Tenda

User Guide

Whole Home Mesh Wi-Fi System

www.tendacn.com

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Preface

This guide describes how to configure each feature of the following Tenda Whole Home Mesh Wi-Fi7 System.

- ME3 Pro
- EE3 Pro

NOTE

Features available in the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual router experience.

In this guide, unless otherwise specified:

- All screenshots are taken from ME3 Pro.
- The router's firmware version takes V16.03.60.27_multi as an example.
- The Tenda WiFi App takes V4.5.1 as an example.

Conventions

The typographical elements that may be found in this document are defined as follows.

Item	Presentation	Example
Cascading menus	>	**More** > **Working Mode**
Parameter and value	Bold	Set **User Name** to **Tom**.
Variable	Italic	Format: *XX*:*XX*:*XX*:*XX*:*XX*:*XX*
UI control	Bold	On the **Policy** page, click the **OK** button.
Message	" "	The "Success" message appears.

The symbols that may be found in this document are defined as follows.

Symbol	Meaning
NOTE	This format is used to highlight information of importance or special interest. Ignoring this type of note may result in ineffective configuration, loss of data or damage to device.

Symbol	Meaning
TIP	This format is used to highlight a procedure that will save time or resources.

More information and support

Visit www.tendacn.com and search for the product model to get your questions answered and get the latest documents.

Revision history

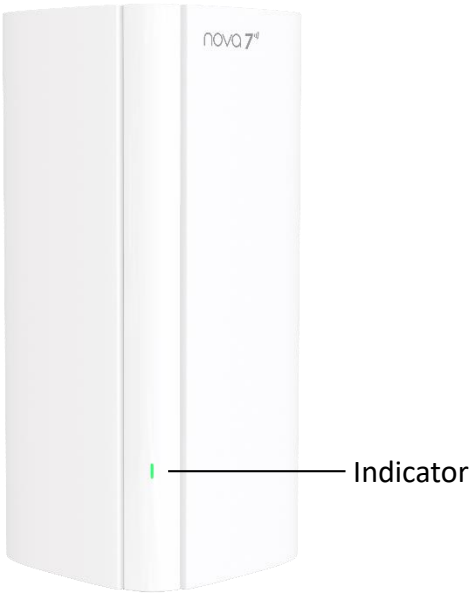
Tenda is constantly searching for ways to improve its products and documentation. The following table indicates any changes that might have been made since the user guide was introduced.

Version	Date	Description
V1.0	2025-05-30	Original publication.

Contents

1 Get to know your device

1.1 Indicator

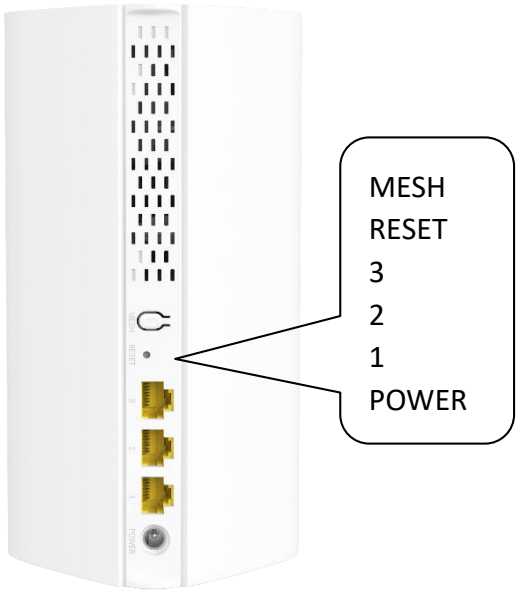


This router has only one indicator. Its behavior varies in different stages, as described in the following table.

Stage	Status	Description
Start	Solid green	The router is starting
During networking	Blinking green slowly	- Connecting to other nodes in the same kit (only exists during the first-time networking), or - Waiting to connect to other nodes
	Blinking green quickly	Networking by the MESH button
	Solid on	Networking completed and internet connection succeeded - Solid green: Good connection quality. - Solid yellow: Fair connection quality. - Solid red: Poor connection quality.

Stage	Status	Description
	Blinking red slowly	Networking succeeded while internet connection failed
Internet connection (primary node)	Solid green	Internet connection succeeded
	Blinking red slowly	Internet connection failed
WPS	Blinking green quickly	- WPS started - Device connecting...
	Recovered to the original light state	Device connected
	Blinking green quickly for 2 minutes	WPS connection failed
Reset	Blinking red quickly	Reset completed
Batch upgrade	Blinking yellow quickly	Batch upgrade succeeded
	Solid yellow	Batch upgrade failed

1.2 Buttons and ports



- **MESH**

Mesh button. Used to enable the WPS or Mesh function.

Method:

1. Press the MESH button for 1-3 seconds. The indicator blinks green fast.

2. Within 2 minutes, enable WPS or MESH on your device to connect the router.

---End

- **RESET**

Reset button.

When the device completes startup, hold down this button using a needle-like item (such as a pin) for about 8 seconds, and then release it when the indicator blinks red fast. If the indicator blinks green slowly, the device is reset and restart successfully.

- **1/2/3**

For primary node:

By default, the mesh device works in router mode. In this mode, port 1 is the WAN port, and port 2 and port 3 are LAN ports.

When you enable WAN/LAN auto-negotiation function, ports 1, 2, and 3 are all WAN/LAN auto-adaptive ports.

To enable WAN/LAN auto-negotiation function, see Manage WAN/LAN auto-negotiation.

NOTE

When the IPTV function is enabled, you need to configure the IPTV port in IPTV.

For secondary node:

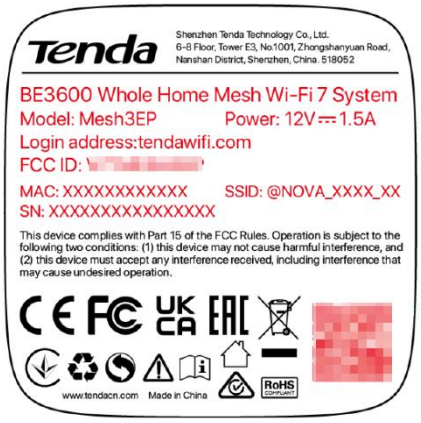
Port 1, 2, and 3 are LAN ports.

- **POWER**

Power jack.

1.3 Label

The router label shows the router’s MAC address and serial number. There's also a QR code on the label that you can scan with your device's built-in code scanner to connect to your router's default Wi-Fi to set up the router. The label is located on the bottom of the router. Following is an example of what the router label might look like:


Tenda
Shenzhen Tenda Technology Co., Ltd.
6-8 Floor, Tower E3, No.1001, Zhongshanyuan Road,
Nanshan District, Shenzhen, China. 518052
BE3600 Whole Home Mesh Wi-Fi 7 System
Model: Mesh3EP
Power: 12V ⎓ 1.5A
Login address:tendawifi.com
FCC ID:
MAC: XXXXXXXXXXXX
SSID: @NOVA_XXXX_XX
SN: XXXXXXXXXXXXXXX
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
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Made in China
RoHS

2 Getting started

Features available in the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual router experience.

2.1 Connect router

If the device kit you purchased includes multiple devices, you can choose one of them to work as the primary node to connect to the internet and others as the secondary nodes to extend your network.

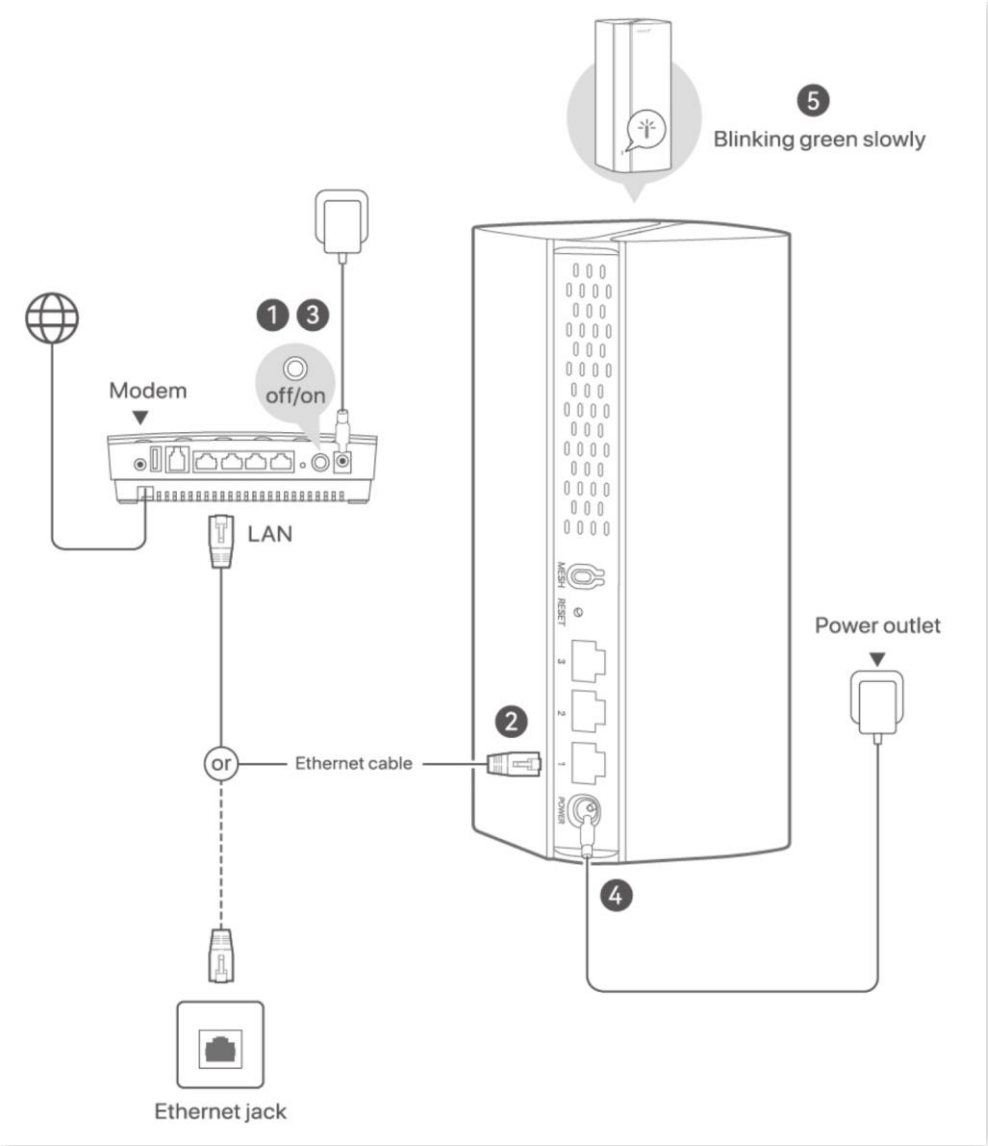
To connect your primary node:

TIP

- If there is no modem in the network, skip steps 1 and 3.
- By default, all mesh devices are working in router mode. In this mode, port 1 is the WAN port.

1. Power off your modem.
2. Use the included Ethernet cable to connect the WAN port of the primary node to your modem (such as optical network terminal) or Ethernet jack.
3. Power on your modem.
4. Power on the primary node.

   Wait until the indicator blinking green slowly.



---End

2.2 Connect your device to router

2.2.1 Wired connection

Connect the computer to a LAN port of the router using an Ethernet cable.

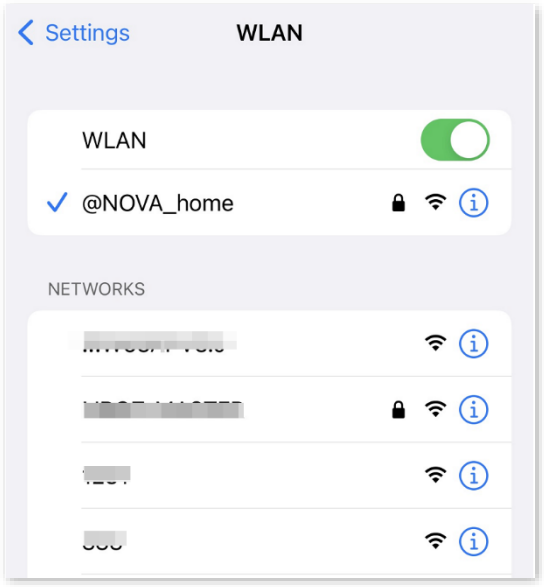
2.2.2 Wi-Fi connection

1. Find the SSID of the router.

- At the time of its first use/configuration or after a reset to its initial factory settings, the SSID (Wi-Fi name) is on the label of the device. No Wi-Fi password.
- Otherwise, use the new Wi-Fi name and Wi-Fi password you set.

2. Select the **Network** (If you don't see it, click or to see if it appears) icon on the taskbar of your computer or go to **Wi-Fi Settings > WLAN** of your smartphone/tablet, and then select the SSID to join the network.

   Below is an example of a smartphone connected to Wi-Fi (**@NOVA_home**).



---End

TIP

At the time of the router first use/configuration, if the device prompts **Unsecured Network** or **No Internet Connection**, ignore it and continue use the Wi-Fi. The Quick Setup Wizard of the router will ask you to set up passwords and internet connection.

2.2.3 Wi-Fi connection using WPS

The WPS function enables Wi-Fi-enabled devices, such as smartphones, to connect to Wi-Fi networks of the mesh device without entering the password.

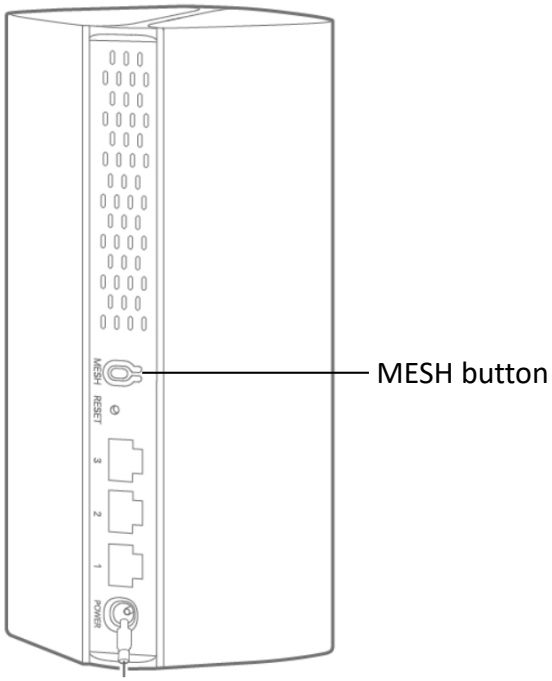
TIP

- This function only applies to WPS-enabled Wi-Fi devices.
- Wi-Fi networks encrypted with WPA3 cannot be connected using WPS.
- The WPS negotiation times out in 120 seconds.

To connect device to the Wi-Fi of mesh device using WPS:

1. Enable the WPS function of the mesh node. The indicator blinks green fast.

- **Method 1: Press the MESH button for 1 - 3 seconds.**



- **Method 2: Enable WPS via web browser.**

1) Launch a web browser from a computer or mobile device that is connected to your NOVA network.

2) Enter **tendawifi.com**.

A login window displays.

3) Enter the login password.

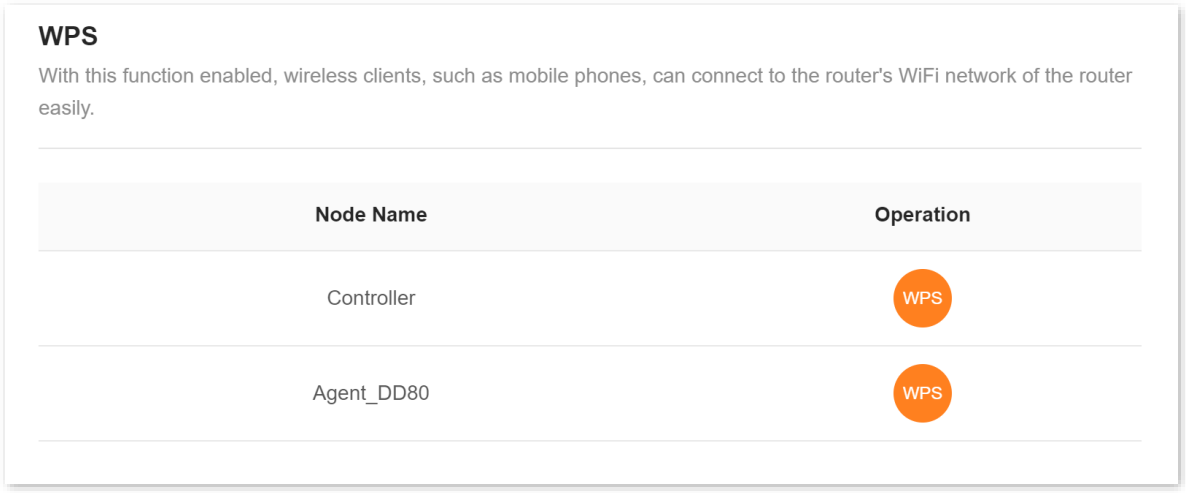
The password is case-sensitive.

4) Go to the settings page.

- **Computer:** Go to **More** > **WiFi Settings** > **WPS**.
- **Smartphone/Tablet**: Tap **More** > **Click to visit the webpage version** > **More** > **WiFi Settings** > **WPS**.

5) Click the **WPS** button of the node near you.

Countdown starts when the WPS function is enabled.



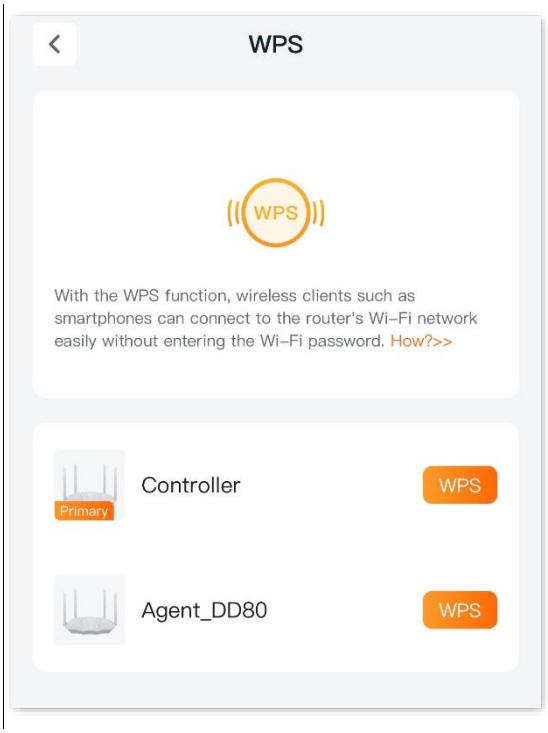
- **Method 3: Enable WPS via Tenda WiFi App.**

  1) Run the **Tenda WiFi** App, then tap your router on **Homepage**.

  2) Tap **More Functions** next to **Common Functions**, then tap **WPS** (below Advanced Functions).

  3) Tap the **WPS** button of the node near you and confirm it.

     Countdown starts when the WPS function is enabled.

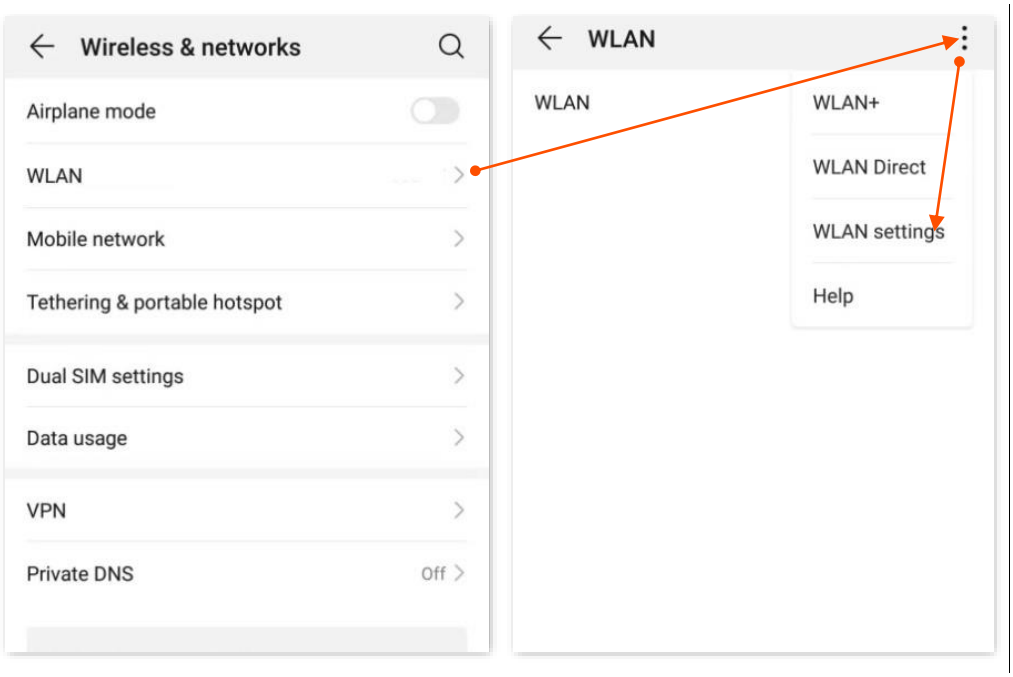


2. Configure the WPS function on your Wi-Fi-enabled devices within 2 minutes.

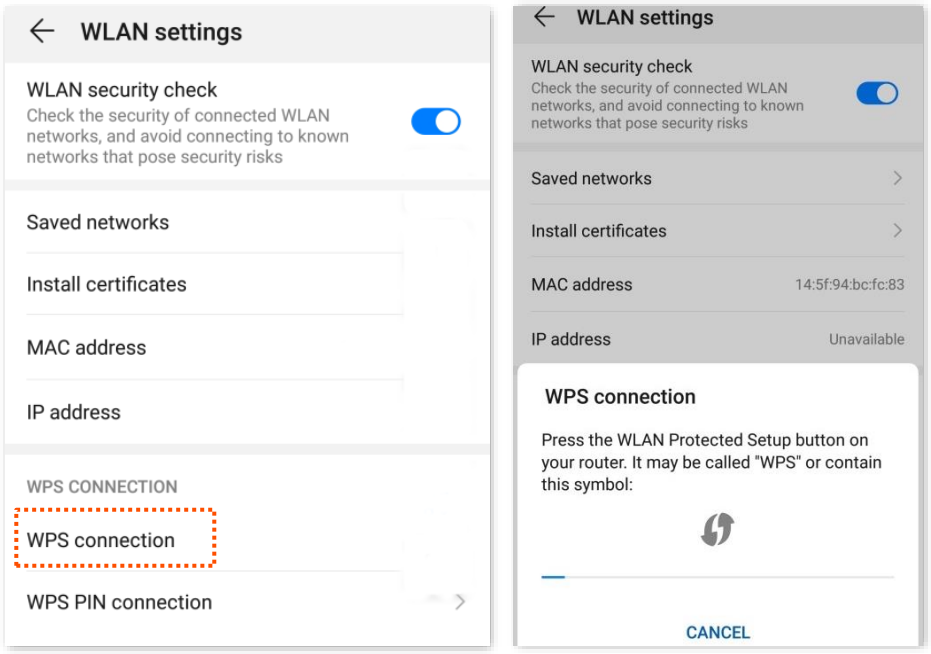
   Configuration on various devices may differ (Example: HUAWEI P10).

   1) Go to **Settings** > **WLAN**.

2) Tap ⋮, then tap **WLAN settings**.



3) Tap **WPS connection**.



---End

Wait until the WPS negotiation completes.

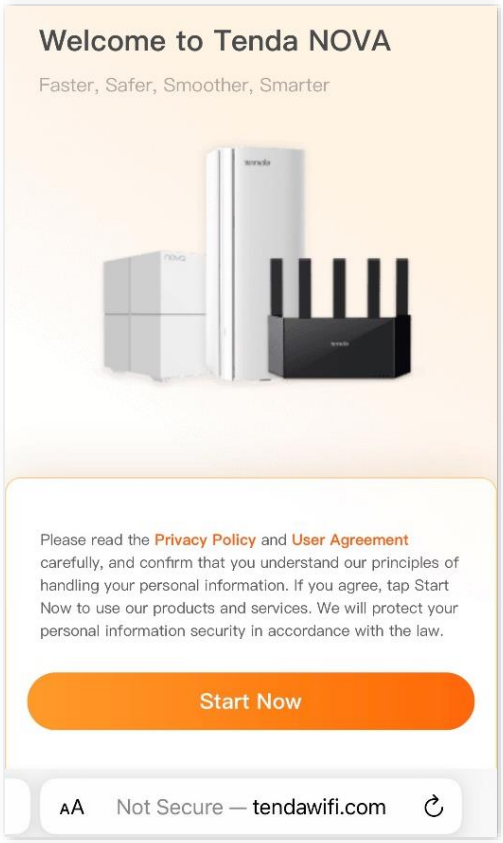
2.3 Connect to the internet using the Quick Setup Wizard

2.3.1 Via web browser

To connect the primary node to the internet using the Quick Setup Wizard:

1. At the time of the router first use/configuration or after a reset to its initial factory settings, the Quick Setup Wizard appears after your device is connected to your router. Tap **Start Now**.

   If the page does not appear automatically, enter **tendawifi.com** in the browser address bar.



2. Follow the step-by-step instructions to complete Quick Setup configuration.

TIP

- Parameters for internet settings are provided by your ISP. Contact your ISP for any doubt.
- For initial setup or after a reset, you must set the new login password and Wi-Fi password to ensure privacy and security. The longer the password, the higher the security.

  Login password, Wi-Fi password: 8-32 characters.

---End

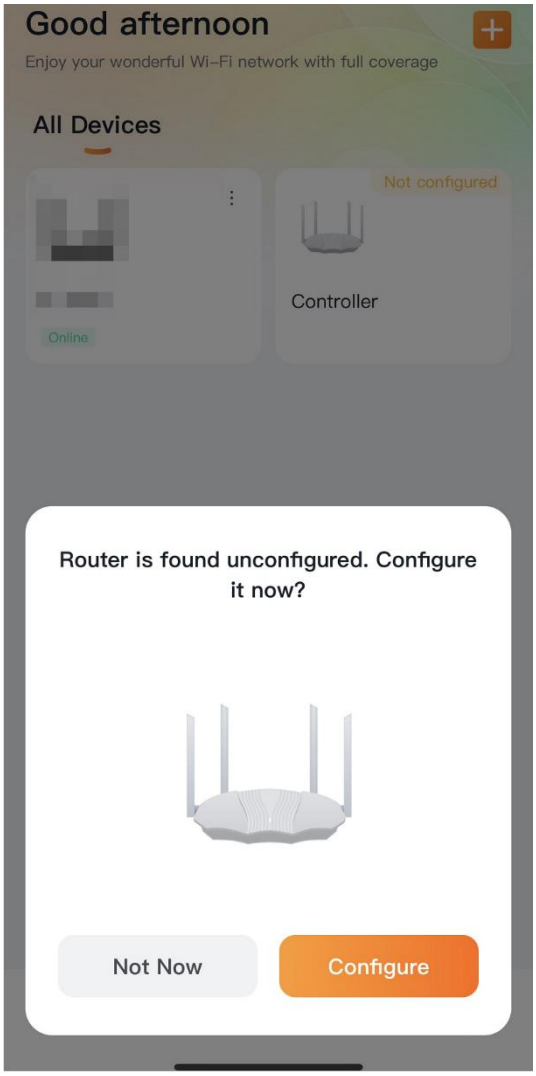
Now you can access the internet with:

- Wired devices: Connect to the LAN ports of your router
- Wireless devices: Connect to your Wi-Fi using the new Wi-Fi name and password you set

2.3.2 Via Tenda WiFi App

To connect the primary node to the internet using the Quick Setup Wizard:

1. Run the Tenda WiFi App on the mobile device that is connected to the Wi-Fi of the primary node.
2. The App pops up “Router is found unconfigured. Configure it now?”, tap **Configure**.



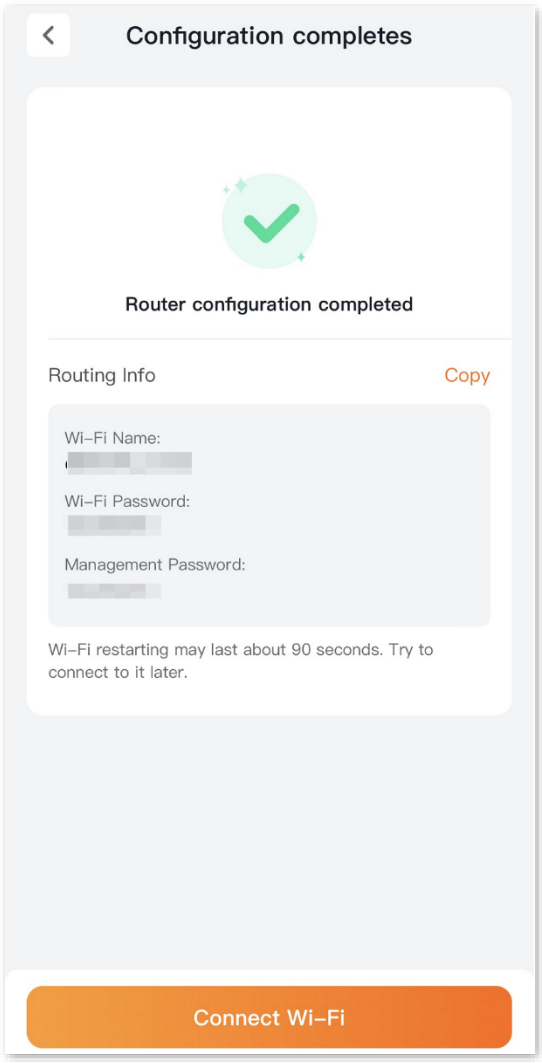
3. Select **Set as New Network**, then tap **Next**.
4. Follow the step-by-step instructions to complete Quick Setup configuration.

TIP

- Parameters for internet settings are provided by your ISP. Contact your ISP for any doubt.
- For initial setup or after a reset, you must set the new login password and Wi-Fi password to ensure privacy and security. The longer the password, the higher the security.

  Login password, Wi-Fi password: 8-32 characters.

---End



Your settings are saved. Your Wi-Fi connection has been disconnected, tap **Connect Wi-Fi** to reconnect to router's Wi-Fi.

2.4 Expand existing network

To extend network coverage and achieve seamless roaming, you can add more nodes to form a mesh network.

NOTE

The nodes must be compatible with **Tenda Wi-Fi + Mesh networking** functionality. Firmware upgrades may be required.

2.4.1 Add more nodes

You can use wired or wireless networking to add nodes.

For nodes in the same package

If the mesh device to be added is in the same package with the primary node, refer to the following instructions.

- **Method 1: Wireless networking**

  Place new nodes within 3 meters of the networked node (primary node or networked secondary node), and then power on new nodes.

- **Method 2: Wired networking**

  Power on new nodes and wait for indicator blinking green slowly, then use an Ethernet cable to connect the LAN port of a networked node (primary node or networked secondary node) to any Ethernet port of the new nodes.

When the indicators of added nodes light solid green, the networking is successful. These added nodes become secondary nodes of the network.

You can relocate the added secondary nodes to gain wider Wi-Fi coverage. See Position secondary node.

TIP

If networking fails (the indicator blinks green slowly for more than 3 minutes), try the following methods to solve it:

- Ensure that all nodes are powered on.
- Ensure that only one node (the primary node) is connected to the internet while other nodes are in factory settings.
- Move the new node closer to the networked node.

For nodes in a different package

NOTE

- The nodes must be compatible with **Tenda Wi-Fi + Mesh networking** functionality. Firmware upgrades may be required.
- A maximum of eight secondary nodes can be added to a mesh network.

If the mesh device to be added is in a different package with the primary node, refer to the following instructions.

Method 1: Wireless networking

You can add a new node by using MESH button, web user interface, or Tenda WiFi App.

TIP

The node to be added must be located within the signal coverage of the networked node (primary node or networked secondary node).

If networking fails (the indicator blinks green slowly for more than 3 minutes), try the following solutions:

- Ensure that all nodes are powered on.
- Ensure that only one node (the primary node) is connected to the internet while other nodes are in factory settings.
- Move the new node closer to the networked node and try again.

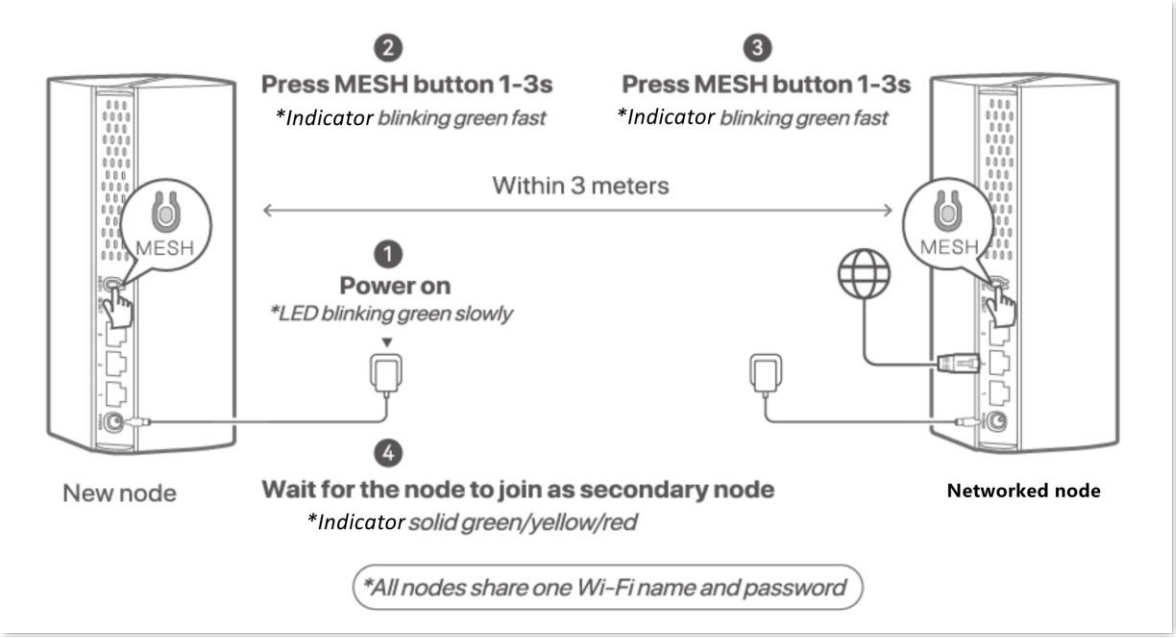
- **Using MESH button**

1. Power on the router with the mesh function (new node) and long-press (8 seconds) the reset button to reset it. Then, place the device within 3 meters of the networked node (primary node or networked secondary node).

   Wait until the indicator of new node blinks green.

2. Press (1-3 seconds) the MESH or WPS button on the new node, and its indicator blinks fast.

3. Within 2 minutes, press (1-3 seconds) the MESH or WPS button on the networked node, and its indicator blinks fast. The indicator of the new node is solid green, indicating that the networking succeeded.



---End

- **Using web user interface**

1. Power on the router with the mesh function (new node) and long-press (8 seconds) the reset button to reset it. Then, place the device within 3 meters of the networked node (primary node or networked secondary node).

   Wait until the indicator of new node blinks green.

2. Launch a web browser from a computer or mobile device that is connected to your NOVA network.

3. Enter **tendawifi.com**.

   A login window displays.

4. Enter the login password.

   The password is case-sensitive.

5. Add new node.

- **Computer:**

  1) Go to **Network Status**, click ⊕ (below Network Topology), click **Next** > **Next** , then click **Scanning networking**.

  2) Follow the instructions displayed to complete the configuration.

- **Smartphone/Tablet:**

  1) Go to **Network Status**, tap + , wait until the page prompts you the following nodes had been discovered, choose the target node, then tap **Start**.

  2) Wait until the ongoing process is complete, if you want to add other nodes, tap **Continue to add new Mesh nodes**, otherwise, tap **Ok**.

TIP

You can identify the device to be added by the MAC address on the router label.

---End

You can see the added node in the **Network Topology** field when the node is added successfully.

- **Using Tenda WiFi App**

1. Power on the router with the mesh function (new node) and long-press (8 seconds) the reset button to reset it. Then, place the device within 3 meters of the networked node (primary node or networked secondary node).

   Wait until the indicator of new node blinks green.

2. Run the **Tenda WiFi** App, then tap your router (primary node) on **Homepage**.

3. Tap **Network Topology**, then tap +.
4. After the App automatically scans the node to be added, tap **Connect**.
5. Wait until the ongoing process is complete, if you want to add other nodes, tap **Continue** to add, otherwise, tap **Done**.

TIP

You can identify the device to be added by the MAC address on the router label.

---End

Method 2: Wired networking

1. Power on the router with the mesh function (new node) and long-press (8 seconds) the reset button to reset it.

   Wait until indicator blinking green slowly.
2. Use an Ethernet cable to connect the LAN port of a networked node (primary node or networked secondary node) to any Ethernet port of the new node.

---End

When the indicators of added node light solid green, the networking is successful. the added node become secondary nodes of the network.

2.4.2 Position secondary node

1. Relocate the secondary nodes to a proper position.
   - Ensure that the distance between any two nodes is less than 10 meters.
   - Keep your nodes away from electronics with strong interference, such as microwave ovens, induction cookers, and refrigerators.
   - Place the nodes in a high position with few obstacles.
2. Power on the secondary nodes again. Wait until these indicators blink green slowly.
3. Observe the indicators of the secondary nodes until the indicators light one of the following colors:

Solid green	Networking succeeds. Excellent connection quality.
Solid yellow	Networking succeeds. Fair connection quality.
Solid red	Networking succeeds. Poor connection quality.

   If any secondary node's indicator lights solid red, move it closer to other networked node.

---End

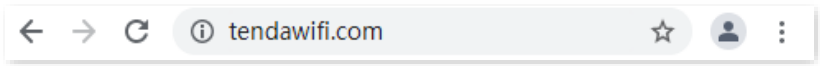
All nodes share one Wi-Fi name and password. All Ethernet ports of the secondary node are LAN port.

2.5 Manage router via web browser

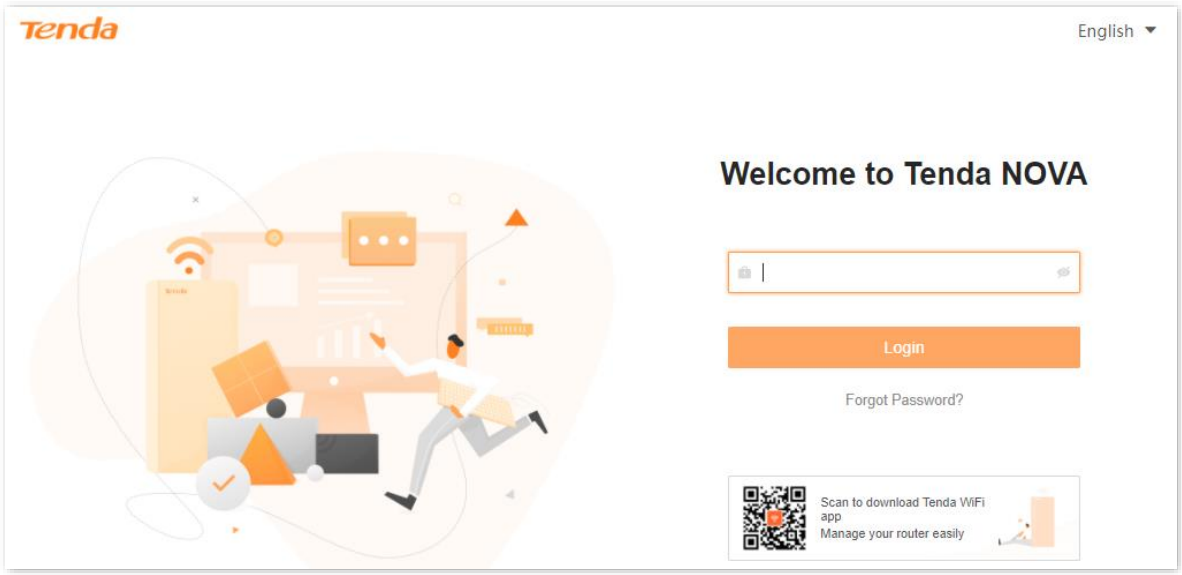
2.5.1 Log in to the router's web UI

To log in to the router's web UI:

1. Connect the device to the router.
   - Smartphone/Tablet: Connect to the Wi-Fi of the router.
   - Computer: Connect to the Wi-Fi of the router, or use an Ethernet cable to connect your computer to the LAN port of the router.
2. Start a web browser on the device and enter **tendawifi.com** in the address bar to access the web UI.



3. Enter your login password, then click **Login**.



TIP

The login password is case-sensitive. If you forgot the login password, see Forgot my password.

---End

2.5.2 Log out of the web UI

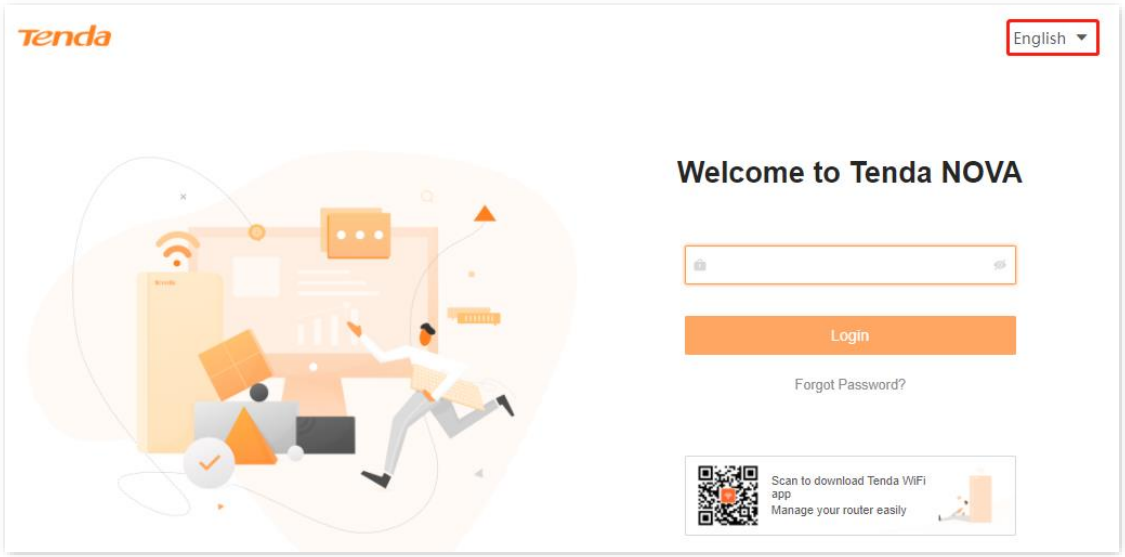
If you log in to the web UI of the mesh device and perform no operation within 5 minutes, the mesh device logs you out automatically.

When accessing the web UI via a browser for PC, you can also log out by clicking **Exit** in the upper-right corner of the web UI.

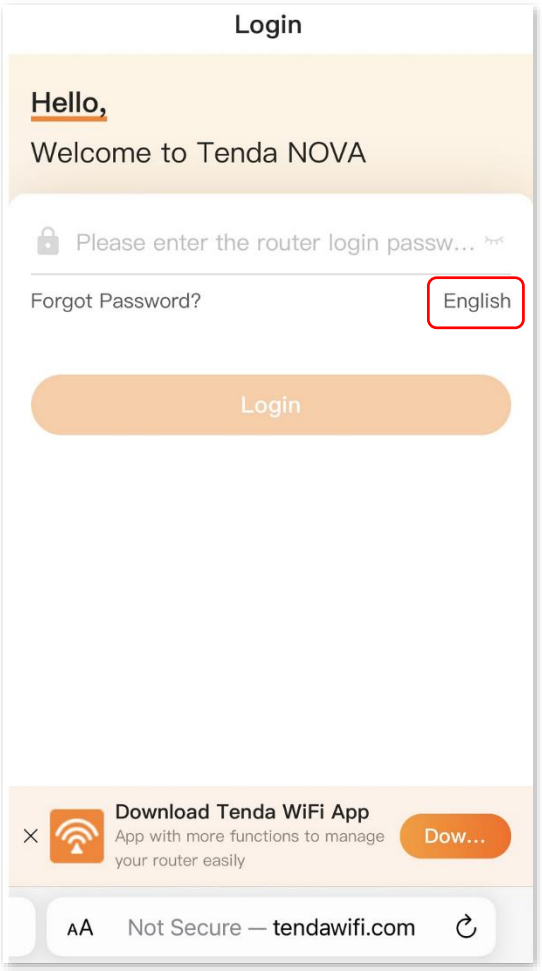
2.5.3 Change the web UI in a different language

By default, the router automatically adapts its web UI to the language of the region where your device is located. You can choose another language from the drop-down list on the login page.

- **Web browser for PC**



- **Web browser for smartphone**



2.6 Manage router via Tenda WiFi App

You can register a Tenda account and log in to the Tenda WiFi App with it to manage the router anywhere, anytime.

2.6.1 Bind the administrator account to your router

To bind the administrator account to your router:

1. Download the Tenda WiFi App onto your mobile device by scanning the **QR** code or by searching for **Tenda WiFi** in **Google Play** or **App Store**. Then install the **Tenda WiFi** App.

Tenda WiFi

2. Run the **Tenda WiFi** App on the mobile device and log in with your Tenda account.

   TIP

   If you don't have a Tenda account, register one first.

3. Connect your mobile device to the Wi-Fi network of your router.
4. The App pops up "Router is found unbound. Bind it now?", tap **Bind now**.
5. Enter the **Management Password** (login password) of the router, if asked. Then tap **Bind now**.

   The router is successfully bound to you Tenda account.

6. Tap **Device Name** to change your router's device name, select your location, then tap **Done**.

   ---End

Now you can use Tenda WiFi App to manage your NOVA network remotely. The Tenda account that you bound to the router becomes the administrator account.

TIP

If you cannot manage the router, ensure that:

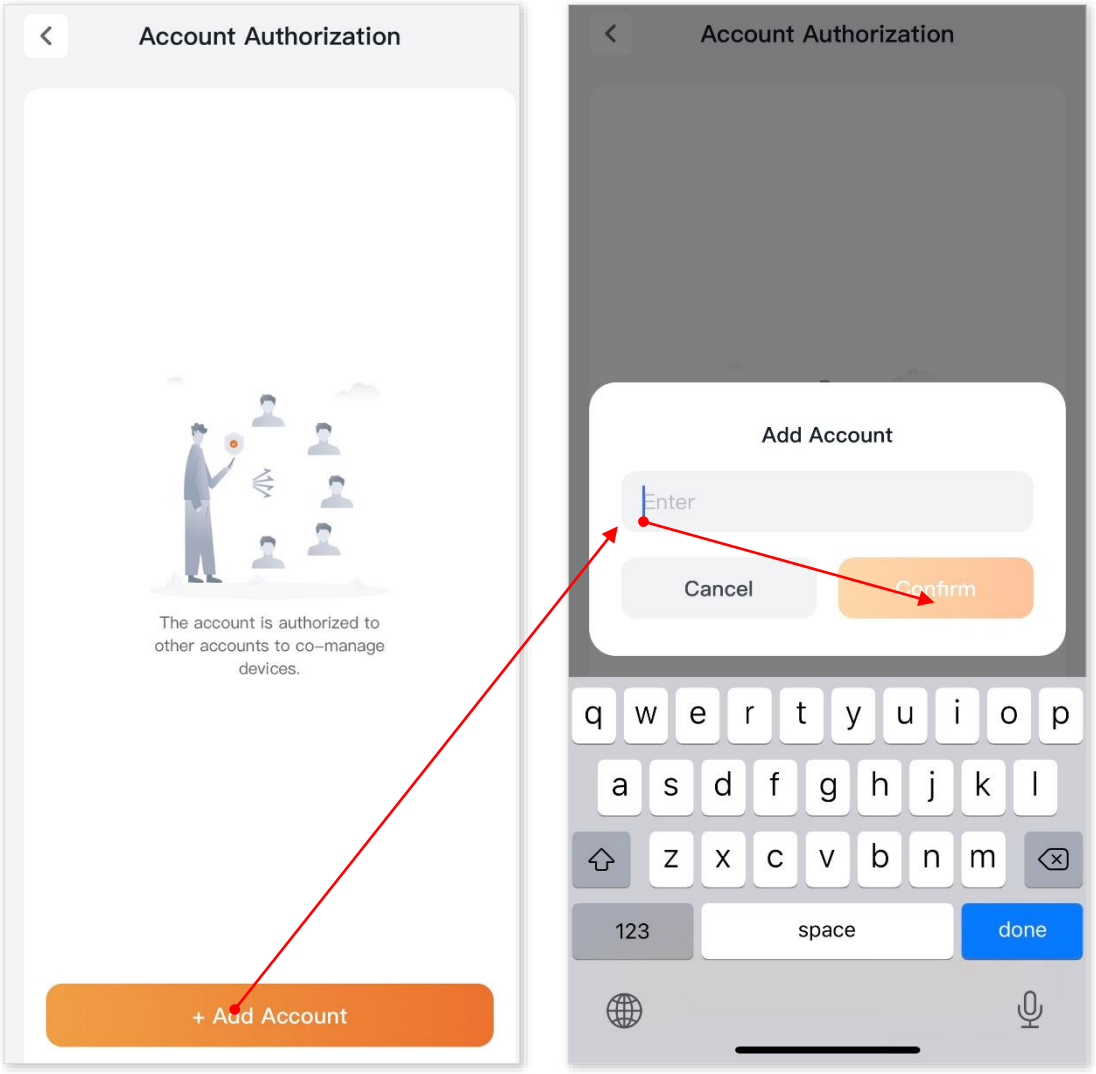
- You're logged in to the Tenda WiFi App.
- The mobile device used for management is connected to the internet.
- The router is connected to the internet.

2.6.2 Authorize another account to manage your router

The mesh device can be managed by multiple authorized accounts, which share the same permissions with the administrator, except that they cannot authorize other accounts.

To authorize an another account to manage your router:

1. Run the **Tenda WiFi** App and log in to the App with administrator account, then tap your router on **Homepage**.
2. Tap **More Functions** next to Common Functions, then tap **Account Authorization** (below Common Functions).
3. Tap **+ Add Account** or **+** in the upper-right corner.
4. Enter an authorized account, then tap **Confirm**.



---End

The added account will be displayed in the list, and the added account can be used to manage the mesh devices.

2.6.3 Delete an authorized account

1. Run the **Tenda WiFi** App and log in to the App with administrator account, then tap your device on **Homepage**.
2. Tap **More Functions** next to Common Functions, then tap **Account Authorization.**
3. tap next to the account you want to delete.

---End

The account will be removed from the list. You cannot use the account to manage the router.

2.6.4 Unbind your router

To unbind your router:

1. Run the **Tenda WiFi** App and log in to the App with administrator account.
2. Tap your router on **Homepage**.
3. Tap ••• in the upper-right corner, tap **Unbind**.

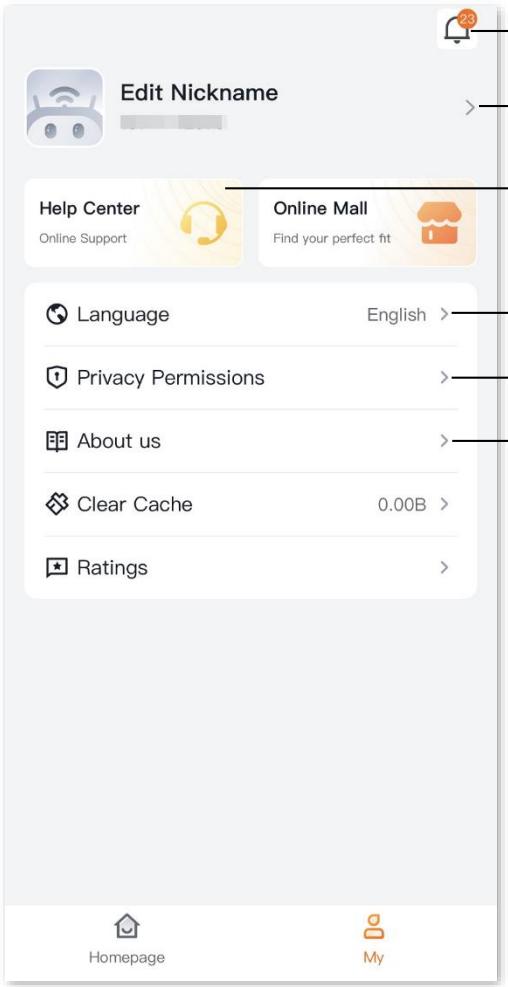
---End

You can no longer use the account to manage the router.

2.6.5 App and account at a glance

To view information about App and account: Run the **Tenda WiFi** App, then tap **My.**

Example of App Version V4.5.1.



Tap to view or set message notification

Tap to set the relevant information of the account.

Tap to contact Tenda online support

Tap to change the language

Tap to set privacy permissions

Tap to view and upgrade App firmware, view contact information, user agreement or privacy policy

3 Manage internet settings

Features available in the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual router experience.

3.1 Modify your internet connection

By configuring the internet settings, you can achieve shared internet access (IPv4) for multiple users within the LAN.

If your internet connection type or parameters changed, you can change the internet settings to enable your nodes to access the internet.

3.1.1 Via web browser

To modify your internet connection:

TIP

Parameters for internet access are provided by your ISP. Contact your ISP for any doubt.

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **Internet Settings**.
5. Select your **ISP Type** from the drop-down list.

   ISP Type: The available options may vary with models. Refer to the product that you purchased. Refer to the following to select your ISP Type. If still unsure, check with your ISP.

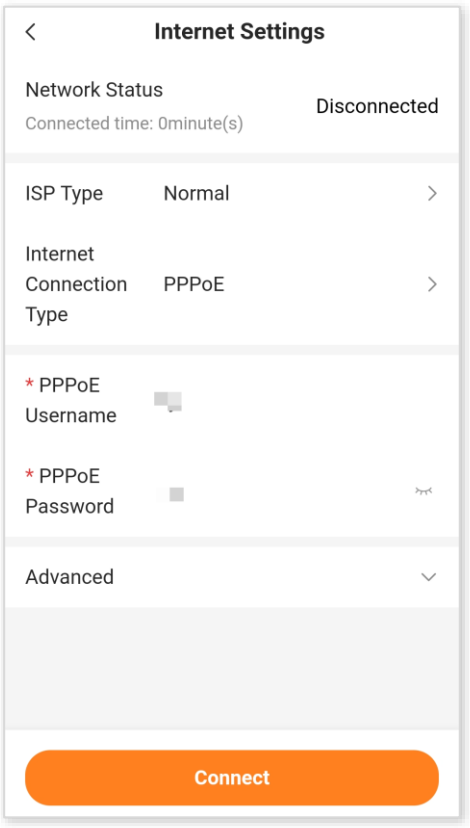
- **Unifi**, **Maxis**, **Celcom** and **Digi**: Select the ISP you actually use.
- **Normal**: Select this option when your ISP does not provide information other than the PPPoE user name and password or a set of IP addresses.
- **Russia:** Select this option when your ISP provides dual access information, such as PPTP, L2TP connection information.
- **Manual**: Select this option when your ISP provides VLAN ID, besides the PPPoE user name and account, or static IP address.

6. (Optional) If you select **Maxis**, **Celcom** or **Digi** for ISP Type, select your ISP **Area** from the drop-down list.
7. (Optional) If you select **Manual** for ISP Type, enter **Internet VLAN ID** and **IPTV VLAN ID** (if any) provided by your ISP. Blank VLAN ID indicates that the IPTV function is disabled.
8. Follow the instructions below to select your **Internet Connection Type** and make the relevant settings.
   - **PPPoE**, **Russia PPPoE**: Select this type if your ISP provides you with a PPPoE account. Russia PPPoE is available only when you set ISP Type to Russia.
   - **Dynamic IP**: Select this type if your ISP does not provide you with a PPPoE account or a set of fixed IP addresses, or you already have a router with internet access and want to add this router.
   - **Static IP**: Select this type if your ISP provides you with a set of fixed IP addresses.
   - **Russia PPTP, Russia L2TP**: These types are available when **ISP Type** is set to **Russia**. Select this type if your Russia ISP provides you with a PPTP/L2TP VPN account, and the VPN server's IP address.

     If you select **Russia PPTP** or **Russia L2TP**, the VPN function will be disabled.

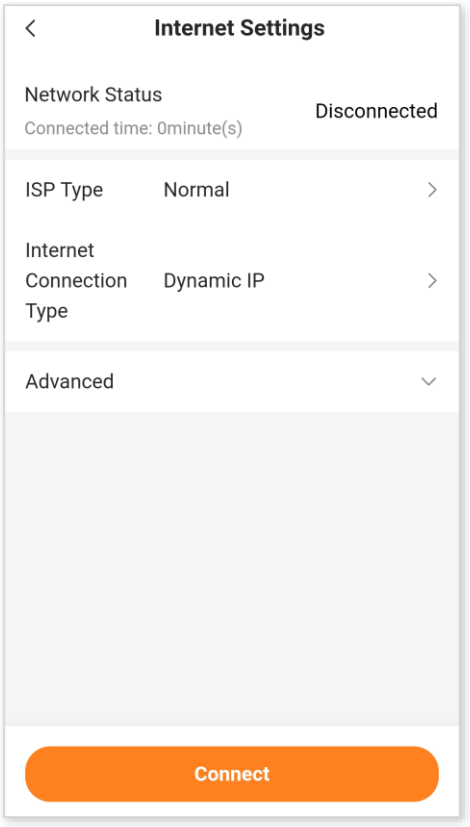
- **PPPoE:**

  1) Set **Internet Connection Type** to **PPPoE**.
  2) Enter the **PPPoE Username** and **PPPoE Password** provided by your ISP.



- **Dynamic IP:**

  Set **Internet Connection Type** to **Dynamic IP**.

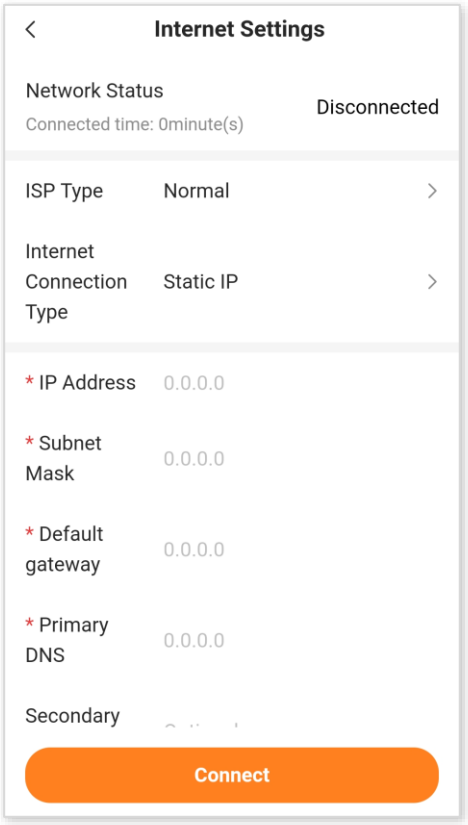


- **Static IP:**

  1) Set **Internet Connection Type** to **Static IP**.

  2) Enter **IP Address**, **Subnet Mask**, **Gateway** and **Primary DNS**, and **Secondary DNS** provided by your ISP.

     If your ISP provides only one DNS server, you can leave **Secondary DNS** blank.



- **Russia PPPoE:**

  1) Set **Internet Connection Type** to **Russia PPPoE**.

  2) Enter the **PPPoE Username** and **PPPoE Password** provided by your ISP.

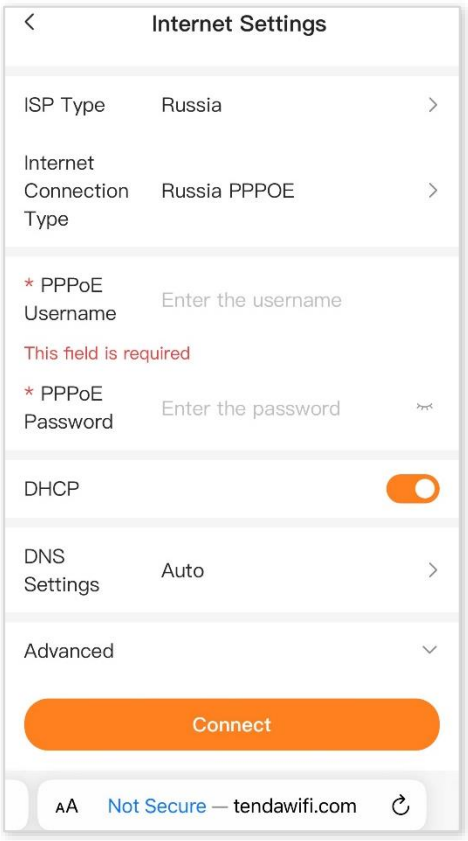
  3) Select an **Address Type** (turn on or turn off DHCP) for obtaining IP address information to access the “local” resources where the ISP is located.

  4) If the **Address Type** is **Dynamic IP Address** (DHCP), select an IPv4 Domain Name Server (DNS) Address radio button:

  - **Auto**: Your ISP uses DHCP to assign your DNS servers. Your ISP automatically assigns this address.
  - **Manual**: If you know that your ISP requires specific servers, select this option. Enter the IP address of your ISP’s primary DNS server. If a secondary DNS server address is available, enter it also.

5) If the **Address Type** is **Static IP Address**, enter **IP Address**, **Subnet Mask**, **Gateway**, **Primary DNS**, and **Secondary DNS** provided by your ISP.

If your ISP provides only one DNS server, you can leave **Secondary DNS** blank.



- **Russia PPTP, Russia L2TP:**

1) Set **Internet Connection Type** to **Russia PPTP/L2TP**.

2) Enter the PPTP/L2TP VPN **Server IP Address/Domain Name** provided by your ISP.

3) Enter the VPN **User Name** and **Password** provided by your ISP.

4) Select an **Address Type** radio button for obtaining IP address information to access the "local" resources where the ISP is located.

5) If the **Address Type** is **Dynamic IP Address**, select an IPv4 Domain Name Server (DNS) Address radio button:

- **Auto**: Your ISP uses DHCP to assign your DNS servers. Your ISP automatically assigns this address.
- **Manual**: If you know that your ISP requires specific servers, select this option. Enter the IP address of your ISP's primary DNS server. If a secondary DNS server address is available, enter it also.

6) If the **Address Type** is **Static IP Address**, enter **IP Address**, **Subnet Mask**, **Gateway**, **Primary DNS**, and **Secondary DNS** provided by your ISP.

   If your ISP provides only one DNS server, you can leave **Secondary DNS** blank.

9. If your ISP has provided you with other parameters, refer to the following settings.

   1) Click **Advanced**.

   2) For **PPPoE** or **Russia PPPoE**, if your ISP requires a server name, service name, enter it in the **Server Name**, **Service Name** field.

   3) (Optional) To set a specific MTU size for an Internet connection, specify the MTU size in the **MTU** field.

   MTU specifies the largest data packet transmitted by a network device. Do not change the value unless:

   - Your ISP or our technical support suggests you change it when you have problems connecting to your ISP or other internet services.
   - You use VPN and encounter serious performance problems.
   - You used a program to optimize MTU for performance reasons, and now you have connectivity or performance problems.
   - A wrong/improper MTU value may cause internet communication problems. For example, you may be unable to access certain websites, frames within websites, secure login pages, FTP or POP servers.

   The MTU value range is as follows:

   - When the internet connection type is PPPoE, the default value is 1480. Its allowed range is 1280 to 1492.
   - When the internet connection type is dynamic IP or static IP, the default value is 1500. Its allowed range is 1280 to 1500.
   - When the internet connection type is PPTP/L2TP, the default value is 1400. Its allowed range is 1280 to 1460.

   4) (Optional) Specify the MAC address of the WAN port of primary node in the **MAC Address Clone** field.

   If the primary node cannot be connected to the internet after internet settings, the reason may be that the ISP binds internet access information to a MAC address. At this point, perform MAC address clone and try to surf the internet.

   - **Default MAC**: Keep the factory setting of MAC address.
   - **Clone Local Host MAC**: Set the MAC address of the primary node to the same as that of the device which is configuring the node.

- **Custom**: Manually set a MAC address.

5) If the **Internet Connection Type** is **Dynamic IP Address** or **PPPoE**, select an IPv4 Domain Name Server (DNS) Address radio button:

- **Auto**: Your ISP uses DHCP to assign your DNS servers. Your ISP automatically assigns this address.
- **Manual**: If you know that your ISP requires specific servers, select this option. Enter the IP address of your ISP's primary DNS server. If a secondary DNS server address is available, enter it also.

10. Click **Connect**.

---End

Wait until the network status changes to **Connected**, then you can access the internet.

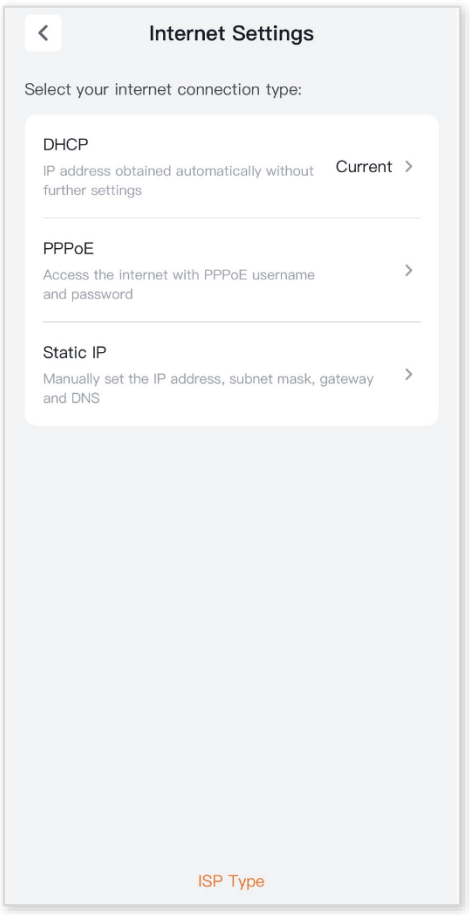
TIP

If network status changes to other information: The internet connection failed. Perform troubleshooting according to the tips displayed.

3.1.2 Via Tenda WiFi App

To modify your internet connection:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Internet Settings** (below Common Settings).
3. By default, the ISP Type is Normal, tap **ISP Type** if you want to change it. For more information, see ISP Type.



4. Select your internet connection type and enter the required information. For more information, see Modify your internet connection via web browser. Then, tap **Save**.

---End

Your settings are saved.

3.2 Set up the router as an Wi-Fi access point (AP)

By default, the mesh device work in the router mode. You can set up the mesh device to run as a Wi-Fi access point on the same local network as your existing router or gateway.

For example, you already have a modem router at home, and now:

- You want to use this router to provide wireless network; or
- You need this router and the existing router in a same network in order to continue to use the LAN printing and sharing services.

In these cases, you do not need to change the settings for the gateway or modem router.

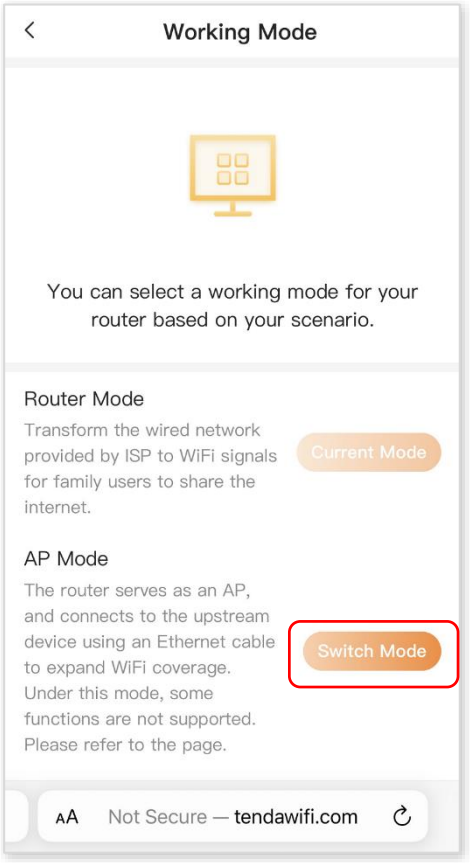
3.2.1 Via web broswer

To set up the mesh device as an AP:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Working Mode**, click **Switch Mode** to the right of the **AP Mode** field, then click **OK**. Wait until the devices are restarted.



5. Use an Ethernet cable to connect the LAN port of your existing gateway (upstream router) to any port of the mesh device (primary node).

   ---End

To access the internet, connect your computer to an Ethernet port of any node, or connect your smartphone to the Wi-Fi network.

3.2.2 Via Tenda WiFi App

To set up the mesh device as an AP:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **Working Mode** (below Advanced Functions).
3. Tap **Switch Mode** next to **Wired Extension (AP)**, then tap **Switch**.

   Wait until the devices are restarted.
4. Use an Ethernet cable to connect the LAN port of your existing gateway (upstream router) to any port of the mesh device (primary node).

   ---End

To access the internet, connect your computer to an Ethernet port of any node, or connect your smartphone to the Wi-Fi network.

3.2.3 Tips

When the mesh device works in AP mode:

- Every Ethernet port can be used as a LAN port.
- The LAN IP address of the mesh device will be changed. To log in to the web UI of the mesh device, enter **tendawifi.com** in browser address bar. If there is another network device with a login domain name of **tendawifi.com**, log in to the upstream router and find the IP address of the mesh device in the client list. Then you can log in to the web UI of the mesh device by visiting the IP address.
- Functions, such as port mapping are unavailable. Refer to the web UI for available functions.

If you cannot access the internet, try the following solutions:

- Ensure that the upstream router is connected to the internet successfully.
- Ensure that your Wi-Fi-enabled clients are connected to the correct Wi-Fi network of the mesh device.
- If the computer connected to the mesh device cannot access the internet, ensure that the computer is configured to obtain an IP address and DNS server automatically.

3.3 Extend Wi-Fi networks that do not support Tenda Wi-Fi + Mesh

By default, the mesh device work in the router mode. If you want to bridge another Wi-Fi network that does not support **Tenda Wi-Fi + Mesh**, you can change the working mode of the mesh device to Client+AP mode.

3.3.1 Via web browser

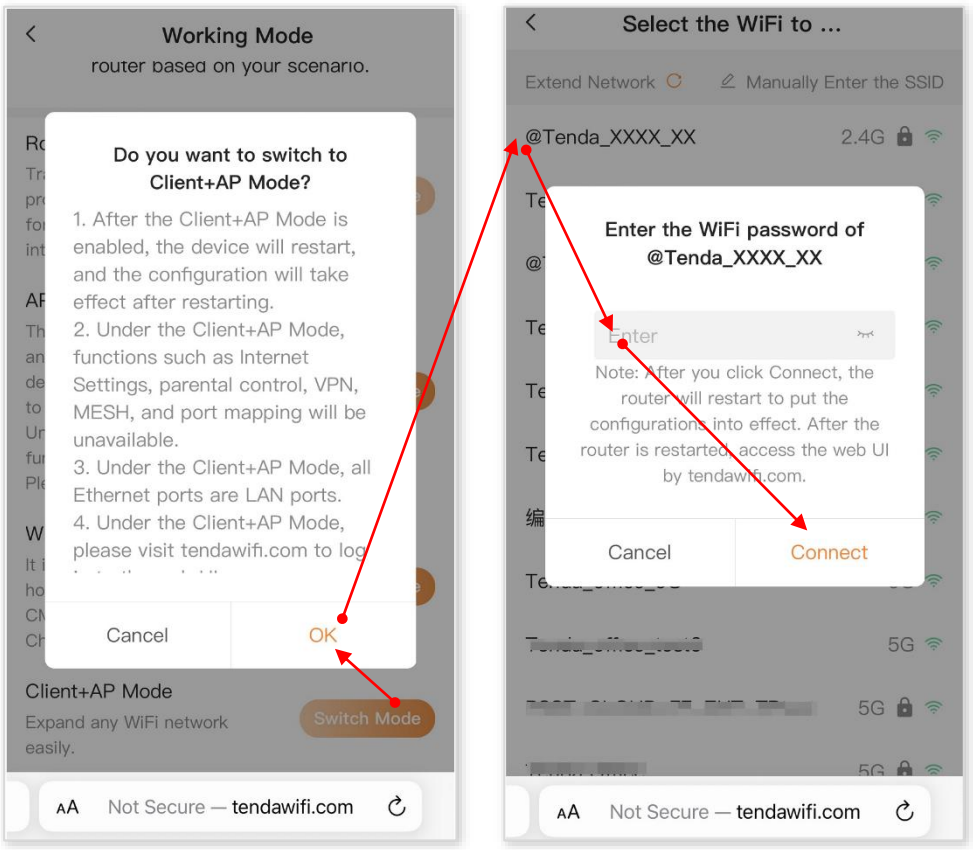
To extend Wi-Fi networks that do not support Tenda Wi-Fi + Mesh:

1. Place the router near the existing router and power it on.
2. If there is an Ethernet cable between the router and the upstream router, unplug it.
3. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
4. Enter **tendawifi.com**.

   A login window displays.
5. Enter the login password.

   The password is case-sensitive.
6. Go to **More** > **Working Mode**.
7. Click **Switch Mode** to the right of the **Client+AP Mode** field and click **OK**.
8. Select the Wi-Fi to be extended, which is **@Tenda_XXXX_XX** in this example. If the 2.4 GHz Wi-Fi name and 5 GHz Wi-Fi name is the same, select it as required. Enter **Upstream WiFi Password**, if asked, then click **Connect**.

   Wait until the device is restarted.



9. Relocate the router by referring to the following suggestions and power it on.
   - Between the existing router (upstream router) and the uncovered area, but within the coverage of the existing router.
   - Away from microwave ovens, electromagnetic ovens, and refrigerators.
   - Above the ground with few obstacles.

   ---End

To access the internet, connect your computer to an Ethernet port of the router, or connect your smartphone to the Wi-Fi network of the router.

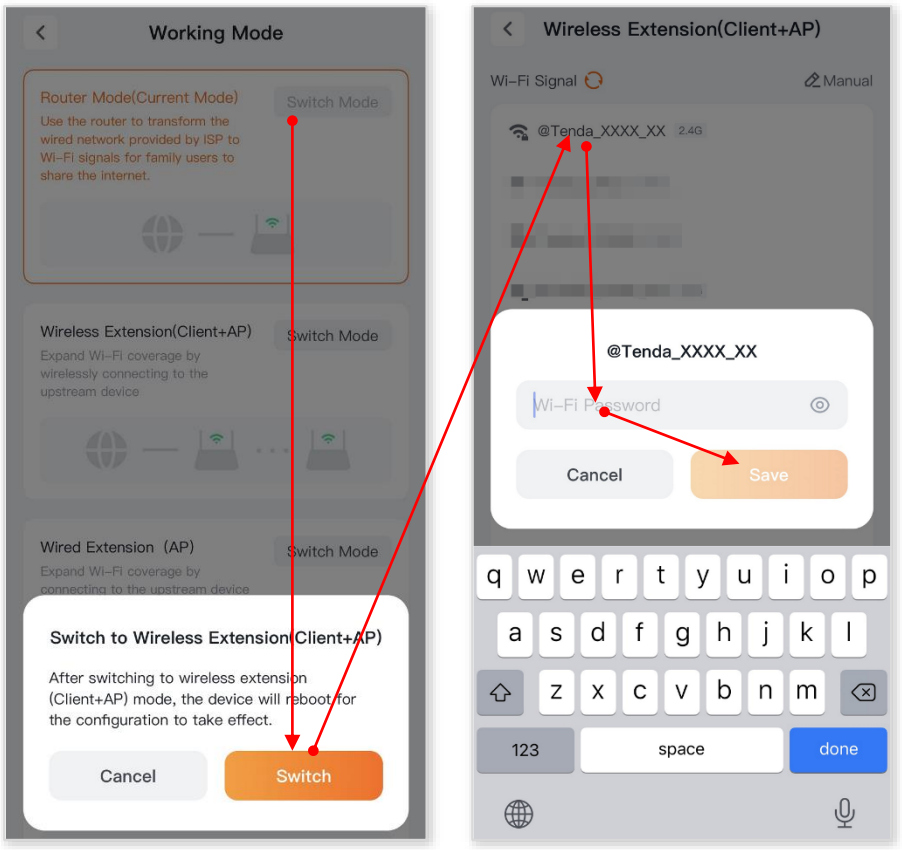
3.3.2 Via Tenda WiFi App

To extend Wi-Fi networks that do not support Tenda Wi-Fi + Mesh:

1. Place the router near the existing router and power it on.
2. If there is an Ethernet cable between the router and the upstream router, unplug it.
3. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
4. Tap **More Functions** next to **Common Functions**, then tap **Working Mode** (below Advanced Functions).

5. Tap **Switch Mode** next to **Wireless Extension (Client +AP)**, then tap **Switch**.
6. Select the Wi-Fi to be extended from the **Wi-Fi Signal** list. If the 2.4 GHz Wi-Fi name and 5 GHz Wi-Fi name is the same, select it as required. Enter **Upstream WiFi Password**, then tap **Save**.

   Wait until the device is restarted.



7. Relocate the router by referring to the following suggestions and power it on.
   - Between the existing router (upstream router) and the uncovered area, but within the coverage of the existing router.
   - Away from microwave ovens, electromagnetic ovens, and refrigerators.
   - Above the ground with few obstacles.

   ---End

To access the internet, connect your computer to an Ethernet port of the new router, or connect your smartphone to the Wi-Fi network of the new router.

3.3.3 Tips

When the mesh device works in Client+AP mode:

- Every Ethernet port can be used as a LAN port.

- The LAN IP address of the mesh device will be changed. To log in to the web UI of the mesh device, enter **tendawifi.com** in browser address bar. If there is another network device with a login domain name of **tendawifi.com**, log in to the upstream router and find the IP address of the mesh device in the client list. Then you can log in to the web UI of the mesh device by visiting the IP address.
- Functions, such as MESH (Nodes that are already networked are also disconnected) and port mapping are unavailable. Refer to the web UI for available functions.

If you cannot access the internet, try the following solutions:

- Ensure that the existing router is connected to the internet successfully.
- Ensure that your Wi-Fi-enabled devices are connected to the Wi-Fi network of the new router.
- If the computer connected to the router for repeating cannot access the internet, ensure that the computer is set to **Obtain an IP address automatically** and **Obtain DNS server address automatically**.

3.4 Connect the mesh device to mobile hotspot

By default, the mesh device work in the router mode. you can change the working mode of the mesh device to WISP mode to bridge a hotspot of ISP.

3.4.1 Via web browser

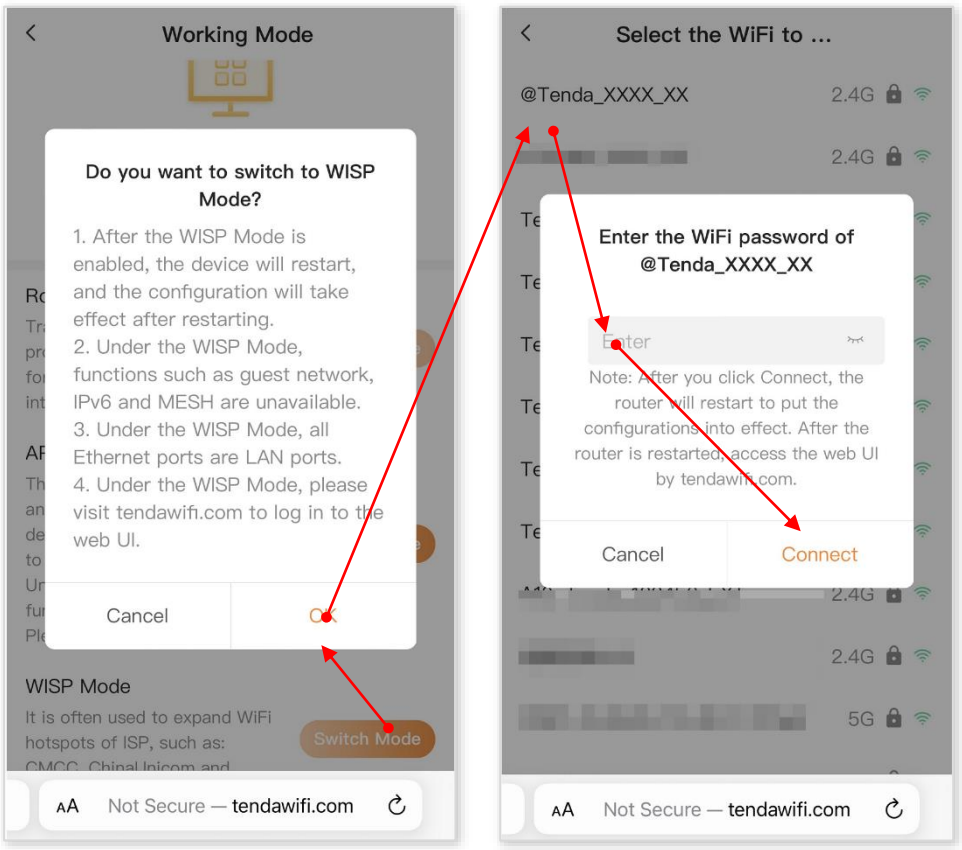
To connect the mesh device to mobile hotspot:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Working Mode**, click **Switch Mode** to the right of the **WISP Mode** field and click **OK**.
5. Select the ISP hotspot from the Wi-Fi list, which is **@Tenda_XXXX_XX** in this example. If the 2.4 GHz Wi-Fi name and 5 GHz Wi-Fi name is the same, select it as required. Enter the upstream Wi-Fi password if asked, then click **Connect**.

   Wait until the devices are restarted.



---End

To access the internet, connect your computer to an Ethernet port of the router, or connect your smartphone to the Wi-Fi of the router.

3.4.2 Via Tenda WiFi App

To connect the mesh device to mobile hotspot:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **Working Mode** (below Advanced Functions).
3. Tap **Switch Mode** next to **WISP Mode**, then tap **Switch**.
4. Select the ISP hotspot from the **Wi-Fi Signal** list, enter the upstream Wi-Fi password, if asked, then tap **Save**.

   Wait until the devices are restarted.

---End

To access the internet, connect your computer to an Ethernet port of the router, or connect your smartphone to the Wi-Fi of the router.

3.4.3 Tips

When the mesh device works in WISP mode:

- Every Ethernet port can be used as a LAN port.
- The LAN IP address of the mesh device will be changed. To log in to the web UI of the mesh device, enter **tendawifi.com** in browser address bar. If there is another network device with a login domain name of **tendawifi.com**, log in to the upstream router and find the IP address of the mesh device in the client list. Then you can log in to the web UI of the mesh device by visiting the IP address.
- Functions, such as MESH (Nodes that are already networked are also disconnected) and IPv6 are unavailable. Refer to the web UI for available functions.

If you cannot access the internet, try the following solutions:

- Ensure that your ISP hotspot is normal. You have completed all necessary configurations required by your ISP.
- Ensure that your Wi-Fi-enabled devices are connected to the Wi-Fi network of the new router.
- If the computer connected to the router for repeating cannot access the internet, ensure that the computer is set to **Obtain an IP address automatically** and **Obtain DNS server address automatically**.

3.5 Switch the working mode back to router mode

3.5.1 Via web browser

To switch the working mode back to router mode:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Working Mode**, click **Switch Mode** to the right of the **Router Mode** field, then Click **OK**.

   Wait until the devices are restarted.

---End

After rebooting, connect your router and log in to the router again to set up the router. For more information, see Modify your internet connection.

3.5.2 Via Tenda WiFi App

To switch the working mode back to router mode:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Working Mode** (below Common Functions).
3. Tap **Switch Mode** next to **Router Mode**, then tap **Switch**.

   Wait until the devices are restarted.

---End

After rebooting, connect your router and log in to the router again to set up the router. For more information, see Modify your internet connection.

3.6 Set up an IPv6 internet connection

Before configuring the IPv6 function, ensure that you are within the coverage of the IPv6 network and already subscribe to the IPv6 internet service. Contact your ISP for any doubt about it.

3.6.1 Via web browser

To set up an IPv6 internet connection:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **IPv6**.
5. Turn on **IPv6**.
6. Fill in information as required by different connection types.

   Which connection type you use depends on your IPv6 ISP. Follow the directions that your IPv6 ISP gave you, or judge according to the already known information provided by your ISP.

DHCPv6: The ISP does not provide any PPPoEv6 user name and password and information about the IPv6 address, or you have an upstream router that can access the IPv6 network.

PPPoEv6: IPv6 service is included in the PPPoE user name and password.

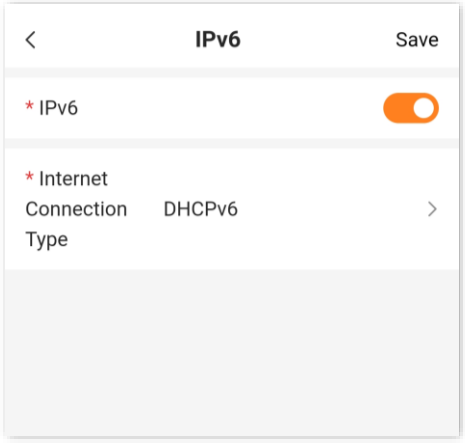
Static IPv6 Address: The ISP provides you with a set of information including IPv6 address, subnet mask, default gateway and DNS server.

- **DHCPv6**

1) Set **Internet Connection Type** to **DHCPv6**.

2) Select an IPv6 Domain Name Server (DNS) Address radio button:

- **Auto**: Your ISP uses DHCP to assign your DNS servers. Your ISP automatically assigns this address.
- **Manual**: If you know that your ISP requires specific servers, select this option. Enter the IP address of your ISP's primary DNS server. If a secondary DNS server address is available, enter it also.



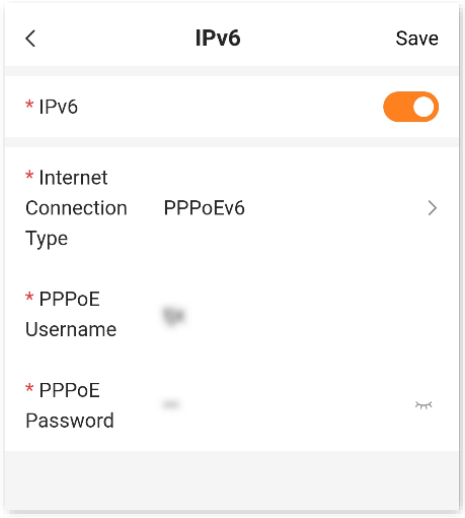
- **PPPoEv6:**

1) Set **Internet Connection Type** to **PPPoEv6**.

2) Enter **PPPoE Username** and **PPPoE Password** provided by your ISP.

TIP

Generally, IPv4 and IPv6 services share the same PPPoE account. If your ISP provides two separate accounts for the IPv4 and IPv6 connections, manually enter the username and password for the IPv6 connection.



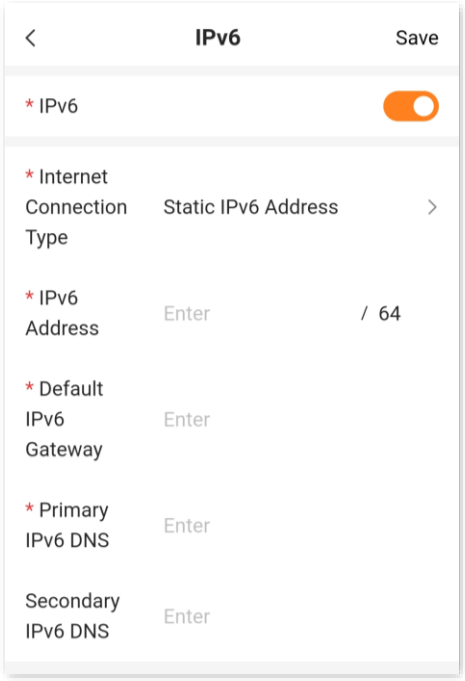
- **Static IPv6 Address:**

  1) Set **Internet Connection Type** to **Static IPv6 Address**.

  2) Fill in blanks.

TIP

If your ISP only provides one DNS address, leave the secondary IPv6 DNS blank.



7. Select a LAN IP Address Assignment mode:

   - **Auto:** Specifies the stateful configuration and stateless configuration. The IPv6 prefix address, and DNS server address of the client can be obtained from the DHCPv6 server or through Route Advertisement (RA). The gateway address can be obtained from RA.

- **SLAAC:** Specifies the DHCPv6 stateless configuration. The IPv6 prefix address and gateway address of the client are obtained through RA, the interface address is generated based on the standard, and the DNS server address is obtained from the DHCPv6 server.
- **SLAAC+RDNSS:** Specifies the stateless address automatic configuration. The IPv6 prefix address and gateway address of the client are obtained through RA, the interface address is generated based on the standard, and the DNS server address is obtained from the RDNSS option in the RA packet.
- **DHCPv6:** Specifies the stateful configuration of Dynamic Host Configuration Protocol for IPv6 (DHCPv6). The client obtains the complete IPv6 address information, including the DNS server address, from the DHCPv6 server. The gateway address is obtained through RA.

8. (Optional) when the Internet Connection Type of IPv6 WAN is Static IPv6 Address, enter the IPv6 **LAN Prefix**.
9. Click **Save**.

---End

Your settings are saved. To test whether IPv6 network is accessible, see Test whether IPv6 network is accessible.

3.6.2 Via Tenda WiFi App

To set up an IPv6 internet connection:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **IPv6** (below Advanced Functions).
3. Turn on **IPv6**.
4. Configure **IPv6 WAN Settings** and **IPv6 LAN Settings**. For more information, see To set up an IPv6 internet connection via web browser.
5. Tap **Save**.

---End

Your settings are saved. To test whether IPv6 network is accessible, see Test whether IPv6 network is accessible.

3.7 Change WAN port negotiation speed

When the Ethernet cable is intact and connected to the WAN port properly, but a prompt indicating that no Ethernet cable is connected to the WAN port is still shown on the **Internet Settings** page, you can try to change the **Speed** to **10 Mbps full duplex** or **10 Mbps half duplex** to solve the problem. Otherwise, keep the default settings.

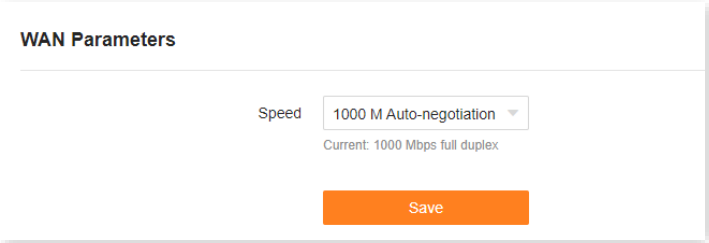
To change the WAN port negotiation speed:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page.
   - **Computer**: Go to **More** > **Network Settings** > **WAN Parameters**.
   - **Smartphone/Tablet**: Tap **More** > **Click to visit the webpage version** > **More** > **Network Settings > WAN Parameters**.
5. Change the WAN port negotiation speed as required.

   ---End



Parameter description

Speed	Application
1000 M Auto-negotiation	Indicates that the speed and duplex mode are determined through the negotiation with the peer port.
100 Mbps full duplex	Indicates that the WAN port is working at the speed of 100 Mbps, and the port can receive and send data packets at the same time.
100 Mbps half duplex	Indicates that the WAN port is working at the speed of 100 Mbps, but the port can only receive or send data packets alternately.
10 Mbps full duplex	Indicates that the WAN port is working at the speed of 10 Mbps, and the port can receive and send data packets at the same time.
10 Mbps half duplex	Indicates that the WAN port is working at the speed of 10 Mbps, but the port can only receive or send data packets alternately.

4 Manage Wi-Fi settings

Features available in the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual router experience.

4.1 Change the Wi-Fi name and password of the main Wi-Fi network

4.1.1 Via web browser

To change the Wi-Fi name and Wi-Fi password of your main Wi-Fi network:

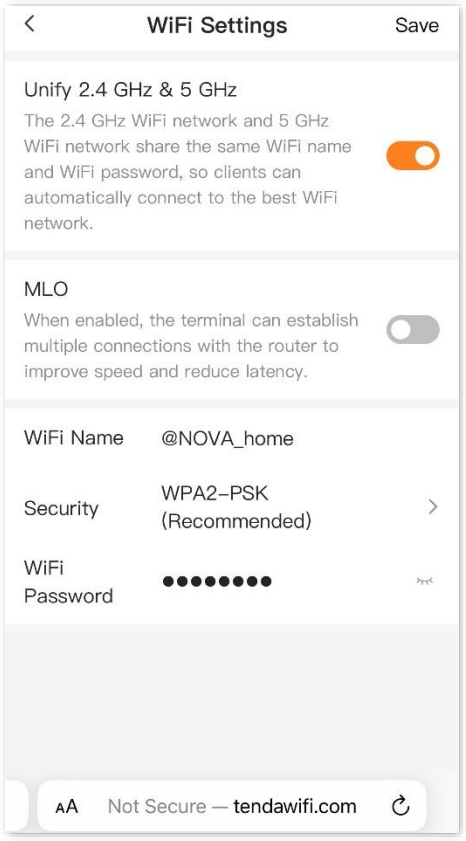
1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **WiFi Settings**.
5. Enter new **WiFi Name**.
6. Choose a **Security** mode as required.
   - **Not encrypted**: Indicates that the Wi-Fi network is not encrypted and any clients can access the network without a password. This option is not recommended as it leads to low network security.
   - **WPA2-PSK**: The network is encrypted with WPA2-PSK/AES.
   - **WPA3-SAE/WPA2-PSK**: The network is encrypted with both WPA3-SAE and WPA2-PSK, improving both security and compatibility. This option is only available for some models. Refer to the product you purchased.

WPA3-SAE is the upgraded version of WPA2-PSK. If your Wi-Fi-enabled client does not support WPA3-SAE, or you get poor Wi-Fi experience, it is recommended to use **WPA2-PSK**.

7. Change **WiFi password**.
8. Click **Save**.



---End

Your settings are saved. If you are using a Wi-Fi connection to your network, you are disconnected from the network. To reconnect to the Wi-Fi network, connect with a new Wi-Fi name and password.

4.1.2 Via Tenda WiFi App

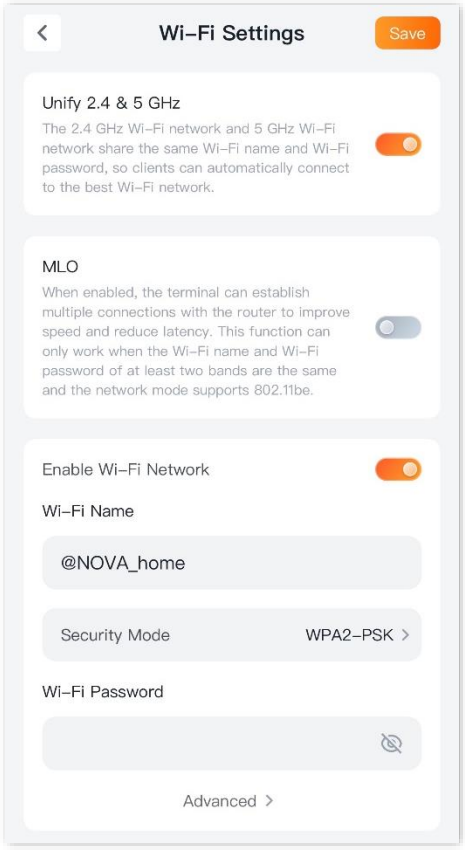
To change the Wi-Fi name and Wi-Fi password of your main Wi-Fi network:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Go to **Wi-Fi Settings.**
3. Enter new **Wi-Fi Name**.
4. Choose a **Security Mode** as required.

- **Not encrypted**: Indicates that the Wi-Fi network is not encrypted and any clients can access the network without a password. This option is not recommended as it leads to low network security.
- **WPA2-PSK**: The network is encrypted with WPA2-PSK/AES.
- **WPA3-SAE/WPA2-PSK**: The network is encrypted with both WPA3-SAE and WPA2-PSK, improving both security and compatibility. This option is only available for some models. Refer to the product you purchased.

  WPA3-SAE is the upgraded version of WPA2-PSK. If your Wi-Fi-enabled client does not support WPA3-SAE, or you get poor Wi-Fi experience, it is recommended to use **WPA2-PSK**.

5. Change **Wi-Fi password**.
6. Tap **Save**.



---End

Your settings are saved. If you are using a Wi-Fi connection to your network, you are disconnected from the network. To reconnect to the Wi-Fi network, connect with a new Wi-Fi name and password.

4.2 Unify/separate the 2.4 GHz and 5 GHz main Wi-Fi networks

The router supports Unify 2.4 GHz & 5 GHz function. After enable this function, the router's 2.4GHz and 5GHz Wi-Fi names and passwords are the same, and the router will automatically select the most appropriate band to connect to according to the distance and internet access needs of the device.

Unify 2.4 GHz & 5 GHz simplifies the network selection process, but some smart home devices may have the following compatibility issues with the Unify 2.4 GHz & 5 GHz function.

- Device Drops: Many smart home devices only support 2.4GHz band, after enable Unify 2.4 GHz & 5 GHz, these devices may drop out frequently, resulting in the inability to use normally.
- Unstable network: The network will be instantly disconnected when switching bands, resulting in poor experience when playing games or swiping videos.
- Smart devices cannot connect: after enable Unify 2.4 GHz & 5 GHz, some smart devices cannot recognize the 2.4GHz band signal, resulting in no networking.

Therefore, it is recommended to disable the Unify 2.4 GHz & 5 GHz function in the smart home environment.

4.2.1 Via web browser

To unify/separate the main Wi-Fi networks:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **WiFi Settings**.
5. To unify the main Wi-Fi networks, turn on **Unify 2.4 GHz & 5 GHz**.

   Turn on **Unify 2.4 GHz & 5 GHz:** the router's 2.4GHz and 5GHz Wi-Fi names and passwords are the same.
6. To separate the main Wi-Fi networks, turn off **Unify 2.4 GHz & 5 GHz**.

   Turn off **Unify 2.4 GHz & 5 GHz:** the router's 2.4GHz and 5GHz Wi-Fi passwords are the same, but Wi-Fi names are different: the 5G Hz Wi-Fi name is **2.4GHz Wi-Fi name_5G**.

7. Click **Save**.

---End

Your settings are saved.

If you are using a 5GHz Wi-Fi connection to your NOVA network, you are disconnected from the network.

4.2.2 Via Tenda Wi-Fi App

To unify/separate the main Wi-Fi networks:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Go to **Wi-Fi Settings.**
3. To unify the main Wi-Fi networks, turn on **Unify 2.4 & 5 GHz**.

   Turn on **Unify 2.4 & 5 GHz:** the router's 2.4GHz and 5GHz Wi-Fi names and passwords are the same.
4. To separate the main Wi-Fi networks, turn off **Unify 2.4 & 5 GHz**.

   Turn off **Unify 2.4 & 5 GHz:** the router's 2.4GHz and 5GHz Wi-Fi passwords are the same, but Wi-Fi names are different: the 5G Hz Wi-Fi name is **2.4GHz Wi-Fi name_5G**.
5. Tap **Save**.

---End

Your settings are saved.

If you are using a 5GHz Wi-Fi connection to your NOVA network, you are disconnected from the network.

4.3 Hide the main Wi-Fi network

The hidden Wi-Fi networks are invisible to Wi-Fi-enabled devices, thus improving the security of the networks.

4.3.1 Via web browser

To hide the main Wi-Fi network:

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.

3. Enter the login password.

   The password is case-sensitive.

4. Go to **WiFi Settings**.
5. Tick **Hide** (below Wi-Fi name).
6. Click **Save**.

   ---End

Your settings are saved. To connect a hide Wi-Fi, see A.4 Connect to a hidden Wi-Fi.

4.3.2 Via Tenda WiFi App

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Go to **Wi-Fi Settings.**
3. Tap **Advanced**, turn on **Hide Wi-Fi**, then tap **<** in the upper-left corner.
4. Tap **Save**.

   ---End

Your settings are saved. To connect a hide Wi-Fi, see A.4 Connect to a hidden Wi-Fi.

4.4 Set up a guest Wi-Fi

A guest network can be set up with a shared bandwidth limit for visitors to access the internet, and is isolated from the main network. It protects the security of the main network and ensures the bandwidth of your main network.

This function is disabled by default.

4.4.1 Via web browser

To set up a guest Wi-Fi:

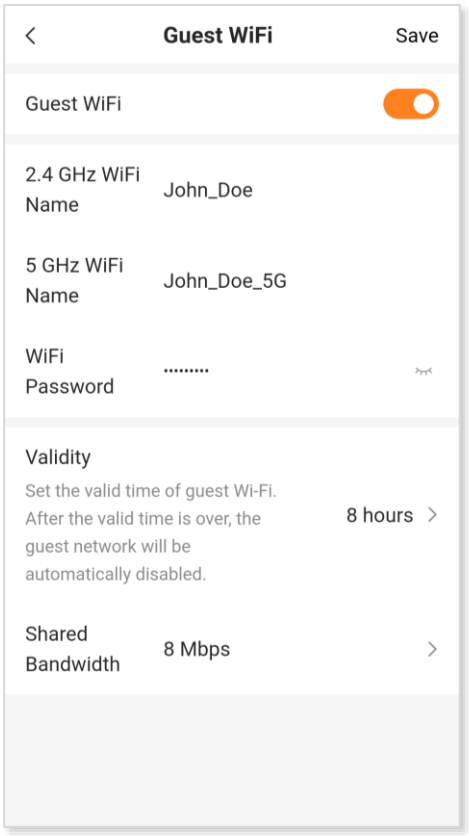
1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.

3. Enter the login password.

   The password is case-sensitive.

4. Go to the Guest WiFi page.
   - **Computer**: Go to **More** > **Guest WiFi**.
   - **Smartphone/Tablet**: Tap **Guest WiFi**.
5. Turn on **Guest WiFi**.
6. To change the network name, type a new name in the **WiFi Name** filed. which is **John_Doe** in this example.
7. Set **WiFi Password**.
8. Select the validity period of the guest Wi-Fi in the **Validity** filed, which is **8 hours** in this example.
9. Set the maximum upload and download speed shared by all clients of the guest Wi-Fi in the **Shared Bandwidth** field, which is **8 Mbps** in this example.
10. Click **Save**.



---End

Your settings are saved.

4.4.2 Via Tenda WiFi App

To set up a guest Wi-Fi:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.

2. Tap **More Functions** next to **Common Functions**.
3. Tap **Guest Wi-Fi** (below Common Functions).
4. Turn on **Guest Wi-Fi**.
5. To change the network name, type a new name in the **Wi-Fi Name** filed.
6. Enter the **Wi-Fi Password**.
7. Tap **Validity** to select a validity period of the guest Wi-Fi.
8. Tap **Bandwidth Limit** to set the maximum upload and download speed shared by all clients of the guest Wi-Fi.
9. Tap **Save**.

---End

Your settings are saved.

4.5 Share Wi-Fi with NFC

An NFC sticker is included with the router. You can use Tenda WiFi app to write the router's Wi-Fi information into the NFC sticker. Then, with a single touch, NFC-enabled **Android** or **HarmonyOs** devices can connect to the Wi-Fi of the router.

To share Wi-Fi with NFC:

1. Connect your mobile device to the Wi-Fi of your router.
2. Run the **Tenda WiFi** App on your mobile device.
3. Tap **NFC Stickers** (below Common Functions).
4. Select the Wi-Fi network you want to share, then tap **Write NFC Sticker**.
5. Turn on **NFC** on your device, then place the NFC sticker close to the NFC area of your device (usually located around the camera on the back of your device).

   Wi-Fi information is successfully written to the NFC sticker.
6. Attach the NFC sticker to selected location in your home.
7. When an NFC-enabled **Android** or **HarmonyOS** device scans the NFC sticker, a pop up should appear asking "Would like to connect to this network", select **Connect**.

---End

If your Wi-Fi information changes, or you want to share another Wi-Fi, repeat the above instructions.

4.6 Change Wi-Fi network mode, channel or bandwidth

You can change the network mode, Wi-Fi channel, and Wi-Fi bandwidth of 2.4 GHz and 5 GHz Wi-Fi networks.

TIP

To ensure the wireless performance, it is recommended to maintain the default settings on this page without professional instructions.

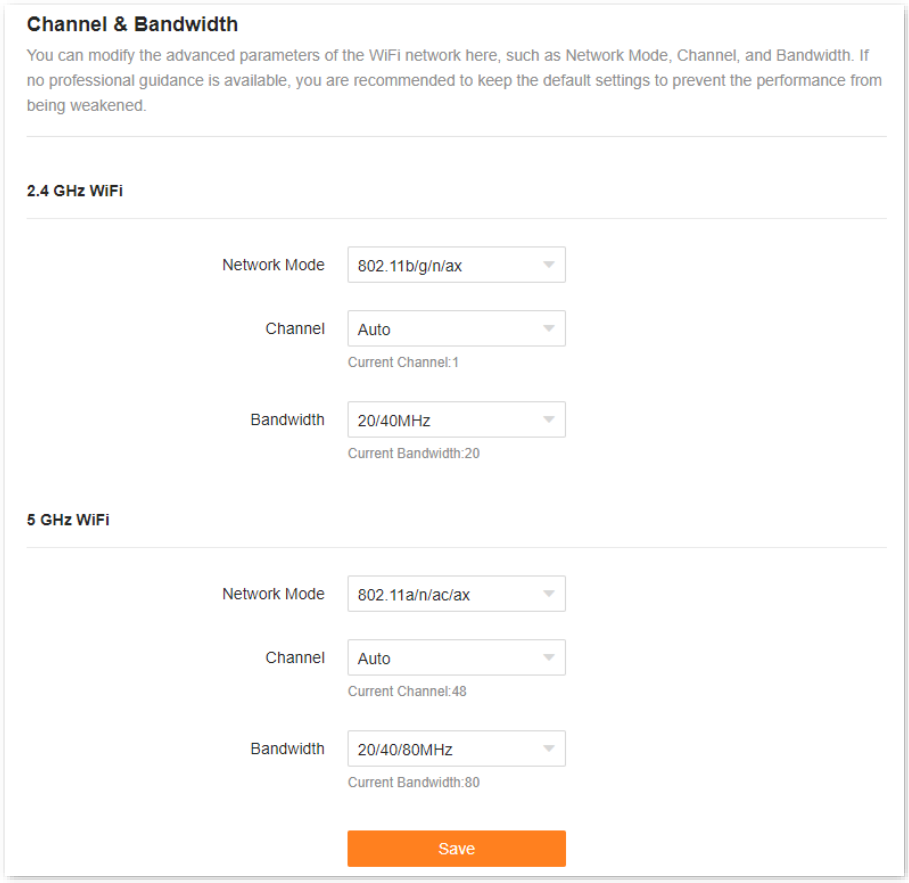
4.6.1 Via web browser

To change Wi-Fi network mode, channel or bandwidth:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page.
   - **Computer**: Go to **More** > **WiFi settings** > **Channel & Bandwidth**.
   - **Smartphone/Tablet**: Tap **More** > **Click to visit the webpage version** > **More** > **WiFi settings** > **Channel & Bandwidth**.
5. Change the **Network Mode**, **Channel**, and **Bandwidth** of the corresponding band.
6. Click **Save**.



---End

4.6.2 Via Tenda WiFi App

To change Wi-Fi network mode, channel or bandwidth:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Go to **Wi-Fi settings**, then tap **Advanced**.
3. Change the **Network Mode**, **Wireless Channel**, and **Channel Bandwidth** of the corresponding band.
4. Tap **<** , then tap **Save**.

---End

4.6.3 Parameter description

Parameter	Description
Network Mode	Specifies various protocols used for wireless transmission. TIP The network modes vary with models. Refer to the product you purchased. 2.4 GHz Wi-Fi network supports the following modes: - **802.11b/g/n**: Indicates that devices compliant with the IEEE 802.11b or IEEE 802.11g protocol, and devices working at 2.4 GHz and compliant with the IEEE 802.11n can connect to the 2.4 GHz Wi-Fi network of the mesh device. - **802.11b/g/n/ac**: Indicates that devices compliant with the IEEE 802.11b or IEEE 802.11g protocol, and devices working at 2.4 GHz and compliant with the IEEE 802.11n or IEEE 802.11 ac protocol can connect to the 2.4 GHz Wi-Fi network of the mesh device. - **802.11b/g/n/ax**: Indicates that devices compliant with the IEEE 802.11b or IEEE 802.11g protocol, and devices working at 2.4 GHz and compliant with the IEEE 802.11n or IEEE 802.11ax protocol can connect to the 2.4 GHz Wi-Fi network of the mesh device. - **802.11b/g/n/ac/ax**: Indicates that devices compliant with the IEEE 802.11b or IEEE 802.11g protocol, and devices working at 2.4 GHz and compliant with the IEEE 802.11n, IEEE 802.11ac or IEEE 802.11ax protocol can connect to the 2.4 GHz Wi-Fi network of the mesh device. 5 GHz Wi-Fi network supports the following modes: - **802.11a/n**: Indicates that devices compliant with the IEEE 802.11a protocol, and devices working at 5 GHz and compliant with the IEEE 802.11n can connect to the mesh device. - **802.11a/n/ac**: Indicates that devices compliant with the IEEE 802.11a or IEEE 802.11ac protocol, and devices working at 5 GHz and compliant with the IEEE 802.11n can connect to the mesh device. - **802.11a/n/ac/ax**: Indicates that devices compliant with the IEEE 802.11a or IEEE 802.11ac protocol, and devices working at 5 GHz and compliant with the IEEE 802.11n or IEEE 802.11ax protocol can connect to the mesh device.
Channel	Specifies the channel in which the Wi-Fi network works. By default, the wireless channel is **Auto**, which indicates that the mesh device selects a channel for the Wi-Fi network automatically. You are recommended to Go to a channel with less interference for better wireless transmission efficiency. You can use a third-party tool to scan the Wi-Fi signals nearby to understand the channel usage situations.

Parameter	Description
Bandwidth	Specifies the bandwidth of the wireless channel of a Wi-Fi network. Please change the default settings only when necessary. TIP The bandwidth varies with models. Refer to the product you purchased. - **20MHz**: Indicates that the channel bandwidth used by the mesh device is 20 MHz. - **40MHz**: Indicates that the channel bandwidth used by the mesh device is 40 MHz. - **20/40MHz**: Specifies that a mesh device can switch its channel bandwidth between 20 MHz and 40 MHz based on the ambient environment. This option is available only at 2.4 GHz. - **80MHz**: Indicates that the channel bandwidth used by the mesh device is 80 MHz. This option is available only at 5 GHz. - **160MHz**: Indicates that the channel bandwidth used by the mesh device is 160 MHz. This option is available only at 5 GHz. - **20/40/80MHz**: Specifies that a mesh device can switch its channel bandwidth among 20 MHz, 40 MHz and 80 MHz based on the ambient environment. This option is available only at 5 GHz. - **20/40/80/160MHz**: Specifies that a mesh device can switch its channel bandwidth among 20 MHz, 40 MHz, 80 MHz and 160 MHz based on the ambient environment. This option is available only at 5 GHz.

4.7 Set a Wi-Fi schedule

You can disable the Wi-Fi networks of the mesh device at specified periods. By default, Wi-Fi Scheduled function is disabled.

TIP

- To make the Wi-Fi schedule work properly, please ensure the system time is synchronized with the internet time. Refer to System time for configuration.
- The WPS/MESH button function is disabled during the Wi-Fi schedule disable time.

4.7.1 Via web browser

To set a Wi-Fi schedule:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

A login window displays.

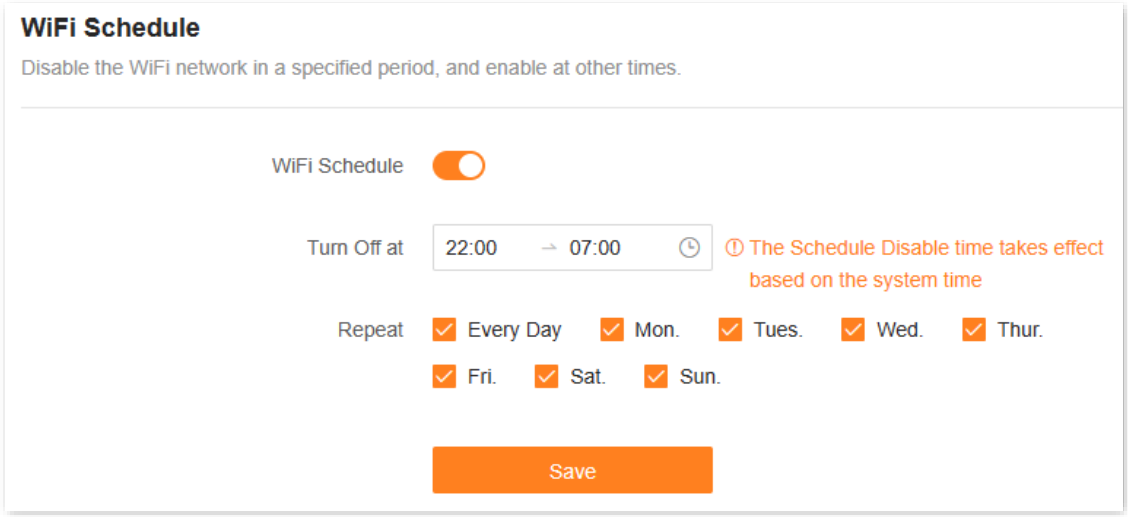
3. Enter the login password.

   The password is case-sensitive.

4. Go to the settings page.

   - **Computer**: Go to **More** > **Smart Power Saving** > **WiFi Schedule**.
   - **Smartphone/Tablet**: Tap **More** > **Click to visit the webpage version** > **More** > **Smart Power Saving** > **WiFi Schedule**.

5. Turn on **WiFi Schedule.**
6. Set **Turn Off at** to the period during which the Wi-Fi network are disabled, which is **22:00 – 07:00** in this example.
7. Select **Repeat** to schedule Wi-Fi to be turned off regularly, which is **Every Day** in this example.
8. Click **Save**.



---End

Your settings are saved. The Wi-Fi networks will be disabled from 22:00 to 7:00 every day.

4.7.2 Via Tenda WiFi App

To set a Wi-Fi schedule:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**.
3. Tap **Smart Power Saving** (below Common Functions), then tap **Wi-Fi Disable Schedule.**
4. Turn on **Wi-Fi Disable Schedule.**

5. To change the default Wi-Fi disabled time, tap the period, choose a new period, and specify the effective date, then tap **Save**.
6. To add a new Wi-Fi disabled time, tap **+ Add**, choose a period, and specify the effective date, then tap **Save**.
7. Tap **Save**.

---End

Your settings are saved. The Wi-Fi will be disabled at the specified time on the specified date.

4.8 Change Wi-Fi signal strength mode

You can change the Wi-Fi signal strength mode to adjust the through-the-wall capability and coverage of the router's wireless network.

4.8.1 Via web browser

To change Wi-Fi signal strength mode:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page.
   - **Computer**: Go to **More** > **Smart Power Saving** > **Wi-Fi Signal Strength**.
   - **Smartphone/Tablet**: Tap **More** > **Wi-Fi Signal Strength**.
5. Select a **Wi-Fi Signal Strength** mode.
6. Click **Save**.

---End

Your settings are saved.

4.8.2 Via Tenda WiFi App

To change Wi-Fi signal strength mode:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**.
3. Tap **Smart Power Saving** (below Common Functions), then tap **Signal Strength.**
4. Select a **Wi-Fi Signal Strength** mode.
5. Tap **Save**.

---End

Your settings are saved.

4.9 Remove a node

If you want to reduce the coverage of the network, you can remove some of the secondary nodes. The removed node will no longer join the current network automatically.

4.9.1 Via web browser

To remove a secondary node:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the configuration page and remove the secondary node.

- **Computer:**

  1) Go to **Network Status**.
  2) Click **Node Topology** (below More Function), click the target secondary node, click **Remove,** then click **OK**.

- **Smartphone/Tablet:**

  1) Tap **Network Topology**, then tap the target secondary node.
  2) Tap **Delete Node**, then tap **OK.**

---End

Wait for about 1 minute, the secondary node is removed successfully. You can remove it from the network.

4.9.2 Via Tenda WiFi App

To remove a secondary node:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Network Topology**.
3. Tap the target secondary node, tap **Remove**, then tap **Remove**.

---End

Wait for about 1 minute, the secondary node is removed successfully. You can remove it from the network.

4.10 Disable MESH button

By default, the MESH button is enabled. You can use the **MESH** button to:

- Network your Tenda devices that support **Tenda Wi-Fi + Mesh networking** function.
- Connect a WPS enabled Wi-Fi device to Wi-Fi networks of the mesh device without entering the password.

For information security, do not enable **MESH Button** when using the mesh device in public areas.

4.10.1 Via web browser

To disable the MESH button:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the configuration page and disable the MESH button.

- **Computer:**

  1) Go to **More** > **WiFi Settings** > **MESH Button**.

  2) Turn off **MESH/WPS Button**.

- **Smartphone/Tablet:**

  1) Tap **More** > **Click to visit the webpage version** > **More** > **WiFi Settings > MESH Button.**

  2) Turn off **MESH/WPS Button**.

  ---End

Your settings are saved. You cannot form a network by using the MESH button on the device, and cannot connect a device to Wi-Fi networks of the mesh device by using WPS.

4.10.2 Via Tenda WiFi App

To disable the MESH button:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **MESH Button** (below Advanced Functions).
3. Turn off **MESH Button**.

   ---End

Your settings are saved. You cannot form a network by using the MESH button on the device, and cannot connect a device to Wi-Fi networks of the mesh device by using WPS.

5 Control access to the internet

Features available in the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual router experience.

5.1 Add a device to the blacklist

If you want to block a device from accessing your network, you can blacklist it.

TIP

- The blacklist rule prevails when conflicting with the parent control rule.
- If you blacklist a wired device, the device will fail to access the network.
- If you blacklist a wireless device, the device will be kicked offline and cannot connect to the mesh device again.

5.1.1 Via web browser

To blacklist a device:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and add the device to the blacklist.

- **Computer:**
  - Method 1: Go to **Network Status**, click **Client** icon (below Network Status), find the target device from **Main Network Device**, **Guest Device** or **Offline Device**, click **Add to blacklist**, then click **OK**.
  - Method 2: Go to **Client Management**, find the target device from **Main Network Device**, **Guest Device** or **Offline Device**, click **Add to blacklist**, then click **OK**.
  - Method 3: Go to **Network Status**, click **Node Topology** icon (below More Function), then click the node which the target device connected, click **Add to blacklist**, then click **OK**.
  - Method 4: Go to **More > Advanced > MAC Address Filter**, turn on **MAC Address Filter,** select **Blacklist Filter mode**, click **Add**, then select a device, or select Manual and then enter the **Device Name** and **Device's MAC address**, click **OK**, then click **Save**.
- **Smartphone/Tablet**
  - Method 1: Tap **Client Management**, tap the target client below **Main Network Device**, tap **Add to blacklist**, then tap **OK**.
  - Method 2: Tap **Node Topology**, tap the node which the target client connected, tap the target device, then tap **Add to blacklist** and then tap **OK**.

---End

Your settings are saved. Now the selected client cannot access the internet.

5.1.2 Via Tenda WiFi App

To blacklist a device:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **Black-White List** (below Common Functions).
3. Turn on **Black-White List**, Select **Blacklist**.
4. Tap **Add**, select a client directly, or select **By MAC Address**, and manually enter the **Device Name** and **MAC Address** of the device you want to blacklist, then tap **Save**.

   TIP

   The format of the MAC address: *xx:xx:xx:xx:xx:xx.* MAC address is not case sensitive.
5. Tap **Save**.

---End

Your settings are saved. Now the selected client cannot access the internet.

5.2 Add a device to the whitelist

You can whitelist devices by MAC addresses to only allow them to access the internet.

5.2.1 Before you start

For the mobile device you want to add to the whitelist, it is recommended to disable the "Private WLAN Address" or "Use randomized MAC" function of the device for better network connection.

The following steps take iPhone as an example:

1. Go to **Settings** > **WLAN**.
2. Tap ⓘ next to the Wi-Fi you connected.
3. Turn off **Private WLAN Address**.

---End

The **WLAN Address** (below Private WLAN Address) changes, record it for later setup.

5.2.2 Via web Browser

To allow specific devices:

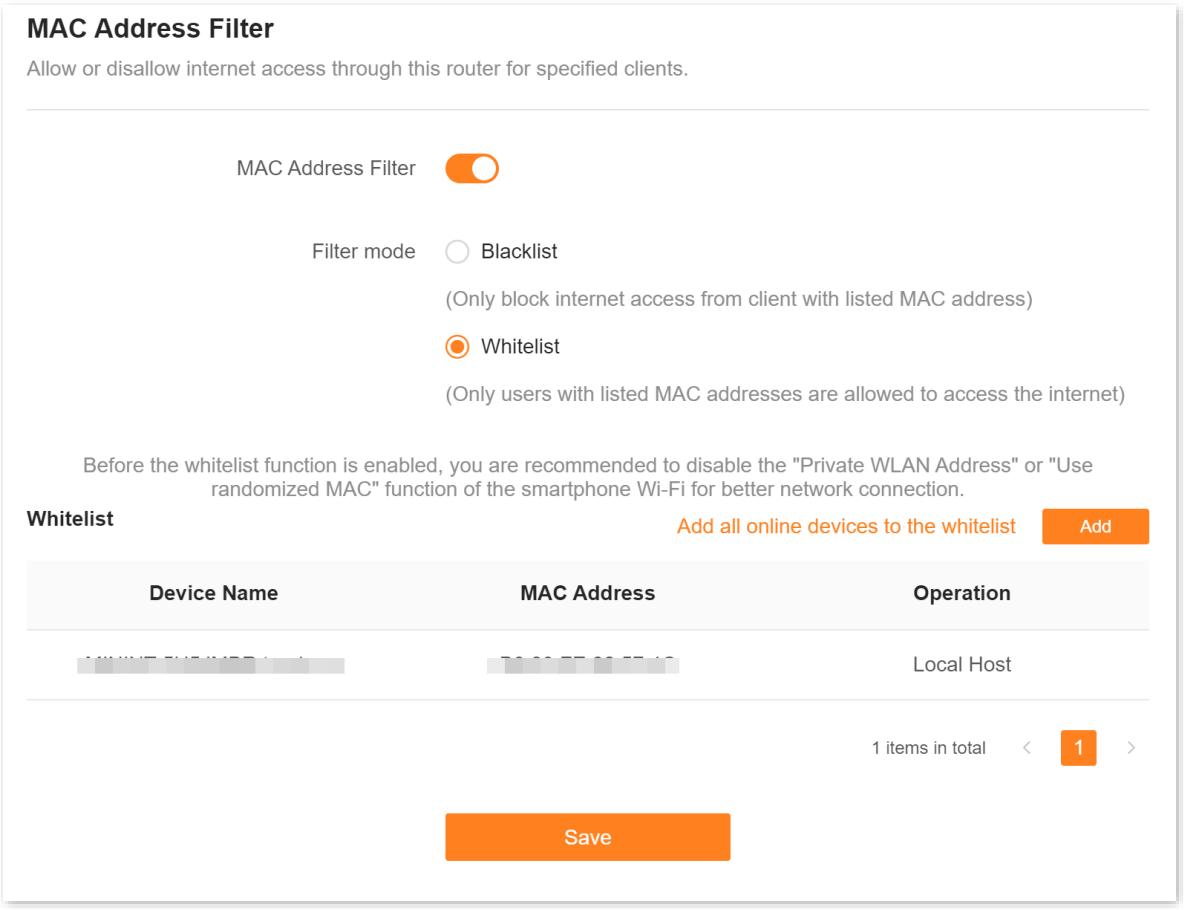
1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page.

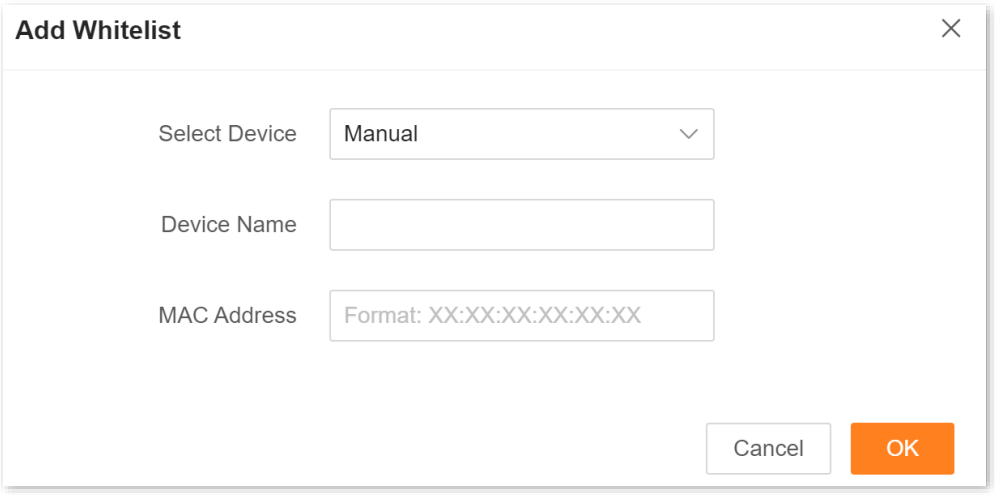
- **Computer:** Go to **More > Advanced > MAC Address Filter.**
- **Smartphone/Tablet:** Tap **More > Click to visit the webpage version > More > Advanced > MAC Address Filter.**

5. Turn on **MAC Address Filter**, then select **Whitelist Filter mode**.
6. Click **Add**.



7. Select a device, or select **Manual** and then enter the **Device Name** and device's **MAC Address**. Then, click **OK**.

   If you want to add all online devices to the whitelist, click **Add all online devices to the whitelist**.



   The blacklisted client displays below **Whitelist Device**.

8. Click **Save**.

---End

Your settings are saved, only the device in the whitelist can access the internet.

5.2.3 Via Tenda WiFi App

To allow specific devices:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **Black-White List** (below Common Functions).
3. Turn on **Black-White List**, then select **White List**.
4. Tap **Add**, select a client directly, or select **By MAC Address**, and manually enter the **Device Name** and **MAC Address** of the device you want to add to the White List, then tap **Save**.

   TIP

   The format of the MAC address: *xx:xx:xx:xx:xx:xx.* MAC address is not case sensitive.

5. Tap **Save**.

   ---End

Your settings are saved, only the device in the whitelist can access the internet.

5.3 Remove a device from the blacklist

If you blacklist a client by mistake, you can remove it from the blacklist.

5.3.1 Via web browser

To remove a client from the blacklist:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page.

- **Computer:**
  - Method 1: Go to **Network Status**, click **Client** icon (below Network Status), then click **Blacklist**.
  - Method 2: Go to **Client Management**, then click **Blacklist**.
  - Method 3: Go to **More > Advanced > MAC Address Filter**.
- **Smartphone/Tablet:** Tap **Client Management**, then slide the menu bar to the right and tap **Blacklist.**

5. Click **Remove from the blacklist** , ⊖ or 🗑 in the line of the target device, then click **OK** or **Save**.

---End

Your settings are saved. The device is removed from the blacklist. It can access the network upon the next connection.

5.3.2 Via Tenda WiFi App

To remove a client from the blacklist:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Go to the blacklist page and remove the device from the blacklist.
   - Method 1: Tap **All** next to **Device Management**, swipe left to go to **Blacklist** page, find the target device, then tap **Restore**.
   - Method 2: Tap **More Functions** next to **Common Functions**, tap **Black-White List** (below Common Functions), tap 🗑 , then tap **Save**.

---End

Your settings are saved. The device is removed from the blacklist. It can access the network upon the next connection.

5.4 Add a parental control rule

You can configure parental control rules to control access to certain websites or block certain devices from accessing the internet.

NOTE

- The blacklist rule prevails when conflicting with the parent control rule.
- A maximum of 30 devices can be controlled.

5.4.1 Via desktop web browser

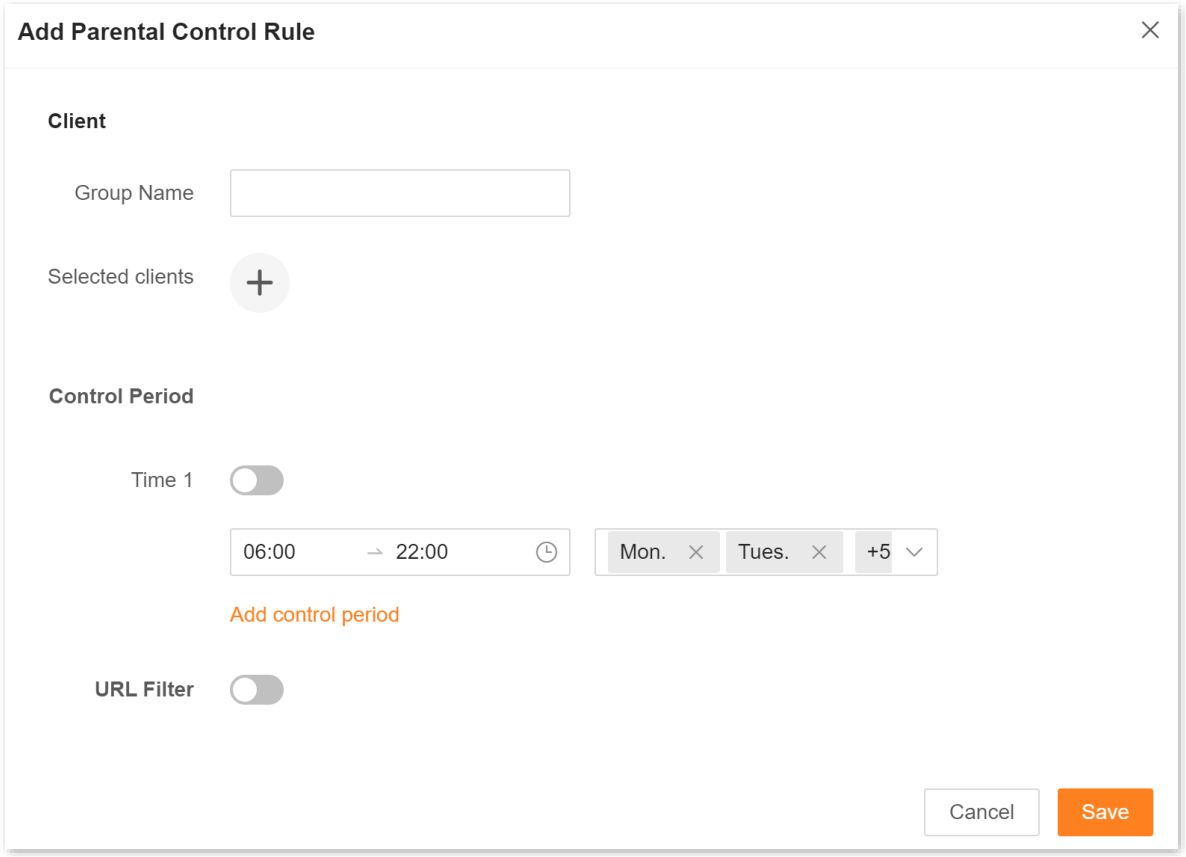
To add a parental control rule:

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

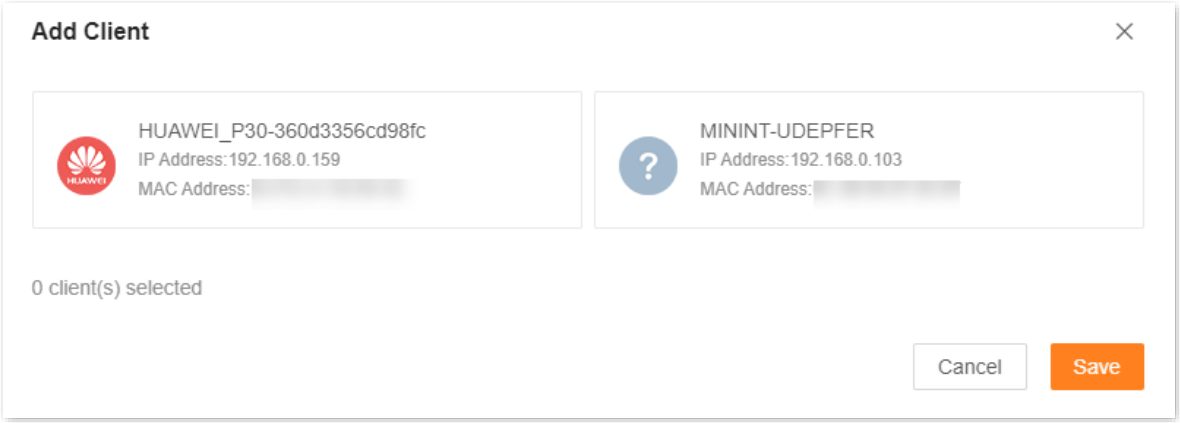
   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **Parental Control**.
5. Click **Add Parental Control Rule** or **Add**.

   The following page displays.



6. Set **Group Name**, for example, **Parental control rule 1**.
7. Click ＋ next to **Selected clients**. Select the devices to which this parental control rule is applied, and click **Save**.



8. Enable **Time 1**, then specify the period during which the target websites are blocked.

   If you want to control multiple periods, click **Add control period**.

9. Enable or disable **URL Filter**.

   - Enable: With this setting, the network access permissions of the clients depend on the **Filter Mode** settings.
   - Disable: With this setting, the clients only be allowed to access internet during the period.

10. Select a **Filter Mode** to apply to the clients.

    - **Only block access to listed URLs**: With this setting, the **Selected clients** are only blocked from accessing the websites specified by URL.
    - **Only allow access to listed URLs**: With this setting, the **Selected clients** can only access the websites specified by URL.

11. In the **URL** filed, enter the keyword of the URL that the **Selected** clients are blocked or allowed to access. For example, **Facebook**, **Twitter**, **YouTube**, or **Instagram**.

12. Click **Save**.

    ---End

Your settings are saved.

5.4.2 Via mobile web browser

To add a parental control rule:

1. Launch a web browser from a mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

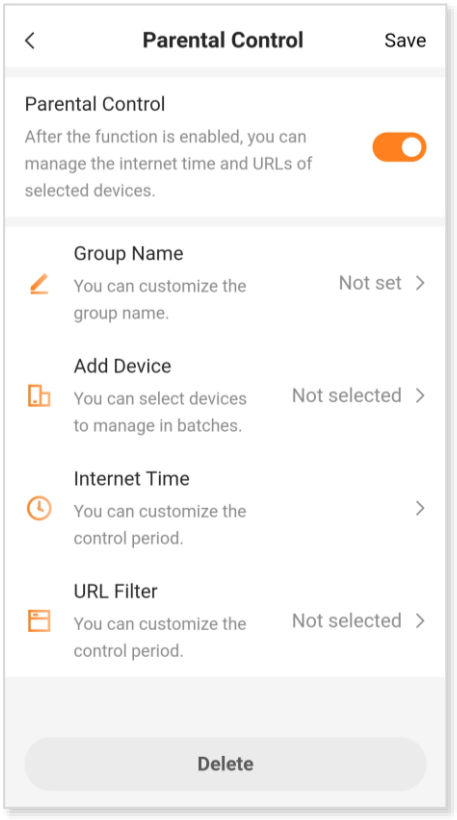
   A login window displays.

3. Enter the login password.

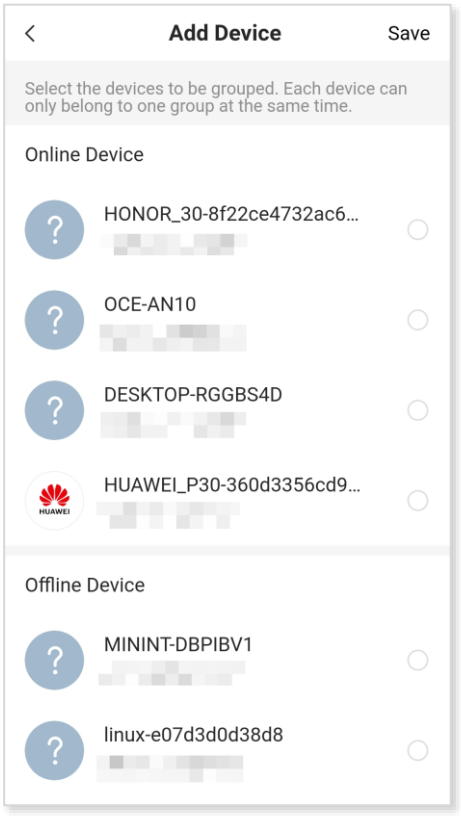
   The password is case-sensitive.

4. Tap **Parental Control**.
5. Tap **Enable Parental Control** or **+**.

   The following page displays.

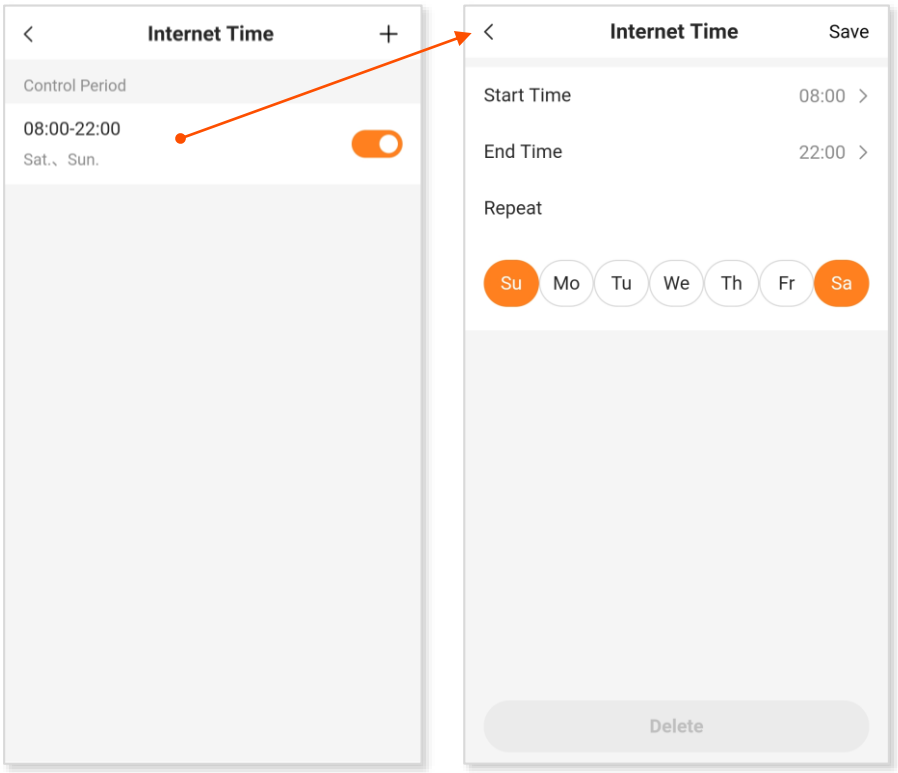


6. Enable **Parental control**.
7. Set **Group Name** and then tap **OK**.
8. Tap **Add Device**, select the target device, then tap **Save** in the upper-right corner.



9. Tap **Internet Time**, turn on the control period, tap the period to specify the period during which the target websites are blocked or allowed, then tap **Save**.

   If you want to control multiple periods, tap + on the **Internet Time** page.



10. Tap **URL Filter** to set URL filter rules.

1) Enable or disable **URL Filter**.

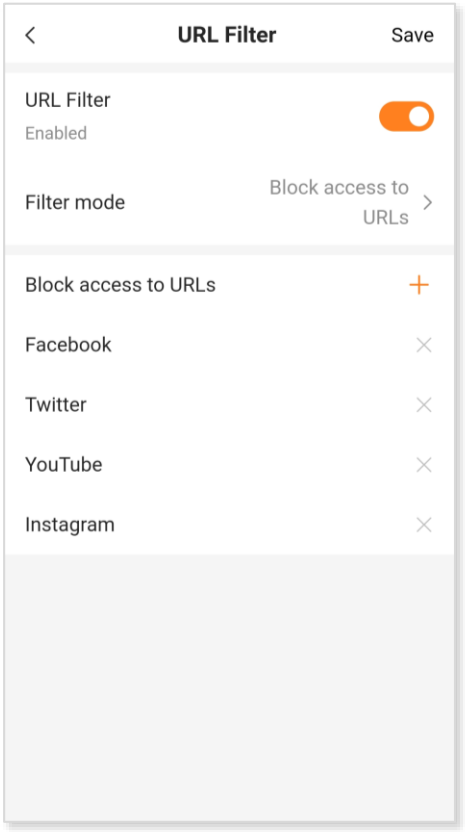
- Enable: With this setting, the network access permissions of the clients depend on the **Filter Mode** settings.
- Disable: With this setting, the clients only be allowed to access internet during the period.

2) Select a **Filter Mode** to apply to the devices.

- **Block access to URLs**: With this setting, the **Selected clients** are only blocked from accessing the websites specified by URL.
- **Allow access to URLs**: With this setting, the **Selected clients** can only access the websites specified by URL.

3) In the **Block** (or **Allow**) **access to URLs** filed, tap +, enter the keyword of the URL that the **Selected** clients are blocked or allowed to access, then tap **Save**. For example, **Facebook**, **Twitter**, **YouTube**, or **Instagram**.

4) Tap **Save**.



11. Tap **Save**.

---End

Your settings are saved.

5.4.3 Via Tenda WiFi App

To add a parental control rule:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Parental Control** (below Common Functions).
3. Tap **Add Parental Control** or +.
4. Specify a group name, which is **Family** in this example, then tap **Next**.
5. Select target devices. **Client1** is used as an example here. Then, tap **Next**.
6. Turn on **Internet Accessible Period Limit**.
7. Turn on the existing control period, then tap period (below Control Period) to customize the period of internet inaccessibility for the group, then tap **Save**. If you want to control multiple periods, tap **Add Control Period**. Then tap **Next**.
8. Enable or disable **URL Filter**.
   - Enable: With this setting, the network access permissions of the clients depend on the **Filter Mode** settings.
   - Disable: With this setting, the clients only be allowed to access internet during the period.
9. Select a **Filter Mode** to apply to the clients.
   - **Only block access to listed URLs**: With this setting, the **Selected clients** are only blocked from accessing the websites specified by URL.
   - **Only allow access to listed URLs**: With this setting, the **Selected clients** can only access the websites specified by URL.
10. In the **List of Prohibited URLs**, tap **Add URL**, enter the keyword of the URL that the **Selected** clients are blocked or allowed to access. For example, **Facebook**, **Twitter**, **YouTube**, or **Instagram**, then tap **Confirm**.

    If you want to add multiple URLs, tap **Add URL** to add it.
11. Tap **Done**.

    ---End

Your settings are saved.

5.5 Manage a parental control rule

5.5.1 Via web browser

To manage a parental control rule:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **Parental Control**.
5. To disable a parental control rule, turn off **Parental Control** at the target parental control rule line.
6. To change a parental control rule, do the following:
   - **Computer**: Click  at the target parental control rule line to change parameters as required, then click **Save**.
   - **Smartphone/Tablet**: Tap the target parental control rule to change parameters as required, then tap **Save**.
7. To delete a parental control rule, do the following:
   - **Computer**: Click  at the target parental control rule line, then click **OK**.
   - **Smartphone/Tablet**: Tap the target parental control rule, then tap **Delete**.

   ---End

Your settings are saved.

5.5.2 Via Tenda WiFi App

To manage a parental control rule:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Parental Control** (below Common Functions).
3. To disable a parental control rule, turn off the target parental control group.
4. To change a parental control rule, tap the target parental control group, then tap **Group Name**, **Group Device**, **Internet Accessible Period**, or **URL Filter** to change it.

5. To delete a parental control rule, tap the target parental control group, then tap **Delete Group**.

---End

5.6 Limit client speed

If multiple clients connect to your mesh network and you want to limit the upload and download speed for a certain client, you can set speed limit.

5.6.1 Via web browser

To set speed limit for a client:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the device speed settings page to limit the device speed.

- **Computer:**
  - Method 1: Go to **Network Status**, click **Client** icon (below Network Status). From the **Main Network Device** page, find the client to be restrict, then select a limit speed from the **Upload/Download** menu. When you select **Custom(KB/s)**, you need to enter a limit value manually.
  - Method 2: Go to **Client Management**. From the **Main Network Device** page, find the client to be restrict, then select a limit speed from the **Upload/Download** menu. When you select **Custom(KB/s)**, you need to enter a limit value manually.
  - Method 3: Go to **Network Status**, next click **Node Topology** icon (below More Function), then click the node which the target client connected. In the **Main Network Device** area, find the client to be restrict, then select a limit speed from the **Upload/Download** menu. When you select **Custom(KB/s)**, you need to enter a limit value manually.
- **Smartphone/Tablet:**
  - Method 1:

  1) Tap **Client Management**.
  2) Tap the target client and then tap **Smart Speed Limit**. **DESKTOP-RGGBS4D** is used as an example here.

3) Enable **Smart Speed Limit**. Set **Upload** and **Download** to the maximum upload and download speeds.

- Method 2:

1) Tap **Node Topology**.
2) Tap the node which the target client connected.
3) Tap the target client and then tap **Smart Speed Limit**.
4) Enable **Smart Speed Limit**. Set **Upload** and **Download** to the maximum upload and download speeds.

---End

Your settings are saved.

5.6.2 Via Tenda WiFi App

To set speed limit for a client:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Go to the device speed settings page.

- **Method 1:** Tap **All** next to **Device Management**, then tap the target device.
- **Method 2:** Tap **Network Topology**, then tap the node that the target device connected.

3. Turn on **Smart Speed Limit**.
4. Set **Max Upload Rate** and **Max Download Rate**, then tap **Confirm**.

---End

Your settings are saved.

5.7 Connect a device to a specified router and Wi-Fi band

You can connect the device to a specified router and Wi-Fi band for stable connections. Once enabled, the device will no longer roam when connecting wirelessly.

5.7.1 Before you start

For the mobile device you want to add to the whitelist, it is recommended to disable the "Private WLAN Address" or "Use randomized MAC" function of the device for better network connection.

The following steps take iPhone as an example:

1. Go to **Settings** > **WLAN**.
2. Tap ⓘ next to the Wi-Fi you connected.
3. Turn off **Private WLAN Address**.

---End

The **WLAN Address** (below Private WLAN Address) changes, record it for later setup.

5.7.2 Via desktop web browser

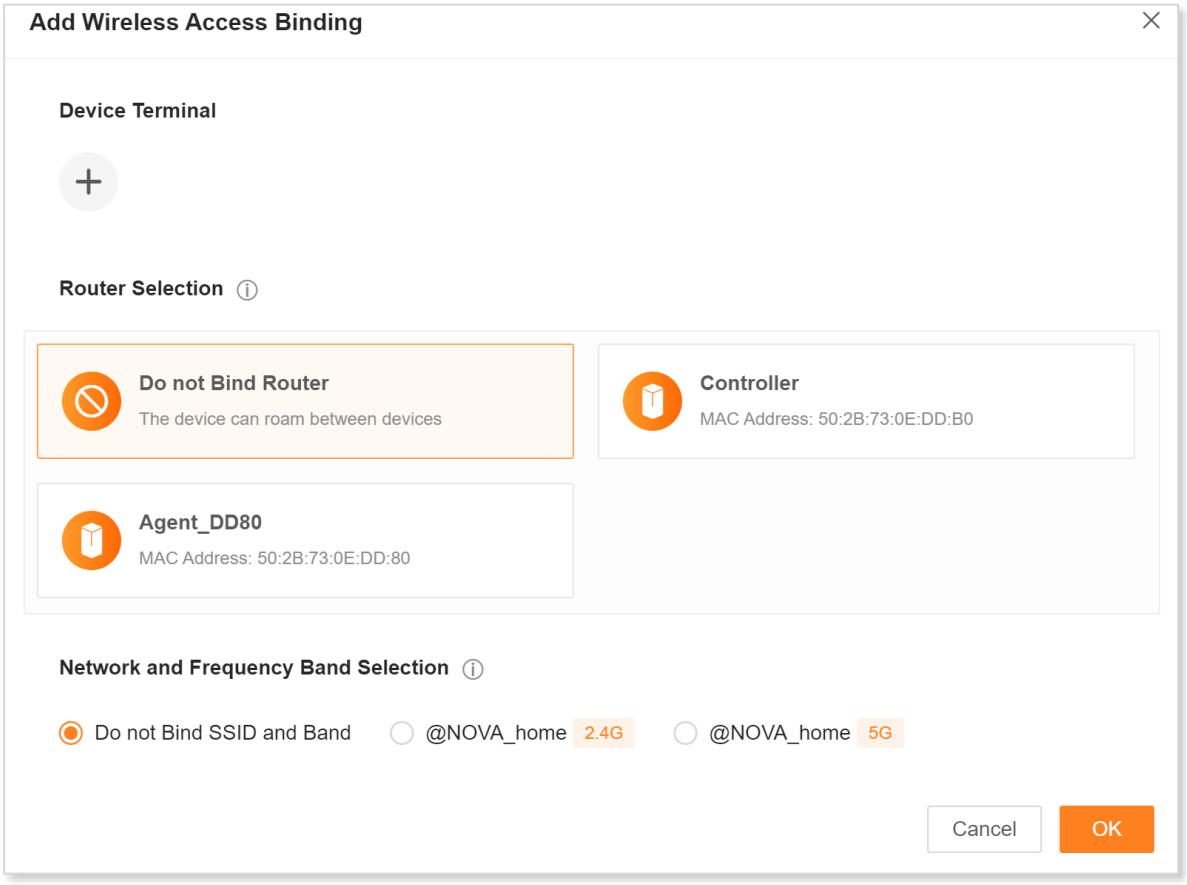
To connect a device to a specified router and Wi-Fi band

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

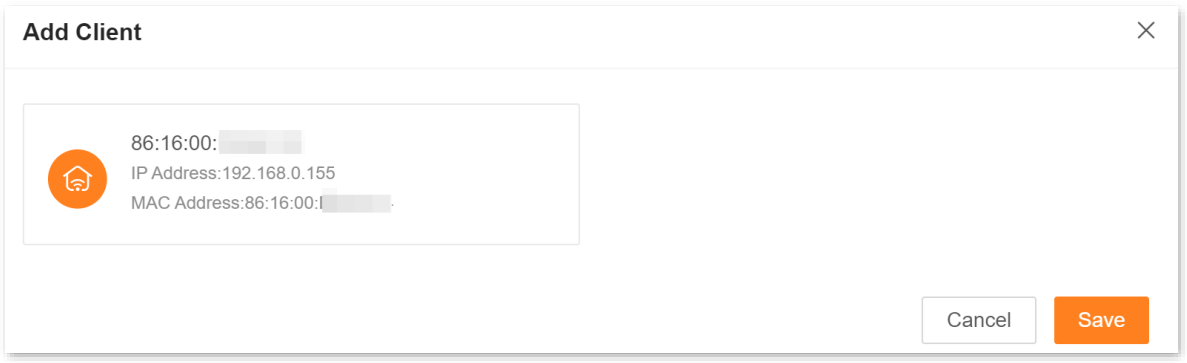
   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More > Wireless Access Binding**.
5. Click **Add**.

   The following page displays.



6. Click + (below Device Terminal), select the devices to which this rule is applied, then click **Save**.



7. Select the node you want to bind in **Router Selection** area.
8. Select the Wi-Fi band you want to bind in Network and Frequency Band Selection area.

   It is recommended to bind dual-band devices to the 5G band for a more stable and faster internet experience.
9. Click **OK**.

---End

Your settings are saved.

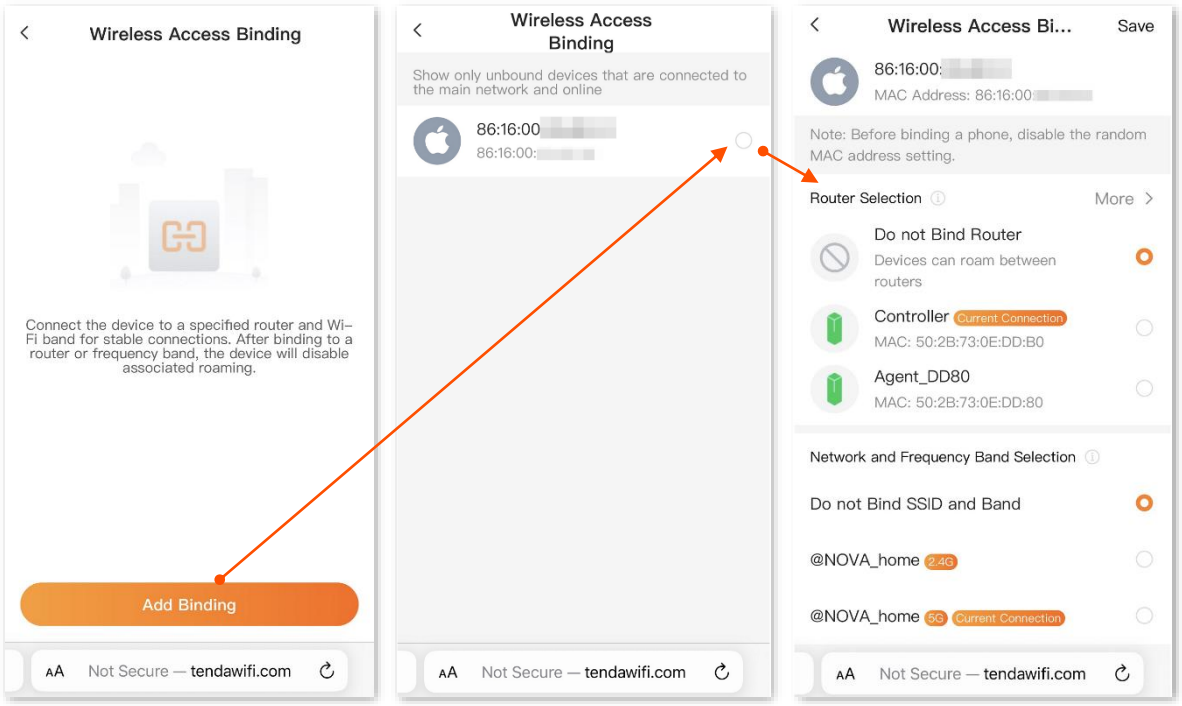
5.7.3 Via mobile web browser

To connect a device to a specified router and Wi-Fi band

1. Launch a web browser from a mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More > Wireless Access Binding**.
5. Tap **Add Binding**.
6. Select the devices to which this rule is applied.
7. Select the node you want to bind in **Router Selection** area, select the Wi-Fi band you want to bind in **Network and Frequency Band Selection** area. It is recommended to bind dual-band devices to the 5G band for a more stable and faster internet experience. Then, tap **Save**.



---End

Your settings are saved.

6 Maintain and monitor your network

Features available in the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual router experience.

6.1 Check the network status

6.1.1 Via web browser

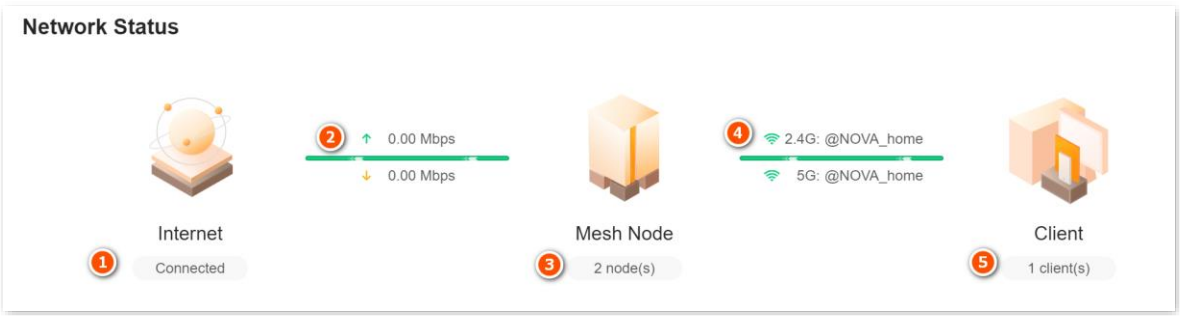
To check the internet connection status:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

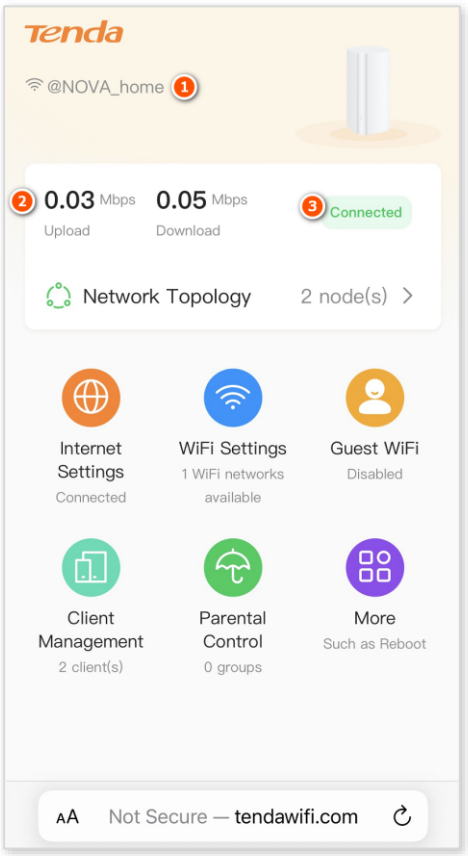
   The password is case-sensitive.

- **Computer:** The Network Status page displays.



No.	Description
1	Indicates the internet connection status. Hover your mouse over the Internet status to view detailed connection information. - **Connected**: The primary node is connected to the internet successfully. - **Disconnected**: The primary node is disconnected from the internet.
2	The information here varies depending on the internet connection status. - ***X.xx* Mbps**: Real-time upload and download speeds of the WAN port. - **Connecting**: The primary node is connecting to the internet. - Other information (for example, **No Ethernet cable is connected to the WAN port**): The internet connection failed. Click the prompt message to view tips for troubleshooting. If the problem persists, contact technical support for help.
3	Indicates the number of mesh nodes. Hover your mouse over the ***x* node(s)** to view detailed node information.
4	Indicates the Wi-Fi name and frequency band.
5	Indicates the number of clients connected in the network. Hover your mouse over the ***x* client(s)** to view detailed client information.

- **Smartphone/Tablet:** The Homepage displays.



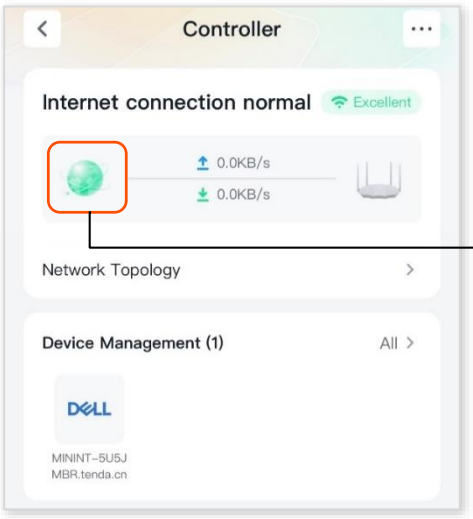
No.	Description
1	Displays the mesh device’s Wi-Fi name.
2	Displays the real-time upload and download speed of the primary node.
3	Displays the internet connection status. - **Connected**: The primary node is connected to the internet successfully. - **Disconnected**: The primary node is disconnected from the internet.

---End

6.1.2 Via Tenda WiFi App

To check the internet connection status:

1. Run the **Tenda WiFi** App on the mobile device that is connected to the Wi-Fi of the NOVA network.
2. Tap your router on **Homepage**.
3. You can see internet connection status. To see internet connection details, tap  .



---End

6.2 View network topology and node info

6.2.1 Via web browser

To view the network topology and node information:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

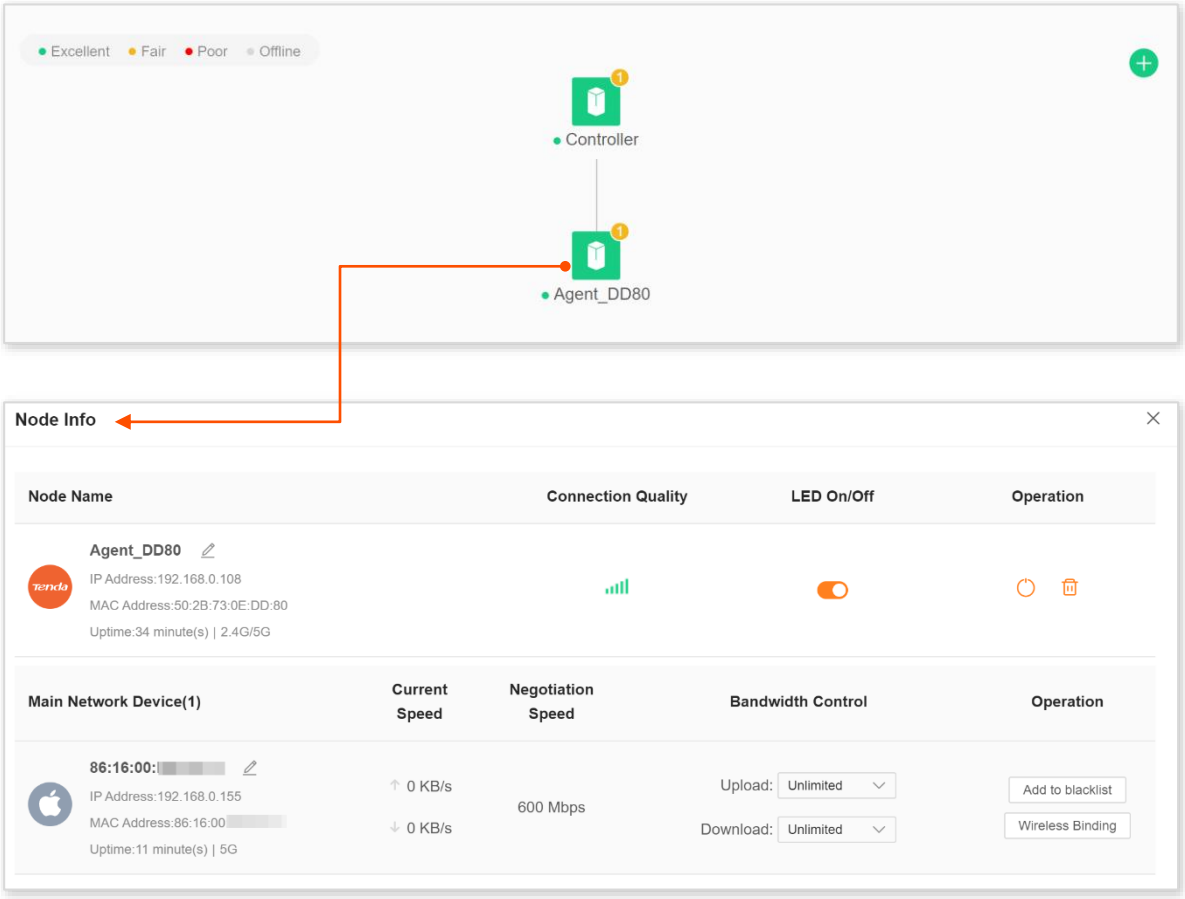
   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **Network Topology** settings page.

- **Computer:**

  Go to **Network Status**, then click **Node Topology** (below More Function).

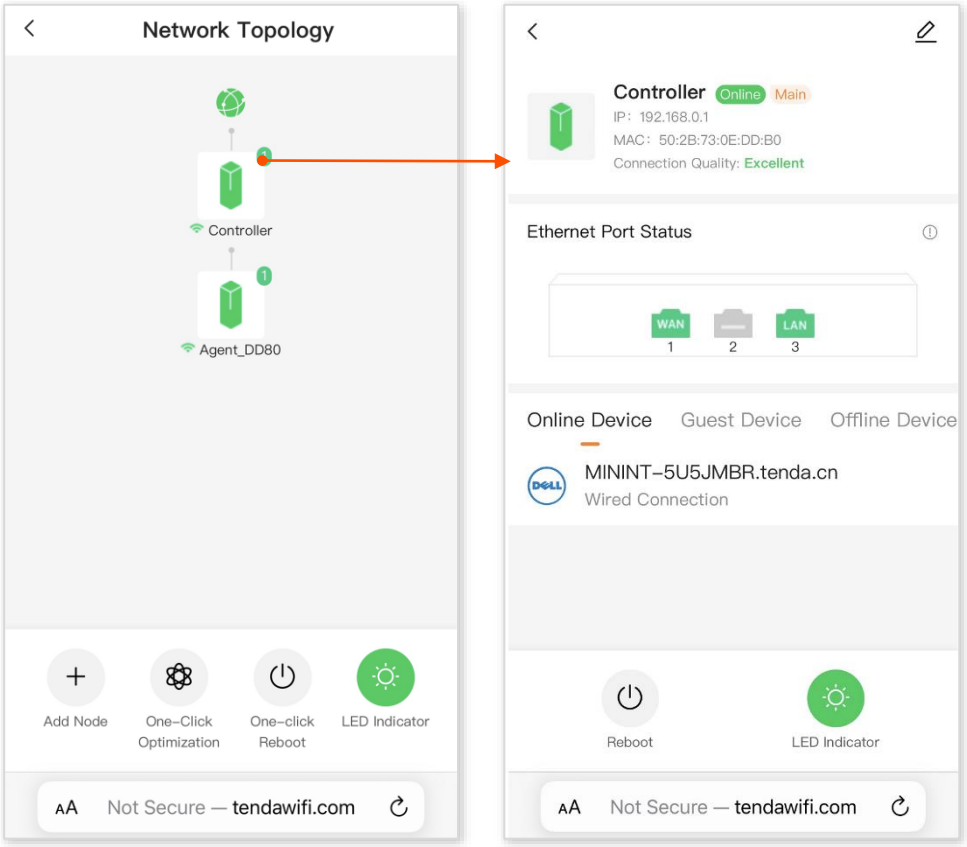
  The Node Topology displays. To view node information, click the node.



- **Smartphone/Tablet:**

  Tap **Network Topology**.

  The Network Topology displays. To view node information, click the node.



---End

6.2.2 Via Tenda WiFi App

To view the network topology and node information:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Network Topology**.

   The Network Topology displays.
3. To view a node information, tap the node, then tap **...**.

---End

6.3 View primary node information

6.3.1 Via web browser

To view the information of the primary node:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the Router Info page.

- **Computer:**

  Method 1: Go to **Network Status**, then click **Mesh Node** icon.

  Method 2: Go to **More** > **Router Info**.

- **Smartphone/Tablet:**

  Method 1: Tap Mesh node thumbnail.

  Method 2: Go to **More** > **Router Info**.

  ---End

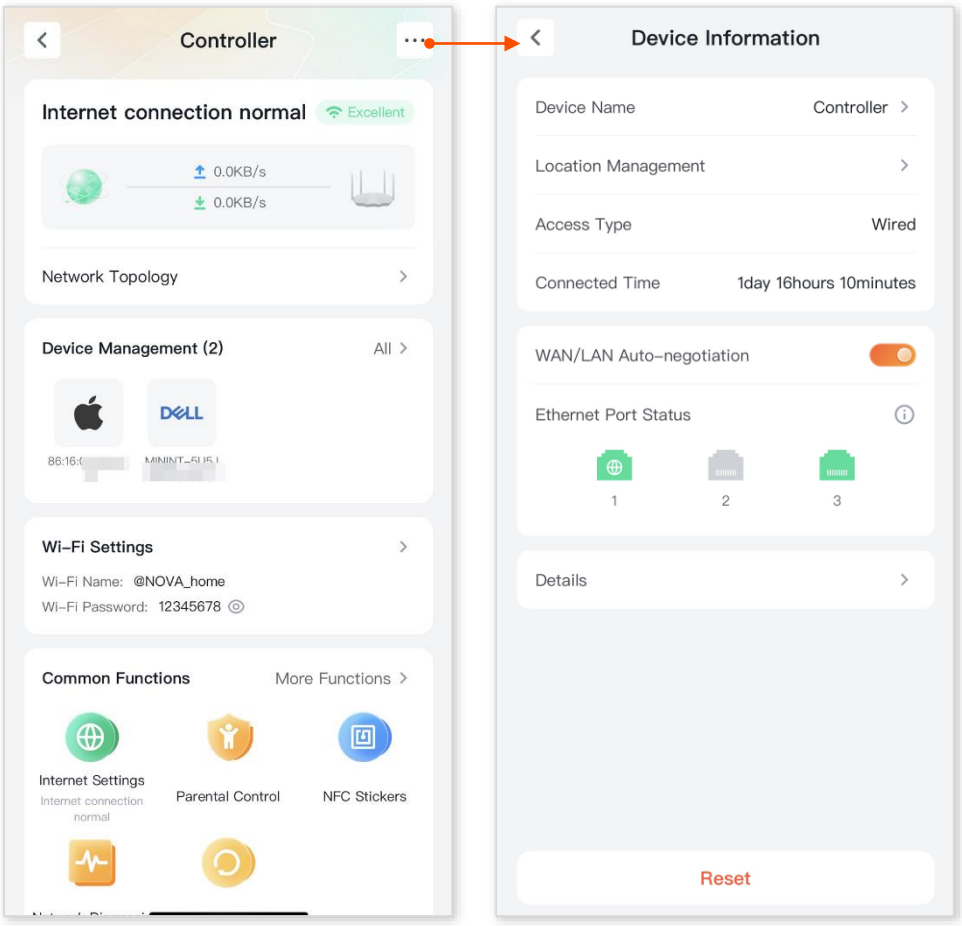
  You can see basic information, WAN port information, LAN information, Wi-Fi information and IPv6 status of the primary node.

6.3.2 Via Tenda WiFi App

To view the information of the primary node:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **…** .

   The **Device Information** page displays.



---End

6.3.3 Parameter description

Parameter		Description
Basic information	System Time	Specifies the mesh device's system time.
	Runtime	Specifies the runtime of the primary node.
	Firmware Version	Specifies the firmware version of the primary node.
	Hardware Version	Specifies the hardware version of the primary node.
WAN port information (Only available on router mode)	Internet Connection Status	Specifies the internet connection status of the WAN port.
	Internet Connection Type	Specifies the internet connection type of the WAN port.
	Connected time	Specifies the internet connection time of the primary node.
	IP Address	Specifies the WAN IP address of the primary node.

Parameter		Description
	Subnet Mask	Specifies the WAN subnet mask of the primary node.
	Default gateway	Specifies the gateway IP address of the primary node.
	Primary DNS	Specify the IP address of primary and secondary DNS servers of the primary node.
	Secondary DNS	
	MAC Address	Specifies the WAN MAC address of the primary node.
LAN information	IP Address	Specifies the LAN IP address of the primary node, which is also the IP address for logging in to the web UI of the primary node.
	Subnet Mask	Specifies the LAN subnet mask of the primary node.
	MAC Address	Specifies the LAN MAC address of the primary node.
Wi-Fi information	Status	Specifies the visibility of the Wi-Fi network.
	Wi-Fi Name	Specifies the Wi-Fi name of the respective Wi-Fi network.
	Security	Specifies the security mode of the respective Wi-Fi network.
	Channel	Specifies the channel that the respective Wi-Fi network works in.
	Bandwidth	Specifies the bandwidth of the respective Wi-Fi network.
	MAC Address	Specifies the MAC address of the respective Wi-Fi network.
IPv6 status * This part is only displayed when the IPv6 function is enabled.	Connection Type	Specifies the IPv6 connection type of the primary node.
	IPv6 WAN Address	Specifies the WAN IPv6 address of the primary node. After the IPv6 function is configured, the WAN port of the primary node obtains a global unicast IPv6 address or a tunnel address.
	Default IPv6 Gateway	Specifies the default IPv6 gateway of IPv6 network.
	Primary IPv6 DNS	Specify the primary and secondary DNS server addresses of IPv6 network.
	Secondary IPv6 DNS	
	IPv6 LAN Address	Specifies the LAN IPv6 address of the primary node. After the IPv6 function is configured, the LAN port of the primary node obtains a global unicast IPv6 address or a tunnel address, and a link local address.

6.4 View client information

6.4.1 Via web browser

To view information of clients:

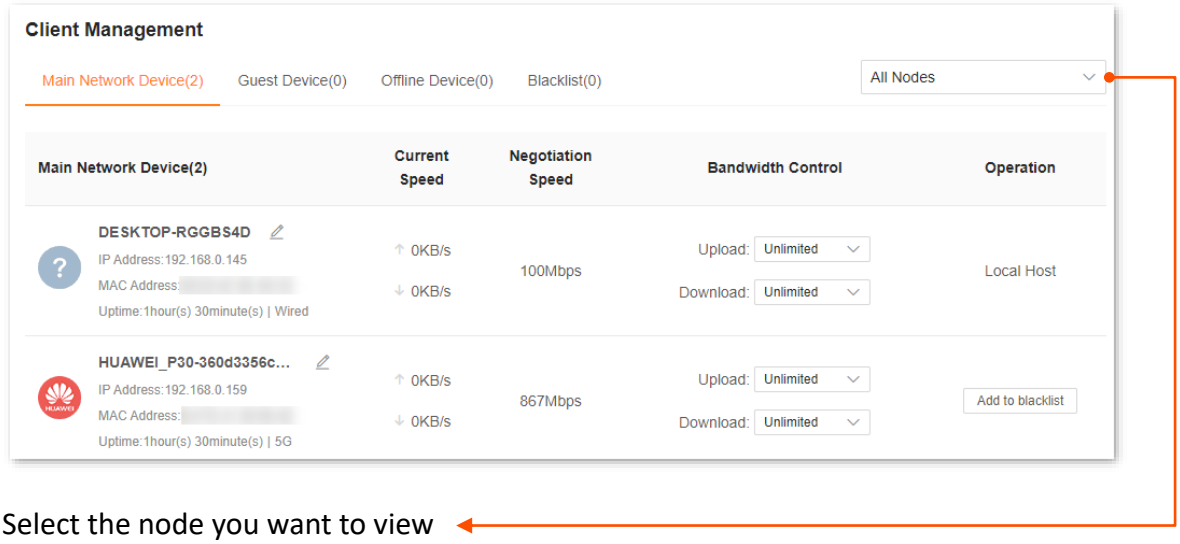
1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

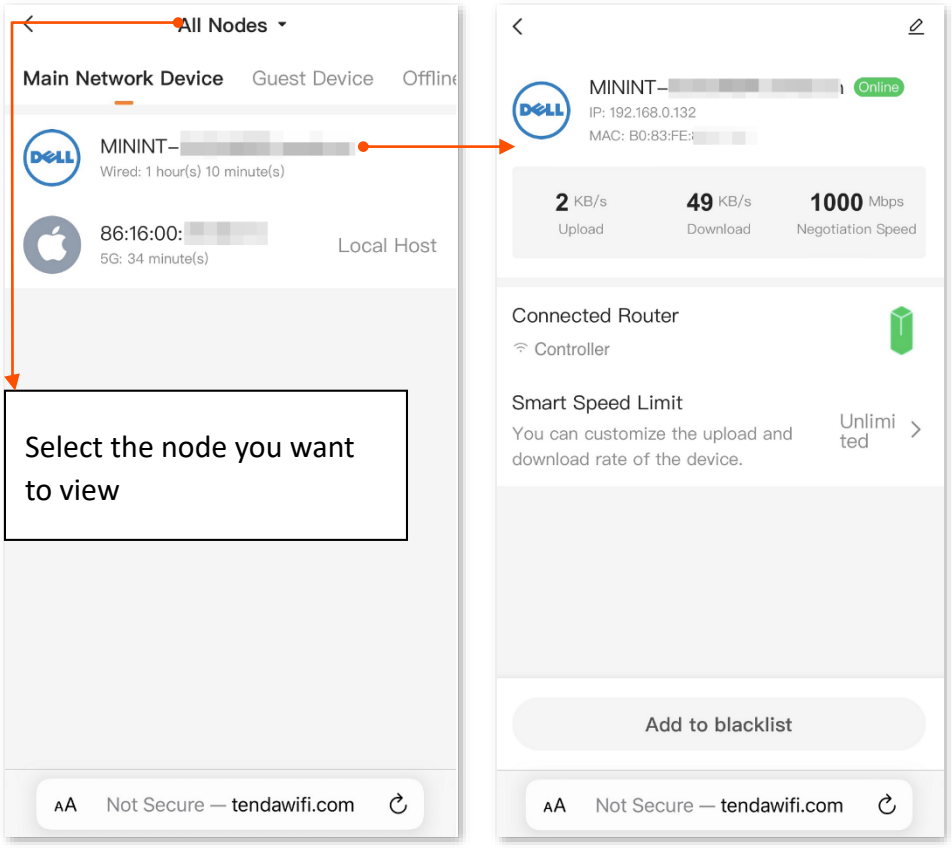
   The password is case-sensitive.
4. Go to the settings page.

- **Computer:** Go to **Network Status**, then click **Client** icon.

  The following page displays.



- **Smartphone/Tablet:** Tap **Client Management**. Tap a client to view details.



---End

6.4.2 Via Tenda WiFi App

To view client information of a node:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Network Topology**, then tap the target node.

---End

You can see the node's online device, guest device, and offline device.

6.5 Change node name and location description

6.5.1 Via web browser

To change the name of a node:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and rename the node.

- **Computer:**

  1) Go to **Network Status**.
  2) Click **Node Topology** (below More Function).
  3) Click ✎ next to node name, enter the new name, then click ✓.

- **Smartphone/Tablet:**

  Tap **Network Topology**, tap the **target** node, tap ✎, **...** , enter the new name, then tap **OK**.

  ---End

6.5.2 Via Tenda WiFi App

To change the name and location description of a node:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. To change the name of the primary node, do the followings:
   - Method 1: Tap **...** , tap **Device Name**, enter the new name, then tap **Save**.
   - Method 2: Tap **Network Topology**, tap the **Primary** node, tap **...** , tap **Device Name**, enter the new name, then tap **Save**.
3. To change the location description of the primary node, do the followings:
   - Method 1: Tap **...** , tap **Location Management**, choose a location from the list, then tap **Confirm**.

- Method 2: Tap **Network Topology**, tap the **Primary** node, tap **...** , tap **Location Management**, choose a location from the list, then tap **Confirm**.

4. To change the name of the secondary node, tap **Network Topology**, tap the target secondary node, tap **...** , tap **Device Name**, enter the new name, then tap **Save**.
5. To change the location description of the primary node, tap **Network Topology**, tap the target secondary node, tap **...** , tap **Location Management**, choose a location from the list, then tap **Confirm**.

---End

6.6 Change a client name

You can change the names of all clients connected to the network.

6.6.1 Via web browser

To change the name of a client:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and rename the client.

- **Computer:**
  - Method 1: Go to **Network Status**, click **Client** icon (below Network Status), find the target device from **Main Network Device**, **Guest Device** or **Offline Device** menu, click next to the client name, enter a new name , then click .
  - Method 2: Go to **Client Management**, find the target device from **Main Network Device**, **Guest Device** or **Offline Device** menu, click next to the client name, enter a new name , then click .

  The new client name is saved.
- **Smartphone/Tablet:**

  1) Tap **Client Management**.
  2) Find the target device from **Main Network Device**, **Guest Device** or **Offline Device** menu.

3) Tap the target client and then tap in the upper-right corner.

4) Enter a new name, then tap **OK**.

The new client name is saved.

---End

6.6.2 Via Tenda WiFi App

To change the name of a client:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **All** next to **Device Management**.
3. Find the target device from **Online Device**, or **Offline Device** menu.
4. Tap the target device.
5. Tap , enter the new name, tap **Save**.

---End

6.7 Delete an offline client

You can delete any offline client that is connected to the network before.

6.7.1 Via web browser

To delete an offline client:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and delete the offline client.

- **Computer:**

  1) Go to **Client Management**.

  2) Select the offline client you want to delete from **Offline Device** menu, and click **Delete** in the upper-right corner of the page.

The client you selected is removed from the device list.

- **Smartphone/Tablet:**

  1) Tap **Client Management**, then swipe left to go to **Offline Device** page.

  2) Tap the offline client you want to delete, then tap **Delete Device**.

  The client you selected is removed from the device list.

  TIP

  To delete all offline clients, select **All** on the **Offline Device** page and then tap **Delete**.

  ---End

6.7.2 Via Tenda WiFi App

To delete an offline client:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Go to **Device Management** > **Offline Device**.
3. Tap the target device.
4. Tap **Delete**, and then confirm the deletion.

---End

6.8 Diagnose network problems

If the network fails or the internet lag is severe, you can use Network Diagnosis function to troubleshoot the fault.

6.8.1 Via web browser

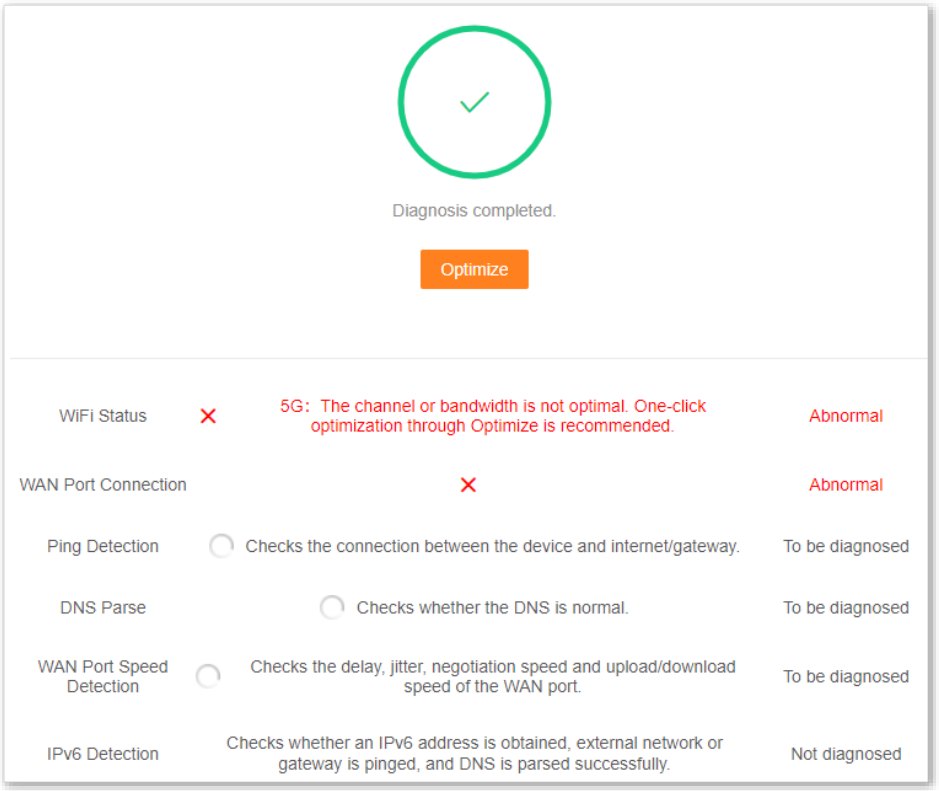
To perform troubleshooting:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.

4. Go to the settings page.
   - **Computer**: Go to **More** > **Network Diagnosis**.
   - **Smartphone/Tablet**: Tap **More** > **Click to visit the webpage version** > **More** > **Network Diagnosis**.
5. Click **Diagnose**.
6. Check the diagnosis result and click **Optimize** to correct faults.



---End

6.8.2 Via Tenda WiFi App

To perform troubleshooting:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Network Diagnosis** (below Common Functions).
3. Tap **Start**.
4. Check the diagnosis result and tap **Optimize** to correct faults.

---End

6.9 Optimize wireless network

6.9.1 Via web browser

To optimize the wireless network with one click:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and optimize wireless network.

- **Computer:**

  Go to **Network Status**, click **One-Click Optimization** (below More Function), then click **OK**.

- **Smartphone/Tablet:**

  Tap **Network Topology** > **One-Click Optimization** > **Optimization**.

  ---End

  The wireless network is disabled and it takes some time for the optimization process. Wait until the network is enabled again.

6.9.2 Via Tenda WiFi App

To optimize the wireless network with one click:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Network Topology**.
3. Tap **Optimize**, then tap **Optimization**.

   ---End

6.10 Reboot

NOTE

Rebooting a node will disconnect all connections to the node. Please reboot the nodes when the network is idle.

6.10.1 Reboot all nodes

Via web browser

To reboot all nodes by one click:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and reboot nodes.
   - **Computer**: Go to **Network Status**, click **Reboot All Nodes** (below More Function), then click **Reboot**. Wait until all nodes are restarted.
   - **Smartphone/Tablet**: Tap **Network Topology**, tap **One-click Reboot**, then tap **Reboot**. Wait until all nodes are restarted.

   ---End

Via Tenda WiFi App

To reboot all nodes:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Network Topology**, tap **Reboot All**, then tap **Reboot**.

   ---End

6.10.2 Reboot a single node

Via web browser

To reboot a single node:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.

4. Go to the settings page and reboot the node.

- **Computer:**

  Go to **Network Status**, click **Node Topology** (below More Function), then click the target node and then click **reboot** and confirm the reboot.

- **Smartphone/Tablet:**

  - Method 1: Tap **Network Topology**, tap the target node, tap **Reboot** and then confirm it.
  - Method 2: Go to **More** > **Reboot**, tap **Reboot** in the line of the node to be reboot, then tap **Reboot**.

  ---End

Wait until the rebooting process completes.

Via Tenda WiFi App

To reboot a single node:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Network Topology**, tap the target node, then tap **Reboot** and then confirm it.

   ---End

6.11 Turn on/off indicators

6.11.1 Turn on/off indicators of all nodes

Via web browser

To turn on/off indicators of all nodes by one click:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and turn indicators on or off.

- **Computer:**

  Go to **Network Status**, then click **LED indicator** (below More Function).

- **Smartphone/Tablet:**

  Tap **Network Topology**, then tap **LED indicator**.

  ---End

Your settings are saved. All indicators of the mesh devices turn on/off.

Via Tenda WiFi App

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Go to the settings page and turn on/off all indicators.
   - Method 1: Tap **Network Topology**, then tap **Indicator: OFF/ON**.
   - Method 2: Tap **More Functions** next to Common Functions, tap **Smart Power Saving** (below Common Functions), tap **Indicator**, turn on/off **Indicator**, then tap **Save**.

   ---End

Your settings are saved. All indicators of the mesh devices turn on/off.

6.11.2 Turn on/off indicator of a single node

Via web browser

To turn on/off indicator of a node:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and turn the node's indicator on or off.
   - **Computer**: Go to **Network Status**, click **Node Topology** (below More Function), click the target node, then turn off **LED On/Off**.
   - **Smartphone/Tablet**: Tap **Network Topology**, tap the target node, then tap **LED indicator**.

   ---End

The node's indicator turns on/off immediately.

Via Tenda WiFi App

To turn on/off indicator of a node:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Network Topology**, tap the target node, then tap **Indicator: OFF/ON**.

---End

The node's indicator turns on/off immediately.

6.11.3 Set a schedule to turn off the LED indicators

You can set a schedule to turn off the indicators of all nodes. By default, the indicators are turned on.

Via web browser

To set a schedule to turn off the indicators of all nodes:

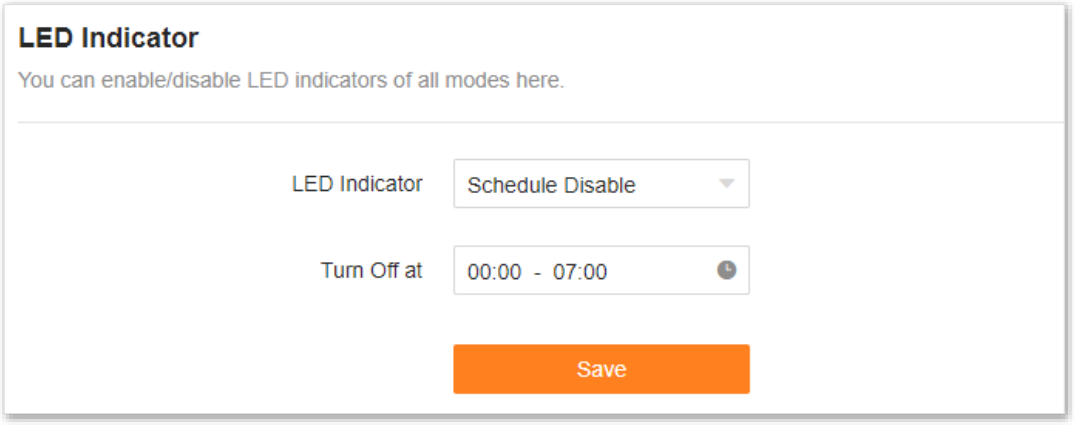
1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and set the indicator off schedule.

- **Computer:**

  1) Go to **More** > **Smart Power Saving** > **LED Indicator**.
  2) Set **LED Indicator** to **Schedule Disable**.
  3) Set **Turn Off at** to the required period.
  4) Click **Save**.

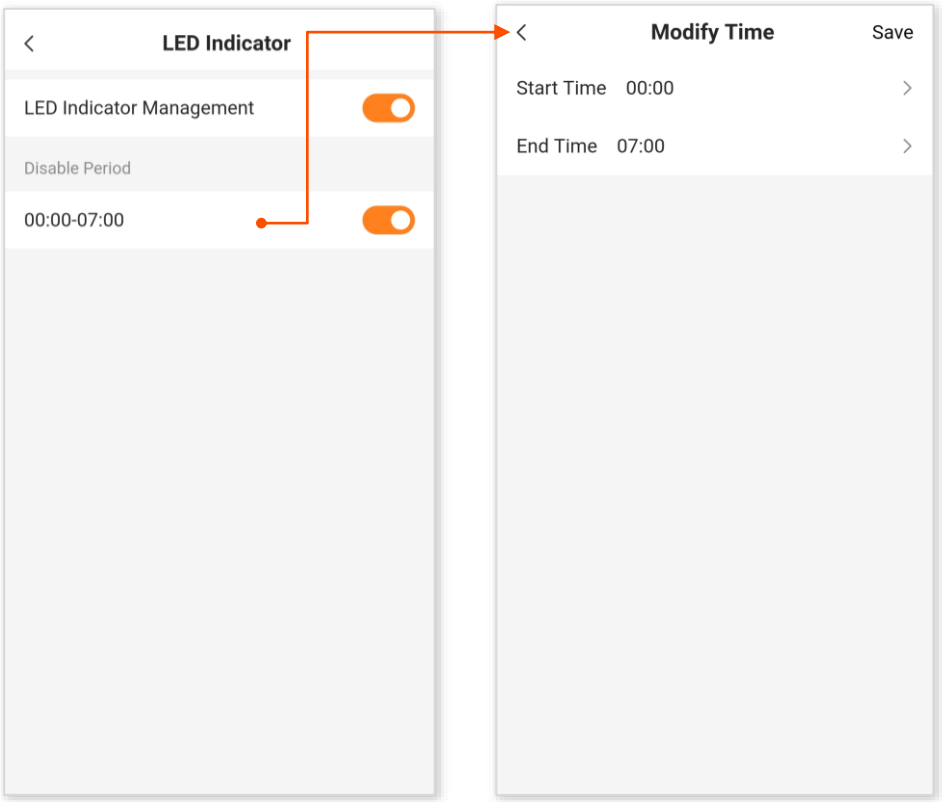


- **Smartphone/Tablet:**

  1) Go to **More** > **LED Indicator**.

  2) Turn on **LED Indicator Management**.

  3) Turn on **Disable Period**. Then, tap the disable period to modify **Start Time** and **End Time**, and tap **Save** in the upper-right corner.



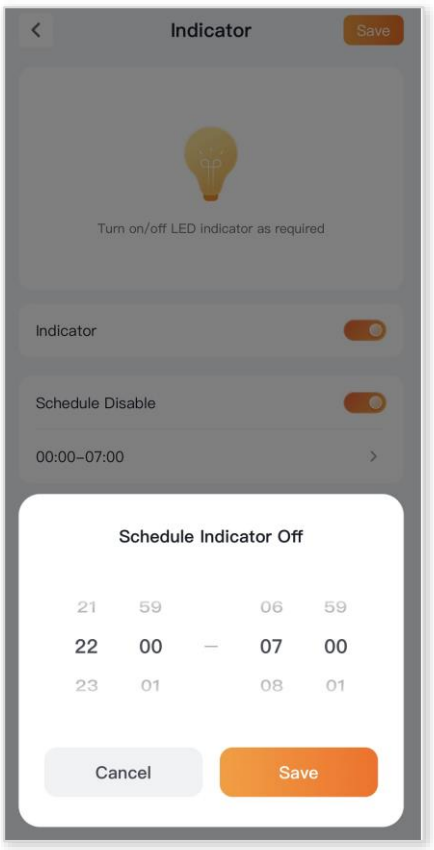
---End

Your settings are saved.

Via Tenda WiFi App

To set a schedule to turn off the indicators of all nodes:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to Common Functions, tap **Smart Power Saving** (below Common Functions), then tap **Indicator**.
3. Turn on **Indicator**.
4. Turn on **Schedule Disable**.
5. Specify the **Start Time** and **End Time**, which are **22:00** and **07:00** in this example, then tap **Save**.
6. Tap **Save**.



---End

Your settings are saved. All indicators of the mesh devices are off from 22:00 to 07:00.

6.12 Change login password

For initial setup or after a reset, set the new login password to ensure privacy and security. The longer the password, the higher the security.

TIP

- Login password: 8-32 characters.
- If you forgot your password, see Forgot my password.

6.12.1 Via web browser

To access the login password setting page:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page.
   - **Computer**: Go to **More** > **System Settings** > **Login Password.**
   - **Smartphone/Tablet**: Go to **More** > **Login Password**.
5. Enter the **Old Password**.
6. Enter the **New Password**.
7. Click **Save**.

---End

6.12.2 Via Tenda WiFi App

To access the login password setting page:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to Common Functions, then tap **Management Password** (below Common Functions).
3. Enter the **Old Management Password**.
4. Enter the **New Management Password**.
5. Tap **Confirm.**

---End

6.13 Set the time zone

The time-based functions require accurate system time. The system time of the mesh device can be synchronized with the internet or local time. By default, it is synchronized with the internet.

You can set your time zone manually.

6.13.1 Via web browser

To set your time zone:

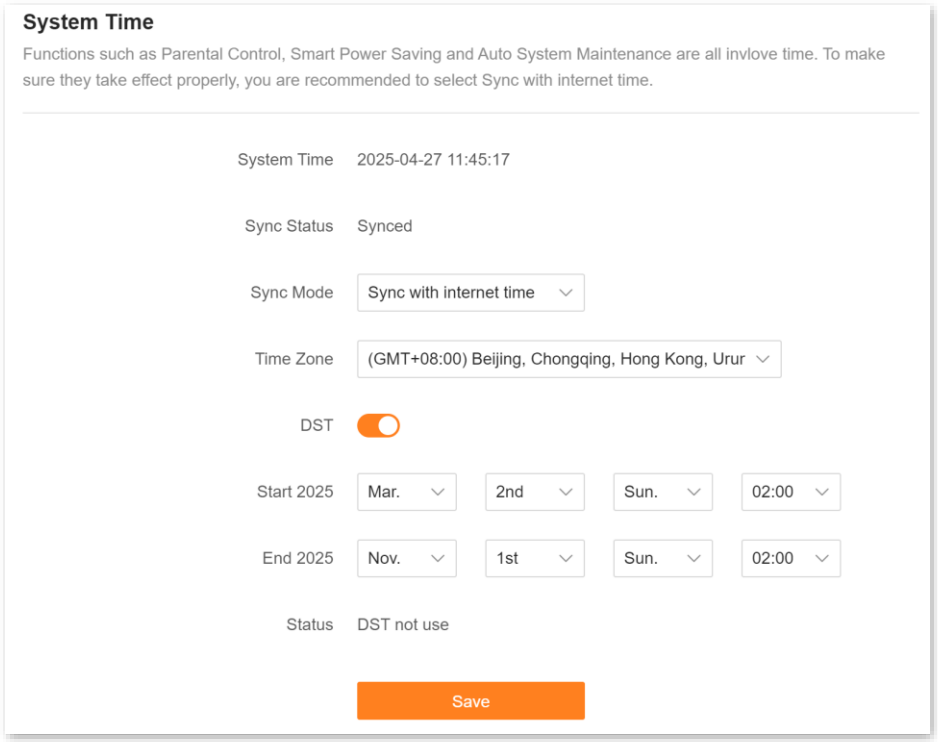
1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page.

- **Computer:** Go to **More** > **System Settings** > **System Time.**
- **Smartphone/Tablet:** Tap **More** > **Click to visit the webpage version** > **More** > **System Settings** > **System Time.**

5. Select your time zone from the **Time Zone** menu.
6. If you live in a region that observes daylight saving time, turn on **DST** (Daylight Saving Time), then select the **Start** time and the **End** time of DST.
7. Click **Save**.



---End

6.13.2 Via Tenda WiFi App

To set your time zone:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **System Time** (below Common Functions).
3. Select **Sync Mode** to **Sync with internet time**.
4. Select your time zone from the **Timezone** menu.
5. If you live in a region that observes daylight saving time, tap **Set DST**, turn on **DST**, select the **Start** time and the **End** time of DST, then tap **Save**.

---End

6.14 Update firmware

Tenda is dedicated to improving its products to let users enjoy better performance. You can use the router web interface or Tenda WiFi App to check if new firmware is available and update your primary and secondary nodes, or you can manually update the firmware for your primary and secondary nodes.

6.14.1 Check for firmware updates

NOTE

- Do not power off the mesh devices during the upgrade.
- For better performance of the new firmware of the mesh device, you are recommended to reset the mesh device to factory settings and re-configure the mesh device after the upgrade completes.

Via web browser

To check for new firmware and update your primary and secondary nodes:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and update nodes.

- **Computer:**

  1) Go to **More** > **System Settings** > **Firmware Upgrade**.
  2) Click **Check New Version**.
  3) If new firmware is available, click **One-click Upgrade**.

  The upgrade automatically starts on all nodes. Wait until the upgrade completes. Then, access the **Firmware Upgrade** page again and check whether the upgrade is successful based on **Current Firmware Version**.

- **Smartphone/Tablet:**

  1) Go to **More** > **Firmware Upgrade.**
  2) Tap **Check New Version**.

     New appears if a new firmware version is detected.
  3) If new firmware is available, tap **One-click Upgrade**.

     Wait until the upgrade completes. Then, access the **Firmware Upgrade** page again and check whether the upgrade is successful based on **Current Version**.

---End

Via Tenda WiFi App

To check for new firmware and update your primary and secondary nodes:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to Common Functions, then tap **Device Upgrade** (below Common Functions).
3. If new firmware is available, do one of the following:
   - To upgrade all nodes, tap **One-click Upgrade**.
   - To upgrade a node, tap the target node, then tap **Upgrade**.

---End

Wait until the upgrade completes. Then, go to the **Firmware Upgrade** (or Device Upgrade) page again and check whether the upgrade is successful based on **Current Version**.

6.14.2 Manually upgrade firmware

NOTE

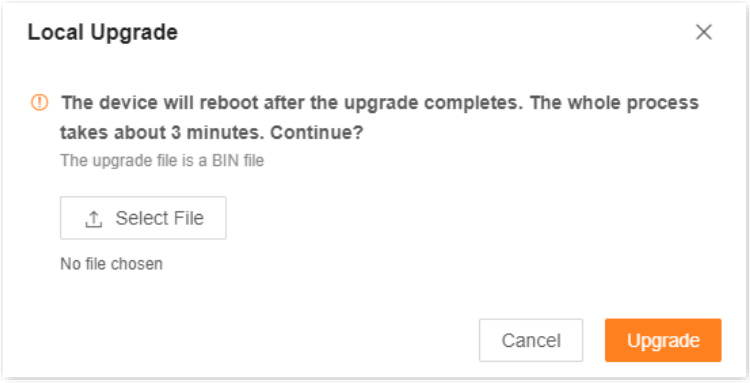
To prevent the mesh device from being damaged:

- Ensure that the firmware is applicable to the mesh device.
- When you are upgrading the firmware, do not power off the mesh device.

1. Go to www.tendacn.com. Download applicable firmware of the mesh device to your local computer and unzip it.
2. Launch a web browser from a computer that is connected to your NOVA network.
3. Enter **tendawifi.com**.

   A login window displays.
4. Enter the login password.

   The password is case-sensitive.
5. Go to **More** > **System Settings** > **Firmware Upgrade**.
6. Click **Local Upgrade** in the line of the node to be upgraded.
7. Click **Select File**.



8. Select the firmware file downloaded previously (.bin), then click **Open**.
9. Click **Upgrade**.

   Wait until the upgrade completes. Then, go to the **Firmware Upgrade** page again and check whether the upgrade is successful based on **Current Firmware Version**.

---End

TIP

For better performance of the new firmware, you are recommended to reset the mesh device to factory settings and re-configure the mesh device after the upgrade completes.

6.15 Backup & restore

You can back up the current configuration of the mesh device to your computer. You are recommended to back up the configuration after the settings of the mesh device are significantly changed, or the mesh device works in good condition.

If you forget your login password or fail to fix network connection problems, you can reset the mesh device to factory settings.

After you restore the mesh device to factory settings or upgrade it, you can restore the configuration that has been backed up.

6.15.1 Back up settings

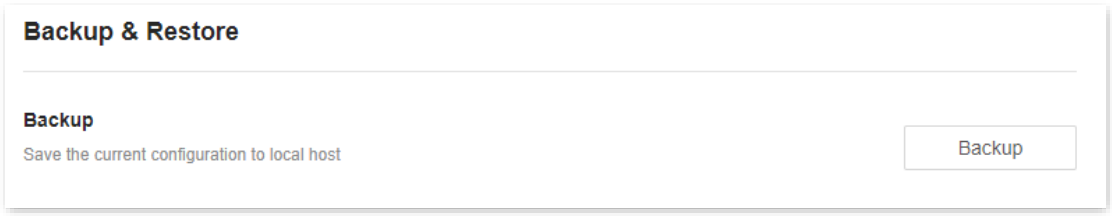
To back up the configuration settings of the mesh device:

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

The password is case-sensitive.

4. Go to **More** > **System Settings** > **Backup & Restore.**
5. Click **Backup**.



---End

A file named **RouterCfm.cfg** will be downloaded to your local host.

TIP

If the browser prompts you “This type of file can harm your computer. Do you want to keep RouterCfm.cfg anyway?”, select **Keep**.

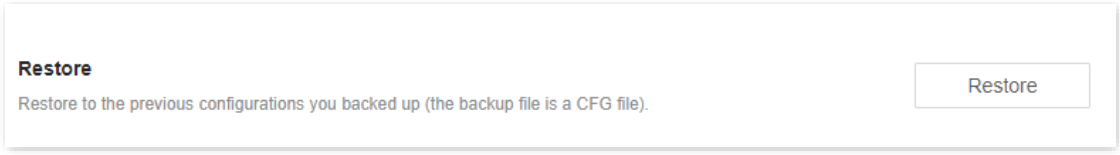
6.15.2 Restore configuration settings

To restore configuration settings that you backed up:

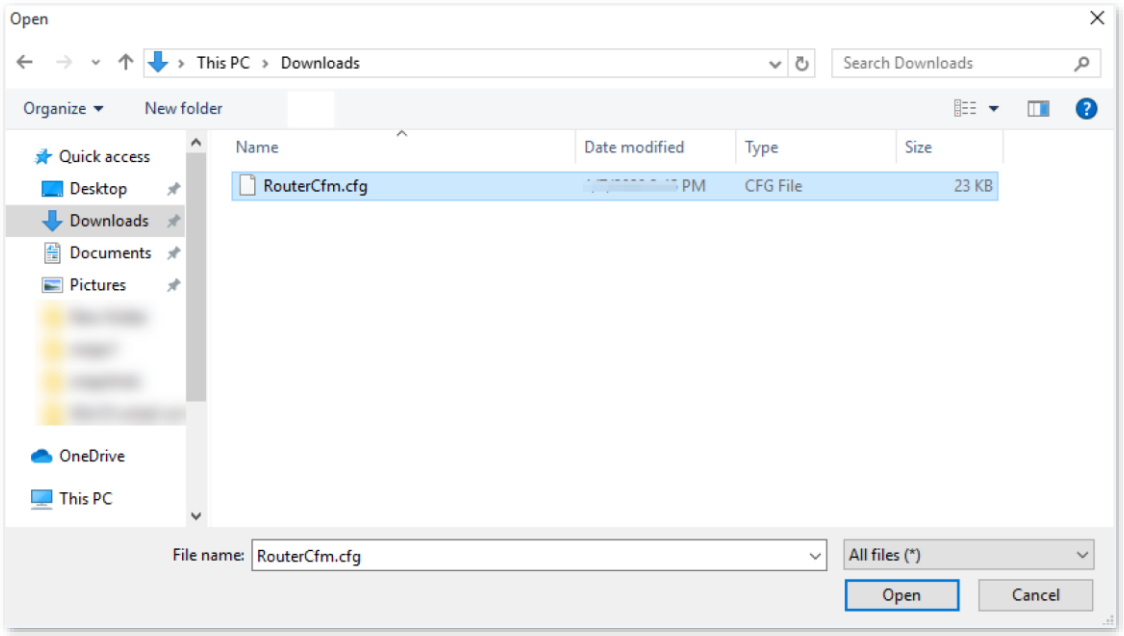
1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **System Settings** > **Backup & Restore.**
5. Click **Restore**.



6. Select the configuration file (.**cfg**) to be restored, and click **Open**.



---End

Wait until the ongoing process finishes, and previous settings are restored to the mesh device.

6.15.3 Reset a node

NOTE

- Resetting the primary node clears all customized configurations on the primary node. You can configure the network again after resetting. If the mesh devices in the same kit are in the networking range, automatic networking will be performed after you configure the node as the primary node again.
- Resetting a secondary node clears all customized configurations on the secondary node. If the secondary node is in the networking range of the primary node in the same kit, automatic networking with the primary node will be performed after you reset the secondary node.

Via web browser

To reset a node:

1. Launch a web browser from a computer or mobile device that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to the settings page and reset the node.

- **Computer:**
  - Method 1: Go to **More** > **System Settings** > **Backup & Restore**. Then, click **Reset** in the line of the node to be reset and confirm the reset.
  - Method 2: Go to **Network Status**, click **Node Topology** (below More Function), then click the target node and then click **Reset** and confirm the reset.
- **Smartphone/Tablet:**

  Go to **More** > **Reset**, tap **Reset** in the line of the node to be reset, then tap **OK**.

  TIP

  To reset all the nodes, tap **Restore to Factory Settings** at the bottom.

  ---End

Wait until the reset completes.

Via Tenda WiFi App

To reset a node:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **Network Topology**.
3. Tap the target node, tap **…** , tap **Reset,** then confirm the reset.

   ---End

Via RESET button

For more information, see RESET.

6.16 Auto system maintenance

You can restart your mesh device at regular intervals to improve its stability and lifetime.

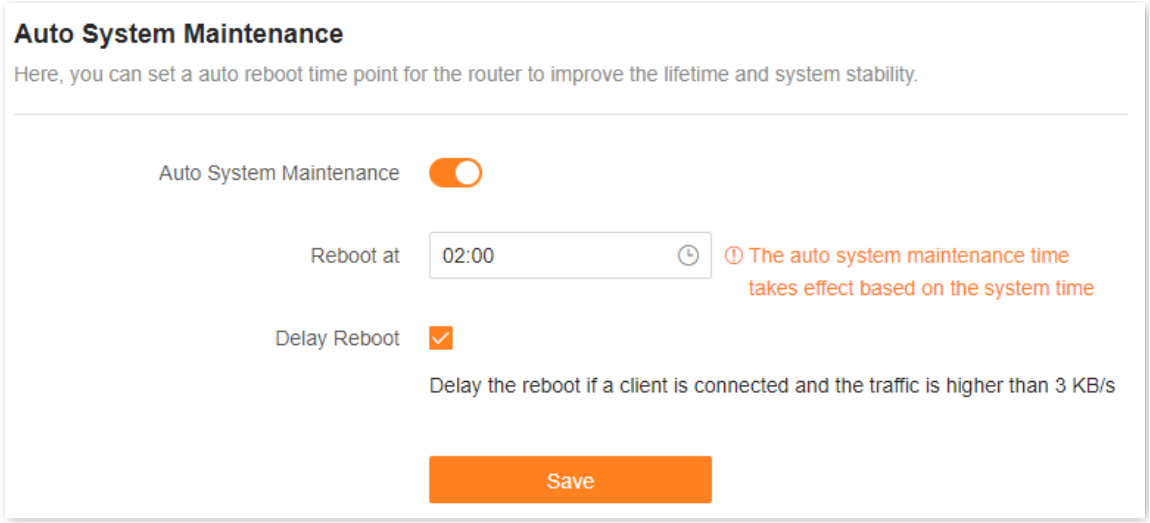
6.16.1 Via web browser

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

The password is case-sensitive.

4. Go to **More** > **System Settings** > **Auto System Maintenance**.
5. Turn on **Auto System Maintenance**.
6. Set **Reboot at** to the required time.
7. Tick **Delay Reboot** as required.
8. Click **Save**.



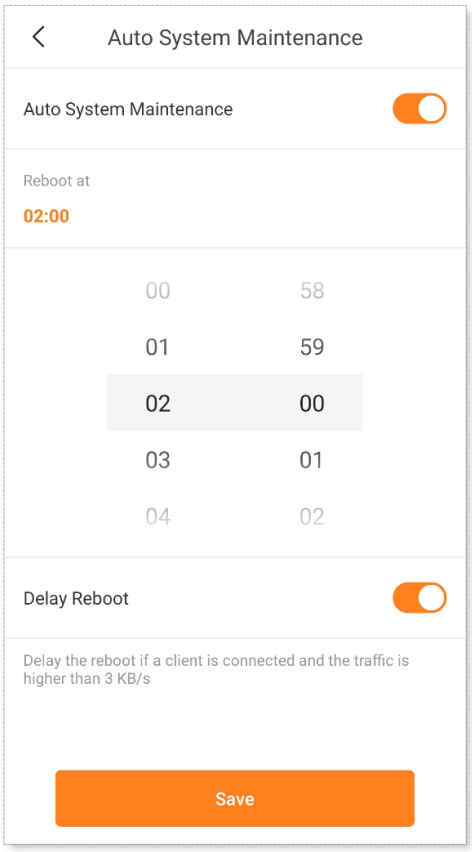
---End

All the nodes will automatically reboot at the specified time.

6.16.2 Via Tenda WiFi App

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to Common Functions, then tap **Reboot Schedule** (below Common Functions).
3. Turn on **Reboot Schedule**.
4. Select a reboot time for **Reboot at**.

   You are recommended to set a time when your network is idle. **02:00** is used as an example.
5. Turn on or turn off the **Delay Reboot** function as required.
6. Tap **Save**.



---End

Now the devices will automatically reboot at the specified time (2 o'clock every day).

6.17 View and export system logs

If you encounter a network fault, you can check the system logs to diagnose the problem. This function logs all key events that occur after the mesh device is started.

TIP

Rebooting the mesh device will clear all previous system logs.

To view or export system logs:

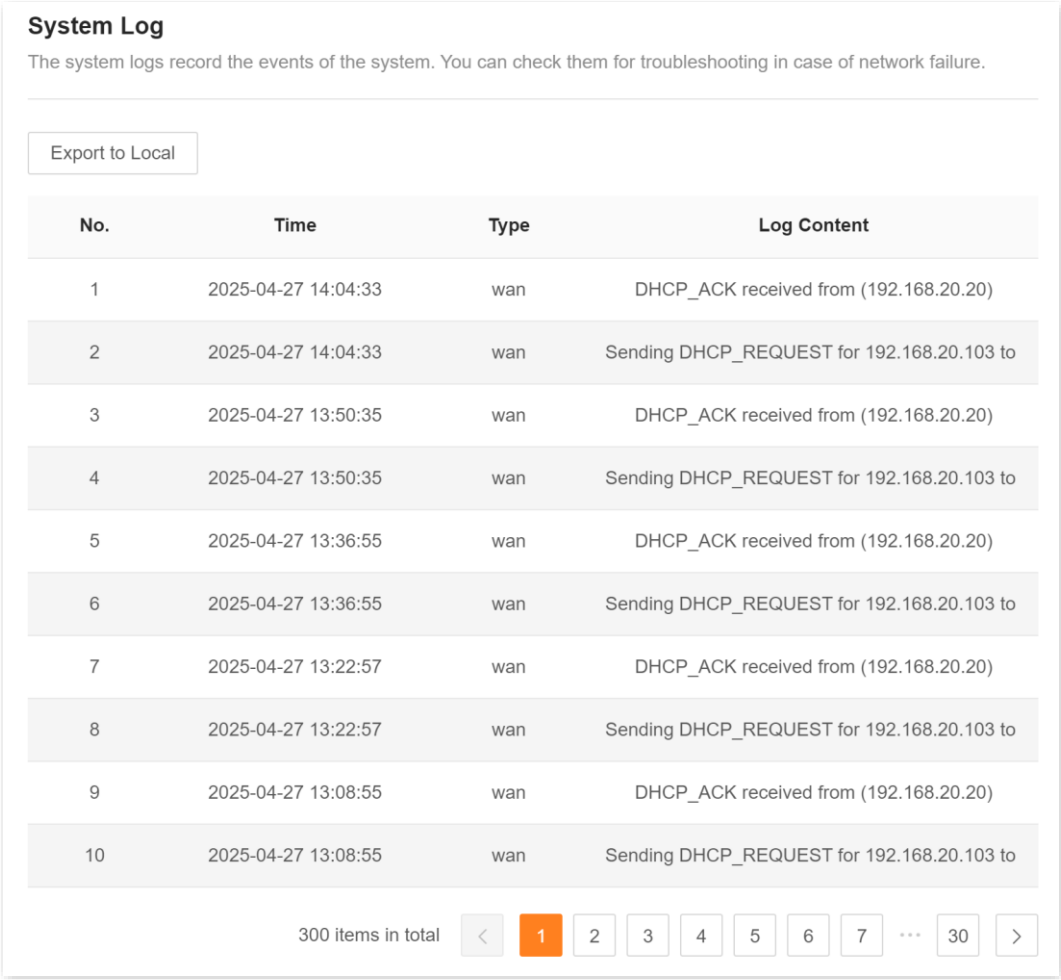
1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **System Settings** > **System Log.**

5. To export system logs, click **Export to Local**.

   The web browser exports file **syslog_*xxx*.tar**.



---End

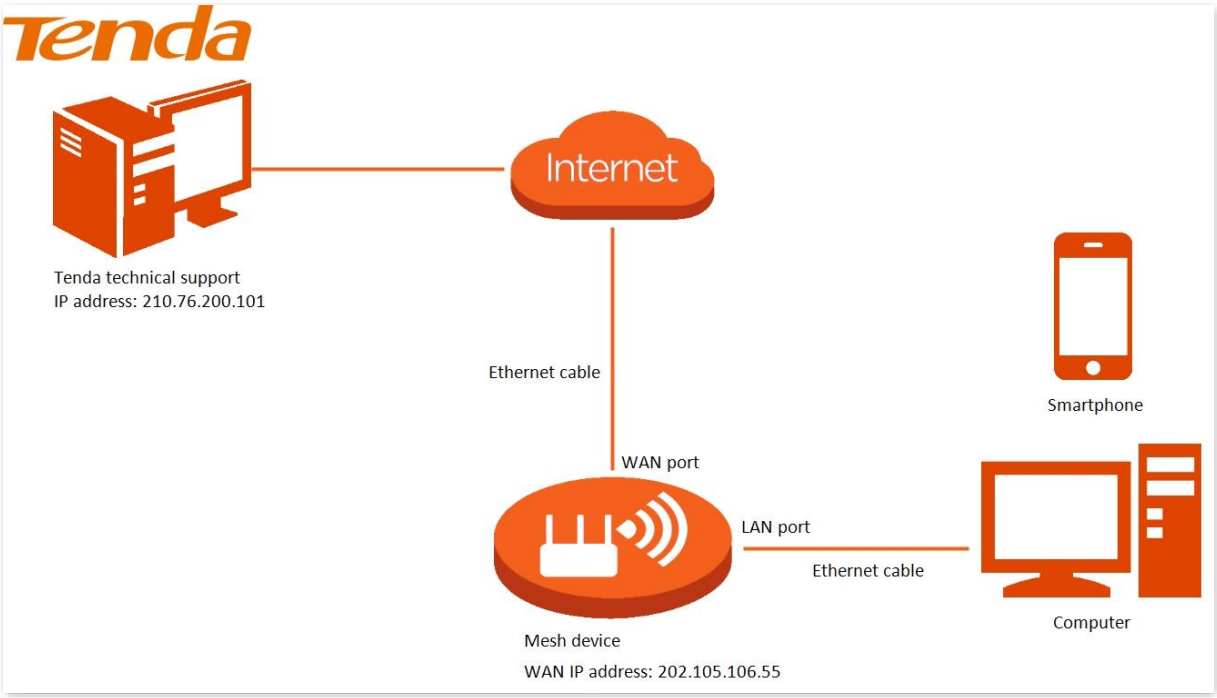
6.18 Remote web management

Generally, the web UI of the router can only be accessed on devices that are connected to the router by a LAN port or wirelessly. When you encounter a network fault, you can ask for remote technical assistance after enabling the remote web management function, which improves efficiency and reduces costs and efforts.

By default, this function is disabled.

Scenario: Your router is connected to the internet, but you encounter a problem when configuring it.

Goal: Ask the Tenda technical support (IP address: 210.76.200.101) to help you configure the router remotely.



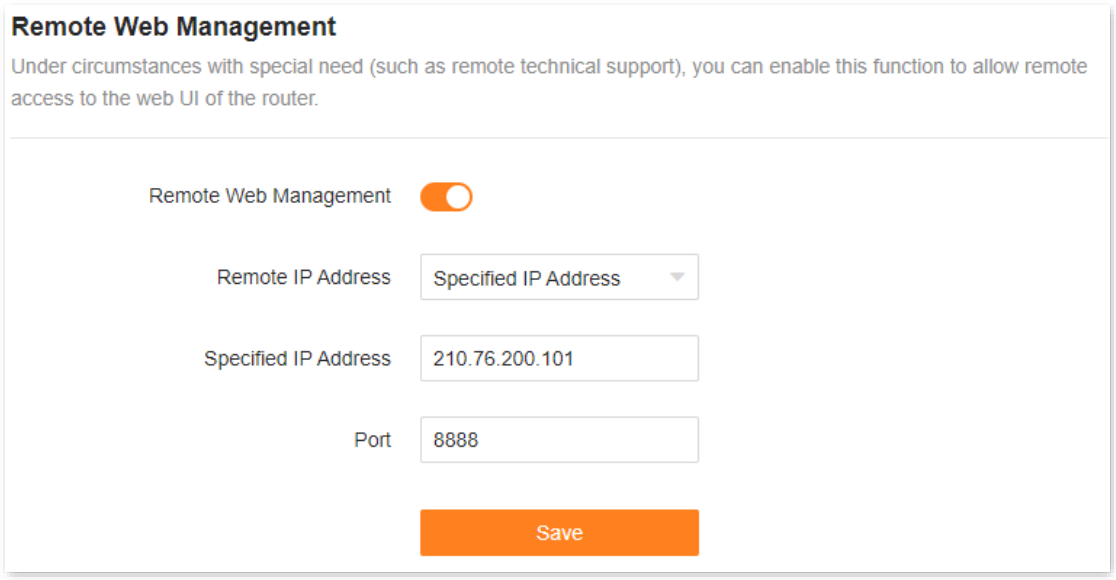
To enable remote web management:

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Advanced** > **Remote Web Management**.
5. Turn on **Remote Web Management**.
6. Select **Specified IP Address** in **Remote IP Address** field.
   - **Any IP Address**: Indicates that hosts with any IP address from the internet can access the web UI of the router. It is not recommended for security.
   - **Specified IP Address**: Only the host with the specified IP address can access the web UI of the router remotely. If the host is behind a NAT router, ensure that the IP address is the WAN IP address (a public IP address) of the NAT router.
7. Enter the IP address that is allowed to access the web UI remotely for **Specified IP Address**, which is **210.76.200.101** in this example.
8. (Optional) Specifies the port of the mesh device which is opened for remote management.

   The port from 1 to 1024 has been occupied by familiar services. It is strongly recommended to enter a port from 1025 to 65535 to prevent conflict.
9. Click **Save**.



---End

Your settings are saved.

The Tenda technical support can access the web UI of the router by visiting "http://*WAN IP address of the router*:*Port*".

If the DDNS function is enabled, the web UI can also be accessed through "http://*Domain name of the router*:*Port*", which is "**http://202.105.106.55:8888**" in this example.

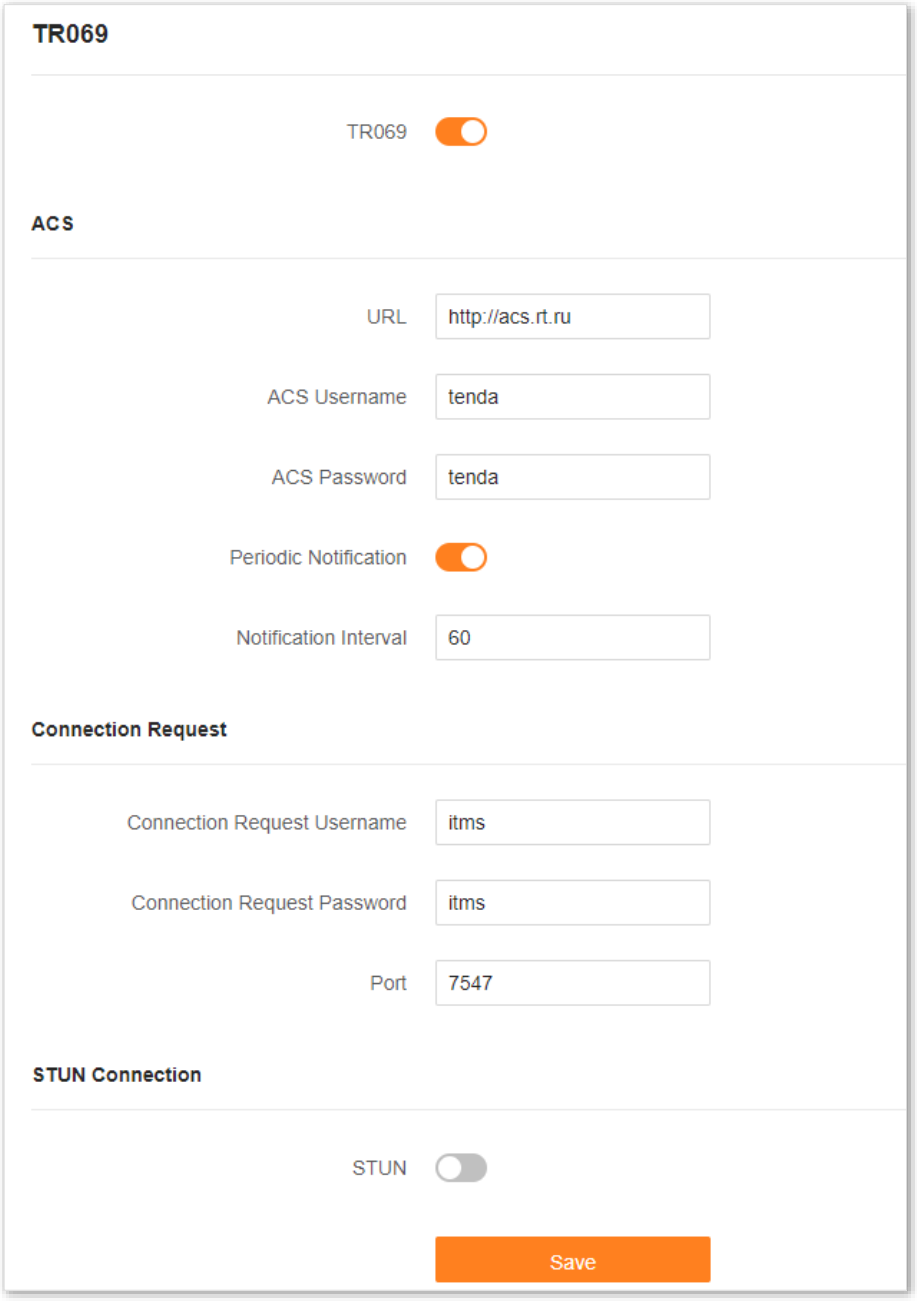
6.19 TR069

TIP

This function is available only for some models. If it is not displayed on your web UI, it is unavailable for the product that you purchased.

The CPE WAN Management Protocol (TR-069) allows an Auto-Configuration Server (ACS) from the internet to perform auto-configuration, provision, collection, and diagnostics to the mesh device. This function is disabled by default.

To access the configuration page, log in to the web UI of the router and go to **More** > **TR069**.



Parameter description

Parameter		Description
TR069		Used to enable or disable the TR069 function.
ACS	URL	Specifies the domain name of the ACS.
	ACS Username	Specifies the user name used to authenticate the mesh device when the mesh device connects to the ACS using the CPE WAN management protocol.
	ACS Password	Specifies the password used to authenticate the mesh device when the mesh device connects to the ACS using the CPE WAN management protocol.

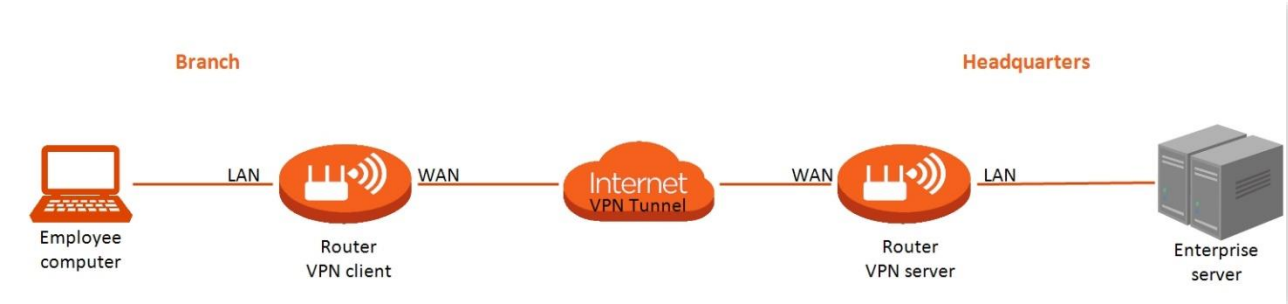
Parameter		Description
	Periodic Notification	Used to enable/disable the mesh device to periodically inform the ACS.
	Notification Interval	Specifies the interval at which the mesh device sends messages to inform the ACS.
Connection Request	Connection Request Username	Specifies the user name used to authenticate the ACS when it sends the connection request to the mesh device.
	Connection Request Password	Specifies the password used to authenticate the ACS when it sends the connection request to the mesh device.
	Port	Specifies the port used to receive the connection request sent by the ACS.
STUN Connection	STUN	Used to enable or disable the STUN function, which facilitates the communication between the mesh device and the public network when the router is behind a NAT router.
	STUN Server Address	Specifies the IP address of the STUN server.
	STUN Server Port	Specifies the port of the STUN server.

7 Use VPN to access network

Features available in the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual router experience.

A Virtual Private Network (VPN) is a private network built on a public network (usually the internet). This private network exists only logically and has no actual physical lines. VPN technology is widely used in corporate networks to share resources between corporate branches and headquarters, while ensuring that these resources are not exposed to other users on the internet.

The topology of a VPN network is shown below.



This series of routers can function as:

- A PPTP server and accept connections from PPTP clients.
- A PPTP/L2TP client and connect to PPTP/L2TP servers.

7.1 Use PPTP VPN to access your home network

TIP

Ensure that the WAN IP address of router is public. This function may not work on a host with a private IP address. Common IPv4 addresses are classified into class A, class B and class C. Private IP addresses of class A range from 10.0.0.0 to 10.255.255.255. Private IP addresses of class B range from 172.16.0.0 to 172.31.255.255. Private IP addresses of class C range from 192.168.0.0 to 192.168.255.255.

To use PPTP VPN to access your home network:

1. Set up PPTP VPN server on your router.

   1) Launch a web browser from a computer that is connected to your NOVA network.

   2) Enter **tendawifi.com**.

   A login window displays.

   3) Enter the login password.

   The password is case-sensitive.

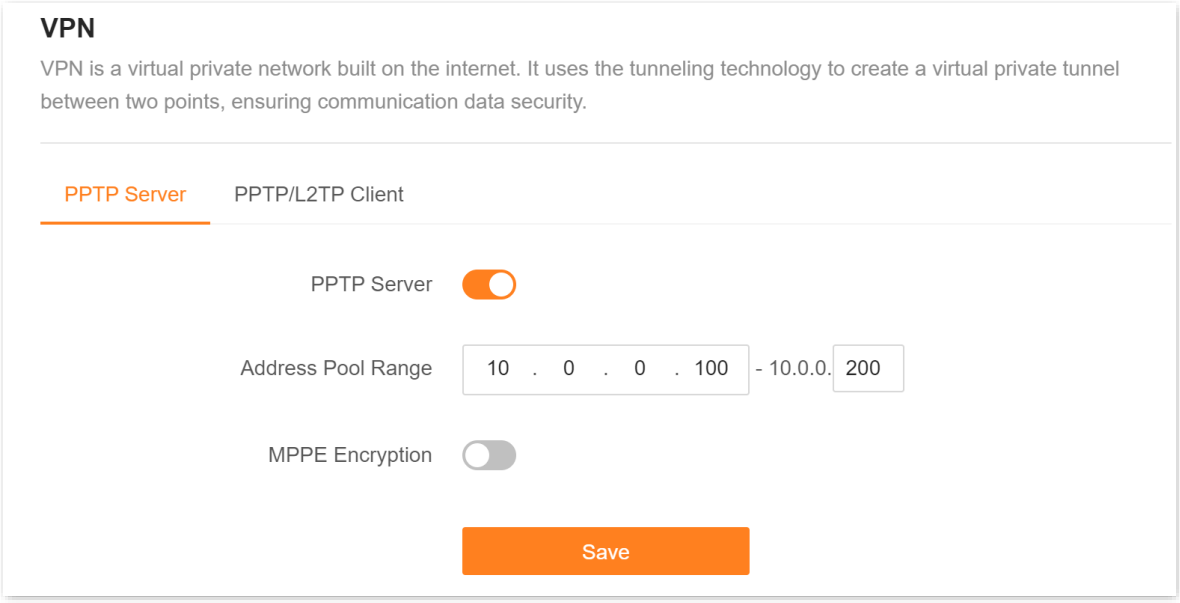
   4) Go to **More** > **Network Settings** > **VPN** > **PPTP Server**.

   5) Turn on **PPTP Server**.

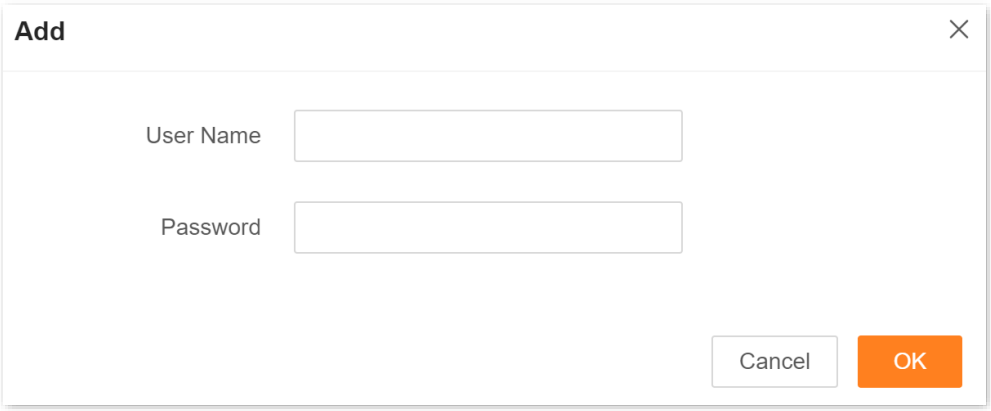
   6) In the **Address Pool Range** filed, enter the range of IP addresses that can be leased to the devices by the PPTP VPN server.

   7) Turn on or turn off **MPPE Encryption** as required. The encryption settings should be the same between the PPTP server and PPTP clients. Otherwise, communication cannot be achieved normally.

   8) Click **Save**.



9) Click **Add**. Set **User Name** and **Password** to authenticate devices to the PPTP VPN Server. Then, click **OK**.

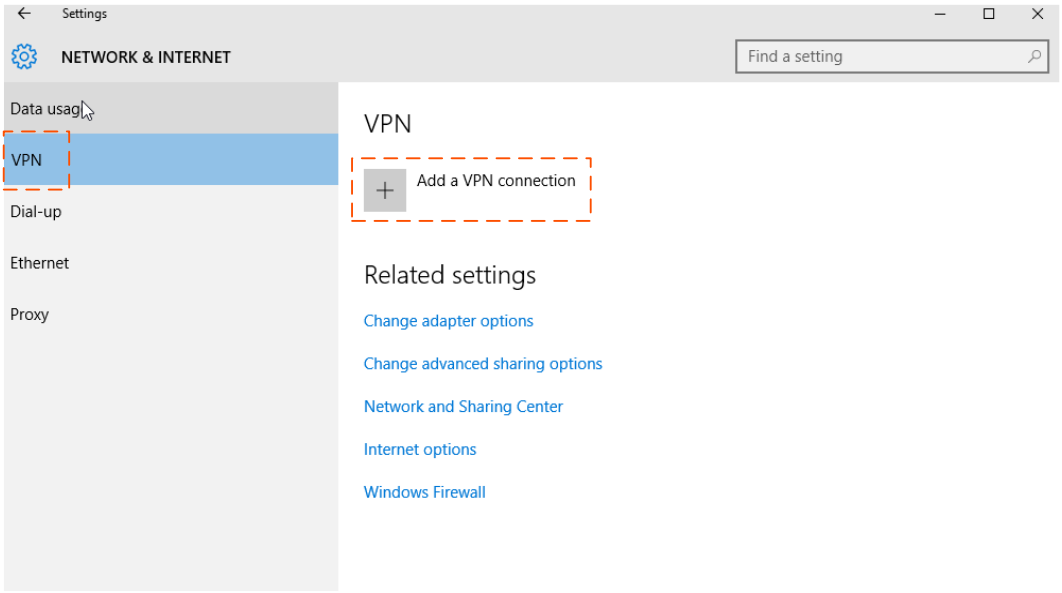


2. Configure PPTP VPN connection on your remote device.

The remote device can use the Windows built-in PPTP software or a third-party PPTP software to connect to PPTP Server. Here we use the **Windows built-in PPTP software** as an example.

1) Go to **Start** > **settings** > **Network & Internet**.

2) Go to **VPN** on the left side, and click **Add a VPN connection**.



3) Enter a connection name, such as **VPN connection**.

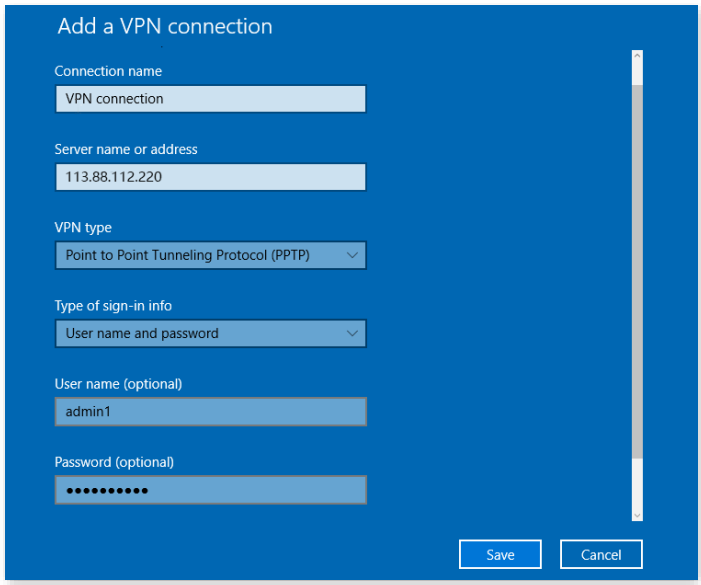
4) Enter the server address, which is **113.88.112.220** (Router's WAN IP address) in this example.

5) Select the VPN type as **Point to Point Tunneling Protocol (PPTP)**.

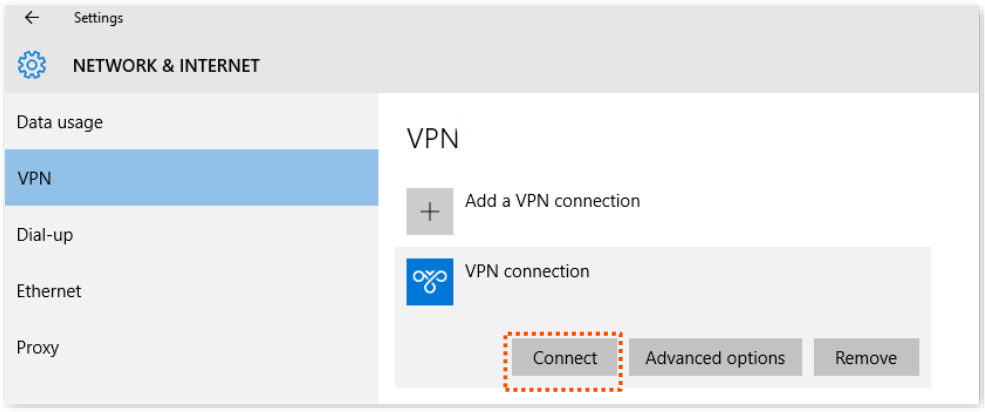
6) Select the type of sign-in info as **User name and password**.

7) Enter the user name and password you have set for the PPTP VPN server on your router.

8) Click **Save**.



3. Find the VPN connection added, and click **Connect**.



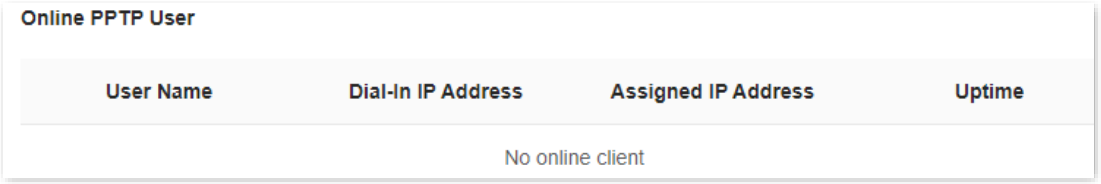
---End

Wait a moment, the VPN connection is successful.

7.2 View Online PPTP users

When the PPTP server function is enabled, you can view the detailed information of VPN clients that establish connections with the PPTP server.

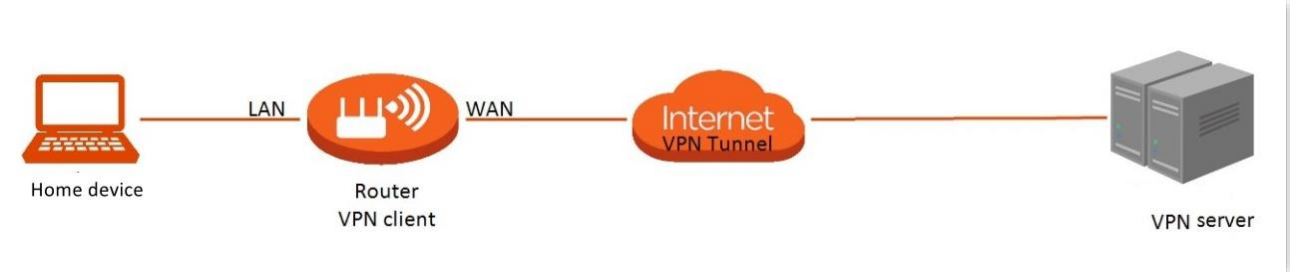
To access the configuration page, log in to the web UI of the router, and Go to **More** > **Network Settings** > **VPN** > **PPTP Server**.



Parameter description

Parameter	Description
User Name	Specifies the VPN user name, which the VPN user uses when making PPTP dial-ups (VPN connection).
Dial-In IP Address	Specifies the IP address of the PPTP client. If the client is a router, it will be the IP address of the WAN port whose VPN function is enabled.
Assigned IP Address	Specifies the IP address that the PPTP server assigns to the client.
Uptime	Specifies the online time since the VPN connection succeeds.

7.3 Use PPTP/L2TP client to access a remote VPN server



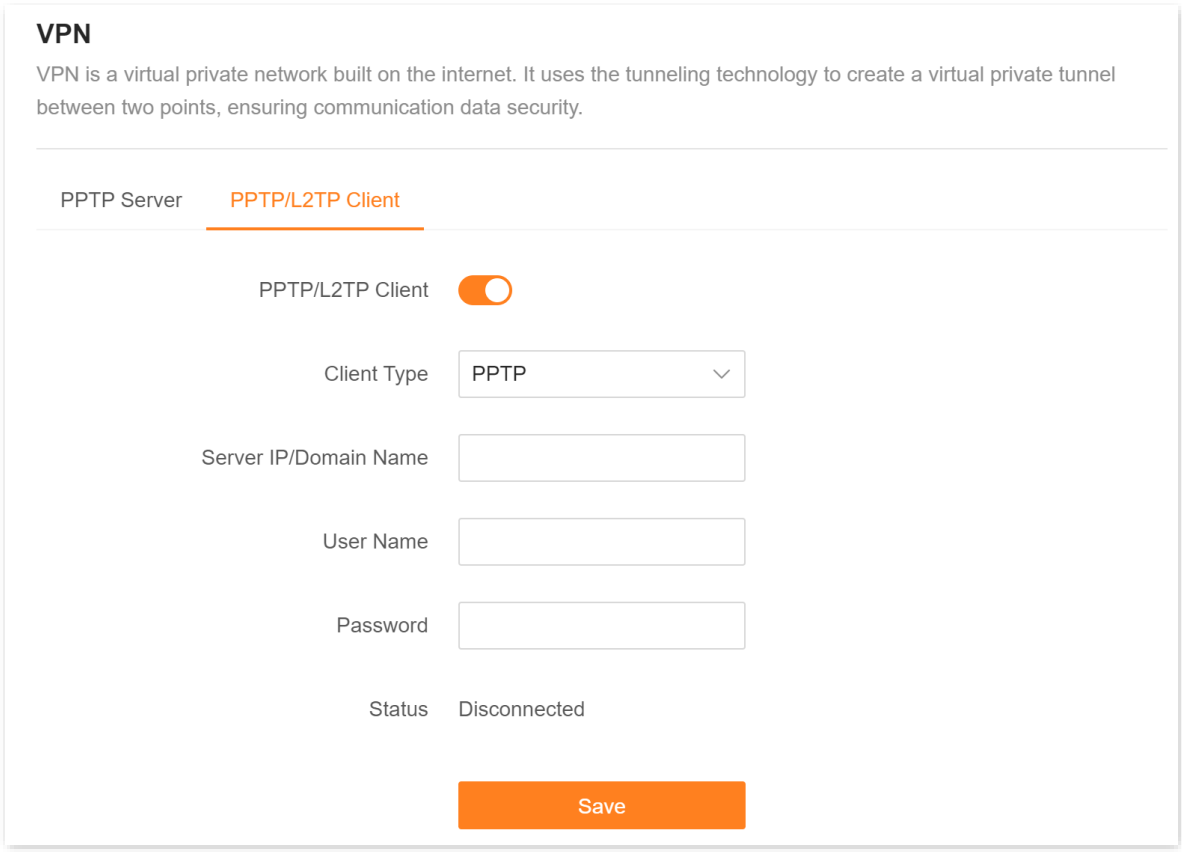
To use PPTP/L2TP client to access VPN resources

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Network Settings** > **VPN** > **PPTP/L2TP Client**.
5. Turn on **PPTP/L2TP Client.**
6. Choose Client Type:
   - To connect to a PPTP VPN server, choose **PPTP** for **Client Type**.
   - To connect to a L2TP VPN server, choose **L2TP** for **Client Type**.
7. Enter the VPN **Server IP/Domain Name**.

   When a mesh device serves as the PPTP/L2TP server, the domain name or IP address should be that of the WAN port.
8. Enter the VPN **User Name** and **Password** provided by your VPN provider.
9. Click **Save**.



---End

When **Connected** is shown behind **Status**, you can access the VPN resources of your ISP.

8 More

Features available in the router may vary by model and software version. Router availability may also vary by region or ISP. All images, steps, and descriptions in this guide are only examples and may not reflect your actual router experience.

8.1 Manage WAN/LAN auto-negotiation

This series routers support WAN/LAN auto-negotiation. By default, this function is disabled, the port 1 is WAN port. If you want to enable WAN/LAN Auto-negotiation, follow the steps below.

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Network Settings** > **WAN/LAN Auto-negotiation**.
5. Turn on **WAN/LAN Auto-negotiation**.

   ---End

Your settings are saved.

8.2 Change the LAN IP settings

The LAN IP address is the router's IP address to the LAN and also the router's management IP address. LAN users can log in to the web UI of the router using this IP address.

The default router's LAN IP address is 192.168.0.1 and the subnet mask is 255.255.255.0.

Generally, you do not need to change the LAN port settings unless IP address conflicts occur. For example, the WAN IP address obtained by the router and the LAN IP address are on the same network segment. The IP address of other devices on the LAN is also 192.168.0.1.

8.2.1 Via web browser

To change the LAN IP address:

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Network Settings** > **LAN Settings**.
5. In the **LAN IP Address** filed, enter the new LAN IP address.

   LAN IP Address: Specifies the LAN IP address of the mesh device, which is also the management IP address for logging in to the web UI of the mesh device.
6. In the **Subnet Mask** filed, enter the subnet mask of the router.

   Subnet Mask: Specifies the subnet mask of the LAN port. This parameter identifies the IP address range of the local area network.

   ---End

Your settings are saved.

8.2.2 Via Tenda WiFi App

To change the LAN Settings:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **LAN Settings** (below Advanced Functions).
3. Enter the new **LAN IP Address**.

   LAN IP Address: Specifies the LAN IP address of the mesh device, which is also the management IP address for logging in to the web UI of the mesh device.
4. Enter the **Subnet Mask** of the router.

   Subnet Mask: Specifies the subnet mask of the LAN port. This parameter identifies the IP address range of the local area network.
5. Tap **Save**.

   ---End

Your settings are saved.

8.3 Use the router as a DHCP server

The Dynamic Host Configuration Protocol (DHCP) is an automatic configuration protocol used on IP networks.

The DHCP server of the router can assign IP address, subnet mask, default gateway and DNS server address to clients within the LAN.

If you disable this function, you need to manually configure the IP address information on the client to access the internet. Do not disable the DHCP server function unless necessary.

8.3.1 Via web browser

To use the router as a DHCP server and specify the pool of IP addresses that the router assigns:

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Network Settings** > **LAN Settings**.
5. If you previously disabled the DHCP server function, turn on the **DHCP Server**.
6. Specify the range of IP addresses that the router assigns in **Address Pool Range** filed.
7. (Optional) Select a value from **Lease Time** menu. It is recommended to keep the default value.
8. To set another DNS address to the client, turn on **DNS**. If not, the LAN IP address of the router is used as the DNS address of the client.

   TIP

   This router supports the DNS proxy function.
9. When **DNS** is turned on, enter **Primary DNS** (required) and **Secondary DNS** (optional) used to assign to the clients.

   TIP

   Ensure that the primary DNS server is the IP address of the correct DNS server or DNS proxy. Otherwise, you may fail to access the internet.

---End

Your settings are saved. The router delivers the following parameters to any LAN device that requests DHCP:

- An IP address from the range that you defined
- Subnet mask
- Gateway IP address (the router's LAN IP address)
- DNS server IP address (the router's LAN IP address or the DNS address you specified)

8.3.2 Via Tenda WiFi App

To use the router as a DHCP server and specify the pool of IP addresses that the router assigns:

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **LAN Settings** (below Advanced Functions).
3. If you previously disabled the DHCP server function, turn on **DHCP Server**.
4. Specify the **Start IP Address**, **End IP Address** to specify the range of IP addresses that the router assigns.
5. (Optional) Select a **Lease Time**. It is recommended to keep the default value.
6. To set another DNS address to the client, turn on **DNS**. If not, the LAN IP address of the mesh device is used as the DNS address of the client.

   TIP

   This mesh device has the DNS proxy function.

7. When **DNS** is turned on, enter **Primary DNS** (required) and **Secondary DNS** (optional) used to assign to the clients.

   TIP

   Ensure that the primary DNS server is the IP address of the correct DNS server or DNS proxy. Otherwise, you may fail to access the internet.

---End

Your settings are saved. The router delivers the following parameters to any LAN device that requests DHCP:

- An IP address from the range that you defined
- Subnet mask
- Gateway IP address (the router's LAN IP address)

- DNS server IP address (the router's LAN IP address or the DNS address you specified)

8.4 Manage reserved LAN IP addresses

Through the Static IP Reservation function, specified clients can always obtain the same IP address when connecting to the mesh device, ensuring that the port forwarding or port mapping, DDNS, DMZ host and other functions are normal.

This function takes effect only when the DHCP server function of the mesh device is enabled.

8.4.1 Reserve an IP address

To reserve an IP address:

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Network Settings** > **LAN Settings**.
5. Click **Add** in **Static IP Reservation List**.
6. Do one of following:

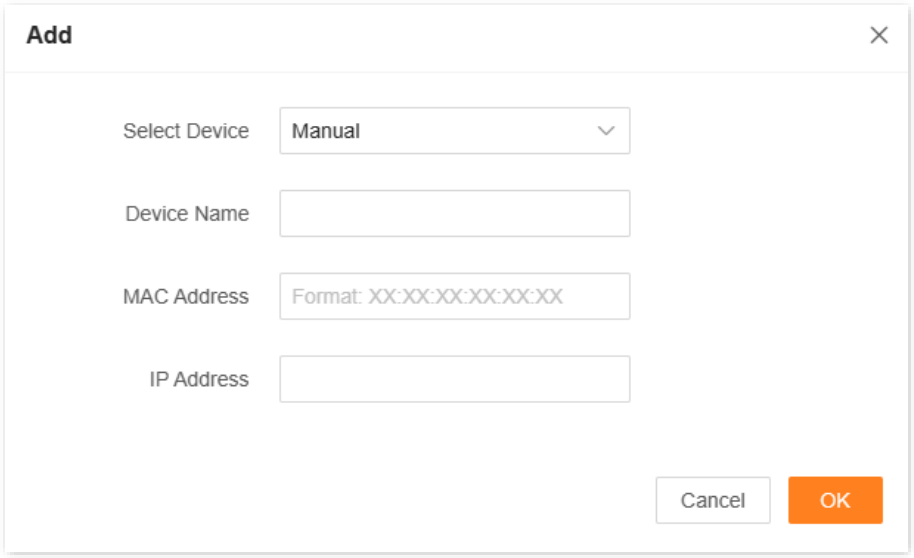
- **To reserve an IP address for a device that is already on the network, select the device.**
- **To reserve an IP address for a device that is not on the network, do the following:**

  1) In the **Device Name** field, type a name for the device.

  2) In the **MAC Address** field, type the MAC address of the device.

  3) In the **IP Address** field, type the IP address to assign to the device. Choose an IP address from the router's LAN subnet, such as 192.168.0.x.

7. Click **OK**.



---End

The reserved address displays in the Static IP Reservation List.

The reserved address is not assigned until the next time the device contacts the router's DHCP server. Reboot the device, or access its IP configuration and force a DHCP release and renew.

8.4.2 Edit or delete a reserved IP address

To edit or delete a reserved IP address:

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Network Settings** > **LAN Settings**.
5. To edit a reserved IP address, in the **Static IP Reservation List**, click (Edit) in the target row, edit IP Address, then click **OK**.
6. To delete a reserved IP address, in the **Static IP Reservation List**, click (Delete) in the target row, then click **OK**.

---End

Your settings are saved.

8.5 Set up IPTV for watching IPTV programs or multicast videos

IPTV is the technology integrating internet, multimedia, telecommunication and many other technologies to provide interactive services, including digital TV, for family users by internet broadband lines.

8.5.1 Via web browser

To Set up IPTV for watching IPTV programs or multicast videos

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Network Settings** > **IPTV**.
5. To watch multicast videos, turn on **Multicast**, then click **Save**.
6. To watch IPTV programs, do the followings:

   1) Turn on **STB**.

   2) Specifies the VLAN ID of your IPTV service.

   - If your ISP does not provide any VLAN ID when the IPTV service is available, keep **Default**.
   - If you have obtained the VLAN ID from your ISP when the IPTV service is available, choose **Custom** VLAN and enter the VLAN ID.

   3) Select the IPTV port for **Ethernet Port Selection**.

   4) Click **Save** and then confirm it.

      Wait until the router is restarted.

   5) Connect the router's IPTV port to the set-top box using Ethernet cable, then use the IPTV user name and password to dial up on the set-top box.

   ---End

After completing the configuration, you can watch IPTV programs on your TV and watch multicast videos on your computer or mobile device.

8.5.2 Via Tenda WiFi App

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **IPTV** (below Advanced Functions).
3. To watch multicast videos, turn on **Multicast**, then tap **Save**.
4. To watch IPTV programs, do the followings:

    1) Turn on **STB**.

    2) Specifies the VLAN ID of your IPTV service.

    - If your ISP does not provide any VLAN ID when the IPTV service is available, keep **Default**.
    - If you have obtained the VLAN ID from your ISP when the IPTV service is available, choose **Custom** and enter the VLAN ID.

    3) select the IPTV port for **Ethernet Port Selection**.

    4) Tap **Save**.

    5) Configure the set-top box.

    Use the IPTV user name and password to dial up on the set-top box.

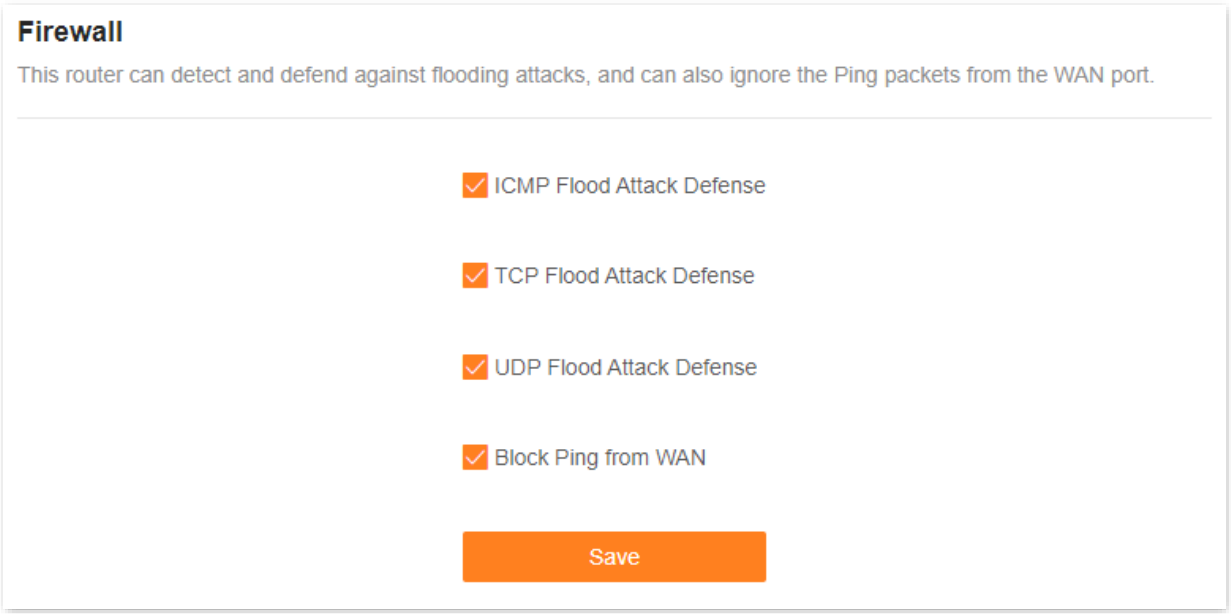
---End

After completing the configuration, you can watch IPTV programs on your TV and watch multicast videos on your computer or mobile device.

8.6 Firewall

The firewall function helps the mesh device detect and defend ICMP flood attacks, TCP flood attacks and UDP flood attacks, and ignore Ping packets from the WAN port. It is recommended to keep the default settings.

To access the configuration page, log in to the web UI of the router, and go to **More** > **Advanced** > **Firewall**.



Parameter description

Parameter	Description
ICMP Flood Attack Defense	Used to enable or disable the ICMP flood attack defense. The ICMP flood attack means that, to implement attacks on the target host, the attacker sends a large number of ICMP Echo messages to the target host, which causes the target host to spend a lot of time and resources on processing ICMP Echo messages, but cannot process normal requests or responses.
TCP Flood Attack Defense	Used to enable or disable the TCP flood attack defense. The TCP flood attack means that, to implement attacks on the target host, the attacker quickly initiates a large number of TCP connection requests in a short period, and then suspends in a semi-connected state, thereby occupying a large number of server resources until the server denies any services.
UDP Flood Attack Defense	Used to enable or disable the UDP flood attack defense. The UDP flood attack is implemented similarly with the ICMP flood attack, during which the attacker sends a large number of UDP packets to the target host, causing the target host to be busy processing these UDP packets, but unable to process normal packet requests or responses.
Block Ping from WAN	Used to enable or disable the Block Ping From WAN function. When it is enabled, the mesh device automatically ignores pings to its WAN port from internet hosts, thereby preventing exposure and blocking external ping attacks.

8.7 Create static routes

Routing is the act of choosing an optimal path to transfer data from a source address to a destination address. A static route is a special route that is manually configured and has the

advantages of simplicity, efficiency, and reliability. Proper static routing can reduce routing problems and overload of routing data flow, and improve the forwarding speed of data packets.

A static route is set by specifying the destination network, subnet mask, default gateway, and interface. The destination network and subnet mask are used to determine a destination network or host. After the static route is established, all data whose destination address is the destination network of the static route are directly forwarded to the gateway address through the static route interface.

Scenario: You have a mesh device and another two routers.

- Router1 is connected to the internet and its DHCP server is enabled.
- Router2 is connected to an intranet and its DHCP server is disabled.

Goal: You can access both the internet and intranet at the same time.

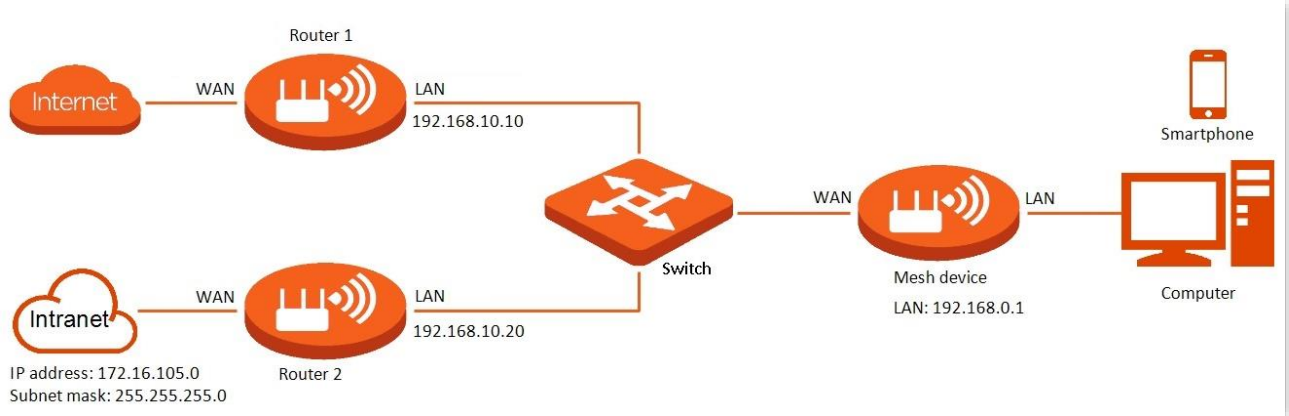
To set up static routes:

Assume the LAN IP addresses of these devices are:

- Mesh device: 192.168.0.1
- Router1: 192.168.10.10
- Router2: 192.168.10.20

Information about the intranet:

- IP address: 172.16.105.0
- Subnet mask: 255.255.255.0

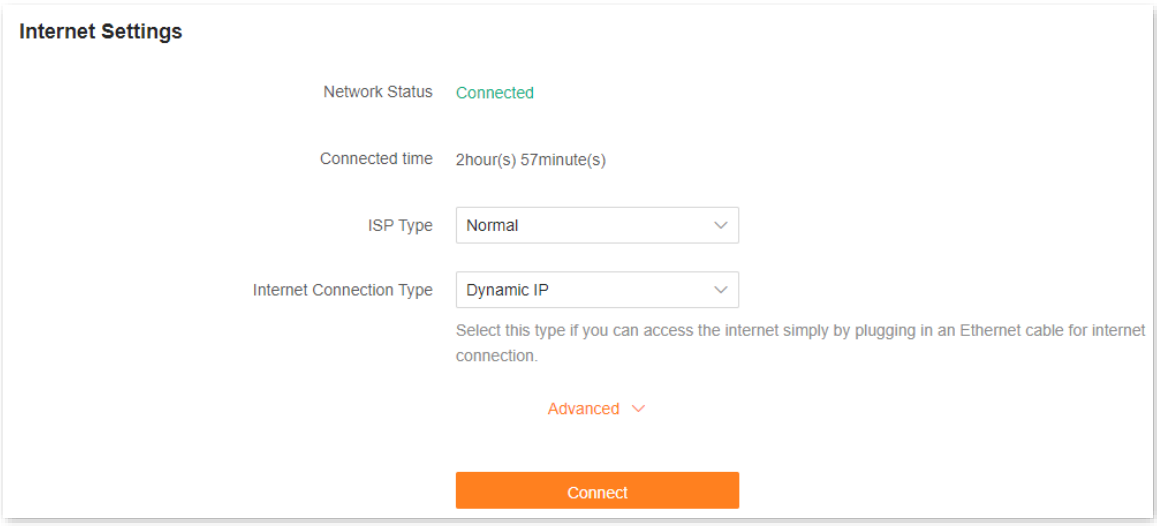


1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.

4. Go to **Internet Settings**, configure the mesh device to access internet using dynamic IP.



5. Add a static routing rule on the mesh device.

   1) Go to **More** > **Advanced** > **Static Routing**.

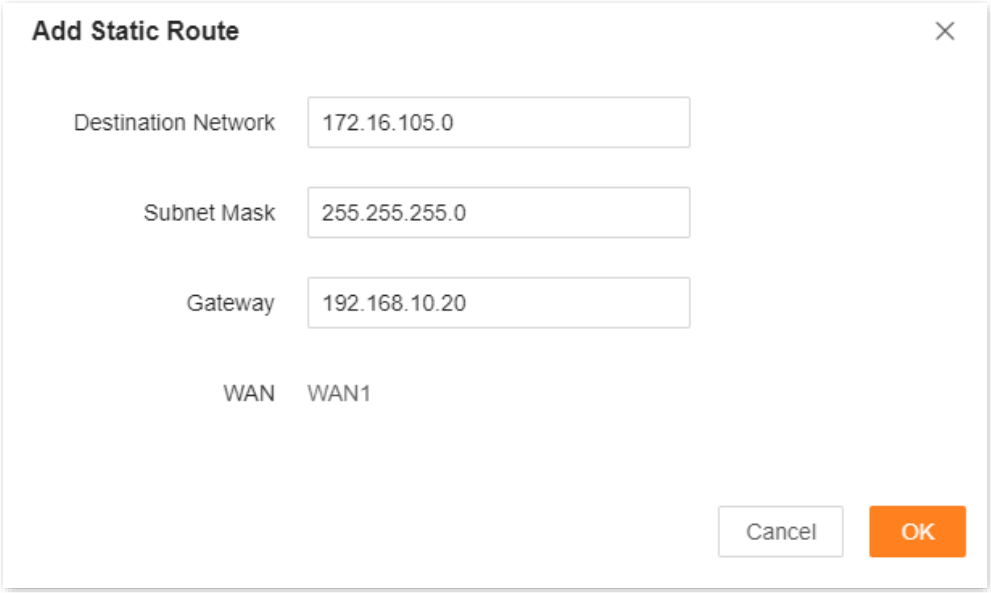
   2) Click **Add**.

   3) Enter the IP address of the destination network, which is **172.16.105.0** in this example.

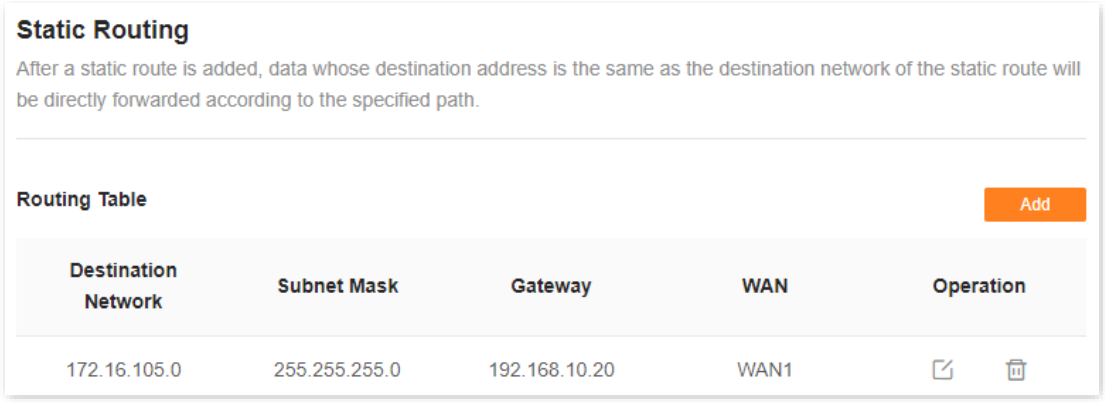
   4) Enter the subnet mask of the destination network, which is **255.255.255.0** in this example.

   5) Enter the ingress IP address of the next hop router, which is **192.168.10.20** in this example.

   6) Click **OK**.



The new static routing rule displays below **Routing Table.**



---End

After completing the configuration, you can access both the internet and intranet at the same time.

Parameter description

Parameter	Description
Destination Network	Specifies the IP address of the destination network. If **Destination Network** and **Subnet Mask** are both **0.0.0.0**, this is the default route. TIP When no route of packets can be found under **Routing Table**, the mesh device will forward the packets using the default route.
Subnet Mask	Specifies the subnet mask of the destination network.
Gateway	Specifies the ingress IP address of the next hop router after the data packet exits from the interface of the mesh device. **0.0.0.0** indicates that the destination network is directly connected to the mesh device.
WAN	Specifies the interface that the packet exits from.
Operation	The available options include: : Used to modify a static routing rule. : Used to delete a static routing rule.

8.8 Improve network connections with Universal Plug and Play

Once enabled Universal Plug and Play (UPnP), the router automatically opens port for application programs in the LAN that support UPnP, such as Xunlei, BitComet and AnyChat, providing smoother user experience.

UPnP function is enabled by default.

To enable or disable UPnP:

1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.
4. Go to **More** > **Advanced** > **UPnP**.
5. To enable UPnP, turn on **UPnP.**
6. To disable UPnP, turn off **UPnP**.

   ---End

Your settings are saved.

Parameter description

Parameter	Description
Remote Host	Specifies the address of remote host to receive and send responses.
External Port	Specifies the port set on the mesh device to map to the outer.
Internal Host	Specifies the address of inner host to receive and send responses.
Internal Port	Specifies the host port which needs to be mapped.
Protocol	Specifies the mapping protocol.

8.9 Manage Dynamic DNS (DDNS)

DDNS normally interworks with the port mapping, DMZ host and remote web management, so that internet users can be free from the influence of dynamic WAN IP address and access the internal server or the mesh device’s web UI with a fixed domain name.

To set up Dynamic DNS:

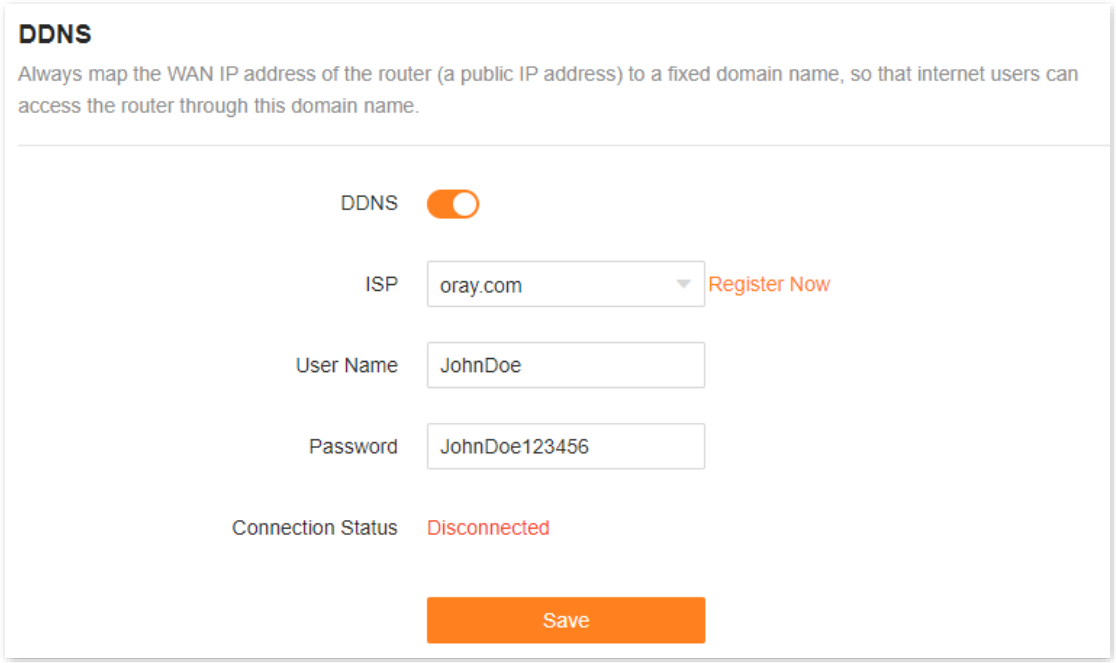
1. Launch a web browser from a computer that is connected to your NOVA network.
2. Enter **tendawifi.com**.

   A login window displays.
3. Enter the login password.

   The password is case-sensitive.

4. Go to **More** > **Advanced** > **DDNS**.
5. Turn on **DDNS**.
6. Select a DDNS service provider from **ISP** menu, which is **oray.com** in this example.

   If you don’t have a DDNS account, you have to register first by click Register Now.
7. Enter the **User Name** and **Password,** which are **JohnDoe** and **JohnDoe123456** in this example.
8. If you have selected **dyn.com** or **no-ip.com**, enter the **Domain Name**.
9. Click **Save**.



---End

Your settings are saved. Wait until **Connected** displays after **Connection Status**, which indicates that the configuration is successful.

When you access the router's web UI or router LAN resources from the internet, you can change the WAN IP address of the router in the access address to your DDNS domain name.

8.10 Set up a DMZ host

A DMZ host on a LAN is free from restrictions in communicating with the internet. It is useful for getting better and smoother experiences in video conferences and online games. You can also set the host of a server within the LAN as a DMZ host when in need of accessing the server from the internet.

NOTE

- A DMZ host is not protected by the firewall of the mesh device. A hacker may leverage the DMZ host to attack your LAN. Therefore, enable the DMZ function only when necessary.
- Hackers may leverage the DMZ host to attack the local network. Do not use the DMZ host function randomly.
- Security software, antivirus software, and the built-in OS firewall of the computer may cause DMZ function failures. Disable them when using the DMZ function. If the DMZ function is not required, you are recommended to disable it and enable your firewall, security, and antivirus software.

To set up a DMZ host:

Assume that you want to make your computer (IP address: 192.168.0.100) join the internet online game without port restriction.

1. Find the local IP address of the computer.

   The computer must always use the same IP address. To specify this setting, use the reserved IP address feature. See Manage reserved LAN IP addresses.

2. Launch a web browser from a computer that is connected to your NOVA network.
3. Enter **tendawifi.com**.

   A login window displays.

4. Enter the login password.

   The password is case-sensitive.

5. Go to **More** > **Advanced** > **DMZ Host**.
6. Turn on **DMZ Host**.
7. In the DMZ Host IP address filed, enter the computer's IP address, which is 192.168.0.100 in this example.
8. Click **Save**.

   ---End

Your settings are saved.

8.11 Port mapping

Port mapping creates a static mapping of a port or range of ports to a single local computer. With Port Mapping, you can access your LAN resources, such as resources on a web server or an FTP server, from the internet.

8.11.1 Set up port mapping to a local server

To forward specific incoming protocols to a local server:

1. Decide which type of service, application, or game you want to provide.
2. Find the local IP address of the computer on your network that will provide the service.

   The server computer must always use the same IP address. To specify this setting, use the reserved IP address feature. See Manage reserved LAN IP addresses.
3. Launch a web browser from a computer that is connected to your NOVA network.
4. Enter **tendawifi.com**.

   A login window displays.
5. Enter the login password.

   The password is case-sensitive.
6. Go to **More** > **Advanced** > **Port Mapping**.
7. Click **Add**.
8. Specify the local server computer by one of following methods:
   - Select a device from Select Device menu.
   - Select Manual from Select Device menu, and then enter the IP address of the local server in the Internal IP Address field.
9. Specify the Internal Port by one of following methods:
   - Select a port number from Internal Port menu.
   - Select Custom from Internal Port menu, and then enter the service port number of the local server.
10. In the External Port filed, enter the port numbers.
11. In the **Protocol** menu, select the protocol.

    If you are unsure, select **TCP/UDP**.
12. Click **OK**.

    ---End

Your settings are saved. The service is now in the table on the Port Mapping page.

8.11.2 Example: Make a local FTP server public

Scenario: You have set up an FTP server on the local network.

Goal: Open the FTP server to internet users and enable family members to access the resources of the FTP server when they are not at home.

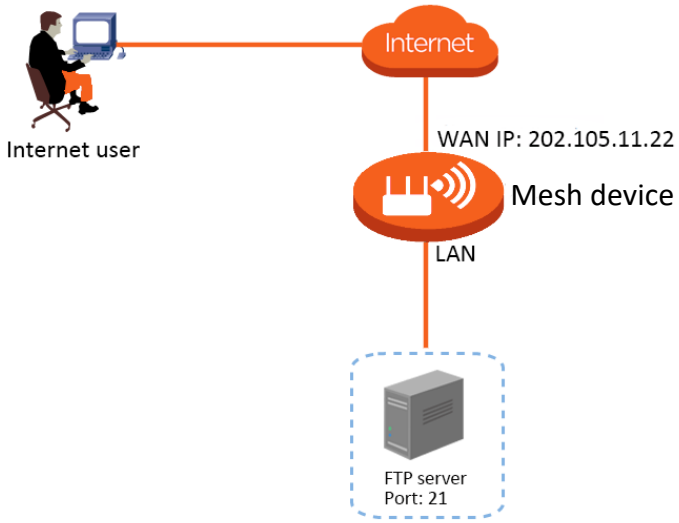
To make a local FTP server public:

Before the configuration, ensure that the mesh device obtains a public IP address. Otherwise, Port Mapping will not work properly. Common IPv4 addresses are categorized into Class A, Class B and Class C. Private IP addresses of Class A range from 10.0.0.0 to 10.255.255.255. Private IP addresses of Class B range from 172.16.0.0 to 172.31.255.255. Private IP addresses of Class C range from 192.168.0.0 to 192.168.255.255.

Assume that:

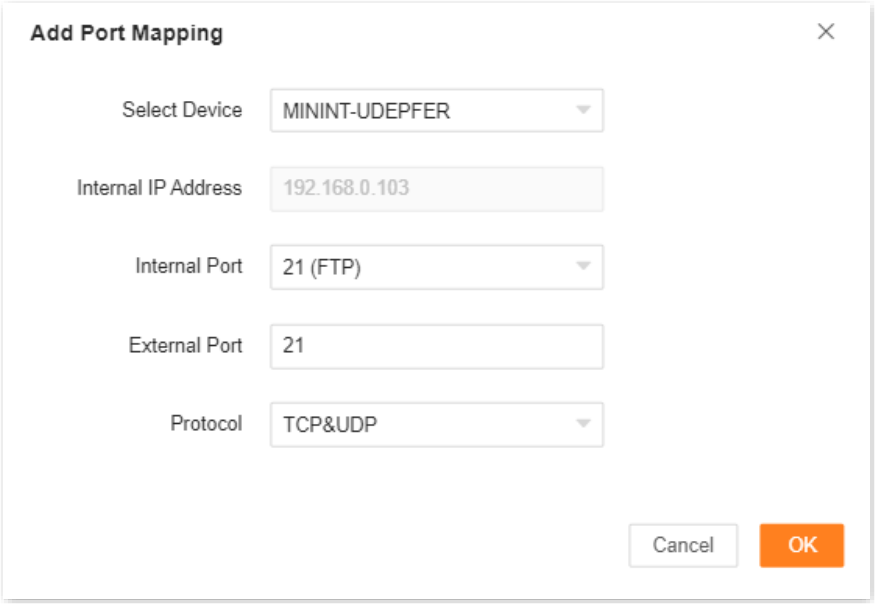
WAN IP address of the mesh device: 202.105.11.22

Service port of the FTP server: 21



1. Assign your FTP server either a fixed IP address or a dynamic IP address using DHCP address reservation.

   In this example, your router always gives your FTP server an IP address of 192.168.0.103.
2. Go to **More** > **Advanced** > **Port Mapping**.
3. Click **Add**.
4. Select your computer for **Select Device**, **21 (FTP)** for **Internal Port**, and **TCP&UDP** for **Protocol**.
5. Click **OK**.



---End

Your settings are saved. internet users can visit "**Protocol name://WAN IP address of the mesh device**" to access LAN resources on the server. If the default internal port is not used, internet users need to visit "**Protocol name://WAN IP address of the mesh device: External port**" to access the resources on the server.

If the DDNS function is enabled, the LAN resources on the server can also be accessed through "**Protocol name://*Domain name* of the mesh device: External port**".

The address in this example is **ftp://202.105.11.22**. You can find the WAN port IP address of the mesh device on the Router Info page.

8.11.3 Tips

If you cannot access the server after the setting completes, try the following solutions:

- Ensure that the WAN IP address of the mesh device is a public IP address, and the internal port you entered is correct.
- Security software, antivirus software, and the built-in OS firewall of the server may cause port mapping function failures. Disable them when using this function.
- Manually set an IP address for the server to avoid the service disconnection caused by the dynamic IP address.

8.12 Manage TWT

With the Target Wakeup Time (TWT) function is enabled, the router will automatically optimize the resource scheduling between devices and negotiate the wake-up time, so that clients such as a smartphone can reduce power consumption and improve device battery life when they do not need to communicate with the router.

To access the configuration page, follow the methods below.

- **Via web browser:**

log in to the web UI of the router from a computer, then go to **More** > **Smart Power Saving** > **TWT**.

- **Via Tenda WiFi App:**

1. Run the **Tenda WiFi** App, then tap your router on **Homepage**.
2. Tap **More Functions** next to **Common Functions**, then tap **Smart Power Saving** (below Common Functions), then tap **TWT**.

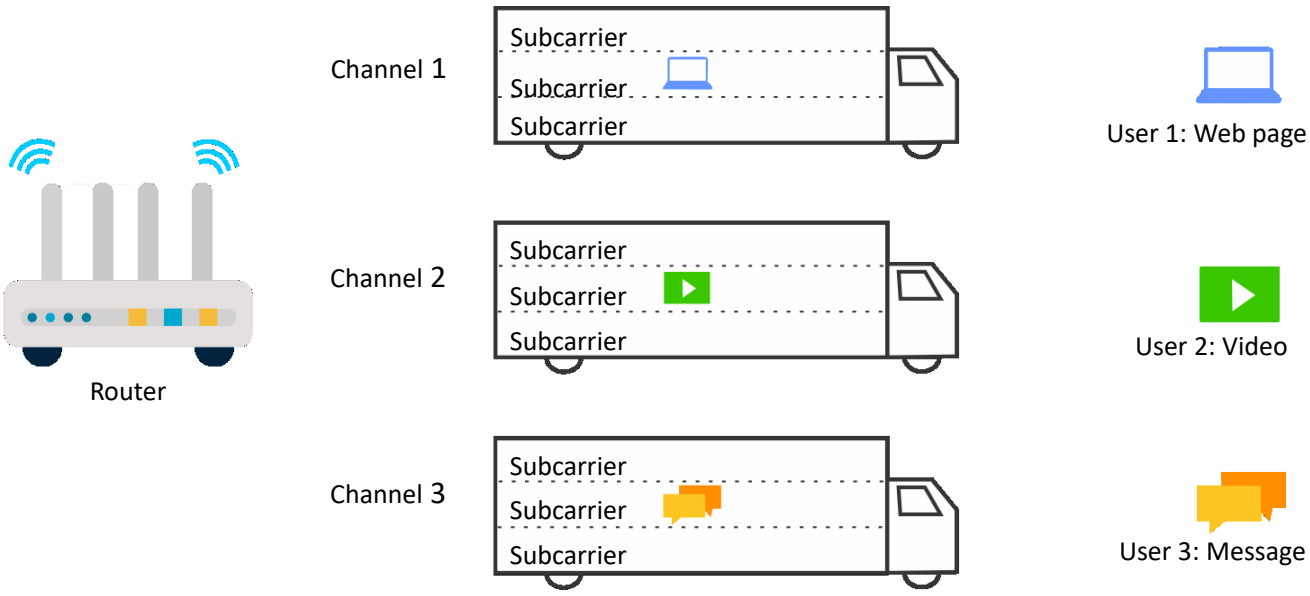
---End

8.13 Manage OFDMA

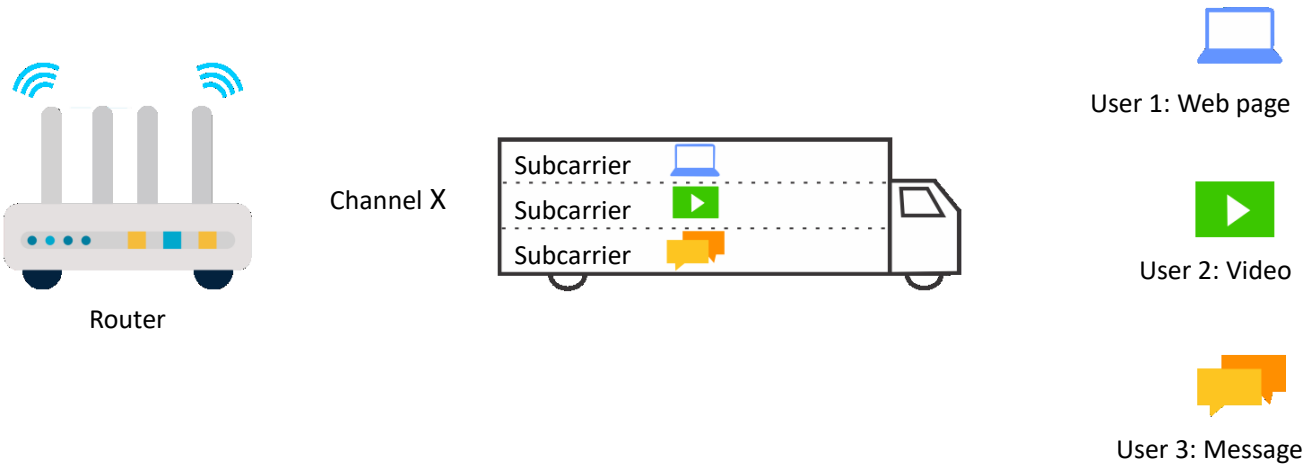
In telecommunications, Orthogonal Frequency-division Multiplexing (OFDM) is a type of digital transmission and a method of encoding digital data on multiple carrier frequencies. OFDM divides a channel into subcarriers, but only a single user can transmit on all of the sub-carriers at any given time.

Orthogonal Frequency-division Multiple Access (OFDMA) is a multi-user version of the popular OFDM digital modulation scheme. It also divides a channel into subcarriers which is further divided into subsets, called Resource Units (RUs). These RUs can be assigned to multiple users, therefore allowing simultaneous low-data-rate transmission from several users.

- **OFDM data transmission mode:**



- **OFDMA data transmission mode:**



To access the configuration page: log in to the web UI of the router from a computer, then go to **More** > **WiFi Settings** > **OFDMA**.

9 FAQ

9.1 Failed to access the web UI

Use the following method to troubleshoot the fault, and then try again.

- **If you are using a wireless device, such as a smartphone:**
  - Ensure that it is connected to the Wi-Fi network of the node.
  - Ensure that the cellular network (mobile data) of the device is disabled.
  - Use another smartphone or tablet to log in to the web UI.
- **If you are using a wired device, such as a computer:**
  - Ensure that the Ethernet cable between your computer and the node (before mesh networking, connect to the primary node; after mesh networking, connect to any node) is connected properly.
  - Ensure that your computer is set to **Obtain an IP address automatically**.
  - Ensure that the login address (**tendawifi.com**, or **192.168.0.1** by default) you entered is correct.
  - Clear cache of your browser, or use another browser.
  - Use another computer to log in to the web UI.

Hold down the reset button (RESET) for about 8 seconds to restore the mesh device to factory settings.

9.2 Internet detection failed upon the first setup

Use the following method to troubleshoot the fault, and then try again.

- Ensure that the Ethernet cable for internet connection is connected to the primary node.
- Ensure that the Ethernet cable is not damaged and well-connected, and the modem is powered on.
- If the problem persists, please contact your ISP.

9.3 Failed to find or connect my wireless network

Use the following method to troubleshoot the fault.

- If you cannot find any wireless network:
  - Check that the wireless function is enabled when you are using a laptop with a built-in wireless adapter.
  - Check that the wireless adapter is installed properly and enabled successfully.
- If you can find other wireless networks except yours, ensure that your device is in the Wi-Fi network coverage range of your mesh devices.

9.4 Forgot my password

Use the following method to troubleshoot the fault.

log in to the web UI, and go to Wi-Fi settings to find the Wi-Fi password.

If you also forgot the web UI login password, reset the primary node by holding down the reset (RESET) button with a needle-like item (such as a pin) for about 8 seconds, and perform settings again.

Appendixes

A.1 Factory settings

Parameter		Default value
Login	IP address	192.168.0.1
	Password	No login password by default
LAN parameters	IP address	192.168.0.1
	Subnet mask	255.255.255.0
DHCP server	DHCP server	Enabled
	Start IP address	192.168.0.100
	End IP address	192.168.0.254
Operating mode		Router mode
Wireless settings	Wi-Fi name	See the label on the bottom of the mesh device
	Wi-Fi password	No password by default
IPv6		Disabled
Unify 2.4 GHz & 5 GHz		Enabled
Guest Wi-Fi		Disabled
MESH button		Enabled
VPN		Disabled
IPTV		Disabled
MAC address filter		Disabled
DMZ host		Disabled
Remote web management		Disabled
DDNS		Disabled

Parameter	Default value
UPnP	Enabled
Time sync mode	Sync with internet time
DST	Disabled
Auto system maintenance	Disabled

A.2 Acronyms and abbreviations

Acronym or Abbreviation	Full Spelling
AES	Advanced Encryption Standard
AP	Access point
DDNS	Dynamic Domain Name System
DHCP	Dynamic Host Configuration Protocol
DHCPv6	Dynamic Host Configuration Protocol for IPv6
DMZ	Demilitarized zone
DNS	Domain Name System
DSL	Digital subscriber line
DST	Daylight Saving Time
FTP	File Transfer Protocol
ICMP	Internet Control Message Protocol
IEEE	Institute of Electrical and Electronics Engineers
IP	Internet Protocol
IPTV	Internet Protocol television
IPv4	Internet Protocol version 4
IPv6	Internet Protocol version 6
ISP	Internet service provider
L2TP	Layer 2 Tunneling Protocol
LAN	Local area network

Acronym or Abbreviation	Full Spelling
LED	Light-emitting diode
MAC	Medium access control
MLO	Multi-Link Operation
MPPE	Microsoft Point-to-Point Encryption
MTU	Maximum Transmission Unit
OFDMA	Orthogonal Frequency-division Multiple Access
PPPoE	Point-to-Point Protocol over Ethernet
PPTP	Point to Point Tunneling Protocol
RA	Router Advertisement
SSID	Service Set Identifier
STB	Set-top box
TCP	Transmission Control Protocol
TWT	Target Wakeup Time
UDP	User Datagram Protocol
UI	User interface
UPnP	Universal Plug and Play
URL	Uniform Resource Locator
USB	Universal Serial Bus
VLAN	Virtual local area network
VPN	Virtual private network
WAN	Wide area network
WLAN	Wireless local area network
WPA	Wi-Fi Protected Access
WPA-PSK	WPA Pre-shared Key
WPA3-SAE	WPA3-Simultaneous Authentication of Equals
WPS	Wi-Fi Protected Setup

A.3 Test whether IPv6 network is accessible

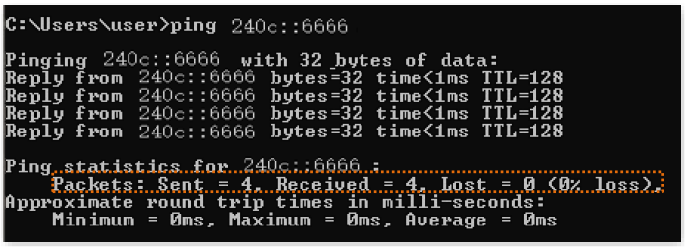
You can ping an IPv6 website (**240c::6666** for example) to check whether the mesh device accesses the IPv6 network successfully. The following steps are for your reference.

- **Computer:**

1. On a computer connected to the mesh device, press **Windows** + **R** to open the **Run** dialog box.
2. Type **cmd** and then click **OK** to open a regular Command Prompt.
3. Type **ping 240c::6666**, then press **Enter**.

---End

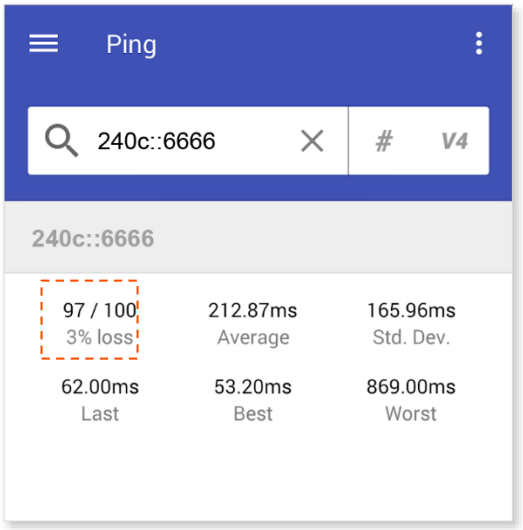
As shown in the following figure, if the number of packets received is not 0, the mesh device accesses the IPv6 network successfully.



- **Smartphone/Tablet:**

You can download a network diagnosis App (**HE.NET Network Tools** for example here) on your device and ping an IPv6 website (**240c::6666** for example) to check whether the mesh device accesses the IPv6 network successfully.

As shown in the following figure, if the number of packets received is not 0, the mesh device accesses the IPv6 network successfully.



If the IPv6 network fails, try the following solutions:

- Ensure that devices connected to the mesh device obtain their IPv6 address through DHCP.
- Consult your ISP for help.

A.4 Connect to a hidden Wi-Fi

When a device connects to Hidden Wi-Fi for the first time, you need to enter the Wi-Fi name, security, and Wi-Fi password of the Hidden Wi-Fi on the device.

To connect to the hidden Wi-Fi on your device (Example: iPhone):

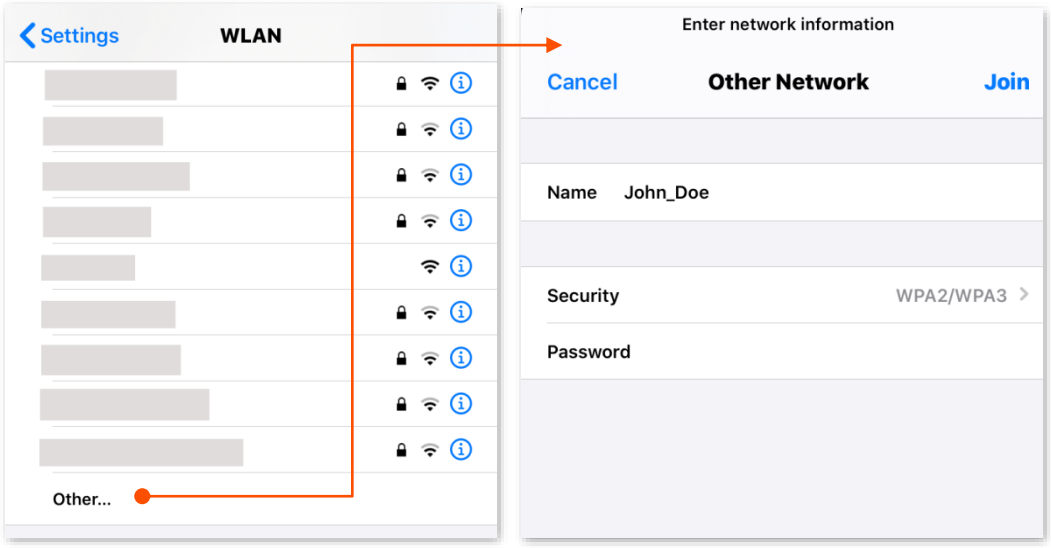
Assume that the **Unify 2.4 GHz & 5 GHz** function is enabled and the Wi-Fi parameters are:

- Wi-Fi name: John_Doe
- Encryption type: WPA/WPA2-PSK (recommended)
- Wi-Fi password: Tenda+Wireless245

TIP

If you do not remember the wireless parameters of the Wi-Fi network, log in to the web UI of the router and go to **WiFi Settings** to find them.

1. Go to **Settings** > **WLAN**.
2. Turn on **WLAN**.
3. Scroll the Wi-Fi list to the bottom, and tap **Other…**.
4. Enter the Wi-Fi name and password, which are **John_Doe** and **Tenda+Wireless245** in this example.
5. Set **Security** to **WPA2/WPA3** (If WPA2/WPA3 is not available, choose WPA2).
6. Tap **Join**.



---End

Wait for a while, and the phone successfully connects to the router's Wi-Fi **John_Doe**.