



AC1200 Smart Dual-band WiFi Router

User Guide

Legal Information

© 2022 Hangzhou Hikvision Digital Technology Co., Ltd. All rights reserved.

About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (<https://www.hikvision.com/>).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

Trademarks

HIKVISION and other Hikvision's trademarks and logos are the properties of Hikvision in various jurisdictions. Other trademarks and logos mentioned are the properties of their respective owners.

Disclaimer

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS MANUAL AND THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, ARE PROVIDED "AS IS" AND "WITH ALL FAULTS AND ERRORS". HIKVISION MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE. THE USE OF THE PRODUCT BY YOU IS AT YOUR OWN RISK. IN NO EVENT WILL HIKVISION BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA, CORRUPTION OF SYSTEMS, OR LOSS OF DOCUMENTATION, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY, OR OTHERWISE, IN CONNECTION WITH THE USE OF THE PRODUCT, EVEN IF HIKVISION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSS.

YOU ACKNOWLEDGE THAT THE NATURE OF THE INTERNET PROVIDES FOR INHERENT SECURITY RISKS, AND HIKVISION SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER-ATTACK, HACKER ATTACK, VIRUS INFECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKVISION WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

YOU AGREE TO USE THIS PRODUCT IN COMPLIANCE WITH ALL APPLICABLE LAWS, AND YOU ARE SOLELY RESPONSIBLE FOR ENSURING THAT YOUR USE CONFORMS TO THE APPLICABLE LAW. ESPECIALLY, YOU ARE RESPONSIBLE, FOR USING THIS PRODUCT IN A MANNER THAT DOES NOT INFRINGE ON THE RIGHTS OF THIRD PARTIES, INCLUDING WITHOUT LIMITATION, RIGHTS OF PUBLICITY, INTELLECTUAL PROPERTY RIGHTS, OR DATA PROTECTION AND OTHER PRIVACY RIGHTS. YOU SHALL NOT USE THIS PRODUCT FOR ANY PROHIBITED END-USES, INCLUDING THE DEVELOPMENT OR PRODUCTION OF WEAPONS OF MASS DESTRUCTION, THE DEVELOPMENT OR PRODUCTION OF CHEMICAL OR BIOLOGICAL WEAPONS, ANY ACTIVITIES IN THE CONTEXT RELATED TO ANY NUCLEAR EXPLOSIVE OR UNSAFE NUCLEAR FUEL-CYCLE, OR IN SUPPORT OF HUMAN RIGHTS ABUSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATTER PREVAILS.

Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the Directive 2014/30/EU, the Directive 2014/35/EU, the Directive 2011/65/EU.

Hereby, Hikvision declares that the radio equipment type Wireless Router is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <https://www.hikvision.com/europe/support/download/declaration-of-conformity/>

Model	Received frequency	Transmitted frequency	Bandwidth	Transmit power
DS-3WR12C	2400-2483.5 MHz 5150-5250 MHz	2412-2472 MHz 5180-5240 MHz	2.4 GHz: 20 MHz and 40 MHz	2.4 GHz:19.86 dBm 5 GHz:22.96 dBm
DS-3WR12GC		2400-2483.5 MHz 5150-5250 MHz	5 GHz: 20 MHz, 40 MHz and 80 MHz	2.4 GHz:19.5 dBm 5 GHz:22.5 dBm



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the

battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.




Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

Applicable Models

This guide applies to the model: DS-3WR12C, DS-3WR12GC. DS-3WR12C is used for illustrations here unless otherwise specified.

Symbol Conventions

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

Symbol	Description
 Note	Provides additional information to emphasize or supplement important points of the main text.
 Caution	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 Danger	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

Safety Instructions

Before operating, read the operation instructions and precautions to be taken, and follow them to prevent accidents. The warning and danger items in other documents do not cover all the safety precautions that must be followed. They are only supplementary information, and the installation and maintenance personnel need to understand the basic safety precautions to be taken.

- Do not use the device in a place where wireless devices are not allowed.
- Please use the included power adapter.
- Mains plug is used as the disconnect device and shall remain readily operable.
- The power socket shall be installed near the device and easily accessible.
- Operating environment: Temperature: 0°C - 40°C; Humidity: (10% - 90%) RH, non-condensing; Storage environment: Temperature: -40°C - 70°C; Humidity: (5% - 90%) RH, non-condensing.
- Keep the device away from water, fire, high electric field, high magnetic field, and inflammable and explosive items.
- Unplug this device and disconnect all cables during lightning storms or when the device is unused for long periods.
- Do not use the power adapter if its plug or cord is damaged.
- If such phenomena as smoke, abnormal sound, or smell appear when you use the device, immediately stop using it and disconnect its power supply, unplug all connected cables, and contact the after-sales service personnel.

- Disassembling or modifying the device or its accessories without authorization voids the warranty, and might cause safety hazards.

TABLE OF CONTENTS

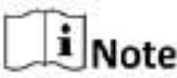
Chapter 1 Get to know your device.....	1
1.1 Overview	1
1.2 Appearance	1
1.2.1 LED indicator	1
1.2.2 Jack, ports, and button	2
1.3 Label.....	4
Chapter 2 Web UI.....	5
2.1 Log in to the web UI.....	5
2.2 Log out of the web UI	7
2.3 Web UI layout	8
2.4 Common element	9
Chapter 3 Status.....	10
3.1 View internet connection status.....	10
3.2 View online device information	15
3.3 View system information	16
Chapter 4 Route settings	18
4.1 Internet settings.....	18
4.1.1 Overview	18
4.1.2 Serve as a router	19
4.1.3 Serve as a WiFi extender.....	26
4.1.4 Serve as an AP	34
4.2 Wireless settings	40
4.2.1 WiFi name and password.....	40
4.2.2 Guest network	47
4.2.3 WiFi signal strength	50
4.2.4 WiFi parameters.....	51
4.2.5 Beamforming	53
4.2.6 WPS.....	54
4.3 IPv6 configuration	61
4.3.1 Connect to the IPv6 network of ISPs.....	61
4.3.2 IPv6 LAN setup	70
4.3.3 IPv6 status.....	72
4.4 Sleeping mode	73
4.4.1 LED control.....	73
4.4.2 WiFi schedule.....	74
Chapter 5 Client management	75
5.1 Access control	75
5.1.1 Overview	75
5.1.2 Set the upload and download speed limit	77
5.1.3 Add the device to the blacklist.....	78
5.1.4 Remove the device from the blacklist	79
5.2 Parental control	80
5.2.1 Overview	80
5.2.2 An example of configuring parental control	82
Chapter 6 Advanced	84

6.1	MAC address filter	84
6.1.1	Overview	84
6.1.2	Only allow specified device to access the internet	85
6.2	IPTV	87
6.2.1	Overview	87
6.2.2	Watch IPTV program through the router	88
6.3	IP-MAC binding	90
6.3.1	Overview	90
6.3.2	Assign fixed IP addresses to LAN clients	90
6.4	Port mapping	92
6.4.1	Overview	92
6.4.2	Enable internet users to access LAN resources using an IP address	93
6.5	DDNS	98
6.5.1	Overview	98
6.5.2	Enable internet users to access LAN resources using a domain name	99
6.6	DMZ host	104
6.6.1	Overview	104
6.6.2	Enable internet users to access LAN resources using an IP address	105
6.7	UPnP	108
6.8	Firewall	109
Chapter 7	Administration	110
7.1	Login password	110
7.2	WAN parameters	111
7.2.1	Change the server name and service name	111
7.2.2	Change the MTU value	112
7.2.3	Clone WAN MAC address	113
7.2.4	Change the WAN speed	115
7.3	LAN parameters	116
7.4	Remote web management	118
7.4.1	Overview	118
7.4.2	Internet users access the web UI	119
7.5	Date & time	121
7.6	Device management	122
7.6.1	Reboot the router	122
7.6.2	Reset the router	123
7.6.3	Backup/restore configuration	125
7.6.4	Export system log	127
7.6.5	Upgrade firmware	127
7.6.6	Automatic maintenance	129
Appendix A	130
A.1	Configuring the computer to obtain an IPv4 address automatically	130
A.1.1	Windows 10	130
A.1.2	Windows 8	133
A.1.3	Windows 7	135
A.2	Default parameters	137
A.3	Acronyms and abbreviations	138

Chapter 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 a smoother internet experience without network address translation (NAT).



The wireless rate is illustrated with DS-3WR12C as an example. The highest wireless rate differs with product models.

1.2 Appearance

1.2.1 LED indicator



Figure 1-1 LED indicator

Table 1-1 LED indicator description

Status	Description
Solid on	Starting up or connected to the internet
Blinking slow	No internet connection
Blinking fast for 2 minutes	Performing WPS negotiation

Status	Description
Blinking fast for 3 seconds	A wired device connecting to or disconnected from the router

1.2.2 Jack, ports, and button



Figure 1-2 Jack, ports, and button

Table 1-2 Jack, ports and button description

Jack/port/button	Description
WPS/RST	Used for WPS negotiation or reset. <ul style="list-style-type: none">● WPS: Press the button for 1 to 3 seconds, and enable the WPS function of the WPS-enabled device within 2 minutes to establish a WPS connection.● RST: Hold down the button for about 8 seconds and then release it when the LED indicator blinks fast. The router is reset successfully.
IPTV/3	10/100 Mbps auto-negotiation Ethernet port. Used as a LAN port by default. Once the IPTV function is enabled, it can only serve as an IPTV port to connect to a set-top box.
1,2	10/100 Mbps auto-negotiation LAN port. Used to connect devices.

Jack/port/button	Description
WAN	10/100 Mbps auto-negotiation WAN port Used to connect to the external network.
POWER	Power jack Used to power on the router (with the included power adapter).

1.3 Label

The bottom label shows the login IP address, SSID, MAC address, serial number (SN) of the router. See the following figure.



Figure 1-3 Label

Login address: It is the domain name used to log in to the web UI of the router.

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

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

SN: It is required if you need technical assistance.

MAC: It specifies the MAC address of the router.

Chapter 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 of the router.



Figure 2-1 Connect your device to the router

Step 2 Launch a web browser on the device connected to the router, and visit **<http://hikvisionwifi.local>**.



Figure 2-2 Visit the domain name of the router

The following page appears.



Figure 2-3 Web UI

Note

If the above page does not 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** in the upper right corner of the web UI.



If there is no **Logout** button in the upper right corner, please set the login password first, and then enter the web UI again, the **Logout** button will appear in the upper right corner.

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.

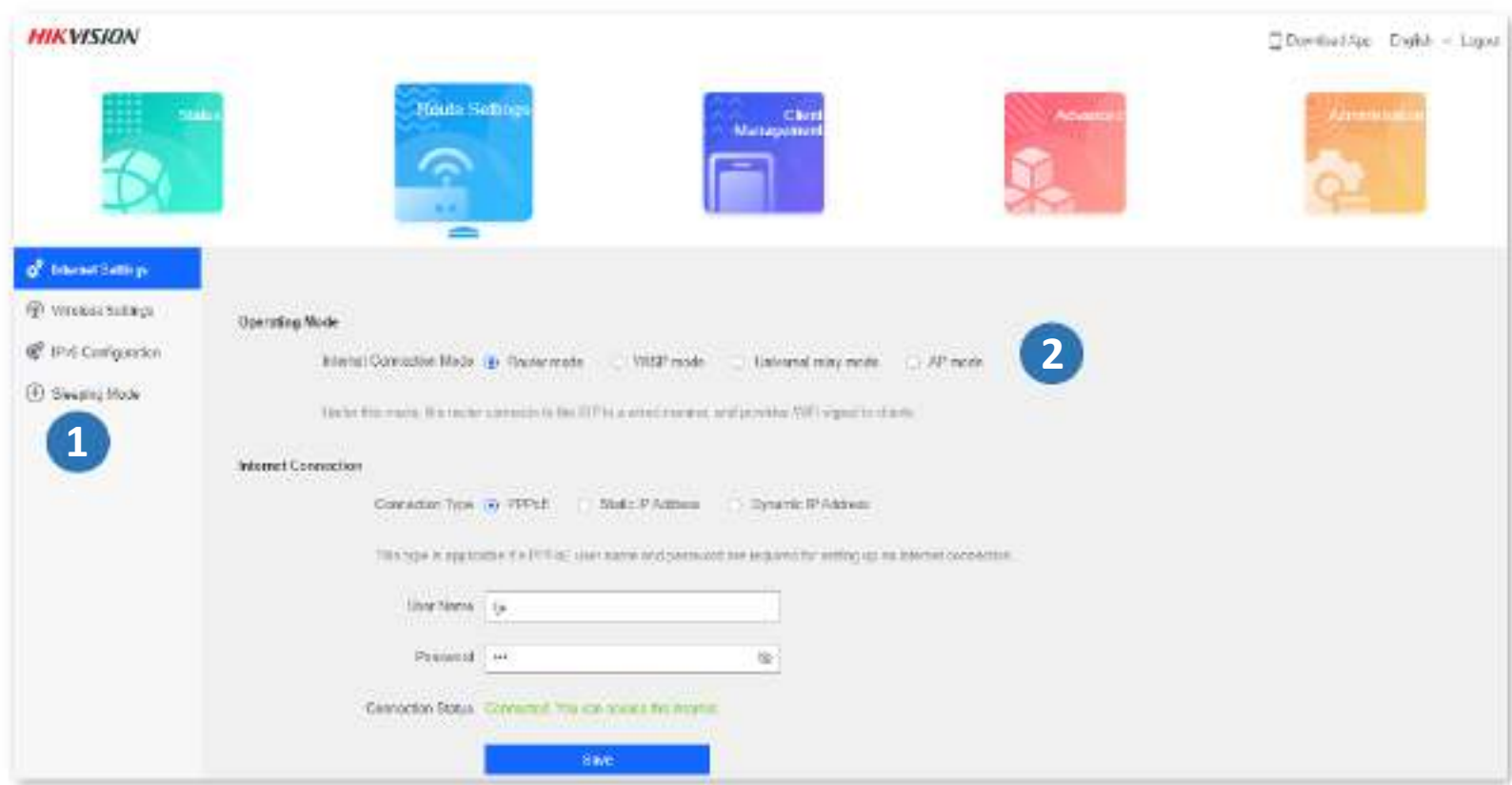


Figure 2-4 Web UI layout

Note

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


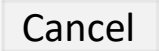
Table 2-1 Navigation bar and configuration area description

SN	Name	Description
1 ²	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.

Table 2-2 Common element description

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.

Chapter 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.

Procedures:

Step 1 Launch a web browser on a device connected to the router and visit **<http://hikvisionwifi.local>** to log in to the web UI of the router.

Step 2 Navigate to **Status > Connection Status**.

When the internet and the router are 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 through the router.

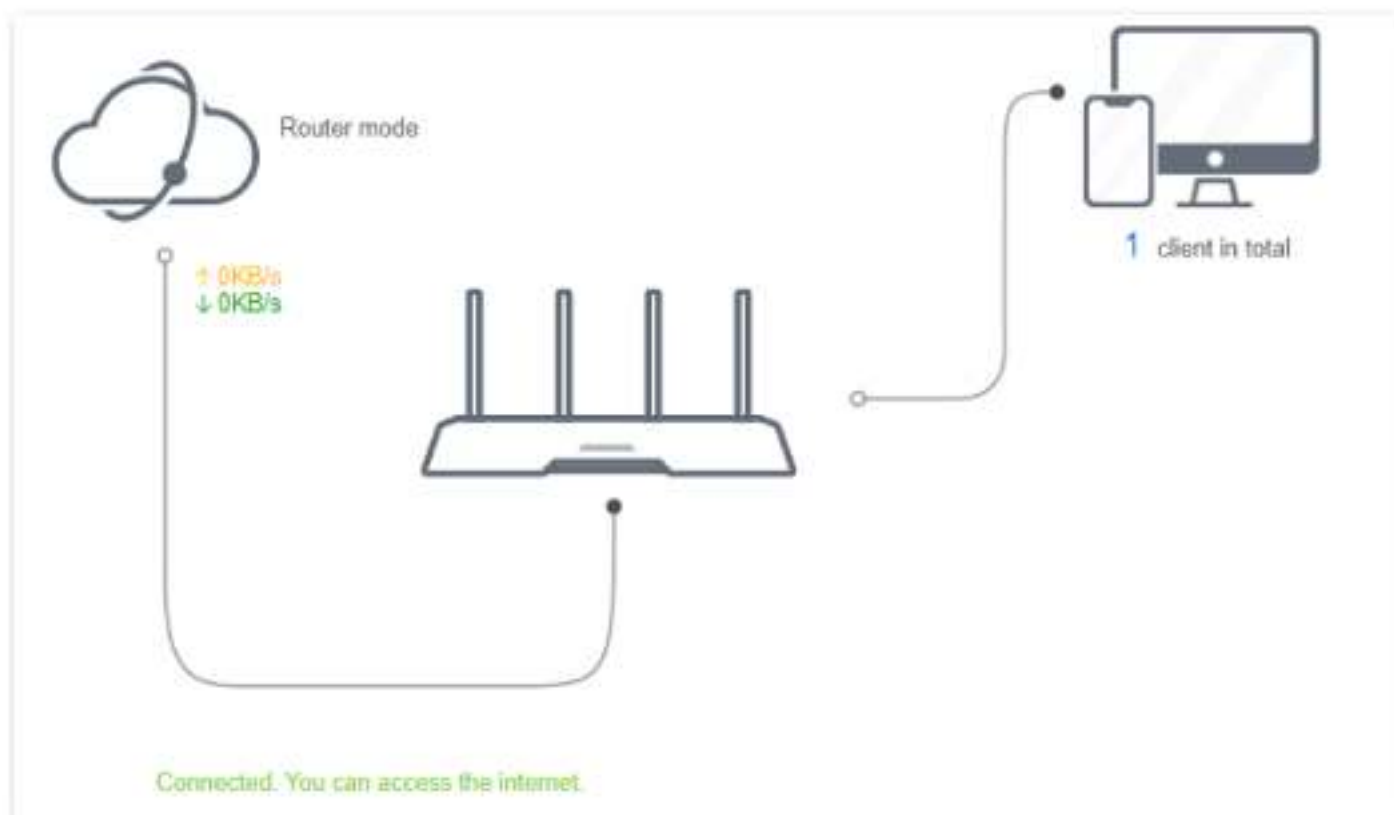


Figure 3-1 Internet connection status

When a red cross and "**Disconnected**" are shown between the internet and the 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.

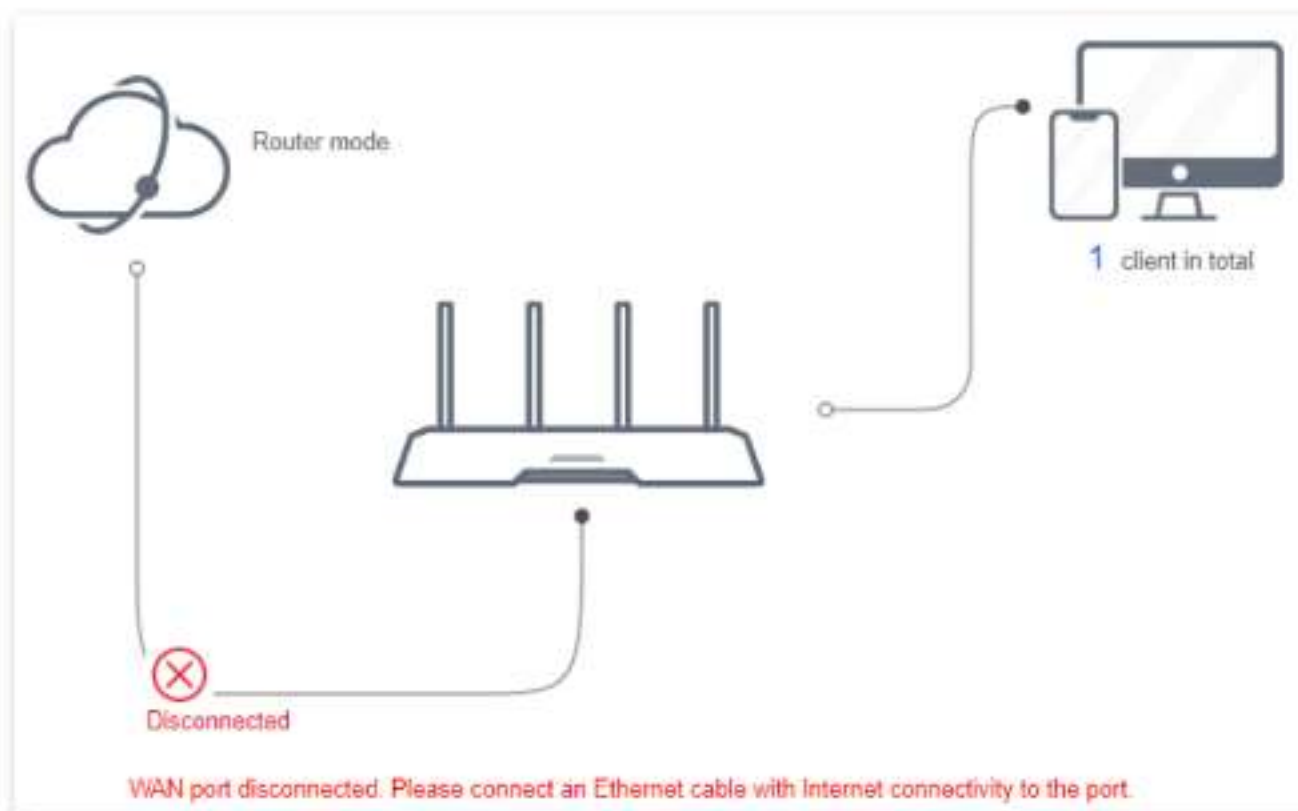


Figure 3-2 Internet connection status

When a red cross and "Disconnected" are shown between the internet and the 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.

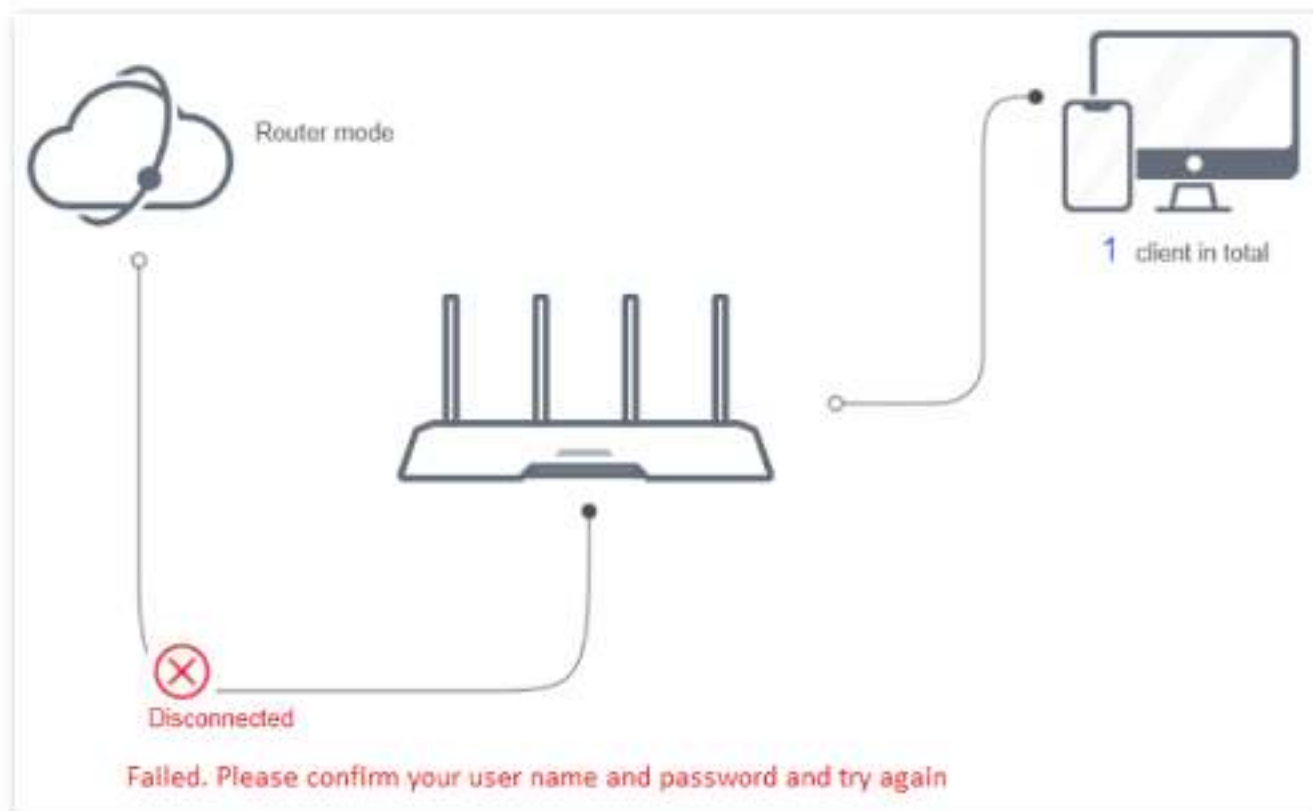


Figure 3-3 Internet connection status

Note

Please consider the following tips when entering the username 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 the router, and **Error: No response from the remote server. Please contact your ISP.** is shown on the page, 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.

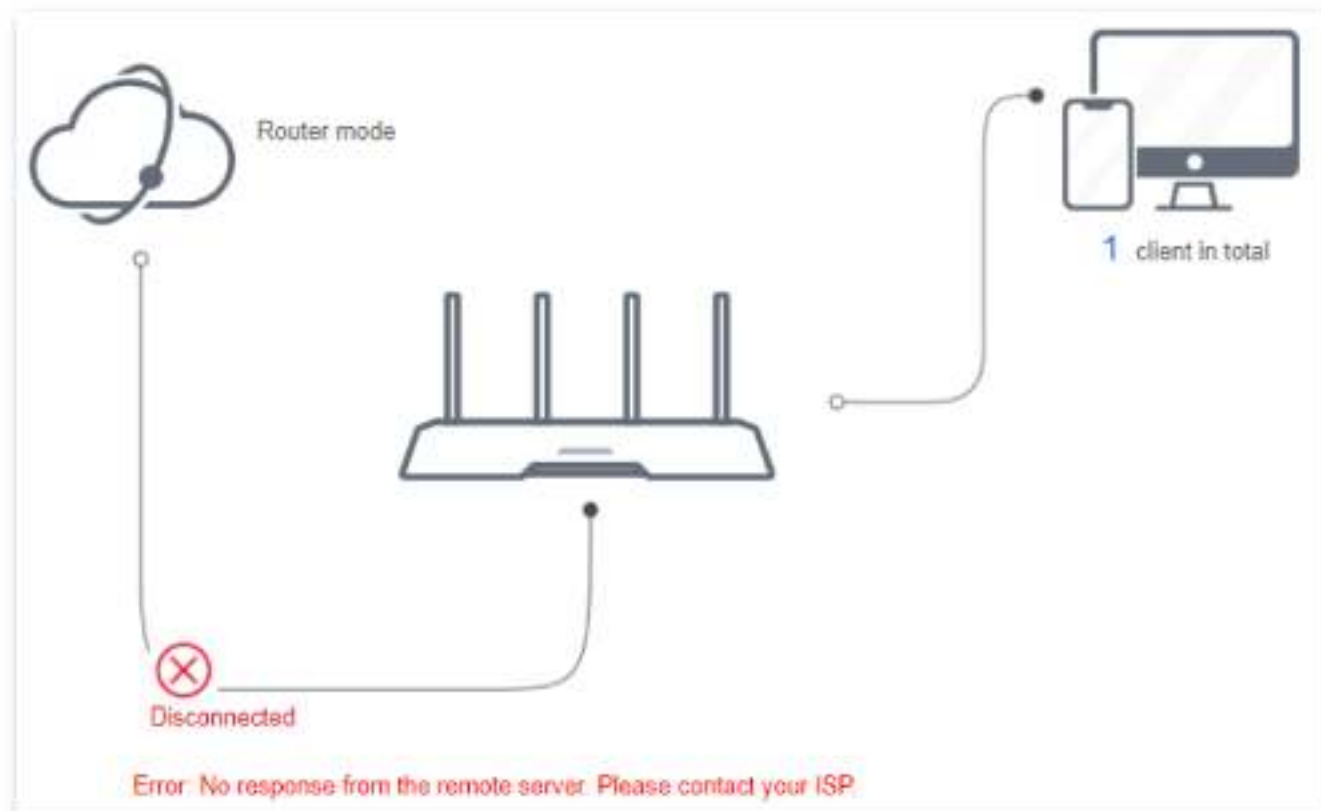


Figure 3-4 Internet connection status

When a red cross and “**Disconnected**” are shown between the internet and the 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.

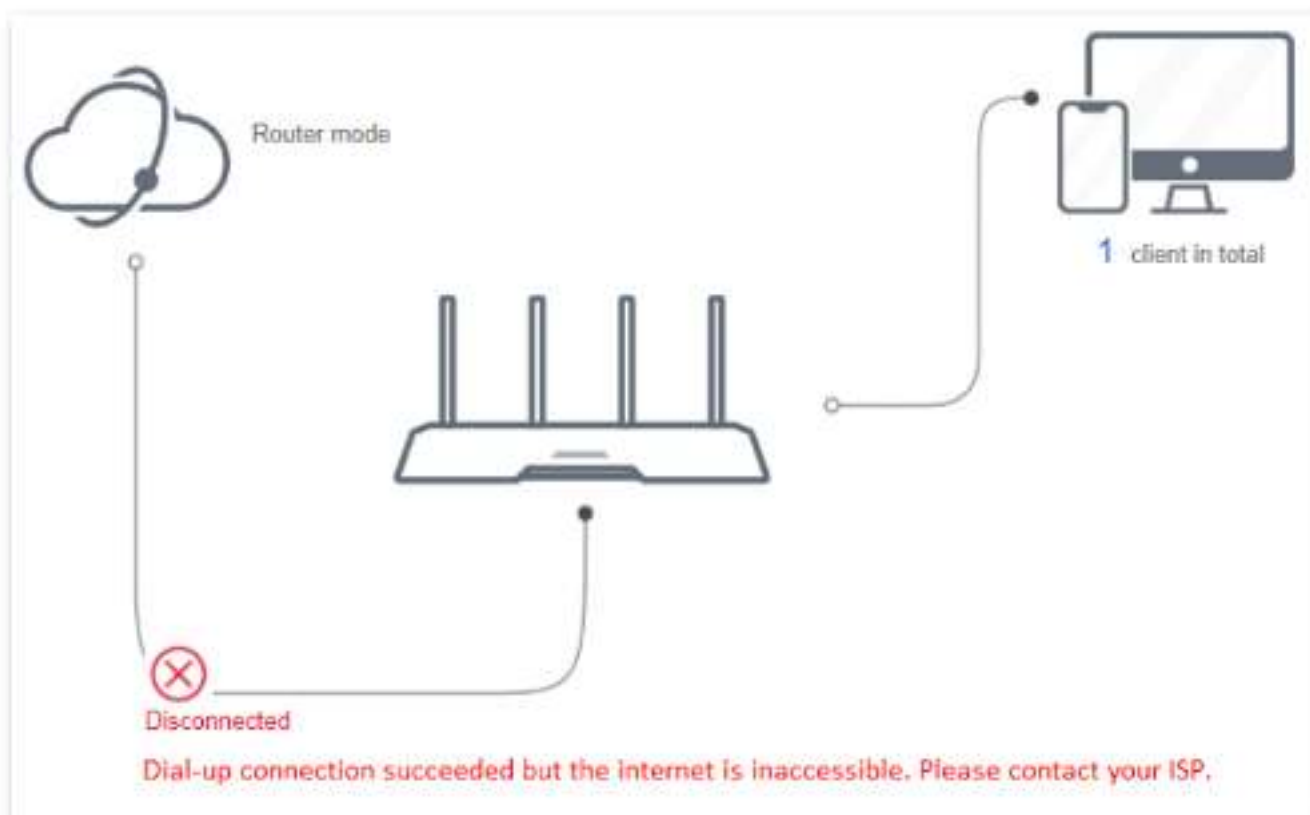


Figure 3-5 Internet connection status

When a red cross and "Disconnected" are shown between the internet and the 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.

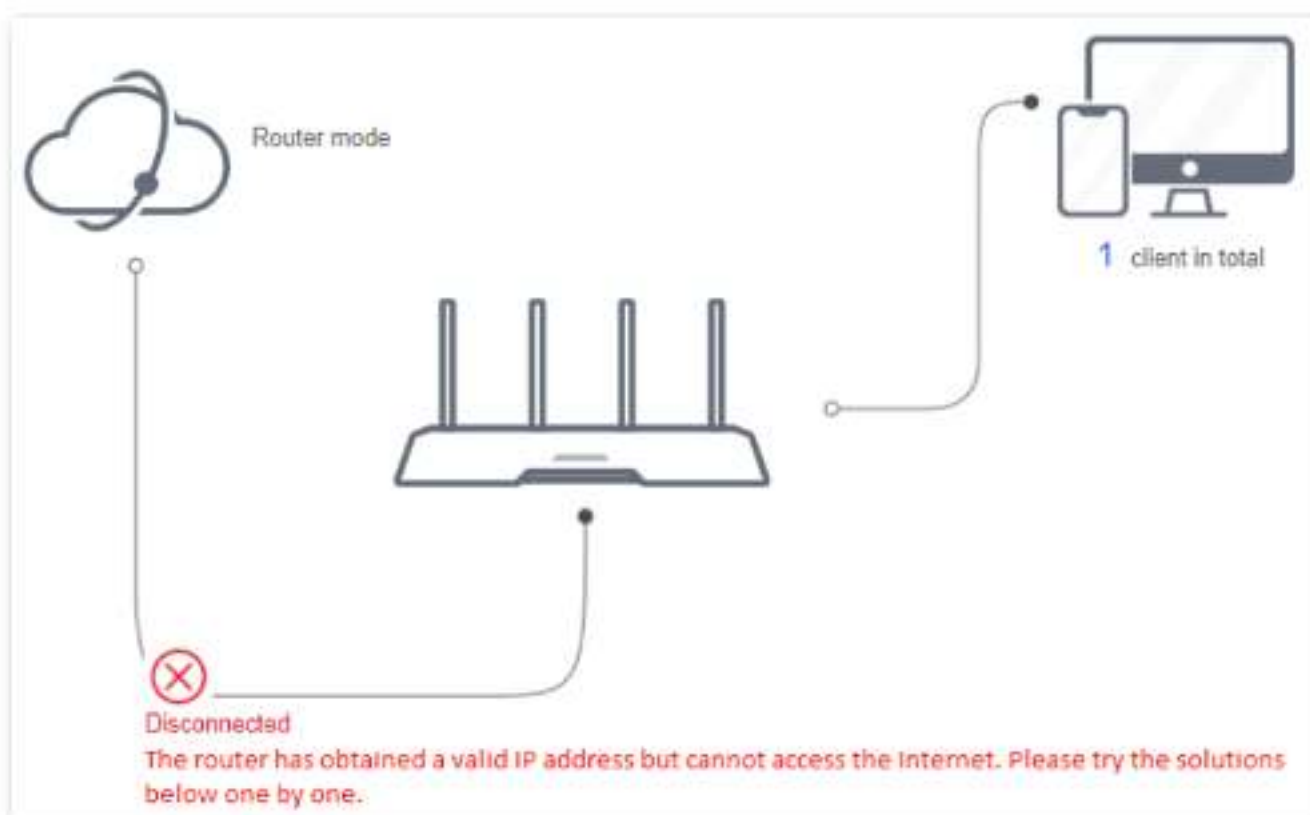



Figure 3-6 Internet connection status

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 navigate to **Status** >  (Online devices).

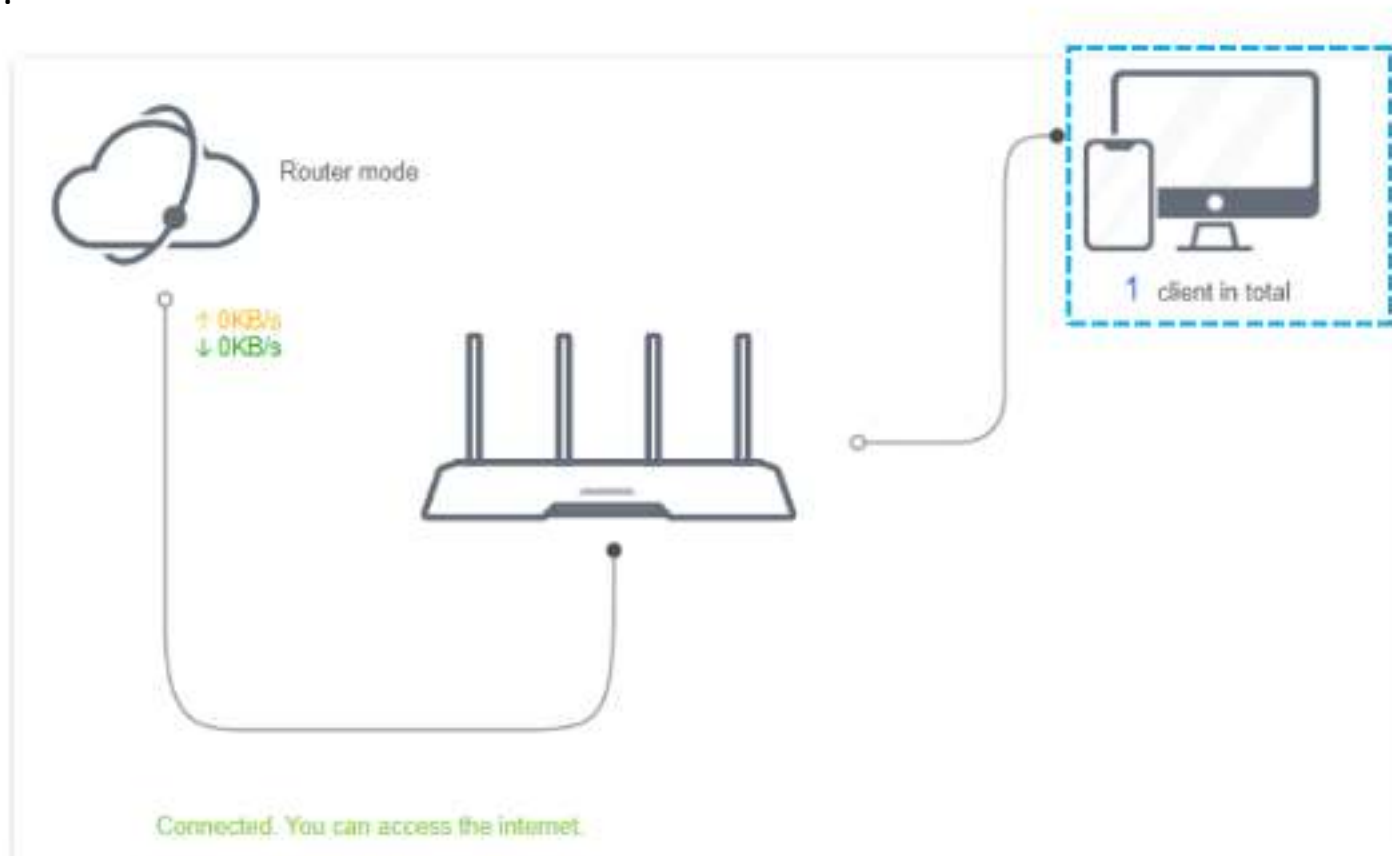


Figure 3-7 Online device information

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

Online Device [1]

Device Name	Download Speed	Upload Speed	Download Limit	Upload Limit	Internet Access
<div><div>?</div><div>MININT-GVSRBDD</div><div>192.168.0.200</div><div>8C:4B:90:A1:E2:AD</div></div>	<div><div></div><div>0KB/s</div></div>	<div><div></div><div>0KB/s</div></div>	<div>No Limit</div>	<div>No Limit</div>	Local

Blocked Device (Blacklist)

Device Name	MAC Address	Unlink
No device		

Figure 3-8 Online device information

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 navigate to **Status > System Info**.

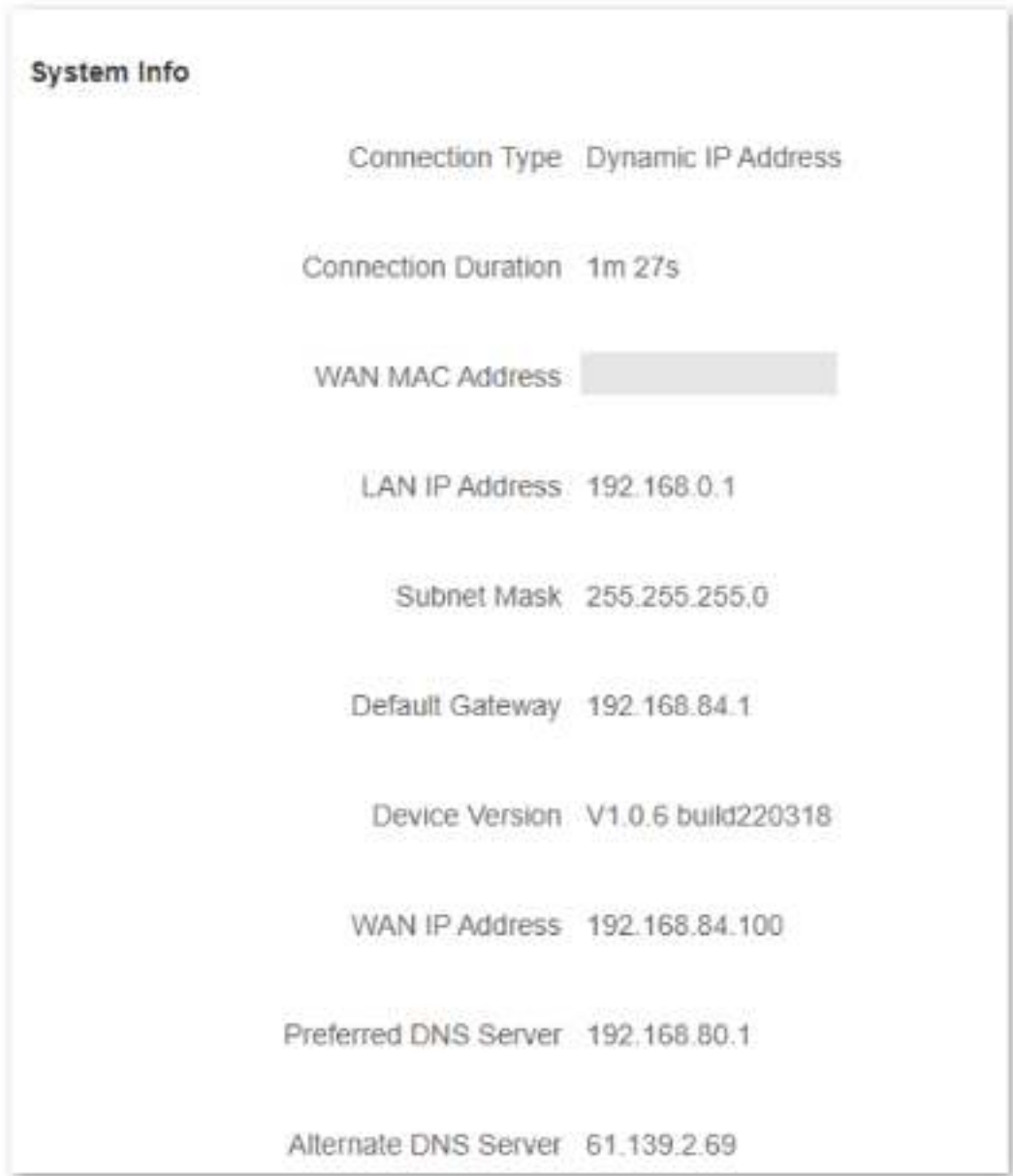


Figure 3-9 System information

Table 3-1 System information 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).

Parameter	Description
Subnet Mask	It specifies the subnet mask of the WAN port.
Default Gateway	It specifies the IPv4 default gateway of the router.
Device Version	It specifies the current version number of the router's firmware.
WAN IP Address	It specifies the IPv4 address of the WAN port.
Preferred DNS Server	They show the preferred and alternative IPv4 DNS server address of the WAN port.
Alternate DNS Server	

Chapter 4 Route settings

4.1 Internet settings

4.1.1 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 navigate to **Route Settings > Internet Settings**.

Operating Mode

Internet Connection Mode ☒ Router mode ☐ WISP mode ☐ Universal relay mode ☐ AP mode

Under this mode, the router connects to the ISP in a wired manner, and provides WiFi signal to clients.

Internet Connection

Connection Type ☒ PPPoE ☐ Static IP Address ☐ Dynamic IP Address

This type is applicable if a PPPoE user name and password are required for setting up an Internet connection.

User Name

Password

Connection Status: **Connected. You can access the Internet.**

Save

Figure 4-1 Internet settings

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

Table 4-1 Working mode of the router

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 relay mode
Connect the router to a smart home gateway to provide wireless coverage.	AP mode

4.1.2 Serve as a router

