



HUAWEI HG552a1 Home Gateway

User Guide



HUAWEI HG552a1 Home Gateway
V100R001

User Guide

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1 Warnings and Precautions

To use the device properly and safely, read these warnings and precautions carefully and strictly observe them during operation. Unless otherwise specified, the term "device" refers to the device and its accessories.

Basic Requirements

- During storage, transportation, and operation of the device, keep it dry and prevent it from colliding with other objects.
- Do not dismantle the device. In case of any fault, contact an authorized service center for assistance or repair.
- Without authorization, no organization or individual can change the mechanical, safety, or performance design of the device.
- When using the device, observe all applicable laws and regulations and respect the legal rights of other people.

Environmental Requirements for Using the Device

- Before connecting and disconnecting cables, stop using the device, and then disconnect it from the power supply. Ensure that your hands are dry during operation.
- Keep the device far from sources of heat and fire, such as a heater or a candle.
- Keep the device far from electronic appliances that generate strong magnetic or electric fields, such as a microwave oven or a refrigerator.
- Place the device on a stable surface.
- Place the device in a cool and well-ventilated indoor area. Do not expose the device to direct sunlight. Use the device in an area with a temperature ranging from 0°C to 40°C.
- Do not block the openings on the device with any object. Reserve a minimum space of 10 cm around the device for heat dissipation.
- Do not place any object (such as a candle or a water container) on the device. If any foreign object or liquid enters the device, stop using the device immediately, power it off, remove all the cables connected to it, and then contact an authorized service center.
- During thunderstorms, power off the device, and then remove all the cables connected to it to prevent it from getting damaged due to lightning strikes.

Precautions for Using Wireless Devices

- When using the device, ensure that the antenna of the device is at least 20 cm away from all persons.
- Do not use the device where using wireless devices is prohibited or may cause interference or danger.

- The radio waves generated by the device may interfere with the operation of electronic medical devices. If you are using any electrical medical device, contact its manufacturer for the restrictions on the use of the device.
- Do not take the device into operating rooms, intensive care units (ICUs), or coronary care units (CCUs).

Areas with Inflammables and Explosives

- Do not use the device where inflammables or explosives are stored, for example, in a gas station, oil depot, or chemical plant. Otherwise, explosions or fires may occur. In addition, follow the instructions indicated in text or symbols.
- Do not store or transport the device in the same box as inflammable liquids, gases, or explosives.

Accessory Requirements

- Use only the accessories supplied or authorized by the device manufacturer. Otherwise, the performance of the device may get affected, the warranty for the device or the laws and regulations related to telecommunications terminals may become null and void, or an injury may occur.
- Do not use the power adapter if its cable is damaged. Otherwise, electric shocks or fires may occur.
- Ensure that the power adapter meets the specifications indicated on the device nameplate.
- Ensure that the power adapter meets the requirements of Clause 2.5 in IEC60950-1/EN60950-1 and it is tested and approved according to national or local standards.
- For pluggable device, the socket-outlet shall be installed near the device and shall be easily accessible.

Safety of Children

Keep the device and its accessories out of the reach of children. Otherwise, they may damage the device and its accessories by mistake, or they may swallow the small components of the device, causing suffocation or other dangerous situations.

Maintenance

- If the device is not used for a long time, power it off, and then remove all the cables connected to it.
- If any exception occurs, for example, if the device emits any smoke or unusual sound or smell, stop using the device immediately, power it off, remove all the cables connected to it, and then contact an authorized service center.
- Do not trample, pull, or overbend any cable. Otherwise, the cable may get damaged, causing malfunction of the device.
- Before cleaning the device, stop using it, power it off, and then remove all the cables connected to it.

- Use a clean, soft, and dry cloth to clean the device shell. Do not use any cleaning agent or spray to clean the device shell.

2 Product Overview

2.1 Product Features

The EchoLife HG552a1 (hereinafter referred to as the HG552a1) is a high-performance Asymmetrical Digital Subscriber Line (ADSL) voice gateway designed for home users and small office and home office (SOHO) users. This section describes the features of the HG552a1.

Flexible Routing

- Providing an embedded Point to Point Protocol over Ethernet (PPPoE) dialer
- Supporting the Dynamic Host Configuration Protocol (DHCP) server
- Supporting simultaneous multi-user access

Abundant Service Interfaces

- Providing four high-speed Ethernet interfaces
- Supporting the routing mode and the bridge mode
- Providing the voice function through the Plain Old Telephone Service (POTS) interface
- Supporting the multi-service set identifier (MSSID) of Wireless Fidelity (WiFi), which enables users to use wireless networks conveniently and securely
- Providing mobile storage capability through the USB host interface

Outstanding Voice Functions

Providing VoIP service and T.38 facsimile service

Standard TR-069 Management Capability

- Providing complete compatibility with the TR-069 standard of the Digital Subscriber Line (DSL) Forum
- Providing complete remote management and diagnosis
- Providing a zero-configuration solution, which significantly lowers the operation and maintenance costs and can be combined with the automatic upgrade and service provisioning processes to conveniently distribute customized services

ADSL/ADSL2+ Interface

- Providing embedded ADSL/ADSL2+ broadband network functions
- Supporting the ITU-T G.994.1 (G.hs) handshake protocol

- Providing compatibility with Annex A ANSI T1.413 Issue 2, ITU-T G.992.1 (G.dmt), G.992.3 (ADSL2), and G.992.5 (ADSL2+)

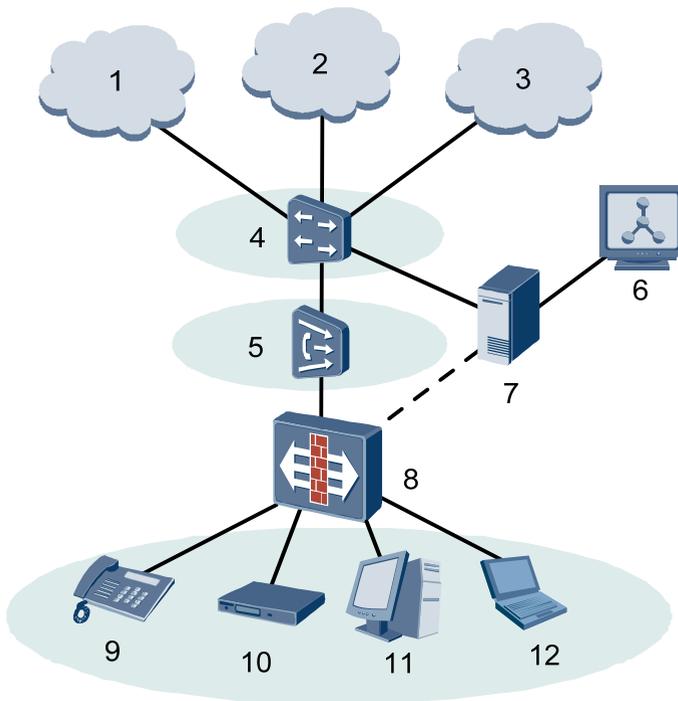
Wide Area Network (WAN) Protocol

- Supporting multiple AAL5 protocols, such as LLC and VC-MUX (RFC1483/2684)
- Supporting PPPoE (RFC2516)
- Supporting routing and bridging in conformance with RFC 2684

2.2 Network Application

Figure 2-1 shows the network application of the HG552a1.

Figure 2-1 Network application of the HG552a1



- — : indicates an actual network connection.
- - - - : indicates a logical management channel.

Table 2-1 describes the elements shown in Figure 2-1.

Table 2-1 Description of the elements for the network application diagram

No.	Item	Full Name
1	NGN	Next Generation Network
2	Internet	-
3	IPTV	Internet Protocol Television
4	BRAS	Broadband Remote Access Server
5	DSLAM	Digital Subscriber Line Access Multiplexer
6	OSS	Operations Support System
7	ACS	Auto-Configuration Server
8	HG552a1	-
9	Telephone	-
10	STB	set-top box
11	Desktop computer	-
12	Notebook computer	-

2.3 Indicators, Interfaces and Buttons

Indicators

The indicators of the HG552a1 are located on the front panel, as shown in Figure 2-2.

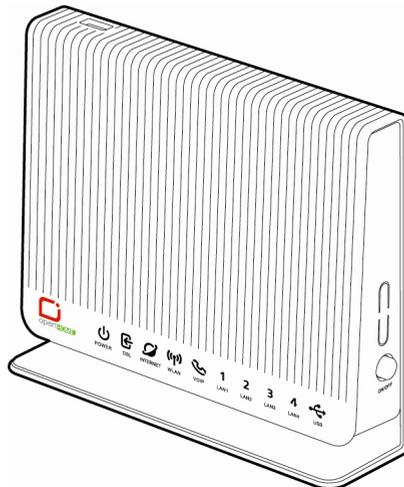
Figure 2-2 Indicators

Table 2-2 describes the meanings of the indicators.

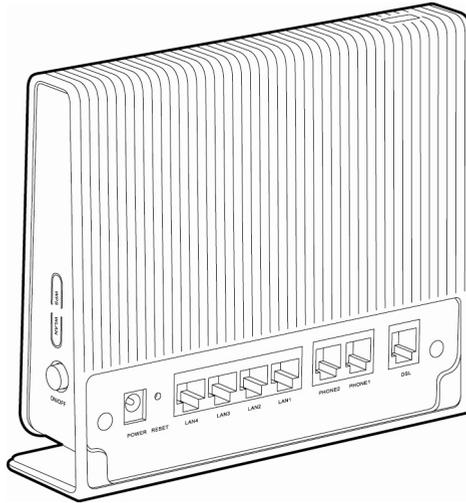
Table 2-2 Meanings of the indicators

Indicator	Status	Description
POWER	On	The HG552a1 is powered on.
	Off	The HG552a1 is powered off.
DSL	On	The DSL connection is established and activated.
	Blinking	The DSL connection is being activated.
	Off	The HG552a1 is powered off or no DSL connection.
INTERNET	On	The Internet connection is set up, but no data is being transmitted on the WAN interface.
	Blinking	The Internet connection is set up, and data is being transmitted.
	Off	The HG552a1 is powered off or no Internet connection.
WLAN	On	The WLAN connection is successfully established but no data is being transmitted.
	Blinking	The WLAN connection is successfully established and data is being transmitted.
	Off	The HG552a1 is powered off or the WLAN connection is not yet established.
VOIP	On	The softswitch has logged in successfully.
	Off	The HG552a1 is powered off or no softswitch connection.
LAN1, LAN2, LAN3, LAN4	On	The LAN connection is successfully established but no data is being transmitted.
	Blinking	The LAN connection is successfully established and data is being transmitted.
	Off	The HG552a1 is powered off or the LAN connection is not yet established.
USB	On	The USB connection is successfully established at USB host mode but no data is being transmitted.
	Blinking	The USB connection is successfully established at USB host mode and data is being transmitted.
	Off	The HG552a1 is powered off or the USB connection is not yet established.

Interfaces and Buttons

The interfaces and buttons of the HG552a1 are located on the rear panel and side panel, as shown in Figure 2-3.

Figure 2-3 Interfaces and buttons



- The **USB** interface is on the top of the HG552a1.
- The rear panel view and side panel view are for reference only. The actual appearance may differ.

Table 2-3 lists the functions of the interfaces and buttons.

Table 2-3 Functions of the interfaces and buttons

Interface/Button	is used to...
DSL	connect the HG552a1 to the MODEM interface on the splitter.
PHONE1, PHONE2	connect the HG552a1 to the telephone.
LAN1, LAN2, LAN3, LAN4	connect the HG552a1 to the Ethernet interface on the computer or the STB.
RESET	restore the factory settings of the HG552a1. NOTE After you restore the default settings, the customized data will be lost. Therefore, press the RESET button with caution.
POWER	connect the HG552a1 to the power adapter.
WLAN	enable or disable wireless network function quickly.
WPS	start the WPS negotiation.
ON/OFF	power on or off the HG552a1.

Interface/Button	is used to...
USB (on the top of the HG552a1)	connect the USB device.

2.4 System Requirements

Make sure that the following requirements are met before using the HG552a1.

Operating System Requirements

The operating system (OS) requirements are as follows:

- Windows 98
- Windows Me
- Microsoft NT4
- Windows 2000
- Windows XP
- Windows Vista

PC Hardware Configuration

The requirements for the hardware configuration of the device are as follows:

- Memory: greater than 64 MB
- Remaining space of disk C: greater than 128 MB
- CD-ROM drive

Web Browser

Internet Explorer 6.0 or later versions, including FireFox 2.0

3 Product Installation

3.1 Connecting the Cables

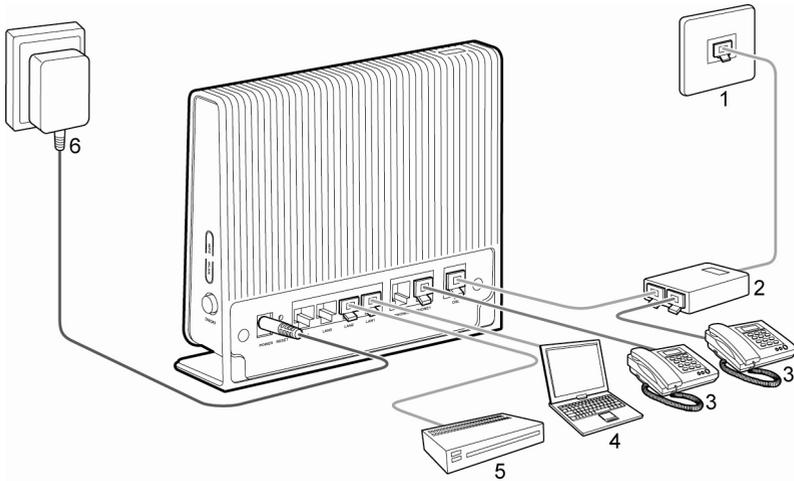


CAUTION

Before connecting the cables, power off all equipment connected to it including the HG552a1, the PC, and the switch.

Connect the other equipment, such as the PC and the telephone, to the HG552a1 according to Figure 3-1.

Figure 3-1 Connecting the HG552a1



- | | | | | | |
|---|----------------------------|---|-------------|---|---------------|
| 1 | Telephone jack on the wall | 2 | Splitter | 3 | Telephone |
| 4 | Computer | 5 | Set-top box | 6 | Power adapter |

3.2 Getting Started

To power on the HG552a1, press the **ON/OFF** button on the side panel of the HG552a1.

After you power on the HG552a1, the **DSL** indicator blinks (for less than three minutes), which indicates that the HG552a1 is being activated. Later, the **DSL** indicator turns solid on. The **POWER** indicator is also solid on, which indicates that the HG552a1 is working properly.

4 Functions Introduction

4.1 Accessing the Web Configuration Page

The HG552a1 provides simple and easy-to-use Web configuration page, through which you can check and configure the working parameters of the HG552a1.

Before you log in to the Web configuration page of the HG552a1, make sure the setting requirements of the PC as listed in Table 4-1 are met.

Table 4-1 Requirements on PC settings

Item	Requirement
Network protocol	Enable the TCP/IP.
IP address and subnet mask of the PC	Select Automatically obtain an IP address .
Internet Explorer	Do not use the proxy server.

To log in to the Web configuration page, do as follows:

Step 1 Start the Internet Explorer on the PC.

Step 2 Enter **http://192.168.1.1** in the address bar of the Internet Explorer, and then press **Enter**.

The **Login** dialog box is displayed.

Step 3 Enter the name and password (**telekom** and **telekom** by default) in the **Login** dialog box, and then click **OK**.

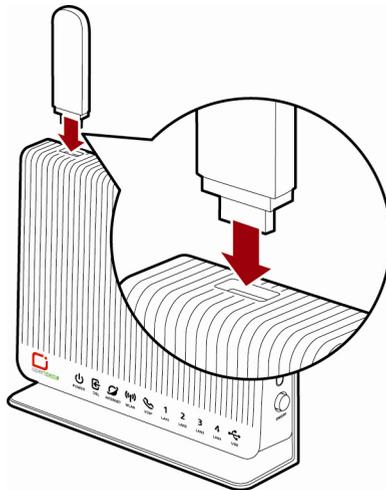
4.2 Accessing Mobile Storage Devices

The HG552a1 provides the home storage function. USB devices, such as USB disks, can be connected to the USB interface on the HG552a1. You can access mobile storage devices through the File Transfer Protocol (FTP) server.

To access a mobile storage device, do as follows:

Step 1 Connected the USB device to the USB interface on the HG552a1.

Figure 4-1 Connect to the USB interface



Step 2 Enable the FTP Server and configure the FTP Server parameters.

1. Log in to the Web configuration page.
2. Choose **Advanced > USB Port** in the navigation tree.
3. Enable **Ftp Enable**.
4. Enter the user name and password of the FTP server in the **User name** and **Password** text boxes.
5. Enter the password again in the **Confirm Password** text box.
6. Click **Submit** to save the settings.

Step 3 Start the FTP client and access the LAN IP address of the HG552a1 through FTP.

The **Login** dialog box is displayed.



Assume that the LAN IP address of the HG552a1 is 192.168.1.1. To access the LAN IP address of the HG552a1 Internet Explorer, enter **FTP://192.168.1.1**.

Step 4 In the **Login** dialog box, enter the user name and password for logging in to the FTP server (that are set in Step 2), and then click **Login**.

After the password is verified, you can read or write the USB storage device connected to the HG552a1.

4.3 Changing the User Name and Password of the Web Configuration Page

You can configure all the parameters of the HG552a1 through the Web configuration page. To prevent unauthorized personnel from changing these parameters, you need to use the user name and password to log in to the Web configuration page.

To change the user name and password, do as follows:

- Step 1** Log in to the Web configuration page.
- Step 2** In the navigation tree, choose **Maintenance > Account**.
- Step 3** Enter the new user name in the **New user name** text box.
- Step 4** Enter the current password and new password in the **Current password** and **New password** text boxes.
- Step 5** Enter the new password again in the **Confirm password** text box for confirmation.
- Step 6** Click **Submit** to save the settings.

After you change them successfully, next time log in to the Web configuration page, enter the new user name and password.



If you forget the user name or password that has been changed, you can restore the default settings of the HG552a1 by pressing and holding the **RESET** button for over 3 seconds. After you restore the default settings, the customized data will be lost. Therefore, press the **RESET** button with caution.

4.4 Changing the IP Address

To make the login IP address easy to remember, you can change the IP address after logging in to the Web configuration page.

To change the IP address, do as follows:

- Step 1** Choose **Basic** > **LAN** in the navigation tree.
- Step 2** Enter a new IP address as desired in the **IP address** text box.
- Step 3** Enter a subnet mask in the **Subnet mask** text box.
- Step 4** Click **Submit** to save the settings.



- To log in to the Web configuration page after you change the IP address successfully, you need to launch the Internet Explorer, and then enter the new IP address in the address bar.
- Ensure that the IP address of the computer is in the same network segment as that of the HG552a1.

4.5 Restoring Default Settings

You can quickly restore the default settings of the HG552a1 by pressing the **RESET** button. To restore the default settings, press and hold the **RESET** button for over six seconds after the HG552a1 is powered on, and then release the button.

In addition, you can restore the default settings of the HG552a1 through the Web configuration page.

To restore the default settings through the Web configuration page, do as follows:

- Step 1** Log in to the Web configuration page.
- Step 2** Choose **Maintenance** > **Device**.
- Step 3** Click **Restore Default Settings**.

After the preceding operations, the page jumps to the login page. You can log in to the Web configuration page by entering the default user name and password that are **telekom**.

5 Voice Services

5.1 Introduction

The HG552a1 supports voice services based on the Session Initiation Protocol (SIP).

The SIP is an application layer protocol used to create, modify, or end multimedia sessions. Based on text coding, the SIP references the Hyper Text Transport Protocol (HTTP) and the Simple Mail Transfer Protocol (SMTP), and can cooperate with other protocols, such as the Real-time Transport Protocol (RTP), the Real-time Transport Control Protocol (RTCP), the Session Description Protocol (SDP), and the Domain Name Server (DNS) protocol to implement voice services and the facsimile service.

The HG552a1 enables voice service interworking between the Internet and the Public Switched Telephone Network (PSTN).

5.2 Voice Service Introduction

Networking

Figure 5-1 Network model of voice services

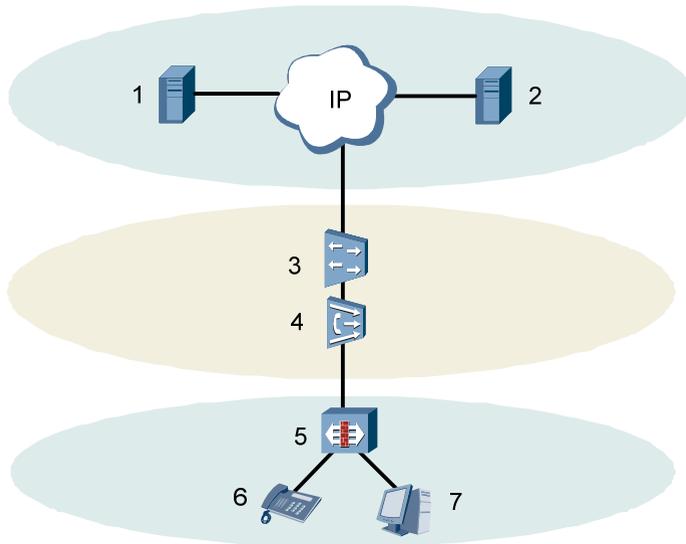


Table 5-1 Description of the equipment in voice service networking

No.	Item	Description
1	Proxy Server	A server that forwards requests or responses in place of the client
2	Registrar Server	A server that receives registration requests
3	BRAS	Broadband Remote Access Server
4	DSLAM	Digital Subscriber Line Access Multiplexer
5	HG552a1	-
6	Telephone	-
7	Computer	-

Configuration Procedure

The VoIP parameter has been configured with the delivered HG552a1. In general, this parameter does not need to be configured and please keep the default settings.

6 Wireless Services

If a wireless network adapter is installed on your computer, you can connect your computer to the HG552a1 through a wireless connection.

There are two methods to configure the wireless network connection.

6.1 Configuring the Wireless Connection by the Web Page

To configure the wireless network connection by configuring the web page, do as follows:

Step 1 Set the wireless network name and access password of the HG552a1 (taking the authentication type WPA-PSK as an example).

1. Log in to the Web configuration page.
2. In the navigation tree, choose **Basic > WLAN**.
3. Ensure select **Enable WLAN**.
4. Enter a wireless network name in the **SSID** text box.
5. Select **WPA-PSK/WPA2-PSK** from the **Security Mode** drop-down list box.
6. Enter an access password in the **WPA Pre-Shared Key** text box.
7. Select **AES** from the **WPA Encryption** drop-down list box, and keep the default settings of other parameters.
8. Click **Submit** to save the settings.

Step 2 Enable the wireless configuration service provided by Windows XP.

1. Right-click **My Computer**, and then choose **Manage** from the shortcut menu.
2. In the **Computer Management** window, choose **Computer Management (Local) > Services and Applications > Services**.
3. From the services listed in the right pane of the **Computer Management** window, right-click **Wireless Zero Configuration**, and then choose **Properties** from the shortcut menu.
4. In the **Wireless Zero Configuration Properties (Local Computer)** dialog box, check whether **Service status** is **Started**. If not, click **Start**.
5. Click **OK** to close the dialog box, and then close the **Computer Management** window.

Step 3 Configure the wireless network connection on your computer (taking the Windows XP operating system as an example).

1. Choose **Start > All Programs > Accessories > Communications > Network Connections**.
2. In the **Network Connections** window, right-click **Wireless Network Connection** to display a shortcut menu, and then select **View Available Wireless Networks** from the shortcut menu.
3. Select the wireless network that is configured in Step 1 from the wireless network list, and then click **Connect** in the lower right corner of the window.
4. In the displayed dialog box, enter the access password that is preset in Step 1, and then click **Connect**.

After the password is verified, **Connected** appears on the icon of the wireless network in the wireless network list, which indicates that your computer is connected to the HG552a1 through wireless connection.

6.2 Configuring the Wireless Connection Manually

If the wireless network adapter on your computer supports the WPS function, you can connect your computer to the HG552a1 wirelessly as follows:

Step 1 Set the WLAN parameters of HG552a1, and then set the **Security** to **WPA-PSK**, **WPA2-PSK** or **WPA-PSK/WPA2-PSK**. For details, see the Step1 of chapter 6.1 "Configuring the Wireless Connection by the Web Page."



The WPS function can be used only when the security mode of the WLAN is set to WPA-PSK, WPA2-PSK, or WPA-PSK/WPA2-PSK.

Step 2 Press the WPS button on the side panel to start the WPS negotiation of the HG552a1. Then the WLAN indicator of the HG552a1 blinks.

Step 3 Start the WPS negotiation of the wireless network adapter within 2 minutes.

Wait for a few seconds, and then you can see the WLAN indicator becomes solid on from the blinking state, indicating that the HG552a1 is connected to your PC through the WPS function. This state lasts 5 minutes. Then the WLAN indicator turns off.

7 FAQs

How can I configure a computer to use a static IP address?

Take a computer that runs Windows XP as an example. To configure the computer to use a static IP address, do as follows:

Step 1 In the Control Panel window, double-click Network Connections to display the Network Connections window.

Step 2 In the **Network Connections** window, right-click the working **Local Area Connection** and choose **Properties**.

Step 3 In the **This connection uses the following items** group box of the Local Area Connection Properties dialog box, select Internet Protocol (TCP/IP). Click Properties.

Step 4 Select Use the following IP address.

Step 5 Set the IP address of the computer and ensure that the IP address is in the same network segment as the local area network (LAN) IP address of the HG552a1.

Assume that the default LAN IP address of the HG552a1 is 192.168.1.1. To set the IP address of the computer, do as follows:

1. In **IP address**, enter **192.168.1.100**. Ensure that this IP address is unique and not used by other computers.



The configurable static IP address ranges from 192.168.1.2 to 192.168.1.254.

2. In Subnet mask, enter 255.255.255.0.
3. In Default gateway, enter 192.168.1.1.

Step 6 Consult your network service provider about the IP address of the domain name server (DNS). In **Preferred DNS server** and **Alternate DNS server**, enter the IP address.

If you configure the static IP address for the purposes of accessing the Web configuration page of the HG552a1, you can skip this step.

Step 7 In the Internet Protocol (TCP/IP) Properties dialog box, click OK. Then in the Local Area Connection Properties dialog box, click OK.

What can I do if I cannot visit Web sites through the HG552a1?

Step 1 Check whether the POWER indicator of the HG552a1 is on.

If the POWER indicator is off, perform further checks as follows:

1. Ensure that electricity comes from the socket and that the input power of the socket meets the requirements described on the label of the HG552a1 power adapter. If the voltage is unsteady, for example, if the voltage is too high or too low, do not use the HG552a1. Wait until the voltage restores to its normal level, and then use the HG552a1.
2. Ensure that the HG552a1 is properly connected to the socket through the power adapter.

If the POWER indicator is still off, contact an authorized maintenance center.

Step 2 After powering on the HG552a1, wait for about three minutes. Then check whether the DSL indicator of the HG552a1 is on.

If the DSL indicator blinks for a long time, perform further checks as follows:

1. Ensure that telephone lines are properly connected. Especially ensure that the telephone line connecting to the splitter is properly connected.
2. Ensure that HG552a1 cables or telephone lines are far from the electric appliances that generate strong magnetic or electric fields.
3. Replace telephone lines.

If the DSL indicator still blinks, contact your network service provider.

Step 3 Check whether the LAN indicator of the HG552a1 is on.

If the LAN indicator is off, perform further checks as follows:

1. Ensure that the network adapter of the computer is enabled.
2. Ensure that the network cable between the HG552a1 and the computer is properly connected.
3. Remove and then insert the network cable or replace the network cable.

If the LAN indicator is still off, contact an authorized maintenance center.

Step 4 Check whether the driver for the network adapter is properly installed.

Take a computer that runs Windows XP as an example. To check whether the driver for the network adapter is installed, do as follows:

1. On the desktop, right-click **My Computer** and choose **Manage**.
2. In the navigation tree of the **Computer Management** window, choose **Device Manager**.
3. In the right pane of the **Computer Management** window, click **Network adapters** to view the information about the network adapter of the computer.

If no network adapter is detected or if a question mark (?) or an exclamation mark (!) is displayed next to the icon of the network adapter, you can infer that the driver for the network adapter is not properly installed. In this case, re-install the driver for the network adapter of the computer.

For details about how to set the parameters, see the description of the PPP dialing software.

Step 5 Ensure that you have entered the correct user name and user password that are required by the PPP dialing software.

The user name and the user password are provided by your network service provider.

Step 6 Check whether you can use the PPP dialing software to dial successfully.

If you cannot use the PPP dialing software to dial successfully, perform further checks as follows:

1. Stop the PPP dialing software and then power off the HG552a1. After five minutes, power on the HG552a1 and use the PPP dialing software to dial again.
2. Restore the default settings of the HG552a1.

If the problem persists, contact your network service provider.

Step 7 Check whether the proxy server of the Web browser is correctly configured. Take the Internet Explorer installed on a computer that runs Windows XP as an example. To check whether the proxy server of the Web browser is correctly configured, do as follows:

1. Start the Internet Explorer.
2. Choose Tools > Internet Options.
3. In the **Internet Options** dialog box, click the **Connections** tab.
4. In the Local Area Network (LAN) settings group box, click LAN settings.
5. In the **Proxy server** group box of the **Local Area Network (LAN) Settings** dialog box, ensure that **Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections)** is not selected.

Step 8 Try to access multiple other Web sites to check whether the HG552a1 can access.

If the HG552a1 still cannot access other Web sites, contact your network service provider.

What can I do if the HG552a1 cannot access the Internet through a wireless network adapter?

Step 1 Ensure that the power cables and telephone lines of the HG552a1 are properly connected.

Step 2 Check whether the WIFI indicator of the HG552a1 is on.

If the WIFI indicator is off, you can infer that the wireless local area network (WLAN) function of the HG552a1 is disabled. In this case, enable the WLAN function.

Step 3 See the description of the wireless network adapter that is installed on the computer and check whether the wireless network adapter supports the 802.11b and 802.11g protocols.

If the wireless network adapter does not support the 802.11b and 802.11g protocols, replace it with the network adapter that supports the protocols.

Step 4 Check whether the driver for the wireless network adapter is properly installed on the computer.

If the driver is improperly installed, install it properly.

Step 5 Check whether the computer can receive the signals of a WLAN.

Take a computer that runs Windows XP as an example. To check whether the computer can receive the signals of a WLAN, do as follows:

1. In the Control Panel window, double-click Network Connections to display the Network Connections window.
2. In the Network Connections window, right-click Wireless Network Connection and choose View Available Wireless Network.

If the computer cannot detect a WLAN, place the computer close to the HG552a1 and ensure that no obstacles such as cement or wooden walls are present between the wireless client and the HG552a1.

Step 6 Check whether the computer accesses the WLAN of the HG552a1 successfully.

Check the list of wireless network connections and ensure that the HG552a1 is connected to the WLAN.

Step 7 Check whether you can use the PPP dialing software to dial successfully.

Step 8 Try to access multiple Web sites to check whether the HG552a1 can access other Web sites.

If the HG552a1 cannot access other Web sites either, restore the default settings of the HG552a1. If the problem persists, contact your network service provider.

What can I do if sometimes the HG552a1 cannot access the Internet through a wireless network adapter or if the WLAN connection is unsteady?

Step 1 Check the positions of your HG552a1 and computer. Ensure that they are far from the electric appliances such as microwave ovens, refrigerators, or cordless telephones that generate strong magnetic or electric fields.

Step 2 Place your HG552a1 in an open position.

Although radio signals can pass through obstacles, the transmission effects of WLAN radio signals are affected if radio signals pass through too many obstacles such as cement or wooden walls.

Step 3 Place your computer close to your HG552a1.

If your computer is far from your HG552a1, the effects of the WLAN are affected.

Step 4 Place your HG552a1 and computer in another direction.

Step 5 Do not use your HG552a1 to access a WLAN during thunderstorms.

What can I do if the WLAN of the HG552a1 is not encrypted and the computer cannot access the WLAN?

Step 1 Delete the settings of wireless network connections from your computer.

Take a computer that runs Windows XP as an example. To delete the settings of wireless network connections, do as follows:

1. In the **Control Panel** window, double-click **Network Connections** to display the **Network Connections** window.
2. In the **Network Connections** window, right-click **Wireless Network Connection** and choose **Properties**.
3. In the **Wireless Network Connection Properties** dialog box, click the **Wireless Networks** tab.
4. In the **Preferred Networks** group box, select the latest wireless network connection saved on your computer. Then click **Remove**.
5. Delete all the other wireless network connections from the **Preferred Networks** group box.
6. Click **OK**.

Step 2 Create a wireless network connection that is not encrypted.

Is there any restriction on the number of the computers that access a WLAN through wireless network adapters?

Theoretically, the HG552a1 supports hundreds of concurrent computers that access the Internet through wireless network adapters. In practical applications, for the purposes of the high performance of a wireless network, the number of the concurrent computers that connect to the HG552a1 should not exceed five.

What can I do if I cannot access the HG552a1 configuration page?

Step 1 See the answer to "What can I do if I cannot visit Web sites through the HG552a1?" and ensure that the power supply of the HG552a1 works properly and that the telephone lines and network cables of the HG552a1 are properly connected.

Step 2 Check the IP address of your computer and ensure that this IP address is in the same network segment as the LAN IP address of the HG552a1.

Step 3 Ensure that your Web browser does not use a proxy server.

Step 4 Ensure that you have entered the correct user name and user password that are used for accessing the HG552a1 configuration page.

Step 5 If the problem persists, restore the default settings of the HG552a1.

What can I do if Web pages often cannot be displayed during Web page browsing and can be displayed after the HG552a1 is restarted?

Step 1 Ensure that the HG552a1 and other devices such as telephones or fax machines are connected to the telephone line through a splitter.

For details about how to install a splitter, see the related description in the manual.

Step 2 Ensure that telephone lines are properly connected.

If the telephone lines are improperly connected, the stability of the network connection is affected.

Step 3 Check the positions of your HG552a1 and computer. Ensure that they are far from the electric appliances such as microwave ovens, refrigerators, or cordless telephones that generate strong magnetic or electric fields.

If the problem persists, contact your service provider.

What can I do if noises exist during telephone calls?

Step 1 Ensure that a splitter is installed.

A splitter helps to protect the call quality of the asymmetric digital subscriber line (ADSL) from being affected due to the interference of other type of signals.

Step 2 Ensure that telephone lines are properly connected. Especially ensure that the telephone line connecting to the splitter is properly connected.

Step 3 Replace telephone lines and ensure that the telephone lines are not faulty.

After the HG552a1 is installed, does Internet access degrade call quality or do telephone calls lower the Internet access rate?

No. The HG552a1 uses the frequency division multiplexing (FDM) and splitter technologies to separate voice signals from data signals. Although the two types of signals are transmitted through one telephone line, they are carried by different frequency bands. Therefore, they do not interfere with each other. In this case, you can make a telephone call and access the Internet at the same time, without degrading call quality or lowering the Internet access rate.

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