



AC1200 Dual-band Router

User Guide

Copyright Statement

© 2020 Shenzhen Tenda Technology Co., Ltd. All rights reserved.

Tenda is a registered trademark legally held by Shenzhen Tenda Technology Co., Ltd. Other brand and product names mentioned herein are trademarks or registered trademarks of their respective holders. Copyright of the whole product as integration, including its accessories and software, belongs to Shenzhen Tenda Technology Co., Ltd. No part of this publication can be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means without the prior written permission of Shenzhen Tenda Technology Co., Ltd.

Disclaimer

Pictures, images and product specifications herein are for references only. To improve internal design, operational function, and/or reliability, Tenda reserves the right to make changes to the products without obligation to notify any person or organization of such revisions or changes. Tenda does not assume any liability that may occur due to the use or application of the product described herein. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information and recommendations in this document do not constitute the warranty of any kind, express or implied.

Preface

Thank you for choosing Tenda! Please read this user guide before you start.

Conventions

This user guide is applicable to the following routers. AC11 is used for illustration in this guide unless specified. The contained images and UI screenshots are subject to the actual products.

Product model	Description
AC11	AC1200 Dual Band Gigabit WiFi Router
AC10	AC1200 MU-MIMO Dual Band Gigabit WiFi Router
AC8	AC1200 Dual-band Gigabit Wireless Router
AC7	AC1200 Smart Dual-Band WiFi Router
AC6	AC1200 Smart Dual-band WiFi Router
AC5	AC1200 Smart Dual-band WiFi Router

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

Item	Presentation	Example
Cascading Menus	>	Click Status > Device Status
Parameter and value	Bold	Set User Name to Tom .
UI control	Bold	On the Policy page, click the OK button.
Variable	<i>Italic</i>	Format: <i>XX:XX:XX:XX:XX:XX</i>
Message	“ ”	The “Success” message appears.

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

Item	Meaning
 NOTE	This format is used to highlight information of importance or special interest. Ignoring this type of note may result in ineffective configurations, loss of data or damage to device.
 TIP	This format is used to highlight a procedure that will save time or resources.

For more documents

If you want to get more documents of the device, visit www.tendacn.com and search for the corresponding product model.

The related documents are listed as below.

Document	Description
Quick Installation Guide	It introduces how to set up the device quickly for internet access, the descriptions of LED indicators, ports, and buttons, FAQ, statement information, and so on.
User Guide	It introduces how to set up more functions of the device for more requirements, including all functions on the web UI of the device.
App User Guide	It introduces how to use the Tenda WiFi App to configure and manage the router.
Data Sheet	It introduces the basic information of the device, including product overview, features, and specifications.

Technical Support

If you need more help, contact us by any of the following means. We will be glad to assist you as soon as possible.



Hotline

Global: (86) 755-27657180

(China Time Zone)

United States: 1-800-570-5892

(Toll Free: 7 x 24 hours)

Canada: 1-888-998-8966

(Toll Free: Mon - Fri 9 am - 6 pm PST)

Hong Kong: 00852-81931998



Email

support@tenda.com.cn



Website

www.tendacn.com

Contents

1	Get to know your device	1
	1.1 Overview	1
	1.2 Appearance	1
	1.2.1 AC5 & AC8	1
	1.2.2 AC7 & AC11	3
	1.2.3 AC6 & AC10	5
	1.3 Label	7
2	Web UI.....	8
	2.1 Log in to the web UI	8
	2.2 Log out of the web UI.....	9
	2.3 Web UI layout.....	10
	2.4 Common element	11
3	Status.....	12
	3.1 View internet connection status	12
	3.2 View online device information	15
	3.3 View system information	16
4	Internet settings.....	17
	4.1 Overview	17
	4.2 Serve as a router	18
	4.2.1 Set up a PPPoE connection	18
	4.2.2 Set up a dynamic IP connection	20
	4.2.3 Set up a static IP connection	21
	4.3 Serve as a WiFi extender	23
	Method 1: Set the router to WISP mode	23
	Method 2: Set the router to universal repeater mode	27
	4.4 Serve as an AP	30
5	Wireless settings	34
	5.1 WiFi name and password	34
	5.1.1 Overview	34
	5.1.2 Separate the 2.4 GHz WiFi name from 5 GHz Wi-Fi name.....	35
	5.1.3 Change the WiFi name and WiFi password	36

5.1.4	Hide the WiFi network	37
5.1.5	Connect to a hidden WiFi network	38
5.2	Guest network.....	40
5.2.1	Overview	40
5.2.2	Set up the guest network.....	41
5.3	WiFi signal strength.....	42
5.4	Wireless parameters	43
5.5	Beamforming.....	45
5.6	WPS	46
5.6.1	Connect to the WiFi network using the WPS button.....	46
5.6.2	Connect to the WiFi network using the PBC button	47
5.6.3	Connect to the WiFi network using the PIN code.....	49
6	Bandwidth control.....	51
6.1	Overview	51
6.2	Set the upload and download speed limit	53
6.3	Add devices to the blacklist.....	54
6.4	Remove devices from the blacklist	55
7	Parental controls	56
7.1	Overview	56
7.2	An example of configuring parental controls.....	57
8	Sleeping mode.....	59
8.1	LED control	59
8.2	WiFi schedule	60
9	Advanced.....	61
9.1	MAC address filter.....	61
9.1.1	Overview	61
9.1.2	Only allow specified devices to access the internet	61
9.2	IPTV	63
9.2.1	Overview	63
9.2.2	Watch IPTV programs through the router	63
9.3	IP-MAC binding.....	65
9.3.1	Overview	65
9.3.2	Assign fixed IP addresses to LAN clients	65
9.4	Port forwarding	67
9.4.1	Overview	67

9.4.2	Enable internet users to access LAN resources using an IP address.....	67
9.5	DDNS	72
9.5.1	Overview	72
9.5.2	Enable internet users to access LAN resources using a domain name	73
9.6	DMZ host.....	76
9.6.1	Overview	76
9.6.2	Enable internet users to access LAN resources using an IP address.....	76
9.7	UPnP	80
9.8	Firewall	81
10	IPv6.....	82
10.1	Connect to the IPv6 network of ISPs.....	82
10.1.1	PPPoEv6.....	82
10.1.2	DHCPv6.....	85
10.1.3	Static IPv6.....	86
10.2	IPv6 LAN setup	90
10.3	IPv6 status	92
11	Administration.....	93
11.1	Login password.....	93
11.2	WAN parameters	94
11.2.1	Change the server name and service name.....	94
11.2.2	Change the MTU value.....	94
11.2.3	Clone WAN MAC Address.....	95
11.2.4	Change the WAN Speed	96
11.3	LAN parameters.....	98
11.4	Remote web-based management.....	99
11.4.1	Overview	99
11.4.2	Enable Tenda techical support to access the web UI.....	100
11.5	Date & Time	101
11.6	Device management	102
11.6.1	Reboot the router	102
11.6.2	Reset the router	102
11.6.3	Backup/Restore configuration	104
11.6.4	Export system log	105
11.6.5	Upgrade firmware	106
11.6.6	Automatic maintenance.....	108

Appendix	109
A.1 Configuring the computer to obtain an IPv4 address automatically.....	109
A.1.1 Windows 10	109
A.1.2 Windows 8	112
A.1.3 Windows 7	114
A.2 Default parameters	116
A.3 Acronyms and abbreviations	117

1

Get to know your device

1.1 Overview

The dual-band WiFi router works at both 2.4 GHz and 5 GHz and supports the 802.11ac Wave2 technology, realizing a dual-band concurrent wireless rate of 1167 Mbps. It supports PPPoE user name and password migration for instant internet access, and IPv6 for smoother internet experience without network address translation (NAT).



The wireless rate is illustrated with AC11 as an example. The highest wireless rate differs with product models.

1.2 Appearance

1.2.1 AC5 & AC8

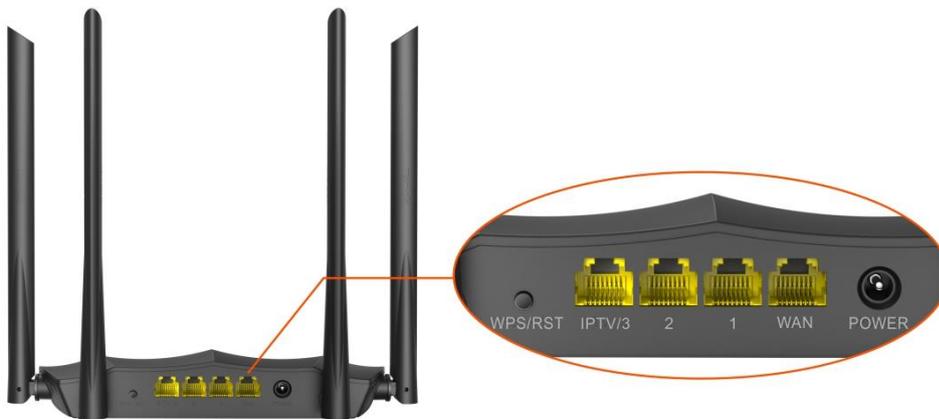
The Ethernet ports of AC5 are fast Ethernet ports, and those of AC8 are gigabit ports. Both products are similar in appearance. AC8 is used for illustration here.

LED indicator



LED indicator	Status	Description
LED indicator	Solid on	The router is starting or connected to the internet successfully.
	Slow blinking	The router fails to connect to the internet.
	Fast blinking for 3 seconds	A wired device is connected to or disconnected from the router.
	Fast blinking for 8 seconds	The migration of PPPoE user name and password succeeds after you connect the WAN port of the original router to one of the LAN ports of the new router.
	Fast blinking for 2 minutes	The router is performing WPS negotiation.

Port & button



Port/Button	Description
POWER	Power jack. Used to connect to the included power adapter.
WAN	10/100/1000 Mbps auto-negotiation WAN port. Used to connect this router to the internet. You can connect this port to the LAN port from the modem or the Ethernet jack at home.
1, 2	10/100/1000 Mbps auto-negotiation LAN ports. Used to connect to wired devices such as computers or switches.
IPTV/3	10/100/1000 Mbps auto-negotiation Ethernet port. By default, it is a LAN port. If the IPTV function of the router is enabled, it serves only as an IPTV port used to connect to a set-top box.
WPS/RST	Used to start the WPS negotiation, or to reset the router. <ul style="list-style-type: none"> • WPS: Press the button for 1 to 3 seconds. Within 2 minutes, enable the WPS function of the other WPS-supported device to establish a WPS connection. • Reset: Hold down the button for about 8 seconds, and then release it when the LED indicator blinks fast. When the LED indicator lights solid on again, the router is reset successfully.

1.2.2 AC7 & AC11

The Ethernet ports of AC7 are fast Ethernet ports, and those of AC11 are gigabit ports. Both products are similar in appearance. AC7 is used for illustration here.

LED indicator



LED indicator	Status	Description
SYS System LED indicator	Solid on	<ul style="list-style-type: none"> The router is starting. If the indicator still lights solid on during normal use, the system is faulty.
	Blinking	The system is working properly.
	Off	The system is faulty, or the router is not powered on properly.
WiFi WiFi & WPS LED indicator	Solid on	At least one of the 2.4 GHz and 5 GHz WiFi networks is enabled.
	Fast blinking	Data is being transmitted wirelessly.
	Slow blinking	The router is performing WPS negotiation.
WAN WAN port LED indicator	Off	The WiFi network of the router is disabled.
	Solid on	The WAN port is connected properly, but no data is being transmitted over the WAN port.
	Blinking	The WAN port is connected properly, and data is being transmitted over the WAN port.
LAN LAN port LED indicator	Off	The WAN port is disconnected or improperly connected.
	Solid on	At least one LAN port is connected properly.
	Blinking	A new wired device is connected to a LAN port properly.
	Off	No device is connected to any LAN port of the router properly.

Port & button



Port/Button	Description
POWER	Power jack. Used to connect to the included power adapter.
WIFI	WiFi button. Used to enable/disable the WiFi network of the router.
RST/WPS	Used to start the WPS negotiation process, or to reset the router. <ul style="list-style-type: none"> • WPS: Press the button of the router for 1 to 3 seconds. Within 2 minutes, enable the WPS function of the other WPS-supported device to establish a WPS connection. • Reset: Hold down the button for about 8 seconds. Release it when all the LED indicators blink once. The router is reset successfully.
WAN	10/100 Mbps auto-negotiation WAN port. Used to connect this router to the internet, such as a LAN port from the modem or the Ethernet jack provided by your ISP.
1, 2	10/100 Mbps auto-negotiation LAN ports. Used to connect to the wired devices such as computers or switches.
3/IPTV	10/100 Mbps auto-negotiation Ethernet port. By default, it is a LAN port. If the IPTV function of the router is enabled, it serves only as an IPTV port used to connect to a set-top box.

1.2.3 AC6 & AC10

The Ethernet ports of AC6 are fast Ethernet ports, and those of AC10 are gigabit ports. Both products are similar in appearance. AC10 is used for illustration here.

LED indicator



LED indicator		Status	Description
SYS	System LED indicator	Solid on	The system is starting up, or does not work properly (during use).
		Blinking	The system is working properly.
		Off	The system is faulty, or the router is not powered on properly.
WAN	WAN port LED indicator	Solid on	The WAN port is connected properly, but no data is being transmitted over the WAN port.
		Blinking	The WAN port is connected properly, and data is being transmitted over the WAN port.
		Off	The WAN port is disconnected or improperly connected.
LAN	LAN port LED indicator	Solid on	At least one LAN port (port 1, 2 or 3/IPTV) is connected properly.
		Blinking twice	A new wired device is connected to the router.
		Off	No wired device is connected to any LAN port of the router, or the wired device is not connected properly.
WiFi	WiFi & WPS LED indicator	Solid on	At least the 2.4 GHz or 5 GHz WiFi network is enabled.
		Fast blinking	Data is being transmitted wirelessly.
		Slow blinking	The router is performing WPS negotiation.
		Off	The WiFi network is disabled.

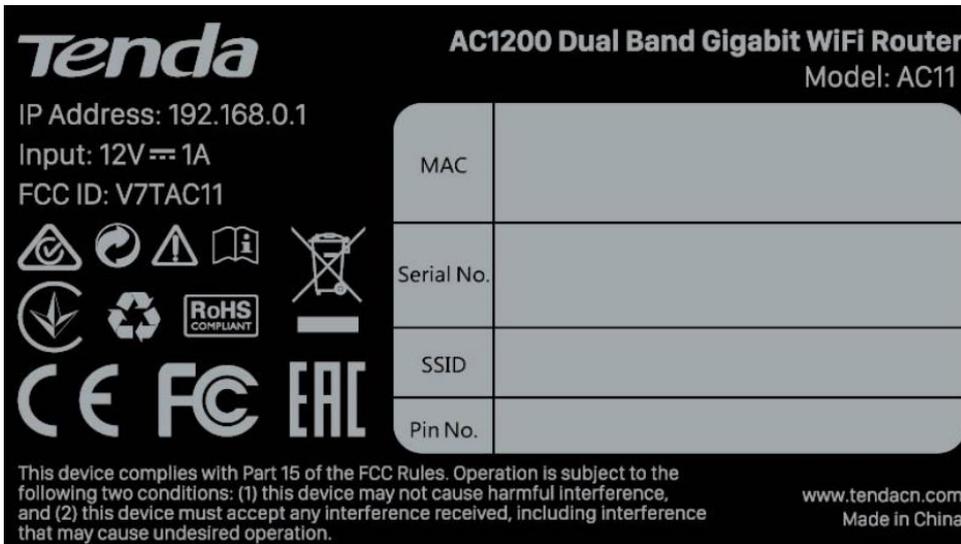
Port & Button



Port/Button	Description
POWER	Power jack. Used to connect to the included power adapter.
WAN	10/100/1000 Mbps auto-negotiation WAN port. <ul style="list-style-type: none"> • (Default) Under the Router mode, connect this port to a modem or an Ethernet jack. • Under the WISP or Universal Repeater mode, DO NOT connect any device to this port. • Under the AP mode, it functions as a LAN port.
1, 2	10/100/1000 Mbps auto-negotiation LAN ports. Used to be connected to computers, switches or game machines.
IPTV/3	10/100/1000 Mbps auto-negotiation Ethernet port. It is a LAN port by default. When the IPTV function is enabled, it can only serve as an IPTV port to be connected to a set top box.
WPS/RST	Used to start the WPS negotiation process, or to reset the router. <ul style="list-style-type: none"> • WPS: Press the button, and the WiFi LED indicator blinks slowly. Within 2 minutes, enable the WPS function of the other WPS-supported device to establish a WPS connection. • Reset: When the SYS LED indicator blinks, hold the button down for about 8 seconds, and then release it when all the LED indicators light up. The router is restored to factory settings.

1.3 Label

The bottom label shows the login IP address, MAC address, serial number, SSID and PIN number of the router. See the following figure. Here AC11 is used for illustration.



IP Address: It is the default address used to log in to the web UI of the router.

MAC: It specifies the MAC address of the router.

Serial No.: It is required if you need technical assistance.

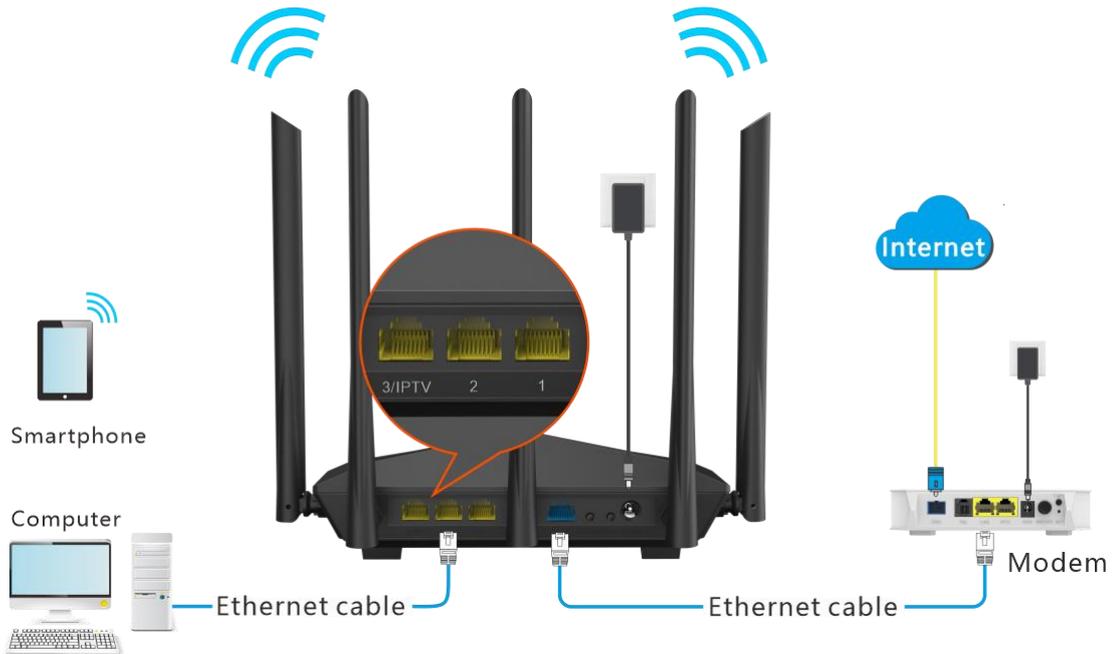
SSID: It specifies the default WiFi name of the router.

Pin No.: It specifies the PIN code of the router.

2 Web UI

2.1 Log in to the web UI

Step 1 Connect your smartphone to the WiFi network of the router, or connect your computer to a LAN port.



Step 2 Start a web browser on the device connected to the router, and visit **tendawifi.com**.



---End

The following page appears.

The screenshot displays the Tenda WiFi APP web interface. The top navigation bar includes the Tenda logo, 'Tenda WiFi APP', 'English', and 'Logout'. A left sidebar contains menu items: Status, Internet Settings, Wireless Settings, Bandwidth Control, Parental Controls, Sleeping Mode, Advanced, IPv6, and Administration. The main content area is divided into three sections:

- Internet Connection Status:** Shows 'Internet' as 'Connected' with a globe icon, 'My Router' with a router icon, and 'Devices' with a laptop and smartphone icon. A message states: 'Connected. You can access the internet.'
- Online Devices and Real-Time Speed:** Displays '1' Online Devices, '0.0 KB/s' Download Speed, and '0.0 KB/s' Upload Speed.
- System Information:** A table with the following data:

Connection Type	Dynamic IP Address	WAN IP Address	192.168.20.149
Connection Duration	1h 35m 53s	Subnet Mask	255.255.255.0
WAN MAC Address	C8:3A:35:17:F0:40	Default Gateway	192.168.20.100



TIP

If the above page doesn't appear, try the following solutions:

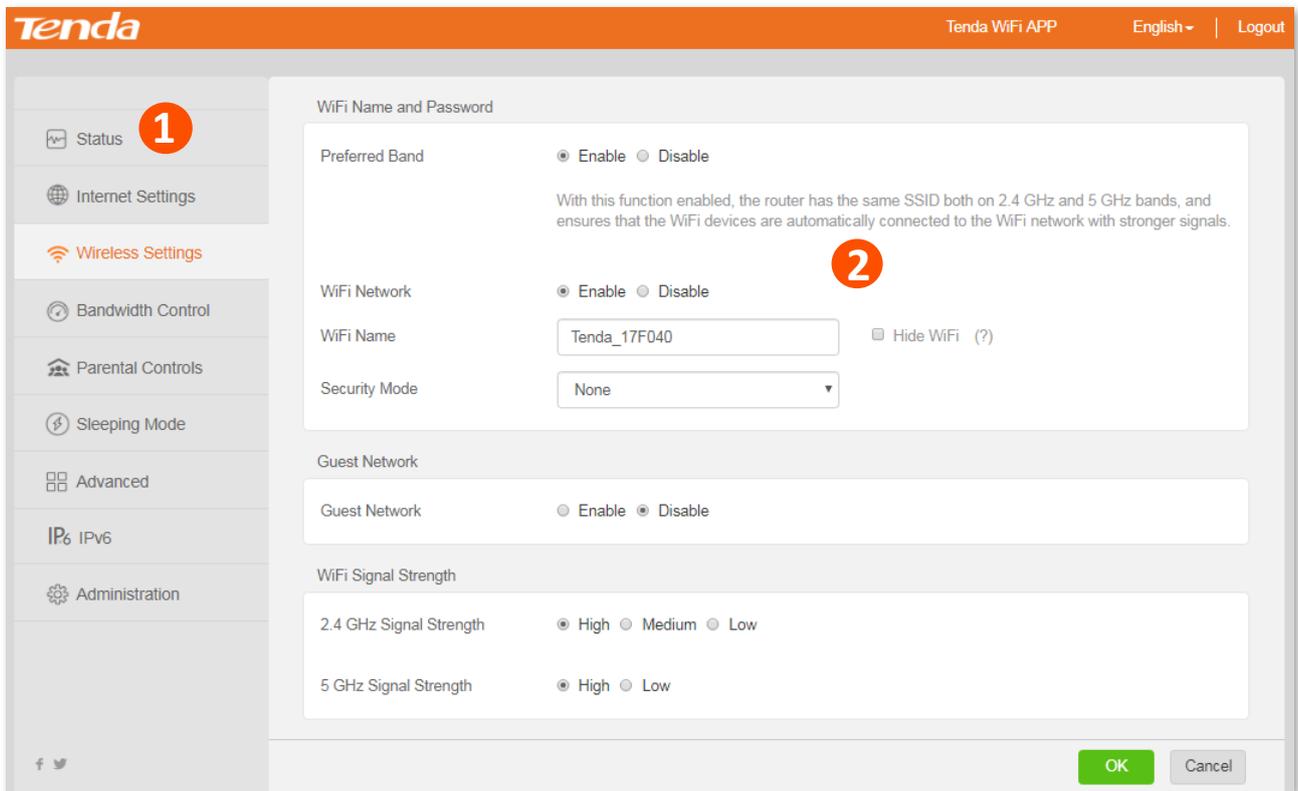
- Ensure that the router is powered on properly.
- If you are using a computer to access the page, check whether the computer obtains an IP address automatically. Refer to [A.1 Configuring the computer to obtain an IPv4 address automatically](#).
- If you are using a smartphone to access the page, ensure that your cellular network is disabled.
- [Reset the router](#) and log in to the web UI of the router.

2.2 Log out of the web UI

If you log in to the web UI of the router and perform no operation within 5 minutes, the router logs you out automatically. You can also log out by clicking **Logout** on the upper right corner of the web UI.

2.3 Web UI layout

The web UI of the router consists of two parts, including the navigation bar and the configuration area. See the following figure.



The functions and parameters shown in gray indicate that the functions are not supported or cannot be modified.

SN	Name	Description
1	Navigation bar	It is used to show the function menu of the router. Users can select functions in the navigation bar and the configuration appears in the configuration area.
2	Configuration area	It is used to modify or view your configurations.

2.4 Common element

The common elements used on the web UI are as follows.

Common element	Description
	It is used to save the current configurations and enable them to take effect.
	It is used to cancel the current configurations and restore the previous settings.

3 Status

Log in to the web UI of the router and choose **Status** to enter the page. On this page, you can:

- [View internet connection status](#)
- [View online device information](#)
- [View system information](#)

3.1 View internet connection status

You can view the internet connection status on this page.

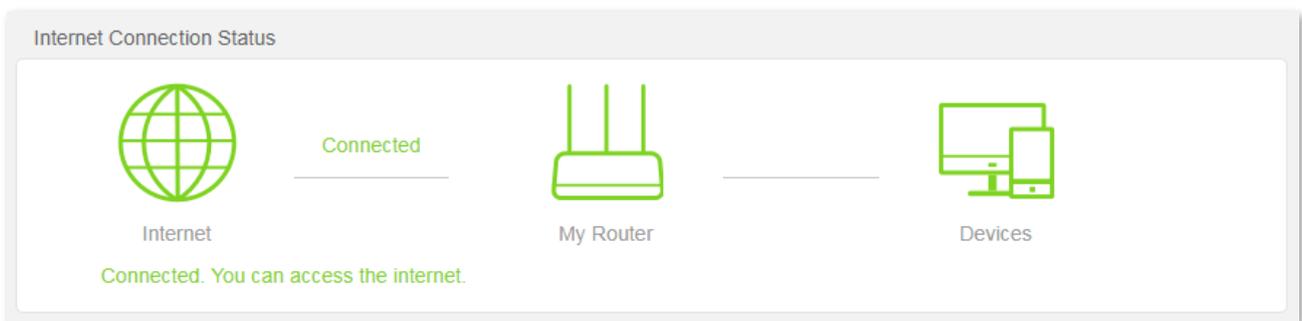
To access the page:

Step 1 Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.

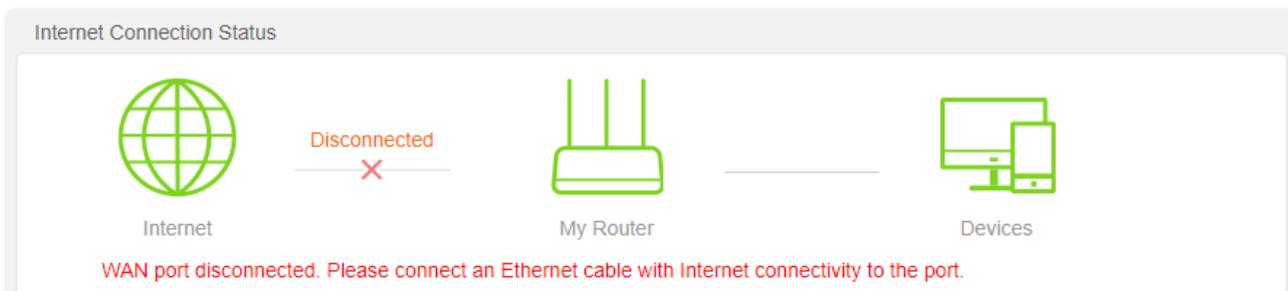
Step 2 Choose **Status > Internet Connection Status**.

---End

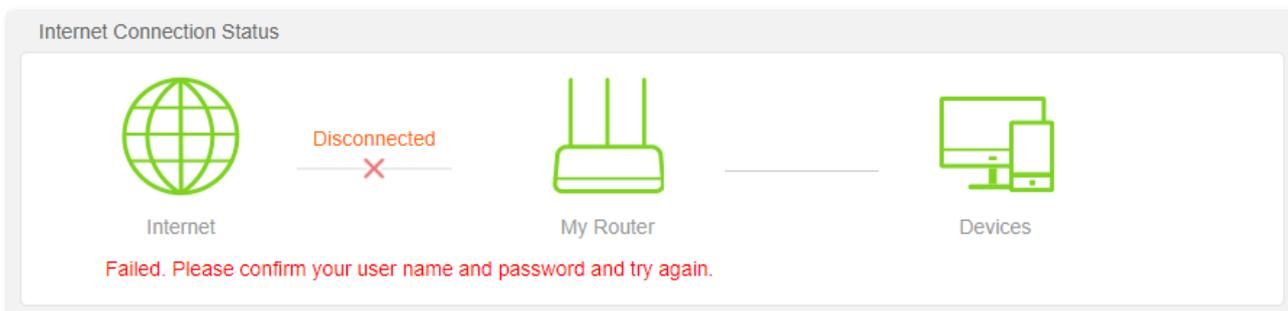
When the **Internet** and **My Router** is connected and **Connected**. **You can access the internet**. is shown as below, the router is connected to the internet successfully and you can access the internet via the router.



When a red cross and “**Disconnected**” are shown between the **Internet** and **My Router**, and **WAN port disconnected**. **Please connect an Ethernet cable with Internet connectivity to the port**. is shown on the page, it indicates that the Ethernet cable is not connected properly. Please ensure that the Ethernet cable is connected properly.



When a red cross and “**Disconnected**” are shown between the **Internet** and **My Router**, and **Failed. Please confirm your user name and password and try again.** is shown on the page, it indicates that the user name and password you entered were incorrect. Please navigate to the **Internet Settings** page to try again.



Please consider the following tips when entering user name and password:

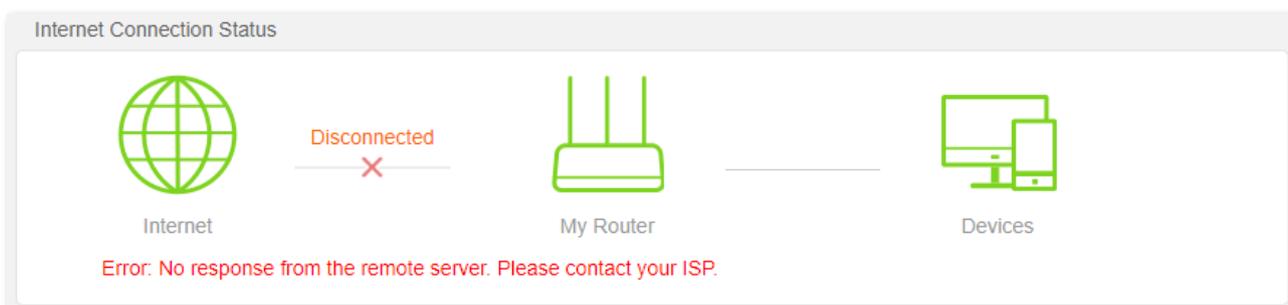
- Pay attention to case sensitivity, such as “Z” and “z”.
- Pay attention to similar letters and numbers, such as “l” and “1”.
- Ensure the completeness of account parameters, such as “0755000513@163.gd”, rather than “0755000513”

If the problem persists, contact your ISP.

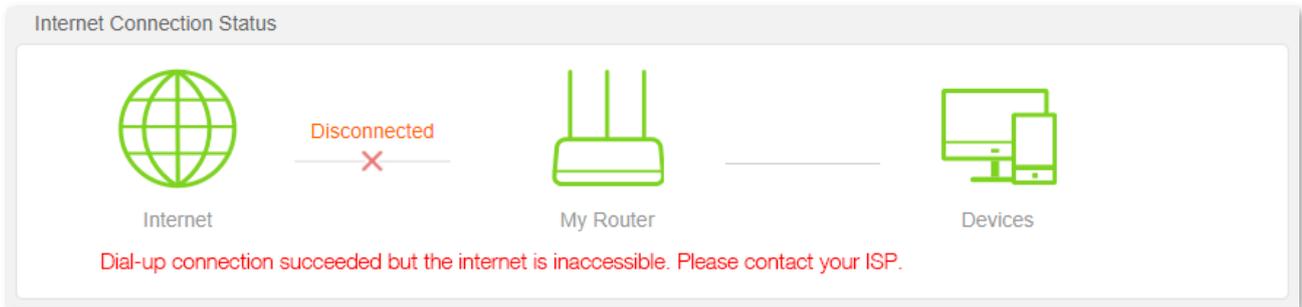
When a red cross and “**Disconnected**” are shown between the **Internet** and **My Router**, and **Error: No response from the remote server. Please contact your ISP.**, try the following solutions:

- Ensure that the Ethernet cable is connected properly.
- Ensure that you choose the proper connection type (Contact your ISP for any doubt about the connection type).
- Power off the router and wait for several minutes, then power it on and try again.

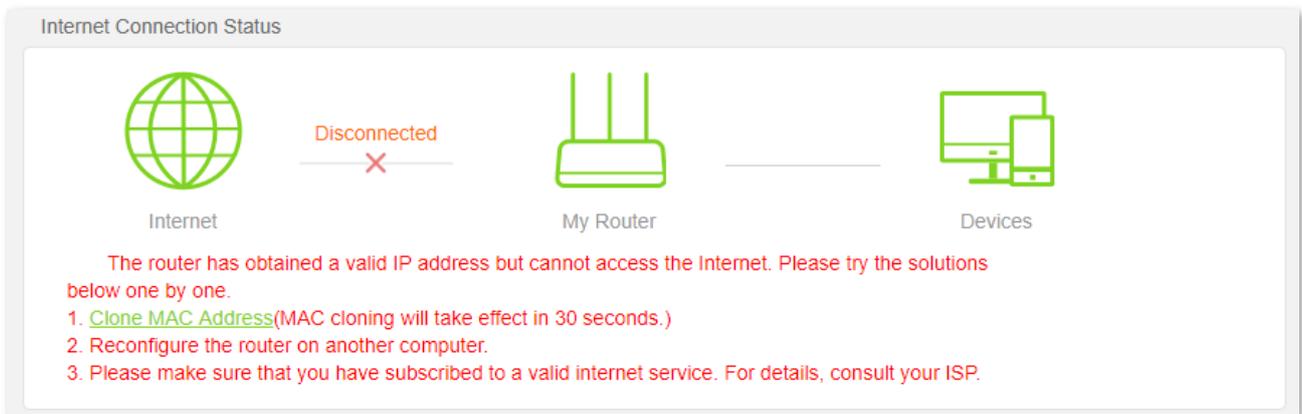
If the problem persists, consult your ISP.



When a red cross and “**Disconnected**” are shown between the **Internet** and **My Router**, and **Dial-up connection succeeded but the internet is inaccessible. Please contact your ISP.** is shown on the page, contact your ISP for the problem.



When a red cross and “**Disconnected**” are shown between the **Internet** and **My Router**, and **The router has obtained a valid IP address but cannot access the Internet. Please try the solutions below one by one.** is shown as below, follow the instructions on the page to solve the problem.



3.2 View online device information

This part shows the information of online devices, such as the number and real-time upload/download speed.

To access the page, log in to the web UI of the router and choose **Status > Online Devices and Real-Time Speed**.

Online Devices and Real-Time Speed

1 Online Devices	0.0 KB/s Download Speed	0.0 KB/s Upload Speed
---------------------	----------------------------	--------------------------

To control the bandwidth of online devices, click the **Download Speed** and **Upload Speed** area to enter the [Bandwidth Control](#) page.

Online Devices(1)

Device Name	Download Speed	Upload Speed	Download Limit	Upload Limit	Internet Access
 MININT-K1N... 192.168.0.100	↓ 0KB/s	↑ 0KB/s	No limit	No limit	Local

Blacklisted Devices

Device Name	MAC Address	Unlimit
No device		

3.3 View system information

This section shows the basic information of the router, including connection type, connection duration, WAN IP address and so on.

To access the page, log in to the web UI of the router and choose **Status > System Information**.

System Information			
Connection Type	Dynamic IP Address	WAN IP Address	192.168.20.149
Connection Duration	2h 32m 59s	Subnet Mask	255.255.255.0
WAN MAC Address	C8:3A:35:17:F0:40	Default Gateway	192.168.20.100
LAN IP Address	192.168.0.1	Preferred DNS Server	192.168.20.100
Firmware Version	V02.03.01.50_multi	Alternate DNS Server	0.0.0.0

Parameter description

Parameter	Description
Connection Type	It shows the current IPv4 connection type of the router.
Connection Duration	It specifies the time that has elapsed since the router connects to the IPv4 internet successfully.
WAN MAC Address	It specifies the MAC address of the WAN port of the router.
LAN IP Address	It specifies the IP address of the LAN port for the router. LAN users can access the web UI of the router by visiting this IP address. Default: 192.168.0.1.
Firmware Version	It specifies the current version number of the router's firmware.
WAN IP Address	It specifies the IPv4 address of the WAN port.
Subnet Mask	It specifies the subnet mask of the WAN port.
Default Gateway	It specifies the IPv4 default gateway of the router.
Preferred DNS Server	It shows the preferred and alternative IPv4 DNS server address of the WAN port.
Alternate DNS Server	

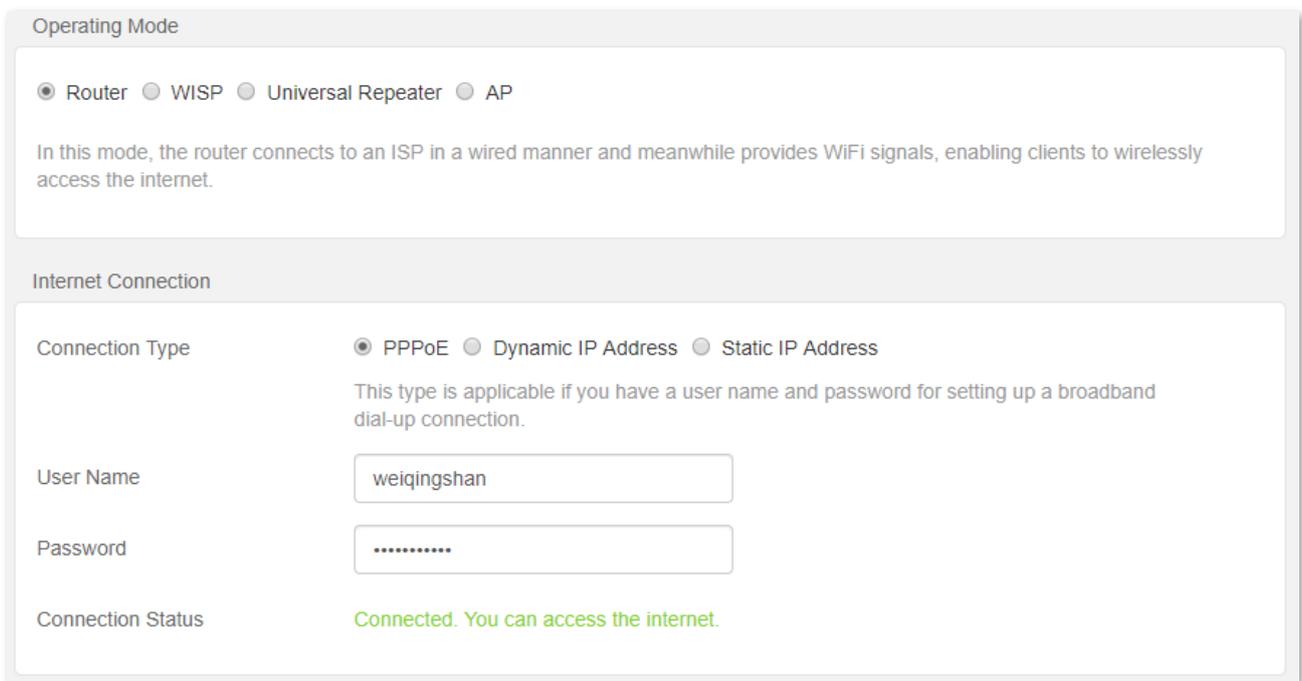
4

Internet settings

4.1 Overview

On this page, you can complete the internet settings to achieve the shared internet access for multiple users.

To access the page, log in to the web UI of the router and choose **Internet Settings**.



Operating Mode

Router WISP Universal Repeater AP

In this mode, the router connects to an ISP in a wired manner and meanwhile provides WiFi signals, enabling clients to wirelessly access the internet.

Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if you have a user name and password for setting up a broadband dial-up connection.

User Name

Password

Connection Status Connected. You can access the internet.

The router supports multiple working mode, including router mode, WISP mode, universal repeater mode and AP mode. Choose the suitable mode according to your context of use.

Context of use	Suitable mode
Connect your router to a modem or Ethernet jack using an Ethernet cable.	Router mode
Bridge the existing WiFi network and extend the wireless coverage.	WISP mode or Universal repeater mode
Connect the router to a smart home gateway to provide wireless coverage.	AP mode

4.2 Serve as a router

If you use the router for the first time or the router is restored to factory settings, follow the quick installation guide to configure the internet access. If you want to modify internet parameters or other settings, you can follow the instruction in this chapter.

By default, the router works in the router mode. Under this mode, connect the WAN port of the router to the internet, connect the LAN ports to user devices and complete the internet settings, then you can access the internet on these devices.



Parameters are provided by your ISP. Contact your ISP for any doubts.

4.2.1 Set up a PPPoE connection

If the ISP provides you with PPPoE user name and password, you can choose this connection type to access the internet. The application scenario is shown below.



Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Internet Settings**.
- Step 3** Set **Operating Mode** to **Router**.
- Step 4** Set **Connection Type** to **PPPoE**.
- Step 5** Enter **User Name** and **Password** provided by your ISP.
- Step 6** Click **OK** at the bottom of the page.

Operating Mode

Router
 WISP
 Universal Repeater
 AP

In this mode, the router connects to an ISP in a wired manner and meanwhile provides WiFi signals, enabling clients to wirelessly access the internet.

Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if you have a user name and password for setting up a broadband dial-up connection.

User Name

Password

---End

Wait a moment. When “**Connected. You can access the internet.**” is shown on the page, the router is connected to the internet.

Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if you have a user name and password for setting up a broadband dial-up connection.

User Name

Password

Connection Status **Connected. You can access the internet.**



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

- If “**Error: No response from the remote server. Please contact your ISP.**” is shown on the page, you are recommended to set the **Connection Type** to **Dynamic IP Address**.
- If the problem persists, refer to 3.1 [View internet connection status](#) to find a solution.

Parameter description

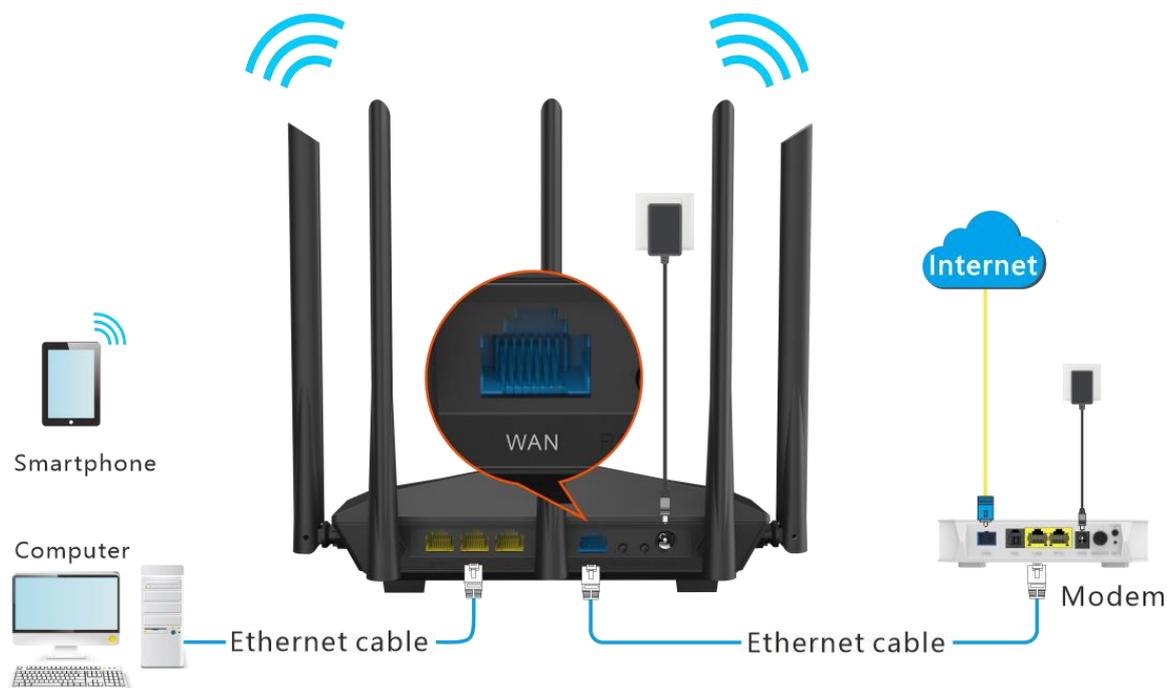
Parameter	Description
User Name	It specifies the PPPoE user name and password provided by your ISP.
Password	
Connection Status	<p>It specifies the connection status of the WAN port.</p> <ul style="list-style-type: none"> • When “Connected. You can access the internet now.” is shown here, the router is connected to the internet successfully. • When other information is shown here, the router fails to connect to the internet. Please take corresponding measures according to the information shown here.

4.2.2 Set up a dynamic IP connection

Generally, accessing the internet through dynamic IP address is applicable in the following situations:

- Your ISP does not provide PPPoE user name and password, or any information including IP address, subnet mask, default gateway and DNS server.
- You have a router with internet access and want to add another router.

The application scenario is shown below.



Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Internet Settings**.
- Step 3** Set **Operating Mode** to **Router**.
- Step 4** Set **Connection Type** to **Dynamic IP Address**.
- Step 5** Click **OK** at the bottom of the page.

Operating Mode

Router WISP Universal Repeater AP

In this mode, the router connects to an ISP in a wired manner and meanwhile provides WiFi signals, enabling clients to wirelessly access the internet.

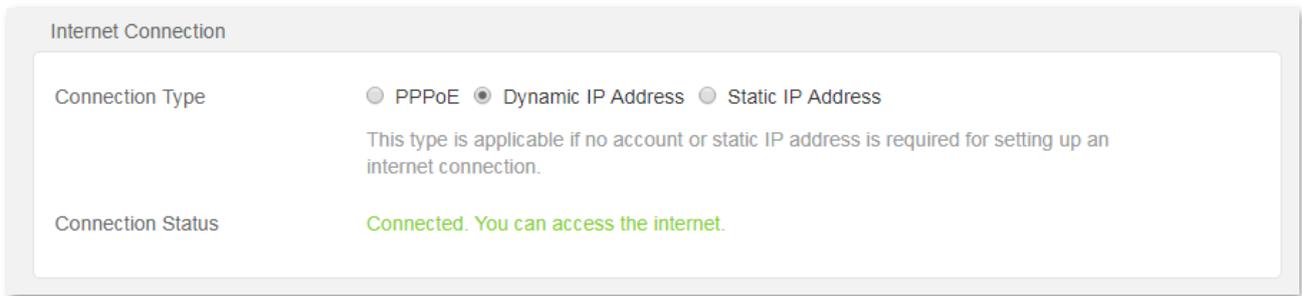
Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if no account or static IP address is required for setting up an internet connection.

---End

Wait a moment. When “**Connected. You can access the internet.**” is shown on the page, you can access the internet.



Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if no account or static IP address is required for setting up an internet connection.

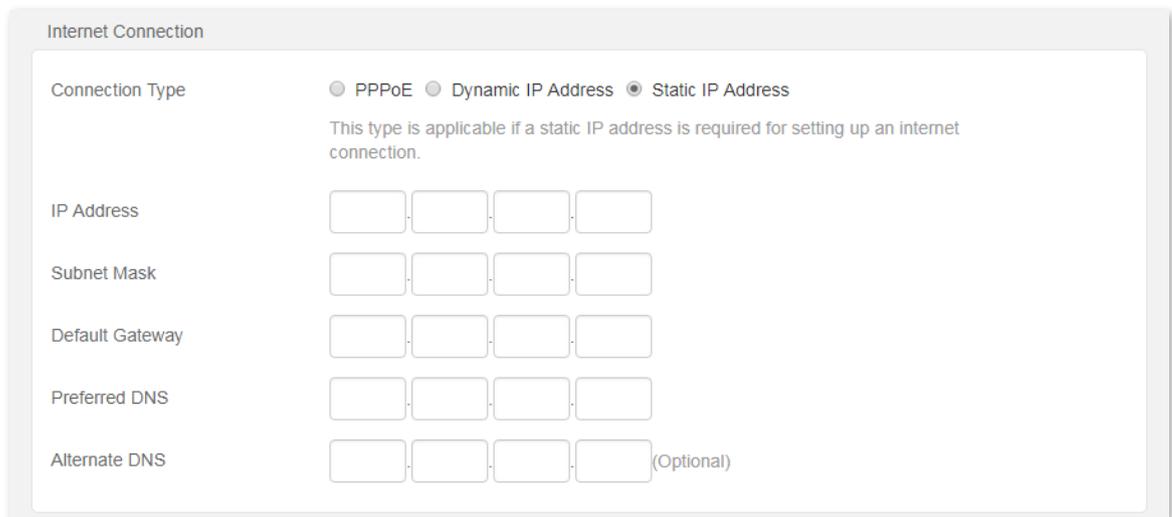
Connection Status **Connected. You can access the internet.**

If you still cannot access the internet, refer to 3.1 [View internet connection status](#) to find a solution.

4.2.3 Set up a static IP connection

When your ISP provides you with information including IP address, subnet mask, default gateway and DNS server, you can choose this connection type to access the internet.

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Internet Settings**.
- Step 3** Set **Operating Mode** to **Router**.
- Step 4** Set **Connection Type** to **Static IP Address**.
- Step 5** Set the required parameters provided by your ISP.
- Step 6** Click **OK** at the bottom of the page.



Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if a static IP address is required for setting up an internet connection.

IP Address . . .

Subnet Mask . . .

Default Gateway . . .

Preferred DNS . . .

Alternate DNS . . . (Optional)

---End

Wait a moment. When “**Connected. You can access the internet.**” is shown on the page, you can access the internet.

Internet Connection

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if a static IP address is required for setting up an internet connection.

IP Address . . .

Subnet Mask . . .

Default Gateway . . .

Preferred DNS . . .

Alternate DNS . . . (Optional)

Connection Status Connected. You can access the internet.

If you still cannot access the internet, refer to 3.1 [View internet connection status](#) to find a solution.

Parameter description

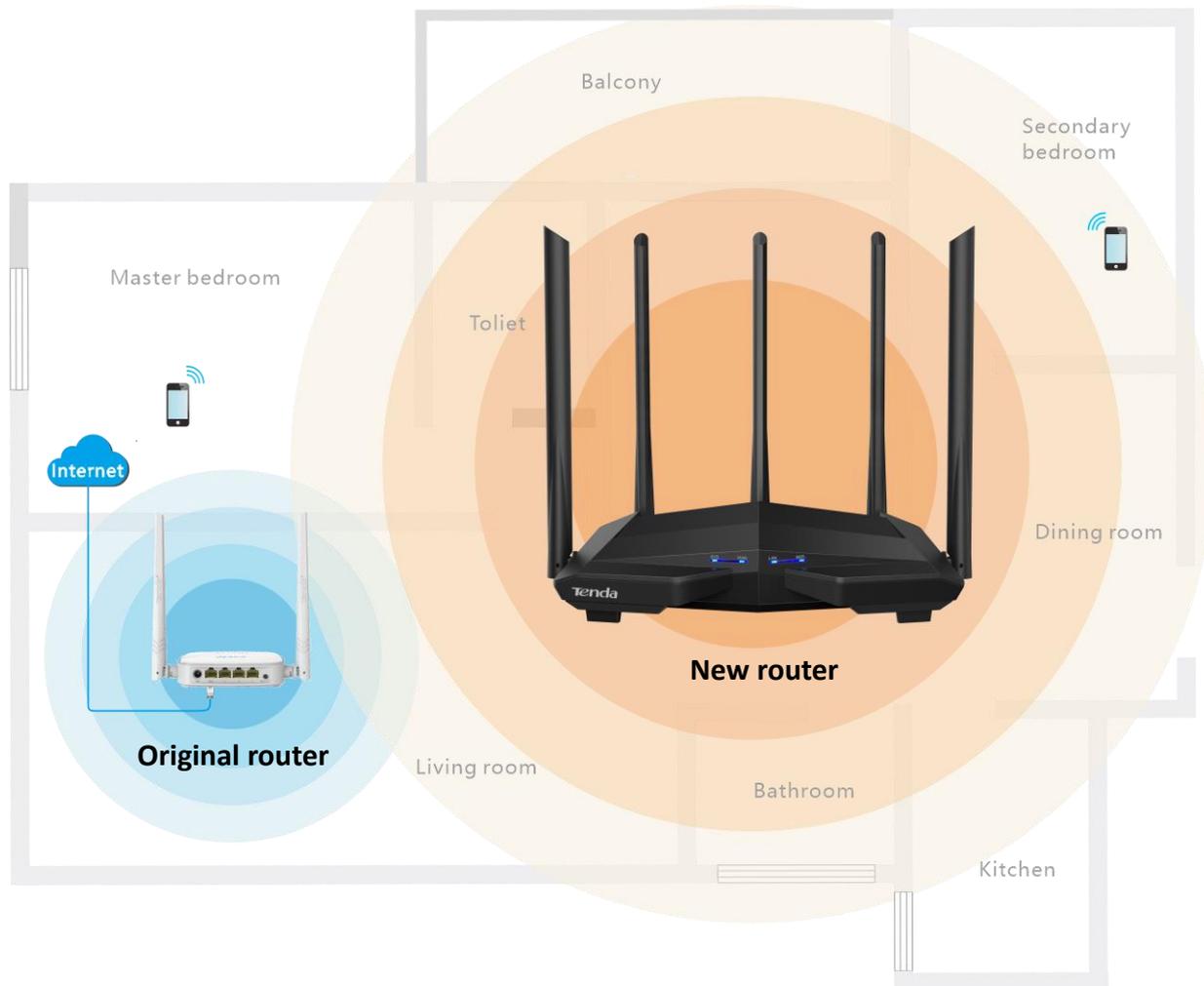
Parameter	Description
IP Address	When static IP address is chosen as the connection type, enter the fixed IP address information provided by your ISP.
Subnet Mask	
Default Gateway	TIP
Preferred DNS	If your ISP only provides one DNS server address, you can leave the Alternate DNS blank.
Alternate DNS	
Connection Status	<p>It specifies the internet connection status.</p> <ul style="list-style-type: none"> • When “Connected. You can access the internet now.” is shown here, the router is connected to the internet successfully. • When other information is shown here, the router fails to connect to the internet. Please take corresponding measures according to information shown here.

4.3 Serve as a WiFi extender

If you have a router which is connected to the internet and want to extend the WiFi coverage, you can refer to this chapter.

Assume that the information of your existing WiFi network is as follows:

- WiFi name: My_home_WiFi
- WiFi password: TendaAC947



Method 1: Set the router to WISP mode

Configuring procedures:

Step 1 Start a web browser on a device connected to the router and visit tendawifi.com to log in to the web UI of the router.



If you use the router for the first time or have reset router, proceed with the following steps. If you have already configured the router, skip **Step 2**.

Step 2 Set **Connection Type** to **Dynamic IP Address**, and click **OK**. You will be direct to the **Status** page.



If you are using a wireless device for configuration and are not directed to the **Status** page automatically, ensure that your wireless device is still connected to the WiFi network of the router.

Tenda

You can access the internet after completing settings on this page.

Tips: WAN port disconnected. Please connect an Ethernet cable with Internet connectivity to the port.

Internet

Connection Type PPPoE Dynamic IP Address Static IP Address

This type is applicable if you can access the internet without configuration after connecting the cable with internet connectivity to your computer.

Wireless

WiFi Name: Tenda_B152C2

WiFi Password: 8 or more characters

OK

Step 3 Choose **Internet Settings**.

Step 4 Set **Operating Mode** to **WISP**.

Step 5 Choose the ISP hotspot, which is **My_home_WiFi** in this example.

Operating Mode

Router WISP Universal Repeater AP

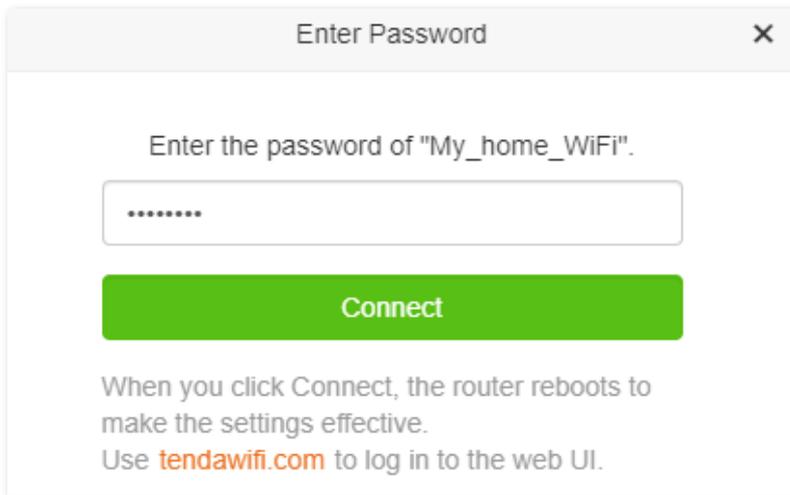
In this mode, the router extends the WiFi signals of ISPs like CMCC, China Unicom, and ChinaNet.

Select WiFi Network

Select	WiFi Name	MAC Address	Channel	Security Mode	Strength
<input checked="" type="radio"/>	My_home_WiFi	50:2B:73:F5:E8:B1	4	WPAWPA2/AESTKIP	100%

Step 6 Enter the password of the WiFi network, which is **TendaAC947** in this example.

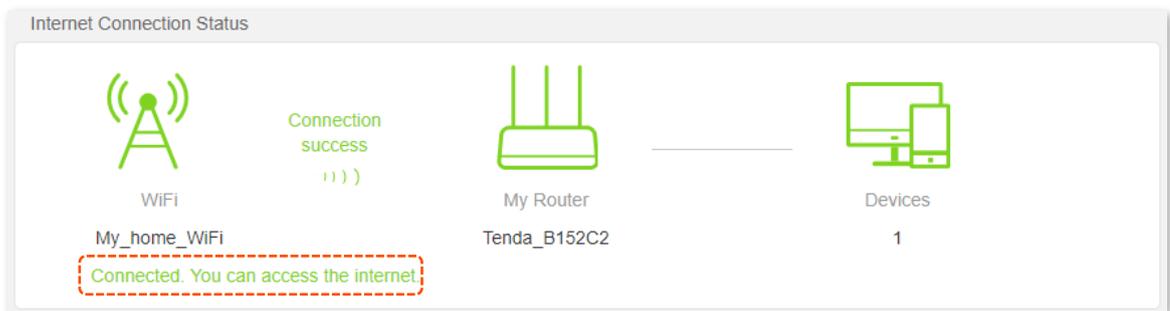
Step 7 Click **Connect**. The router will reboot to activate the settings.



Step 8 Log in to the web UI of the router again, navigate to **Status** to ensure that **Connected. You can access the internet.** is shown on this page.



The LAN IP address of the router will change. Please log in to the web UI of the router by visiting **tendawifi.com**. If there is another network device with the same login domain name (tendawifi.com) with the router, log in to the upstream router and find the IP address obtained by the new router in the client list. Then you can log in to the web UI of the router by visiting the IP address.



If the connection between **WiFi** and **My Router** failed, try the following solutions:

- Ensure that you have entered the correct WiFi password of the WiFi, and mind case sensitivity.
- Ensure that **My Router** is within the wireless coverage of the **WiFi**.

Step 9 Relocate the new router by referring to the following suggestions and power it on again:

- Between the original router and the uncovered area, but within the coverage of the original router.
- Away from the microwave oven, electromagnetic oven or refrigerator.
- Above the ground with few obstacles.



Do not connect any device to the WAN port of the new router after setting the router to WISP mode.

---End

To access the internet, connect your computer to a LAN port of the new router, or connect your

smart phone to the WiFi network of the new router.

You can find the WiFi name and password on the **Wireless Settings > WiFi Name and Password** page. If the network is not encrypted, you can also set a WiFi password on this page for security.

WiFi Name and Password

Preferred Band Enable Disable

With this function enabled, the router has the same SSID both on 2.4 GHz and 5 GHz bands, and ensures that the WiFi devices are automatically connected to the WiFi network with stronger signals.

WiFi Network Enable Disable

WiFi Name Hide WiFi (?)

Security Mode



TIP

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

- Ensure that the existing router is connected to the internet successfully.
- Ensure that your wireless devices are connected to the WiFi network of the new router.
- If the computer connected to the router for repeating cannot access the internet, ensure that the computer is configured to obtain an IP address and DNS server automatically.

Method 2: Set the router to universal repeater mode

Configuring procedures:

Step 1 Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.



If you use the router for the first time or have reset router, proceed with the following steps. If you have already configured the router, skip **Step 2**.

Step 2 Set **Connection Type** to **Dynamic IP Address**, and click **OK**. You will be direct to the **Status** page.



If you are using a wireless device for configuration and are not directed to the **Status** page automatically, ensure that your wireless device is still connected to the WiFi network of the router.

The screenshot shows the Tenda web UI configuration page. At the top, there is a message: "You can access the internet after completing settings on this page." Below this, a red tip reads: "Tips: WAN port disconnected. Please connect an Ethernet cable with Internet connectivity to the port." The page is divided into two main sections: "Internet" and "Wireless".

Internet Section:

- Icon: A globe representing the Internet.
- Label: "Internet".
- Connection Type: Three radio buttons are present: "PPPoE", "Dynamic IP Address" (which is selected), and "Static IP Address".
- Description: "This type is applicable if you can access the internet without configuration after connecting the cable with internet connectivity to your computer."

Wireless Section:

- Icon: A Wi-Fi signal icon representing Wireless.
- Label: "Wireless".
- WiFi Name: A text input field containing "Tenda_B152C2".
- WiFi Password: A text input field containing "8 or more characters".

At the bottom of the configuration area, there is a green "OK" button.

Step 3 Choose **Internet Settings**.

Step 4 Set **Operating Mode** to **Universal Repeater**.

Step 5 Select the WiFi name to be extended, which is **My_home_WiFi** in this example.

The screenshot shows two parts of the Tenda web UI configuration page. The top part is the "Operating Mode" section, and the bottom part is the "Select WiFi Network" section.

Operating Mode Section:

- Radio buttons: "Router", "WISP", "Universal Repeater" (which is selected), and "AP".
- Description: "In this mode, the router can extend any WiFi signals."

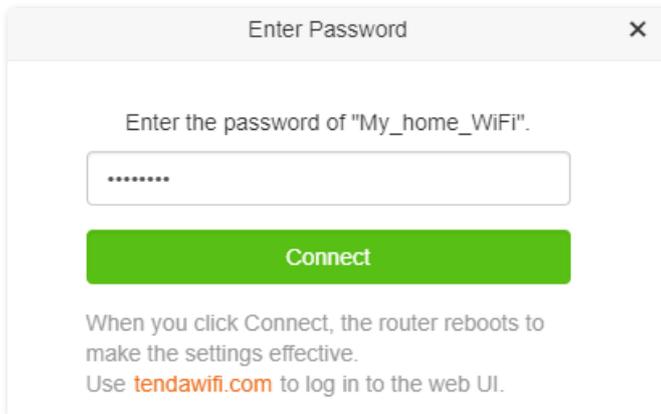
Select WiFi Network Section:

A refresh icon is shown next to the "Select WiFi Network" label.

Select	WiFi Name	MAC Address	Channel	Security Mode	Strength
<input type="radio"/>	My_home_WiFi 5G	00:90:4C:88:88:8D	36	WPAWPA2/AES	100%

Step 6 Enter the password of the selected WiFi network, which is **TendaAC947** in this example.

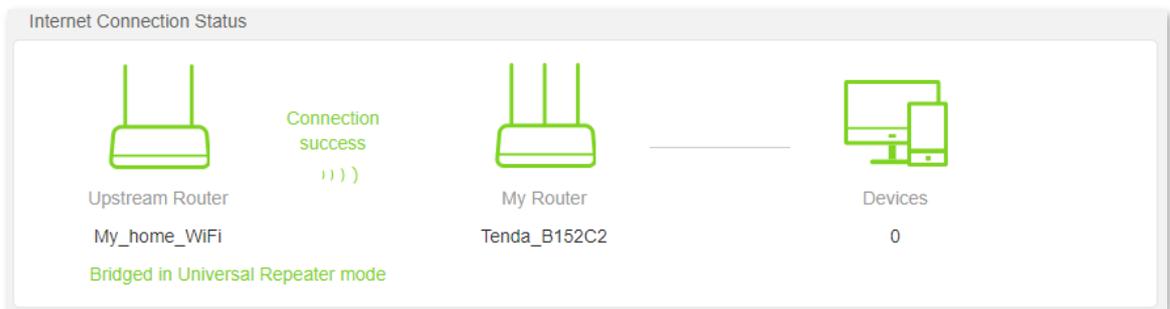
Step 7 Click **Connect**. The router will reboot to activate the settings.



Step 8 Log in to the web UI of the router again, navigate to **Status** to ensure that **Bridged in Universal Repeater mode** is shown on this page.



The LAN IP address of the router will change. Please log in to the web UI of the router by visiting **tendawifi.com**. If there is another network device with the same login domain name (tendawifi.com) with the router, log in to the upstream router and find the IP address obtained by the new router in the client list. Then you can log in to the web UI of the router by visiting the IP address.



If the connection between the **Upstream Router** and **My Router** failed, try the following solutions:

- Ensure that you have entered the correct WiFi password of the WiFi, and mind case sensitivity.
- Ensure that **My Router** is within the wireless coverage of the **Upstream Router**.

Step 9 Relocate the new router by referring to the following suggestions and power it on again:

- Between the original router and the uncovered area, but within the coverage of the original router.
- Away from the microwave oven, electromagnetic oven, refrigerator.
- Above the ground with few obstacles.



After the new router is set to universal repeater mode, Do NOT connect any device to the WAN port of the new router.

---End

To access the internet, connect your computer to a LAN port of the new router, or connect your smart phone to the WiFi network of the new router.

You can find the WiFi name and password on the **Wireless Settings > WiFi Name and Password** page. If the network is not encrypted, you can also set a WiFi password on this page for security.

WiFi Name and Password

Preferred Band Enable Disable

With this function enabled, the router has the same SSID both on 2.4 GHz and 5 GHz bands, and ensures that the WiFi devices are automatically connected to the WiFi network with stronger signals.

WiFi Network Enable Disable

WiFi Name Hide WiFi (?)

Security Mode



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

- Ensure that the existing router is connected to the internet successfully.
- Ensure that your wireless devices are connected to the WiFi network of the new router.
- If the computer connected to the router for repeating cannot access the internet, ensure that the computer is configured to obtain an IP address and DNS server automatically.

4.4 Serve as an AP

When you have a smart home gateway which only provides wired internet access, you can set the router to work in AP mode to provide wireless coverage.

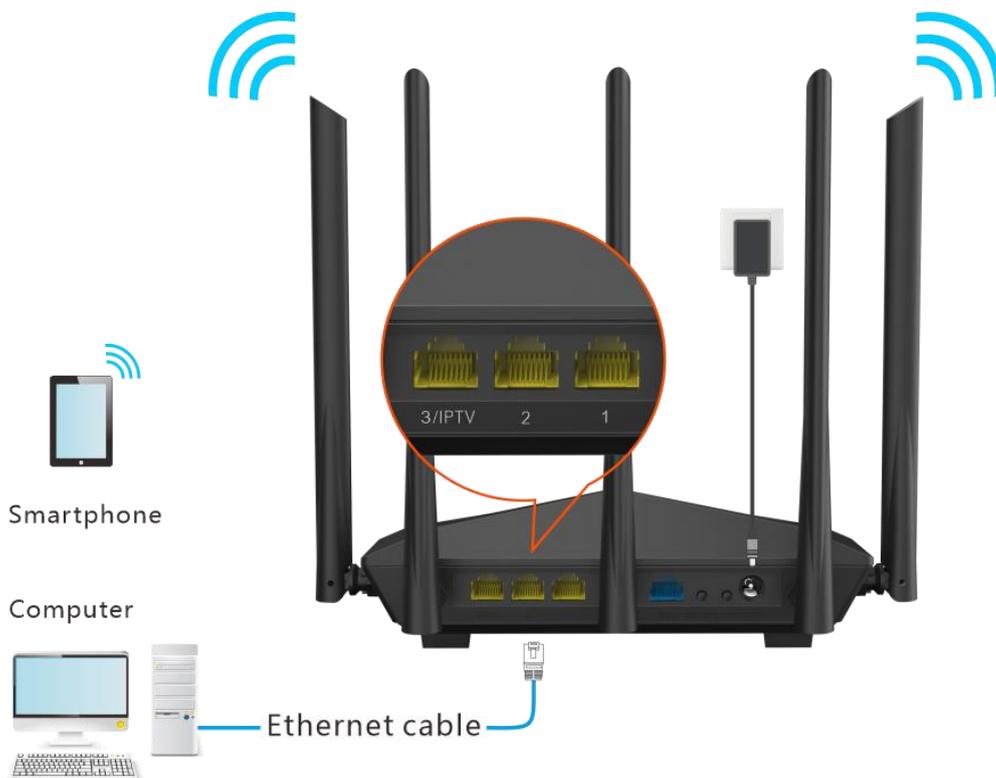


When the router is set to AP mode:

- Every physical port can be used as a LAN port.
- The LAN IP address of the router will be changed. Please log in to web UI of the router by visiting **tendawifi.com**.
- Functions, such as bandwidth control and port forwarding will be unavailable. Refer to the web UI for available functions.

Configuring procedures:

Step 1 Power on the router. Connect a computer to a LAN port of the router, or connect your smart phone to the WiFi network of the router.



If you have finished the quick setup wizard before, start a web browser and visit **tendawifi.com** and skip **Step 2**.

Step 2 Log in to the web UI of the router.

1. Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router. A computer is used for illustration below.
2. Set **Connection Type** to **Dynamic IP Address**, and click **OK**. You will be directed to the **Status** page.



If you are using a wireless device for configuration and are not directed to the **Status** page automatically, ensure that your wireless device is still connected to the WiFi network of the router.

The screenshot shows the Tenda router's configuration interface. At the top, the Tenda logo is displayed. Below it, a message states: "You can access the internet after completing settings on this page." A red tip message reads: "Tips: WAN port disconnected. Please connect an Ethernet cable with Internet connectivity to the port." The "Internet" section features a globe icon and "Connection Type" options: PPPoE, Dynamic IP Address (selected), and Static IP Address. A note explains that Dynamic IP Address is applicable if you can access the internet without configuration after connecting the cable. The "Wireless" section features a WiFi icon and input fields for "WiFi Name" (Tenda_B152C2) and "WiFi Password" (8 or more characters). A green "OK" button is located at the bottom of the configuration area.

Step 3 Set the router to **AP** mode.

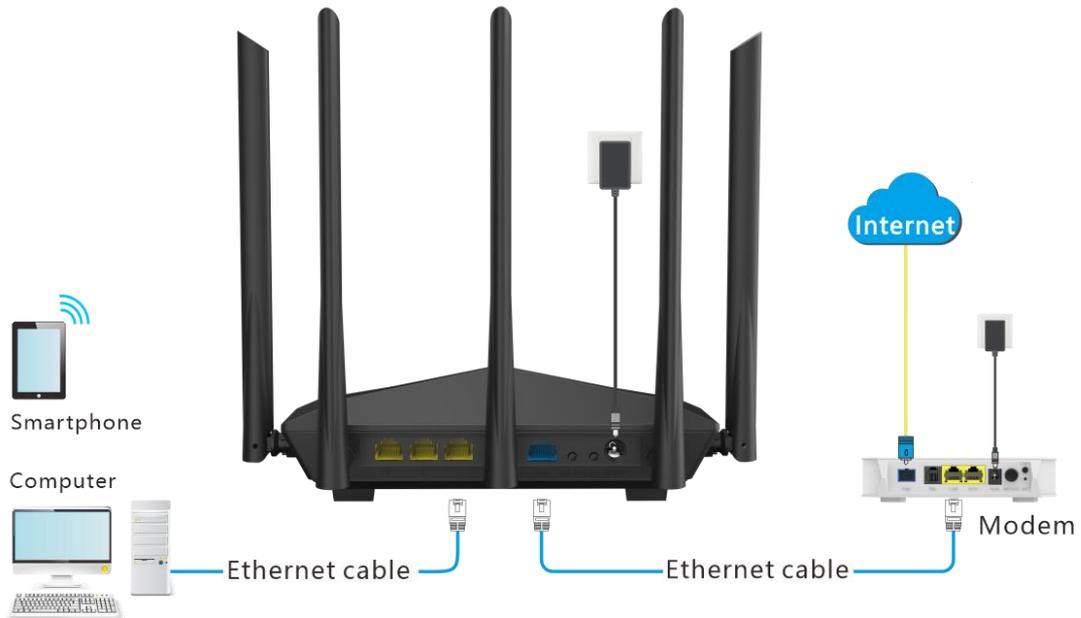
1. Choose **Internet Settings** to access the configuration page.
2. Set **Operating Mode** to **AP**, and click **OK** at the bottom of the page.

The screenshot shows the "Operating Mode" configuration window. It contains four radio button options: Router, WISP, Universal Repeater, and AP (selected). Below the options, a note states: "In this mode, the router functions as an AP, which is often used for wireless network coverage in hotels and SMEs."

3. Click **OK** in the popup window. The router will reboot to activate the settings.

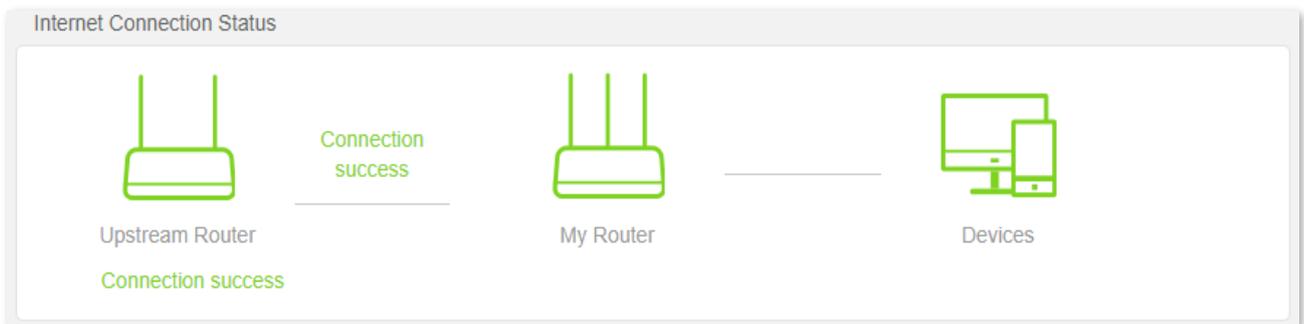
The screenshot shows a "Reboot" popup window with a close button (X) in the top right corner. The text inside reads: "When the AP mode is enabled, the router reboots. After the reboot process is complete, please use tendawifi.com to log in to the web UI." At the bottom, there are two buttons: a green "OK" button and a grey "Cancel" button.

Step 4 Connect the upstream device, such as a gateway, to any port of the router.



---End

Log in to the web UI of the router again, and navigate to **Status** to check if the AP mode is configured successfully as follows.



If there is another network device with the same login domain name (tendawifi.com) with the router, log in to the upstream router and find the IP address obtained by the new router in the client list. Then you can log in to the web UI of the router by visiting the IP address.

To access the internet, connect your computer to physical port, or connect your smart phone to the WiFi network.

You can find the WiFi name and password on the **Wireless Settings > WiFi Name and Password** page. If the network is not encrypted, you can also set a WiFi password on this page for security.

WiFi Name and Password

Preferred Band Enable Disable

With this function enabled, the router has the same SSID both on 2.4 GHz and 5 GHz bands, and ensures that the WiFi devices are automatically connected to the WiFi network with stronger signals.

WiFi Network Enable Disable

WiFi Name Hide WiFi (?)

Security Mode



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

- Ensure that the existing router is connected to the internet successfully.
- Ensure that your wireless devices are connected to the correct WiFi network of the new router.
- If the computer connected to the router cannot access the internet, ensure that the computer is configured to obtain an IP address and DNS server automatically.

5

Wireless settings

5.1 WiFi name and password

5.1.1 Overview

On this page, you can configure basic WiFi parameters, such as the WiFi name and password.

To access the configuration page, log in to the web UI of the router, and navigate to **Wireless Settings > WiFi Name and Password**.

WiFi Name and Password

Preferred Band Enable Disable

With this function enabled, the router has the same SSID both on 2.4 GHz and 5 GHz bands, and ensures that the WiFi devices are automatically connected to the WiFi network with stronger signals.

WiFi Network Enable Disable

WiFi Name Hide WiFi (?)

Security Mode

Parameter description

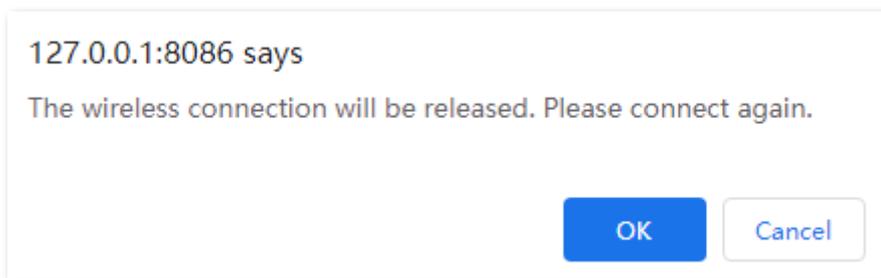
Parameter	Description
Preferred Band	It is used to turn on or off the Preferred Band function. When it is enabled, the WiFi names of 2.4 GHz and 5 GHz networks are integrated, and only one WiFi signal is shown. Devices connected to the WiFi network will use the network with better connection quality automatically.
WiFi Network	It is used to enable or disable the WiFi networks of the router.
2.4 GHz Network	You can enable or disable the 2.4 GHz network and 5 GHz network separately when the Preferred Band function is disabled. <ul style="list-style-type: none">• If the wireless devices such as mobile phones are far away from the router, or blocked from the router by a wall, it is recommended to connect to the 2.4 GHz network.
5 GHz Network	<ul style="list-style-type: none">• If the wireless devices are close to the router, it is recommended to connect to the 5 GHz network.
WiFi Name	It specifies the WiFi network name (SSID) of the WiFi network.

Parameter	Description
Security Mode	<p>It specifies the encryption modes supported by the router, including:</p> <ul style="list-style-type: none"> • None: It indicates that a WiFi 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. • WPA-PSK: It indicates that WPA-PSK is adopted to authenticate users. • WPA2-PSK: It indicates that WPA2-PSK is adopted to authenticate users. • WPA/WPA2-PSK Mixed: It indicates that WPA-PSK and WPA2-PSK are adopted to authenticate users.
WiFi Password	<p>It specifies the password for connecting to the WiFi network. You are strongly recommended to set a WiFi password for security.</p> <p> TIP</p> <p>It is recommended to use the combination of numbers, uppercase letters, lowercase letters and special symbols in the password to enhance the security of the WiFi network.</p>
Hide WiFi	<p>With this function enabled, wireless clients cannot find the SSID, and you need to enter the SSID on the wireless clients to access the WiFi network. By default, this function is disabled.</p>

5.1.2 Separate the 2.4 GHz WiFi name from 5 GHz Wi-Fi name

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Wireless Settings > WiFi Name and Password**.
- Step 3** Set **Preferred Band** to **Disable**.
- Step 4** Customize the 2.4 GHz and 5 GHz WiFi name and WiFi password.
- Step 5** Click **OK** at the bottom of the page.

Step 6 Click **OK**.



---End

When completing the configurations, you can connect to the WiFi networks of the router to access the internet.

5.1.3 Change the WiFi name and WiFi password

The router supports both 2.4 GHz and 5 GHz WiFi networks.

Assume that you want to change the 2.4 GHz WiFi name and password to **John_Doe_2.4GHz** and **Tenda+Wireless24**, and the 5 GHz WiFi name and password to **John_Doe_5GHz** and **Tenda+Wireless5**. Both networks adopt **WPA/WPA2-PSK Mixed** as the encryption type.

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Wireless Settings > WiFi Name and Password**.
- Step 3** Set **Preferred Band** to **Disable**.
- Step 4** Change the parameters of the 2.4 GHz network.

1. Change the WiFi Name of the 2.4 GHz network, which is **John_Doe_2.4GHz** in this example.
2. Choose an Encryption Mode, which is **WPA/WPA2-PSK Mixed** in this example.
3. Change the WiFi Password of the 2.4 GHz network, which is **Tenda+Wireless24** in this example.

Step 5 Change the parameters of the 5 GHz network.

1. Change the WiFi Name of the 5 GHz network, which is **John_Doe_5GHz** in this example.
2. Choose an Encryption Mode, which is **WPA/WPA2-PSK Mixed** in this example.
3. Change the WiFi Password of the 5 GHz network, which is **Tenda+Wireless5** in this example.

Step 6 Click **OK** on the bottom of the page.

WiFi Name and Password

Preferred Band Enable Disable

With this function enabled, the router has the same SSID both on 2.4 GHz and 5 GHz bands, and ensures that the WiFi devices are automatically connected to the WiFi network with stronger signals.

2.4 GHz Network Enable Disable

WiFi Name Hide WiFi (?)

Security Mode

WiFi Password

5 GHz Network Enable Disable

WiFi Name Hide WiFi (?)

Security Mode

WiFi Password

---End

When completing the configurations, you can connect your wireless devices to the WiFi networks of the router to access the internet.

5.1.4 Hide the WiFi network

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Wireless Settings > WiFi Name and Password**.
- Step 3** Tick **Hide WiFi** of the target network.
- Step 4** Click **OK** on the bottom of the page.

WiFi Name and Password

Preferred Band Enable Disable

With this function enabled, the router has the same SSID both on 2.4 GHz and 5 GHz bands, and ensures that the WiFi devices are automatically connected to the WiFi network with stronger signals.

WiFi Network Enable Disable

WiFi Name Hide WiFi (?)

Security Mode

WiFi Password

---End

When completing the configurations, the corresponding WiFi network is invisible to wireless devices.

5.1.5 Connect to a hidden WiFi network

When a WiFi network is hidden, you need to enter the WiFi name manually in order to connect to it.

Assume that the Preferred Band function is enabled and the WiFi parameters are:

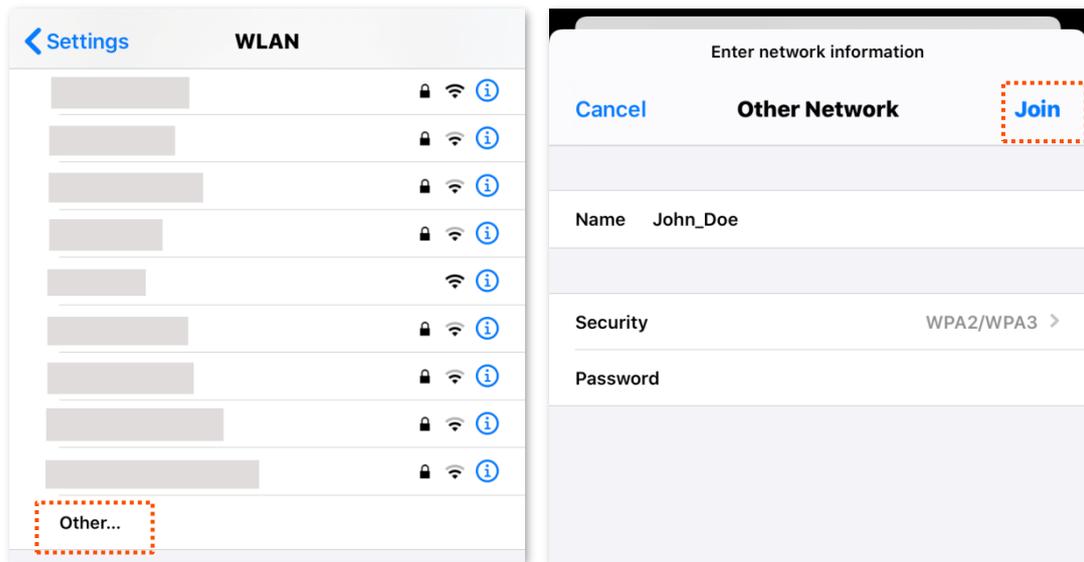
- WiFi name: Jone_Doe
- Encryption type: WPA/WPA2-PSK Mixed
- WiFi password: Tenda+Wireless245



If you do not remember the wireless parameters of the WiFi network, log in to the web UI of the router and navigate to **Wireless Settings > WiFi Name and Password** to find them.

Configuring procedures (Example: iPhone):

- Step 1** Tap **Settings** on your phone, and find **WLAN**.
- Step 2** Enable **WLAN**.
- Step 3** Scroll the WiFi list to the bottom, and tap **Other...**
- Step 4** Enter the WiFi name and password, which are **John_Doe** and **Tenda+Wireless245** in this example.
- Step 5** Set security to **WPA2/WPA3** (If WPA2/WPA3 is not available, choose WPA2).
- Step 6** Tap **Join**.



---End

When completing the configurations, you can connect to the hidden WiFi network to access the internet.

5.2 Guest network

5.2.1 Overview

In this module, you can enable/disable the guest network function and change the WiFi name and password of the guest network.

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

To access the configuration page, log in to the web UI of the router and navigate to the **Wireless Settings > Guest Network**. This function is disabled by default.

Guest Network

Guest Network Enable Disable

2.4 GHz WiFi Name

5 GHz WiFi Name

Guest Network Password

Validity

Shared Bandwidth for Guests Mbps

Parameter description

Parameter	Description
Guest Network	It is used to enable the Guest Network function.
2.4 GHz WiFi Name	It specifies the WiFi name of the router's guest network. By default, Tenda_VIP is for 2.4 GHz WiFi network and Tenda_VIP_5G for 5 GHz WiFi network.
5 GHz WiFi Name	 TIP You can change the SSIDs (WiFi name) if required. To distinguish the guest network from the main network, you are recommended to set the different WiFi network names.
Guest Network Password	It specifies the password for the router's two guest networks.
Validity	It specifies the validity of the guest networks. The Guest Network function will be disabled automatically out of the specified time.
Shared Bandwidth for Guests	It allows you to specify the maximum download speed for all devices connected to the guest networks. By default, the bandwidth is not limited.

5.2.2 Set up the guest network

Scenario: A group of friends are going to visit your home and stay for about 8 hours.

Goal: Prevent the use of WiFi network by guests from affecting the network speed of your computer for work purposes.

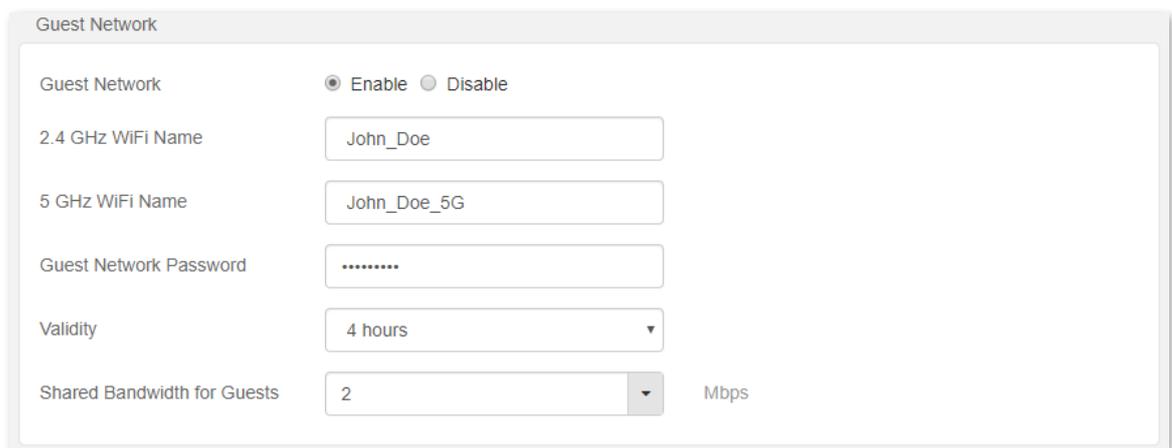
Solution: You can configure the guest network function and let your guests to use the guest networks.

Assume that the parameters you are going to set for the guest WiFi network:

- WiFi names for 2.4 GHz and 5 GHz networks: John_Doe and John_Doe_5G.
- WiFi password for 2.4 GHz and 5 GHz networks: Tenda+245.
- The shared bandwidth for guests: 2 Mbps.

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Wireless Settings > Guest Network**.
- Step 3** Set **Guest Network** to **Enable**.
- Step 4** Change **2.4 GHz WiFi Name**, which is **John_Doe** in this example.
- Step 5** Change **5 GHz WiFi Name**, which is **John_Doe_5G** in this example.
- Step 6** Set **Guest Network Password**, such as to **Tenda+245**.
- Step 7** Select a validity time from the **Validity** drop-down box, which is **4 hours** in this example.
- Step 8** Set the bandwidth in the **Shared Bandwidth for Guests** drop-down box, which is **2** in this example.
- Step 9** Click **OK** at the bottom of the page.



Guest Network

Guest Network Enable Disable

2.4 GHz WiFi Name

5 GHz WiFi Name

Guest Network Password

Validity

Shared Bandwidth for Guests Mbps

---End

During the 4 hours after the configuration, guests can connect their wireless devices, such as smartphones, to **John_Doe** or **John_Doe_5G** to access the internet and enjoy the shared bandwidth of 2 Mbps.

5.3 WiFi signal strength

In this module, you can adjust the wall-penetration capability and wireless coverage of the router.



Not all routers support this function. The actual product prevails.

To access the configuration page, log in to the web UI of the router and navigate to the **Wireless Settings > WiFi Signal Strength**.

WiFi Signal Strength

2.4 GHz Signal Strength High Medium Low

5 GHz Signal Strength High Low

Parameter description

Parameter	Description
Signal Strength	<p>The mode of signal strength. The default mode is High.</p> <ul style="list-style-type: none">• High: It is typically used to meet wireless coverage requirements in large or multi-barrier environments.• Medium: It is typically used to meet wireless coverage requirements in medium-area or less-obstacle environments.• Low: It is typically used to meet wireless coverage requirements in small area or barrier-free environments. <p> TIP</p> <p>If the WiFi function works properly in low mode, you are recommended to select the low mode.</p>

5.4 Wireless parameters

In this section, you can change network mode, wireless channel, and wireless bandwidth of 2.4 GHz and 5 GHz WiFi networks.

To access the configuration page, log in to the web UI of the router, and choose **Wireless Settings > Wireless Parameters**.



In order not to influence the wireless performance, it is recommended to maintain the default settings on this page without professional instructions.

2.4 GHz Network		
Network Mode	<input type="text" value="11b/g/n"/>	
Wireless Channel	<input type="text" value="Auto"/>	Current Channel:8
Wireless Bandwidth	<input type="text" value="20/40"/>	Current bandwidth:20MHz
5 GHz Network		
Network Mode	<input type="text" value="11a/n/ac"/>	
Wireless Channel	<input type="text" value="Auto"/>	Current Channel:149
Wireless Bandwidth	<input type="text" value="20/40/80"/>	Current bandwidth:80MHz

Parameter description

Parameter	Description
Network Mode	<p>It specifies various protocols adopted for wireless transmission.</p> <p>2.4 GHz WiFi network supports 11b, 11g, 11b/g mixed and 11b/g/n mixed modes.</p> <ul style="list-style-type: none">• 11b: It indicates that devices compliant with IEEE 802.11b protocol can connect to the 2.4 GHz WiFi network of the router, enjoying a maximum transmission rate of 11 Mbps.• 11g: It indicates that devices compliant with IEEE 802.11g protocol can connect to the 2.4 GHz WiFi network of the router, enjoying a maximum transmission rate of 54 Mbps.• 11b/g: It indicates that devices compliant with IEEE 802.11b or IEEE 802.11g protocol can connect to the 2.4 GHz WiFi network of the router, enjoying a maximum transmission rate of 54 Mbps.• 11b/g/n: It indicates that all devices compliant with IEEE 802.11b or IEEE 802.11g protocol, or work at 2.4 GHz with IEEE 802.11n protocol can connect to the 5 GHz WiFi network of the router, therefore enjoying a maximum transmission rate of 300 Mbps. <p>5 GHz WiFi network supports 11ac, 11a/n/ac mixed modes.</p> <ul style="list-style-type: none">• 11ac: It indicates that devices complaint with IEEE 802.11ac protocol can connect to the 5 GHz WiFi network of the router, enjoying a maximum transmission rate of 867 Mbps.• 11a/n/ac: It indicates that all devices compliant with IEEE 802.11a or IEEE 802.11ac protocol, or work at 5 GHz with IEEE 802.11n protocol can connect to the 5 GHz WiFi network of the router, enjoying a maximum transmission rate of 867 Mbps.

Parameter	Description
Wireless Channel	<p>It specifies the operating channel of a WiFi network.</p> <p>By default, the wireless channel is Auto, which indicates that the router selects a channel for the WiFi network automatically. You are recommended to choose a channel with less interference for better wireless transmission efficiency. You can use a third-party tool to scan the WiFi signals nearby to understand the channel usage situations.</p>
Wireless Bandwidth	<p>It specifies the bandwidth of the wireless channel of a WiFi network. Change the default settings only when necessary.</p> <ul style="list-style-type: none"> • 20: It indicates that the channel bandwidth of a router is to 20 MHz. • 40: It indicates that the channel bandwidth of a router is 40 MHz. • 20/40: It specifies that a router 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. • 80: It indicates that the channel bandwidth of a router is 80 MHz. This option is available only at 5 GHz. • 20/40/80: It specifies that a router 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.

5.5 Beamforming

Beamforming is a radio wave technology written into IEEE 802.11ac standard. With beamforming, the router transmits radio signal in the direction of the client, thus creating a stronger, faster and more reliable wireless communication.

To access the page, log in to the web UI of the router and choose **Wireless Settings > Beamforming**.

The following figure shows the wireless transmission when Beamforming is disabled.



The following figure shows the wireless transmission when Beamforming is enabled.



5.6 WPS

The WPS function enables wireless devices such as smartphones to connect to WiFi networks of the router quickly and easily.

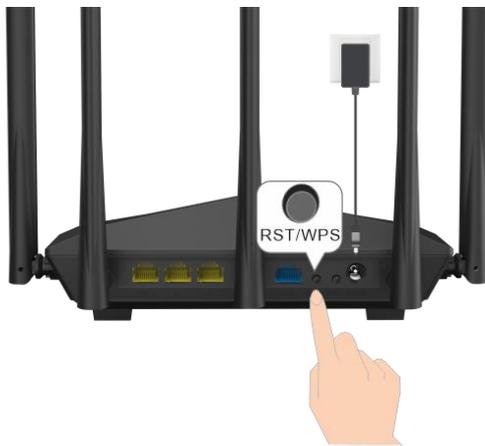
To access the page, log in to the web UI of the router and choose **Wireless Settings > WPS**.



This function is only applicable to WPS-enabled wireless devices.

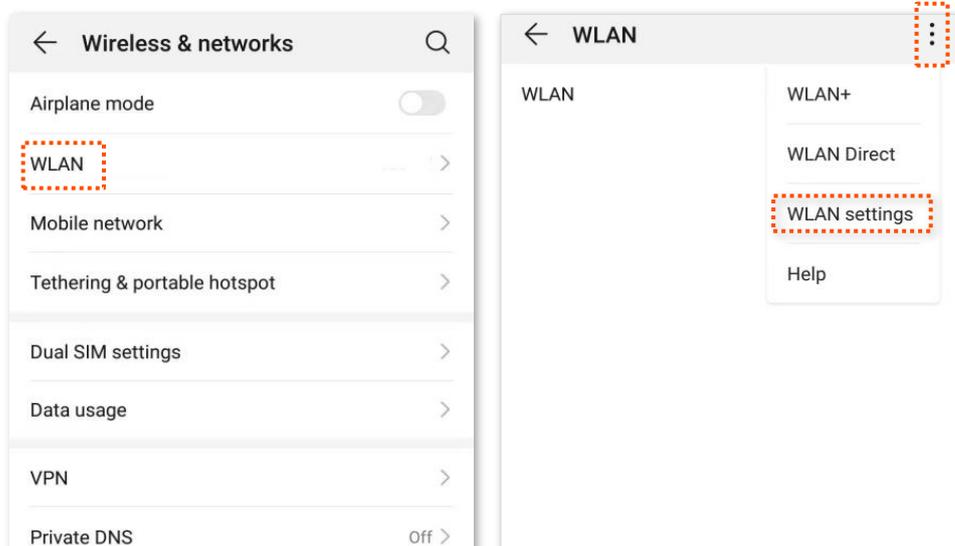
5.6.1 Connect to the WiFi network using the WPS button

Step 1 Press the WPS button on the router. If there is only one LED indicator, the LED indicator blinks fast, such as AC8; if the router has more than one LED indicator, the WiFi LED indicator blinks slowly, such as AC11.

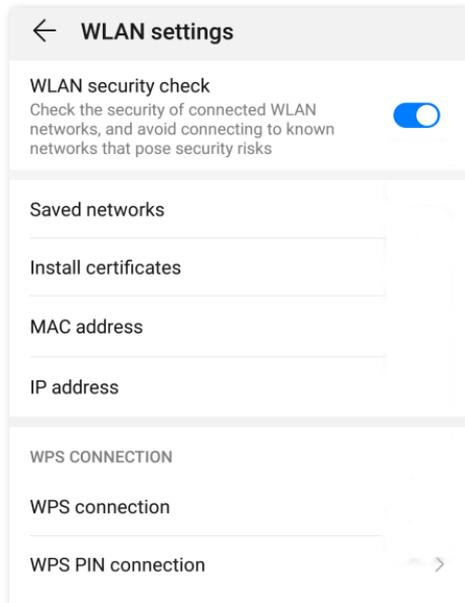


Step 2 Configure the WPS function on your wireless devices **within 2 minutes**. Configurations on various devices may differ (Example: HUAWEI P10).

1. Find **Settings** on the phone.
2. Choose **WLAN**.
3. Tap **⋮**, and choose **WLAN settings**.

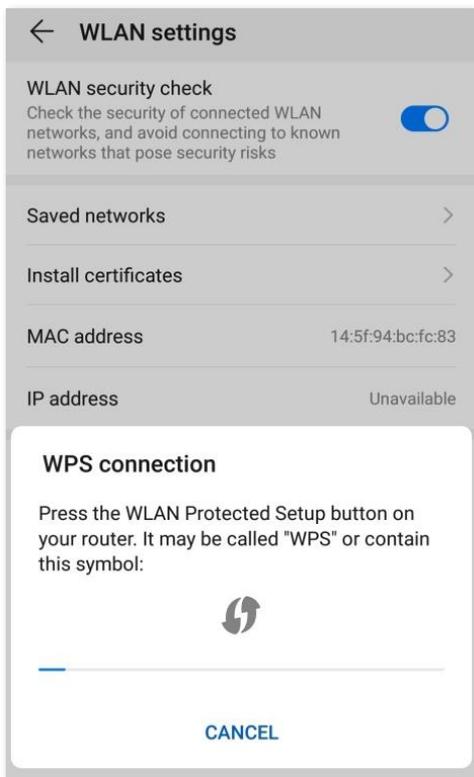


4. Choose **WPS** connection.



---End

Wait a moment until the WPS negotiation is completed, and the phone is connected to the WiFi network.



5.6.2 Connect to the WiFi network using the PBC button

Configuring procedures:

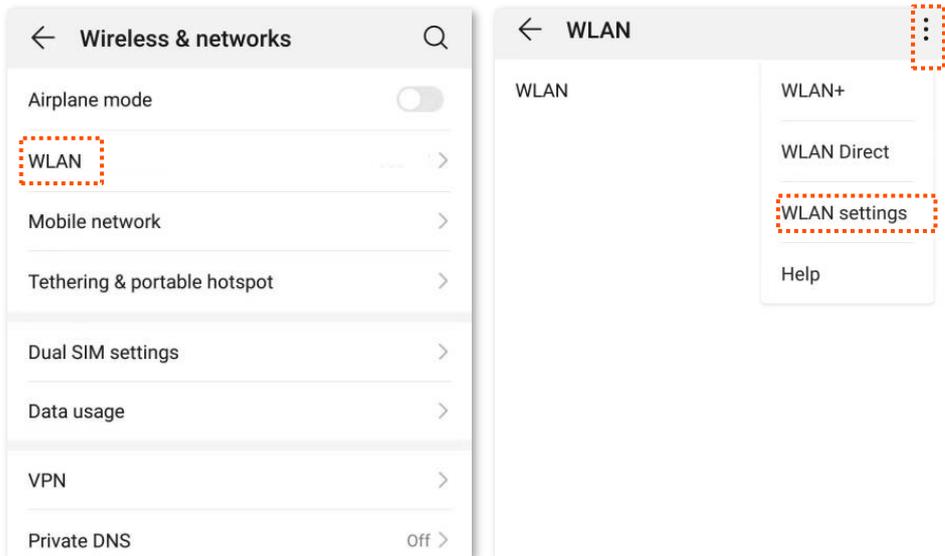
Step 1 Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.

Step 2 Choose **Wireless Settings > WPS**.

Step 3 Click **PBC**.

Step 4 Configure the WPS function on your wireless devices **within 2 minutes**. Configurations on various devices may differ (Example: HUAWEI P10).

1. Find **WLAN** settings on the phone.
2. Tap **⋮**, and choose **WLAN settings**.

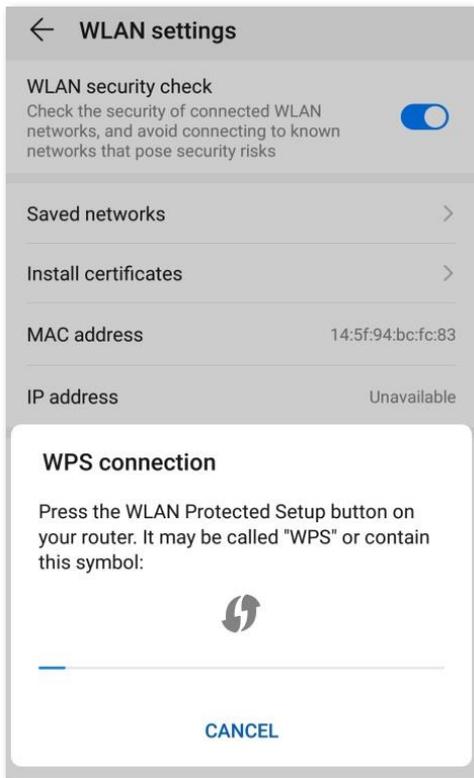


3. Choose **WPS connection**.



---End

Wait a moment until the WPS negotiation is completed, and the phone is connected to the WiFi network.



---End

Wait until the smartphone or computer is connected to the WiFi network of the router successfully.

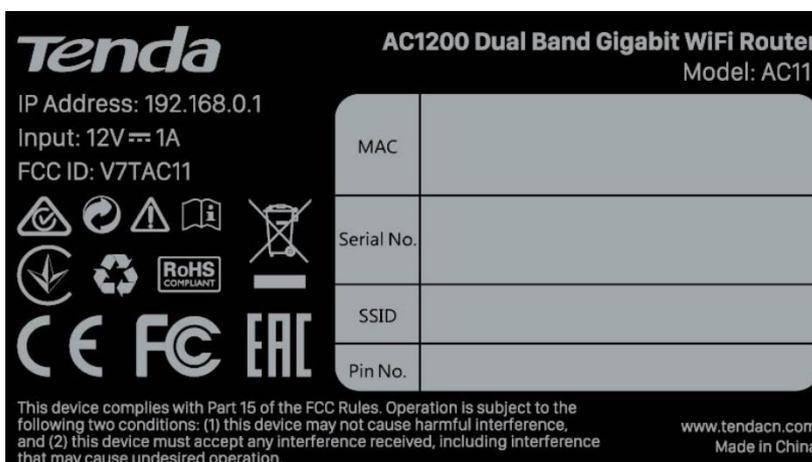
5.6.3 Connect to the WiFi network using the PIN code



WPS connection using pin code is generally applied on a computer with a wireless adapter. Please refer to relevant adapter's user guide for detailed instructions.

Step 1 Find the PIN code.

Check the PIN code on the bottom label of the router.



You can also visit tendawifi.com on a device connected to the router or its WiFi network, and navigate to **Wireless Settings** > **WPS** to check the PIN code.

WPS

WPS Enable Disable

PBC Mode Click this button or press the WPS/RESET button.

PIN Mode Enter this PIN on the device to be connected.

Step 2 Enter the PIN code on the wireless device for connection.

---End

Wait until the smartphone or computer is connected to the WiFi network of the router successfully.

6

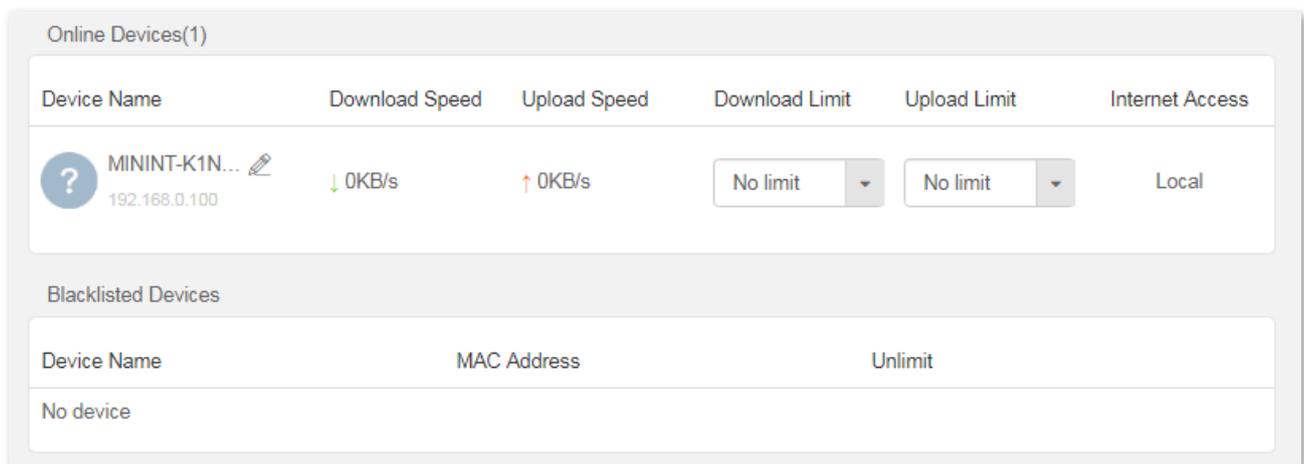
Bandwidth control

6.1 Overview

By configuring this function, you can limit the upload and download speed of devices connected to the router and allocate the bandwidth reasonably. On this page you can:

- [Set the upload and download speed limit](#)
- [Add devices to the blacklist](#)
- [Remove devices from the blacklist](#)

To access the configuration page, log in to the web UI of the router and choose **Bandwidth Control**.



Parameter description

Parameter	Description
Online Devices	Device Name It shows the information of the online device, including device name and IP address. You can click to customize the device name for easier management.
	Download Speed
	Upload Speed It specifies the current upload and download speeds of the device.
	Download Limit It allows you to specify the maximum upload and download speeds for the device.
	Upload Limit
Internet Access	It specifies whether the device can access the internet. <ul style="list-style-type: none">• : It indicates that the device can access the internet.• : It indicates that the device is unable to access the internet.• Local: It indicates that the device is managing the web UI of the router.

Parameter	Description
Blacklisted Devices	Device Name It specifies the device name of a blocked device.
	MAC Address It specifies the MAC address of a blocked device.
	Unlimit It is used to remove a blocked device from the blacklist. After being removed from the blacklist, the device can reconnect to the router for internet access.

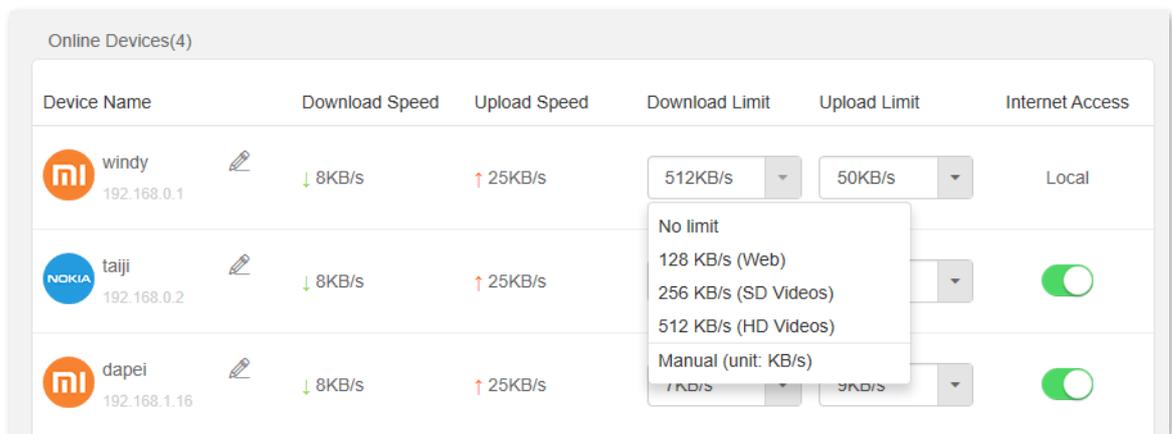
6.2 Set the upload and download speed limit

Scenario: You want to allocate bandwidth equally and enable all connected devices to enjoy smooth 720p videos.

Solution: Configure the bandwidth control function to meet the requirement.

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Bandwidth Control**.
- Step 3** Target the devices to be controlled, and set the **Download Limit** to **512 KB/s (HD Videos)**.
- Step 4** Click **OK** at the bottom of the page.



---End

After the configuration, the highest speed for the device is 4 Mbps (or 512 KB/s) and satisfies the requirement of 720p videos.

6.3 Add devices to the blacklist

Add devices to the blacklist to block the internet access:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Click **Bandwidth Control**.
- Step 3** Click corresponded to the device to be blocked to change the status to .

Online Devices(2)					
Device Name	Download Speed	Upload Speed	Download Limit	Upload Limit	Internet Access
 MININT-K1N... 192.168.0.100 74:27:ea:69:80:04	↓ 0Kbps	↑ 0Kbps	No limit	No limit	Local
 MI8 192.168.0.101 d8:ce:3a:8f:71:24	↓ 0Kbps	↑ 0Kbps	No limit	No limit	<input checked="" type="checkbox"/>

- Step 4** Click **OK** at the bottom of the page.

---End

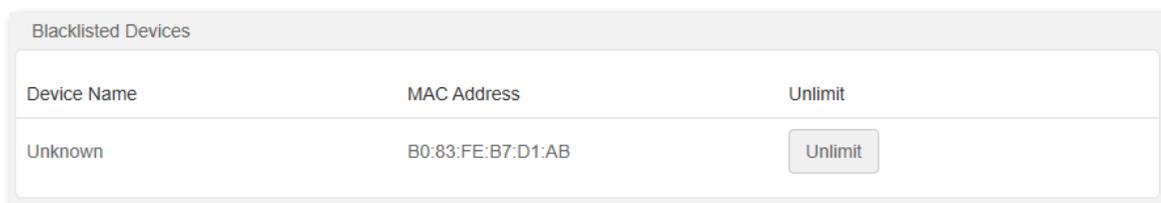
The blocked device is shown in the blacklist.

Blacklisted Devices		
Device Name	MAC Address	Unlimit
MI8	D8:CE:3A:8F:71:24	Unlimit

6.4 Remove devices from the blacklist

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Click **Bandwidth Control > Blacklisted Devices**.
- Step 3** Target the device and click **Unlimit**.
- Step 4** Click **OK** at the bottom of the page.



Device Name	MAC Address	Unlimit
Unknown	B0:83:FE:B7:D1:AB	<input type="button" value="Unlimit"/>

---End

After the device is removed from the blacklist, it can access the internet through the router again.

7

Parental controls

7.1 Overview

On the parental control page, you can view the information of online devices and configure their internet access options.

To access the configuration page, log in to the web UI of the router, and navigate to the **Parental Controls** page.

Online Devices

Device Name	IP Address	Online Duration	Manage
MININT-K1N741G 	192.168.0.100	46m 51s	<input type="checkbox"/>

Access Restrictions

Settings below will be applied to all managed devices

Allow access during: 19:00 ~ 21:00

Repeat: Everyday Mon. Tue. Wed. Thu. Fri. Sat. Sun.

Website Restrictions:

Parameter description

Parameter	Description
Online Devices	Device Name It specifies the name of the online device. You can click  to customize the device name for easier management.
	IP Address It specifies the IP address of the online device.
	Online Duration It specifies the time that has elapsed since the device connects to the router successfully.
	Manage It specifies the status of a rule. You can enable/disable the rule by switching the button.

Parameter	Description
Allow access during	It specifies the time period when internet connection is allowed.
Repeat	It specifies the dates when internet connection is allowed.
Access Restrictions	<p>It specifies the modes of website restrictions.</p> <ul style="list-style-type: none"> • Disable: It specifies that all websites are accessible. • Only Permit: It specifies that only the websites listed in Unblocked Websites are accessible. • Only Forbid: It specifies that only the websites listed in Blocked Websites are inaccessible.
	Unblocked Websites
Blocked Websites	<p> TIP</p> <p>Key words are supported for access restriction. Full website addresses are recommended for precise limit.</p>

7.2 An example of configuring parental controls

Scenario: The final exam for your daughter is approaching and you want to configure her internet access through the router.

Goal: Your daughter cannot access websites, such as facebook, twitter, youtube and Instagram, during 8:00 to 22:00 on weekends using the computer in her room, and cannot access the internet from 22:00 to 8:00.

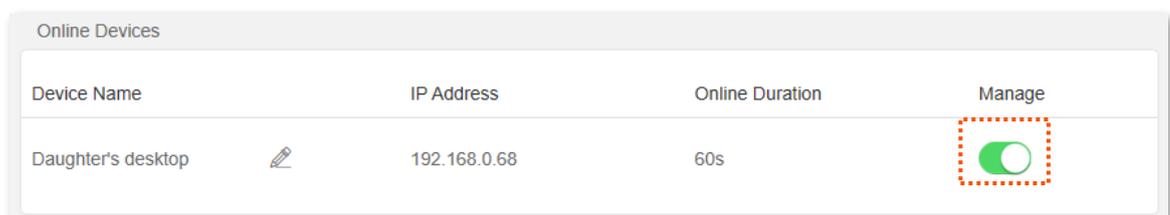
Solution: You can configure the parental controls function to reach the goal.

Configuring procedures:

Step 1 Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.

Step 2 Choose **Parental Controls**.

Step 3 Set the button from  to .



Step 4 Specify the period when the target websites cannot be accessed, which is **8:00 ~ 22:00** in this example.

Step 5 Tick the days when the rule is applied, which are **Sat.** and **Sun.** in this example.

Step 6 Set **Website Restrictions** to **Only Forbid**.

Step 7 Set **Blocked Websites**, which are **facebook.com**, **twitter.com**, **youtube.com** and **instagram.com**.

Step 8 Click **OK** on the bottom of the page.

Access Restrictions

Settings below will be applied to all managed devices

Allow access during 08 : 00 ~ 22 : 00

Repeat Everyday Mon. Tue. Wed. Thu. Fri. Sat. Sun.

Website Restrictions Only Forbid

Blocked Websites Enter website +

1	facebook.com	-
2	twitter.com	-
3	youtube.com	-
4	instagram.com	-

---End

After the configuration is completed, your daughter can access any websites except for facebook, twitter, youtube and instagram from 8:00 to 22:00 on weekends, and she cannot access the internet at all between 22:00 to 8:00.

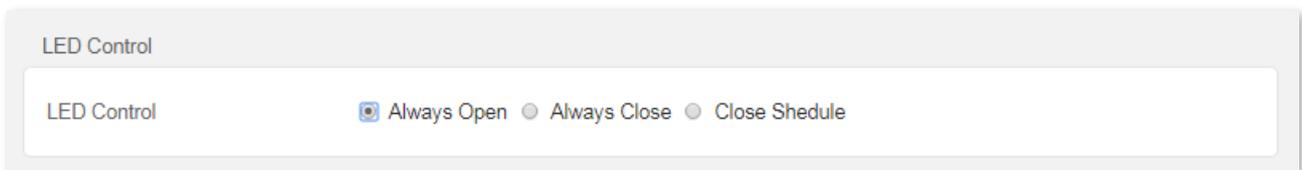
8

Sleeping mode

8.1 LED control

This page allows you to turn on and turn off the LED indicator of the router as required.

To access the configuration page, log in to the web UI of the router and choose **Sleeping Mode > LED Control**.



LED Control

LED Control Always Open Always Close Close Shedule



To make the LED control function work properly, please ensure the system time is synchronized with the internet time.

Parameter description

Parameter	Description
Always Open	It indicates that the LED indicator works in ordinary states.
Always Close	It indicates that the LED indicator is off even when the router is working.
Close Schedule	It specifies that the LED indicator is turned off as scheduled.

8.2 WiFi schedule

When the WiFi schedule function is enabled, the router disables the WiFi network during the specified period to reduce power consumption.

To access the configuration page, log in to the web UI of the router, and choose **Sleeping Mode > WiFi Schedule**.

This function is disabled by default. When it is enabled, the page is shown as below.

WiFi Schedule

WiFi Schedule Enable Disable

Turn WiFi Off At : ~ :

Turn WiFi Off On Everyday Mon. Tue. Wed. Thu. Fri. Sat. Sun.

How to enable WiFi?



To enable/disable your WiFi anywhere and anytime, scan the QR code to download the Tenda WiFi app, register an account and bind it to the router.

or

Use an Ethernet cable to connect your router to your computer, enter tendawifi.com in the address bar of a web browser on the computer, and enable WiFi on the WiFi Settings page.



To make the WiFi schedule function work properly, please ensure the system time is synchronized with the internet time.

Parameter description

Parameter	Description
WiFi Schedule	It is used to enable/disable the WiFi Schedule function.
Turn WiFi Off At	It specifies the period when the WiFi network is disabled. In that period, wireless devices cannot find the router's WiFi networks.
Turn WiFi Off On	It specifies the day(s) when the WiFi network is disabled.

9 Advanced

9.1 MAC address filter

9.1.1 Overview

This function enables you to add devices to the whitelist or blacklist to enable or disable specified users to access the internet through the router.

To access the configuration page, log in to the web UI of the router, and choose **Advanced > MAC Address Filter**.

Blacklisted MAC Address	Remark (Optional)	Operation
<input type="text"/>	<input type="text"/>	

Parameter description

Parameter	Description
Filter Mode	It specifies the MAC address filter mode. <ul style="list-style-type: none">• Blacklist: Wireless devices listed are unable to connect to the WiFi network of the router, and wired devices listed are unable to access the internet.• Whitelist: Only wireless devices listed can connect to the WiFi network of the router, and wired devices listed are able to access the internet.
Blacklisted MAC Address	It specifies the MAC address of the device to which a rule applies.
Whitelisted MAC Address	
Remark (Optional)	It specifies the description of a rule.
Operation	: Click it to add a device into the blacklist/whitelist. : Click it to delete a device from the blacklist/whitelist.
Add all online devices to the whitelist	It is only available when you set the whitelist for the first time. By clicking it, you can add all currently connected devices to the whitelist.

9.1.2 Only allow specified devices to access the internet

Scenario: The WiFi network in your home is misused by unknown users sometimes.

Goal: Only allow certain devices of family members to access the internet.

Solution: You can configure the MAC address filter function to reach the goal.

Assume the MAC address and connection status of your domestic devices are as follows.

Device	MAC address	Status
Your own phone	8C:EC:4B:B3:04:92	Connected
Wife's phone	94:C6:91:29:C2:12	Disconnected
Daughter's phone	98:9C:57:19:D0:1B	Disconnected

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Advanced > MAC Address Filter**.
- Step 3** Set the **Filter Mode** to **Whitelist**.
- Step 4** Enter the **Whitelisted MAC Address** of the device, which is **94:C6:91:29:C2:12** in this example.
- Step 5** (Optional) Enter the remark for the device, which is **Wife's phone** in this example.
- Step 6** Click **+**.

MAC Address Filter

Filter Mode

Blacklist (Disallow only listed MAC addresses.)

Whitelist (Allow only listed MAC addresses.)

Whitelisted MAC Address	Remark (Optional)	Operation
94:C6:91:29:C2:12	Wife's phone	+

- Step 7** Repeat **Step 4** to **Step 6** to add **Daughter's phone (98:9C:57:19:D0:1B)** to the whitelist.
- Step 8** Click **OK** at the bottom of the page.

MAC Address Filter

Filter Mode

Blacklist (Disallow only listed MAC addresses.)

Whitelist (Allow only listed MAC addresses.)

Whitelisted MAC Address	Remark (Optional)	Operation
		+
8C:EC:4B:B3:04:92		Local
94:C6:91:29:C2:12	Wife's phone	-
98:9C:57:19:D0:1B	Daughter's phone	-

---End

When configuration is completed, only the three devices added can access the internet through the router.

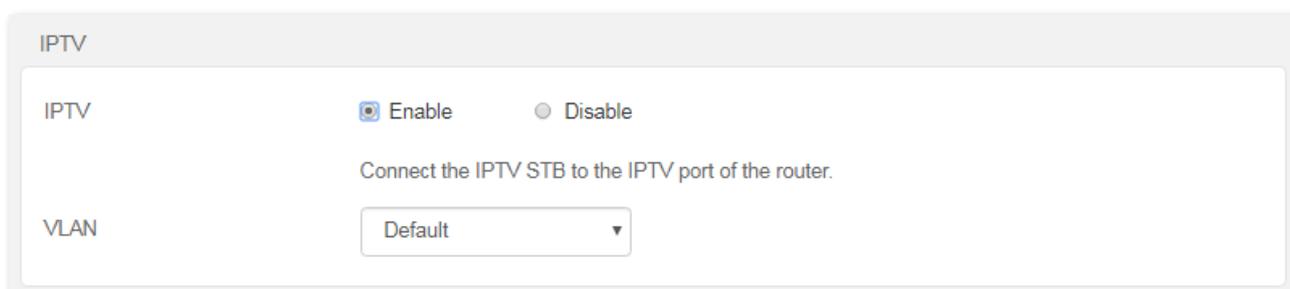
9.2 IPTV

9.2.1 Overview

If the IPTV service is included in the broadband service you purchased, you can enable the IPTV function to enjoy both internet access and IPTV programs through the router at the same time.

To access the configuration page, log in to the web UI of the router, and choose **Advanced > IPTV**.

This function is disabled by default. When it is enabled, the page is shown as below.



Parameter description

Parameter	Description
IPTV	It is used to enable or disable the IPTV function of the router. When this function is enabled, the port 3/IPTV can be used only as an IPTV port to be connected to an IPTV set-top-box.
VLAN	It specifies the VLAN ID of your IPTV service. <ul style="list-style-type: none">• If you do not have any information about VLAN provided by your ISP, please keep Default.• If you are using the IPTV service in Shanghai, choose Shanghai VLAN and choose the proper VLAN ID.• If you have VLAN ID from your ISP, please choose Manual VLAN and enter the VLAN value.

9.2.2 Watch IPTV programs through the router

Scenario: The IPTV service is included in your broadband service. You have obtained the IPTV account and password from your ISP, but no VLAN information.

Goal: Be able to watch IPTV programs through the router.

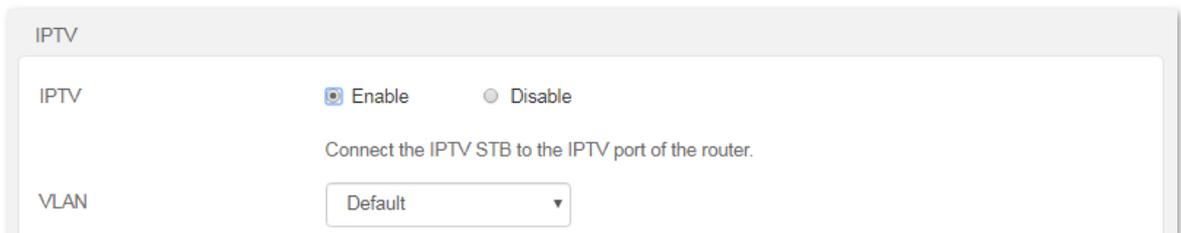
Solution: You can configure the IPTV function to reach the goal.



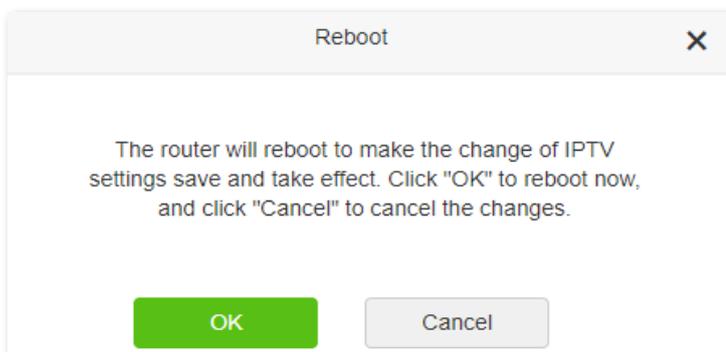
Configuring procedures:

Step 1 Set your router.

1. Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
2. Choose **Advanced > IPTV**.
3. Set **IPTV** to **Enable**.
4. Click **OK** at the bottom of the page.



5. Click **OK**.



Step 2 Set the set-top-box.

Dial up on set-top-box with the account and password provided by ISP.

---End

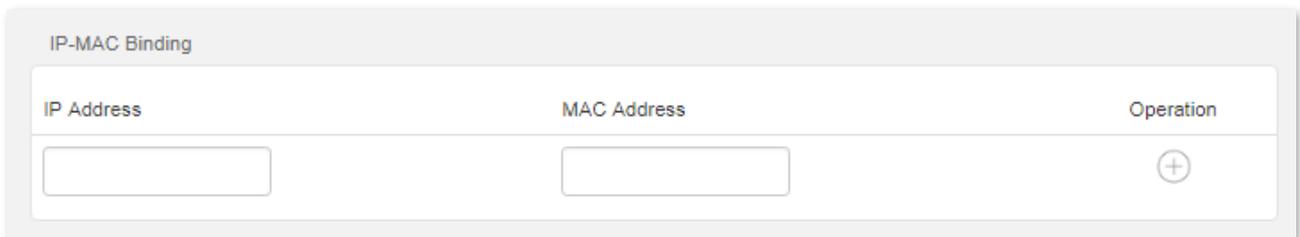
After the configuration is completed, you can watch IPTV programs on the TV.

9.3 IP-MAC binding

9.3.1 Overview

Through the DHCP reservation function, specified clients can always obtain the same IP address when connecting to the router, ensuring that the router's "Port Forwarding", "DDNS", "DMZ host" and other functions can function normally. This function takes effect only when the DHCP server function of the router is enabled.

To access the configuration page, log in to the web UI of the router, and choose **Advanced > IP-MAC Binding**.



Parameter description

Parameter	Description
IP Address	It specifies the IP address to be reserved for the client with the specified MAC address. It should belong to the DHCP address pool.
MAC Address	It specifies the MAC address of the client that needs a fixed IP address.
Operation	 : It is used to add an IP-MAC binding rule.  : It is used to delete an IP-MAC binding rule.

9.3.2 Assign fixed IP addresses to LAN clients

Scenario: You have set up an FTP server within your LAN.

Goal: Assign a fixed IP address to the host of the FTP server and prevent the failure of access to the FTP server owing to the change of IP address.

Solution: You can configure the DHCP reservation function to reach the goal.

Assume that the information of the FTP server includes:

- The fixed IP address for the server: 192.168.0.136
- MAC address of the FTP server host: D4:61:DA:1B:CD:89

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Advanced > IP-MAC Binding**.
- Step 3** Enter an IP address included in the DHCP address pool, which is **192.168.0.136** in this example.

Step 4 Enter the MAC address of the client which needs a fixed IP address, which is **D4:61:DA:1B:CD:89** in this example.

Step 5 Click ⊕.

Step 6 Click **OK** at the bottom of the page.

IP Address	MAC Address	Operation
192.168.0.136	D4:61:DA:1B:CD:89	⊕

---End

When the configuration is completed, the page is shown as below and the FTP server host always gets the same IP address when connecting to the router, which is 192.168.0.136 in this example.

IP Address	MAC Address	Operation
		⊕
192.168.0.136	D4:61:DA:1B:CD:89	⊖

9.4 Port forwarding

9.4.1 Overview

By default, internet users cannot actively access the LAN of the router.

The port forwarding function opens a port of the router, and binds the LAN server to the port using the server's IP address and intranet service port. All access requests to the WAN port of the router will be directed to the server. Therefore, the server within the LAN can be accessed by internet users and the LAN can be free from attacks from the internet.

For example, the port forwarding function enables internet users to access web servers or FTP servers within the LAN.

To access the configuration page, log in to the web UI of the router, and choose **Advanced > Port Forwarding**.

Internal IP Address	Internal Port	External Port	Protocol	Operation
<input type="text"/>	21	21	Both	+

Parameter description

Parameter	Description
Internal IP Address	It specifies the IP address of a server that resides on the LAN.
Internal Port	It specifies the service port number of the internal server. You can either choose a port from the drop-down list or specify a port manually.
External Port	It specifies the service port number for internet users to access a specified service. When the internal port is selected or specified, the external port will be occupied automatically. You can also change it as required.
Protocol	It specifies the protocol that specified service uses. Both indicates that both TCP and UDP are used. If you are uncertain about it, Both is recommended.
Operation	+ : It is used to add a port forwarding rule. - : It is used to delete a port forwarding rule.

9.4.2 Enable internet users to access LAN resources using an IP address

Scenario: You have set up an FTP server within your LAN.

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

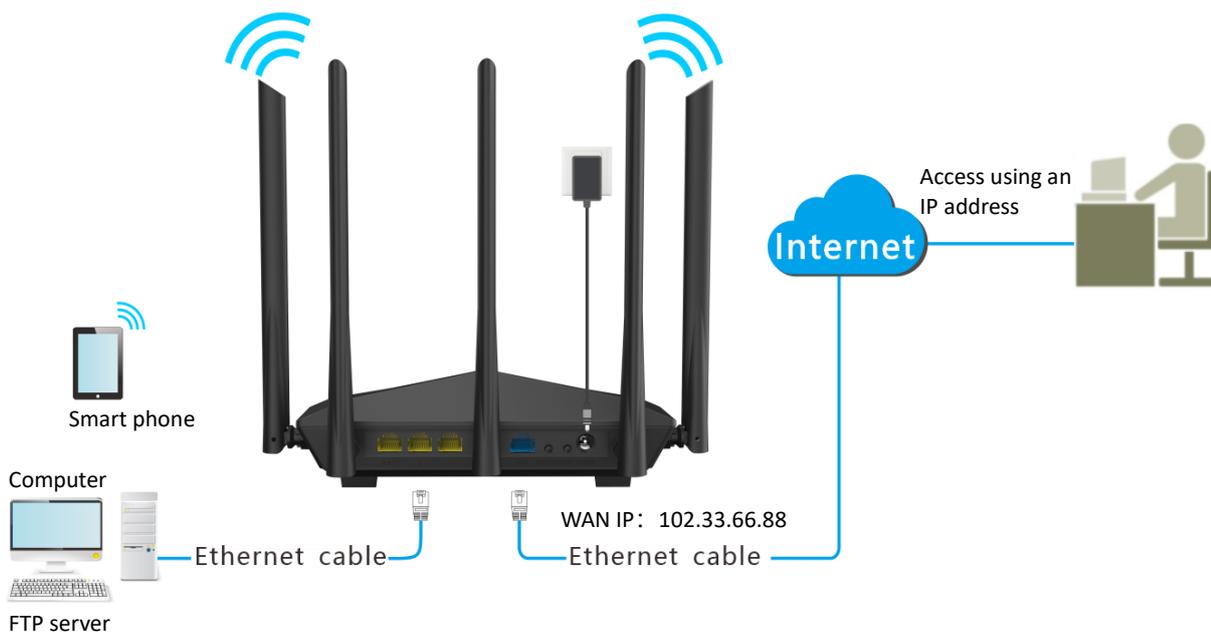
Solution: You can configure the port forwarding function to reach the goal.

Assume that the information of the FTP server includes:

- IP address: 192.168.0.136
- MAC address: D4:61:DA:1B:CD:89
- Service port: 21
- The WAN IP address of the router: 102.33.66.88.



- Please ensure that router obtains an IP address from the public network. This function may not work on a host with an IP address of a private network or an intranet IP address assigned by ISPs that start with 100. 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.
- ISPs may block unreported web services to be accessed with the default port number 80. Therefore, when the default LAN port number is 80, please change it to an uncommon port number (1024 to 65535) manually, such as 9999.
- The LAN port number and the WAN port number can be different.



- FTP server
- IP: 192.168.0.136
 - MAC: D4:61:DA:1B:CD:89
 - Port number: 21

Configuring procedures:

Step 1 Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.

Step 2 Add a port forwarding.

1. Choose **Advanced > Port Forwarding**.
2. Enter the **Internal IP Address**, which is **192.168.0.136** in this example.

3. Choose an **Internal Port** in the drop-down box, which is **21** in this example.
4. Choose a protocol, which is **Both** in this example.
5. Click **+**.
6. Click **OK** on the bottom of the page.

Port Forwarding				
Internal IP Address	Internal Port	External Port	Protocol	Operation
192.168.0.136	21	21	Both	+

The port forwarding rule is added when the page is shown as below.

Port Forwarding				
Internal IP Address	Internal Port	External Port	Protocol	Operation
	21	21	Both	+
192.168.0.136	21	21	Both	-

Step 3 Assign a fixed IP address to the host where the server locates.

1. Choose **Advanced > IP-MAC Binding**.
2. Specifies an **IP Address** for the host of the server, which is **192.168.0.136** in this example.
3. Enter the **MAC Address** of the host of the server, which is **D4:61:DA:1B:CD:89** in this example.
4. Click **+**.
5. Click **OK** on the bottom of the page.

IP-MAC Binding		
IP Address	MAC Address	Operation
192.168.0.136	D4:61:DA:1B:CD:89	+

The IP-MAC binding rule is added when the page is shown as below.

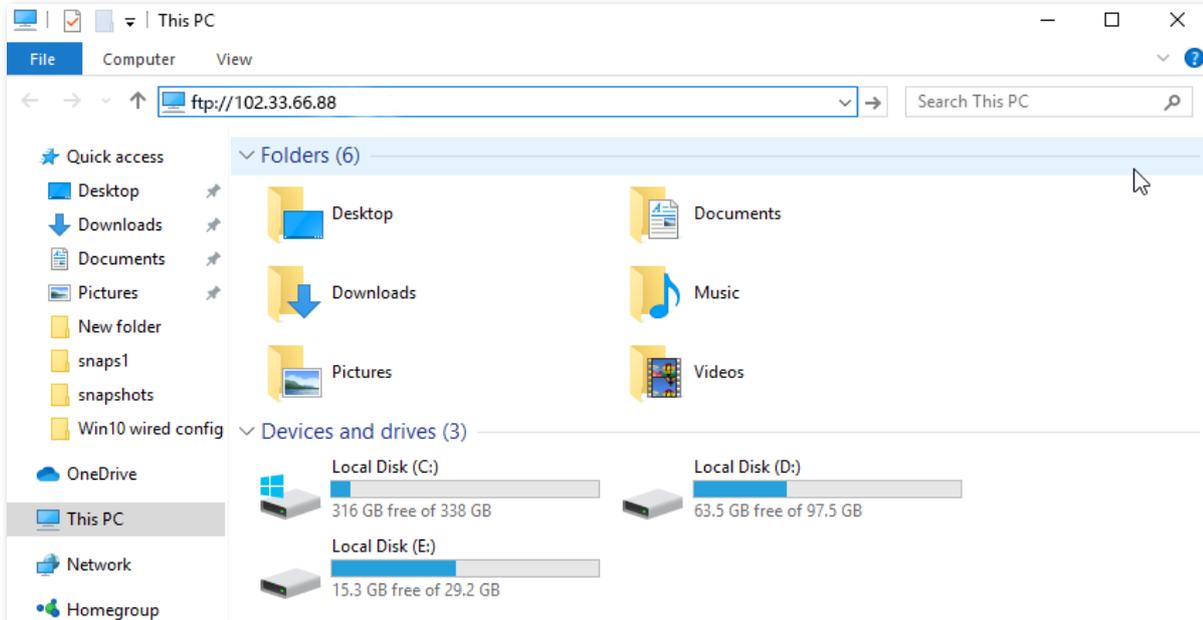
IP-MAC Binding		
IP Address	MAC Address	Operation
		+
192.168.0.136	D4:61:DA:1B:CD:89	-

---End

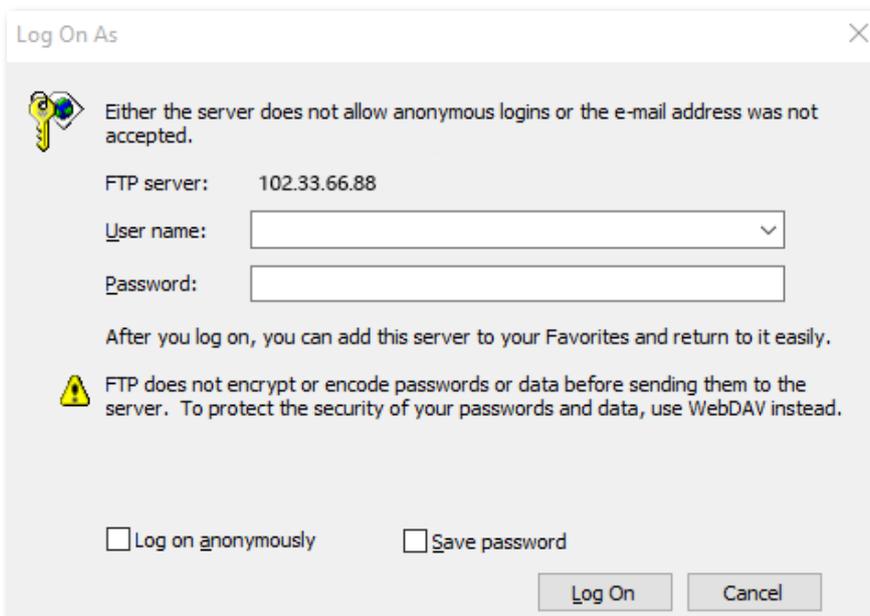
When completing the configurations, users from the internet can access the FTP server by visiting *"Intranet service application layer protocol name://WAN IP address of the router"*. If the external

port number is not the same as the default intranet service port number, the visiting address should be: *“Intranet service application layer protocol name://WAN IP address of the router:external port number”*.

In this example, the address is *“ftp://102.33.66.88”*. You can find the WAN IP address of the router in [View system information](#).



Enter the user name and password to access the resources on the FTP server.



If you want to access the server within a LAN using a domain name, refer to the solution [DDNS + Port forwarding](#).



After the configurations, if internet users still cannot access the FTP server, try the following methods:

- Ensure that the internal port number configured in the port forwarding function is the same as the service port number set on the server.
 - Close the firewall, antivirus software and security guards on the host of the FTP server and try again.
-

9.5 DDNS

9.5.1 Overview

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

To access the configuration page, log in to the web UI of the router, and choose **Advanced > DDNS**.

This function is disabled by default. When it is enabled, the page is shown as below.

DDNS

DDNS Enable Disable

Service Provider [Register Now](#)

DDNS User Name

DDNS Password

Connection Status

Parameter description

Parameter	Description
DDNS	It specifies whether to enable the DDNS function.
Service Provider	It specifies a DDNS service provider, including oray.com, 88ip.cn and dyn.com.
DDNS User Name	It specifies the user name and password registered on a DDNS service provider's website for logging in to the DDNS service.
DDNS Password	
DDNS Host Name	It specifies the domain name you applied on the website of your service provider. It is only required when dyn.com is chosen as the service provider.
Connection Status	It specifies the current connection status of the DDNS service.

9.5.2 Enable internet users to access LAN resources using a domain name

Scenario: You have set up an FTP server within your LAN.

Goal: Open the FTP server to internet users and enable family members who are not at home to access the resources of the FTP server from the internet with a domain name.

Solution: You can configure the DDNS and port forwarding functions to reach the goal.

Assume that the information of the FTP server includes:

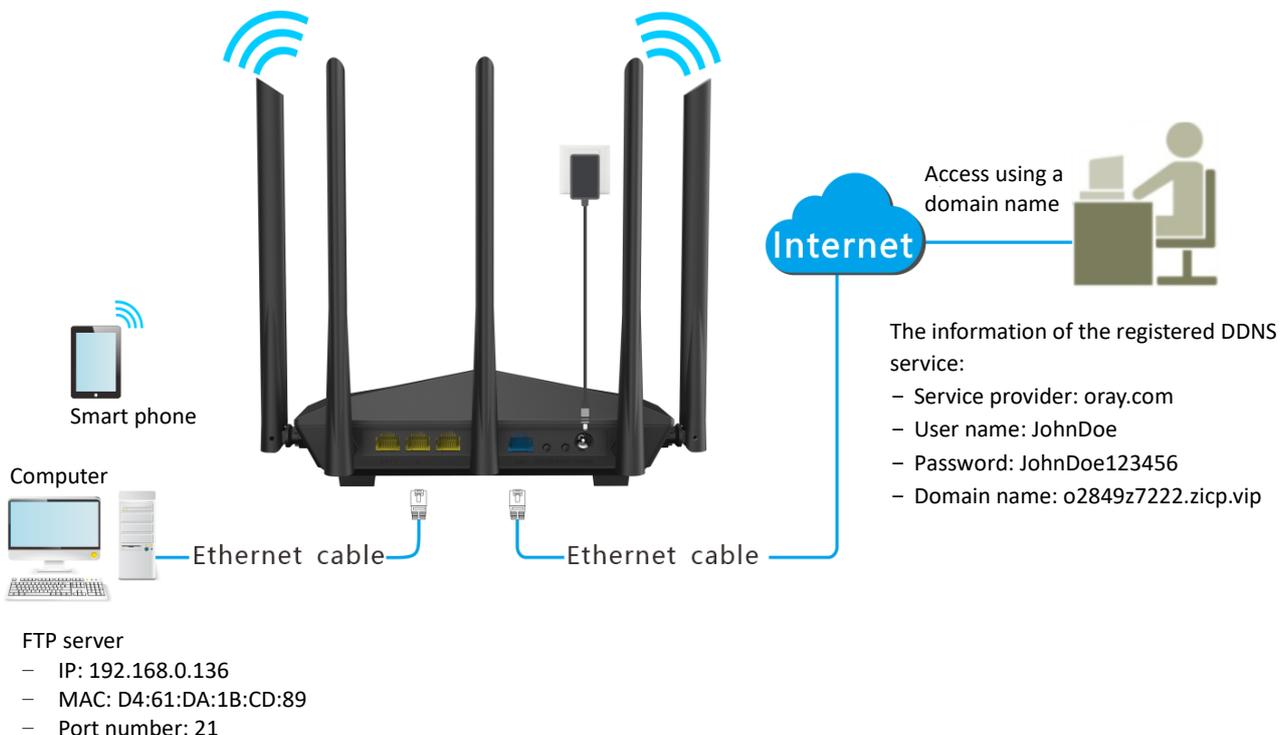
- IP address: 192.168.0.136
- MAC address of the host: D4:61:DA:1B:CD:89
- Service port: 21

The information of the registered DDNS service:

- Service provider: oray.com
- User name: JohnDoe
- Password: JohnDoe123456
- Domain name: o2849z7222.zicp.vip

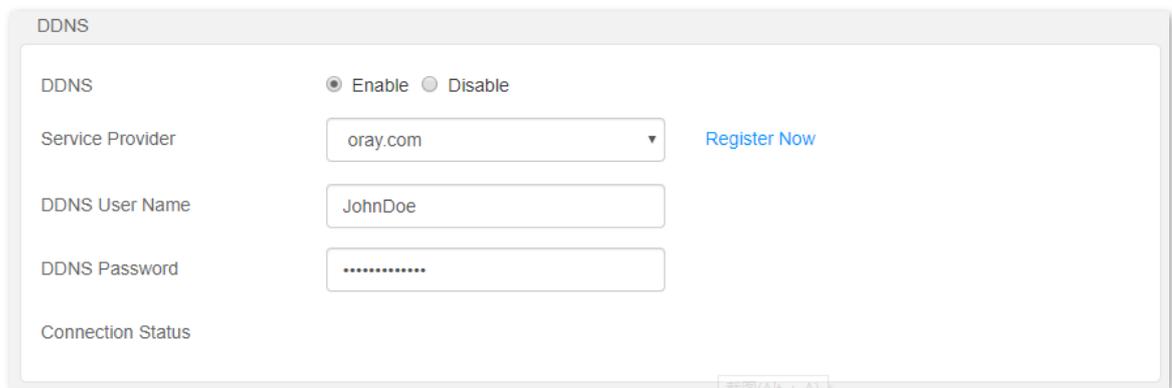


Please ensure that router obtains an IP address from the public network. This function may not work on a host with an IP address of a private network or an intranet IP address assigned by ISPs that start with 100. Common IPv4 addresses are classified into class A, class B and class C. Private IP addresses of class A range from 10.0.0.0 to 10.255.255.255; Private IP addresses of class B range from 172.16.0.0-172.31.255.255; Private IP addresses of class C range from 192.168.0.0-192.168.255.255.



Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Configure the DDNS function.
1. Choose **Advanced > DDNS**.
 2. Set **DDNS** to **Enable**.
 3. Choose a service provider, which is **oray.com** in this example.
 4. Enter the user name and password, which are **JohnDoe** and **JohnDoe123456** in this example.
 5. Click **OK** on the bottom of the page.



DDNS

DDNS Enable Disable

Service Provider [Register Now](#)

DDNS User Name

DDNS Password

Connection Status

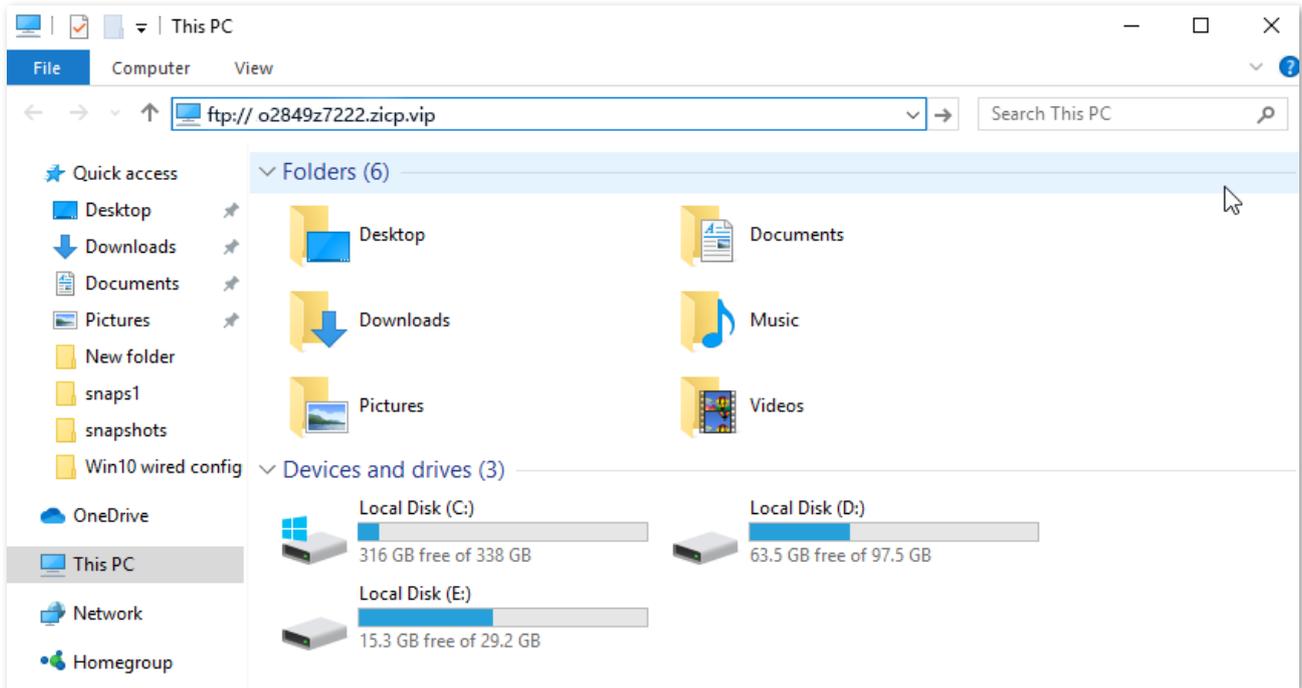
Wait a moment, when the Connection Status turns **Connected**, the configurations succeed.

- Step 3** Configure the port forwarding function (refer to [Port forwarding](#)).

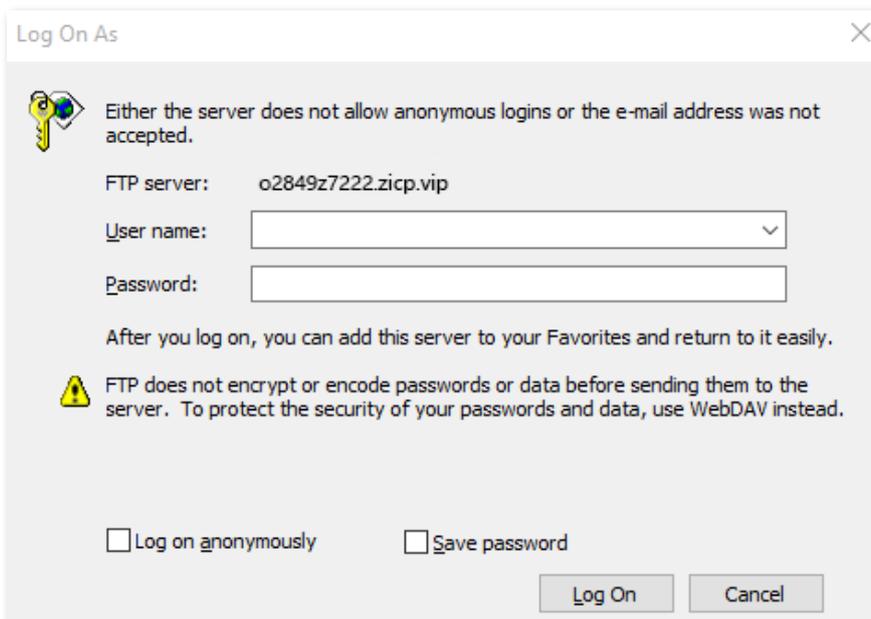
---End

When completing the configurations, users from the internet can access the FTP server by visiting *"Intranet service application layer protocol name://the domain name"*. If the external port number is not the same as the default intranet service port number, the visiting address should be: *"Intranet service application layer protocol name://the domain name:external port number"*.

In this example, the address is **ftp://o2849z7222.zicp.vip**.



Enter the user name and password to access the resources on the FTP server.



After the configurations, if internet users still cannot access the FTP server, try the following methods:

- Ensure that the LAN port number configured in the port forwarding function is the same as the service port number set on the server.
- Close the firewall, antivirus software and security guards on the host of the FTP server and try again.

9.6 DMZ host

9.6.1 Overview

A DMZ host on a LAN is free from restrictions when communicating with the internet. It is useful for getting better and smoother experience 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.



- A DMZ host is not protected by the firewall of the router. 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 access the configuration page, log in to the web UI of the router, and choose **Advanced > DMZ Host**.

This function is disabled by default. When it is enabled, the page is shown as below.

A screenshot of a web interface for configuring a DMZ host. The title is "DMZ Host". There are two main sections: "DMZ Host" with radio buttons for "Enable" (selected) and "Disable", and "Host IP Address" with an empty text input field.

Parameter description

Parameter	Description
DMZ Host	It is used to enable or disable the DMZ function.
Host IP Address	It specifies the IP address to be set as the DMZ host.

9.6.2 Enable internet users to access LAN resources using an IP address

Scenario: You have set up an FTP server within your LAN.

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

Solution: You can configure the DMZ host function to reach the goal.

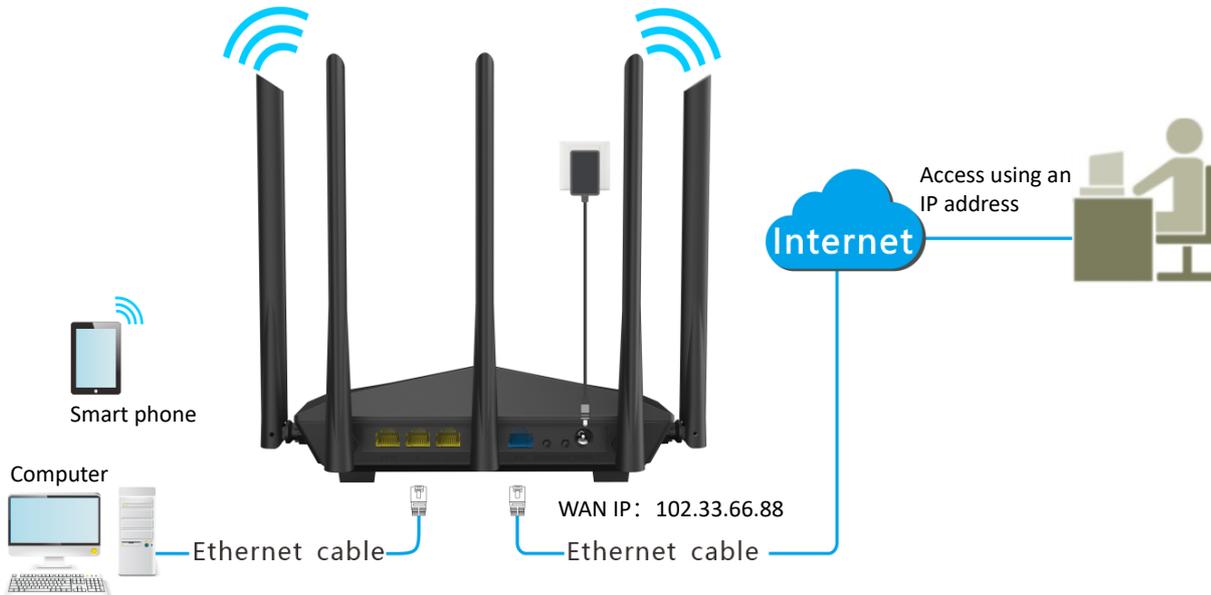
Assume that the information of the FTP server includes:

- IP address: 192.168.0.136
- MAC address: D4:61:DA:1B:CD:89
- Service port: 21

- The WAN IP address of the router: 102.33.66.88.



Please ensure that router obtains an IP address from the public network. This function may not work on a host with an IP address of a private network or an intranet IP address assigned by ISPs that start with 100. 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 172.16.0.0-172.31.255.255; Private IP addresses of class C range from 192.168.0.0-192.168.255.255.



FTP server

- IP: 192.168.0.136
- MAC: D4:61:DA:1B:CD:89
- Port number: 21

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Set the server host as the DMZ host.
1. Choose **Advanced > DMZ Host**.
 2. Set **DMZ Host** to **Enable**.
 3. Enter the IP address of the host, which is **192.168.0.136** in this example.
 4. Click **OK** on the bottom of the page.

DMZ Host

DMZ Host Enable Disable

Host IP Address

- Step 3** Assign a fixed IP address to the host where the server locates.

1. Choose **Advanced > IP-MAC Binding**.
2. Enter the IP Address for the FTP server host, which is **192.168.0.136** in this example.

3. Enter the MAC Address of the host of the FTP server, which is **D4:61:DA:1B:CD:89** in this example.
4. Click ⊕.

IP-MAC Binding		
IP Address	MAC Address	Operation
192.168.0.136	D4:61:DA:1B:CD:89	⊕

5. Click **OK** on the bottom of the page.

----End

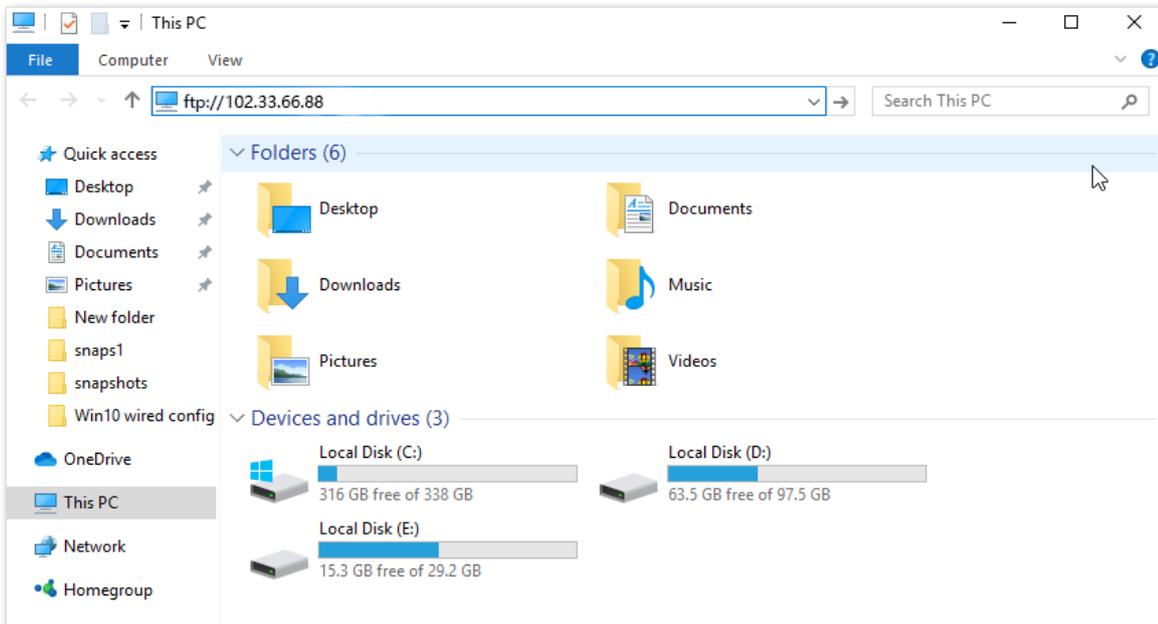
When the configurations are completed, users from the internet can access the DMZ host by visiting “*Intranet service application layer protocol name://WAN IP address of the router*”. If the intranet service port number is not the default number, the visiting address should be: “*Intranet service application layer protocol name://WAN IP address of the router:intranet service port number*”.

In this example, the address is “**ftp://102.33.66.88**”. You can find the WAN IP address of the router in [View system information](#).

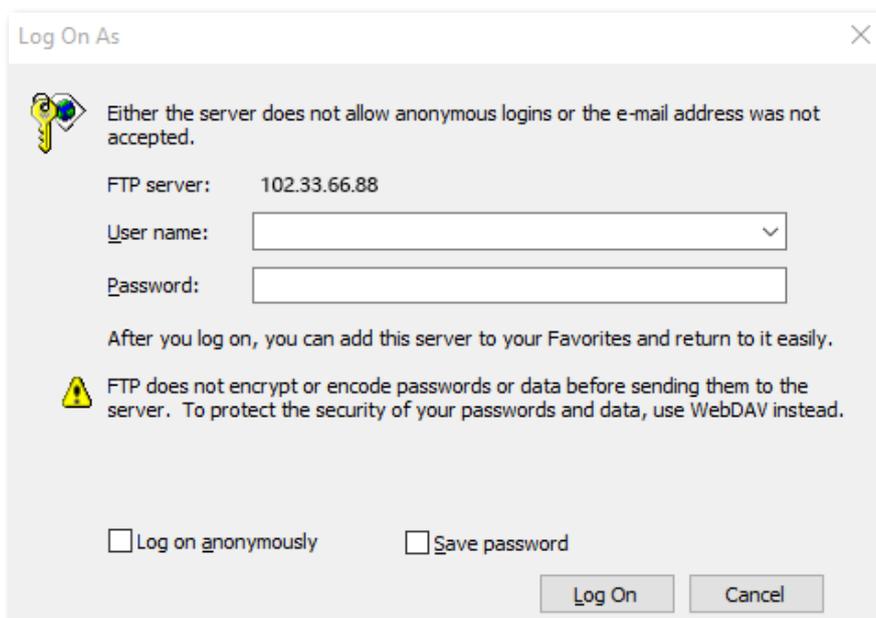


TIP

When the default intranet service port number is 80, please change the service port number to an uncommon one (1024 to 65535), such as 9999.



Enter the user name and password to access the resources on the FTP server.



If you want to access the server within a LAN using a domain name, refer to the solution [DMZ + DDNS](#).



After the configurations, if internet users still cannot access the FTP server, close the firewall, antivirus software and security guards on the host of the FTP server and try again.

9.7 UPnP

UPnP is short for Universal Plug and Play. This function enables the router open port automatically for UPnP-based programs. It is generally used for P2P programs, such as BitComet and AnyChat, and helps increase the download speed.

To access the configuration page, log in to the web UI of the router, and choose **Advanced > UPNP**.

This function is enabled by default.



9.8 Firewall

The firewall function helps the router avoid the host on WAN to Ping the WAN IP address of the router to prevent from exposing itself, and meanwhile protect the router against external Ping attacks.

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

This function is enabled by default.



The screenshot shows a web interface for the Firewall configuration. At the top, there is a header labeled "Firewall". Below the header, there is a section labeled "Firewall" with two radio buttons: "Enable" (which is selected) and "Disable".

10 IPv6

This router supports IPv4 and IPv6 dual stack protocols. In the IPv6 part, you can:

- [Connect to the IPv6 network of ISPs](#)
- [Change IPv6 LAN settings](#)
- [View IPv6 connection status](#)

10.1 Connect to the IPv6 network of ISPs

The router can access the IPv6 network of ISPs through three connection types. Choose the connection type by referring to the following chart.

Scenario	Connection Type
IPv6 service is included in the PPPoE user name and password.	PPPoEv6
<ul style="list-style-type: none">• The ISP does not provide any PPPoEv6 user name and password.• The ISP does not provide information about IPv6 address.• You have a router that can access IPv6 network.	DHCPv6
The ISP provides you with a set of information including IPv6 address, subnet mask, default gateway and DNS server, etc.	Static IPv6



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

10.1.1 PPPoEv6

Overview

If your ISP provides you with the PPPoE user name and password with IPv6 service, you can choose PPPoEv6 to access the internet.

Log in to the web UI of the router, and navigate to the **IPv6 > IPv6 WAN Settings**. When the connection type is set to **PPPoEv6**, the page is shown as below.

IPv6 WAN Settings

Connection Type: PPPoEv6

PPPoE Username: []

PPPoE Password: [..]

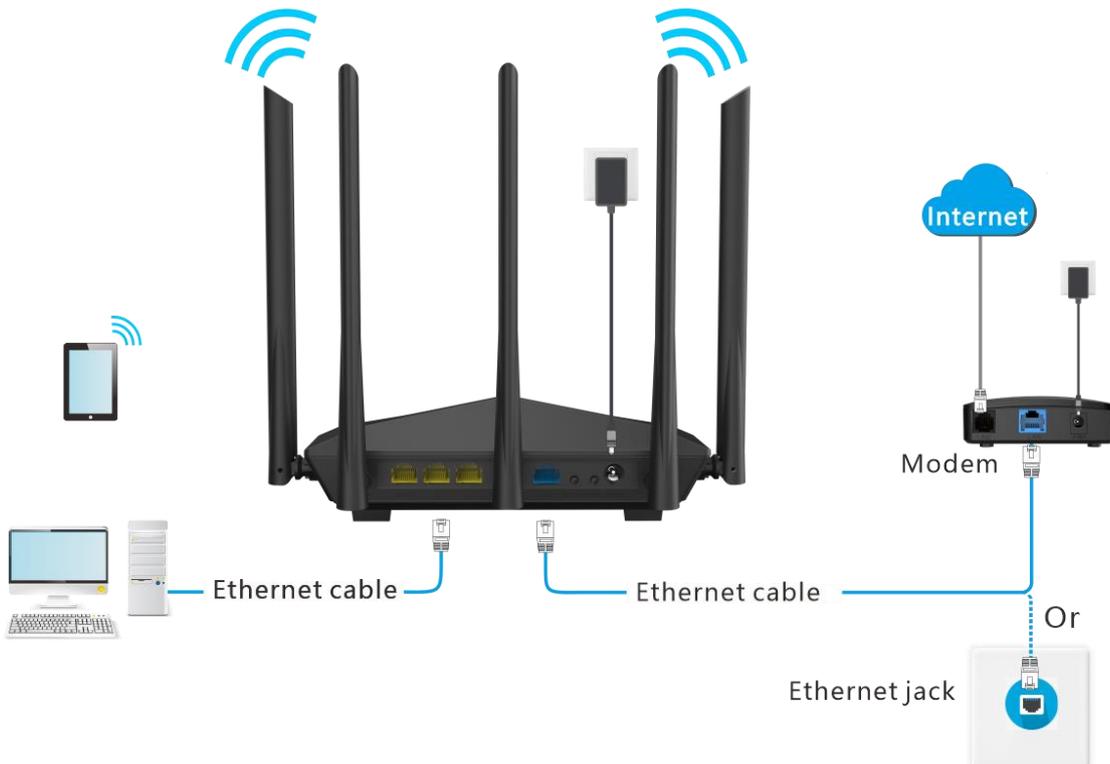
IPv6 Address Obtaining Method: Obtain IPv6 Prefix Delegation

Parameter description

Parameter	Description
PPPoE Username	It specifies the PPPoE user name and password provided by your ISP.
PPPoE Password	IPv4 and IPv6 services share the same PPPoE account.
IPv6 Address Obtaining Method	When the option is selected, the LAN port of router obtains IPv6 prefix from its upstream device. It is recommended to keep the default setting (Selected). If the LAN port cannot obtain the PD prefix, it is because the upstream device does not support PD prefix delivery. Contact your ISP to solve this problem.

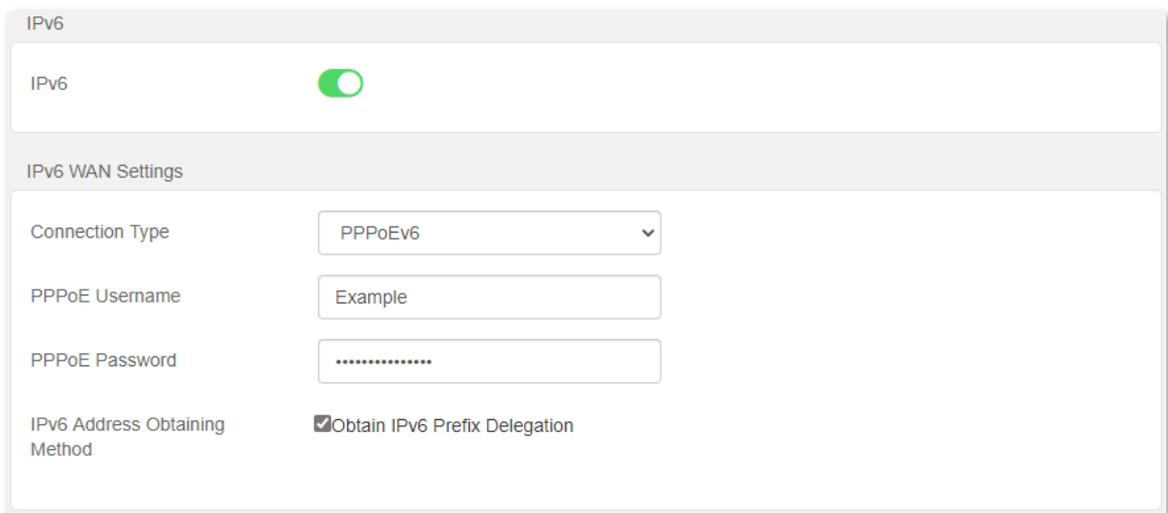
Access the internet through PPPoEv6

The application scenario is shown as below.



Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **IPv6**.
- Step 3** Set the status of **IPv6** to .
- Step 4** Set the **Connection Type** to **PPPoEv6**.
- Step 5** Enter the **PPPoE Username** and **PPPoE Password**.
- Step 6** Tick **Obtain IPv6 Prefix Delegation**.
- Step 7** Click **OK** at the bottom of the page.



IPv6

IPv6

IPv6 WAN Settings

Connection Type: PPPoEv6

PPPoE Username: Example

PPPoE Password:

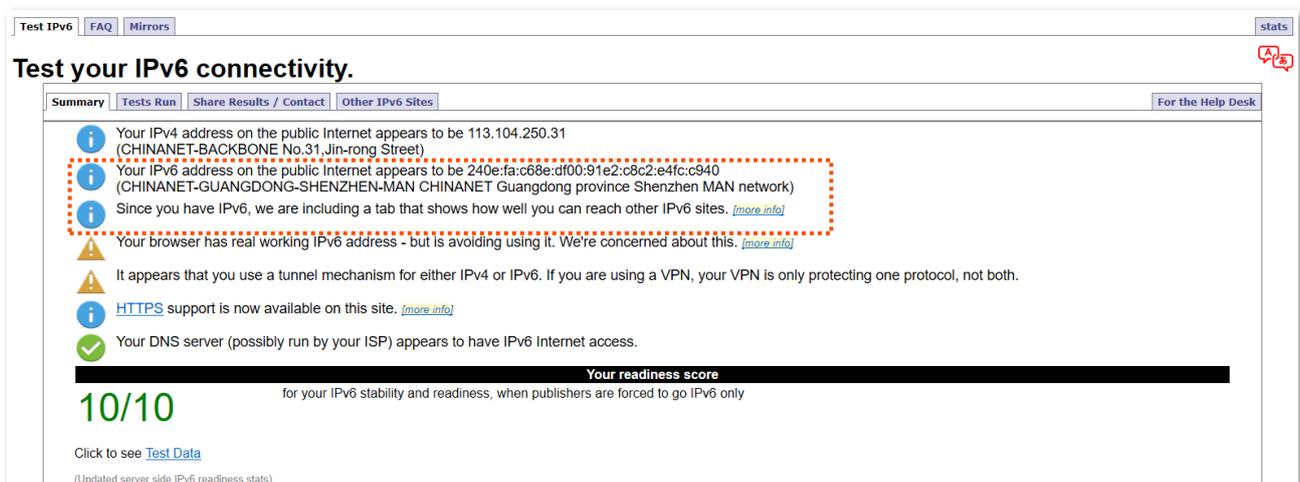
IPv6 Address Obtaining Method: Obtain IPv6 Prefix Delegation

---End

IPv6 network test:

Start a web browser on a phone or a computer that is connected to the router, and visit **test-ipv6.com**. The website will test your IPv6 connection status.

When “You have IPv6” is shown on the page, it indicates that the configurations succeed and you can access IPv6 services.



Test IPv6 | FAQ | Mirrors | stats

Test your IPv6 connectivity.

Summary | Tests Run | Share Results / Contact | Other IPv6 Sites | For the Help Desk

- Your IPv4 address on the public Internet appears to be 113.104.250.31 (CHINANET-BACKBONE No.31,Jin-rong Street)
- Your IPv6 address on the public Internet appears to be 240e:fa:c68e:df00:91e2:c8c2:e4fc:c940 (CHINANET-GUANGDONG-SHENZHEN-MAN CHINANET Guangdong province Shenzhen MAN network) [\[more info\]](#)
- Since you have IPv6, we are including a tab that shows how well you can reach other IPv6 sites. [\[more info\]](#)
- Your browser has real working IPv6 address - but is avoiding using it. We're concerned about this. [\[more info\]](#)
- It appears that you use a tunnel mechanism for either IPv4 or IPv6. If you are using a VPN, your VPN is only protecting one protocol, not both.
- HTTPS support is now available on this site. [\[more info\]](#)
- Your DNS server (possibly run by your ISP) appears to have IPv6 Internet access.

Your readiness score
10/10 for your IPv6 stability and readiness, when publishers are forced to go IPv6 only

Click to see [Test Data](#)
(Updated server side IPv6 readiness stats)

If the IPv6 network test fails, try the following solutions:

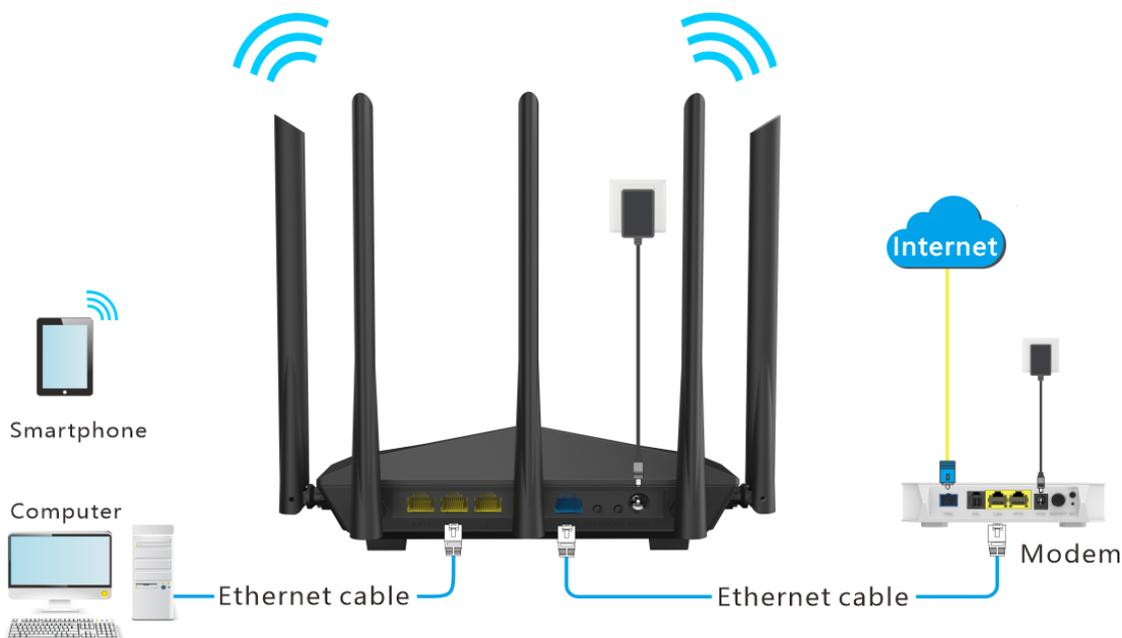
- Navigate to the **IPv6 > IPv6 Status**, ensure that the IPv6 WAN address is a global unicast address.
- Ensure that devices connected to router obtain their IPv6 address through DHCPv6.
- Consult your ISP.

10.1.2 DHCPv6

DHCPv6 enables the router to obtain IPv6 address from DHCPv6 server to access the internet, which is applicable in the following scenarios:

- The ISP does not provide any PPPoEv6 user name and password.
- The ISP does not provide information about IPv6 address.
- You have a router that can access IPv6 network.

The application scenario is shown as below.



Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **IPv6**.
- Step 3** Set the status of **IPv6** to .
- Step 4** Set the connection type to **DHCPv6**.

IPv6 WAN Settings

Connection Type ▼
DHCPv6

IPv6 Address Obtaining Method Obtain IPv6 Prefix Delegation

- Step 5** Click **OK** at the bottom of the page.

---End

Parameter description

Parameter	Description
IPv6 Address Obtaining Method	When the option is selected, the LAN port of router obtains IPv6 prefix from its upstream device. It is recommended to keep the default setting (Selected). If the LAN port cannot obtain the PD prefix, it is because the upstream device does not support PD prefix delivery. Contact your ISP to solve this problem.

IPv6 network test:

Start a web browser on a phone or a computer that is connected to the router, and visit **test-ipv6.com**. The website will test your IPv6 connection status.

When “You have IPv6” is shown on the page, it indicates that the configuration succeeds and you can access IPv6 services.

The screenshot shows the 'Test your IPv6 connectivity' page. At the top, there are navigation links for 'Test IPv6', 'FAQ', and 'Mirrors'. The main heading is 'Test your IPv6 connectivity.' Below this, there are tabs for 'Summary', 'Tests Run', 'Share Results / Contact', and 'Other IPv6 Sites'. A 'For the Help Desk' link is also present. The test results are as follows:

- Information icon: Your IPv4 address on the public Internet appears to be 113.104.250.31 (CHINANET-BACKBONE, No.31, Jin-rong Street).
- Information icon: Your IPv6 address on the public Internet appears to be 240e:fa:c68e:df00:91e2:c8c2:e4fc:c940 (CHINANET-GUANGDONG-SHENZHEN-MAN CHINANET Guangdong province Shenzhen MAN network).
- Information icon: Since you have IPv6, we are including a tab that shows how well you can reach other IPv6 sites. [\[more info\]](#)
- Warning icon: Your browser has real working IPv6 address - but is avoiding using it. We're concerned about this. [\[more info\]](#)
- Warning icon: It appears that you use a tunnel mechanism for either IPv4 or IPv6. If you are using a VPN, your VPN is only protecting one protocol, not both.
- Information icon: [HTTPS](#) support is now available on this site. [\[more info\]](#)
- Checkmark icon: Your DNS server (possibly run by your ISP) appears to have IPv6 Internet access.

At the bottom, there is a 'Your readiness score' section with a score of 10/10, indicating 'for your IPv6 stability and readiness, when publishers are forced to go IPv6 only'.

If the IPv6 network test fails, try the following solutions:

- Navigate to the **IPv6 > IPv6 Status**, ensure that the IPv6 WAN address is a global unicast address.
- Ensure that devices connected to router obtain their IPv6 address through DHCPv6.
- Consult your ISP.

10.1.3 Static IPv6

Overview

When your ISP provides you with information including IPv6 address, subnet mask, default gateway and DNS server, you can choose this connection type to access the internet with IPv6.

Log in to the web UI of the router, and navigate to the **IPv6 > IPv6 WAN Settings**. When the connection type is set to **Static IPv6 Address**, the page is shown as below.

IPv6

IPv6

IPv6 WAN Settings

Connection Type: Static IPv6 Address

IPv6 Address: /

Default IPv6 Gateway:

Primary IPv6 DNS:

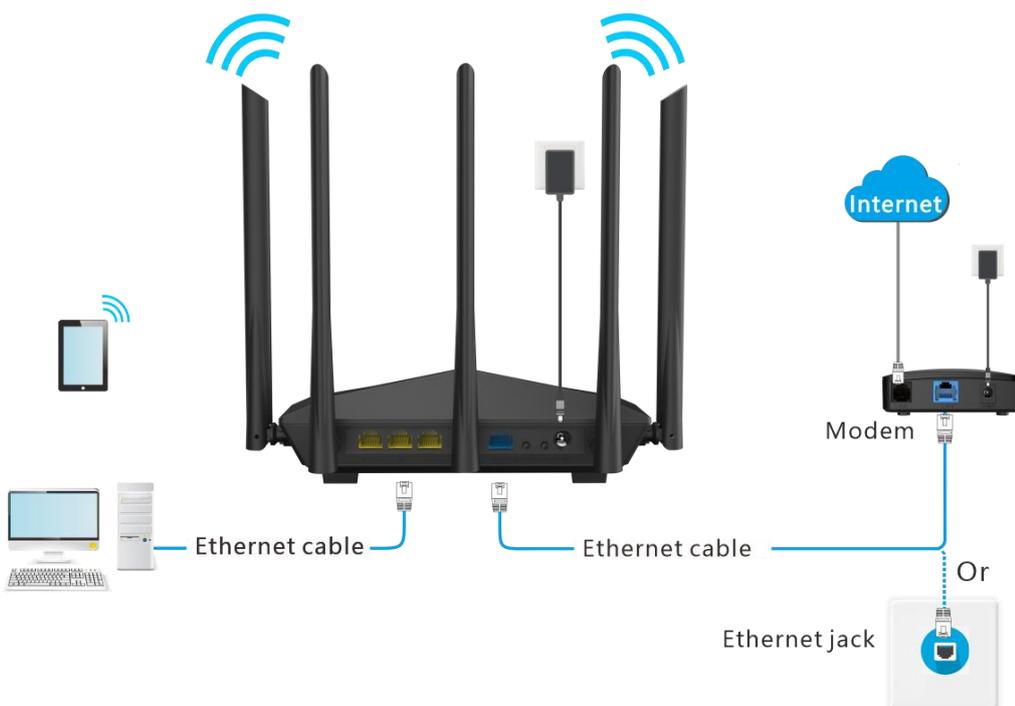
Secondary IPv6 DNS:

Parameter description

Parameter	Description
IPv6 Address	It specifies the fixed IP address information provided by your ISP.
Default IPv6 Gateway	 TIP
Primary IPv6 DNS	If your ISP only provides one DNS server address, you can leave the Secondary IPv6 DNS blank.
Secondary IPv6 DNS	

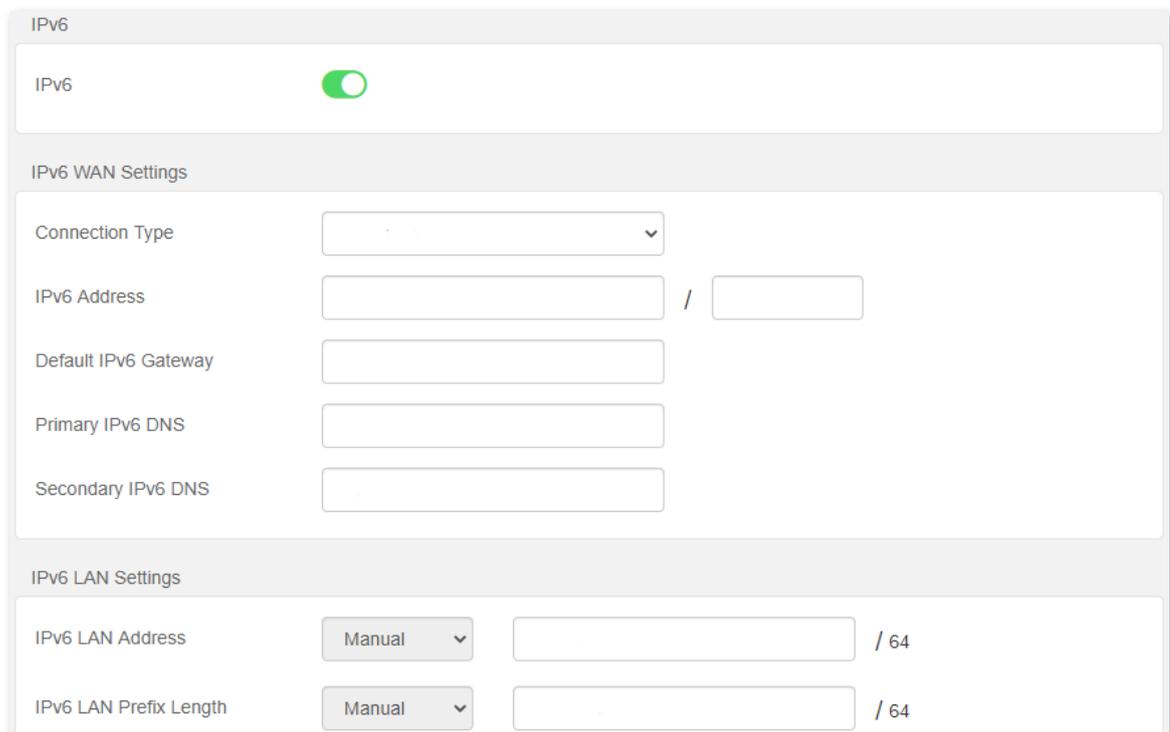
Access the internet through Static IPv6

The application scenario is shown as below.



Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **IPv6**.
- Step 3** Set the status of **IPv6** to .
- Step 4** Set the connection type to **Static IPv6**.
- Step 5** Enter the required parameters under IPv6 WAN settings.
- Step 6** Enter the **IPv6 LAN Address** and **IPv6 LAN Prefix Length**.
- Step 7** Click **OK** at the bottom of the page.



IPv6

IPv6

IPv6 WAN Settings

Connection Type

IPv6 Address /

Default IPv6 Gateway

Primary IPv6 DNS

Secondary IPv6 DNS

IPv6 LAN Settings

IPv6 LAN Address / 64

IPv6 LAN Prefix Length / 64

---End

IPv6 network test:

Start a web browser on a phone or a computer that is connected to the router, and visit **test-ipv6.com**. The website will test your IPv6 connection status.

When “You have IPv6” is shown on the page, it indicates that the configurations succeed and you can access IPv6 services.

Test IPv6 [FAQ](#) [Mirrors](#) stats

Test your IPv6 connectivity.

[Summary](#) [Tests Run](#) [Share Results / Contact](#) [Other IPv6 Sites](#) [For the Help Desk](#)

-  Your IPv4 address on the public Internet appears to be 113.104.250.31 (CHINANET-BACKBONE No.31, Jin-rong Street)
-  Your IPv6 address on the public Internet appears to be 240e:fa:c68e:d00:91e2:c8c2:e4fc:c940 (CHINANET-GUANGDONG-SHENZHEN-MAN CHINANET Guangdong province Shenzhen MAN network)
-  Since you have IPv6, we are including a tab that shows how well you can reach other IPv6 sites. [\[more info\]](#)
-  Your browser has real working IPv6 address - but is avoiding using it. We're concerned about this. [\[more info\]](#)
-  It appears that you use a tunnel mechanism for either IPv4 or IPv6. If you are using a VPN, your VPN is only protecting one protocol, not both.
-  [HTTPS](#) support is now available on this site. [\[more info\]](#)
-  Your DNS server (possibly run by your ISP) appears to have IPv6 Internet access.

Your readiness score

10/10 for your IPv6 stability and readiness, when publishers are forced to go IPv6 only

Click to see [Test Data](#)

(Updated server side IPv6 readiness stats)

If the IPv6 network test fails, try the following solutions:

- Ensure that you have entered the correct WAN IPv6 address.
- Ensure that devices connected to router obtain their IPv6 address through DHCPv6.
- Consult your ISP.

10.2 IPv6 LAN setup

To access the page, log in to the web UI of the router and choose **IPv6 > IPv6 LAN Settings**.

You can change the IPv6 LAN settings here.

IPv6 LAN Settings

IPv6 LAN Address	Manual	<input type="text"/>	/ 64
IPv6 LAN Prefix Length	Manual	<input type="text"/>	/ 64
DHCPv6	Enable		
DHCPv6 Address Assignment Method	Manual		
Start ID		<input type="text"/>	
End ID		<input type="text"/>	
IPv6 DNS	Manual		
Primary IPv6 DNS		<input type="text"/>	
Secondary IPv6 DNS		<input type="text"/>	

Parameter description

Parameter	Description
IPv6 LAN Address	<p>It specifies two types of IPv6 LAN address assignment.</p> <ul style="list-style-type: none">• Auto: The router generates the IPv6 address according to its LAN IPv6 address. By default, the prefix has 64 digits.• Manual: You need to set the IPv6 LAN address manually.
IPv6 LAN Prefix Length	<p>It specifies two types IPv6 LAN prefix address assignment.</p> <ul style="list-style-type: none">• Auto: The router obtains an LAN prefix from the upstream device.• Manual: You need to set the IPv6 LAN prefix manually.
DHCPv6	<p>DHCPv6 (Dynamic Host Configuration Protocol for IPv6) is used to assign IP addresses and prefix to IPv6 hosts on a network. It is the IPv6 equivalent of the DHCP for IPv4. This is also known as a stateful autoconfiguration.</p>
DHCPv6 Address Assignment Method	<p>It specifies the assignment type of DHCPv6 address for the clients connected to the router.</p> <ul style="list-style-type: none">• Auto: DHCPv6 stateless configuration. Clients obtain their IPv6 address through Router Advertisement (Stateless Auto Address Configuration) and other parameters are allocated by the DHCPv6 server.• Manual: DHCPv6 stateful configuration. The DHCPv6 server automatically assigns IPv6 addresses/prefixes and other network configuration parameters (e.g. DNS server addresses, etc.) to clients. The user needs to manually configure the start ID and the end ID.

Parameter	Description
Start ID	The configuration is required when the IPv6 DHCP type is set to Manual .
End ID	It specifies the range of the last segment of the IPv6 address that the DHCPv6 server assigns to the devices. Range: 1 to ffff.
IPv6 DNS	It specifies the LAN IPv6 DNS configuration method. <ul style="list-style-type: none"> • Auto: Obtain the IPv6 DNS address from the upstream device. • Manual: Configure the IPv6 DNS address manually.
Primary IPv6 DNS	It specifies the fixed IPv6 DNS address provided by your ISP here. <p> TIP</p>
Secondary IPv6 DNS	If your ISP only provides one DNS server address, you can leave the Secondary IPv6 DNS blank.

10.3 IPv6 status

To access the page, log in to the web UI of the router and choose **IPv6 > IPv6 Status**.

You can change the IPv6 information of the router.

IPv6 Status	
Connection Type	PPPoEv6
IPv6 WAN Address	fe80:0018::29a3:9c17:23b5:180e/64 240e:00fa:00a1:dad7:29a3:9c17:23b5:180e/64
Default IPv6 Gateway	fe80::da86:8eff:feb6:15
IPv6 LAN Address	fe80:0001::ca3a:35ff:feb1:3d72/64 240e:00fa:c6a0:2000:ca3a:35ff:feb1:3d72/64
Primary IPv6 DNS	240e:1f:1::1
Secondary IPv6 DNS	--

Parameter description

Parameter	Description
Connection Type	It specifies the IPv6 connection type of the router.
IPv6 Wan Address	It specifies the WAN IPv6 address of the router. After the IPv6 function is configured, the WAN port of the router obtains a global unicast IPv6 address or a tunnel address, and a link local address.
Default IPv6 Gateway	It specifies the default IPv6 gateway address of IPv6 network.
IPv6 LAN Address	It specifies the LAN IPv6 address of the router. After the IPv6 function is configured, the LAN port of the router obtains a global unicast IPv6 address or a tunnel address, and a link local address.
Primary IPv6 DNS	It specifies the primary and secondary DNS server address of IPv6 network.
Secondary IPv6 DNS	

11

Administration

11.1 Login password

To ensure network security, a login password is recommended. We recommend you set a complex login password by more types of characters, such as uppercase letters, lowercase letters, numbers and special characters.

To access the login password configuration page, log in to the web UI and choose **Administration > Login Password**.

When you use the router for the first time, no password is required to log in to the web UI of the router and you can set a login password on this page.

The screenshot shows a web form titled "Login Password". It contains two rows of input fields. The first row has a label "New Password" followed by a text input field containing the placeholder text "Digits and letters only". The second row has a label "Confirm Password" followed by a text input field containing the placeholder text "Confirm Password".

If you have already set a login password, you can change the password on this page, but the old password is required.

The screenshot shows a web form titled "Login Password". It contains three rows of input fields. The first row has a label "Old Password" followed by a text input field containing the placeholder text "Digits and letters only". The second row has a label "New Password" followed by a text input field containing the placeholder text "Digits and letters only". The third row has a label "Confirm Password" followed by a text input field containing the placeholder text "Confirm Password".



TIP

If you forget your login password and cannot log in to the web UI of the router, refer to [Reset the router](#) and log in to the web UI without password.

11.2 WAN parameters

11.2.1 Change the server name and service name

When the connection type is PPPoE, you may need to set the server name and service name. These parameters provided by your ISP, if any, need to be configured after you have set up your internet connection. Otherwise, keep the default settings.

To access the configuration page, log in to the web UI and choose **Administration > WAN Parameters**.

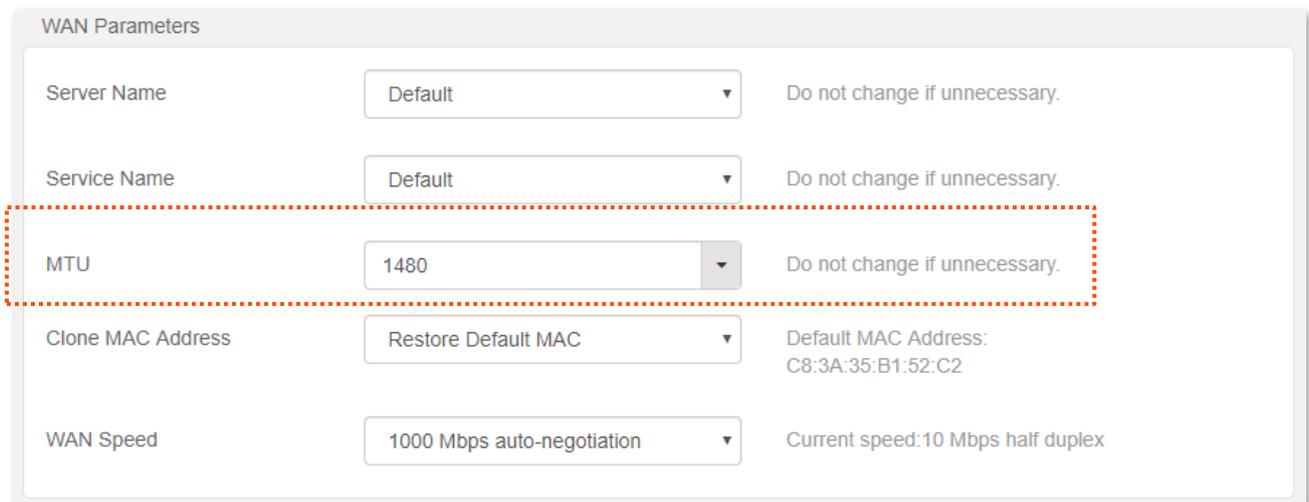


The screenshot shows the 'WAN Parameters' configuration page. It contains two rows of configuration options. The first row is for 'Server Name', with a dropdown menu set to 'Default' and a note 'Do not change if unnecessary.' The second row is for 'Service Name', also with a dropdown menu set to 'Default' and a note 'Do not change if unnecessary.'

11.2.2 Change the MTU value

MTU (Maximum Transmission Unit) is the largest data packet transmitted by a network device. When the connection type is PPPoE, the default MTU value is 1480. When the connection type is dynamic IP address or static IP address, the default MTU value is 1500. Do not change the value unless necessary. If you need to, please refer to the following instructions.

To access the configuration page, log in to the web UI of the router, and choose **Administration > WAN Parameters**.



The screenshot shows the 'WAN Parameters' configuration page with five rows of configuration options. The 'MTU' row is highlighted with a red dashed border. The 'Server Name' and 'Service Name' rows are identical to the previous screenshot. The 'Clone MAC Address' row has a dropdown menu set to 'Restore Default MAC' and a note 'Default MAC Address: C8:3A:35:B1:52:C2'. The 'WAN Speed' row has a dropdown menu set to '1000 Mbps auto-negotiation' and a note 'Current speed: 10 Mbps half duplex'.

Generally, the default value is recommended. Try to change the MTU value when:

- You cannot access some specific websites or encrypted websites (such as E-banking or Paypal websites).
- You cannot receive or send Emails or access an FTP or POP server.

You can try reducing the value of MTU gradually from 1500 until the problem is resolved (The recommended range is 1400 to 1500).

MTU application description

MTU	Application
1500	It is commonly used for non-ADSL and non-VPN dial-up connections.
1492, 1480	It is used for ADSL dial-up connections.
1472	It is the maximum value for the ping command. A packet with a larger size is fragmented.
1468	It is used for DHCP connections.
1436	It is used for VPN or PPTP connections.

11.2.3 Clone WAN MAC Address

If you still cannot access the internet after completing [Internet settings](#), it could be the result of the ISP's configuration to bind the internet account information with a fixed MAC address. In this case, you can clone and change the MAC address of the router to solve the problem.

To access the configuration page, log in to the web UI of the router, and choose **Administration > WAN Parameters**.

WAN Parameters

Server Name	Default	Do not change if unnecessary.
Service Name	Default	Do not change if unnecessary.
MTU	1480	Do not change if unnecessary.
Clone MAC Address	Restore Default MAC	Default MAC Address: C8:3A:35:B1:52:C2
WAN Speed	1000 Mbps auto-negotiation	Current speed:10 Mbps half duplex

- **Restore Default MAC:** Restore the factory setting of MAC address.
- **Clone Local Host MAC:** Set the MAC address of the router to the same as that of the device which is configuring the router.
- **Manual:** Manually set a MAC address.



Please ensure the cloned MAC address is that of the computer or the router which is already able to access the internet.

Configuring procedures:

Step 1 Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.

Step 2 Choose **Administration > WAN Parameters**.

Step 3 Click the drop-down box of **Clone MAC Address**, and choose **Clone Local Host MAC** to copy the MAC address of the management device, or **Manual** to enter the desired MAC address.

Step 4 Click **OK** on the bottom of the page.

The screenshot shows the WAN Parameters configuration page with the following settings:

- Server Name:** Default (dropdown), Do not change if unnecessary.
- Service Name:** Manual (dropdown), asd (text input).
- MTU:** 1487 (dropdown), Do not change if unnecessary.
- Clone MAC Address:** Clone Local Host MAC (dropdown), Local Host MAC Address: 24:7E:14:12:DF:AA.
- WAN Speed:** 100 Mbps full duplex (dropdown), Current speed: 10 Mbps half duplex.

---End

11.2.4 Change the WAN Speed

To access the configuration page, log in to the web UI of the router, and choose **Administration > WAN Parameters**.

When the Ethernet cable is not damaged and connected to the WAN port properly, but **Ethernet cable disconnected** is still shown on the **Internet Settings** page, you can try to change the **WAN Speed** to **10 Mbps full duplex** or **10 Mbps half duplex** to solve the problem. Otherwise, keep the default settings.

The screenshot shows the WAN Parameters configuration page with the following settings:

- Server Name:** Default (dropdown), Do not change if unnecessary.
- Service Name:** Default (dropdown), Do not change if unnecessary.
- MTU:** 1480 (dropdown), Do not change if unnecessary.
- Clone MAC Address:** Restore Default MAC (dropdown), Default MAC Address: C8:3A:35:B1:52:C2.
- WAN Speed:** 1000 Mbps auto-negotiation (dropdown), Current speed: 10 Mbps half duplex. This section is highlighted with a red dashed box.

MTU parameter description

MTU	Application
1000 Mbps auto-negotiation	It indicates that the speed and duplex mode are determined through the negotiation with the peer port.
10 Mbps FDX	10 Mbps Full Duplex. It 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.

MTU	Application
10 Mbps HDX	10 Mbps Half Duplex. It indicates that the WAN port is working at the speed of 10 Mbps, but the port can only receive or send data packets alternately.
100 Mbps FDX	100 Mbps Full Duplex. It 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 HDX	100 Mbps Half Duplex. It indicates that the WAN port is working at the speed of 100 Mbps, but the port can only receive or send data packets alternately.

11.3 LAN parameters

On this page, you can:

- **Change the LAN IP address and subnet mask of the router.**
- **Change the DHCP server parameters of the router.**

The DHCP server can automatically assign IP address, subnet mask, gateway and other information 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.

- **Configure the DNS information assigned to clients.**

To access the configuration page, log in to the web UI of the router, and choose **Administration > LAN Parameters**.

LAN Parameters

LAN IP Address	<input type="text" value="192.168.0.1"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
DHCP Server	<input checked="" type="checkbox"/> Enable <small>If this function is disabled, the router stops assigning IP addresses to clients.</small>
Start IP Address	192.168.0. <input type="text" value="100"/>
End IP Address	192.168.0. <input type="text" value="200"/>
Preferred DNS Server	<input type="text" value="192.168.0.1"/>
Alternate DNS Server	<input type="text"/>

Parameter description

Parameter	Description
LAN IP Address	It specifies the LAN IP address of the router, which is also the management IP address for logging in to the web UI of the router.
Subnet Mask	It specifies the subnet mask of the LAN port, used to identify the IP address range of the local area network.
DHCP Server	When the DHCP server is enabled, the router automatically assign IP address to clients connected to the router
Start IP Address	It specifies the range of IP addresses that can be assigned to devices connected to the router. The default range is 192.168.0.100 to 192.168.0.200.
End IP Address	
Preferred DNS Server	It specifies the primary DNS address of the router, which is assigned to the clients. You can change it if necessary.  TIP Make sure 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.

Parameter	Description
Alternate DNS Server	It specifies the secondary DNS address of the router used to assign to the clients. It is an optional field and is left blank by default.

11.4 Remote web-based management

11.4.1 Overview

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

To access the configuration page, log in to the web UI of the router, and choose **Administration > Remote Web-based Management**.

By default, this function is disabled. When this function is enabled, the page is shown as below.

Remote Web-based Management

Remote Web-based Management Enable If this function is enabled, you can manage the router through the internet.

Management IP Address

Port

Parameter description

Parameter	Description
Remote Web-based Management	It is used to enable or disable the remote management function of the router.
Management IP Address	<p>It specifies the IP address of the host which can access the web UI of the router remotely.</p> <ul style="list-style-type: none"> All: It indicates that hosts with any IP address from the internet can access the web UI of the router. It is not recommended for security. Specific: Only the host with the specified IP address can access the web UI of the router remotely. If the host is under a LAN, ensure that the IP address is the IP address of the gateway of the host (a public IP address).
Port	<p>It specifies the port number of the router which is opened for remote management. Change it as required.</p> <p> TIP</p> <ul style="list-style-type: none"> The port number from 1 to 1024 has been occupied by familiar services. It is strongly recommended to enter a port number from 1025 to 65535 to prevent confliction. Remote management can be achieved by visiting “http://the WAN IP address of the router:port number”. If the DDNS host function is enabled, the web UI can also be accessed through “http://the domain name of the router’s WAN port:port number”.

11.4.2 Enable Tenda technical support to access the web UI

Scenario: You encounter a problem in configuring the router, and the router can access the internet.

Goal: Ask the Tenda technical support to help you configure the router remotely.

Solution: You can configure the remote management function to reach the goal.

Assume that:

- The IP address of Tenda technical support: 210.76.200.101
- The WAN port IP address of the router: 202.105.106.55



Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Administration > Remote Web-based Management**.
- Step 3** Tick **Enable** of **Remote Web-based Management** function.
- Step 4** Set **Management IP Address** to **Specific**, and enter the IP address of Tenda technical support, which is **210.76.200.101** in this example.
- Step 5** Enter a port number used to access the router remotely.
- Step 6** Click **OK** at the bottom of the page.

Remote Web-based Management

Remote Web-based Management Enable If this function is enabled, you can manage the router through the internet.

Management IP Address Specific

Port

---End

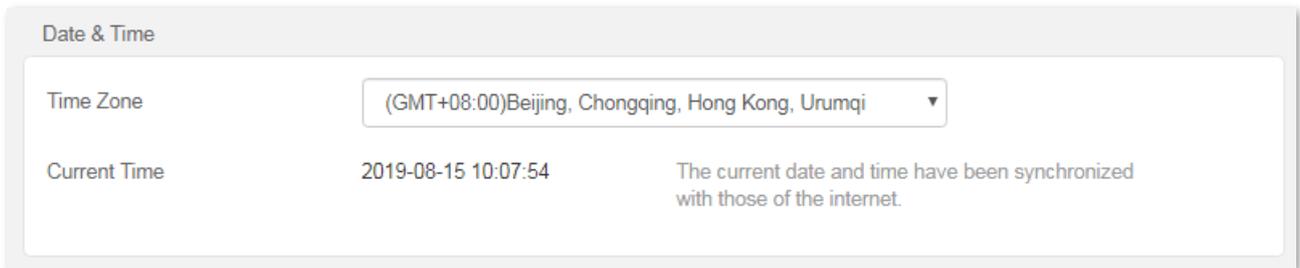
When the configurations are completed, the Tenda technical support can access and manage the router by visiting "http://202.105.106.55:8888" on the computer.

11.5 Date & Time

If the system time of the router is incorrect, time-based functions of the router cannot take effect correctly, including the WiFi schedule, parental controls and automatic maintenance functions.

The router supports the synchronization of time with the internet. when the router is connected to the internet, the router will calibrate the system time of the router. You can also set the time zone for your router.

To access the page, log in to the web Ui of the router and choose **Administration > Date & Time**.



The screenshot shows a web interface titled "Date & Time". It contains a "Time Zone" dropdown menu set to "(GMT+08:00)Beijing, Chongqing, Hong Kong, Urumqi". Below this, the "Current Time" is displayed as "2019-08-15 10:07:54". To the right of the current time, a message states: "The current date and time have been synchronized with those of the internet."

11.6 Device management

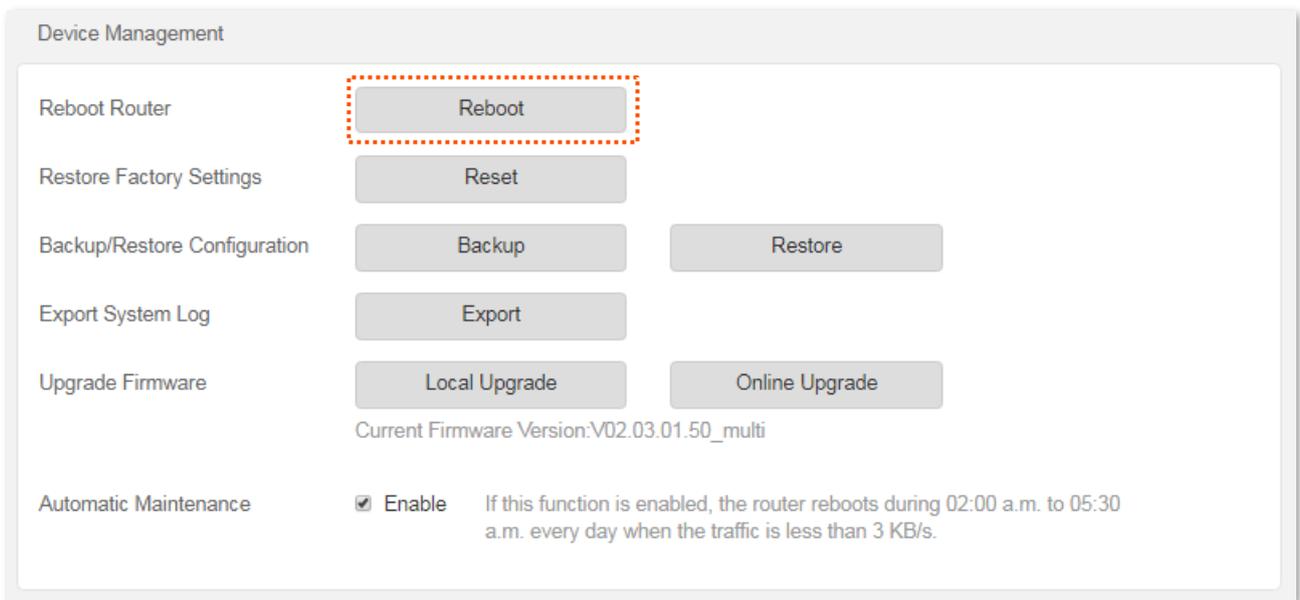
11.6.1 Reboot the router

If any parameter fails to take effect or the router does not work properly, you can try rebooting the router.



Rebooting the router will disconnect all connections to the router. Reboot the router during leisure time.

To reboot the router, log in to the web UI of the router and choose **Administration > Device Management**. Click **Reboot** to reboot the router.



Wait for a moment until the ongoing process finishes. The router reboots successfully.

11.6.2 Reset the router

If you are uncertain about why the internet is inaccessible through the router or you forget the login password of the router, you can reset the router.



- Resetting the router is not recommended unless you cannot find a solution for the current problem anyway. You need to reconfigure the router after it is reset.
- Ensure that the power supply of the router is normal when the router is reset. Otherwise the router could be damaged.
- The default login IP address is 192.168.0.1 after resetting, and no password is required.

Reset the router using the reset button

If the router only has one LED indicator, hold down the reset button for about 8 seconds and release it when the LED indicator blinks fast. The router is reset.

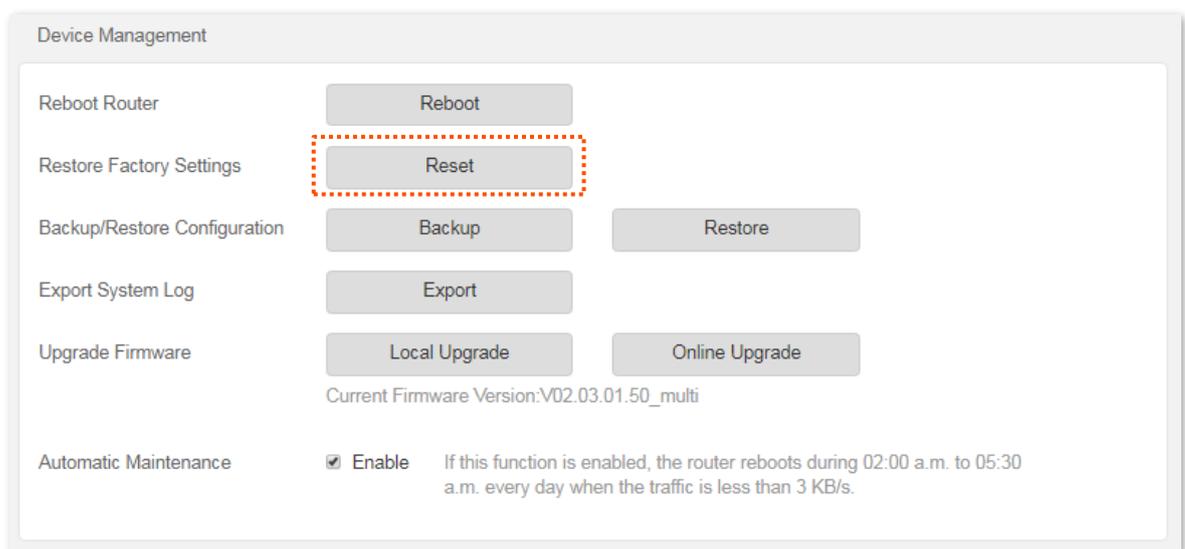
If the router only has multiple LED indicators, hold down the reset button for about 8 seconds and

release it when all LED indicators light up. The router is reset.

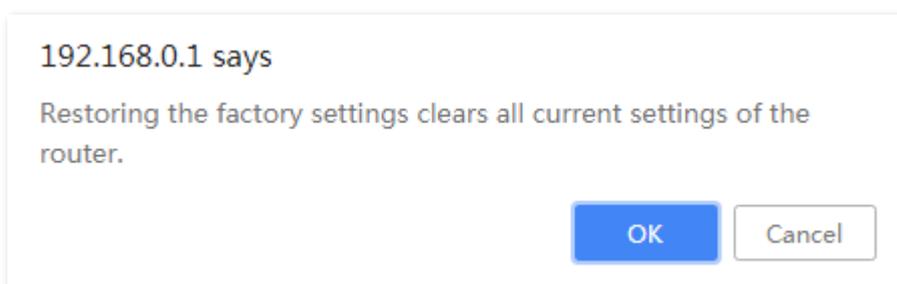


Reset the router on the web UI

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Administration > Device Management**.
- Step 3** Click **Reset**.



- Step 4** Click **OK** in the popup window.



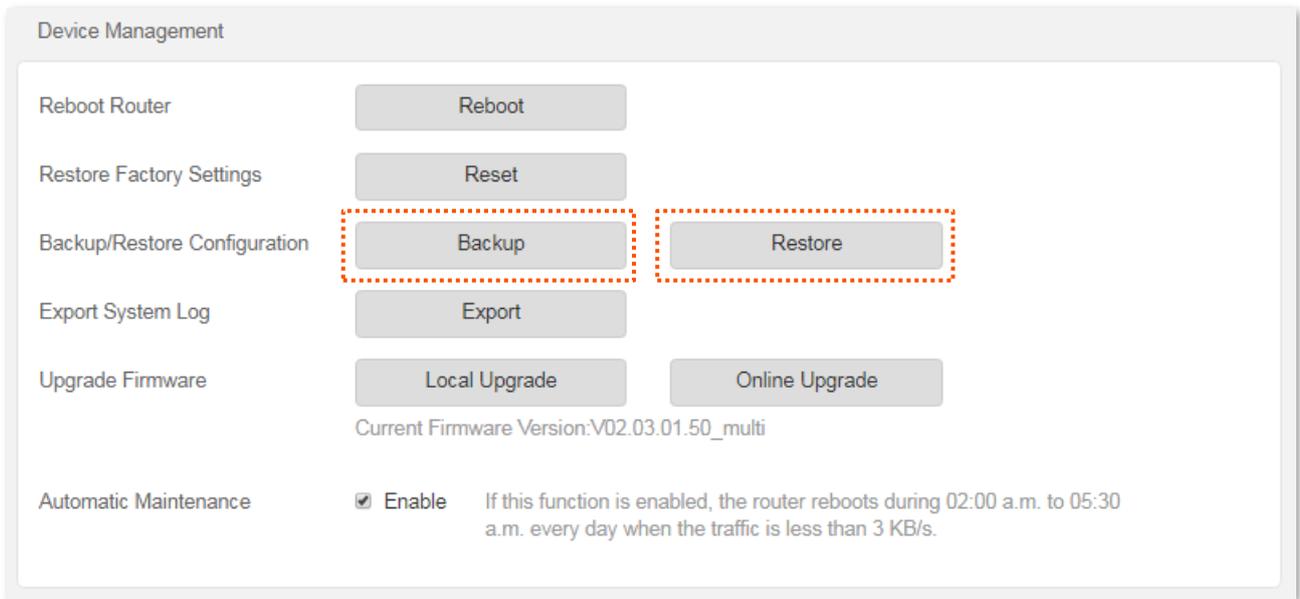
---End

Wait for a moment until the ongoing process finishes. The router is reset.

11.6.3 Backup/Restore configuration

In this module, you can back up the current configurations of the router to your computer. You are recommended to back up the configuration after the settings of the router are significantly changed, or the router works in a good condition.

After you restore the router to factory settings or upgrade it, you can use this function to restore the configurations that have been backed up.



Back up the configurations of the router

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Administration > Device Management**.
- Step 3** Click **Backup**.



- Step 4** Follow the instruction of the browser to save the file.

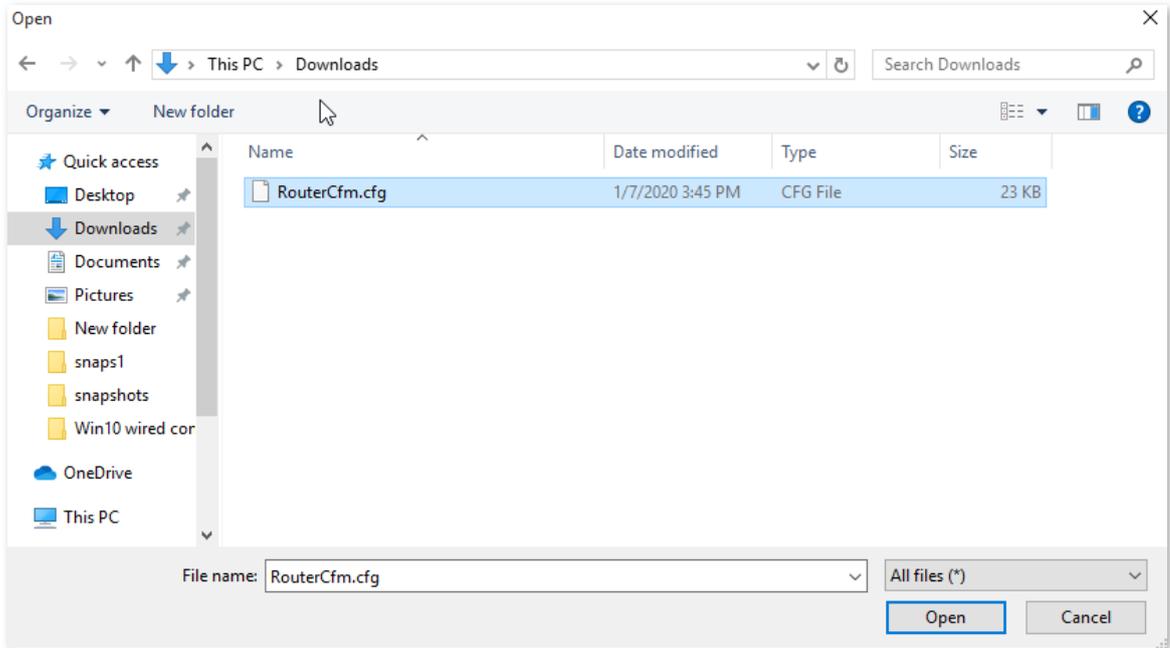
---End

After the file is downloaded, you can name it **RouterCfm.cfg**.

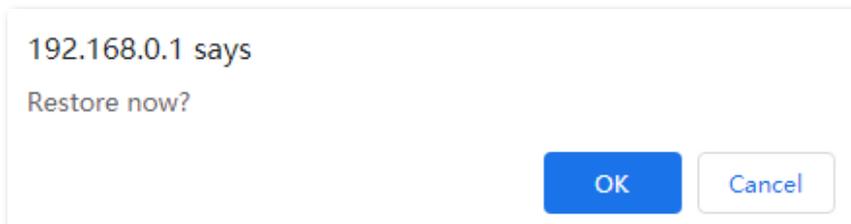
Restore previous configurations of the router

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Administration > Device Management**.
- Step 3** Click **Restore**.
- Step 4** Choose the configuration file to be restored (extension: .cfg), and click **Open**.



- Step 5** Click **OK** in the popup window.



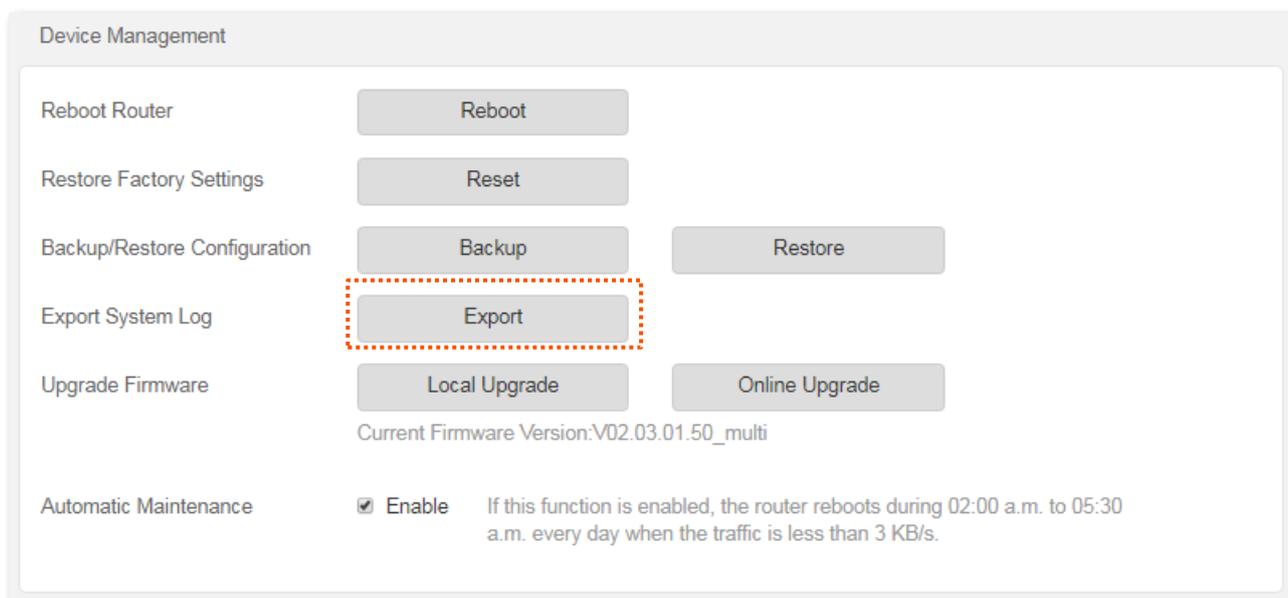
---End

Wait for a moment until the ongoing process finishes, and the router restores previous settings.

11.6.4 Export system log

This function logs all key events that occur after the router is started. If you encounter a network fault, you can turn to system logs for fault rectification.

To access the configuration page, log in to the web UI of the router, and choose **Administration > Device Management**. Click **Export** to save the system logs to your local host.



11.6.5 Upgrade firmware

This function enables the router to obtain the latest functions and more stable performance. The router supports online firmware upgrade and local firmware upgrade.

Local upgrade



In order to prevent the router from being damaged:

- Ensure that the firmware is applicable to the router.
- It is recommended to upgrade the firmware by connecting a LAN port to a computer and performing the upgrade on the web UI.
- When you are upgrading the firmware, do not power off the router.

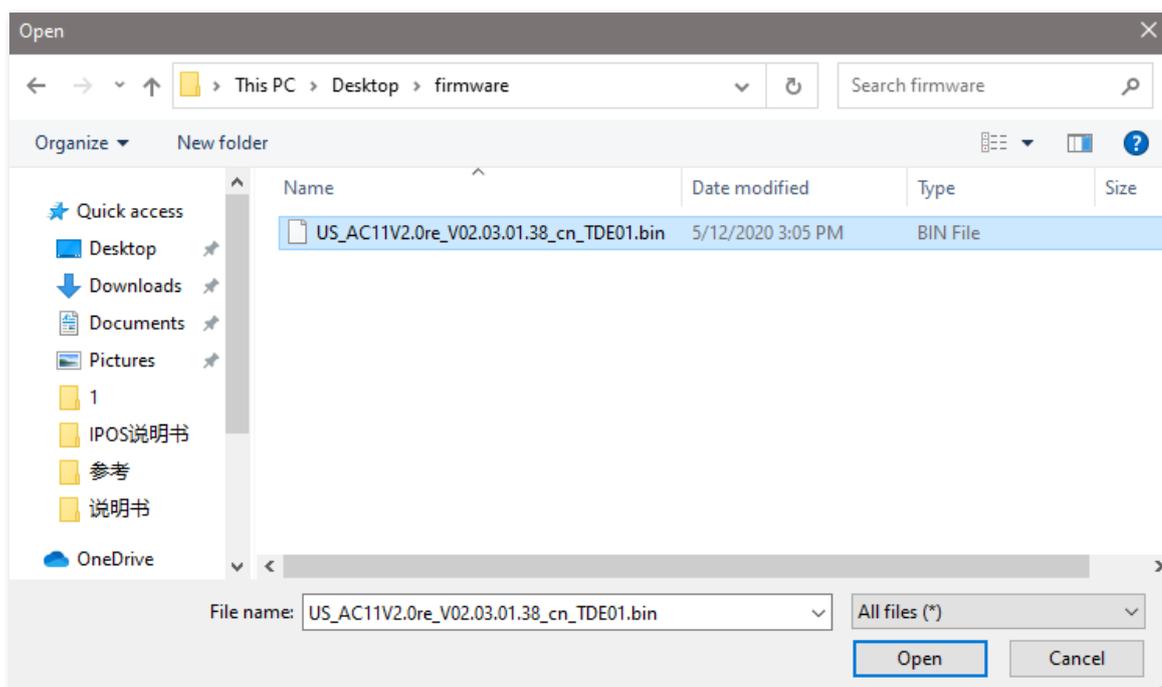
Step 1 Go to www.tendacn.com. Download an applicable firmware of the router to your local computer and unzip it.

Step 2 Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.

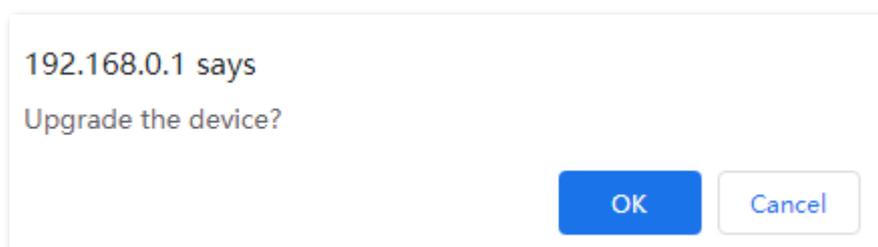
Step 3 Choose **Administration > Device Management**.

Step 4 Click **Local Upgrade**.

Step 5 Click the firmware file downloaded previously (extension: bin), and click **Open**.



Step 6 Click **OK**.



---End

Wait for a moment until the ongoing process finishes. Log in to the web UI of the router again. Choose **Administration > Device Management** and check whether the upgrade is successful based on the **Current Firmware Version**.



TIP
For better performance of the new firmware, you are recommended to reset the router to factory default settings and re-configure the router when the upgrading is completed.

Online upgrade

Configuring procedures:

- Step 1** Start a web browser on a device connected to the router and visit **tendawifi.com** to log in to the web UI of the router.
- Step 2** Choose **Administration > Device Management**.
- Step 3** Click **Online Upgrade**.
- Step 4** Follow the onscreen instructions to upgrade the router.

---End

Wait for a moment until the ongoing process finishes. Log in to the web UI of the router again.

Choose **Administration > Device Management** and check whether the upgrade is successful based on the **Current Firmware Version**.



For better performance of the new firmware, you are recommended to reset the router to factory default settings and re-configure the router when the upgrading is completed.

11.6.6 Automatic maintenance

Automatic maintenance enables you to make the router restart regularly. It helps improve the stability and service life of the router.

To configure the automatic maintenance function, choose **Administration > Device Management**.

When this function is enabled, during 02:00 to 05:30 every day in the morning, if there is any user connected to the router and the traffic over the router's WAN port exceeds 3 KB/s within 30 minutes, the router will delay rebooting. If there is any user connected to the router and the traffic over the WAN port does not exceed 3 KB/s within 30 minutes, or there is no user connected to the router and the traffic over the router's WAN port is slower than 3 KB/s within 3 minutes, the router will reboot automatically.

The screenshot shows the 'Device Management' section of a router's web interface. It contains several rows of management options, each with a corresponding button:

- Reboot Router: Reboot
- Restore Factory Settings: Reset
- Backup/Restore Configuration: Backup, Restore
- Export System Log: Export
- Upgrade Firmware: Local Upgrade, Online Upgrade

Below these options, the 'Current Firmware Version' is displayed as 'V02.03.01.50_multi'. At the bottom, the 'Automatic Maintenance' option is highlighted with a dashed orange border. It is currently checked and set to 'Enable'. A descriptive text next to it reads: 'If this function is enabled, the router reboots during 02:00 a.m. to 05:30 a.m. every day when the traffic is less than 3 KB/s.'

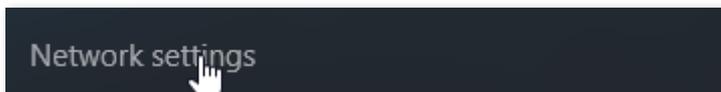
Appendix

A.1 Configuring the computer to obtain an IPv4 address automatically

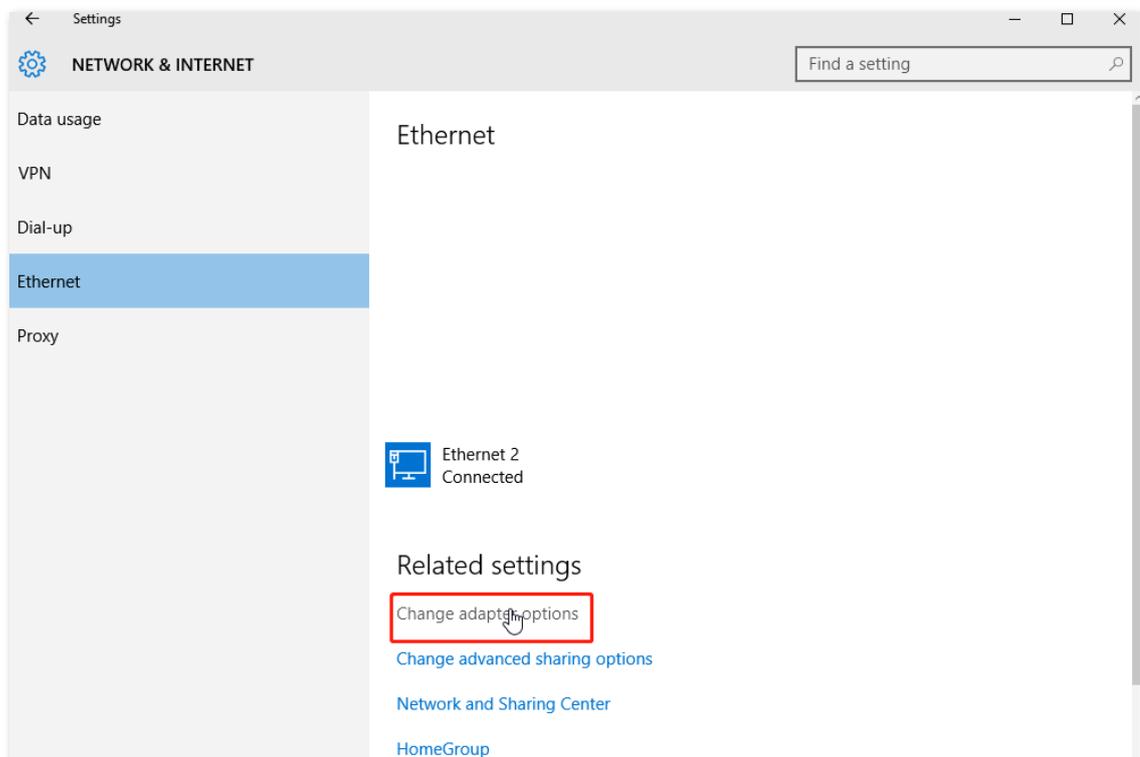
Perform the Configuring procedures corresponding to [Windows 10](#), [Windows 8](#) and [Windows 7](#) as required. A computer installed with a wired network adapter is used as an example to describe the procedures. The procedures for configuring computers installed with a WiFi network adapter are similar.

A.1.1 Windows 10

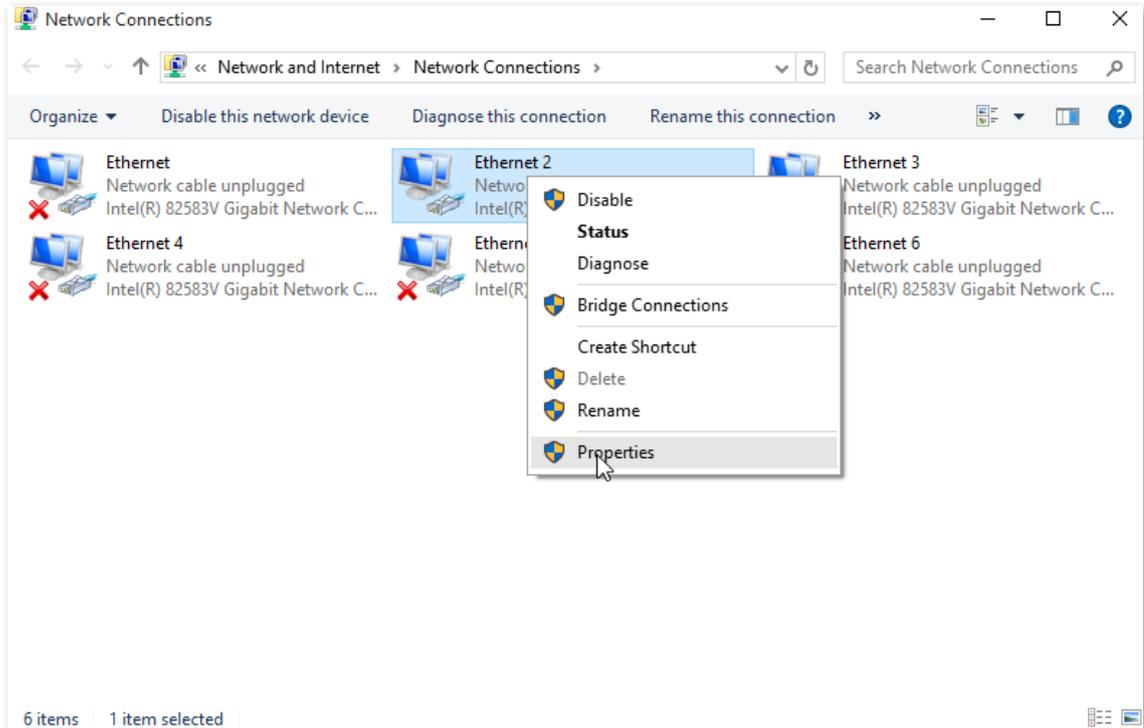
Step 1 Click  in the bottom right corner of the desktop and choose **Network settings**.



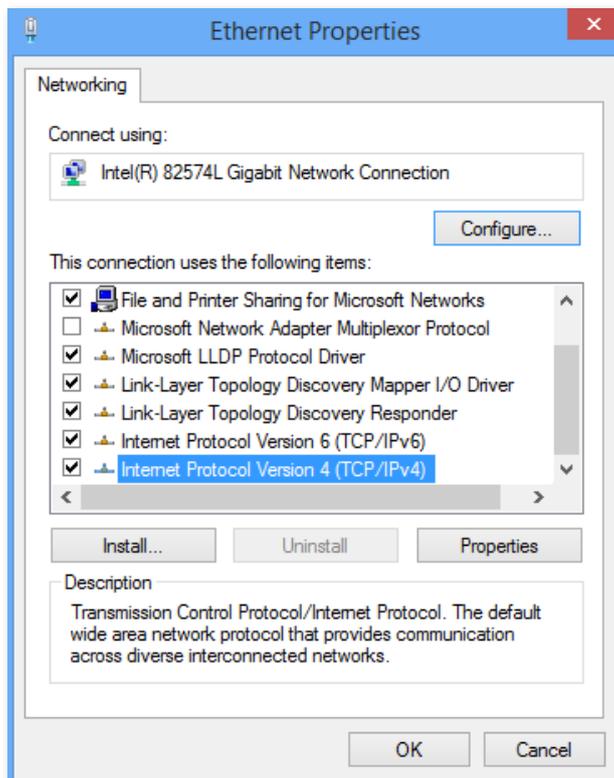
Step 2 Click **Change adapter options**.



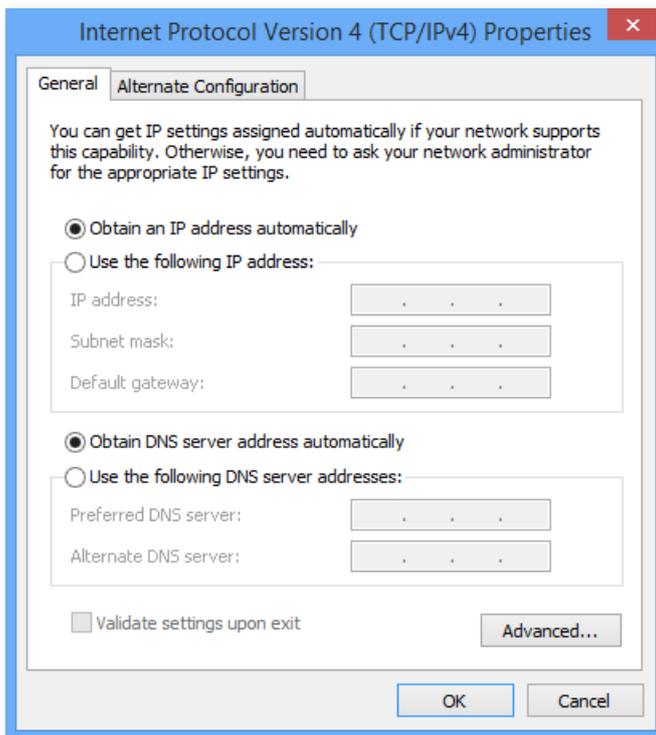
Step 3 Right click on the connection which is being connected, and then click **Properties**.



Step 4 Double-click **Internet Protocol Version 4 (TCP/IPv4)**.



Step 5 Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**, and click **OK**.

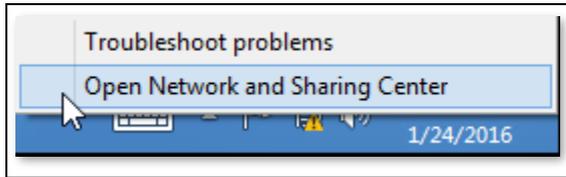


Step 6 Click **Close** in the **Ethernet Properties** window.

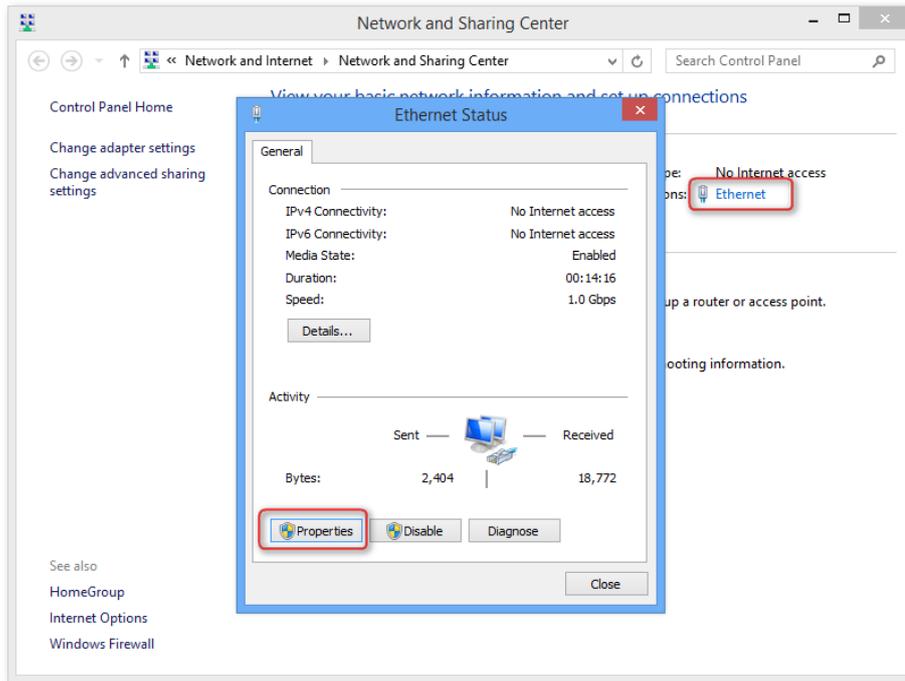
---End

A.1.2 Windows 8

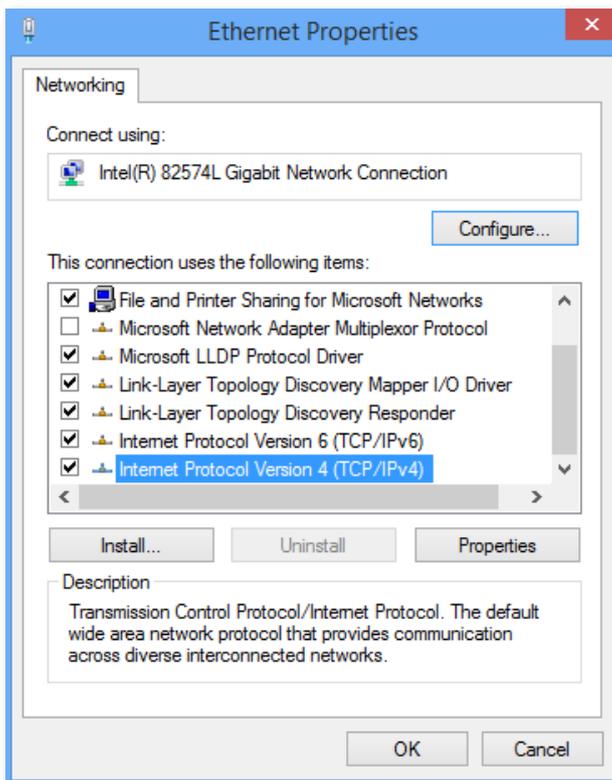
Step 1 Right-click  in the bottom right corner of the desktop and choose **Open Network and Sharing Center**.



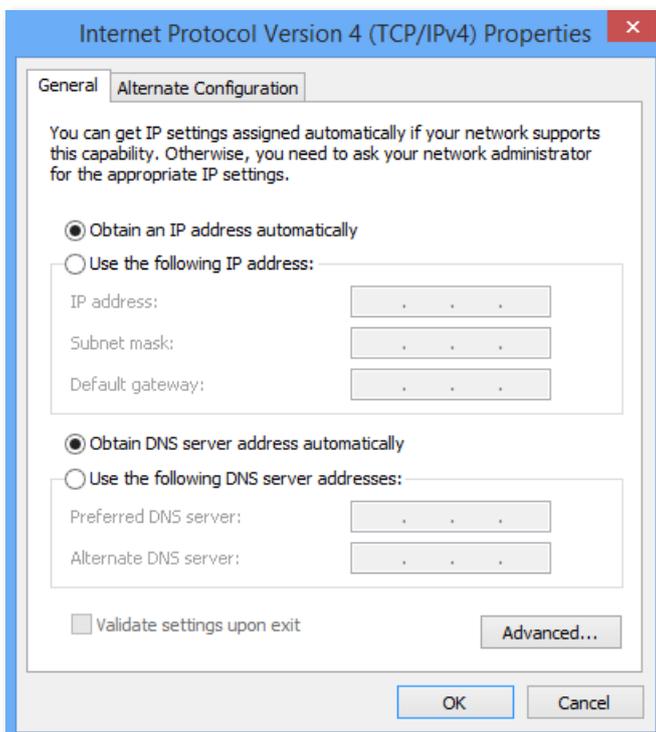
Step 2 Click **Ethernet** and then **Properties**.



Step 3 Double-click **Internet Protocol Version 4 (TCP/IPv4)**.



Step 4 Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**, and click **OK**.

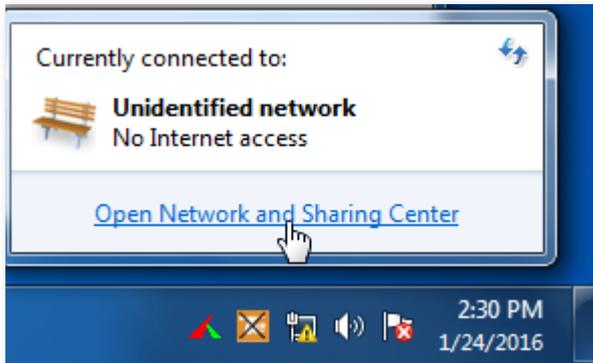


Step 5 Click **OK** in the **Ethernet Properties** window.

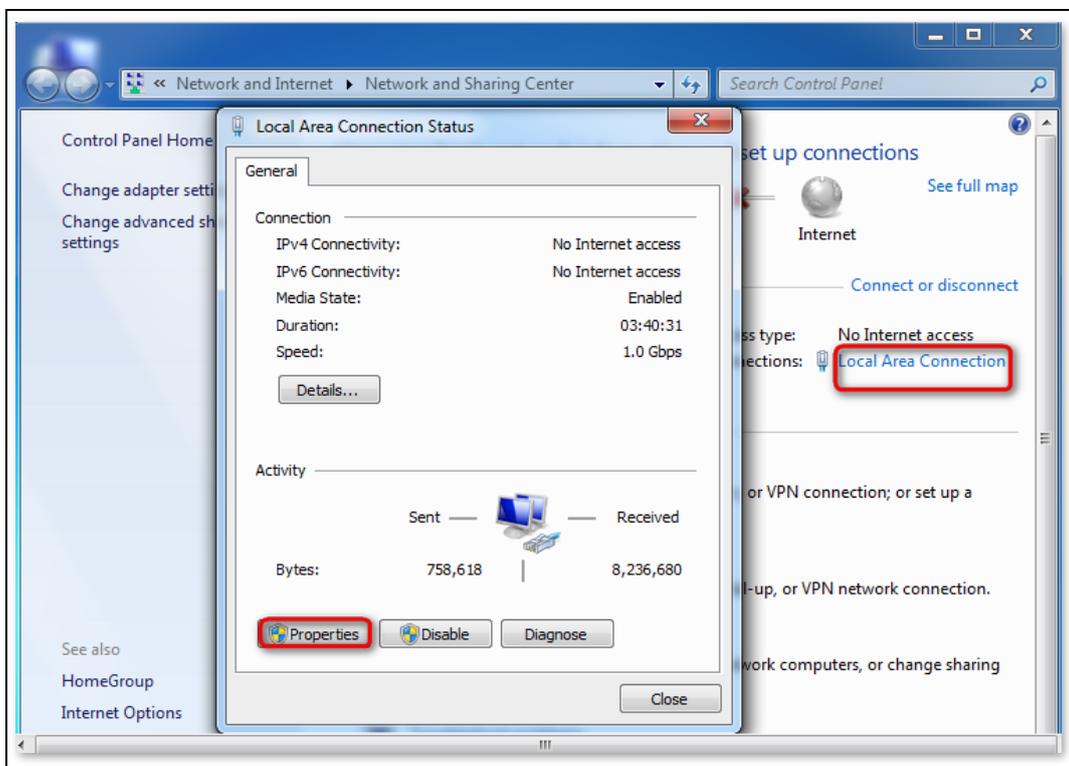
---End

A.1.3 Windows 7

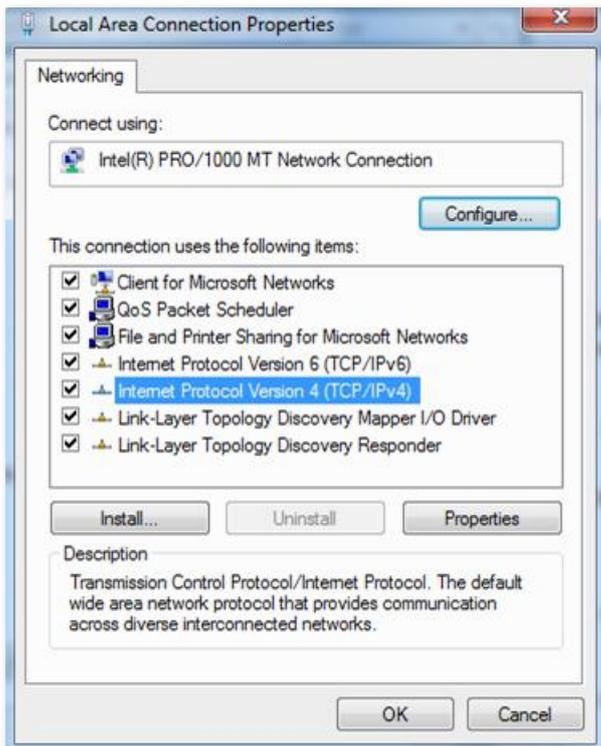
Step 1 Click  in the bottom right corner of the desktop and choose **Open Network and Sharing Center**.



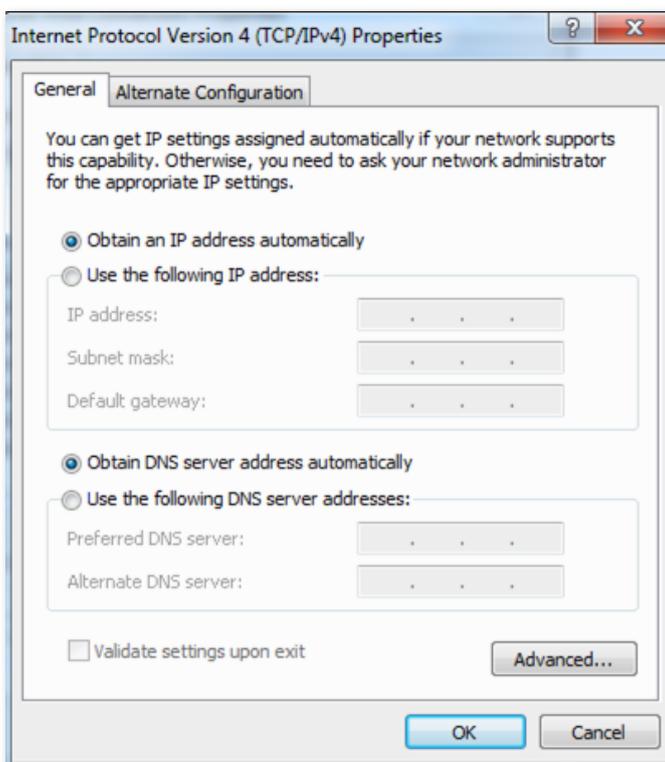
Step 2 Click **Local Area Connection** and then **Properties**.



Step 3 Double-click **Internet Protocol Version 4 (TCP/IPv4)**.



Step 4 Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**, and click **OK**.



Step 5 Click **OK** in the **Local Area Connection Properties** window.

---End

A.2 Default parameters

Parameter	Default	
Login	IP address	192.168.0.1
	Password	None
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	192.168.0.200
	Preferred DNS Server	192.168.0.1
Wireless Settings	WiFi Name	See the label on the bottom of the router
	WiFi Password	None
	Unify 2.4 GHz & 5 GHz	Enabled
	Guest Network	Disabled
	Beamforming	Enabled
IPv6	Disabled	

A.3 Acronyms and abbreviations

Abbreviations	Full spelling
AES	Advanced Encryption Standard
AP	Access Point
DDNS	Dynamic Domain Name Server
DHCP	Dynamic Host Configuration Protocol
DHCPv6	Dynamic Host Configuration Protocol for IPv6
DMZ	Demilitarized Zone
DNS	Domain Name System
GMT	Greenwich Mean Time
IP	Internet Protocol
IPv4	Internet Protocol version 4
IPv6	Internet Protocol version 6
LAN	Local Area Network
MAC	Medium Access Control
MIMO	Multiple Input Multiple Output
MTU	Maximum Transmission Unit
NAT	Network Address Translation
TCP	Transmission Control Protocol
UDP	User Datagram Protocol
UPnP	Universal Plug and Play
WAN	Wide Area Network
WISP	Wireless Internet Service Provider
WPA-PSK	WPA-Preshared Key