HG659 Home Gateway

User Guide

1 Product Overview

Ports and Buttons
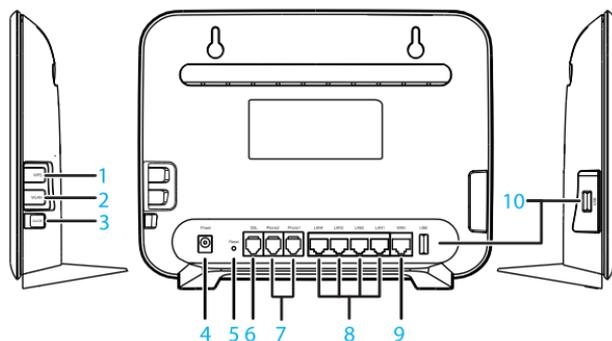
No.	Item	Description
1	WPS	Starts Wi-Fi protected setup (WPS) negotiation.
2	WLAN	Enables or disables the WLAN function.
3	On/Off	Powers the HG659 on or off.
4	Power	Connects to a power adapter.
5	Reset	Restores the HG659 to its default settings after you press and hold this button for 6 seconds or more while the HG659 is powered on. ⚠ A reset will result in all custom data and settings being lost. Use with caution.
6	DSL	Connects to a DSL filter or phone socket.
7	PHONE	Connects to a telephone.
8	LAN1 ∼ LAN4	Connects to Ethernet devices, such as computers, set-top boxes (STBs), and switches.
9	WAN	Connects to an Ethernet device that provides Internet access, such as a modem or switch.

No.	Item	Description
10	USB	Connects to a USB device. ⚠️ If you connect a USB device to the HG659, verify that the input voltage and current of the USB device does not exceed 5 V/0.65 A. Otherwise, the HG659 may malfunction.

Indicators
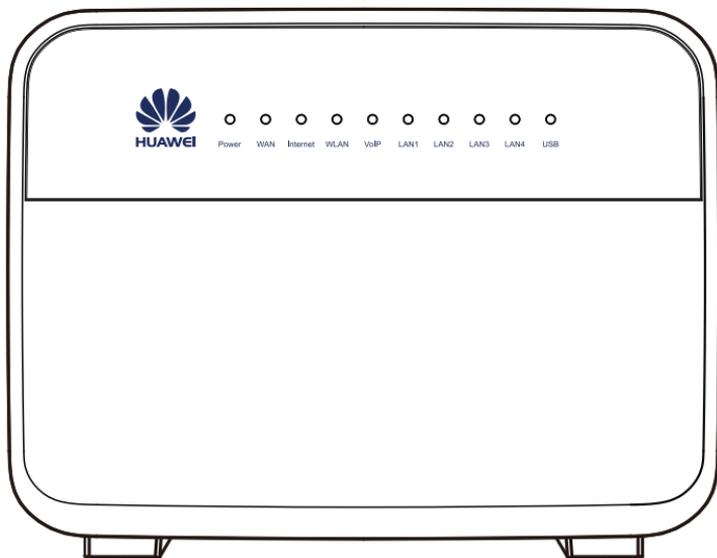
Indicator	Status	Description
Power	Steady green	The HG659 is powered on.
	Off	The HG659 is powered off.
WAN	Blinking green	A DSL connection is being activated.
	Steady green	A DSL connection has been set up and activated. A WAN connection has been set up.
	Off	The WAN or DSL port is not connected.

Indicator	Status	Description
Internet	Steady green	The HG659 is connected to the Internet in router mode, but no data is being transmitted.
	Blinking green	The HG659 is connected to the Internet in router mode, and data is being transmitted.
	Off	> The HG659 is in router mode, but not connected to the Internet. > The HG659 is in bridge mode.
WLAN	Steady green	The HG659 has WLAN enabled, but is not transmitting data.
	Fast Blinking (2Hz)	The HG659 has WLAN enabled, and data is being transmitted.
	Slow Flashing (1Hz)	The HG659 is attempting to connect to a wireless client over the WLAN using the WPS function. This process lasts for no longer than 120 seconds.
	Off	WLAN is disabled.
VoIP	Steady green	The HG659 is registered with a SIP server, but no data is being transmitted.
	Blinking green	The HG659 is registered with a SIP server, and data is being transmitted.
	Off	The HG659 is not registered with a SIP server.
LAN1 ~ LAN4	Steady green	The LAN port is connected to an Ethernet device (such as a computer) with a network cable, but no data is being transmitted.
	Blinking green	The LAN port is connected to an Ethernet device with a network cable, and data is being transmitted.
	Off	The LAN port is not connected to any Ethernet device.
USB	Steady green	The USB port is connected to an USB device, but no data is being transmitted.
	Blinking green	The USB port is connected to an USB device, and data is being transmitted.
	Off	The HG659 is not connected to any USB device.

2 Hardware Installation

Selecting an Installation Location

Place the HG659 on a well-ventilated even surface without exposure to direct sunlight. For the best possible performance, take note of the following:

> Make sure there are no obstacles, such as concrete or wooden walls, between the computer and HG659.

> Ensure that the computer and HG659 are far from electric appliances that generate strong magnetic or electric fields, such as microwave ovens.

Installing the HG659 on a DSL Broadband Network

In some communities, Internet service providers use telephone lines to provide broadband access services.

If you have subscribed to digital subscriber line (DSL) broadband, you can connect the HG659 to a telephone port for Internet access.

Connect your devices in the sequence indicated in the following figure.
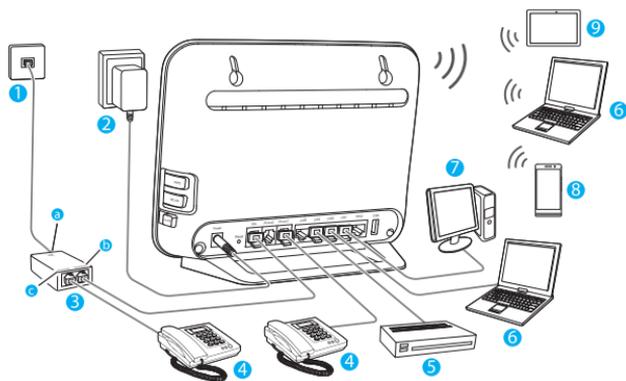
1	Telephone wall jack	2	Power adapter	3	Splitter
4	Telephone	5	Set-top Box	6	Laptop computer
7	Desktop computer	8	Smart Phone	9	Pad
a	LINE port	b	MODEM port	c	PHONE port

When configuring the HG659 for the first time, use an Ethernet cable to connect the HG659 to a computer.

Installing the HG659 on an Ethernet Broadband Network

In some communities, network service providers use Ethernet interfaces as Internet interfaces. On this network, your PC is directly connected to the Internet through the Ethernet interface provided by the network service provider.

If you have subscribed to digital Ethernet broadband, you can connect the HG659 to an Ethernet interface for Internet access.

Connect your devices in the sequence indicated in the following figure.
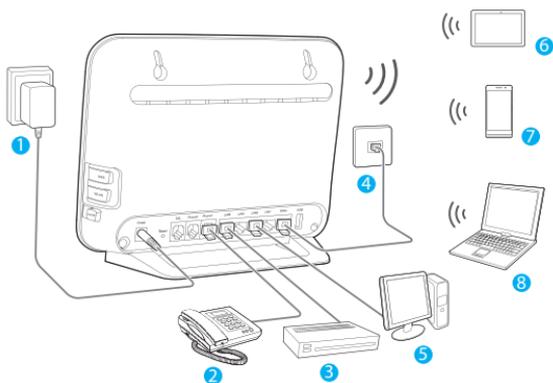
1	Power adapter	2	Telephone	3	Set-top Box
4	Network interface on the wall	5	Desktop computer	6	Pad
7	Smart Phone	8	Laptop computer		

Powering On

To power on the HG659, press its power button.

After the HG659 is powered on, the HG659 indicator turns on.If the indicators do not behave as expected, ensure that everything is plugged in correctly.

3 Setting Network Parameters

Setting the Computer IP Address

Before logging in to the HG659 web management page, set the IP address of the computer that will be used for the login.

On Windows 7

1. Choose **start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center**.
2. Choose **Change adapter settings**. Right-click **Local Area Connection** and choose **Properties**.
3. Double-click **Internet Protocol Version 4 (TCP/IPv4)**.
4. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Click **OK**.

On Windows XP

1. Choose **start** > **Control Panel** > **Network and Internet Connections**.
2. Click **Network Connections**. Right-click **Local Area Connection** and choose **Properties** from the shortcut menu.
3. Double-click **Internet Protocol (TCP/IP)**.
4. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Click **OK**.

Logging In to the Web Management Page

The HG659 provides an intuitive web management page where you can view or set the HG659 parameters.

📄 Before you log in to the HG659 web management page, ensure that the computer used for the login is connected to the HG659 and has been configured to automatically obtain an IP address or assigned with a static IP address.

1. Open a browser. In the address box, enter 192.168.1.1. Press **Enter**.
2. Enter the login user name (**user** by default) and password (**HuaweiUser** by default). Click **Log in**.

📄 To protect against unauthorized access, change the user name and password after the first login.

Setting Network Access Parameters

Configuring an Automatical Connection to Access the Internet

The HG659 supports you to choose the proper connection mode automatically to access the Internet, meaning you do not need to install dial-up software or perform dial-up operations on your computer and just following the wizard page.

To set up an automatical connection to access the Internet:

1. Log in to the web management page.

2. On the **I want to... Connect to the Internet** page, choose **Connect automatically**, and click **Next**.

   The HG659 supports ADSL/ETH compliance uplink mode, meaning you can use the HG659 with a telephone port, a network interface on the wall for Internet access.

After you complete the preceding settings, check the status of the **Internet** indicator light. When the **Internet** indicator light turns steady green, you can start browsing the Internet.

You need to perform the preceding operations on a computer once only. The next time you power on your computer, you can browse the Internet without performing the same configurations.

Configuring a Wireless Account

After you complete the preceding settings, click **Try WLAN**, you will see the **I want to Set Up WLAN** page used to configure the wireless account.

   The default SSID and WLAN Key printed on the HG659's rear panel are unique and secure. If you do not want to change them, just turn the WLAN switch on.

For security reasons or to make the password easy to remember, you can change the wireless network name and password as follows:

1. On the **I want to Set Up WLAN** page, choose the 2.4 GHz or the 5 GHz WLAN network.

2. Enter your desired SSID (WLAN name) and WLAN password.

3. Click **Save**.

4 Wireless Connection Setup

Enabling and Disabling the WLAN on the HG659

Press the WLAN button in the HG659 to enable or disable the WLAN. To ascertain whether the WLAN is enabled, view the WLAN indicator.

Setting Up a Wireless Connection Using the WPS Button

Push the WPS button once to quickly set up a wireless connection between the HG659 and any WPS-capable device.

Before you set up a wireless connection using the WPS button, verify the following:

> The wireless network security mode of the HG659 is WPA2-PSK or WPA-PSK/WPA2–PSK.

> The wireless device (laptop, tablet, or mobile phone) to connect to the HG659 is WPS-capable.

1. Press the WPS button on the wireless device to start WPS negotiation. For details, see the user guide for the wireless device.

2. Within 2 minutes, press and hold the WPS button on the HG659 for 1 second or more. The WPS button indicator blinks.

When the WPS button indicator on the HG659 is steady on, a connection between the HG659 and wireless device is set up. The WPS button indicator is on for 300 seconds.

Manually Setting Up a Wireless Connection

The wireless configuration software provided by Windows is used as an example to describe how to set up a wireless connection.

You can also use the tool built into the network adapter to set up a wireless connection. For details, see the network adapter's user guide.

Before setting up a wireless connection, record the WLAN name and password of the HG659. The default WLAN name and password are printed on the HG659 cover label.

On Windows 7

1. Choose **start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center** > **Change adapter settings**. Right-click **Wireless Network Connection**, and select **Connect/Disconnect**.

2. From the wireless network list, select the WLAN provided by the HG659. Click **Connect**.

3. In the displayed dialog box, enter the WLAN password and click **OK**.

4. In the wireless network list, check the WLAN connection status. If the status is **Connected**, the computer is wirelessly connected to the HG659.

On Windows XP

1. Choose **start** > **Control Panel** > **Network and Internet Connections** > **Network Connections**. Right-click **Wireless Network Connection** and choose **View Available Wireless Networks** from the shortcut menu.

2. From the wireless network list, select the WLAN provided by the HG659. Click **Connect**.

3. In the displayed dialog box, enter the WLAN password and click **Connect**.

4. In the wireless network list, check the WLAN connection status. If the status is **Connected**, the computer is wirelessly connected to the HG659.

Changing Your WLAN Name and Password

WLAN access requires the WLAN name and password. To improve your WLAN security, regularly change your WLAN name and password.

1. Log in to the web management page.

2. In the navigation tree, choose **Home Network** > **WLAN Settings**.

3. On the **Basic Settings** page, enable your WLAN, and click **Save**.

4. On the **WLAN Encryption** page, enter your desired WLAN SSID and Key, and click **Save**.

5 Parent Control

Controlling Computer Internet Access

Your HG659 provides time control function. With this function, you can set limits on the duration of Internet usage. you can confine Internet access to specific computers or deprive specific computers of Internet access.

1. Log in to the web management page.
2. In the navigation tree, choose **Internet** > **Parental Control** > **Time Rules**.
3. Click **New time rule**.
4. In **Rule name**, enter a new rule name you specified.
5. In **Times allowed**, set the time range that allowed to access the Internet.
6. Select the device you want to control.
7. Click **Save**.

Filtering Out Inappropriate Websites

Use URL filtering to prevent certain websites from being accessed.

1. Log in to the web management page.
2. In the navigation tree, choose **Internet** > **Parental Control** > **URL Filter**.
3. Click **New URL filter**.
4. In **URL**, enter the website address you specified.
5. Select **Manage devices manually**, and select the device you want to apply to.
6. Click **Save**.

6 IP Telephony

Introduction to IP Telephony

IP telephony, namely voice over Internet Protocol (VoIP), is also called broadband telephony or Internet telephony. It utilizes Internet Protocol (IP) network technologies to implement voice communication. During a VoIP call, voice signals are digitized, encoded, packetized, and transmitted as packets over a network. On the receiving side, the packets are then decoded, and digital signals are converted to reproduce the original voice streams, which can be heard by the called party. Different from traditional PSTN calls, VoIP calls are transported over IP networks, meaning voice streams are transmitted over users' existing broadband Internet. This makes full use of broadband resources.

Configuring VoIP

The HG659 supports VoIP. You can place VoIP calls after your phone is connected to the **Phone** port on the HG659.

To use the HG659 to place VoIP calls, ask your network service provider to activate VoIP services for you. By default, your network service provider will have all related parameters, such as the VoIP account and address, set for you. You will not need to configure any settings to place VoIP calls.

To configure voice services, do as follows:

1. Configure a VoIP provider.

   a) Choose **Telephony** > **VoIP** to display the VoIP provider page.

   b) Click **New VoIP provider**.

   c) Enter the VoIP provider name provided by the service provider.

   d) Enter the IP address or name of the SIP registrar server provided by the service provider in the **Primary registrar** text box.

   e) Enter the port number of the SIP registrar server provided by the service provider in the primary registrar **Port** text box. If the service provider does not provide the port number, the default value should be used.

   f) Enter the IP address or name of the SIP proxy server provided by the service provider in the **Primary proxy** text box.

   g) Enter the port number of the SIP proxy server provided by the service provider in the primary proxy **Port** text box.

   h) Enter the home domain name of the SIP user in the **SIP domain** box.

   i) Click **Save** to save the settings.

2. Configure a VoIP number.

   a) Choose **Telephony** > **VoIP** > **VoIP Numbers** to display the VoIP configuration page.

   b) Select the VoIP provider name from the drop-down list box.

   c) Click **New number**.

   d) Enter the SIP phone number.

   e) Enter the SIP user name and password.

   f) Click **Save** to save the settings.

3. Associate your telephone to the VoIP number.
   a) Choose **Telephony** > **Telephone** to display the telephony page.
   b) Associate your telephone to the VoIP number.
   c) Click **Save** to save the settings.

Placing a VoIP Call

Once your network service provider has activated VoIP services for you, you will be assigned a VoIP account, which is also your VoIP call number.

Before placing a VoIP call, ensure that the HG659 has connected to the network. When the call is established, your VoIP call number is displayed on the called party's phone.

For VoIP call tariffs, contact your network service provider.

7 USB Device

USB Storage Device

USB storage devices use their USB ports to exchange data with other devices.

You can connect a USB storage device to your HG659 and access the USB device from your computer.

Both the USB drive and removable hard disk can connect to your HG659.

Your HG659 supports the following file systems for reading and writing.

> > FAT32/FAT
> > NTFS

Connecting a USB Device

After you connect a USB device to your HG659, computers or other devices connected to the HG659 network can access and share the data in or applications provided by the USB device.

⚠️ If you connect a USB device to the HG659, verify that the input voltage and current of the USB device does not exceed 5 V/0.65 A. Otherwise, the HG659 may malfunction.

You can connect the following USB devices to your HG659:

> > USB storage device
> > USB printer

Setting the FTP Access Permission

To avoid unauthorized access to the USB storage device, you can set the FTP access permission on your HG659. This allows only authorized users to access the USB storage device.

Accessing to FTP Server Through the User Name and Password

1. Connect the portable storage device to the HG659's USB port.

2. Enable the FTP server.

   a) Log in to the web management page.
   b) Choose **Share** > **Storage Share**.
   c) In **Service Settings**, select **Enable FTP** for FTP server.
   d) Click **Save** to save the settings.

3. Set the user name and password of the portable storage device.

   a) In **User Settings**, click **Add USB storage user**.
   b) In **Username** and **Password**, enter a user name and password for the FTP server, and re-enter the password to confirm it.
   c) In **Directory mode**, choose a file sharing path.
   d) In **Privilege**, select the desired right.
   e) Click **Save** to save the settings.

Accessing to FTP server Anonymously

1. Connect the portable storage device to the HG659's USB port.

2. Enable the FTP server.

    a) Log in to the web management page.

    b) Choose **Share** > **Storage Share**.

    c) In **Service Settings**, select **Enable FTP** for FTP server.

    d) Click **Save** to save the settings.

3. Enable anonymous users.

    a) In **FTP Anonymous Users**, select **Enable anonymous users**.

    b) In **Directory mode**, choose a file sharing path.

    c) In **Privilege**, select the desired right.

    d) Click **Save** to save the settings.

Accessing a USB Storage Device Using FTP

You can access a USB storage device through the FTP server.

To access a USB storage device using FTP, connect the USB storage device to your HG659 and set the FTP login parameters.

1. Open a browser on your computer.

2. In the address box, enter ftp://192.168.1.1. Press **Enter**.

3. In the **Login** dialog box, enter the login user name and password your set in the HG659's **Storage Share** page (Anonymous users select the anonymous directly). Click **Login**.

Once you pass the authentication, the directory of and files in the USB storage device will be displayed.

Setting the Samba Access Permission

To prevent unauthorized users from accessing data stored in USB devices, you can set the Samba access permission for the HG659. After this permission is set, only authorized users can access data stored in USB devices.

1. Connect the portable storage device to the HG659's USB port.

2. Enable the samba server.

    a) Log in to the web management page.

    b) Choose **Share** > **Storage Share**.

    c) In **Service Settings**, select **Enable SAMBA** for samba server.

    d) Click **Save** to save the settings.

3. Set the user name and password of the portable storage device.

    a) In **User Settings**, click **Add USB storage user**.

    b) In **Username** and **Password**, enter a user name and password for the samba server, and re-enter the password to confirm it.

    c) In **Directory mode**, choose a file sharing path.

    d) In **Privilege**, select the desired right.

    e) Click **Save** to save the settings.

Accessing Data Using Samba

Using Samba, you can securely and easily access data stored in USB devices by accessing shared network directories.

You have connected a USB device to the HG659 and set its access permission.

> *1.* On your computer, open a browser.
>
> *2.* Enter \\192.168.1.1 in the address box, and then press **Enter**.

If the access permission of the USB device is set, your identity will be authenticated. During the authentication, follow the onscreen instructions. When the authentication is successful, you will be able to access data stored in the USB device.

Sharing a USB Printer

HG659 supports USB printers. After you connect a USB printer to your HG659 through the USB port, you can access the printer from the Internet or internal network.

> *1.* Connect the USB cable of the printer to the USB port on the HG659.
>
> *2.* Add a Network Printer.

On Windows 7

> *1.* Choose **start** > **Devices and Printers**.
>
> *2.* Choose **Add a printer**.
>
> *3.* Choose **Add a network, wireless or Bluetooth printer**.
>
> *4.* Click **The printer that I want isn't listed**.
>
> *5.* Choose **Select a shared printer by name** and enter the printer address http:// 192.168.1.1:631/printers/myprinter in the text box. **myprinter** is the customized name of the printer to add. Click **Next**.
>
> *6.* Select the model of the printer you want or click **Have Disk** to manually install the printer drive.
>
> *7.* Click **OK**.

On Windows XP

> *1.* Choose **start** > **Printers and Faxes**.
>
> *2.* Choose **Add a printer**.
>
> *3.* In the **Add Printer Wizard** dialog box, click **Next**.
>
> *4.* Choose **A network printer, or a printer attached to another computer** and click **Next**.
>
> *5.* Choose **Connect to a printer on the Internet or on a home or office network** and enter the printer's address http://192.168.1.1:631/printers/myprinter in the **URL** text box. **myprinter** is the customized name of the printer to add. Click **Next**.
>
> *6.* Select the model of the printer you want or click **Have Disk** to manually install the printer drive. Click **Next**.
>
> *7.* Determine whether to set the printer as the default printer. Click **Next**.
>
> *8.* Click **Finish**.

After you complete the preceding settings, open the files you want to print on your computer. Then you can choose the printer just installed to print your files.

8 IPTV

Introduction to IPTV

Internet Protocol Television (IPTV) is digital television delivered on your television (and not PC) through high speed internet (broadband) connection. In this service, channels are encoded in IP format and delivered to the TV through a set top box.

Configure IPTV

The HG659 supports IPTV. You can watch IPTV from your network service provider after your STB is conneced to the LAN port on the HG659.

To use the HG659 to watch IPTV, ask your network service provider to activate IPTV services for you. By default, your network service provider will have all related parameters, such as the VLAN id, internet account and password, set for you.

To configure IPTV services, do as follows:

    1. Log in to the web management page.

    2. Choose **Internet** > **IPTV Service**.

    3. In **IPTV Setup**, select **Enable IPTV**.

    4. In **Access type**, select your IPTV access type.

    5. In **LAN Interface**, select a LAN port for IPTV service.

    6. In **Connection type**, select your IPTV connection type.

    7. In **VPI/VCI**, enter the VPI and VCI parameters provided by your network service provider.

    8. Enable the VLAN and enter the VLAN id provided by your network service provider.

> If your network service provider doesn't provide the VLAN, you don't need to enable the VLAN.

    9. Click **Save**.

9 Maintenance Guide

Changing the Web Management Page User Name and Password

The correct user name and password are required to log in to the web management page. Regular changes to the web management page user name and password can effectively prevent unauthorized users from logging in and modifying important parameters.

1. Log in to the web management page.

2. In the navigation tree, choose **Maintain** > **Account Management**.

3. Click **Edit**.

4. In **New username**, enter the new user name you specified.

5. In **Current password**, enter the currently used password.

6. In **New password**, enter the new password you specified. In **Confirm password** enter the new password again.

7. Click **Submit**.

   When modify password successfully, this page will jump to the login page, enter the new user name and password to log in.

> If you forget the password , you can press and hold the **Reset** button for 6 seconds or more, then the user name and password of the Web management page will back to factory value. This operation will make your own configuration data lost, please perform this operation with caution.

Restoring Default Settings

Using the Configuration Tool

If the HG659 parameter settings were configured incorrectly, log in to the web management page to reload the default configuration file and restore the HG659 to its default settings. Perform this operation with caution. After the HG659 is restored to its default settings, all custom data and settings will be lost, and the password will be restored to **HuaweiUser**.

1. Log in to the web management page.

2. In the navigation tree, choose **Maintain** > **Device Management**.

3. In **Factory Restore**, click **Reset**.

4. In the displayed dialog box, click **OK**.

Using the Reset Button

If you forget the login password to the web management page or could not access the web management page, use the **Reset** button on the HG659 rear panel to restore the HG659 to its default settings. Perform this operation with caution. After the HG659 is restored to its default settings, all custom data and settings will be lost, and the password will be restored to **HuaweiUser**.

1. Press the HG659 power button to power the HG659 on.

2. Press and hold the **Reset** button for 6 seconds or more.

   The HG659 will restart, which will cause temporary network interruptions.

After the HG659 is restored to its default settings, change the computer IP address so that it is in the same network segment as the 192.168.1.1 default IP address.

Changing the Web Management Page IP

To make the login IP address easy to remember or from avoiding the IP address of the router conflict with other device in your home, you can change the IP address of the router after logging in to the web management page.

1. Log in to the web management page.

2. Choose **Home Network** > **LAN Interface**.

3. Click **LAN Interface Settings**.

4. In **IP address**, enter the new IP address you specified.

5. Click **Save**.

6. In the displayed dialog box, click **OK**.

After you change the IP address successfully, enter the new IP address for logging in.

10 FAQs

What Can I Do If I Cannot Open the Web Management Page?

1. Open Internet Explorer. Choose **Tools** > **Internet Options** > **Connections** > **LAN settings**, and ensure that all check boxes are deselected.

2. Check that the computer IP address is 192.168.1.*. (* is any integer from 2 to 254.)

3. Check that the cables are securely connected to the HG659 and that the LAN port's indicator is on.

4. Ensure that the user name and password are correct.

If the problem persists, restore the HG659 to its default settings.

What Can I Do If the HG659 Cannot Access the Internet through a Wireless Network Adapter Sometimes or If the WLAN Connection Is Unsteady?

This is probably because the HG659 has its cables connected loosely, is placed too close to electronic appliances with intensive interference, or is too far from the computer. Verify that:

1. The power and telephone cables are correctly connected to the HG659.

2. Your computer and the HG659 are far from electric appliances that generate strong magnetic or electric fields, such as microwave ovens, refrigerators, and cordless telephones.

3. The HG659 is in an open area, and there are no obstacles, such as concrete or wooden walls, between the HG659 and computer.

4. The HG659 is close to the computer.

5. The angle between the HG659 and computer is appropriate.

> Do not use the HG659 during thunderstorms, as the signal strength may be unsteady and the HG659 itself may be damaged due to lightning strikes.

What can I do if I cannot access the Internet?

1. Check that the **Power** indicator on the HG659 is steady on. If the **Power** indicator is off, perform further checks as follows:

   a) Check that the HG659 is turned on.

   b) Check that electricity comes from the socket and that the power input from the socket meets the requirements described on the label of the HG659's power adapter. If the voltage is unstable, for example, if the voltage is too high or too low, do not use the HG659. Wait until the voltage recovers, and then use the HG659.

   c) Check that the HG659 is securely connected to the socket using its power adapter.

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

2. After powering on the HG659, wait for about 3 minutes. Then check whether the **ADSL** indicator turns steady on.

a) Check that the telephone line is correctly and securely connected, especially the connection between the telephone line and the splitter.

b) Check that the HG659 and telephone line are located far from any electric appliances that generate strong magnetic or electric fields. Replace the telephone line when necessary.

If the **ADSL** indicator is still off, contact your network service provider.

3. Check whether the **LAN** indicator is on. If the **LAN** indicator is off, perform further checks as follows:

a) Check that the network adapter on your computer is enabled.

b) Check that the network cable between the HG659 and the computer is securely connected. Remove and then insert the network cable or replace the network cable when necessary.

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

4. Check that the driver for the network adapter is correctly installed. The following example uses a computer running the Windows XP operating system to check whether the driver for the network adapter is installed:

a) Right-click **My Computer**, and choose **Manage** from the displayed shortcut menu.

b) In the **Computer Management** window, click **Device Manager**.

c) In the right pane of the **Computer Management** window, click **Network adapters**.

If no network adapter is found or if a question mark (?) or an exclamation mark (!) is displayed next to the network adapter icon, the driver for the network adapter is not correctly installed. Re-install the driver.

5. Check that PPP dial-up software is installed and parameters are set correctly. For details about parameter settings, see the user guide for the PPP dial-up software.

6. Check that you have entered the correct user name and password required by the PPP dial-up software. The user name and password are provided by your network service provider.

7. Check that you can use the PPP dial-up software to set up dial-up connection. If the dial-up connection fails, perform further checks as follows:

a) Close the PPP dial-up software, and power off the HG659. After 5 minutes, power on the HG659, and use the PPP dial-up software to dial again.

b) Restore the HG659 to its default settings.

If the problem persists, contact your network service provider.

8. Check that the proxy server of the browser is correctly configured. The following example uses Internet Explorer on the Windows XP operating system to check whether the proxy server of the browser is correctly configured:

a) Launch Internet Explorer.

b) Choose **Tools** > **Internet Options**.

c) In the **Internet Options** dialog box, click the **Connections** tab.

d) In the **Local Area Network (LAN) settings area**, click **LAN Settings**.

e) In the **Proxy server area of the Local Area Network (LAN) Settings** dialog box, check that the **Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections).** check box is cleared.

9. Try to access more websites to check whether the HG659 can access these websites. If the problem persists, contact your network service provider.

I Often Need to Restart the HG659 to Display Web Pages. What Can I Do?

Verify the following:

1. The HG659 and other devices such as telephones or fax machines are connected to the plain old telephone service (POTS) line through a digital subscriber line (DSL) filter. For details about how to install a DSL filter, see the description in the DSL filter manual.

2. Cables are securely connected to HG659 ports. Otherwise, network stability may suffer.

3. Your computer and the HG659 are far from electric appliances that generate strong magnetic or electric fields, such as microwave ovens, refrigerators, and cordless telephones.

If the problem persists, contact your Internet Service Provider.

11 Appendix

Technical Specifications

Item	Specifications	
Power supply	12 V DC, 2 A	
Power consumption	< 24 W	
Ambient operating temperature	0°C to 40°C	
Ambient humidity	5% to 95% RH (non-condensing)	
Dimensions (H x W x D)	185 mm x 37 mm x 240 mm, exclude the installer	
Weight	< 350 g	
DSL standard	VDSL standard	ITU G.993.2 (G.dmt) Annex B 8a, 8b, 8c, 8d, 12a, 12b, 17a
	ADSL standard	ITU G.992.1 (G.dmt) ITU G.992.2 (G.lite) ITU G.994.1 (G.hs) ANSI T1.413 Issue 2
	ADSL2 standard	ITU G.992.3 (G.dmt.bis) Annex L
	ADSL2+ standard	ITU G.992.5 (G.dmt.bitplus) Annex M
	WLAN standard	802.11b, 802.11g, 802.11n (2.4 GHz) and 802.11ac (5 GHZ)
Wireless transmission rate	802.11b	Up to 11 Mbit/s
	802.11g	Up to 54 Mbit/s
	802.11n (2T2R antenna technology)	Up to 300 Mbit/s
	802.11ac (3T3R antenna technology)	Up to 1.3 Gbit/s

Default Settings

Parameter	Default Value
LAN port IP address	192.168.1.1
LAN port subnet mask	255.255.255.0
User name to log in to the web configuration page	user
Password to log in to the web configuration page	HuaweiUser
WLAN name	Labeled on the product cover
WLAN password	Labeled on the product cover
Dynamic Host Configuration Protocol (DHCP) server	Enabled
WLAN	Enabled

12 For More Help

Please visit http://consumer.huawei.com/en/support/hotline for recently updated hotline and email address in your country or region.

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Notice

Some features of the product and its accessories described herein rely on the software installed, capacities and settings of local network, and therefore may not be activated or may be limited by local network operators or network service providers.

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ErP Product Information

Hereby, Huawei Technologies Co.,Ltd. declares that the product meets the directive 2009/125/EC and its implementation regulation (EC) NO 1275/2008 amended by (EC) 278/2009, (EC) 642/2009, (EU) 617/2013, (EU) 801/2013, and its implementation regulation (EC) NO 278/2009.

The power consumption of product in networked standby if all wired network ports are connected and all wireless network ports are activated is 10.4 W.

For the product information displayed on the manufacturers' freely accessible websites required by (EU) No 801/2013, please visit http://consumer.huawei.com/certification.