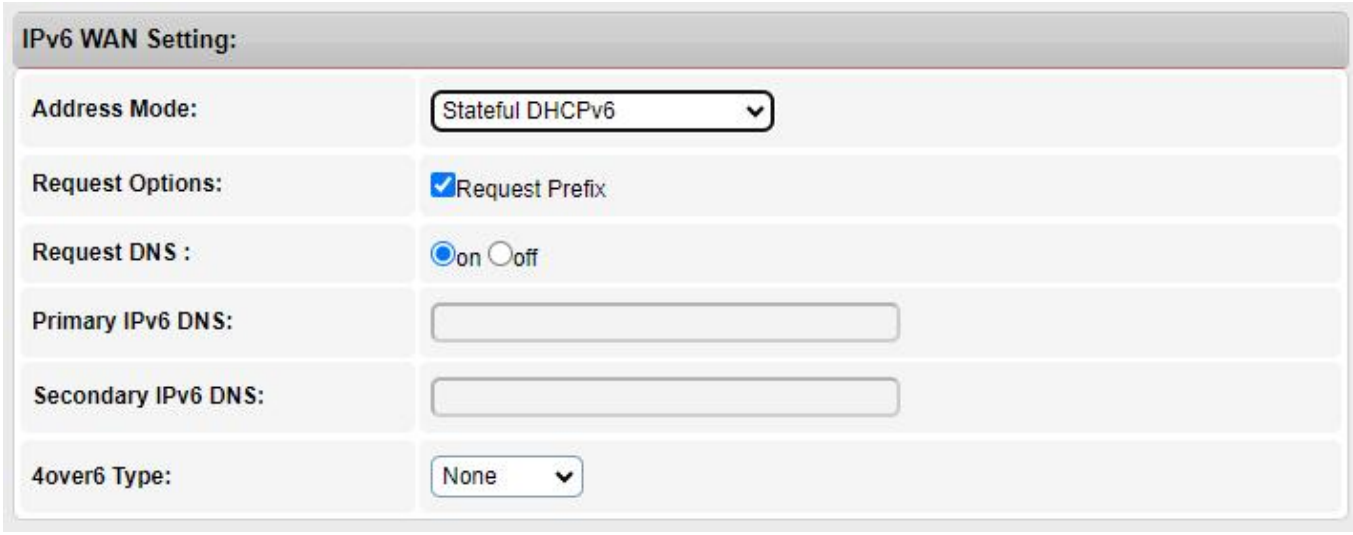


Figure 4-2-1-2-3 IPv6 DHCPv6

IPv6 Static

Object	Description
Address Mode	Current Address Mode Static.
IPv6 Address	WAN IPv6 address.
IPv6 Gateway	WAN IPv6 default gateway.
Request DNS	WAN IPv6 DNS automatic or manual write.

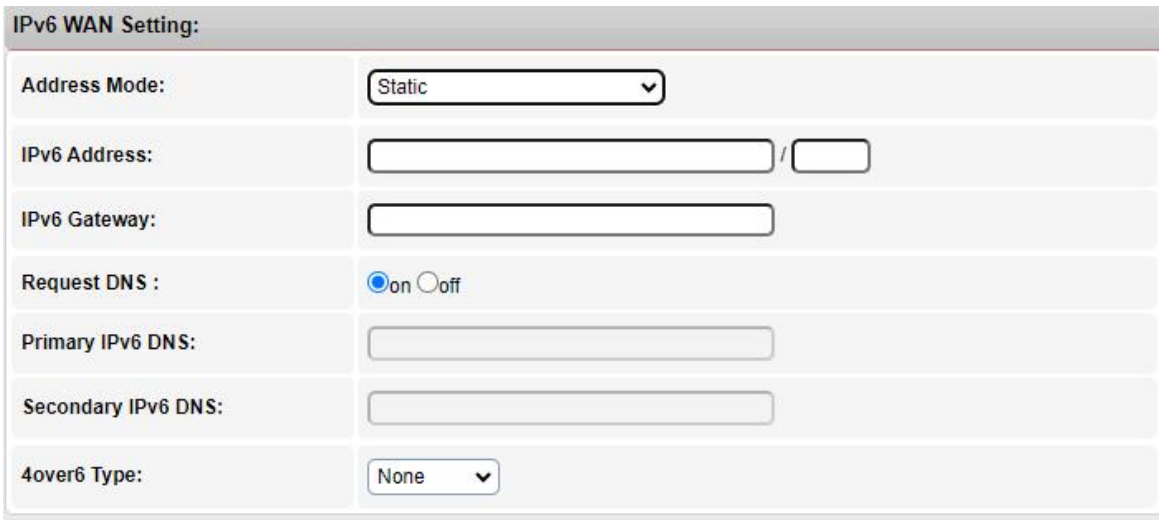


Figure 4-2-1-2-4 IPv6 Static

4.2.2 LAN

On this page, you are able to configure various LAN-related network settings for your WI-GP1412 device. This includes customizing the device's LAN IP address, managing the DHCP address pool, enabling or disabling LAN ports, and setting up IPv6 configurations on the LAN side. It offers a centralized control panel for optimizing your local network according to your specific needs.

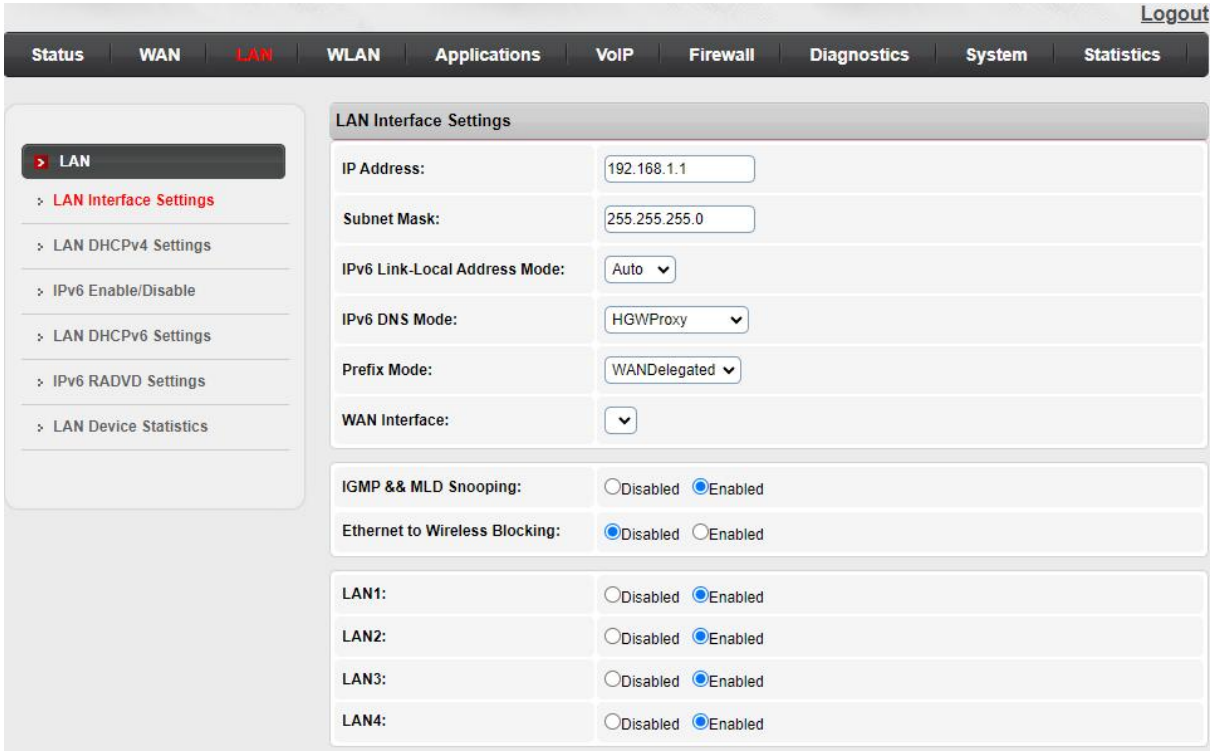


Figure 4-2-2 LAN Setting

4.2.2.1 LAN Interface Settings

Thispage is used setting the LAN interface configuration.

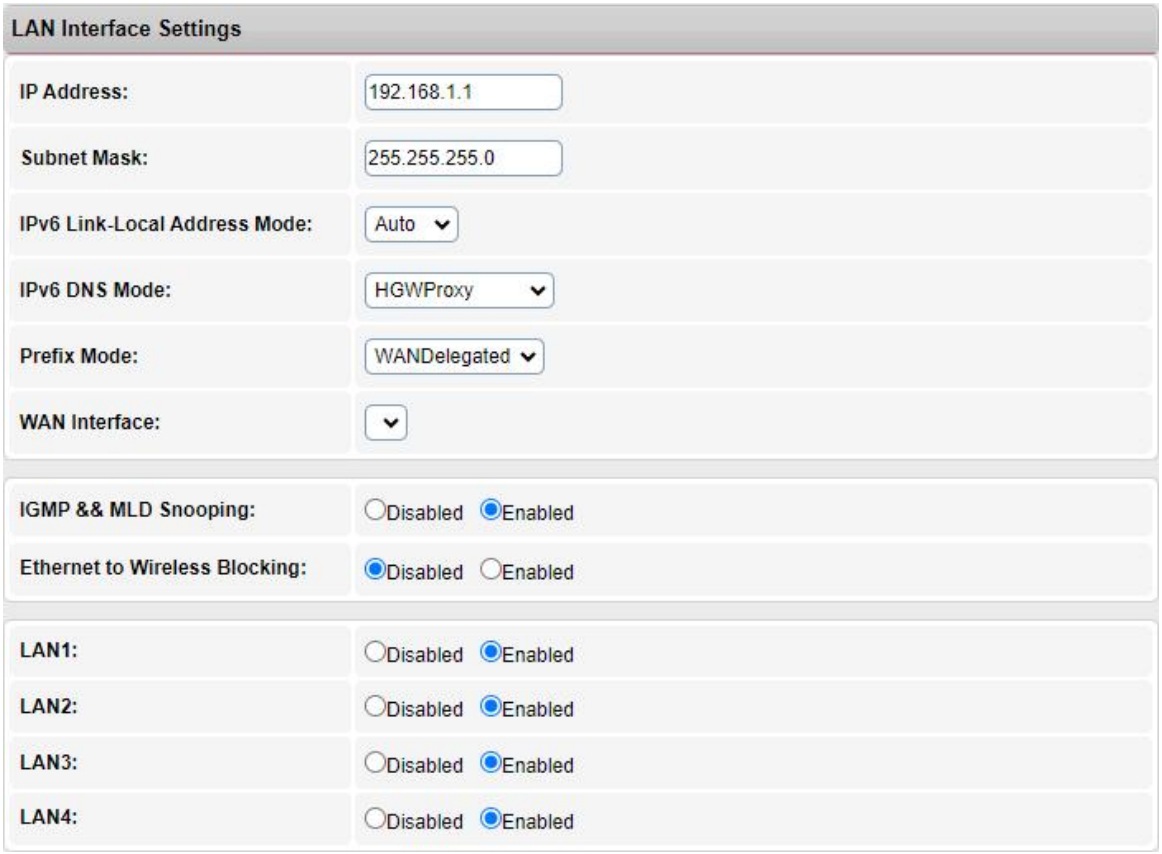


Figure 4-2-3-1 LAN Interface Setting

4.2.2.2 LAN DHCPv4 Settings

This page is used to configure the parameters for local area network which connects to the LAN port of your Access Point. Here you may change the setting for IP address, subnet, DHCP, etc.

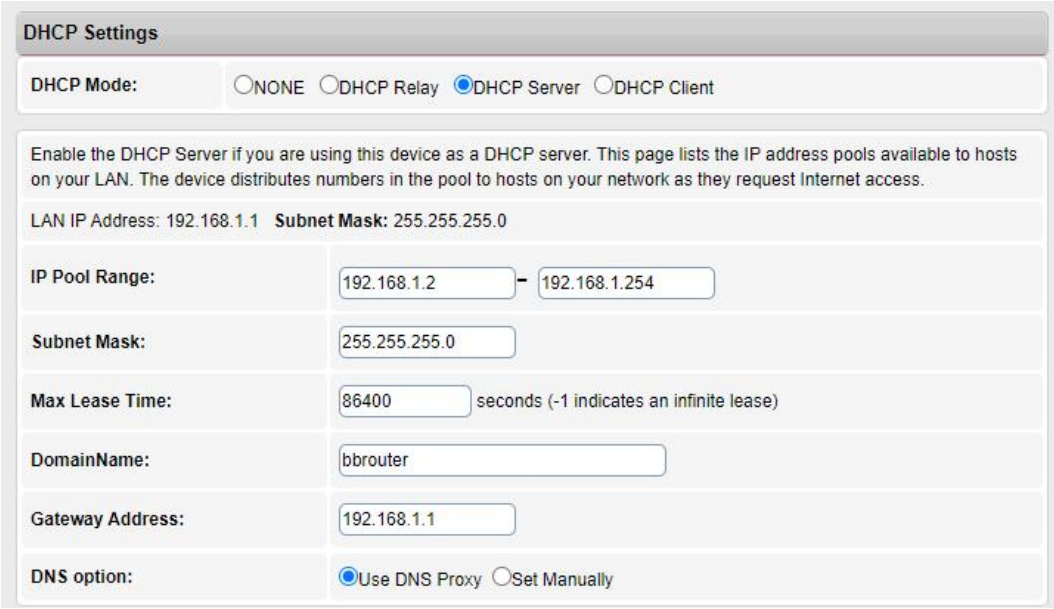


Figure 4-2-2-2-1 LAN IPv4 DHCP Setting

Object	Description
IP Address	Router's LAN IP. The default is 192.168.1.1. You can change it according to your needs.
Subnet Mask	Router's LAN subnet mask.
DHCP Mode	If you select dhcp server mode, the router serves as the DHCP server and automatically assigns IP addresses to all computers in the LAN.
IP Pool Range	Enter the start and end IP address of all the available successive IPs.
Lease Time	Select the time for using one assigned IP from the dropdown list. After the lease time, the AP automatically assigns new IP addresses to all connected computers.
Static DHCP	This page allows you reserve IP addresses, and assign the same IP address to the network device with the specified MAC address any time it requests an IP address. This is almost the same as when a device has a static IP address except that the device must still request an IP address from the DHCP server.
Domain Name	Set the domain name of the server.
Gateway address	Set the LAN Gateway address.
DNS option	Set the LAN DNS distribution mode for LAN clients

If user want to reserve specific IP for some device, you can bind the mac and the IP in this page.

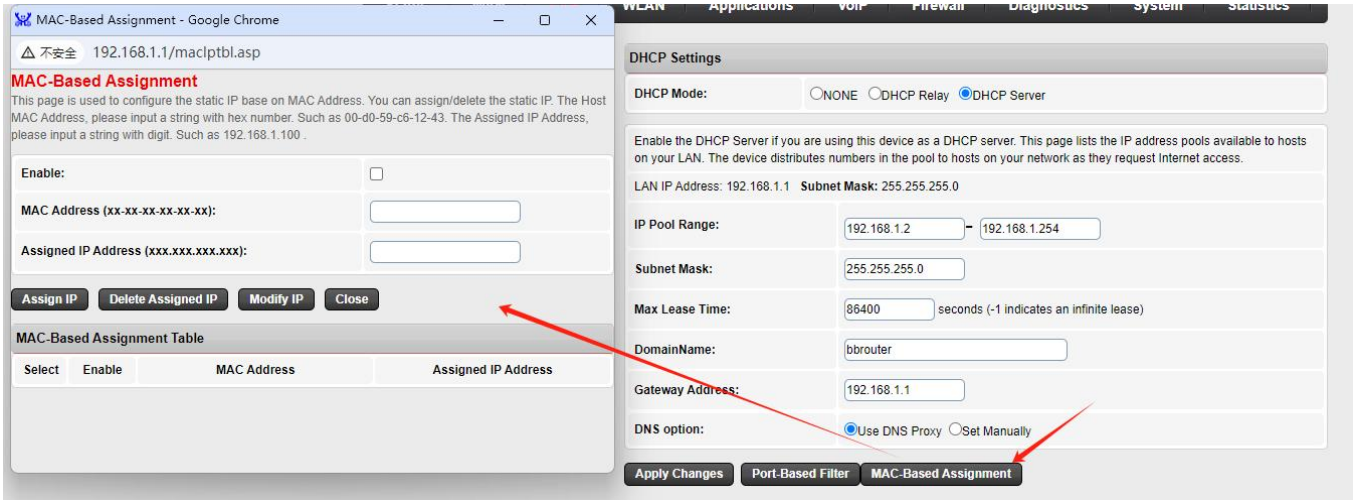


Figure 4-2-2-2-2 Static IPv4 base on MAC Address

4.2.2.3 LAN IPv6

On this page, you can configure the LAN side IPv6 settings, including enabling or disabling the DHCPv6 server and setting the DHCPv6 address pool allocation mode. This interface allows you to manage IPv6 services and ensure proper addressing and connectivity for devices on your LAN that utilize IPv6 protocol.

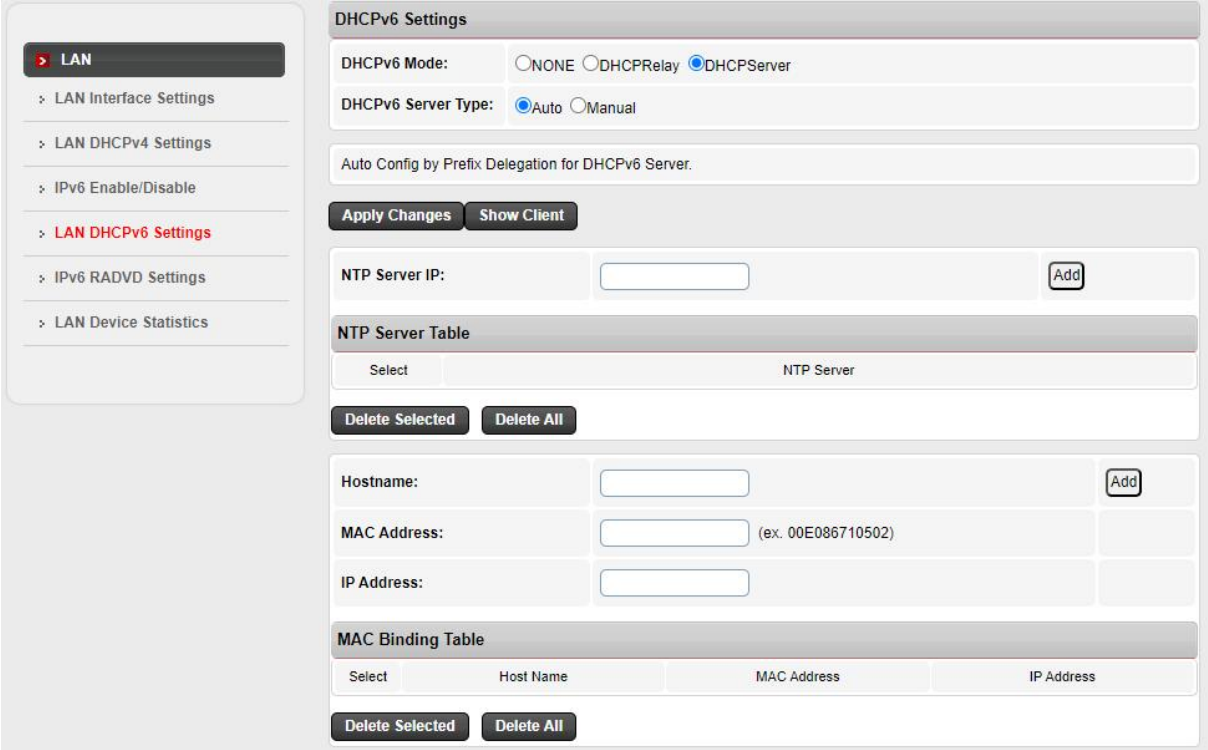


Figure 4-2-2-3 DHCPv6 Settings

Object	Description
DHCPv6 Mode	If you select dhcp server mode, the router serves as the DHCP server and automatically assigns IPv6 addresses to all computers in the LAN.
DHCPv6 Server Type	Auto Config by Prefix Delegation for DHCPv6 Server. Enable the DHCPv6 Server if you are using this device as a DHCPv6 server. This page lists the IP address pools available to hosts on your LAN. The device distributes numbers in the pool to hosts on your network as they request Internet access.

4.2.2.4 LAN IPv6 RADVD

On this page, you can configure the IPv6 Router Advertisement Daemon (RADVD) settings, which control the IPv6 allocation methods on the LAN side. This includes options such as "Stateful DHCP," "Stateless DHCP," "SLAAC" (Stateless Address Autoconfiguration), as well as the management of other prefixes. These settings are essential for determining how IPv6 addresses and prefixes are assigned to devices within your local network.

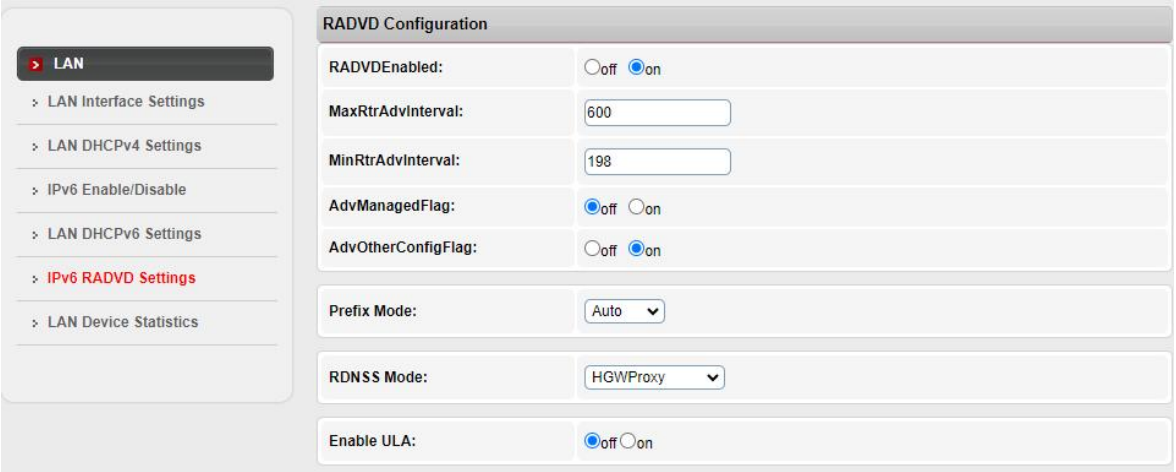


Figure 4-2-2-4 IPv6 RADVD

Object	Description
MaxRtrAdvInterval	Enter the max retry advertisement interval.
MinRtrAdvInterval	Enter the min retry advertisement interval.
AdvManagedFlag	Enable or disable the advertisement managed flag.
AdvOtherConfigFlag	Enable or disable the advertisement other config flag.
Prefix Mode	Select the Proefix mode Auto or Manual.
Enable ULA	Enable or disable the ULA.

4.2.3 Wi-Fi

4.2.3.1 Basic Settings

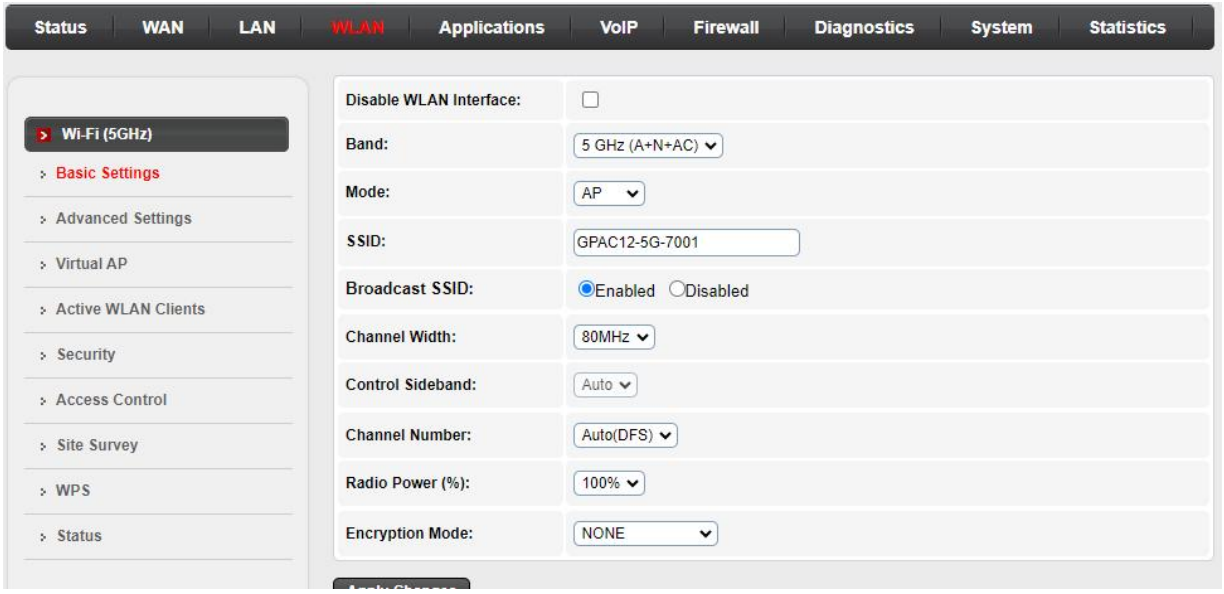


Figure 4-2-3-1-1 Basic settings(5G)

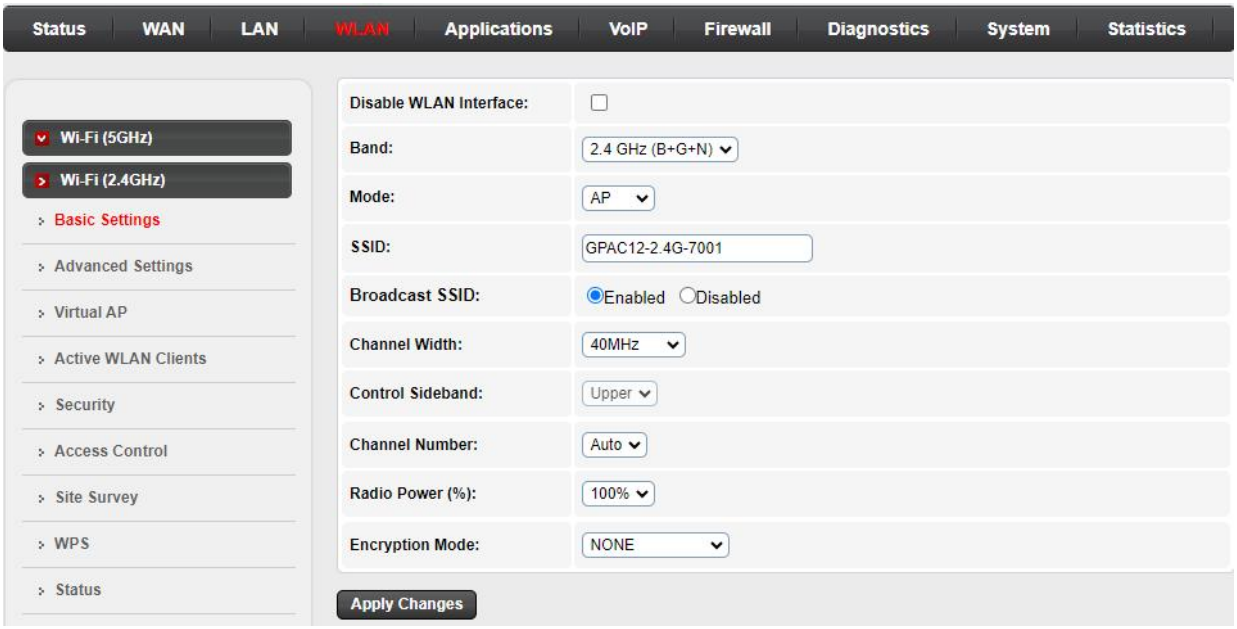


Figure 4-2-3-1-2 Basic settings(2.4G)

Object	Description
Disable WLAN Interface	You may choose to enable or disable Wireless function.
Band	Set the wireless mode to which you need. Default is “**Mixed 802.11a/n/ac**”. It is strongly recommended that you set the Band to “802.11a/n/ac”, and al l of 802.11a, 802.11n, and 802.11ac wireless stations can connect to the GPON(WI-GP1412)

Mode	WLAN working mode, such AP, client.
SSID	Set a name (SSID) for your wireless network. The ID of the wireless network. User can access the wireless network through it only. However, if you switch to Client Mode, this field becomes the SSID of the AP you want to connect with.
Channel Width	Select a proper channel bandwidth to enhance wireless performance. When there are 11a/n and 11n wireless clients, please select the 802.11n mode of 20/40MHz frequency band.
Channel Number	For an optimal wireless performance, you may select the least interferential channel. It is advisable that you select an unused channel or “Auto” to let device detect and select the best possible channel for your wireless network to operate on from the drop-down list.
Radio Power	You can control the transmission power of the wireless signals.
Encryption Mode	You can set the Encryption Mode for your wireless network, choosing from various security protocols to protect your data and ensure a secure connection.
Wifi Password	You can set the Wi-Fi password for your wireless network, which is essential for restricting access to authorized users and maintaining network security.

4.2.3.2 Advanced Settings

These settings are only for more technically advanced users who have a sufficient knowledge about WLAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.

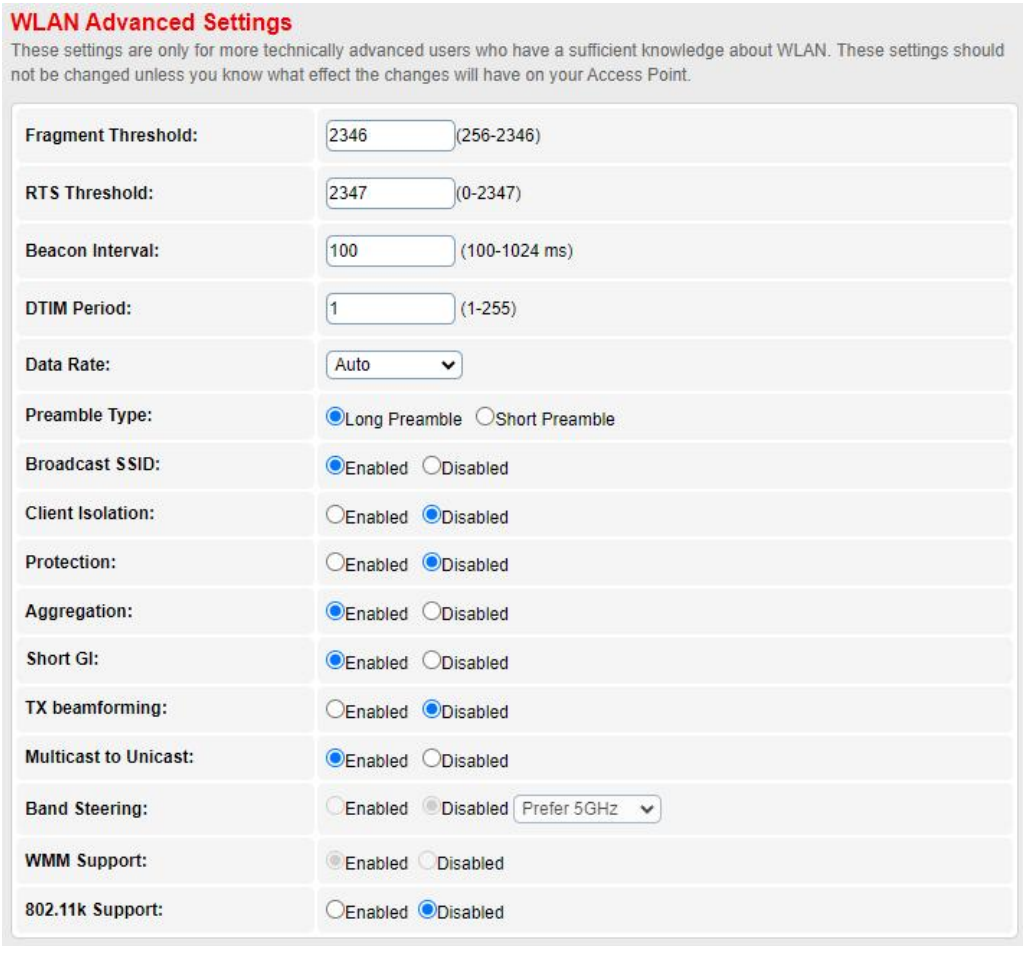


Figure 4-2-3-2 Advanced Settings

4.2.3.3 Virtual AP

On this page, you can configure virtual Access Points (APs), allowing you to set up multiple SSIDs for user connections. This feature also enables the isolation of SSIDs from each other, providing separate network environments for different users or purposes, which enhances security and network management.

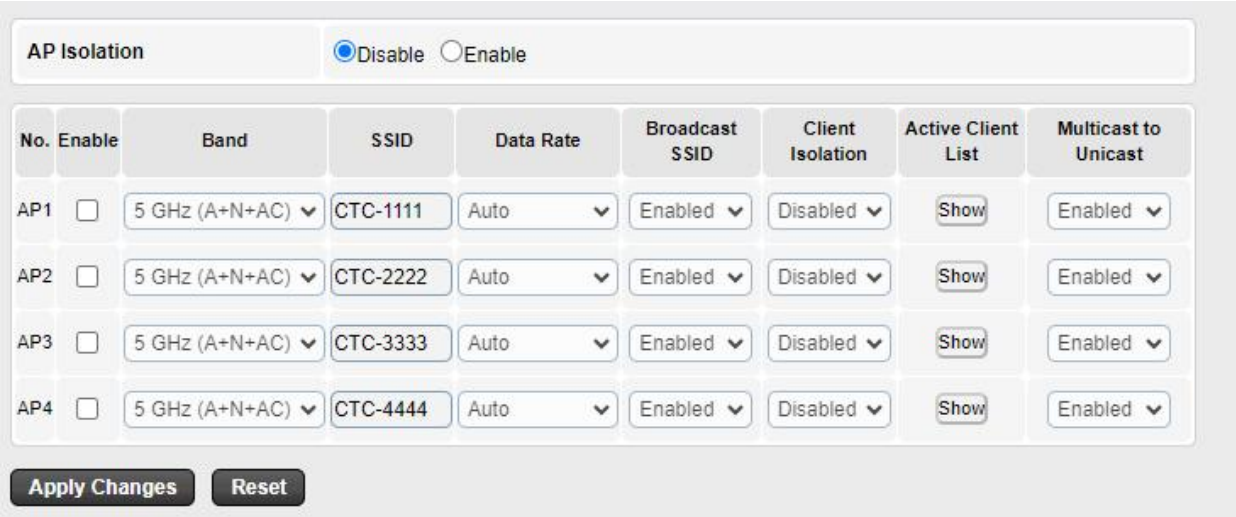


Figure 4-2-3-3 Virtual AP

4.2.3.4 Active WLAN Clients

This page displays the MAC address, transmission, reception packet counters, and encrypted status for each associated WLAN client.

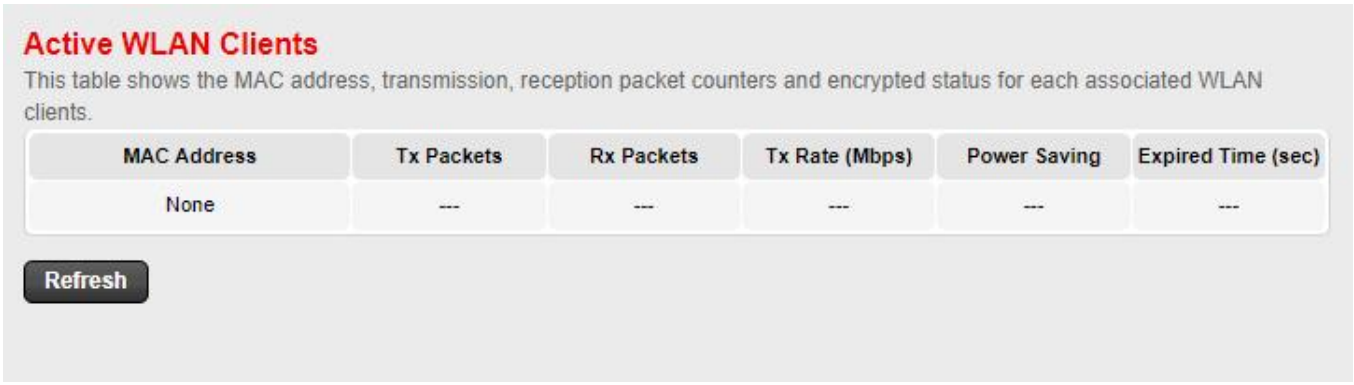


Figure 4-2-3-4 WLAN Clients

4.2.3.5 WLAN Security

On this page, you can configure the WLAN security settings. Enabling WEP or WPA with the use of encryption keys helps prevent unauthorized access to your wireless network.

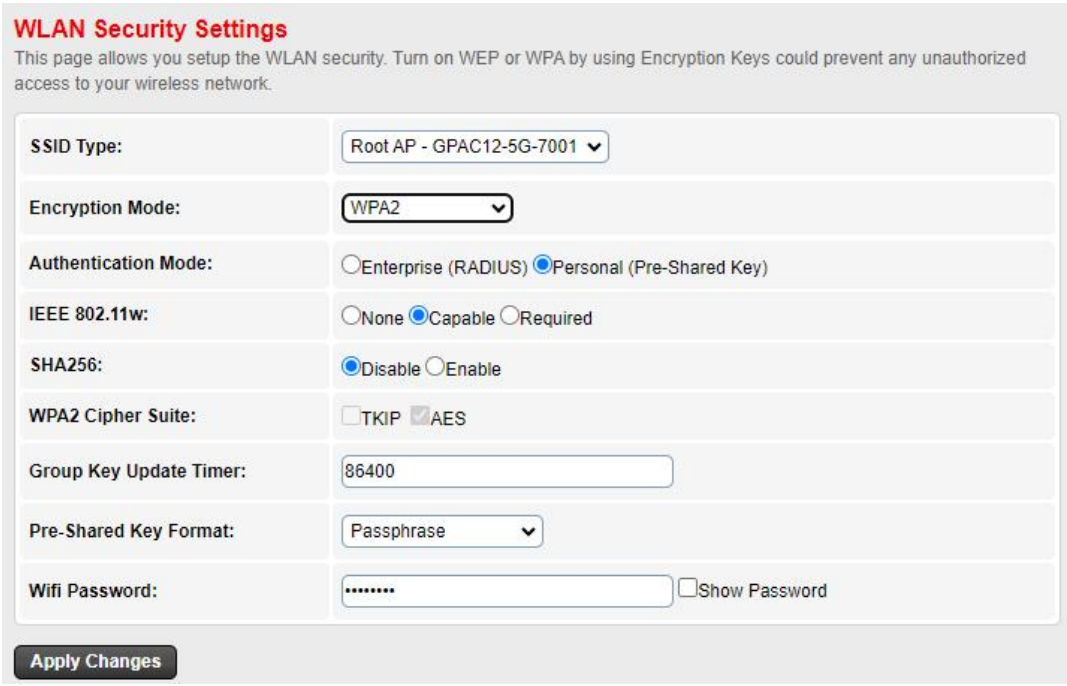


Figure 4-2-3-5 WLAN Security

Object	Description
SSID Type	Select a name (SSID) for your wireless network.
Encryption	Select the security mode from the **Encryption** dropdown list. There are 6 options in the Security Mode dropdown list: ■ **NONE** ■ **WEP** ■ **WPA2** ■ **WPA2-Mixed** ■ **WP3** ■ **WPA3 Transition**
Pre-Shared Key	Enter the Wi-Fi password

4.2.3.6 Access Control

On this page, you have the capability to finely control access to your wireless network, enhancing its security by managing which devices are permitted or denied connection based on their MAC addresses.

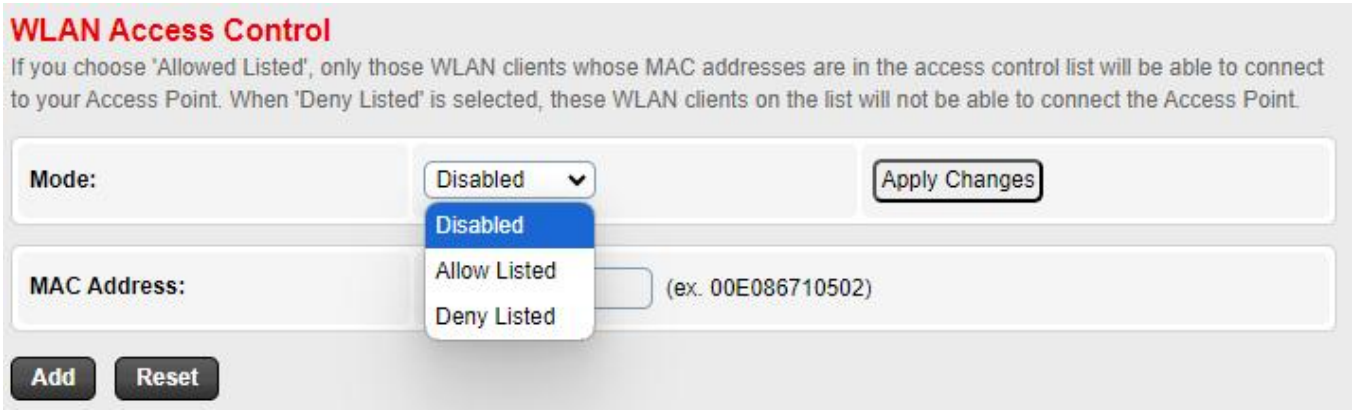


Figure 4-2-3-6 Wi-Fi ACL

Object	Description
Wireless ACL Mode	If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point.
MAC Address	The MAC address of the client.

4.2.3.7 WLAN Site Survey

This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually when client mode is enabled.

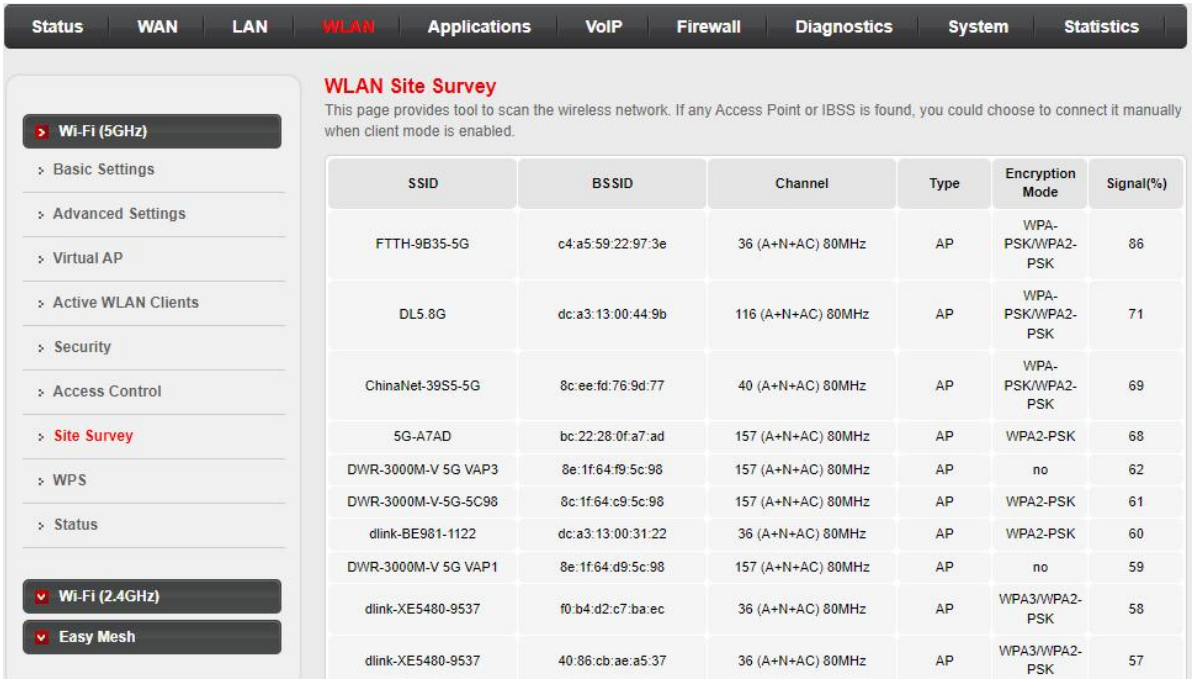


Figure 4-2-3-7 Wi-Fi Site Survey

Figure 4-2-3-7 displays the list of nearby Wi-Fi networks that have been scanned. When the device's Wi-Fi mode is set to client mode, you can connect to these SSIDs. After the connection is established, by disabling the device's DHCP server, the LAN-side terminals will obtain IP addresses assigned by the connected SSID.

4.2.3.8 WPS

This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your WLAN client automically syncronize its setting and connect to the Access Point in a minute without any hassle.

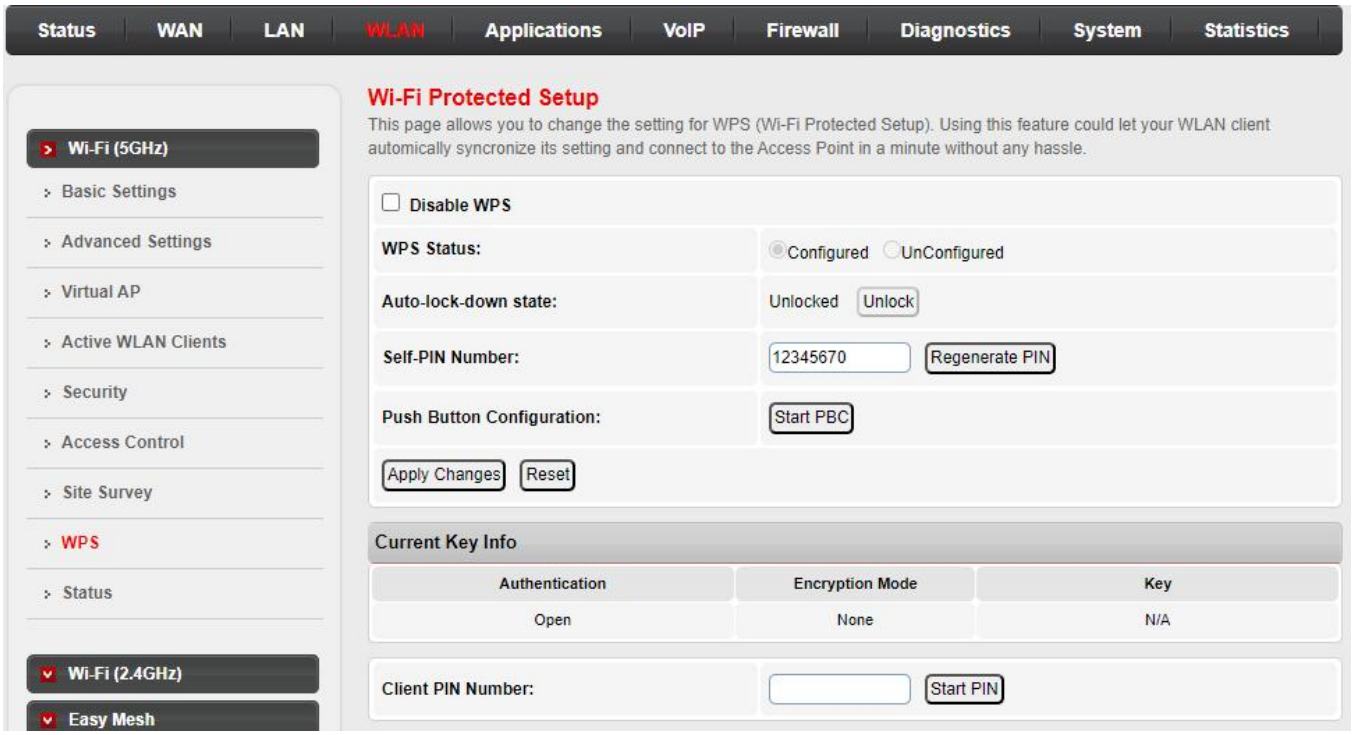


Figure 4-2-3-8-1 Wi-Fi WPS

Object	Description
WPS	This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automatically synchronize its setting and connect to the Access Point in a minute without any hassle.
Disable WPS	Enable or disable WPS function.

Click "Start PBC" to begin WPS. Press the WPS button on the client or select to connect to the WPS-enabled network. The device will automatically pair and connect to the network.

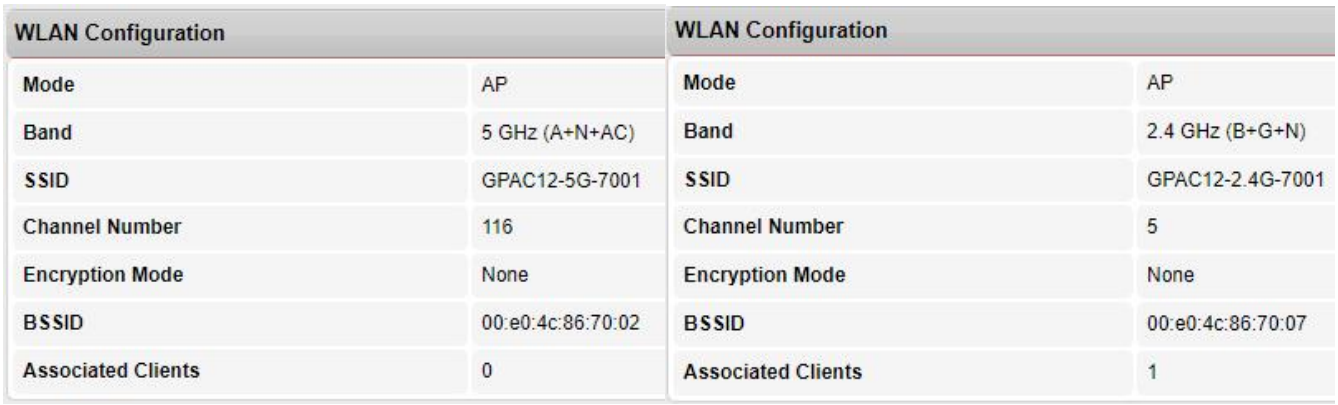


Figure 4-2-3-8-2 Wi-Fi Configuration

4.2.4 Service

4.2.4.1 TR069

This page is used to configure the TR069. Here you may change the setting for the ACS's parameters.

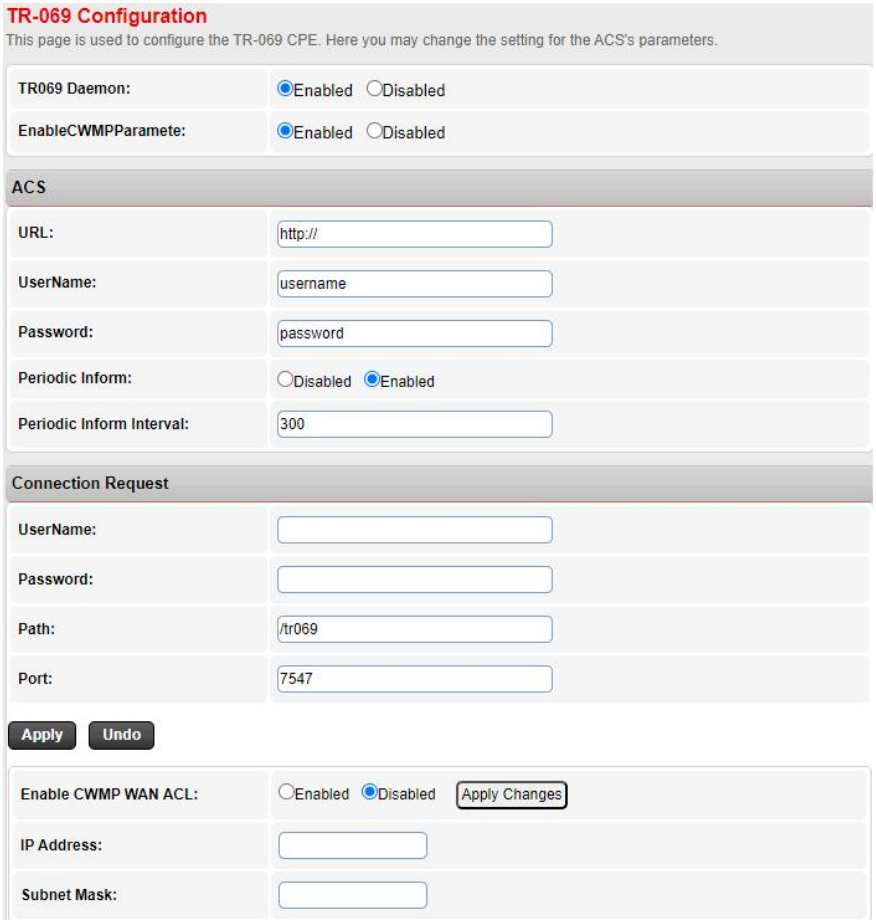


Figure 4-2-4-1 TR-069 Configuration

Object	Description
TR069	Enable or disable TR069.
URL	ACS server domain or IP Address.
User Name	User name for connection to ACS.
Password	Password for connection to ACS.
Periodic Inform	Enable or disable periodic inform.
Periodic Inform Interval	Periodic inform interval.
Connection Request User Name	User Name used form ACS connection to TR069.
Connection Request Password	Password used form ACS connection to TR069.

Path	Connection request path.
Port	Connection port.

4.2.4.2 DDNS

The WI-GP1412 device supports Dynamic Domain Name Service (DDNS). This service allows a changing public IP address to be linked with a static hostname across various domains, enabling access to a specific device via the internet using that hostname. By clicking on a hyperlinked URL in the format of hostname.dyndns.org, remote access to the device can be achieved. Since many Internet Service Providers (ISPs) assign public IP addresses dynamically using DHCP, locating a specific host on the LAN using standard DNS can be challenging. For instance, if you operate a public web server or VPN server on your LAN, DDNS ensures that these servers can be found over the Internet even if the public IP address changes. To utilize DDNS, an account must be established with one of the supported DDNS service providers.

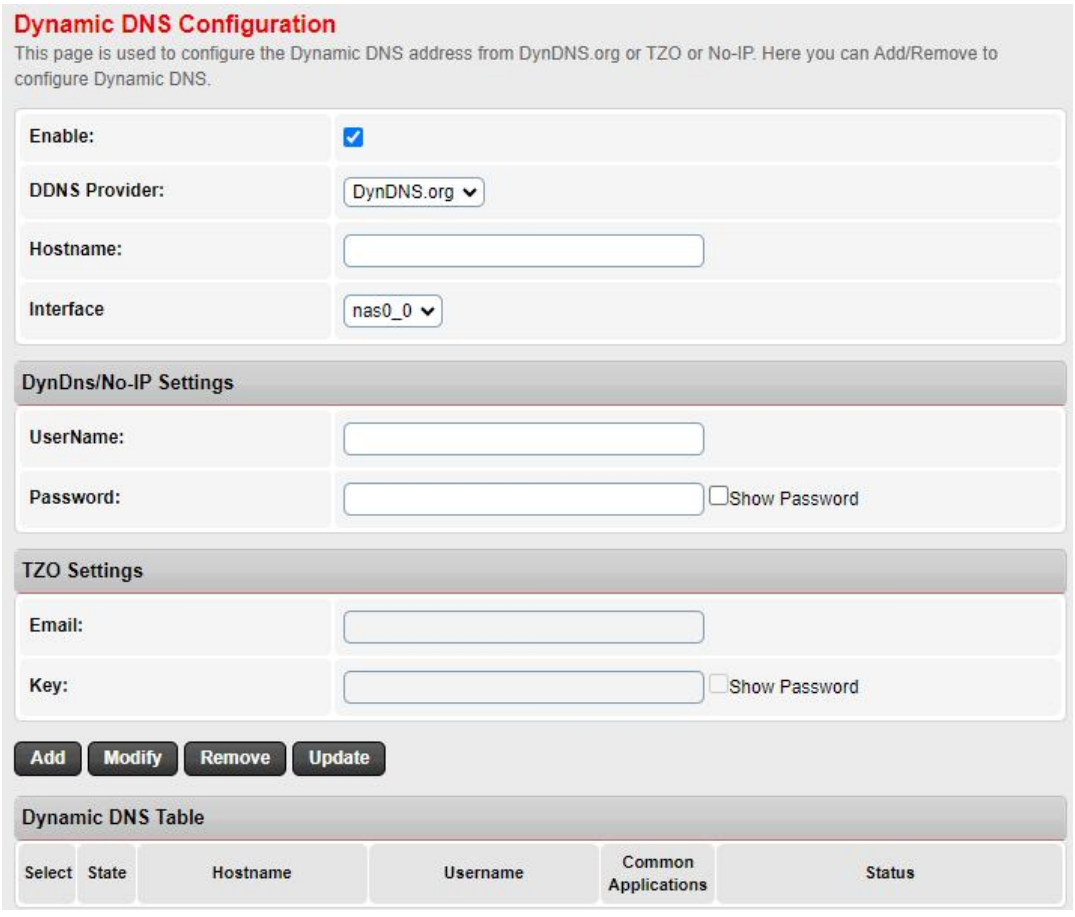


Figure 4-2-5-2 DDNS

Object	Description
DDNS Provider	Select server from the drop-down list ■ DynDNS ■ TZO ■ No-IP

Hostname	Enter the host name
Interface	Select the interface
User Name/Email	Enter the user name
Password/Key	Enter the password

4.2.4.3 Routing(IPv4/IPv6)

On this page, you configure static routing by specifying elements like destination IP addresses, subnet masks, and gateway IP addresses for the next hop. This allows you to manually set the path that network traffic takes, overriding the default routing behavior and establishing a more direct or specific route for data to travel through your network.

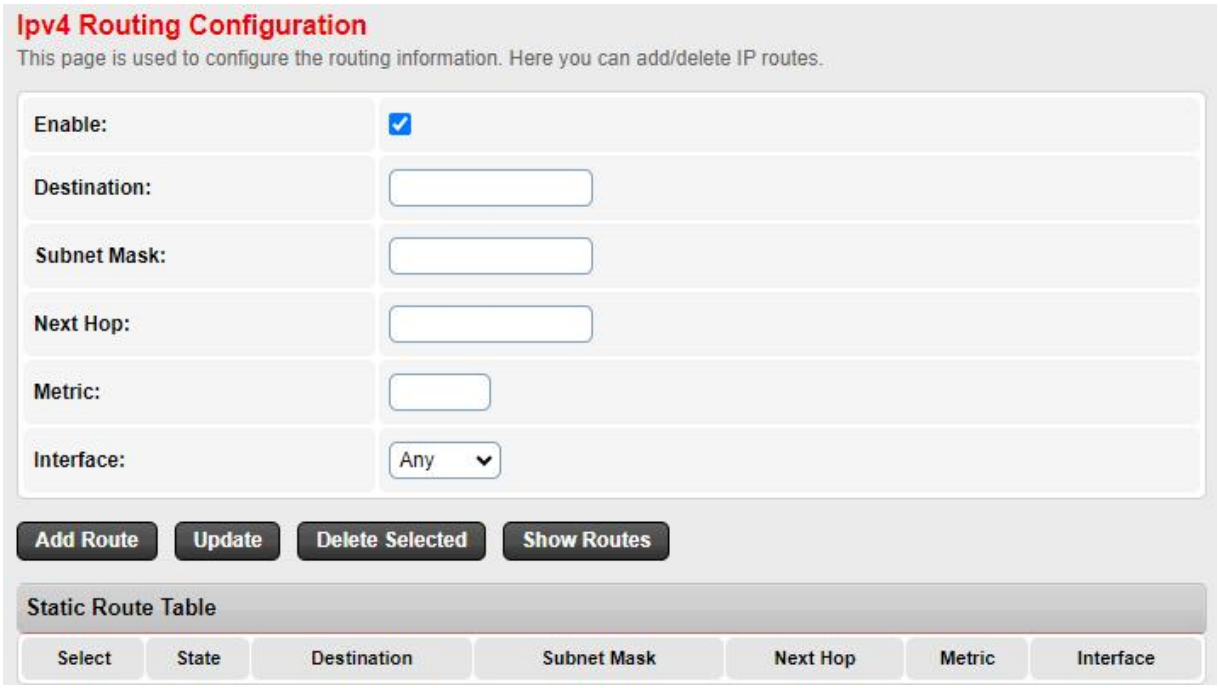
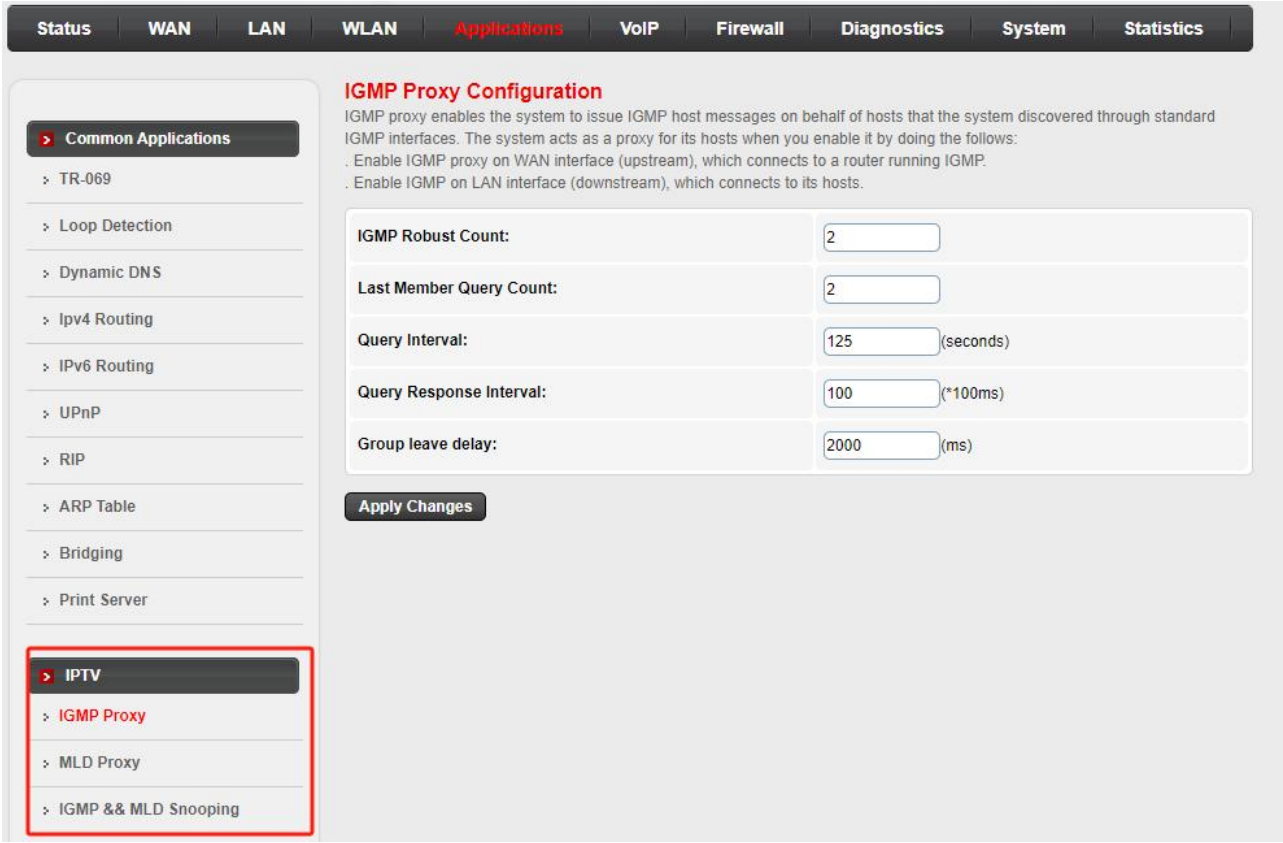


Figure 4-2-4-3-1 IPv4 Routing

Object	Description
Enable	Static Routing Switch
Destination	Used to specify the IP address range or network for static routing
Next Hop	This is the IP address of the next gateway or router, through which traffic is routed to the destination
Metric	"Metric" in the context of routing refers to a value that quantifies the cost, distance, or priority of a route. It helps the routing process to determine the most efficient path for network traffic when there are multiple routes to the same destination.
interface	Specify which WAN interface this static route should use.
Subnet Mask	Subnet mask for the IPv4 static route's destination IP.

4.2.4.4 IPTV

IPTV is a broadband service that streams TV channels and video content over the internet. It offers live TV, on-demand services, and interactive features for a flexible viewing experience



IGMP Proxy

IGMP proxy enables the system to issue IGMP host messages on behalf of hosts that the system discovered through standard IGMP interfaces. The system acts as a proxy for its hosts when you enable it by doing the follows

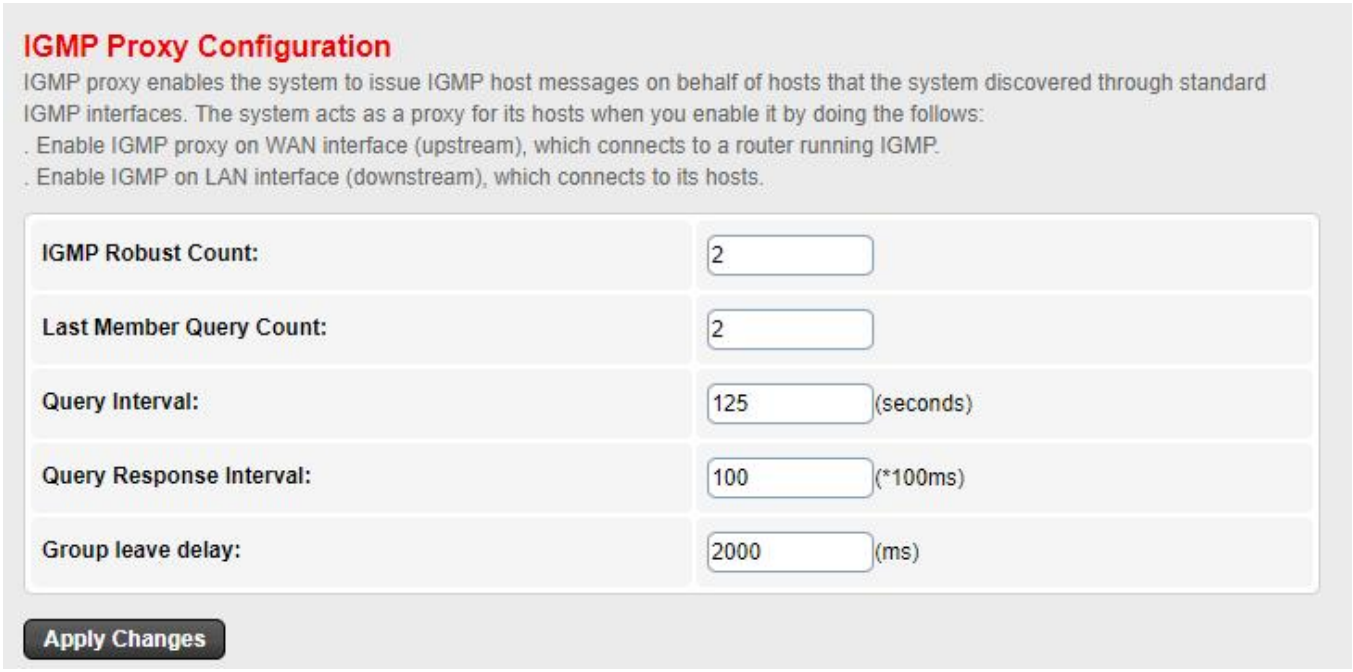
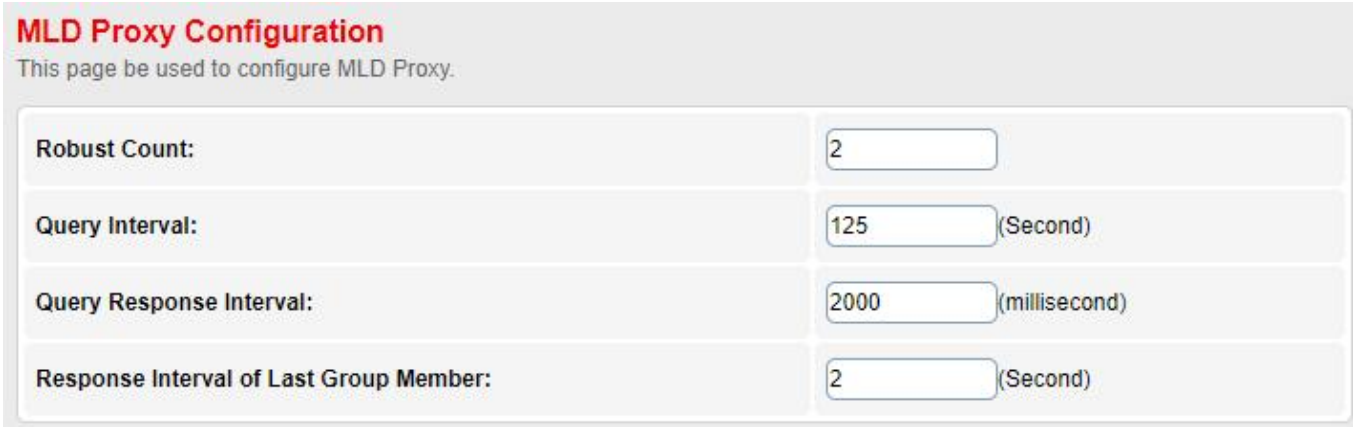


Figure 4-2-4-4-1 IGMP Proxy

MLD Proxy

This page be used to configure MLD Proxy.



Snooping

This page is used to configure IGMP and MLD Snooping, which improves network efficiency by enabling the device to monitor and manage multicast traffic, reducing the unnecessary proliferation of multicast packets to ports without interested receivers.

Figure 4-2-4-4-3 MLD Proxy

Note: When you intend to utilize IPTV services and your set-top box on the LAN side needs to play multicast video streams, make sure that the WAN connection is configured for IPTV service, and that IGMP Proxy and

IGMP Snooping are checked, along with port binding as illustrated in Figure 4-2-4-4-4.

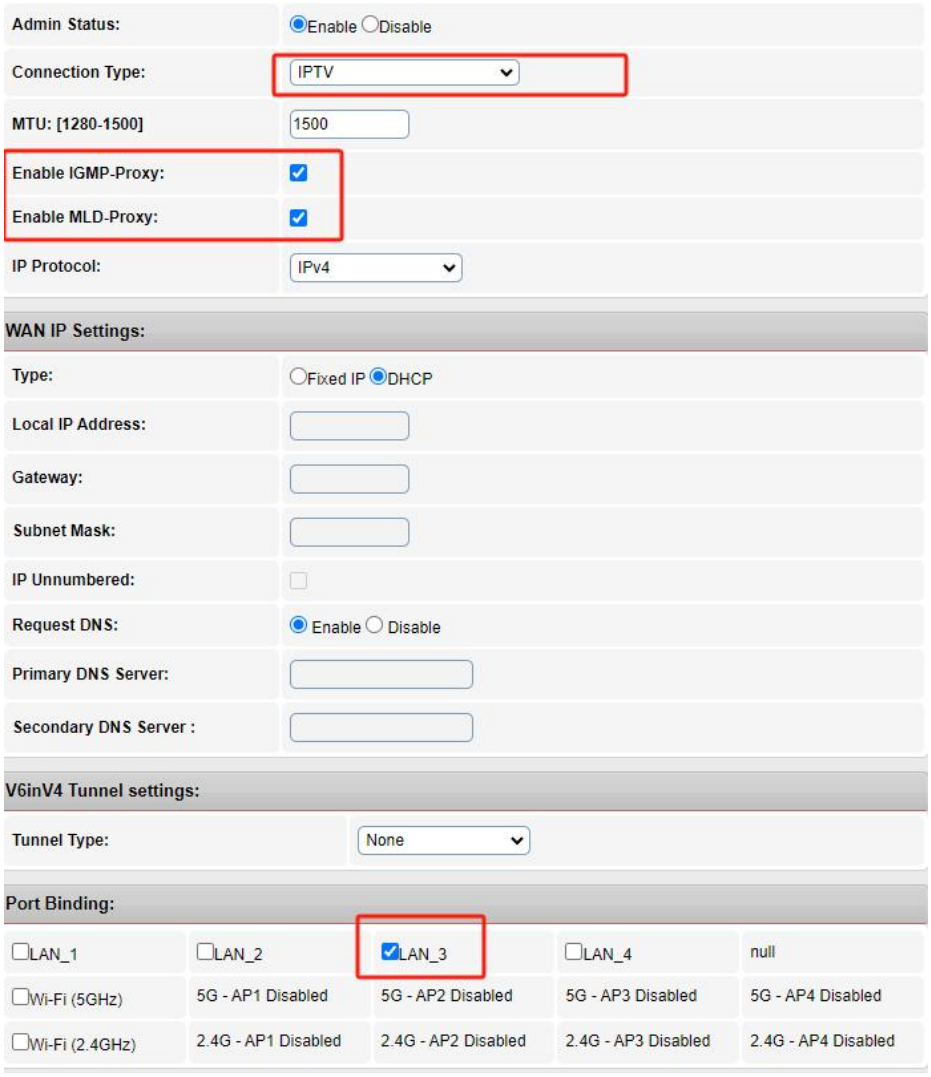


Figure 4-2-4-4-4 Check the necessary options

4.2.5 VOIP

Please note, to use VOIP services, you must ensure that the WAN connection includes VOIP service capability. Only then can you utilize VOIP services.

4.2.5.1 Basic Settings

This page is used to configure the VOIP Proxy server and the SIP basic info.

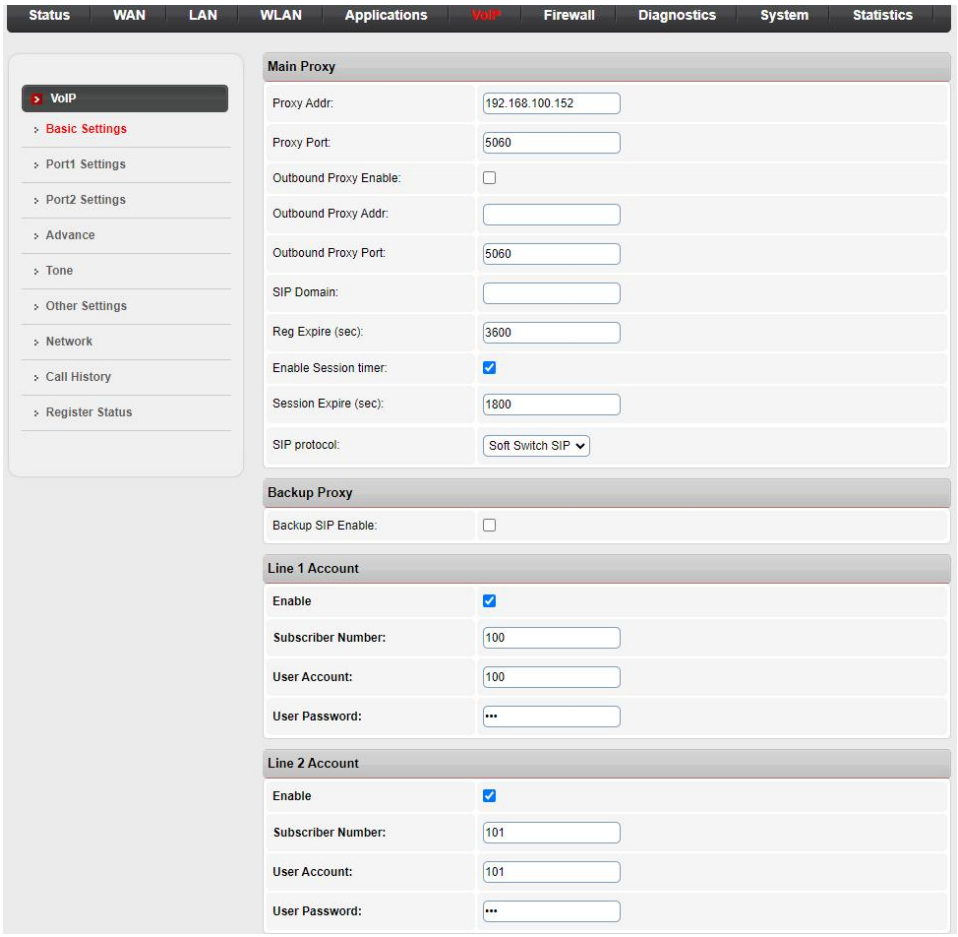


Figure 4-2-5-1-1 VOIP Basic Setting

On this page, you typically need to enter the correct Proxy Address and port for both voice port 1 and voice port 2, and then fill in the correct account password for each. Once these settings are correctly configured for both ports, VOIP registration should be successful for both voice ports.

Figure 4-2-5-1-2 VOIP registration successful

4.3 Firewall

4.3.1 ACL

This page is used to configure the IP Address for Access Control List. If ACL is enabled, only the IP address in the ACL Table can access CPE. Here you can add/delete the IP Address.

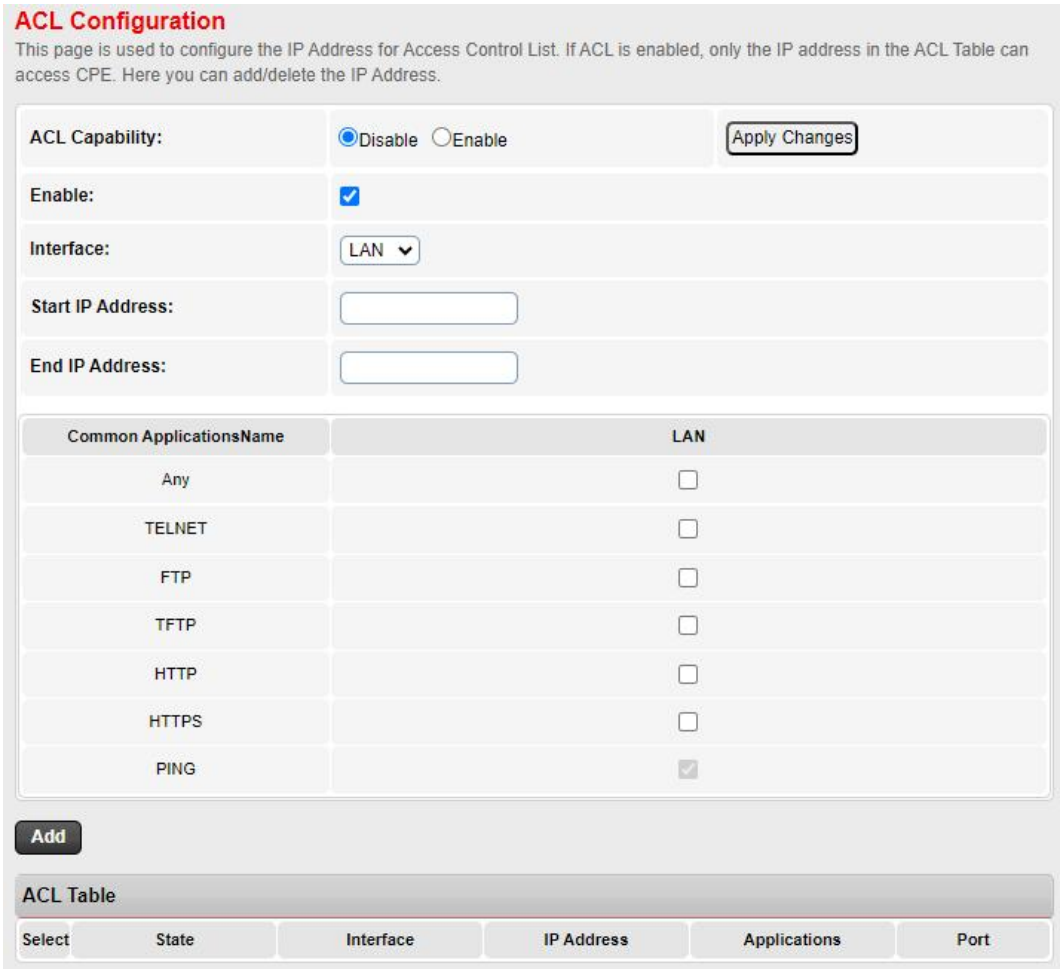


Figure 4-3-1 ACL Configuration

4.3.2 IP/Port Filtering

Entries in this table are used to restrict certain types of data packets through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

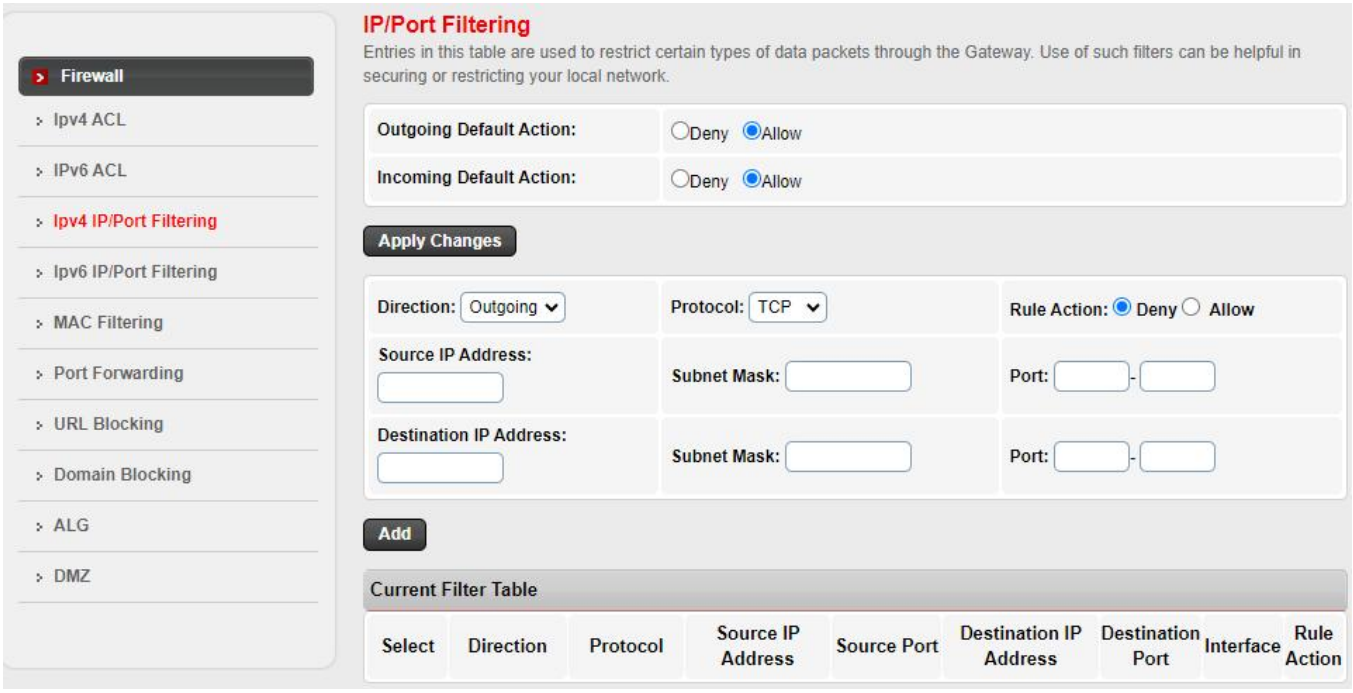


Figure 4-3-2 IP/Port Filtering

4.3.3 MAC Filtering

Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

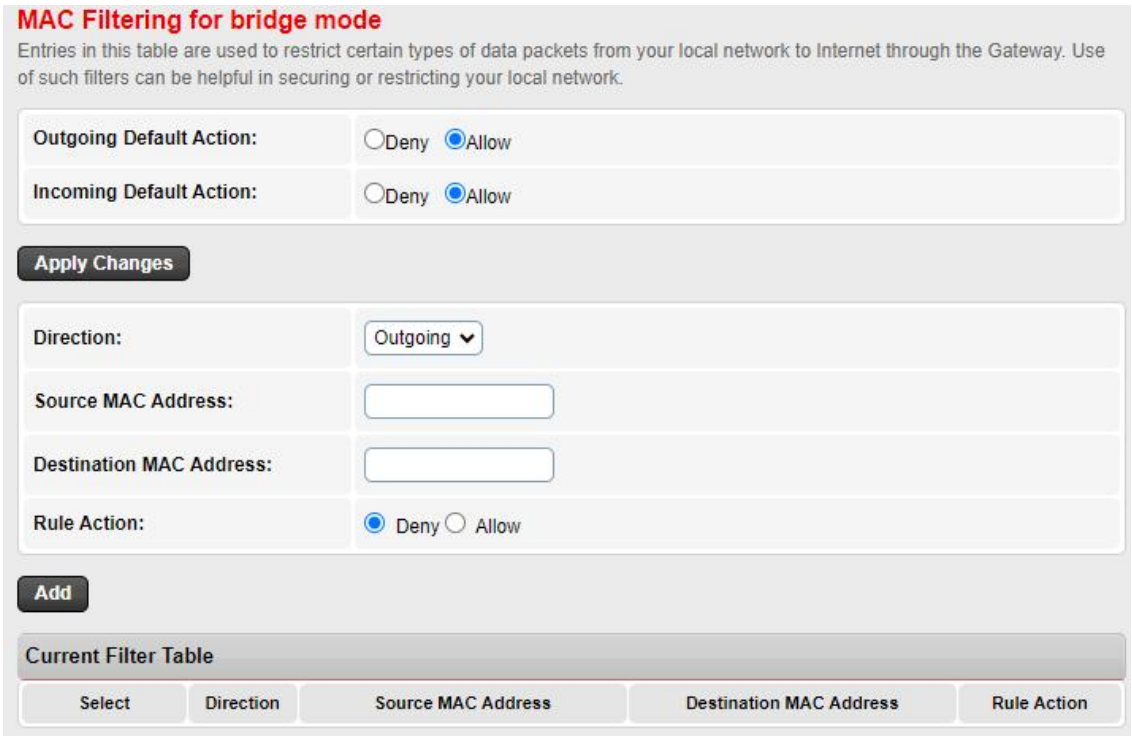


Figure 4-3-3 MAC Filtering

4.3.4 Port Forwarding

Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.

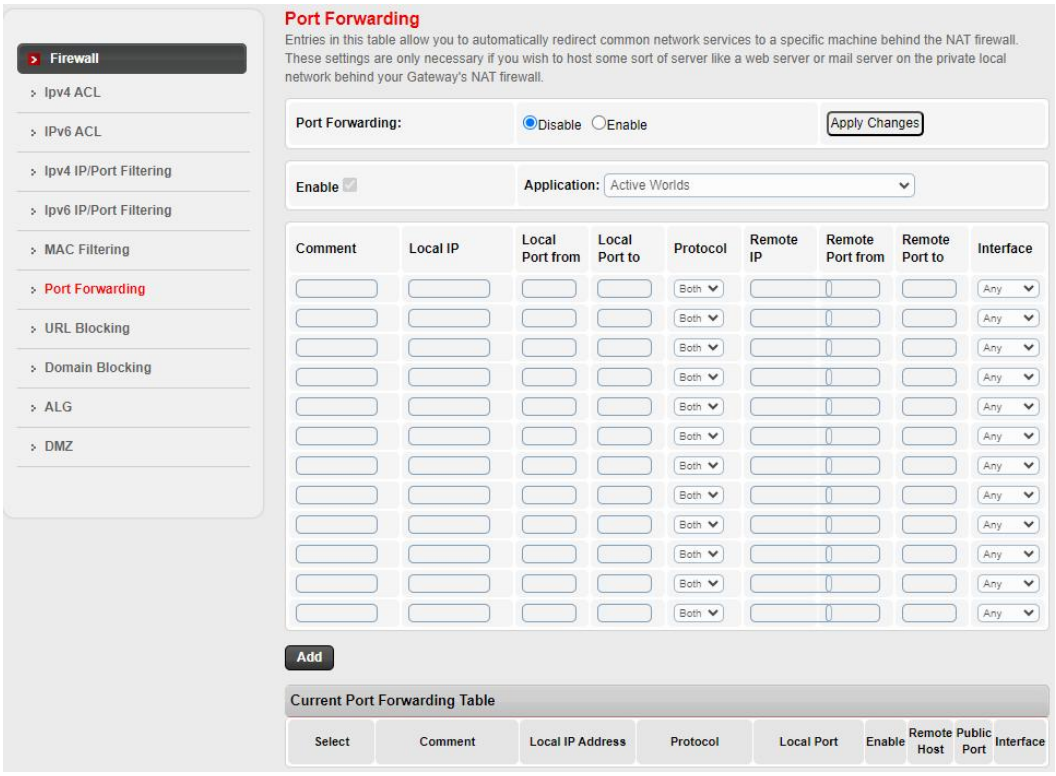


Figure 4-3-4 Port Forwarding

4.3.5 Domain Blocking

This page is used to configure the Blocked domain. Here you can add/delete the blocked domain.

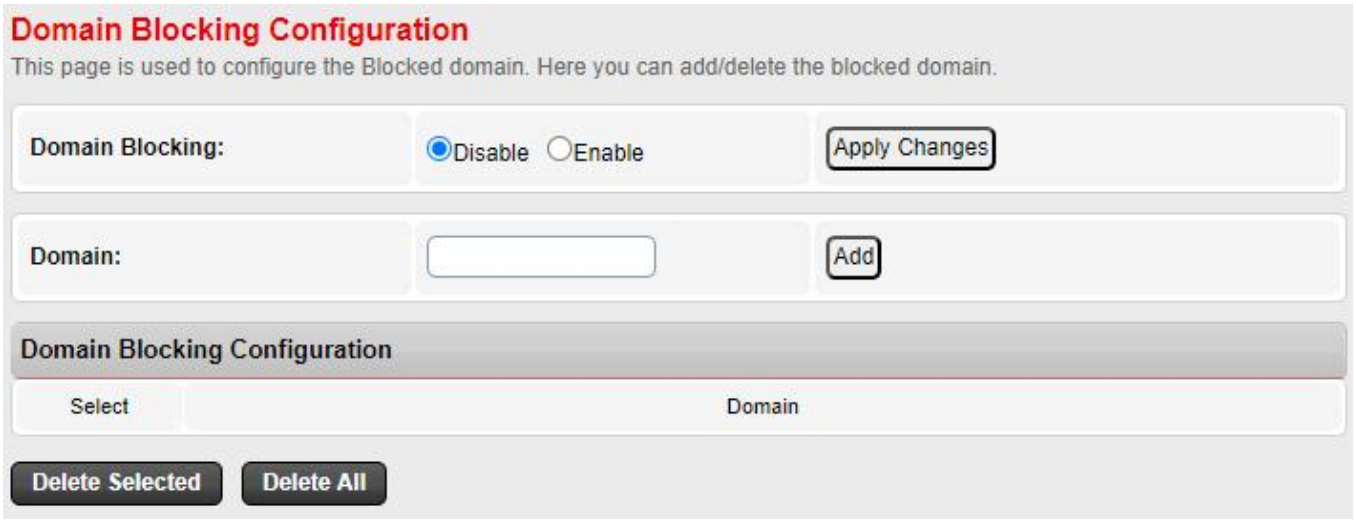


Figure 4-3-5 Domain Blocking

4.3.6 ALG

On this page, you can configure Application Layer Gateway (ALG) settings, which help manage traffic for specific applications like FTP and SIP by analyzing packet contents and enabling communication through the device.

Figure 4-3-6 ALG

4.3.7 DMZ

On this page, you can configure the DMZ (Demilitarized Zone) settings. Once DMZ is enabled and the local IP address of a device is entered, external access to that device can be achieved by accessing the WI-GP1412 WAN IP address combined with the port number, which directs to the corresponding local IP terminal on its specific port.

Figure 4-3-7 DMZ Configuration

4.4 Diagnostics

4.4.1 Ping/Ping6 Diagnostics

On this page, you can initiate ping diagnostics for IPv4 and IPv6 addresses, and view the results.

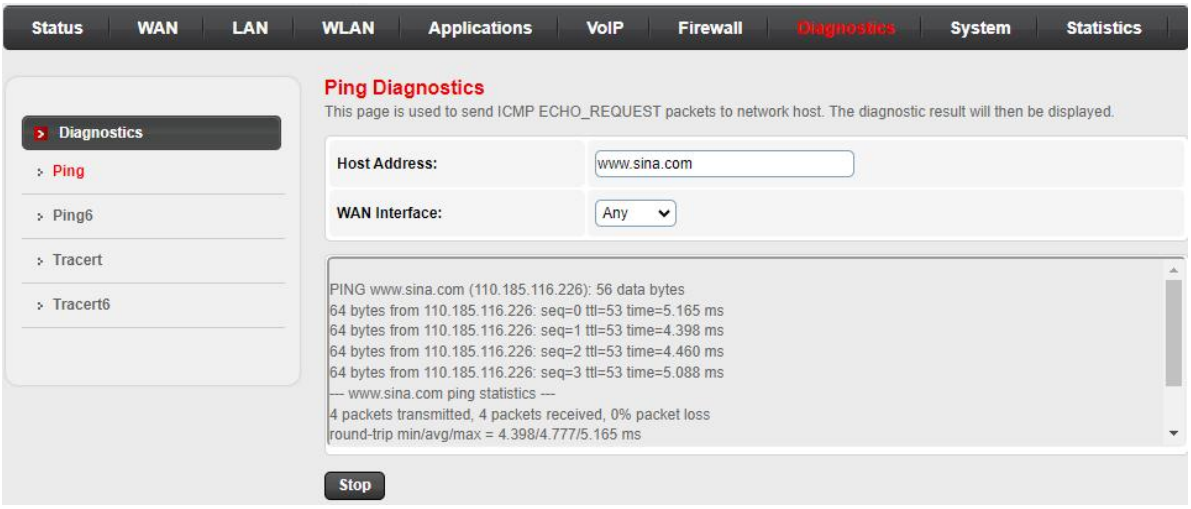


Figure 4-4-1-1 Ping Diagnostics

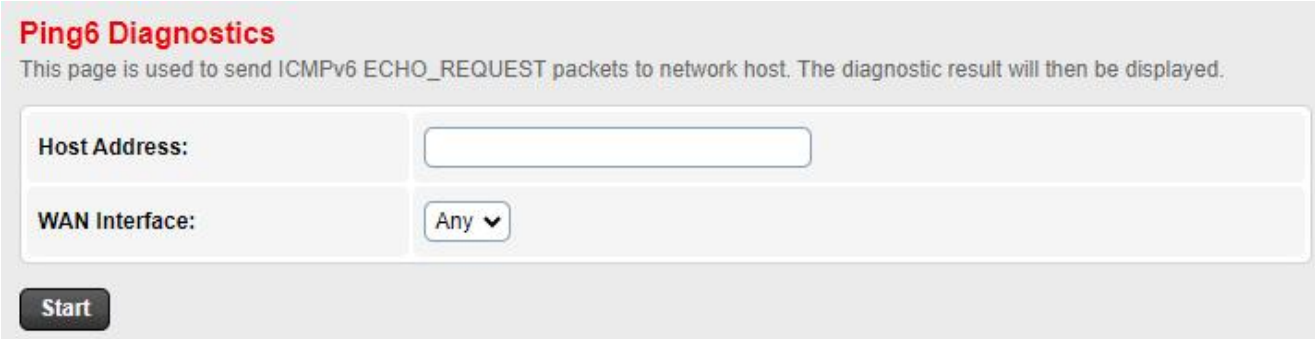


Figure 4-4-1-2 Ping6 Diagnostics

4.4.2 Traceroute Diagnostics

This page is used to print the route packets trace to network host. The diagnostic result will then be displayed.

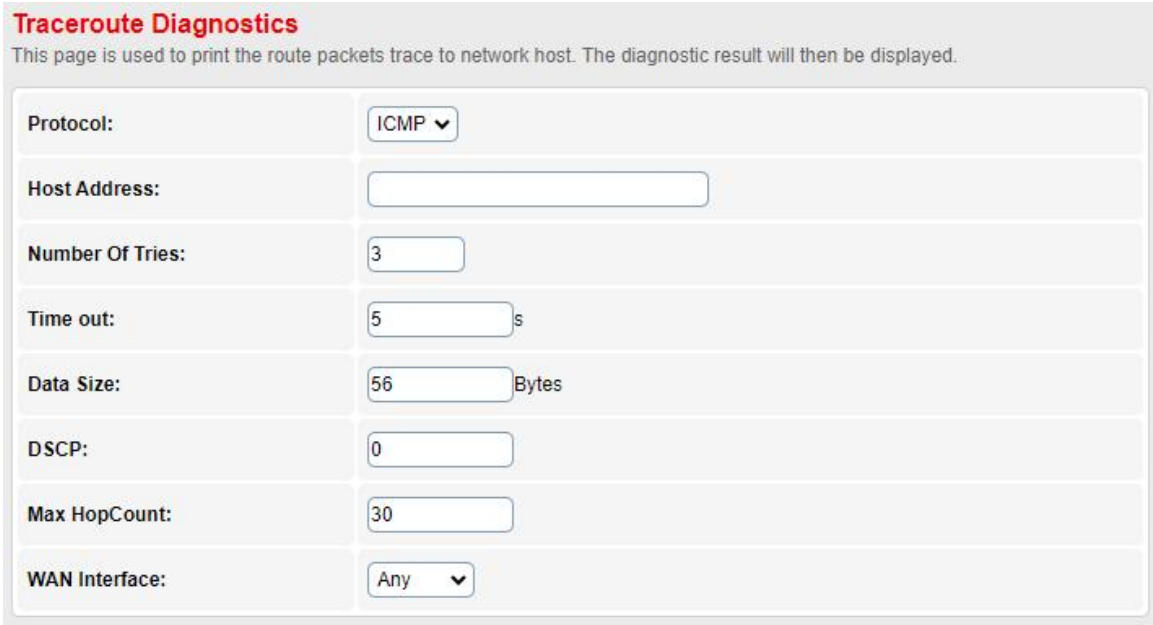


Figure 4-4-2-1 Traceroute Diagnostics

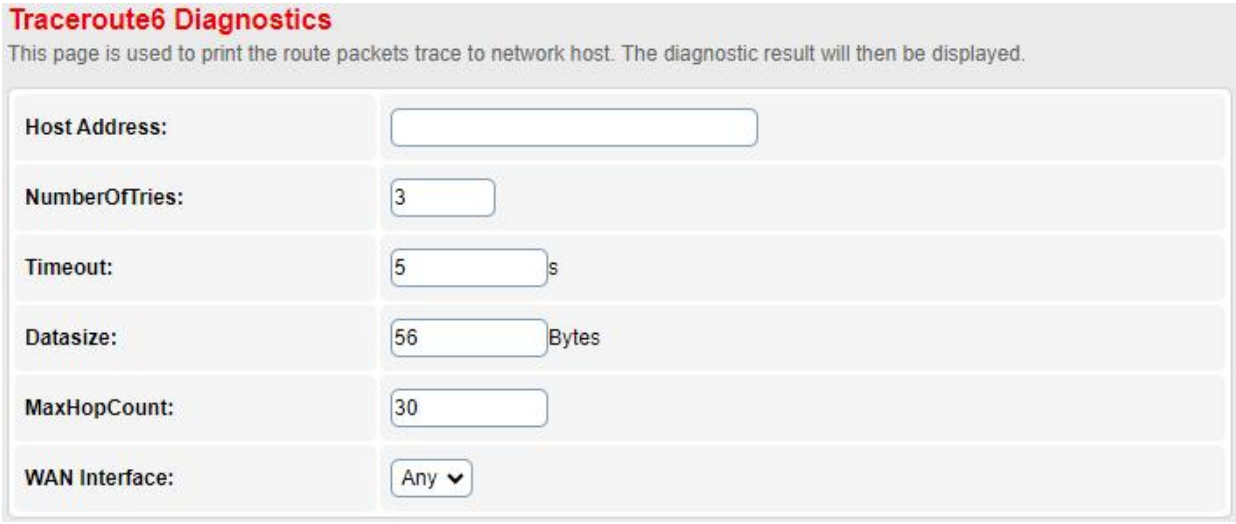


Figure 4-4-2-2 Traceroute6 Diagnostics

4.5 System

4.5.1 GPON Settings

On this page, you set up the GPON authentication information such as LOID (Logical Operator Identifier), LOID Password, PLOAM (Packet Lambda OAM) Password, and Serial Number. Correctly configuring these credentials is essential for the device to successfully register and communicate with the OLT (Optical Line Terminal).

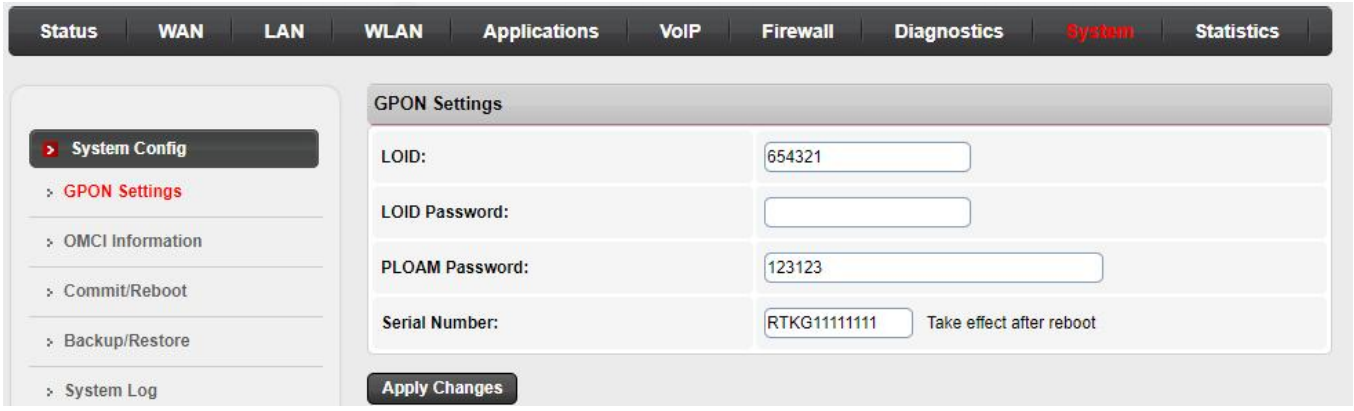


Figure 4-5-1 GPON Settings

4.5.2 Reboot

Figure 4-5-2 reboot

4.5.3 Backup and Restore Settings

This page allows you to backup current settings to a file or restore the settings from the file which was saved previously. Besides, you could reset the current settings to factory default.

Backup Configuration：

Import Configuration File：

Restore Factory Settings：

When you load new configuration, the original configuration will be lost. Please back up the current configuration before loading a new one. In this way, if the new configuration file has an error, you can load the backup file.

4.5.4 System Log

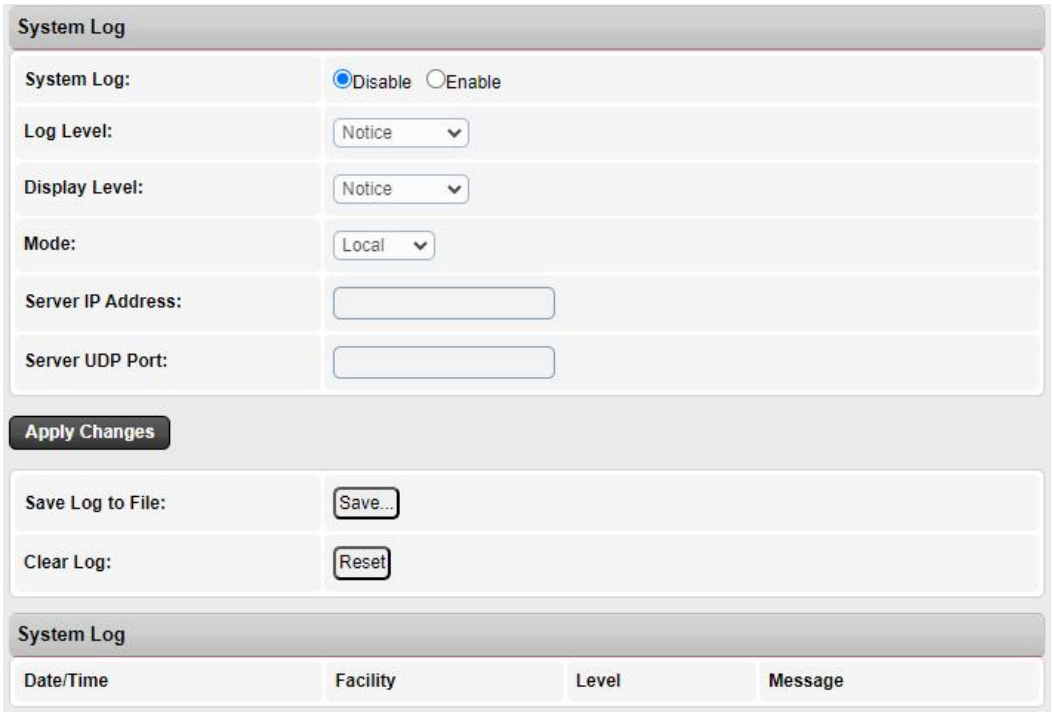


Figure 4-5-4 System Log

4.5.5 Password Configuration

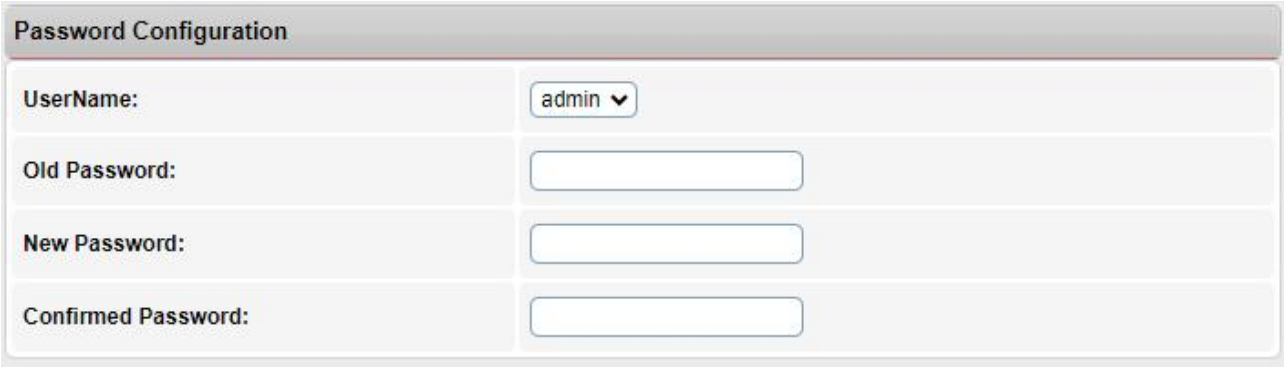


Figure 4-5-5 Password Configuration

4.5.6 Firmware Upgrade

This page allows you upgrade the firmware to the newer version. Please note that do not power off the device during the upload because this make the system unbootable.

Figure 4-5-6 Firmware Upgrade

4.5.7 Time Zone

This page is for configuring the time display, where you can select different time zones and specify an SNTP server. Be sure to check the "Enable SNTP Client Update" option to synchronize the time with the internet.

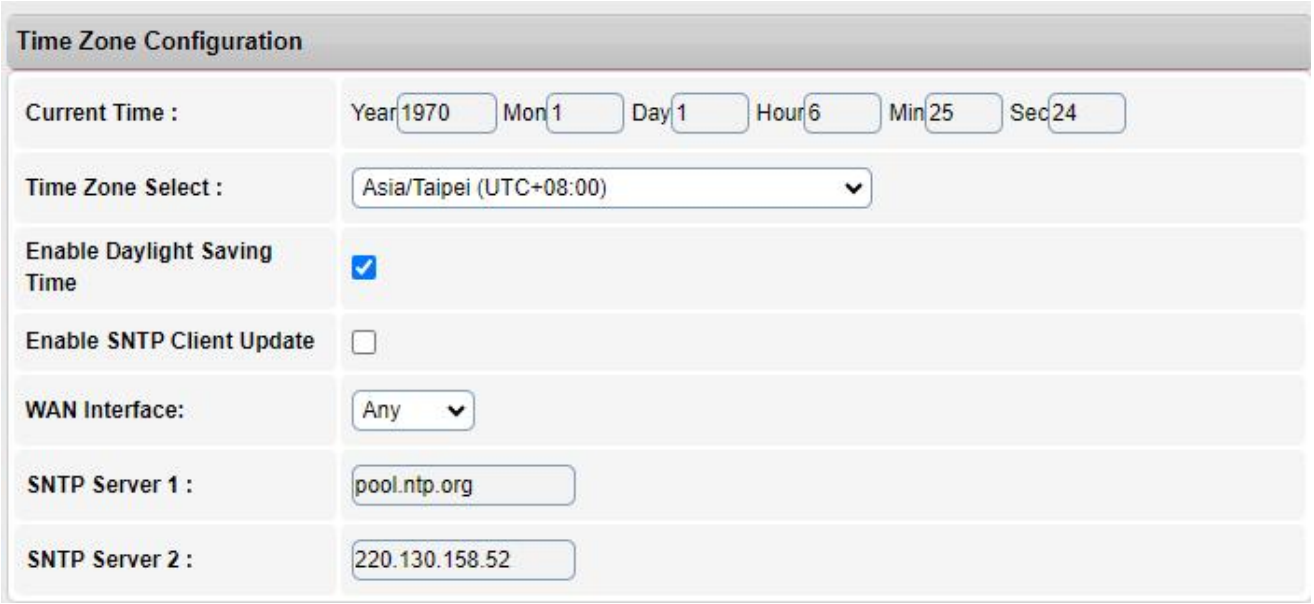


Figure 4-5-7 Time Zone