User Guide
For WI-NR3230

Release version:V1.0.0

January 2026

WI-NR3230 User Manual Instruction

Chapter 1. Introduction

1.1 Product Description

Current Product is a 5G CPE, it supports dual 2x2 Wi-Fi 6, and Fast Ethernet LAN and WAN, thus providing the wireless speed of 3000Mbps in the 2.4GHz and 5G frequency band. The product integrates the latest generation of 750 modem which meets the 3GPP Release 15 specification, it supports both 5G NSA and SA modes. With its outstanding stability of high-speed wireless transmission and enhanced reliability, the 5G CPE can provide users with excellent multimedia streaming through their mobile devices anywhere, anytime in the home and office.

1.2 Product Features

- Built-in 5G/LTE LGA modem for
- Connecting to 5G/LTE network
- One 2.5 Gigabit Ethernet LAN port to connect to CPE
- Comply to 802.3af POE standard
- Built-in 5G/LTE antenna design
- Plug-and-Play with Ethernet interface
- Easy-To-Use web interface for

1.3 Product Specifications

Technical Specifications	
General	
Chipset	T750+MT7916AN/+MT7976DA +2*RTL8221B+Le9643
CPU frequency	Quad core ARM Cortex A55 2GHz
Memory	1GB 16-bit LPDDR4
Flash	1GB NAND FLASH
WIFI	2T2R 2.4GHz 802.11b/g/n/ac/ax, 574Mbps 2T2R 5.8GHz 802.11a/n/ac/ax, 2402Mbps
Device Interfaces	• 1x RJ45 10M/100M/1000M/2500M LAN Ethernet • 1 x RJ45 10M/100M/1000M/2500M WAN • 1 x reset button • 1 x WPS button • 1 x Power jack • 1 x RJ11 Phone jack

WIFI Antenna	2 x 3dBi internal 2.4G&5G dual band antenna
A	
Wi-Fi Features	
Standards	802.11a/b/g/n/ac/ax
	2.4G: 2.4~2.4835GHz 5G: 5.150~5.825GHZ
	Korea、Japan、ETSI、FCC channels can be selected
Modulation schemes	OFDM = BPSK,QPSK, 16-QAM, 64-QAM 256-QAM 1024-QAM
	DSSS = DBPSK, DQPSK, CCK
Transfer Rate	HE40: up to 574Mbps 2.4G HE80: up to 1201Mbps 5G HE160: up to 2402Mbps 5G
5G /LTE Features	
5G/ LTE Standards	• Release 15, Cat.19 • 5G NR
5G/ LTE Frequency Support	• 5G NR SA: n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n71/n75/n76/n77/n78 • 5G NR NSA: n1/n3/n7/n8/n20/n28/n38/n40/n41/n71/ n75/n76/n77/n78 • LTE FDD: B1/B3/B5/B7/B8/B20/B28/B32/B71 • LTE TDD: B38/B40/B41/B42/B43/B46(LAA) • WCDMA: B1/5/8
5G/LTE Throughput	•5G SA Sub-6 : DL 4.67Gbps; UL 1.25Gbps •5G NSA Sub-6: DL 4.47Gbps; UL 730Mbps •LTE: DL 1.6Gbps; UL 211Mbps
MIMO	•DL: 4 × 4 UL: 2 × 2(only support 5G SA)
Output Power	23dBm±2dBm

Software Features	
General	Wireless main Protocols: •IEEE 802.11a •IEEE 802.11b •IEEE 802.11g •IEEE 802.11n •IEEE 802.11ac •IEEE 802.11ax •IEEE 802.11h(dfs) •IEEE 802.11e(wmm) •IEEE 802.11k/v/r Wireless spec Features: •Embedded AP with 8 SSIDs on each Radio •Separate authentication for each SSID •Wmf •AutoChannel

	Mobile main Protocols: •3GPP Release 15 Mobile spec Features: •5G SA && 5G NSA •VOLTE •APN && Dial Settings •NAT support •Bridge Mode •Pin Management •Message Management •sim lock/band lock/cell lock support •AT Command Web interface provided Network main Protocols: •RFC0768 UDP •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 Transmission of IP Datagrams over IEEE 802 Networks •IPoE (a.k.a IP over Ethernet over AAL5) Network spec Features: •IPv4/IPv6 dual stack •6RD •IPoE Bridge Mode •IPoE DHCP/Static •PPPoE Dynamic/Static •IPv6 Stateless/Stateful •PPTP、L2TP GRE IPSEC VPN •IGMP proxy and MLD for IPTV •DNS Proxy •DHCP server •NAT,NAPT and ALG

	Other spec Features: •QOS Flow Control •Samba/DLNA/FTP •NAT,NAPT and ALG •DMZ and Port forwarding(Virtual server) •SPI Firewall, Denial of Service (DoS) protection •Port filtering, IP filtering and MAC filtering •URL filter •DDNS •Static route •SNTP Date/time update from Internet Time Server •Diagnostics(Ping/TraceRoute) •Logs and statistics •Automatic timing restart Management Features: •WEB GUI •Command line tools(telnet/ssh) •TR-069 remote mangagment •TR181/TR104/TR140/TR143/TR157(periodicstatistics) •UPNP
Environment Requirement	
Operating Temperature	0°C~40°C
Storage Temperature	-20°C ~ 70°C
Operating Humidity	5%~95% (typical)
Power Supply	12V/1.5A
EMC/Safety	
Regulation Compliance	CE
Safety Regulations	UL
Green Standard	RoHS

Chapter 2. Hardware Installation

Please follow the instructions below to connect the WI-NR3230 to the existing network devices and your computers.

2.1 Hardware Description

Dimensions: 168（H）X 109.5(W) X 109.5(D)mm (W x D x H)
Diagram:

Figure 2-1-1

2.1.1 Front LED

The front LED provides a simple interface monitoring the router. Figure 2-1-1-1 shows the front LED of the WI-NR3230.

Figure 2-1-1-1

Figure 2-1-1-2

2.1.2 LED Indications

The LEDs on the front panel indicate instant status of port links, wireless data activity, system power, USB and WPS, and help monitor and troubleshoot when needed. Figure 2-1-2-1 and Table 2-1-2-1 show the LED indications of the Wireless Router.

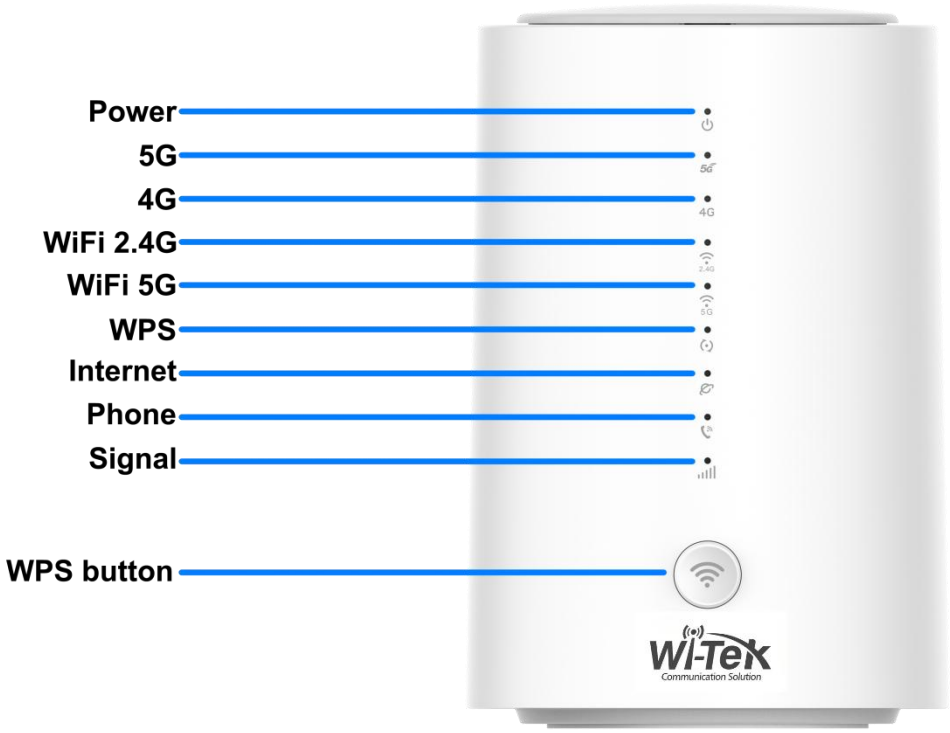

Figure 2-1-2-1 WI-NR3230 Top View

LED	STATE	FUNCTION
PWR	On	Device power on
	Off	Device power off
5G	On	The net is 5G only
	Off	Other
4G	On	The net is LTE
	Off	Other
2.4G Wi-Fi	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 Wi-Fi	On	The 5GHz Wi-Fi is activated.
	Flash	Device is transmitting data wirelessly over 5GHz.
	Off	The 5GHz Wi-Fi is disabled.
WPS	Flash	WPS is triggered
	Off	WPS is connected or disable
Internet	On	Link is established.
	Flash	Packets are transmitting or receiving.
	Off	WAN port is not connected.

Phone	Blue	VoLTE is established.
	Green	VoIP is established.
	Off	Phone port is not connected.
Signal Strength Indicator	On	Signal strength (yellow – poor, green – good, blue – excellent).
	Off	Mobile connection is not created or not established.

Table 2-1-2-1 LED Indications

2.1.3 Rear Panel

The rear panel provides the physical connectors connected to the power adapter and any other network device. Figure 2-1-3-1 shows the rear panel of the WI-NR3230.

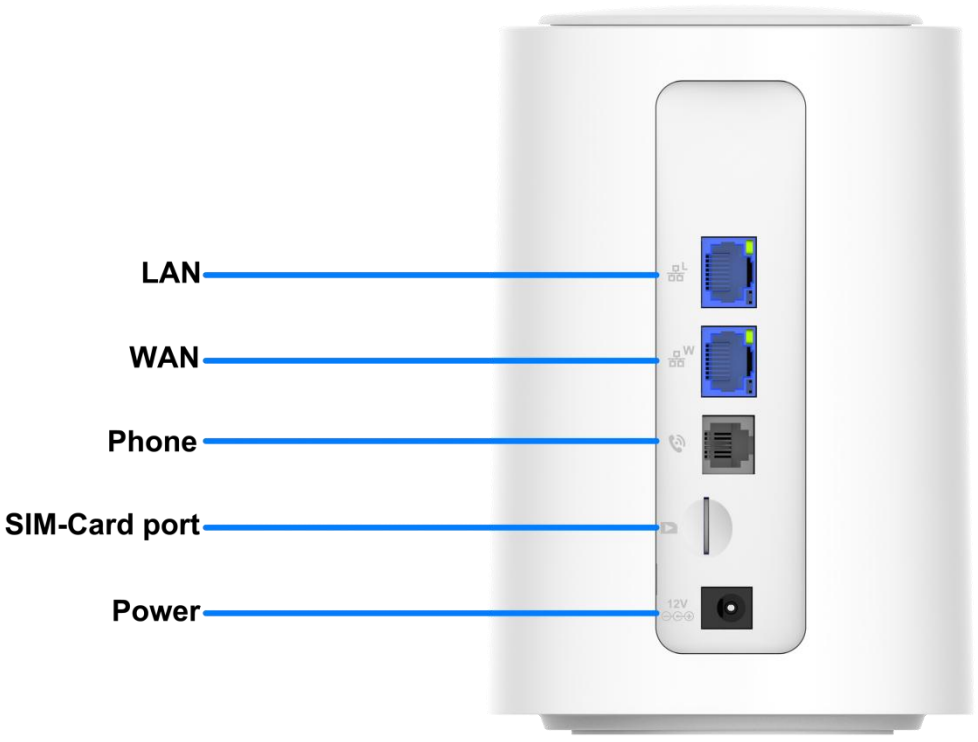

Figure 2-1-3-1 Rear Panel of the WI-NR3230

Interface	Description
Power Connector	Connect to the power adapter provided in the package.
USB3.0	USB3.0 port
Phone	Connects to an analogue telephone for Internet telephony.

WAN	Connect to the Cable/xDSL Modem or the Ethernet
LAN	Connect to the user's PC or network devices
WPS (In the front panel)	Press it will enable WPS function
Reset (In the bottom panel)	Press the Reset button gently for 5 seconds and then release it. The system restores to the factory default settings
SIM interface (In the bottom panel)	SIM card access

Table 2-1-3-1 Interface Indications

2.1.4 Bottom panel

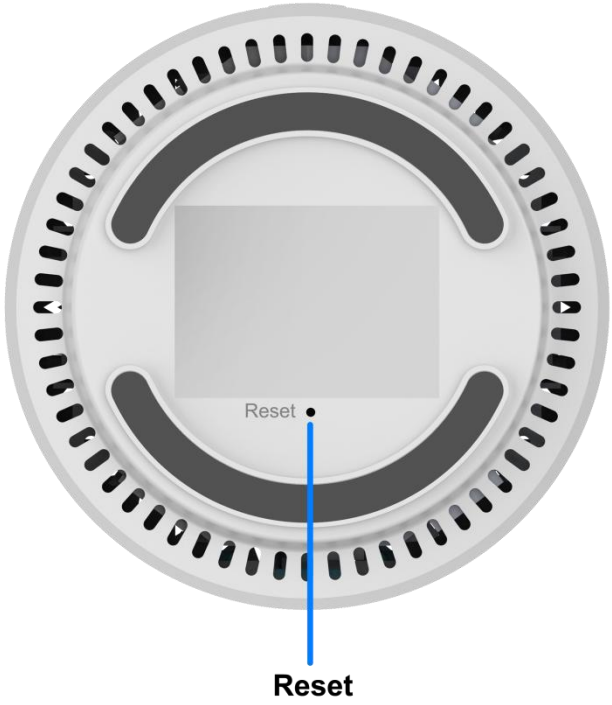

Figure 2-1-4-1 bottom of the WI-NR3230

Chapter 3. Connecting to the Router

3.1 System Requirements

- Broadband Internet Access Service (Ethernet/Mobile WAN connection).
- One Conversion Modem with RJ45 is needed if Access Type is Cable/xDSL.
- PCs work network with Ethernet/Wireless Adapters.
- PC subscribers use Windows XP, Windows Vista,Windows7/8/10/11 ,MACOS9/12/13 or later, or Linux, UNIX or other platforms compatible with TCP/IP protocols.
- The above PC is installed with a Web browser.

1.The Router in the following instructions means WI-NR3230.
2.It is recommended to use Google Chrome to access the Router.

3.2 Installing the Router

Before installing the Router, make sure your PC is connected to the Internet through the broadband service successfully at this moment. If there is any problem, please contact your local ISP. After that, please install the Router according to the following steps. Don't forget to pull out the power plug and keep your hands dry.

Step 1. Power off your PC, Cable/xDSL Modem and the Router.
Step 2. Locate an optimum location for the Router. The best place is usually at the center of your wireless network.
Step 3. Connect the PC or Switch/Hub in your LAN to the LAN Ports of the Router with Ethernet cable.
Step 4. Connect the power adapter to the power socket on the Router, and the other end into an electrical outlet. Then power on the Router.
Step 5. Power on your PC and Cable/xDSL Modem.

Chapter 4. Quick Installation Guide

This chapter will show you how to configure the basic functions of your Wireless Router using Quick Setup within minutes.

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

4.1 Manual Network Setup - TCP/IP Configuration

The default IP address of the Wireless Router is 192.168.0.1 and the default Subnet Mask is 255.255.255.0. These values can be changed as you desire in the web UI of the Router. In this section, we use all the default values for description.
Whether the Router is configured via wired or wireless connection, the PC needs to be assigned an IP address first. Before you connect the local PC to the Wireless Router via wired or wireless connection, please configure the IP address for your PC in the following two ways first.

- 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 Windows10. 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.

4.1.1 Obtaining an IP Address Automatically

Summary:
1.Set up the TCP/IP Protocol in "Obtain an IP address automatically" mode on your PC.
2.Then the Wireless Router built-in DHCP server will assign an IP address to the PC automatically.

If you are sure the DHCP server of Wireless Router is enabled, you can set up the TCP/IP Protocol in "Obtain an IP address automatically" mode on your PC. And then the Wireless Router built-in DHCP server will assign an IP address to the PC automatically.

1. Installing TCP/IP Component

1) On the Windows taskbar, click the Start button, point to Setting, and then click it.

2) Under the **Network and Internet** icon. And then click **Change adapter options**.

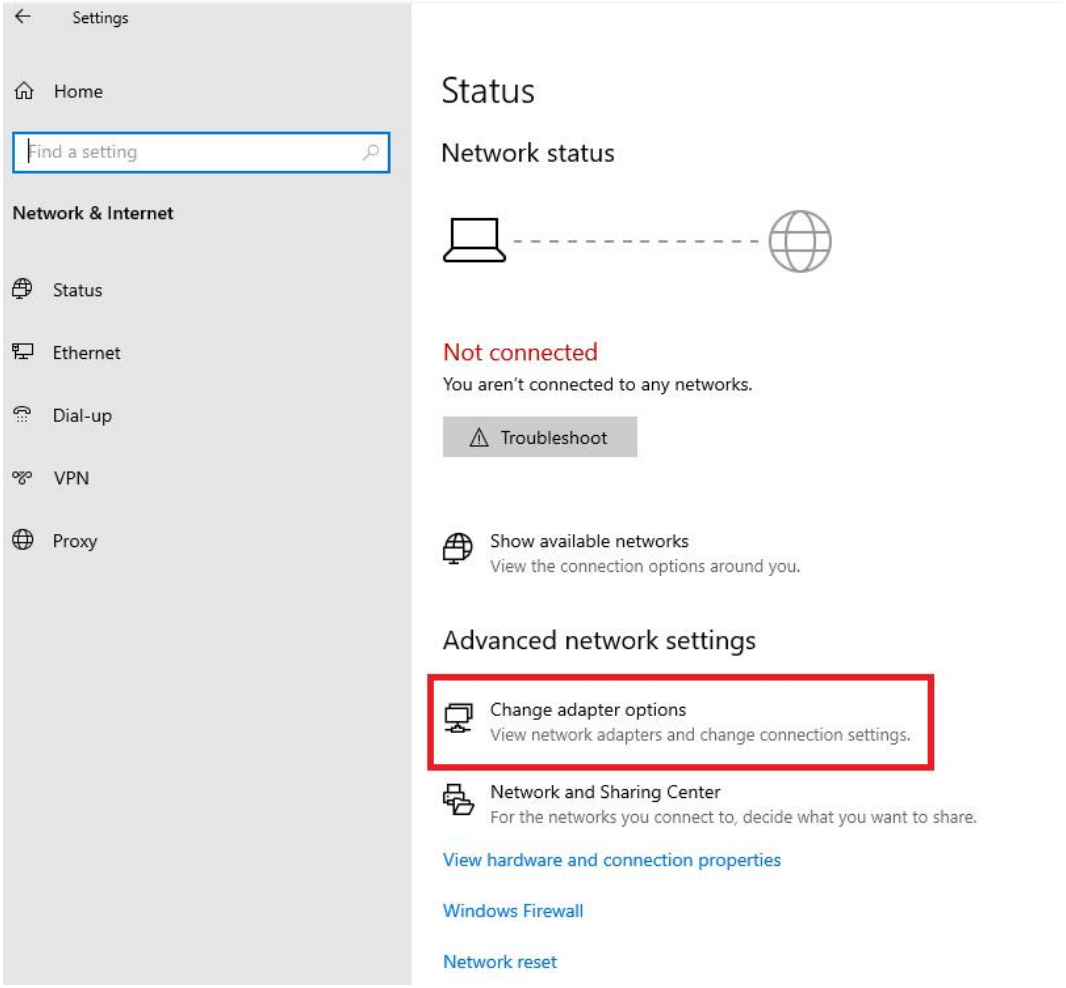

Figure 4-1-1-1 Change Adapter Settings

3) Right-click on the **Network Connection**, and select **Properties** in the appearing window.

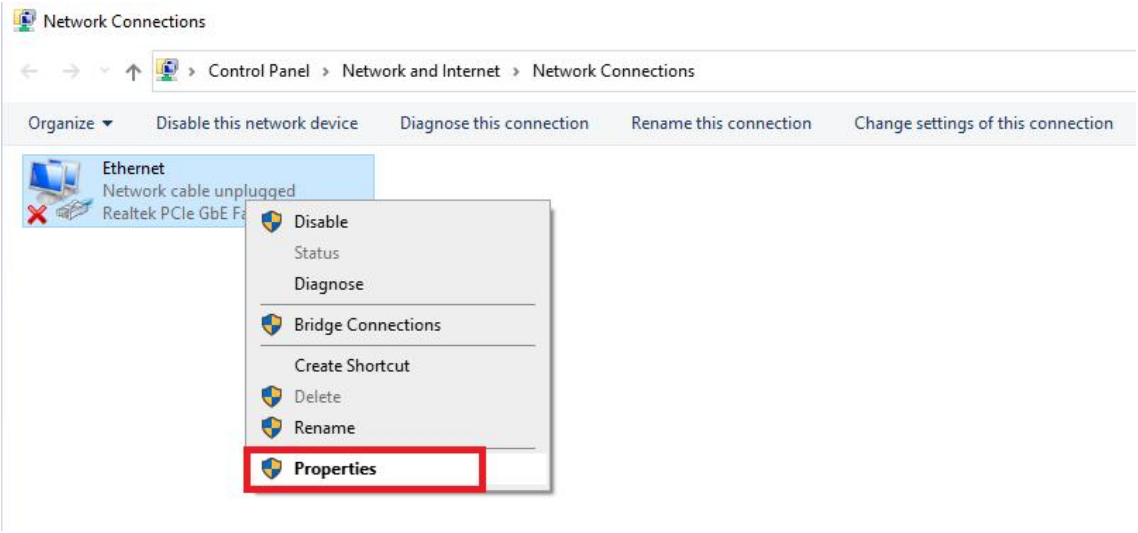

Figure 4-1-1-2 Network Connection Properties

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

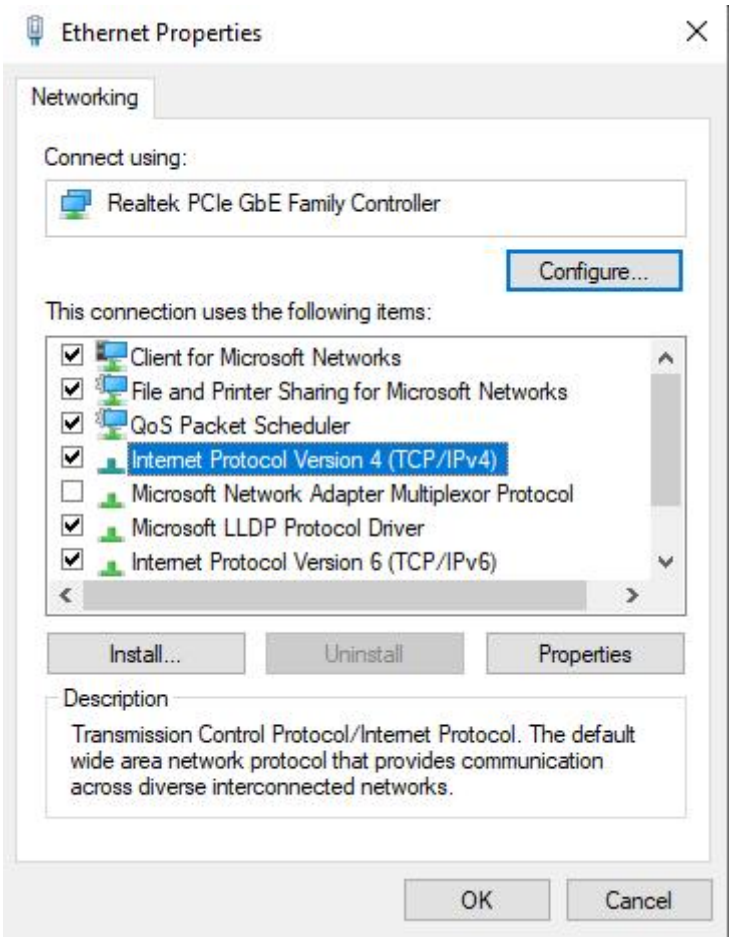

Figure 4-1-1-3 TCP/IP Setting

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.

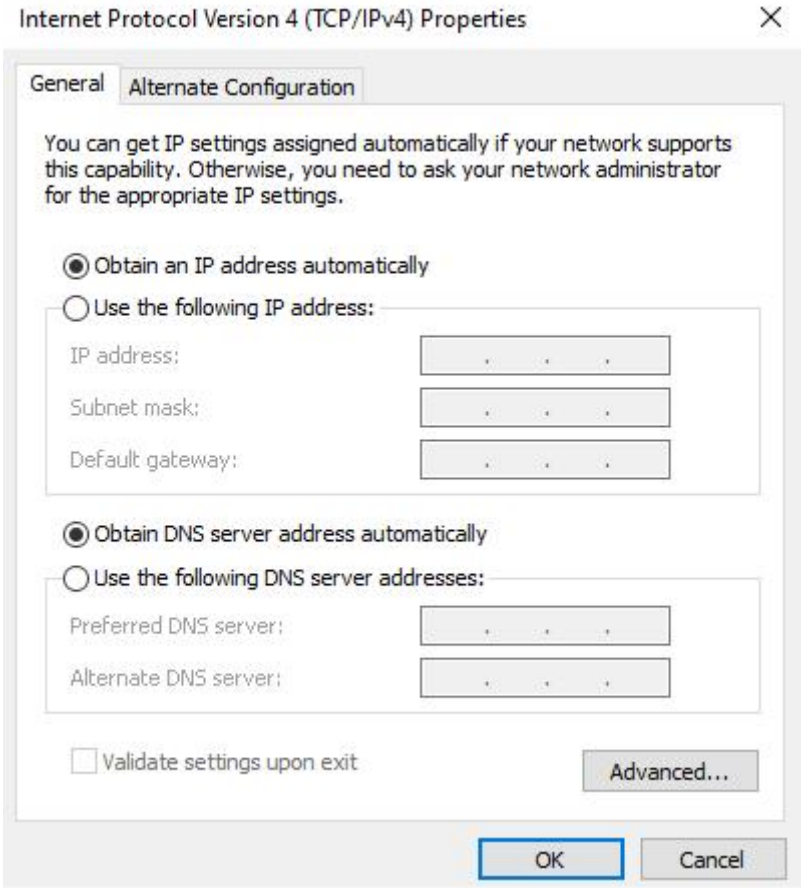

Figure 4-1-1-4 Obtain an IP Address Automatically

4.1.2 Configuring the IP Address Manually

Summary:

- Set up the TCP/IP Protocol for your PC.
- Configure the network parameters. The IP address is 192.168.0.xxx ("xxx" is any number from 2 to 254), Subnet Mask is 255.255.255.0, and Gateway is 192.168.0.1(The Router's default IP address).

If you are sure the DHCP server of Wireless Router is disabled, you can configure the IP address manually. The IP address of your PC should be 192.168.0.xxx (the same subnet of the IP address of the Wireless Router, and "xxx" is any number from 2 to 254), Subnet Mask is 255.255.255.0, and the Gateway is 192.168.0.1(The default IP address of the Wireless Router).

1) Continue the settings from the last figure. Select Use the following IP address radio button.
2) If the LAN IP address of the Wireless Router is 192.168.0.1, enter IP address

192.168.0.x (x is from 2 to 254), and Subnet mask 255.255.255.0

3) Enter the LAN IP address of the Wireless Router (the default IP is 192.168.0.1) 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.

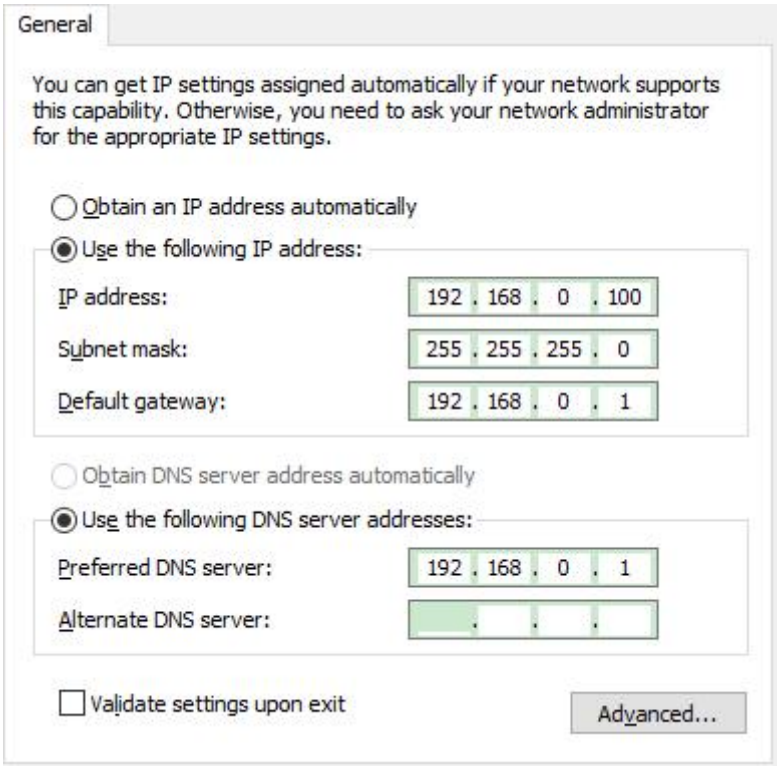

Figure 4-1-2-1 IP and DNS Server Addresses

Now, you can run the Ping command in the command prompt to verify the network connection between your PC and the Router. The following example is in Windows 10 OS. Please follow the steps below:

1. Click on **Search** .
2. Type "**cmd**" in the Search box.

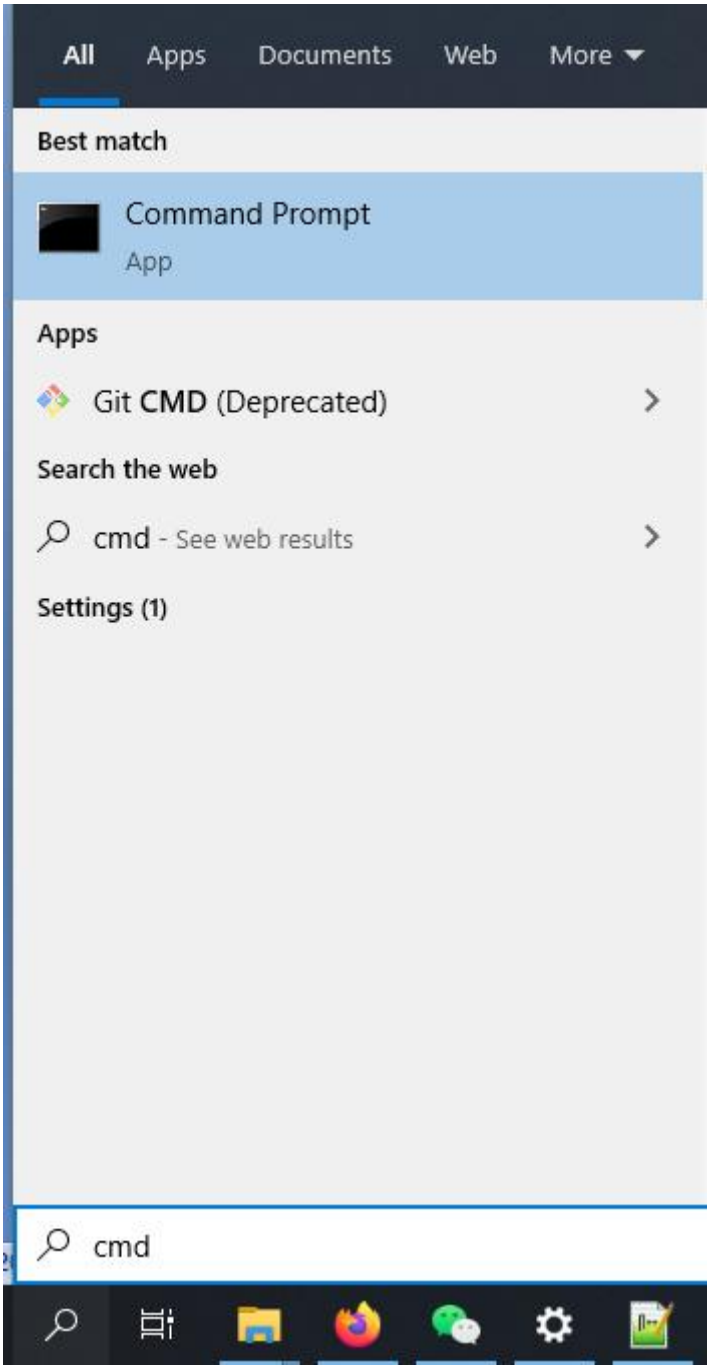

Figure 4-1-2-2

3. Open a command prompt, and type ping **192.168.0.1**, and then press **Enter** key.

• If the result displayed is similar to Figure 4-1-2-3, it means the connection between your PC and t he Router has been established well.

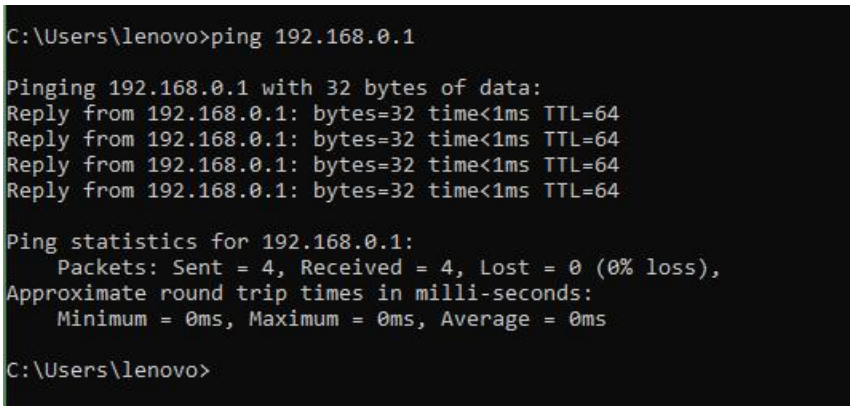

Figure 4-1-2-3 Successful Ping Command

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.

Note

If the Router's IP address is 192.168.0.1, your PC's IP address must be within the range of 192.168.0.2 ~ 192.168.0.254.

4.2 Starting Setup in the Web UI

It is easy to configure and manage the WI-NR3230 with the web browser.

Step1. To access the configuration utility, open a web-browser and enter the default IP address http://192.168.0.1 in the web address field of the browser.

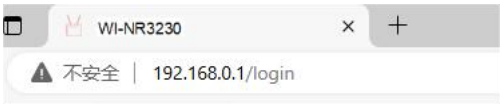

Figure 4-2-1 Login the Router

After a moment, a login window will appear. Enter the Username and Password in the input prompt boxes, both in lower case letters. Then click the Login button or press the Enter key.

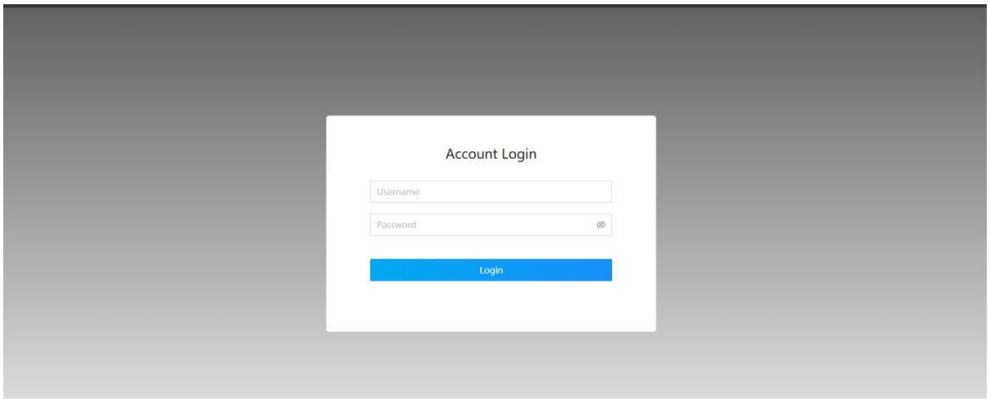

Figure 4-2-2 Login Window

Default IP Address: **192.168.0.1**
Default User Name: **admin**
Default Password: describe on device label(if no, ‘admin’ is default).

The first time login router, it will enter wizard setup, the Wizard Setup page screen appears as Figure 4-2-3.

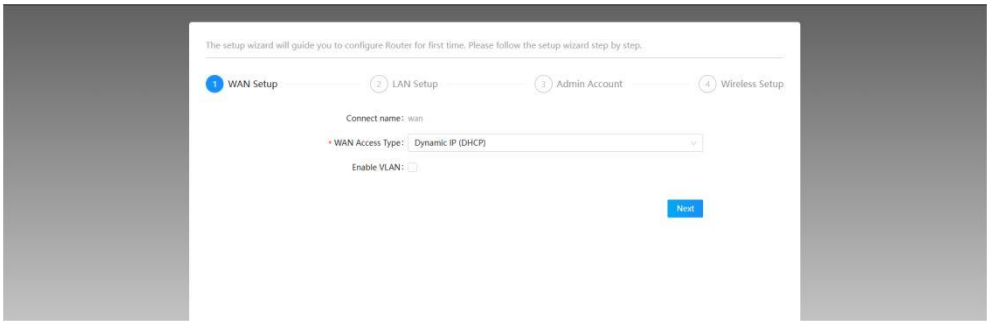

Figure 4-2-3 WI-NR3230 Web UI Screenshot

Step2. You can configure the WAN Interface Setup in Figure 4-2-3.

Step3. Choose “Next” and you can configure the LAN Interface Setup.

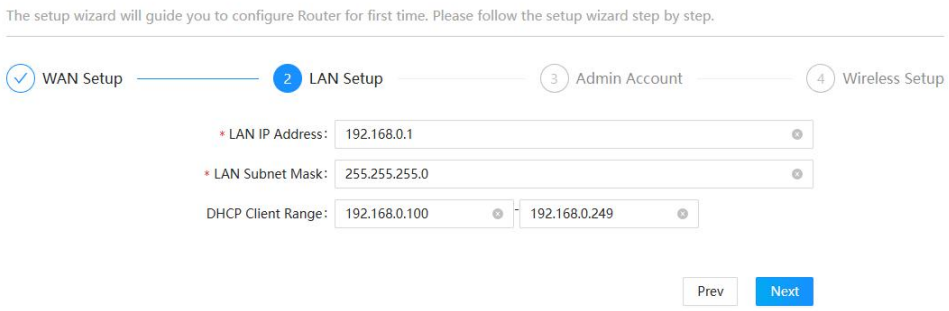

Figure 4-2-4 Configure LAN Interface Setup

Step4. Choose “Next” and you can configure login password.

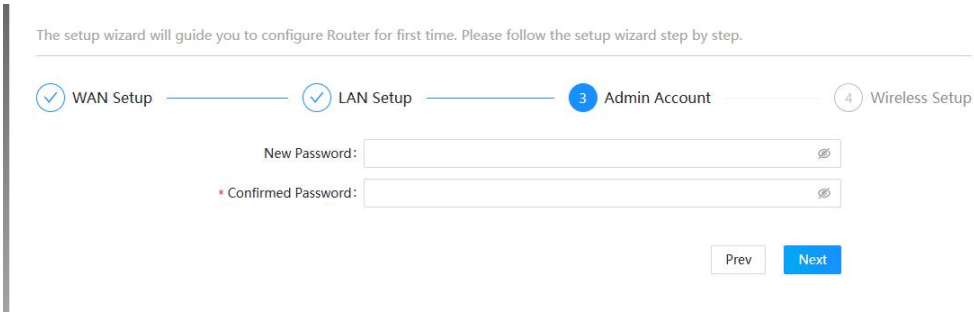

Figure 4-2-5 Configure admin account

Step5. Choose “Next” and you can configure the Wi-Fi Interface Setup.

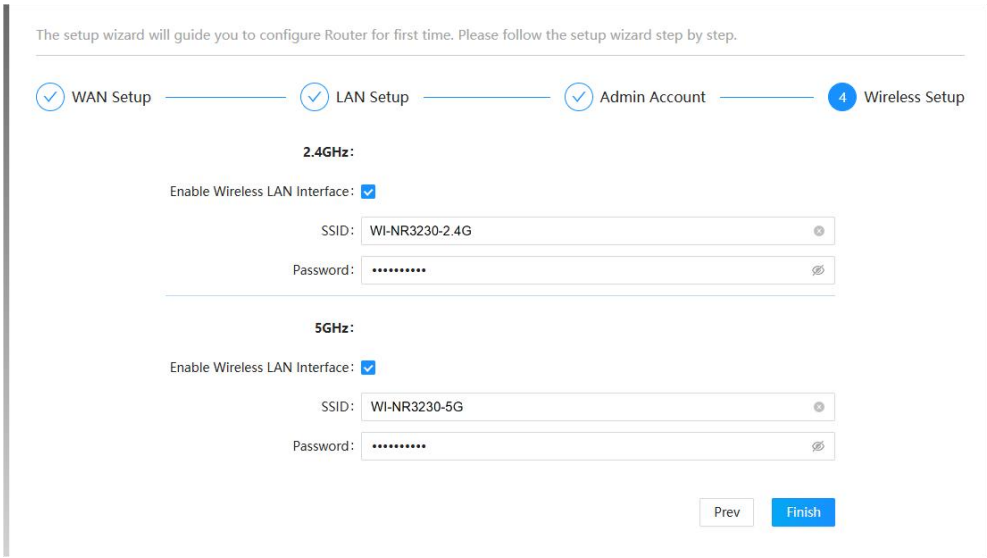

Figure 4-2-6 Configure Wi-Fi Interface setup

Chapter5. Configuring the Router

This chapter delivers a detailed presentation of router's functions and features under 4 main menus shown below, allowing you to manage the router easily.

Figure 5-1 Router's Functions

5.1 HOME

5.1.1 Internet

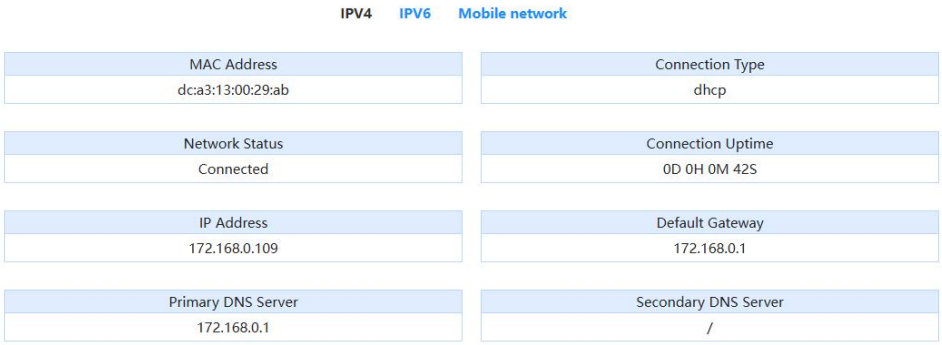

Figure 5-1-1-1 Router IPv4 Status

IPV4 IPV6 Mobile network

MAC Address	Connection Type
dc:a3:13:00:29:ab	Auto
Network Status	**Connection Uptime**
Connected	0D 0H 2M 13S
IPv6 Address	**Default Gateway**
/	/
Primary DNS Server	**Secondary DNS Server**
/	/

Figure 5-1-1-2 Router IPv6 Status

IPV4 IPV6 Mobile network

Network	
Signal Intensity:	
Network Provider:	/
Network Status:	Disconnected
Connection Uptime:	0D 0H 0M 0S
IMEI:	868866050711030
Net Type:	/

Figure 5-1-1-3 Mobile network Status

5.1.2 WI-NR3230

On this page, you can view information about the current LAN status of the WI-NR3230.

IPv4 Network	
MAC Address:	DC:A3:13:00:29:AA
IP Address:	192.168.0.1
Subnet Mask:	255.255.255.0

IPv6 Network	
Link-Local Address:	fe80::dea3:13ff:fe00:29aa/64
Global Address:	/

Wi-Fi 2.4GHz	
Status:	Up
Wi-Fi Name (SSID):	B3-2.4G
Encryption:	WPA2PSK
BSSID:	dc:a3:13:10:29:aa
Channel Number:	Auto

Wi-Fi 5GHz	
Status:	Up
Wi-Fi Name (SSID):	B3-5G
Encryption:	WPA2PSK
BSSID:	dc:a3:13:20:29:aa
Channel Number:	Auto

System/CPU	
Uptime:	3881
Build Time:	Mon Jun 17 07:56:56 UTC 2024
CPU Usage:	6.42%
Memory (Free/Total):	246788096/663293952

Device	
Device Type:	CPE
Serial Number:	G530B324053029AA
Customer ID:	
IMSI:	/
IMEI:	868866050711030
First Contact Time:	
Last Contact Time:	
Last Activation Time:	
On 5G Time:	0:00:00

Figure 5-1-2-1 WI-NR3230 Info

5.1.3 Connected Clients

This page shows the IP addresses and host names of all the PCs in your network.

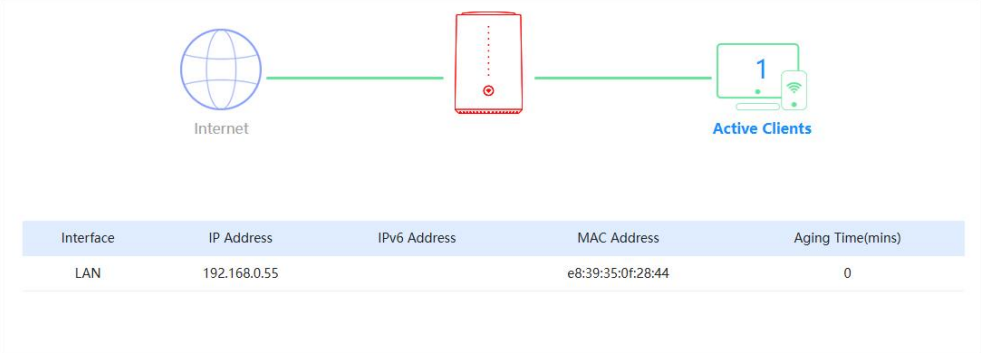

Figure 5-1-3-1 Connected Clients

5.2 Settings

5.2.1 WAN

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

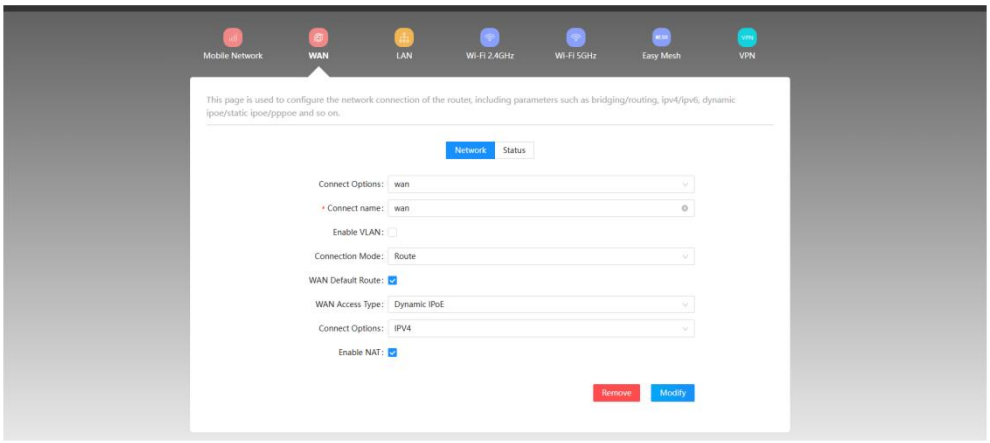

Figure 5-2-1-1 WAN

5.2.1.1 Network

This page is used to configure the network connection of the router, including parameters such as bridging/routing, ipv4/ipv6, dynamic ipoe/static ipoe/pppoe and so on.

There is one wan connection can be use, the wan connection can be configured as difference mode, such as DHCP router mode, PPPoE router mode, Static router mode, and each wan connection can be configured to have VLAN tag, this will more helpful for user to meet different environment usage. You need to initialize it first.

• **DHCP**

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

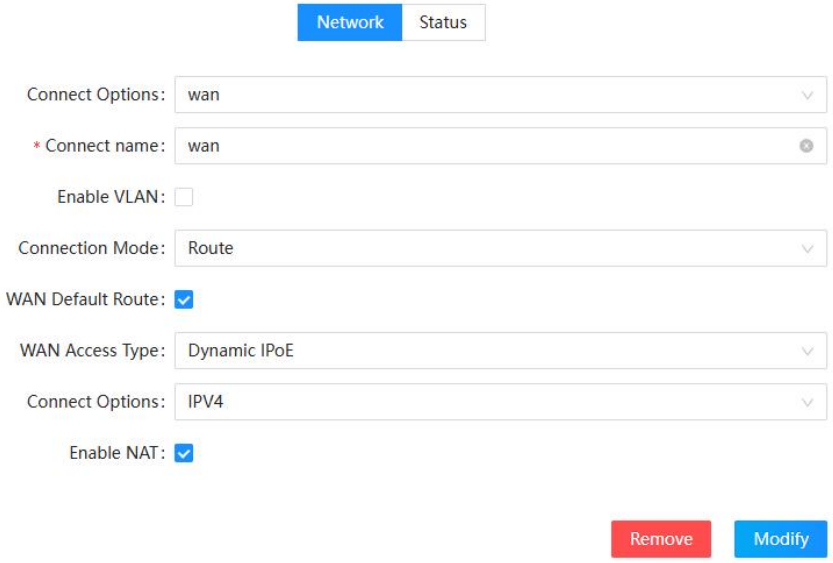

Figure 5-2-1-1-1 DHCP

Object	Description
MTU	You can keep the maximum transmission unit (MTU) as default.
Bridge	The LAN interface can obtain an IP address of the same network segment as WAN.
VLAN	Enter the VLAN ID value provided by your ISP.
WAN Type	From this feature, user can distinguish different services.
NAT	Support network address translation

• **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.

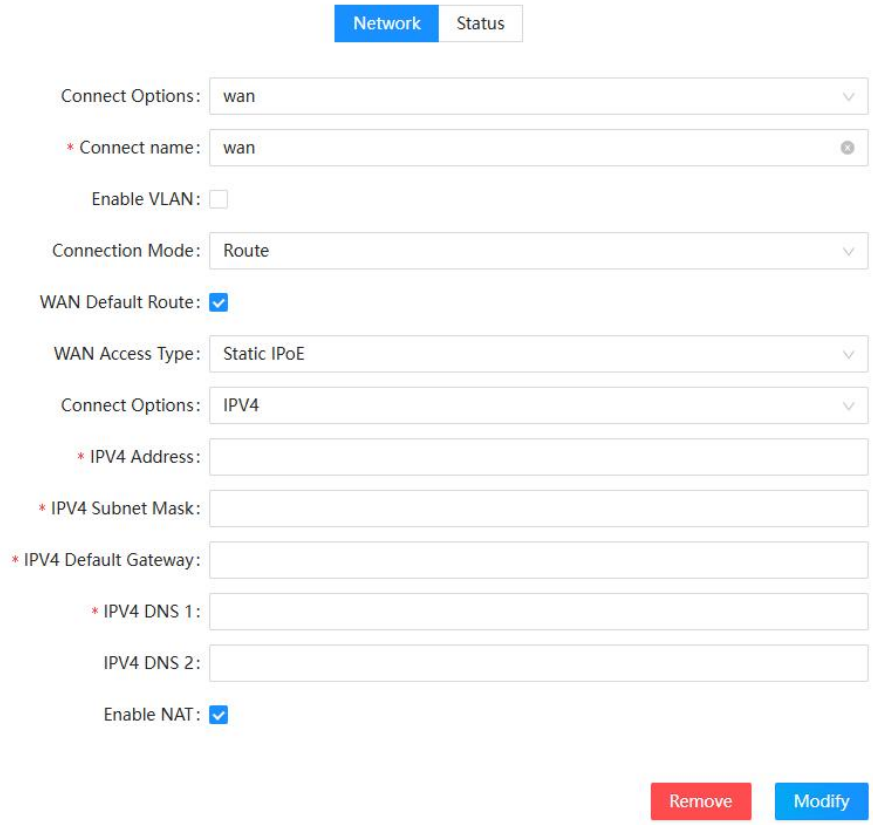

Figure 5-2-1-1-2 Static IP

Object	Description
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.
Default Gateway	Enter the WAN Gateway address provided by your ISP.
DNS 1	Enter the necessary DNS address provided by your ISP.
DNS 2	Enter the other DNS address if your ISP provides you with 2 such addresses, and it is optional.

- **PPPoE**

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

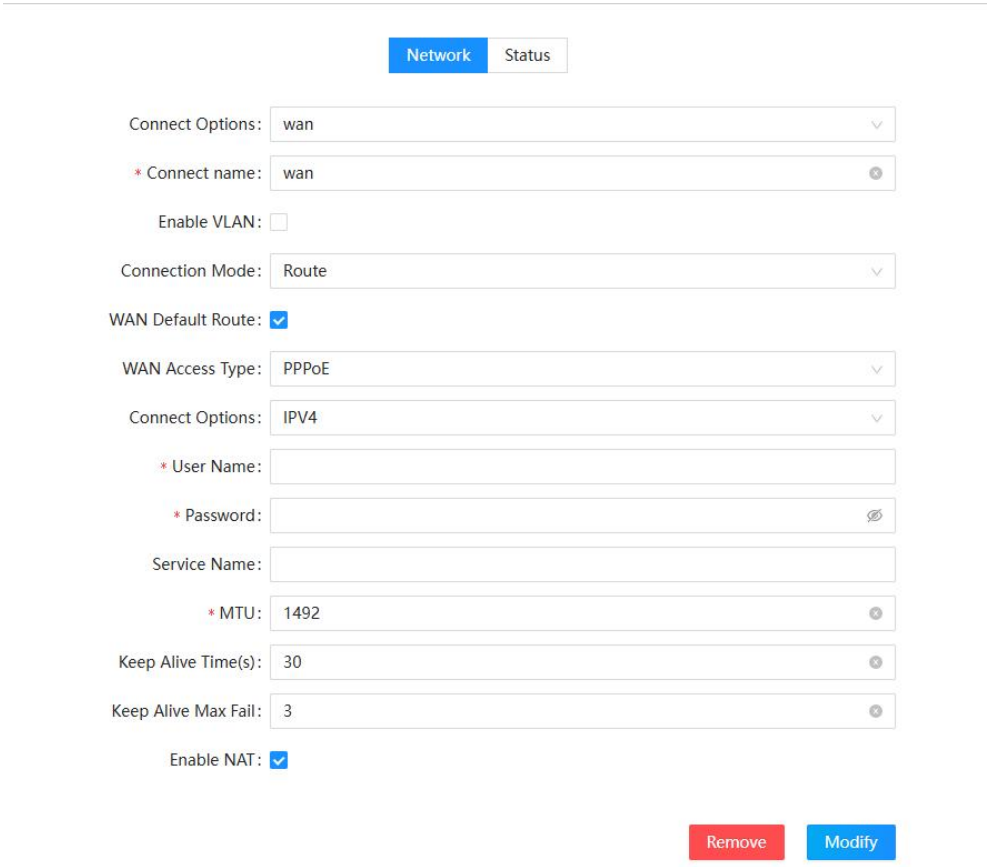

Figure 5-2-1-1-3 PPPoE

Object	Description
Username	Enter the User Name provided by your ISP.
Password	Enter the password provided by your ISP.
Service Name	Type the name of this router.
Keep Alive Time(s)	Time when a keepalive packet is sent
Keep Alive Max Fail	Maximum number of times for sending keepalive packets without reply. If the number exceeds, the connection will be disconnected

5.2.1.2 Status

This page shows the status information for all wan.

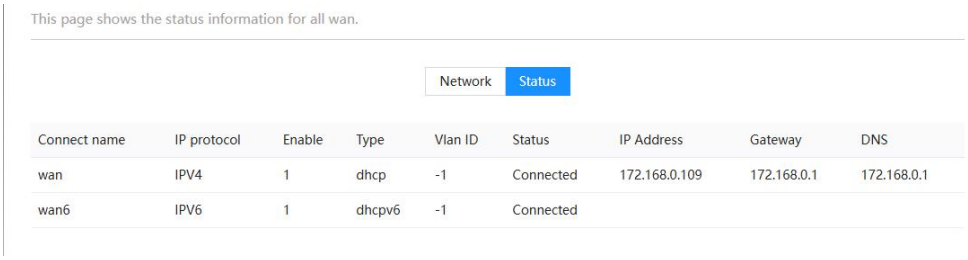

Figure 5-2-1-2-1 Status

5.2.2 Mobile Network

5.2.2.1 Basic setting

This page is used to configure the parameters for Internet network which 3G , LTE or 5G.

Choose “AT Command” and you can jump to a new page as Figure 5-2-2-2-1

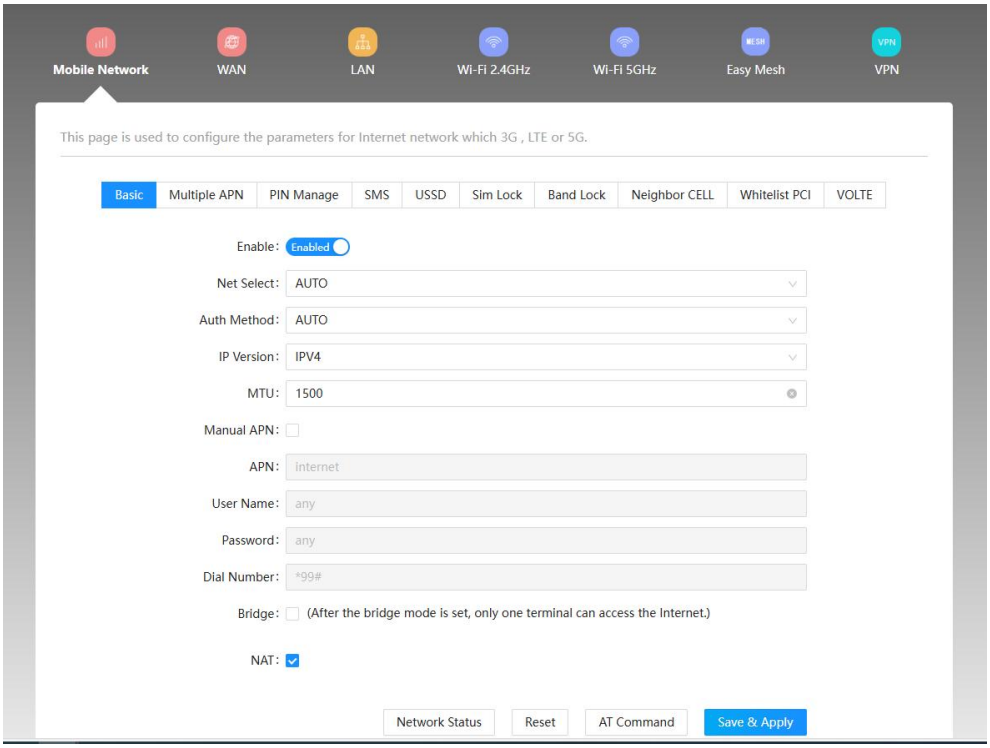

Figure 5-2-2-1-1 Operation Mode

Object	Description
Net Select	Select Auto/3G/4G/5G.
Auth Method	Auth mode settings, include auto, pap and chap.
IP Version	Select IPv4/IPv6/IPv4v6.
MTU	You can keep the maximum transmission unit (MTU) as default.
Manual APN	If enable this option, the APN above will be used. Otherwise the router will get the APN automaticly.
APN	Enter the APN from ISP
User Name	Enter the user name.

Password	Enter the password.
Dial Number	Enter the Dial number from ISP.
PIN	If the SIM card has set PIN, please enter the PIN here.
NAT	Enable/Disable LTE NAT function.

5.2.2.2 AT command

This page is used to get the result of at command.

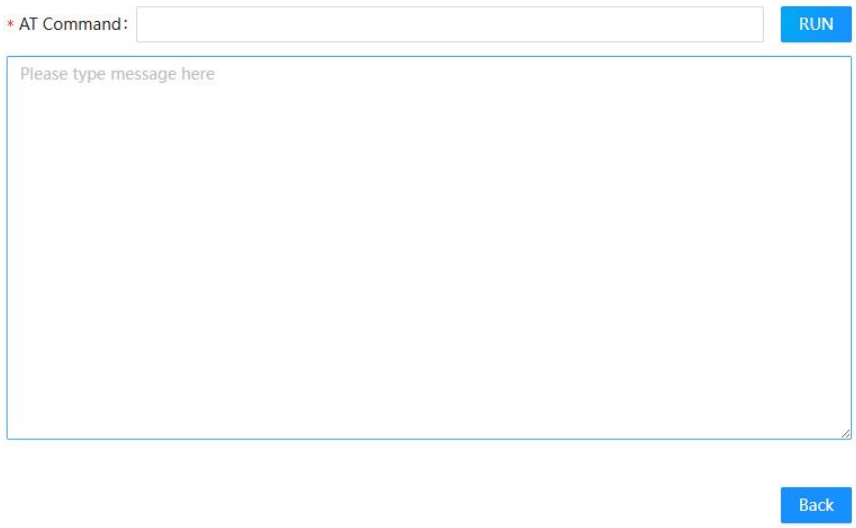

Figure 5-2-2-2-1 AT Command

5.2.2.3 PIN Manage

This page is used to configure the SIM PIN.

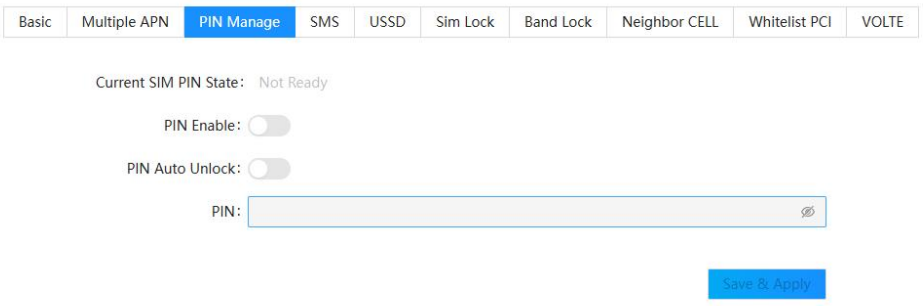

Figure 5-2-2-3-1 PIN Manage

Object	Description
Operation	Include Unlock、Modify PIN、Reset PIN、Lock.
PIN	When you need to unlock, you need to enter PIN.

Old PIN	When you need to modify the PIN, you need to enter the original PIN.
New PIN	When you need to modify the PIN, you need to enter the new PIN.
PUK	When enter PIN error exceeds 3 times, the PUK is required to reset the PIN.

5.2.2.4 SMS

• Inbox

This page lists all the SMS messages that in your inbox. You can create messages, delete messages, and read messages.

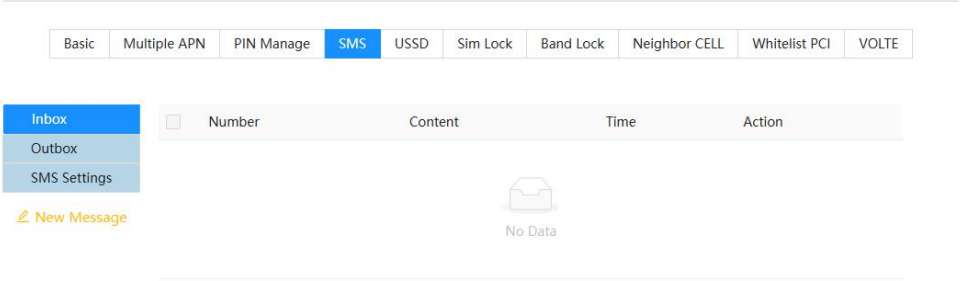

Figure 5-2-2-4-1 Inbox

• Outbox

This page lists all the SMS messages that in your outbox, and you can delete them.

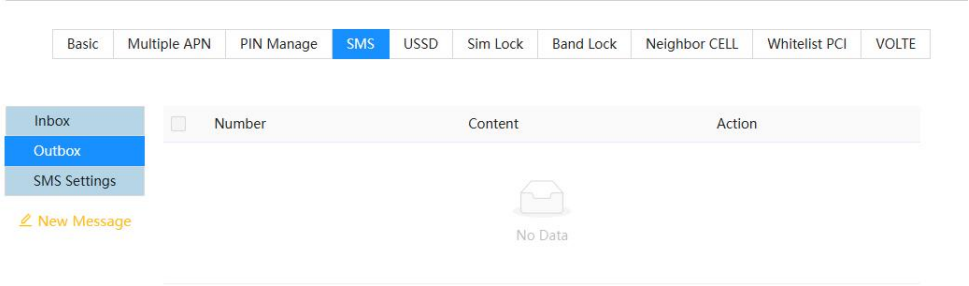

Figure 5-2-2-4-2 Outbox

• SMS Settings

SMS Settings page, you can set the SMS stored in the SIM card or module.

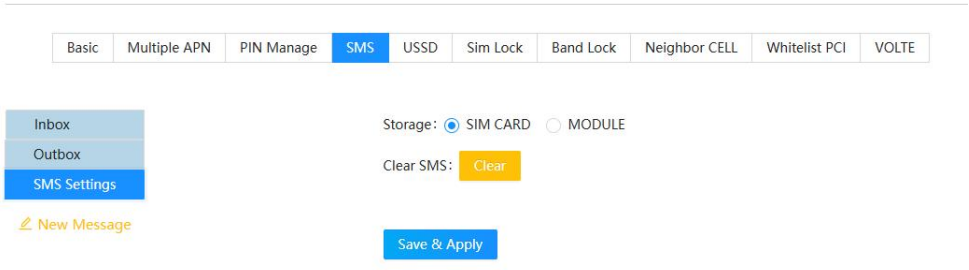

Figure 5-2-2-4-3 SMS Settings

• New Message

This page is used to send messages.

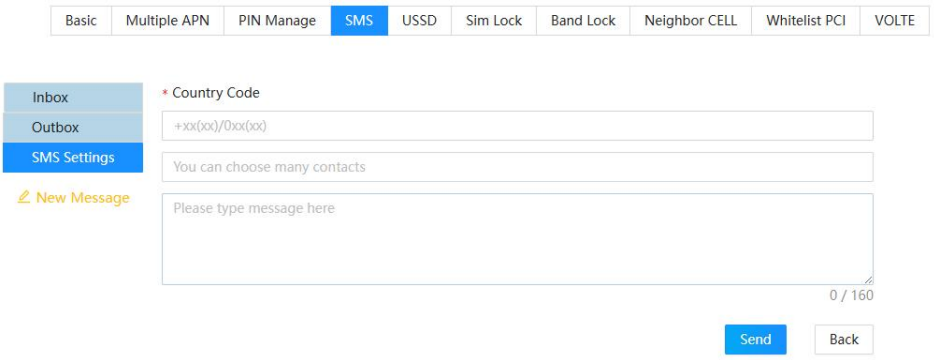

Figure 5-2-2-4-4 New Message

5.2.2.5 USSD

You can send a command to the network (have predefined numbers or symbols), the network will be based on the instruction for you to provide the corresponding services.

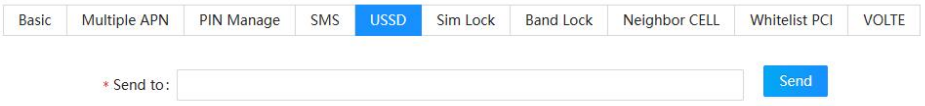

Figure 5-2-2-5-1 USSD

5.2.2.6 Sim Lock

This page can set the SIM card lock or enable status, restart the device to take effect.

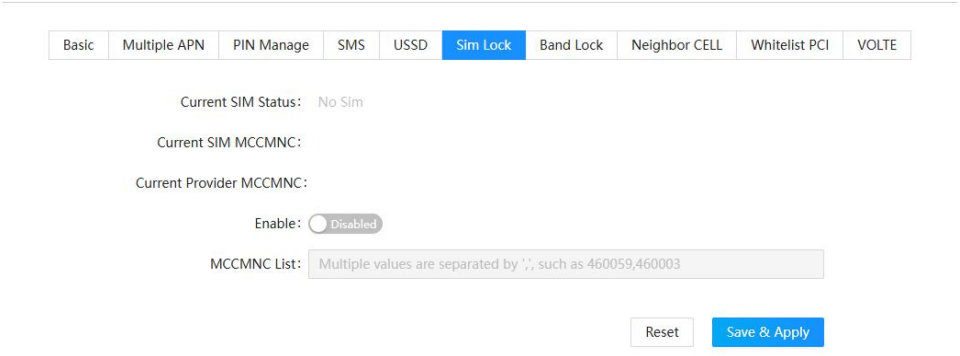

Figure 5-2-2-6-1 Sim Lock

Object	Description
Enable	Enable or disable SIM locking function.
Password	Enter the password.
MCCMNC List	Enter MCCMNC list which need lock.

5.2.2.7 Band Lock

This page can select the frequency band of mobile network.Remark:The following settings are related to the current actual registered network.

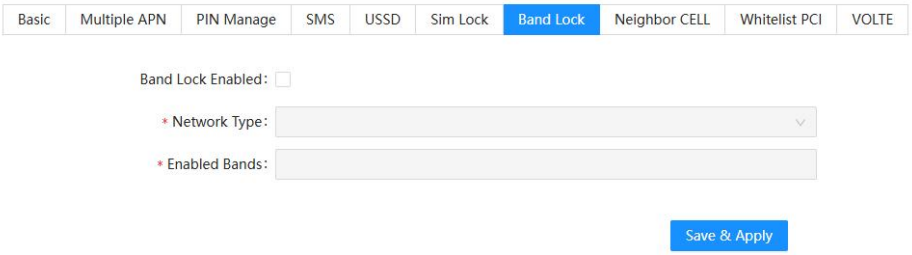

Figure 5-2-2-7-1 Band Lock

Object	Description
Band Lock Enabled	Enable or disable Band locking function.
Network Type	Select a network format.
Enabled Bands	Select network band.

5.2.2.8 Neighbor CELL

This page displays the ID of the nearby cell after the SIM card has been added to the network.

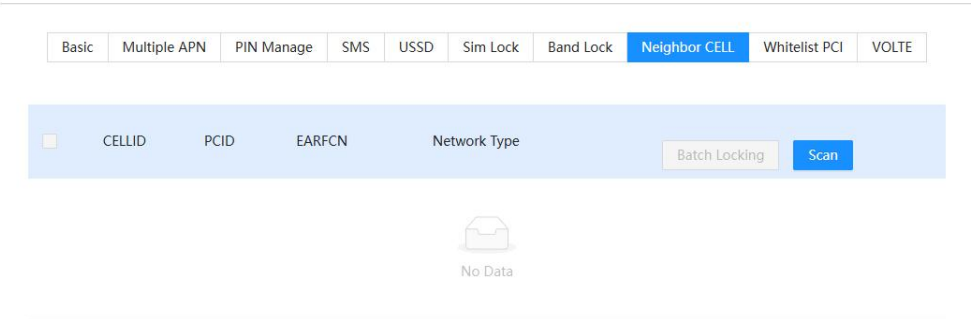

Figure 5-2-2-8-1 Neighbor CELL

5.2.2.9 Whitelist PCI

This page displays the cell ID of the device that is currently locked.

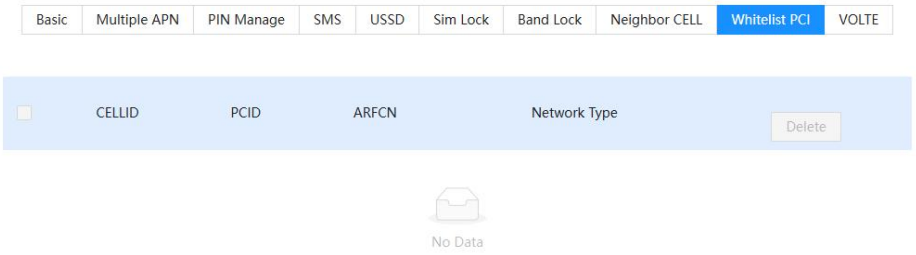

Figure 5-2-2-9-1 Whitelist PCI

5.2.2.10 VOLTE

This page can set VOLTE.

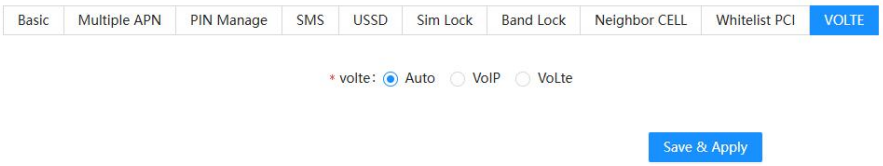

Figure 5-2-2-10-1 VOLTE

5.2.3 LAN

5.2.3.1 IPv4

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 addresss, subnet mask, DHCP, etc.

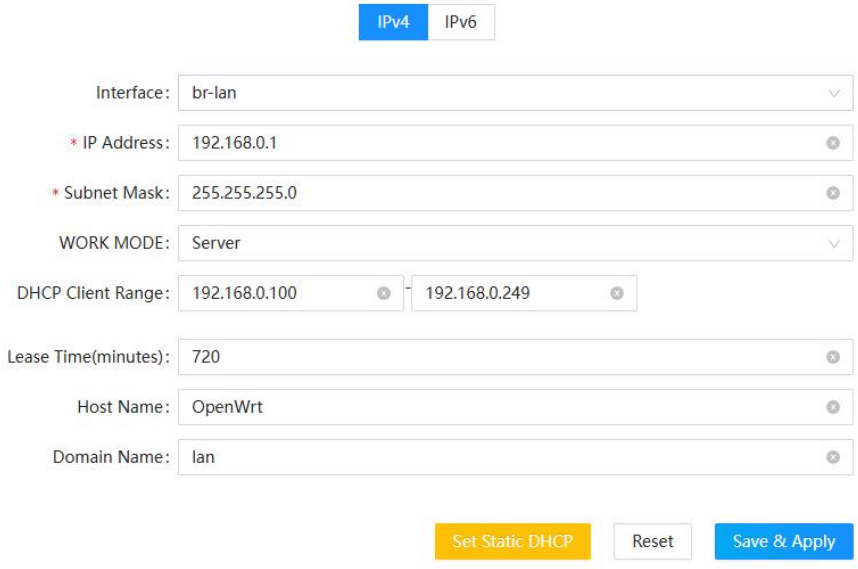

Figure 5-2-3-1-1 IPv4

Object	Description
Interface	Router's LAN interface.
IP Address	Router's LAN IP. You can change it according to your needs.
Subnet Mask	Router's LAN subnet mask.
WORK MODE	If it is selected, the router serves as the DHCP server and automatically assigns IP addresses to all computers in the LAN.
DHCP Client Range	Enter the start and end IP address of all the available successive IPs.
Lease Time(minutes)	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.
Host Name	Host name of the device.
Domain Name	The domain name; host name and domain name of the device constitute domain name access on the LAN.

5.2.3.2 IPv6

This page shows the information of IPv6.

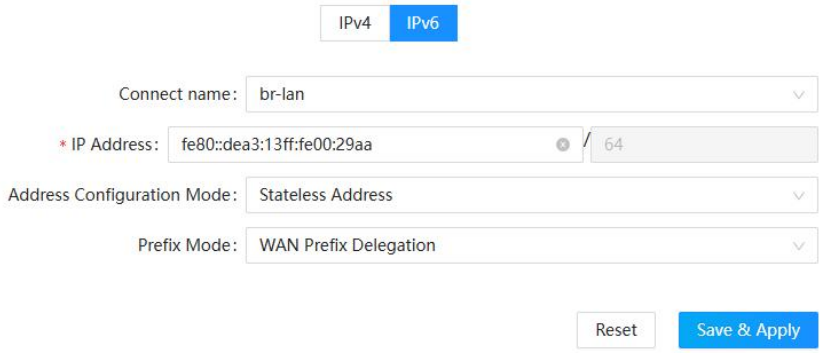

Figure 5-2-3-1 IPv6

Object	Description
Connect name	Router's IPv6 interface.
IP Address	Router's LAN IPv6 address. You can change it according to your needs.
Address Configuration Mode	IPv6 defines mechanisms for both stateful address and stateless address autoconfiguration. The stateless mechanism uses local information as well as non-local information that is advertised by routers to generate the addresses. In the stateful autoconfiguration model, hosts obtain interface

	addresses or configuration information and parameters from a server.
Prefix Mode	Enter the prefix and prefix length.

5.2.4 Wi-Fi

5.2.4.1 Wi-Fi Basic

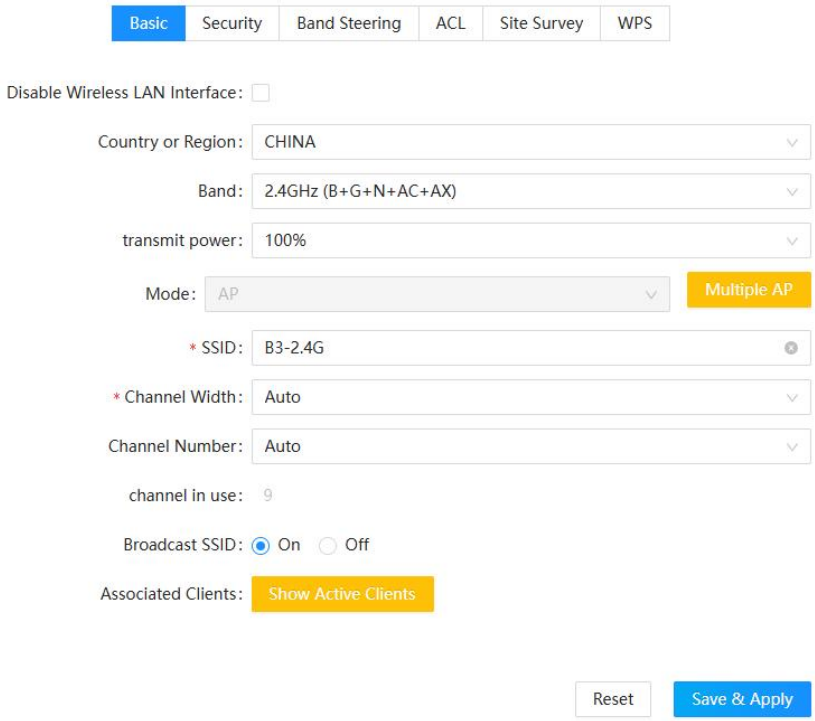

Figure 5-2-4-1-1 2.4GHz Wi-Fi

Object	Description
Disable Wireless LAN Interface	You may choose to enable or disable Wireless function.
Band	Set the wireless mode to which you need. Default is “Mixed 802.11B/G/N/AC/AX”. It is strongly recommended that you set the Band to “802.11b/g/n/ac/ax”, and all of 802.11b, 802.11g, 802.11n, 802.11ac and 802.11ax wireless stations can connect to the WI-NR3230
Transmit Power	You can modify the WLAN transmission power.
Mode	WLAN working AP mode.
Multiple AP	You can set guest SSID from this button.

SSID	Set a name (SSID) for your wireless network. The ID of the wireless network. User can access the wireless network through it only.
Channel Width	Select a proper channel bandwidth to enhance wireless performance.
Channel Number	For an optimal wireless performance, you may select the least interferential channel. It is advisable that you select an unused channel from the drop-down list or “Auto” to let device detect.
Broadcast SSID	You may choose to visible or invisible SSID broadcast. When it is enabled, the router SSID will be broadcast in the wireless network, so that it can be scanned by wireless clients and they can join the wireless network with this SSID.
WMM	WMM provides basic Quality of service (QoS) features to IEEE 802.11 networks. WMM prioritizes traffic according to four Access Categories: voice, video, best effort, and background.
Associated Clients	This option shows you all the clients which connected to this SSID.

5.2.4.2 Security

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

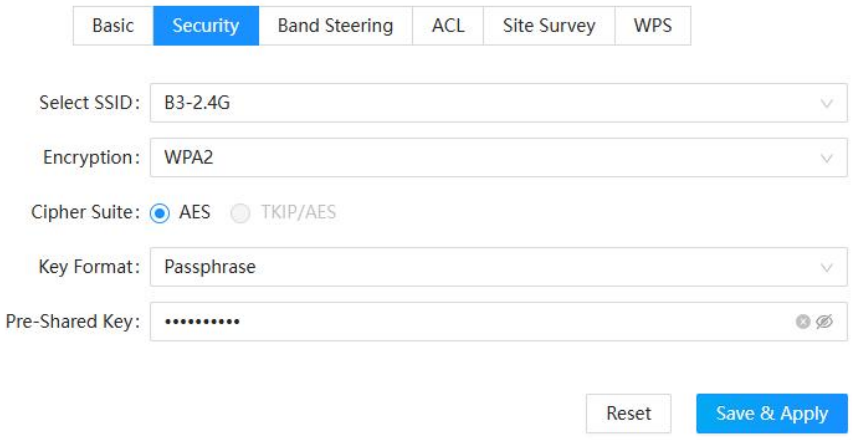

Figure 5-2-4-2-1 Wi-Fi security

Object	Description
Select SSID	Set a name (SSID) for your wireless network. User can access the wireless network through the ID only.
Encryption	Select the security mode from the **Encryption** dropdown list. There are 5 options in the Security Mode dropdown list: • **Disable** • **WPA2** • **WPA/WPA2**

	• **WPA3** • **WPA2/WPA3**
Management Frame Protect	You may choose to enable or disable management frame protect (IEEE 802.11w). When “required” is selected the management frame will be force encryption. When “capable” is selected the management frame will support encryption through negotiation.
Pre-Shared Key	Enter the Wi-Fi password

5.2.4.3 Band Steering

Band steering enables wireless clients with dual band function to connect to faster 5GHz Wi-Fi, while for clients only supporting 2.4GHz, 2.4GHz Wi-Fi will not be crowded.

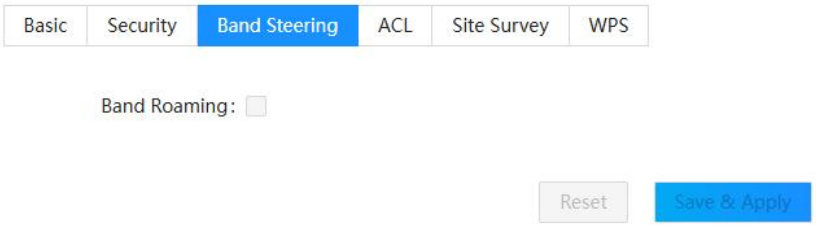

Figure 5-2-4-3-1 Band Steering

5.2.4.4 ACL

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. Notice that acl setting works for both 2.4G and 5G WiFi.

Figure 5-2-4-4-1 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.
Comment	Comment

5.2.4.5 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.

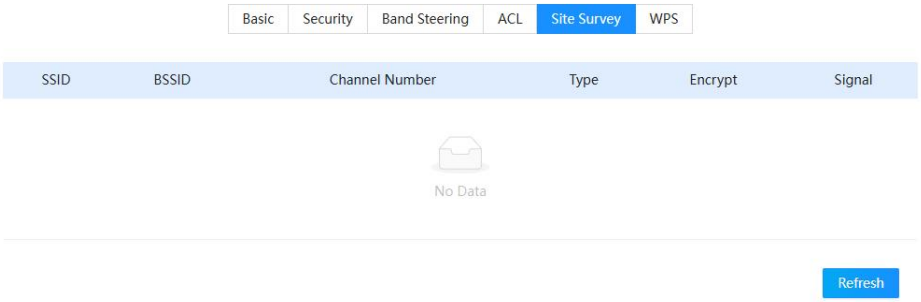

Figure 5-2-4-5-1 Site Survey

5.2.4.6 WPS

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

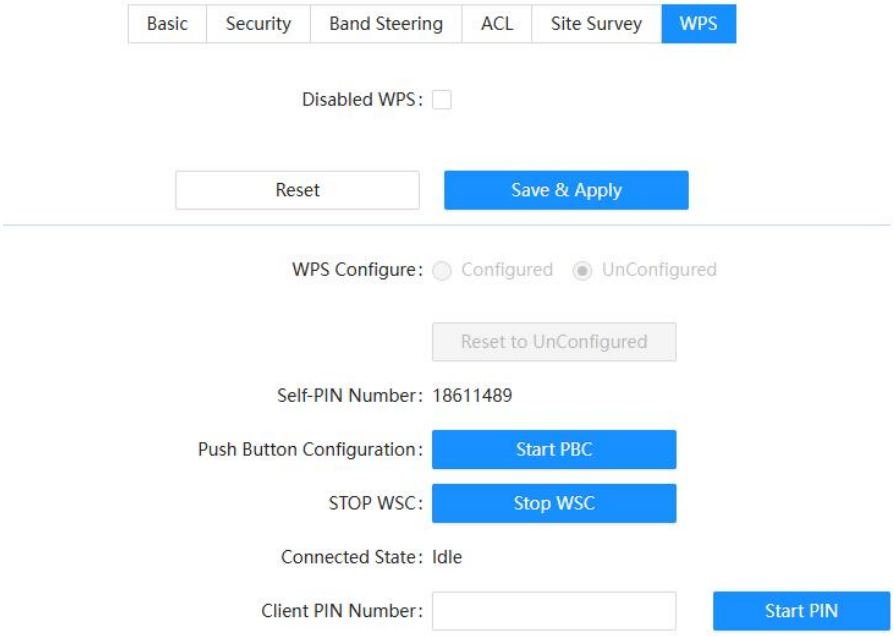

Figure 5-2-4-6-1 WPS

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.

5.2.5 Easy Mesh

This page is used to configure the parameters for EasyMesh feature of your Router. When the mesh function is enabled, the WPS function will be turned on automatically. When the mesh function is enabled and run in Agent mode, the device dhcp server will be closed && the wireless main configuration will synchronize with Controler automatically, so some wireless settings will be prohibited to configure.

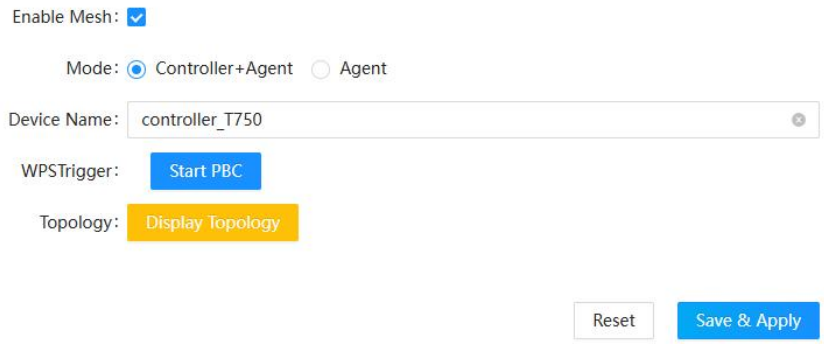

Figure 5-2-5-1 Easy Mesh Setting

5.2.6 VPN

5.2.6.1 PPTP

This page is used to configure the parameters for Internet network which connects to the PPTP server.

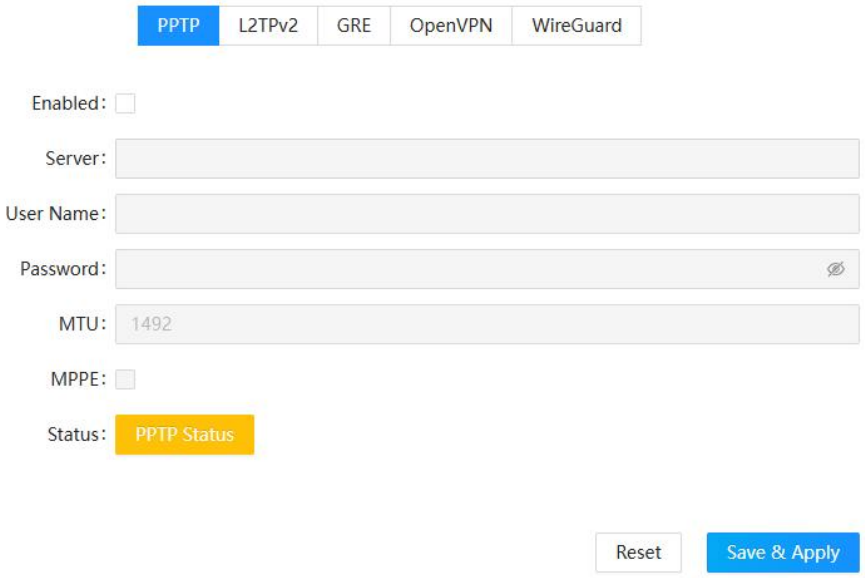

Figure 5-2-6-1-1 PPTP

Object	Description
Enabled	Enable or disable the PPTP client.
Server	PPTP server address. You can enter an IP address or domain name.
User Name	PPTP user name.

Password	PPTP password.
MTU	PPTP MTU.
MPPE	Enable or disable MPPE.
Status	The PPTP connection information is displayed after the PPTP connection is successful.

5.2.6.2 L2TPv2

This page is used to configure the parameters for Internet network which connects to the L2TPv2 server.

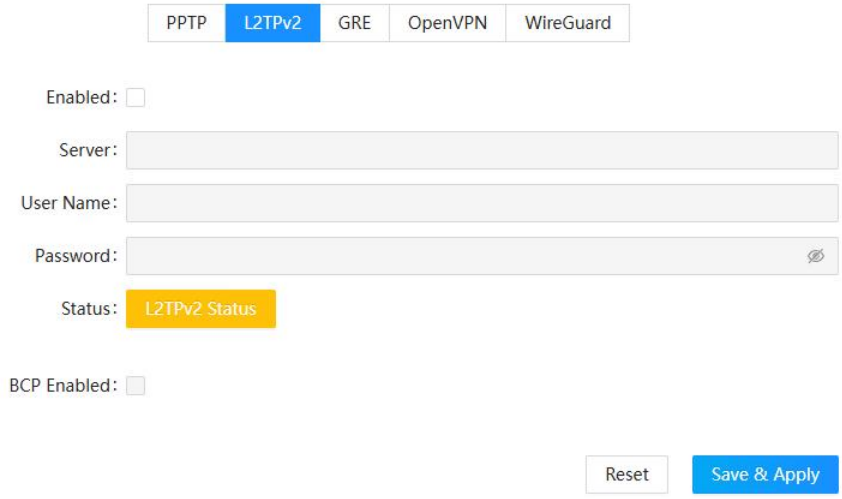

Figure 5-2-6-2-1 L2TPv2

Object	Description
Enabled	Enable or disable the L2TP client.
Server	L2TP server address. You can enter an IP address or domain name.
User Name	L2TP user name.
Password	L2TP password.
Status	The L2TP connection information is displayed after the L2TP connection is successful.
BCP Enabled	Enable or disable the L2TP BCP function.

5.2.6.3 GRE

This page is used to configure the parameters for Internet network which connects to the GRE.

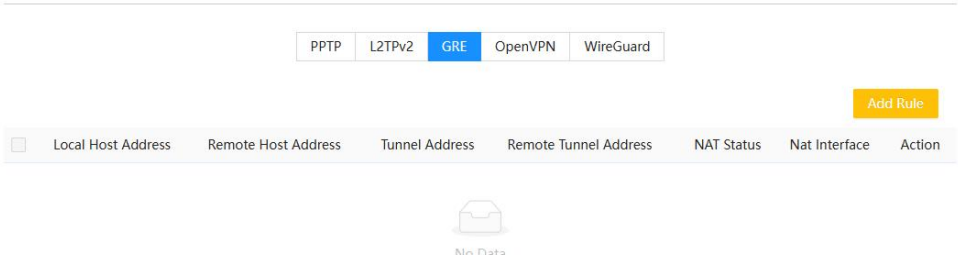

Figure 5-2-6-3-1 GRE

5.2.6.4 OpenVPN

This page shows the OpenVPN configuration.

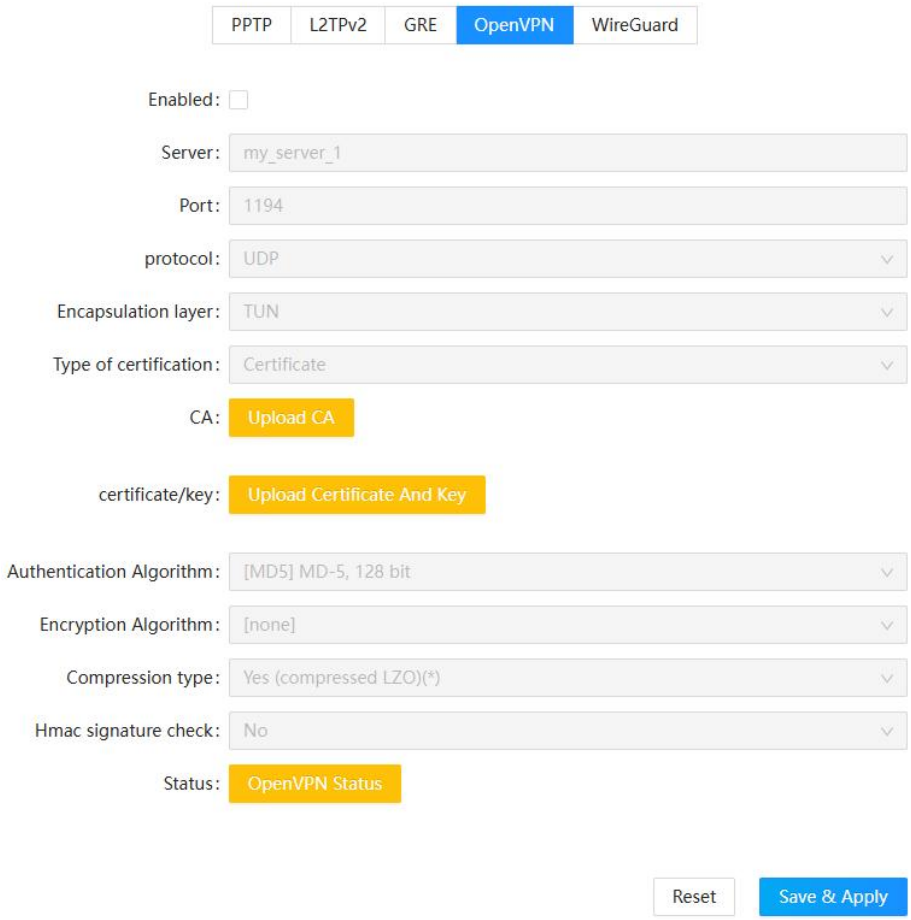

Figure 5-2-6-4-1 OpenVPN

Object	Description
Enabled	Enable or disable the OpenVPN client.
Server	OpenVPN server address. You can enter an IP address or domain name.
Port	Enter the port of the server.

Protocol	Select UDP or TCP.
Encapsulation layer	Select TAP or TUN.
Type of certification	Select an authentication type. Select Certificate or Username/Password.
CA	Uploading a CA Certificate.
Certificate/key	Uploading certificate and key.
Authentication Algorithm	Selective authentication algorithm. This parameter must be consistent with the server.
Encryption Algorithm	Selective encryption Algorithm. This parameter must be consistent with the server.
Compression type	Select compression type. This parameter must be consistent with the server.
Hmac signature check	Choose whether or not Hmac signature check. This parameter must be consistent with the server.
Status	The OpenVPN connection information is displayed after the OpenVPN connection is successful.

5.2.6.5 WireGuard

WireGuard is a lightweight virtual private network (VPN) protocol designed to provide fast, secure, and simple network connections.

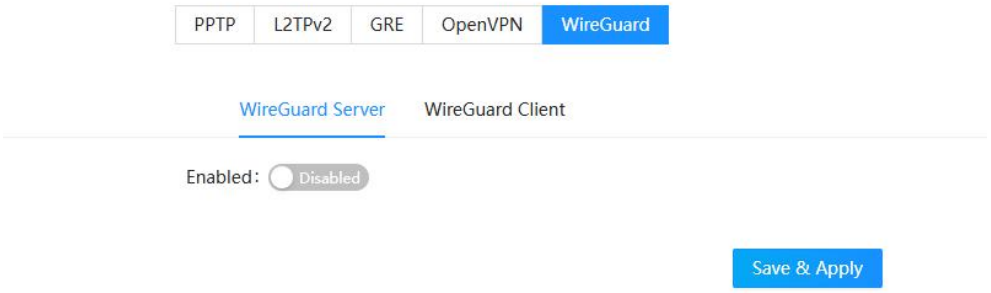

Figure 5-2-6-4-1 WireGuard

5.3 Features

5.3.1 Firewall

5.3.1.1 NAT Settings

This page shows NAT Settings.

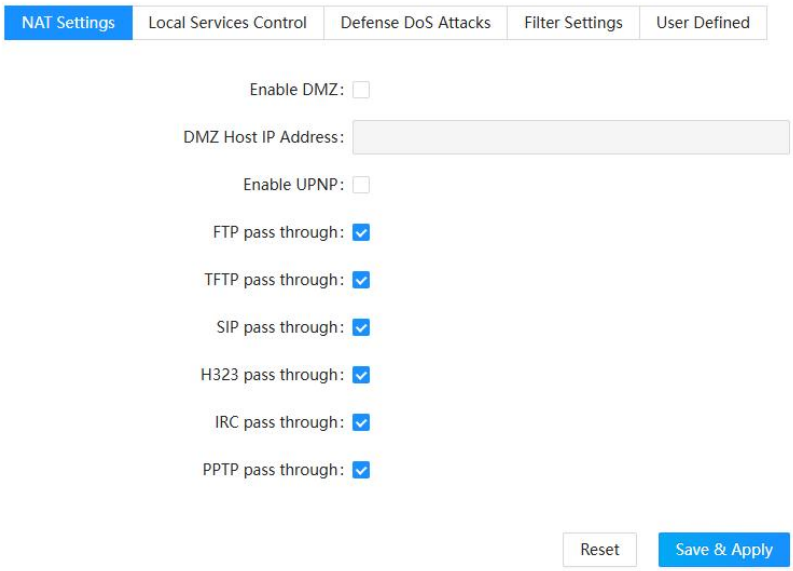

Figure 5-3-1-1-1 NAT Settings

Object	Description
Enable DMZ	Enable or disable the DMZ.
DMZ Host IP Address	Set the IP address of the DMZ.
Enable UPNP	Enable or disable the UPNP.
FTP pass through	Enable or disable the FTP pass through.
TFTP pass through	Enable or disable the TFTP pass through.
SIP pass through	Enable or disable the SIP pass through.
H323 pass through	Enable or disable the H323 pass through.
IRC pass through	Enable or disable the IRC pass through.
PPTP pass through	Enable or disable the PPTP pass through.

5.3.1.2 Local Services Control

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.

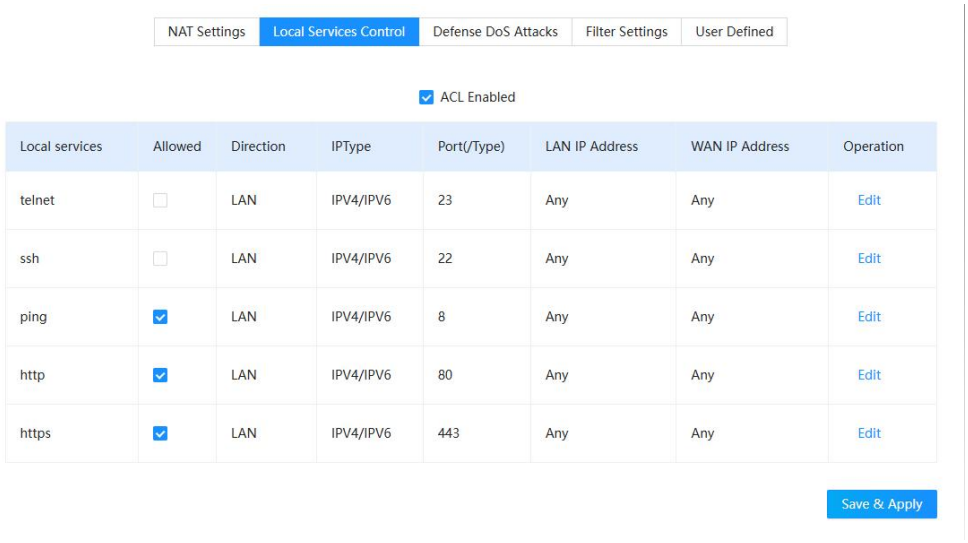

Figure 5-3-1-2-1 Local Services Control

5.3.1.3 Ddfense Dos Attacks

A denial-of-service (DoS) attack is characterized by an explicit attempt by hackers to prevent legitimate users of a service from using that service.

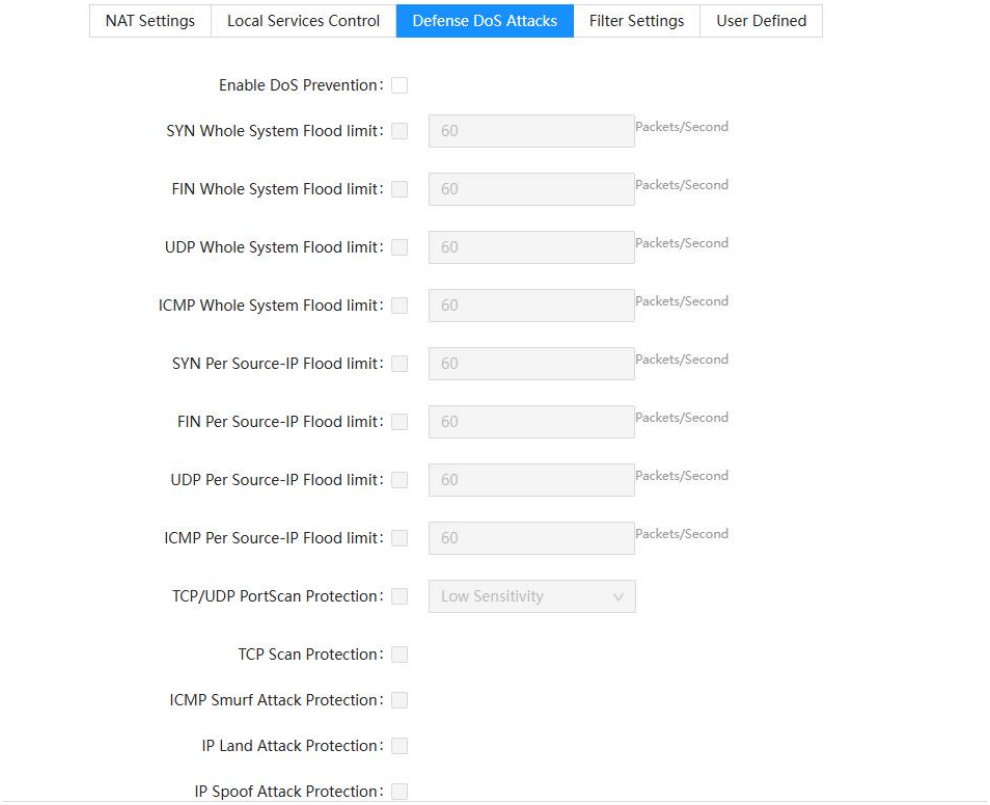

Figure 5-3-1-3-1 Ddfense Dos Attacks

5.3.1.4 Filter Settings

Your router's high-performance firewall feature continuously monitors Internet traffic, protecting your network and connected devices from malicious Internet attacks.

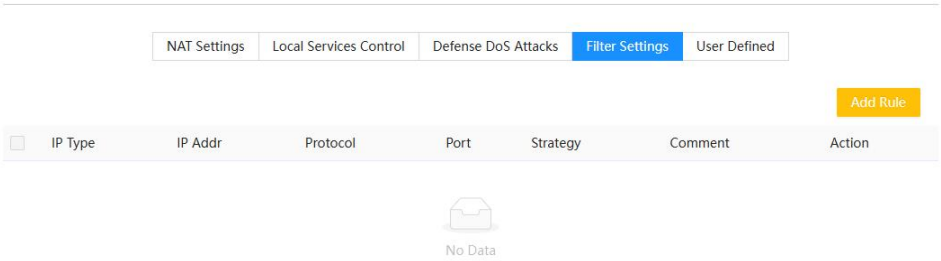

Figure 5-3-1-4-1 Filter Settings

5.3.1.5 User Defined

Users can add firewall rules, such as:iptables -I FORWARD 1 -i eth1 -j ACCEPT, and only 5 rules can be added at most.

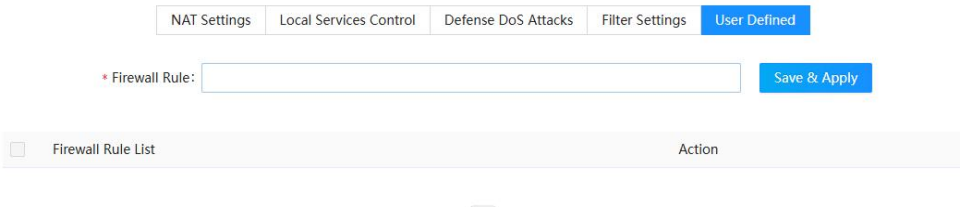

Figure 5-3-1-5-1 User Defined

5.3.2 Parental Control

5.3.2.1 User Access Restrictions

This page adds time of day restriction to a special LAN device connected to the Router. Note: you cannot access the Internet within the time period when you have joined the rules.

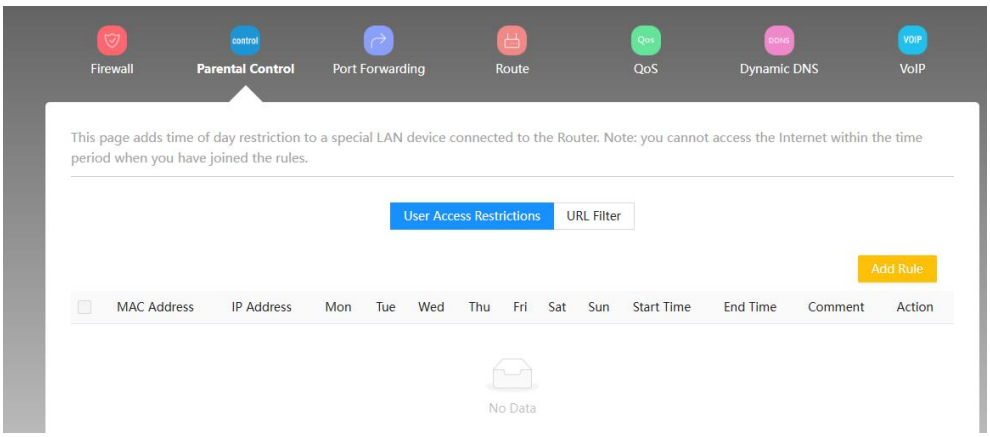

Figure 5-3-2-1-1 User Access Restrictions

5.3.2.2 URL Filter

URL filter is used to deny LAN users from accessing the internet. Block those URLs which contain keywords listed below.Please note: URL Filter can not filter the HTTPS encrypted domain name.Please be informed that the domian name must not contain:http://,ftp://,and https://.

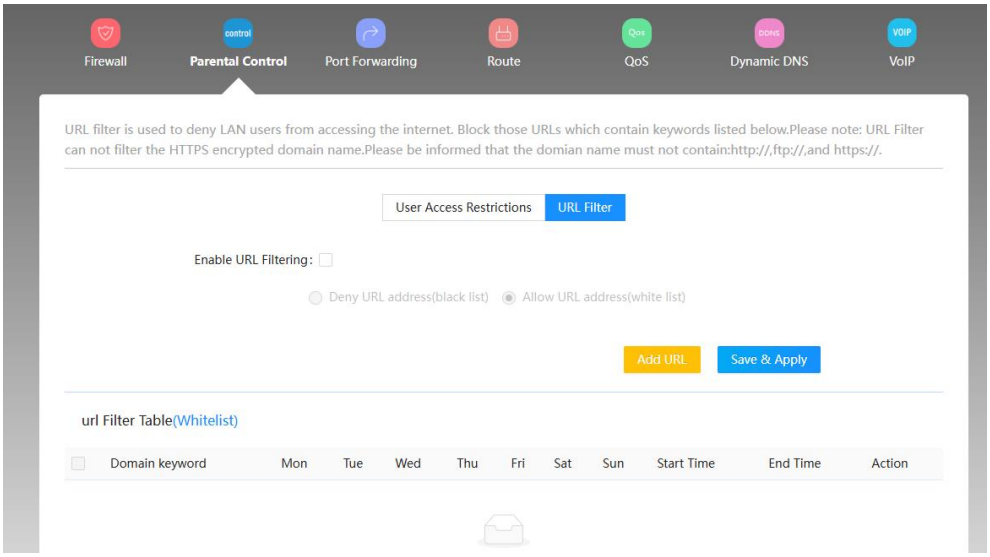

Figure 5-3-2-2-1 URL Filter

5.3.3 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.

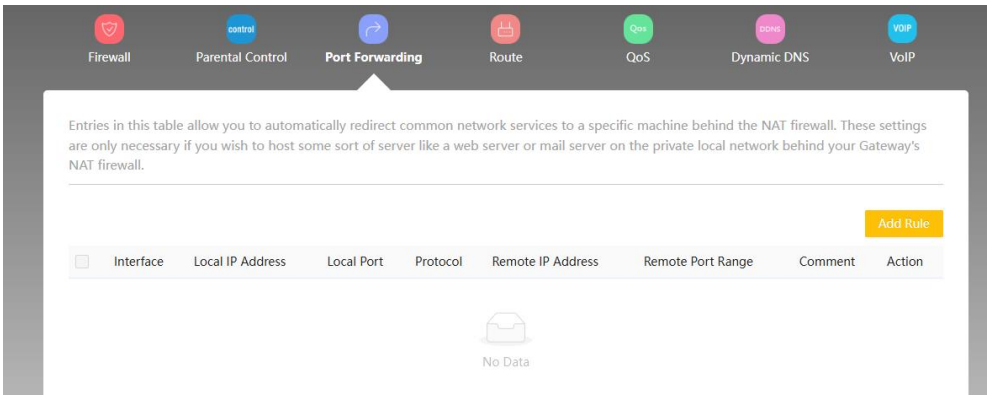

Figure 5-3-3-1 Port Forwarding

To add a rule, click the **Add Rule** button.

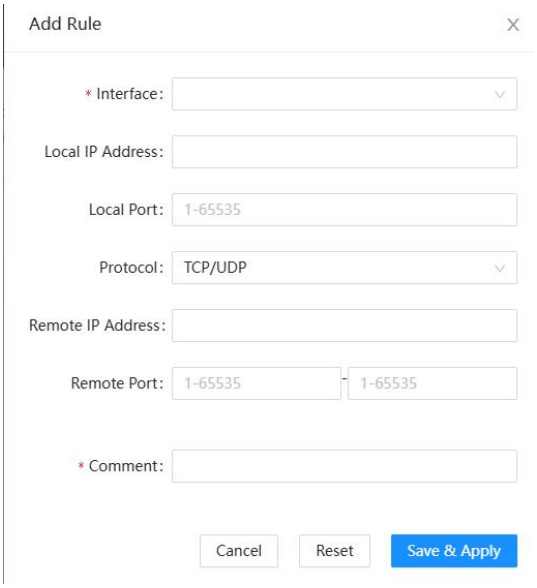

Figure 5-3-3-2 Add Rule

Object	Description
Interface	Select interface.
Local IP Address	Enter a LAN IP address.
Local Port	Enter LAN port.
Protocol	Select “TCP”, “UDP” or “TCP/UDP”.
Remote IP Address	Enter a WAN IP address.
Remote Port	Enter the range of external ports.
Comment	Enter comment.

5.3.4 Routes

This menu shows you the current default route and static route. Static Route reduces route selection problems and corresponding data overload and accelerates data packet forwarding.

5.3.4.1 Route Status

Flags: U - up, ! - reject, G - gateway, H - host, D - dynamic (redirect), M - modified (redirect).

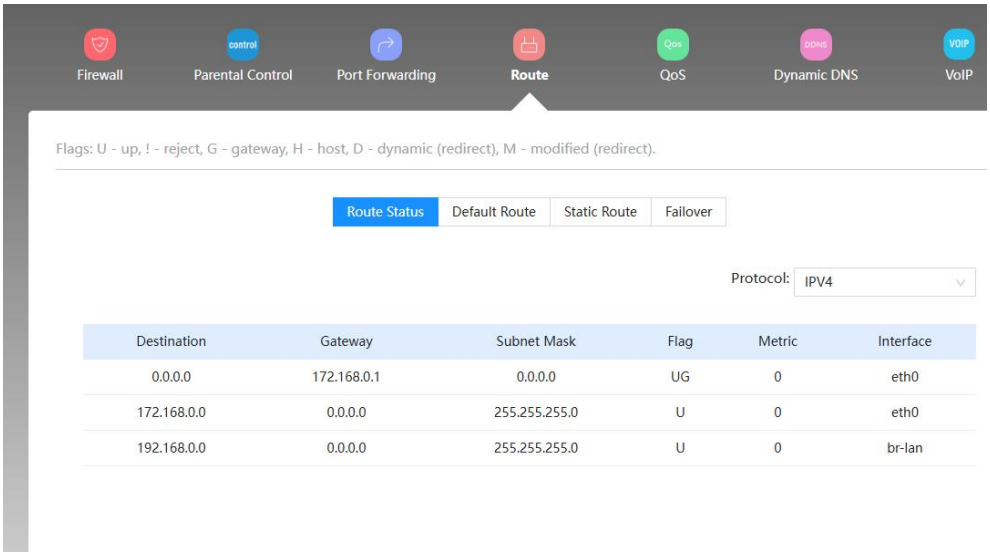

Figure 5-3-4-1-1 Route Status

5.3.4.2 Default Route

You can select which wan connection as default gateway route.if not ,system will auto select a connect up wan as default gateway route.

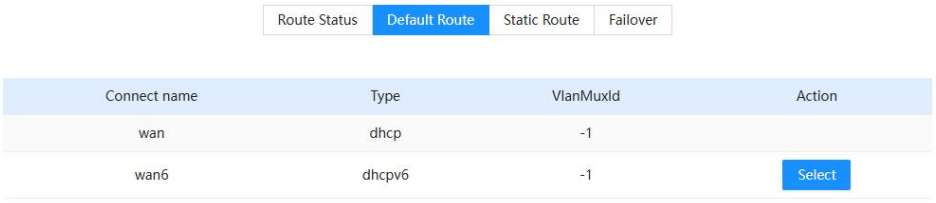

Figure 5-3-4-2-1 Default Route

5.3.4.3 Static Route

Once connected to the Internet, your router automatically builds routing tables that determine where traffic should be sent. Static routes can override this process, allowing traffic to be directed to a specific client or location.

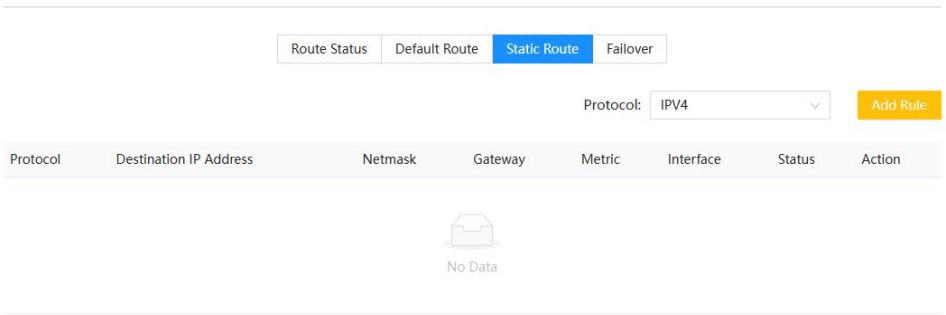

Figure 5-3-4-3-1 Static Route

To add a rule, click the **Add Rule** button.

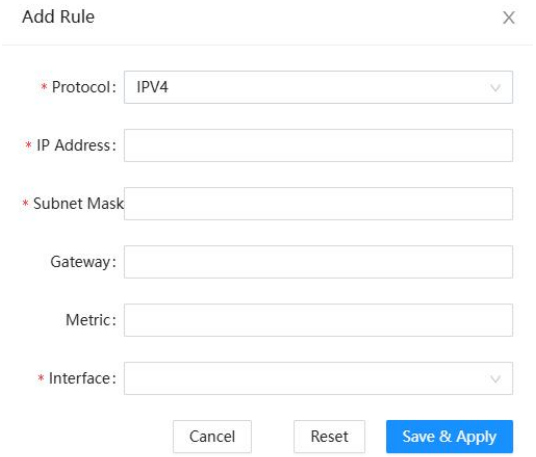

Figure 5-3-4-3-2 Static Route Add Rule

Object	Description
Protocol	Select “IPv4”, or “IPv6”.
IP Address	Enter the destination network.
Subnet Mask	Enter the network mask.
Gateway	Enter the network gateway.
Metric	Enter the routing metric.
Interface	Select the interface.

5.3.4.4 Failover

When failover is enable, if primary wan is down, system will select other wan as default that it is connected automatically.

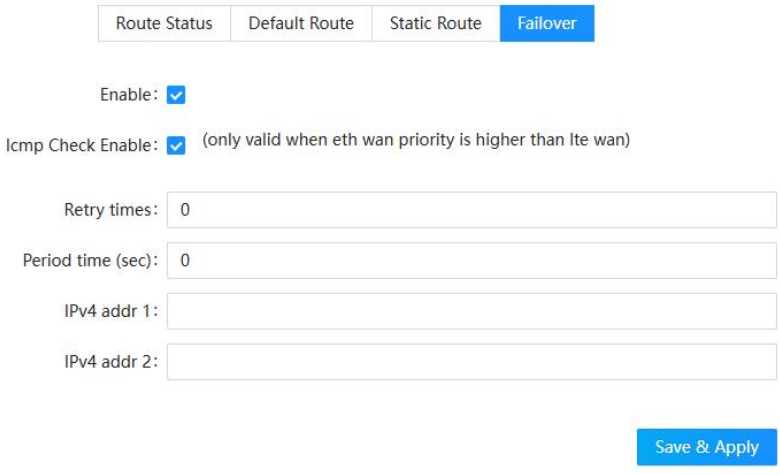

Figure 5-3-4-4-1 Failover

Object	Description
Enable	Enable or disable Failover.
Icmp Check Enable	Enable or disable ICMP Check.
Retry times	ICMP check retry times.
Period time (sec)	ICMP check period time,The unit is in seconds.
IPv4 addr 1	Check the address 1.
IPv4 addr 2	Check the address 2.

5.3.5 QOS

Entries in this table improve your online gaming experience by ensuring that your game traffic is prioritized over other network traffic, such as FTP or Web.Note: If Enable Qos checkbox is not selected, all QoS will be disabled for all interfaces.

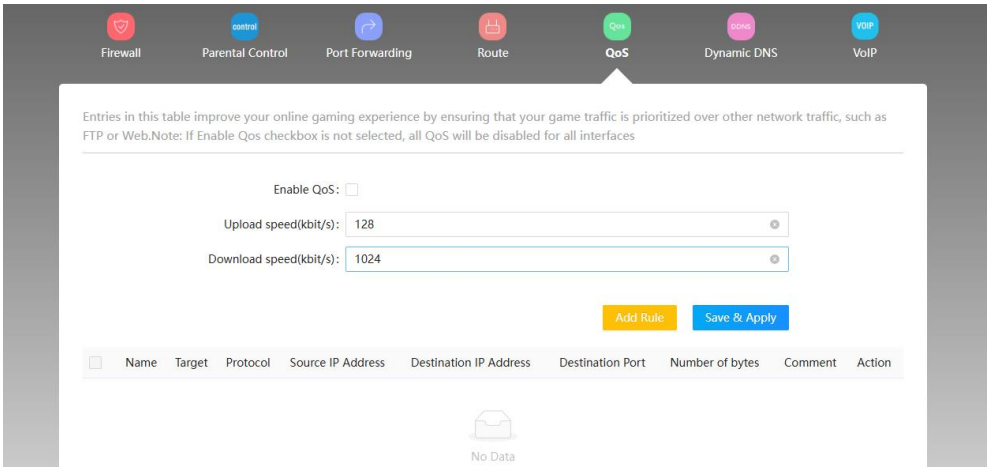

Figure 5-3-5-1 QOS

5.3.6 Dynamic DNS

Dynamic DNS is a service, that provides you with a valid, unchanging, internet domain name (an URL) to go with that (possibly everchanging) IP-address.

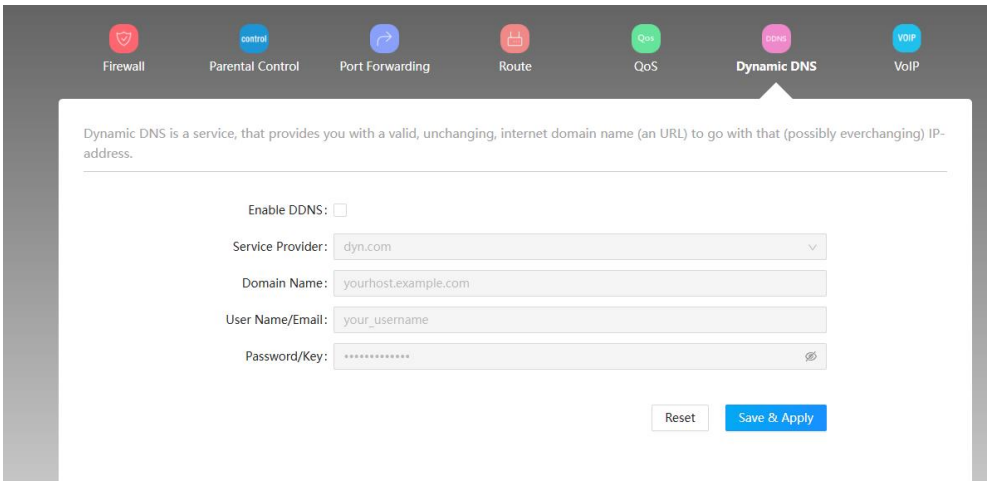

Figure 5-3-6-1 Dynamic DNS

Object	Description
Enable DDNS	Enable or disable DDNS.
Service Provider	Select server from the drop-down list.
Domain Name	Enter the host name.
User Name/Email	Enter the user name.
Password/Key	Enter the password.

5.3.7 VoIP

Basic settings for VoIP.

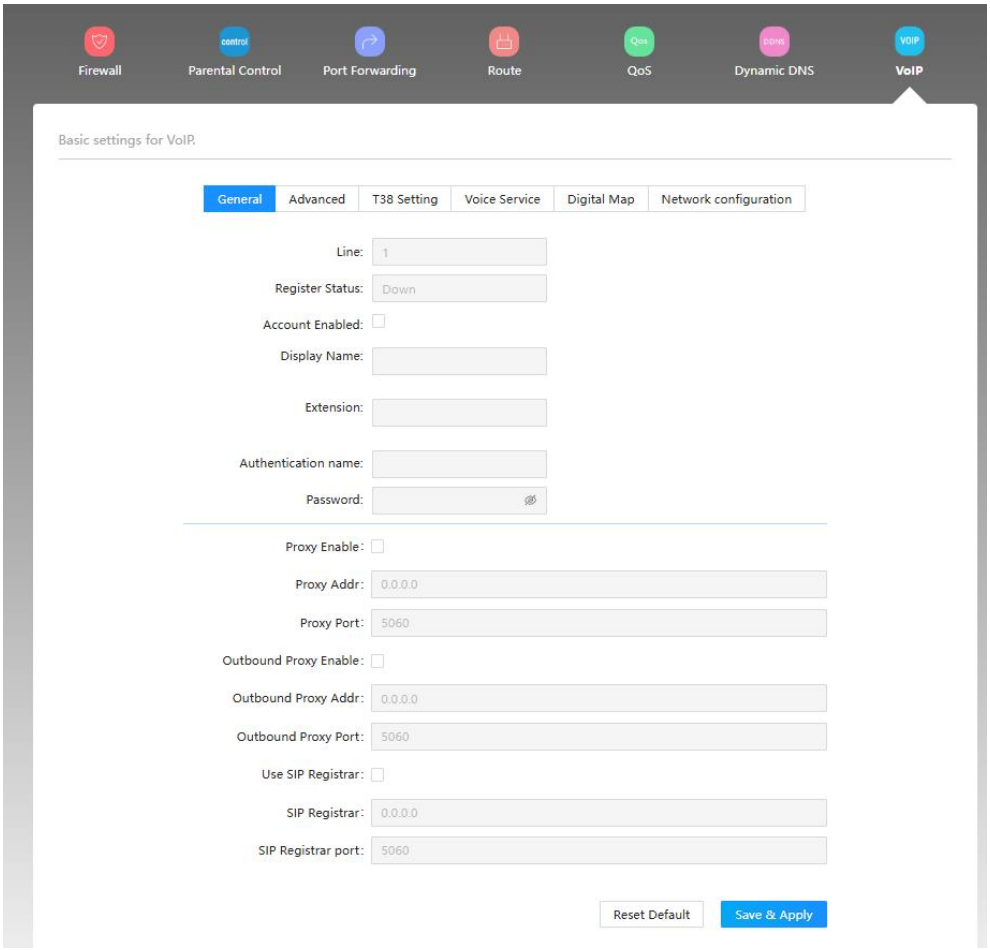

Figure 5-3-6-1 Dynamic DNS

5.4 Management

5.4.1 Time

5.4.1.1 NTP Server

You can maintain the system time by synchronizing with a public time server over the Internet.

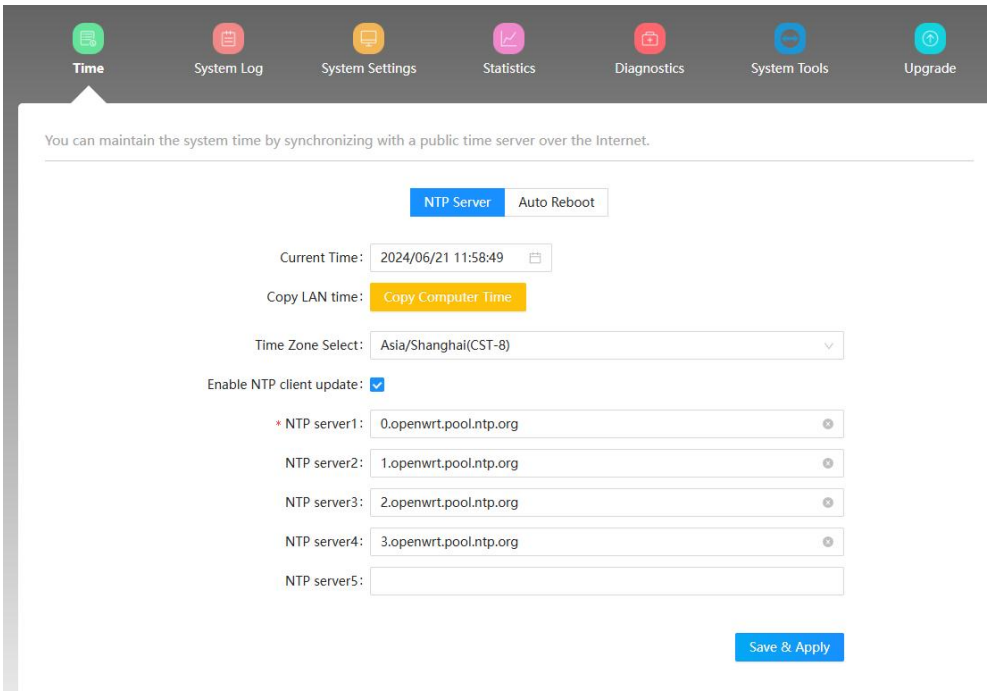

Figure 5-4-1-1-1 NTP Server

Object	Description
Enable DDNS	Enable or disable DDNS.
Service Provider	Select server from the drop-down list.
Domain Name	Enter the host name.
User Name/Email	Enter the user name.

5.4.1.2 Auto Reboot

'Auto Reboot' is the feature which can do the Reboot automatically at a specified time.Please note: 'Auto Reboot' depend on the 'NTP Server',you have to enable the 'NTP Server' when use this feature.

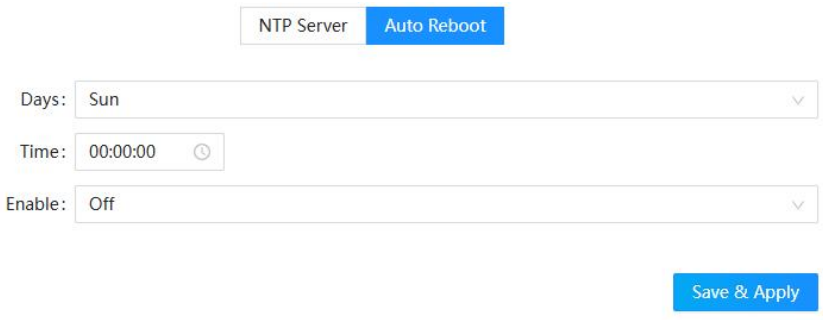

Figure 5-4-1-2-1 Auto Reboot

5.4.2 System Log

This page can be used to set remote log server and show the system log.

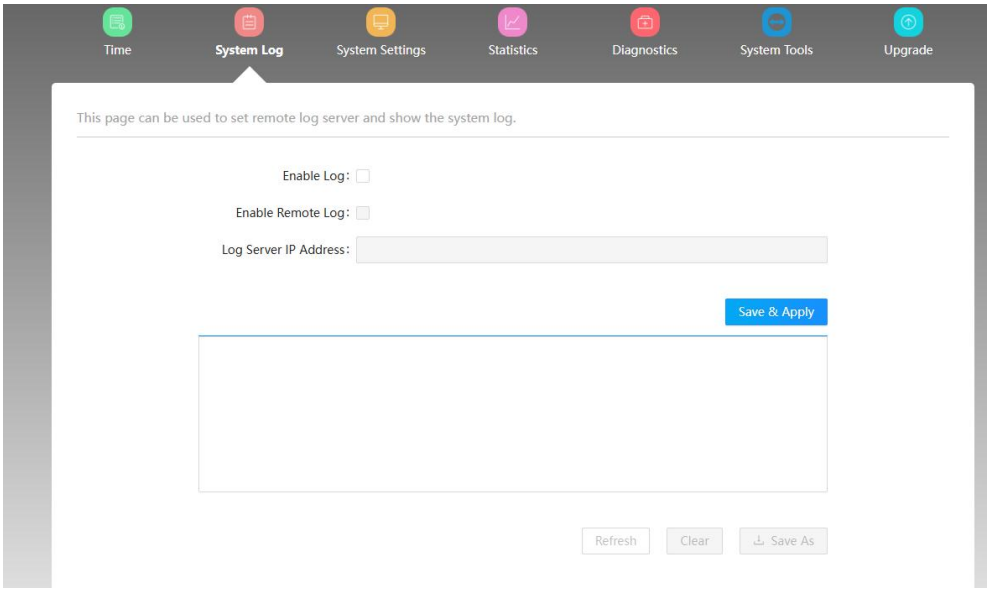

Figure 5-4-2-1 System Log

Object	Description
Enable Log	Enable or disable Log function.
Enable Remote Log	Enable or disable “Logging to Syslog Server”.
Log Server IP Address	Enter the Syslog server IP address.

5.4.3 System Settings

5.4.3.1 Account

This page is used to modify account and password.

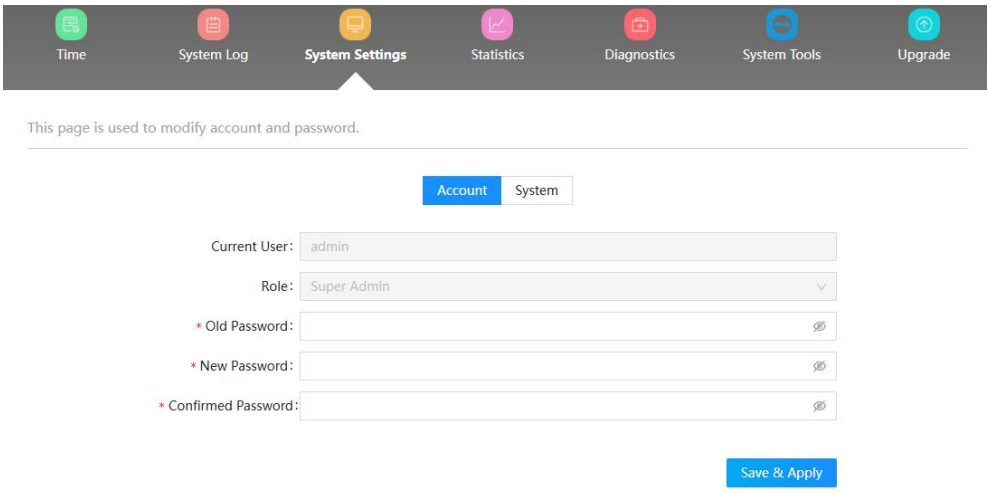

Figure 5-4-3-1-1 Account

Object	Description
Current User	Current login account.
Role	System role.
Old Password	Enter the old password.
New Password	Enter the new password.
Confirmed Password	Enter the new password again.

5.4.3.2 System

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

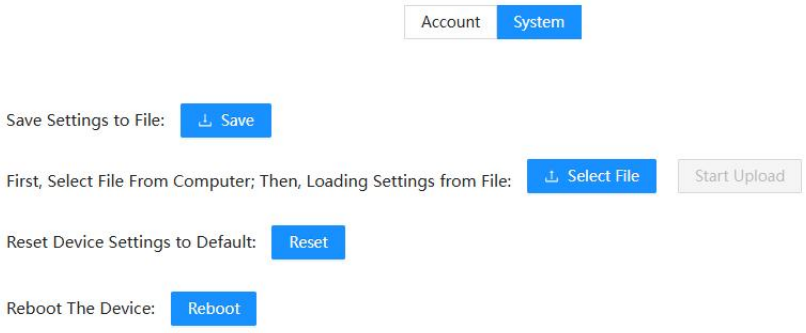

Figure 5-4-3-2-1 System

Object	Description
Save settings to file	Save the setting to local PC.
Load settings from File	Load the settings from local PC.
Reset Settings to Default	Restore the device to factory default.
Reboot the device	Press the button to reboot the device.

Note

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.

Note

DO NOT shut down your router when loading a configuration file. Otherwise, the router may be damaged.

5.4.4 Statistics

This page shows the packet counters for transmission and reception regarding to wireless and Ethernet networks.

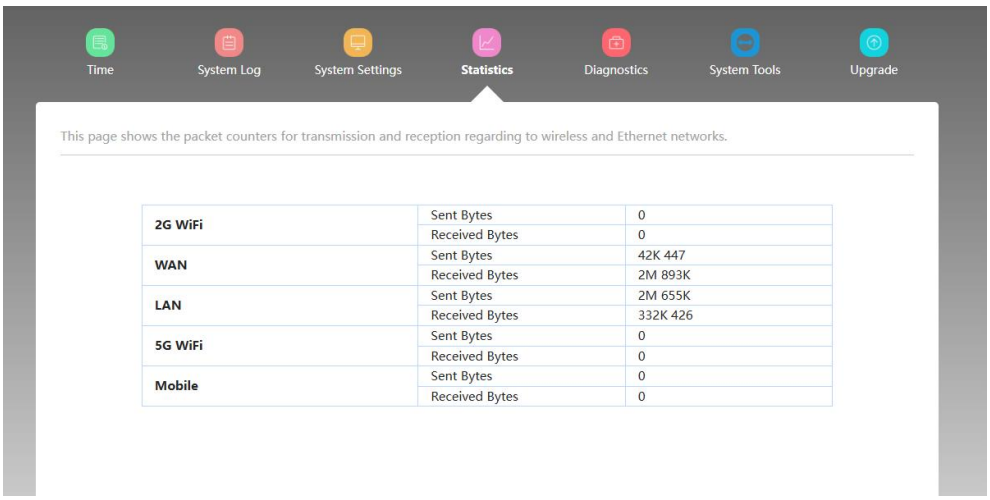

Figure 5-4-4-1 Statistics

5.4.5 Diagnostics

5.4.5.1. Ping

This page allows you use PING to diagnosis for network.

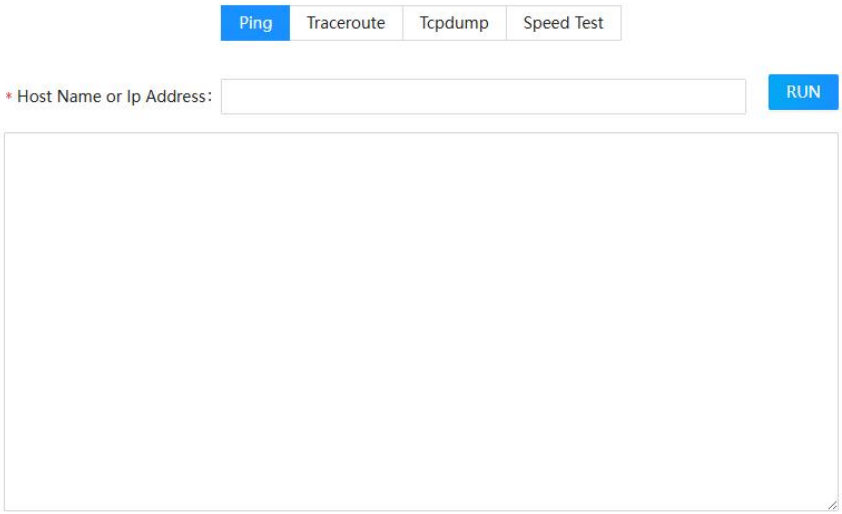

Figure 5-4-5-1-1 Ping

5.4.5.2. Traceroute

This page allows you use TRACEROUTE to diagnosis for network.

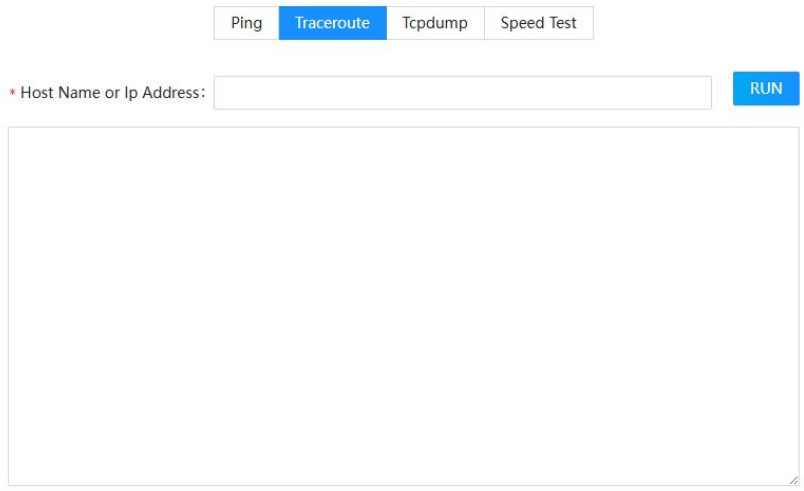

Figure 5-4-5-2-1 Traceroute

5.4.5.3 Tcpdump

This page allows you use TCPDUMP to obtain captured data by interface. Note: if the value of some configuration items is 0, it means no setting is made.

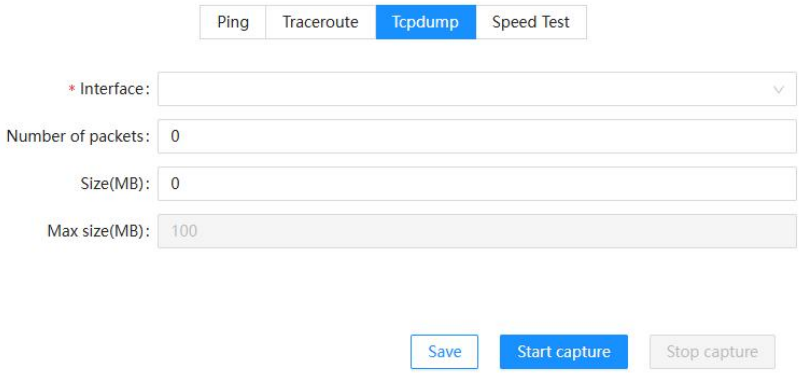

Figure 5-4-5-3-1 Tcpdump

Object	Description
Interface	Selecting a Network Interface.
Number of packets	Set the number of packets.
Size(MB)	Set size,The unit is MB.
Max size(MB)	The max size is 100 MB.
Start capture	Start packet capture button.
Stop capture	Stop packet capture button.

5.4.5.4 Speed Test

Current speedtest support iperf server, so make sure your enviroment such server works well.

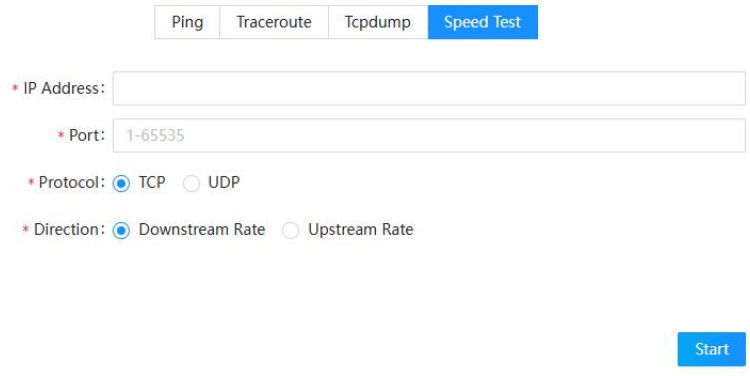

Figure 5-4-5-4-1 Speed Test

Object	Description
IP Address	Iperf server IP Address.
Port	Iperf server port.

Protocol	Select “TCP” or “UDP”.
Direction	Select Downstream Rate or Upstream Rate.

5.4.6 System Tools

5.4.6.1 TR069

This page is used to configure the TR-069. Here you may change the setting for the ACS's parameters.

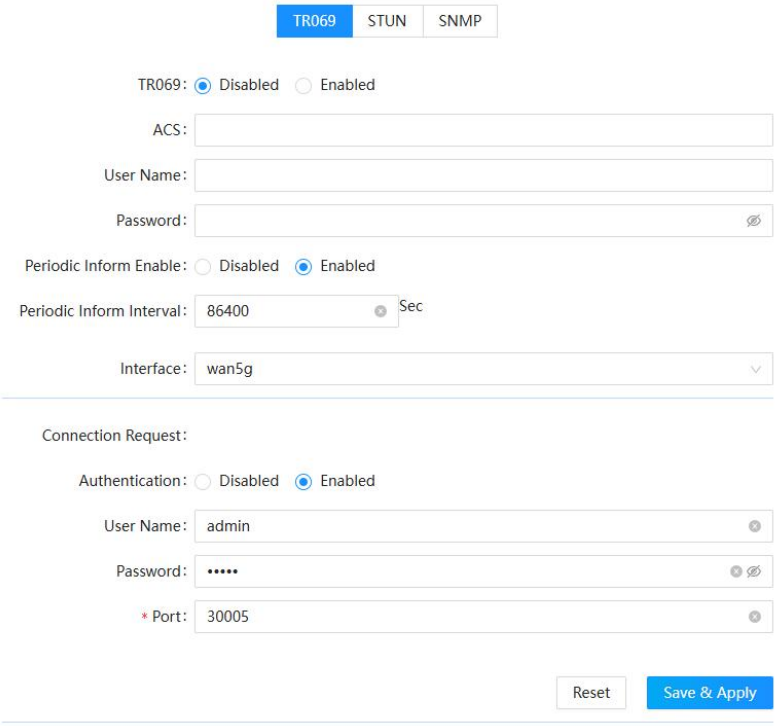

Figure 5-4-6-1-1 TR069

5.4.6.2 STUN

Session Traversal Utilities for NAT (STUN) is a protocol that serves as a tool for other protocols in dealing with Network Address Translator (NAT) traversal. The current application is designed for TR069. Please ensure that TR069 is enabled if you need to use it.

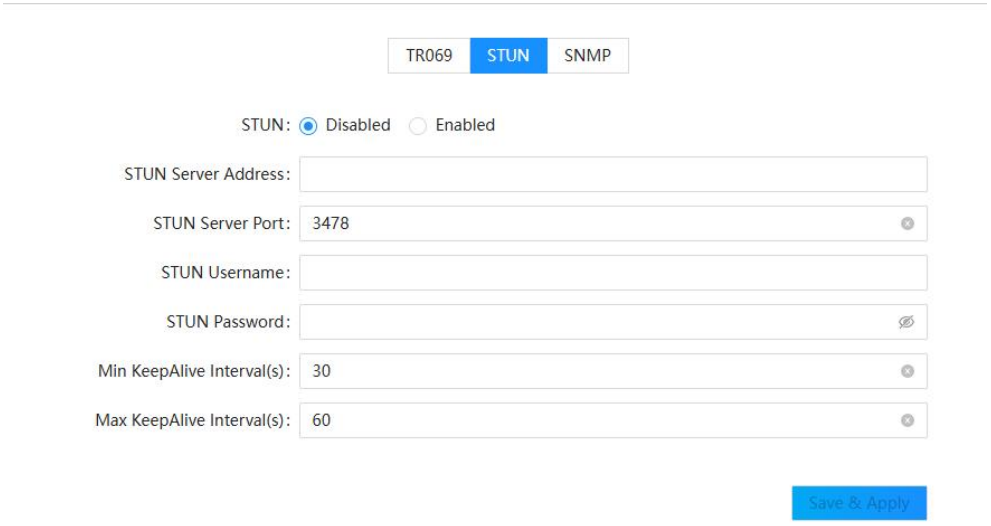

Figure 5-4-6-2-1 STUN

5.4.6.3 SNMP

This page shows the SNMP configuration.

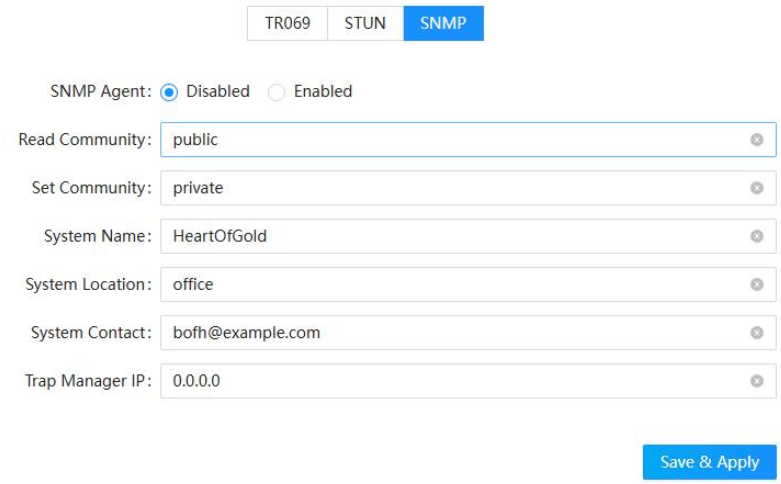

Figure 5-4-6-3-1 SNMP

5.4.7 Upgrade

5.4.7.1 Firmware Upgrade

This page allows you upgrade the Access Point firmware to new version. Please note, do not power off the device during the upload because it may crash the system.

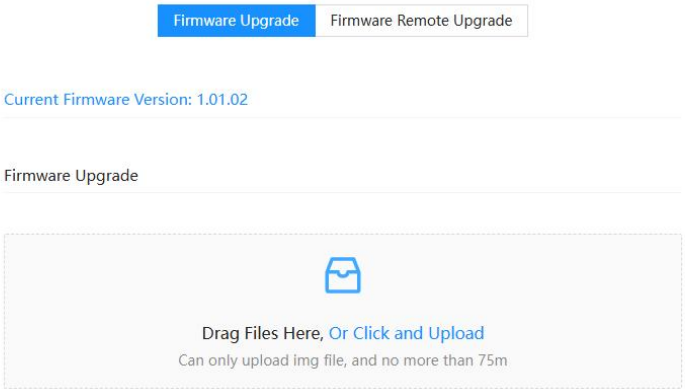

Figure 5-4-7-1-1 Upgrade

5.4.7.2 Firmware Remote Upgrade

Remotely query the latest firmware and update it. Do not disconnect the power adapter or interrupt the update process. When the update is complete, your device will restart.

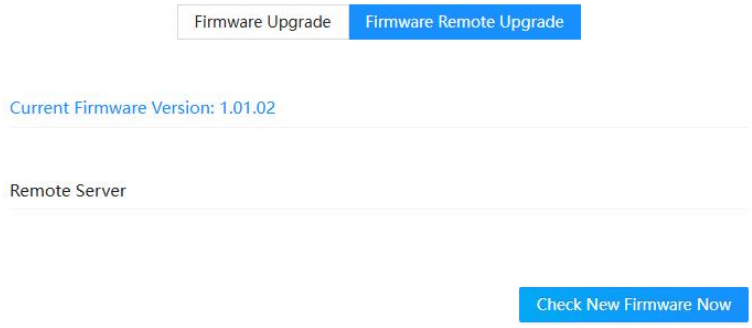

Figure 5-4-7-2-1 Firmware Remote Upgrade

DO NOT turns off the power or press the Reset button when updating the firmware. Otherwise, the router may be damaged.