HG531s V1 300Mbps Wireless ADSL2+ Router
User Guide

HUAWEI

Contents

8 Appendix

1 **Product Overview**

Supported Features

The HG531s V1 300Mbps Wireless ADSL2+ Router (HG531s V1 for short) is a high-speed wireless router designed for home and small office use. This chapter describes the features supported by the HG531s V1.

- Digital subscriber line (DSL) provides rugged stability, and with the WPS button, zero configuration is required for connections to multiple devices.
- Network range allows any device in a home to be connected with a transmission rate of up to 300Mbps.
- A powerful firewall is provided with a flexible network configuration and quality of service (QoS) strategy, enabling different home devices to enjoy high-speed and high-quality broadband services.

High-Bandwidth DSL Connectivity
The HG531s V1 incorporates a high-performance ADSL2+ processor and provides high-speed Internet access and abundant services to be delivered through the digital subscriber line (DSL).

High-Speed 3G Connectivity
The HG531s V1 provides a USB port into which you can insert a 3G data card to access the Internet at high speeds.

Routing
The HG531s V1 supports routing. It can obtain an IP address through PPP dial-up or Dynamic Host Configuration Protocol (DHCP), which provides simultaneous access for multiple devices.

WLAN
The HG531s V1 supports multiple WLAN protocols, including 802.11b/g/n (2.4 GHz). Adopting 802.11n multiple-input multiple-output antennas (MIMO) technology, the HG531s V1 delivers a wireless transmission rate of up to 300Mbps with its dual antennas. In addition, the HG531s V1 supports multiple wireless encryption modes to provide a secure, reliable, and high-speed WLAN.

Wi-Fi Protected Setup
You can set up wireless connections between the HG531s V1 and Wi-Fi enabled devices by pressing the Wi-Fi Protected Setup (WPS) button.

Firewall
The powerful built-in firewall effectively protects against viruses and malicious attacks.

ARP Attack Protection

You can bundle an IP address and MAC address bi-directionally, which effectively protects your LAN from Address Resolution Protocol (ARP) attacks.

Easy Configuration and Management

The HG531s V1 provides password-protected web-based management pages to protect your personal data.

Ports and Buttons
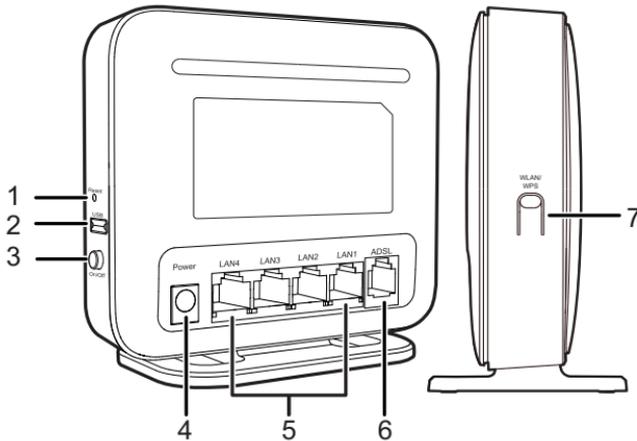
No.	Item	Description
1	Reset	Restores the HG531s V1 to its default settings after you press and hold this button for 6 seconds or more while the HG531s V1 is powered on. ⚠️ A reset will result in all custom data and settings being lost. Use with caution.
2	USB	Connects to a USB device. ⚠️ If you connect a USB device to the HG531s V1, verify that the input voltage and current of the USB device do not exceed 5 V/0.65 A. Otherwise, the HG531s V1 may malfunction.
3	On/Off	Powers the HG531s V1 on or off.
4	Power	Connects to a power adapter.

5	LAN4~ LAN1	Connects to Ethernet devices, such as computers, set-top boxes (STBs), and switches.
6	ADSL	Connects to a DSL filter or phone socket.

7	WLAN/ WPS	• Enables or disables the WLAN function.
		  Press this button (more than 3 seconds) to enable the WLAN function.
		• Starts Wi-Fi protected setup (WPS) negotiation.
		  Press this button (less than 3 seconds) to start WPS negotiation.

Indicators
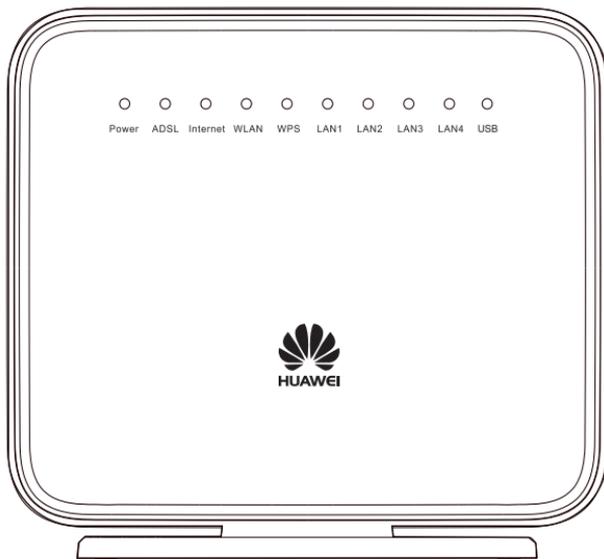
Indicator	Status	Description
Power	Steady green	The HG531s V1 is powered on.
	Off	The HG531s V1 is powered off.
ADSL	Blinking green	A DSL connection is being activated.
	Steady green	A digital subscriber line (DSL) connection has been set up and activated.
	Off	• No DSL connection has been set up, or the DSL connection is faulty. • The HG531s V1 is powered off.
Internet	Blinking green	The HG531s V1 is connected to the Internet in router mode, and data is being transmitted.
	Steady green	The HG531s V1 is connected to the Internet in router mode, but no data is being transmitted.
	Off	• The HG531s V1 is in router mode, but not connected to the Internet. • The HG531s V1 is in bridge mode. • The HG531s V1 is powered off.
WLAN	Blinking green	The HG531s V1 has WLAN enabled, and data is being transmitted.
	Steady green	The HG531s V1 has WLAN enabled, but is not transmitting data.
	Off	• WLAN is disabled. • The HG531s V1 is powered off.
WPS	Blinking green	• The HG531s V1 is connected to a wireless client, such as a computer with a wireless network adapter, over the WLAN using the Wi-Fi Protected Setup (WPS) function. • The WPS indicator blinks for 120 seconds or less.
	Steady green	• The HG531s V1 is attempting to connect to a wireless client over the WLAN using the WPS function. • The WPS indicator is steady on for 300 seconds, and then turns off.
	Off	• WPS is disabled. • The HG531s V1 is powered off.

LAN1~ LAN4	Blinking green	The LAN port is connected to an Ethernet device with a network cable, and data is being transmitted.
	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.
	Off	• The LAN port is not connected to any Ethernet device. • The HG531s V1 is powered off.
USB	Blinking green	The HG531s V1 is connected to a USB device, and data is being transmitted.
	Steady green	The HG531s V1 is connected to a USB device, but no data is being transmitted.
	Off	• The HG531s V1 is not connected to any USB device. • The HG531s V1 is powered off.

2 **Hardware Installation**

Selecting an Installation Location

Place the HG531s V1 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 HG531s V1.

• Ensure that the computer and HG531s V1 are far from electric appliances that generate strong magnetic or electric fields, such as microwave ovens.

Connecting Cables

Installing the HG531s V1 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 HG531s V1 to a telephone port for Internet access.

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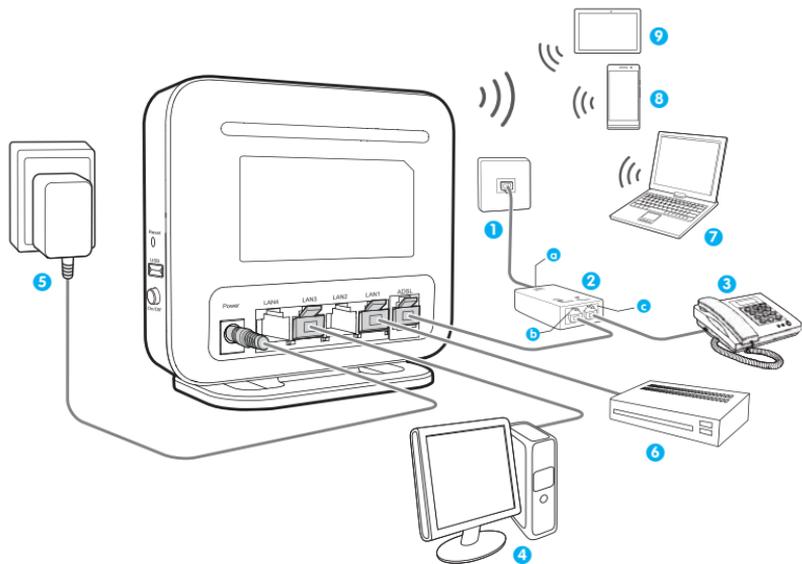
1	Telephone wall jack	2	Splitter	3	Telephone
4	Desktop computer	5	Power adapter	6	Set-top Box
7	Laptop computer	8	Smart Phone	9	Pad
a	LINE port	b	MODEM port	c	PHONE port

When configuring the HG531s V1 for the first time, use an Ethernet cable to connect the HG531s V1 to a computer.

Installing the HG531s V1 on a 3G network

If you use the 3G data card to access the Internet, you can connect the data card to the USB interface on the rear panel of the HG531s V1.

Connect your devices in the sequence indicated in the following figure.
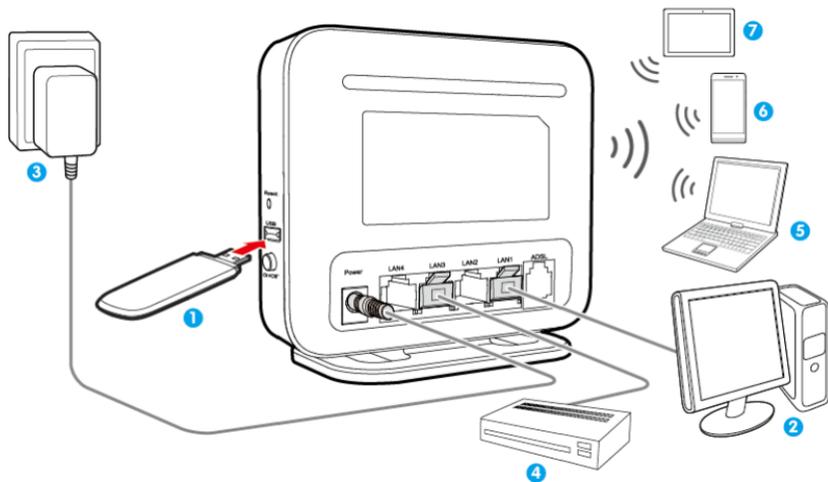
1	Data card	2	Desktop computer	3	Power adapter
4	Set-top Box	5	Laptop computer	6	Smart Phone
7	Pad				

Powering On

To power on the HG531s V1, press its power button.

After the HG531s V1 is powered on, the HG531s V1 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 HG531s V1 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 Vista

1. Choose **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center**.
2. Choose **Manage network connections**. Right-click the connection that you want to change, and then click **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 8

1. Choose **Settings** > **Control Panel** > **Network and Internet** > **Network and Sharing Center**.
2. Choose **Change adapter settings**. Right-click the connection that you want to change, and then click **Properties**.
3. Select **Internet Protocol Version 4 (TCIP/IPv4)**, and click **Properties**.
4. Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Click **OK**.

On MAC OS X

1. Choose **System Preferences** > **Network** > **Advanced**.
2. Click **AirPort**, and choose **Advanced** in the lower right corner.
3. Click **TCP/IP** tab.
4. Select **Automatically** in **Configure IPv4**, and click **OK**.
5. Click **Apply**.

Logging In to the Web Management Page

The HG531s V1 provides an intuitive web management page where you can view or set the HG531s V1 parameters.

Before you log in to the HG531s V1 web management page, ensure that the computer used for the login is connected to the HG531s V1 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 (**@User1234** by default). Click **Login**.

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

Configuring a Wireless Account

After you Log in to the web management page, you will see a configuration wizard page used to configure the wireless account.

> *i* The default SSID and WLAN Key printed on the HG531s V1's rear panel are unique and secure. If you do not want to change them, click Next.

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

1. Log in to the web management page.

2. On the **Quick Configure Router:Wireless Network** page, enter your desired SSID (WLAN name) and key, and click **Next**.

Setting Dial-Up Connection Parameters

Accessing Network through DSL

The HG531s V1 works in bridge mode by default. You need to install and configure a dial-up connection on your computer, and perform it each startup.

Before setting dial-up connection parameters, verify that the HG531s V1 is correctly connected to your computer and you have the dial-up connection account name and password provided by your Internet service provider (ISP). This section demonstrates how to set up a Point-to-Point Protocol over Ethernet (PPPoE) connection on Windows.

On Windows 7

1. Choose **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center**.

2. Under **Change your networking settings**, click **Set up a new connection or network**.

3. In the **Set Up a Connection or Network** window, select **Connect to the Internet** and click **Next**.

4. Click **Broadband (PPPoE)**.

5. In **User name** and **Password**, enter the dial-up connection account name and password provided by your ISP. In **Connection name**, name the dial-up connection. Select or deselect **Allow other people to use this connection**. Then click **Connect**.

6. Return to the **Network and Sharing Center** page. Click **Change adapter settings**. Right-click the icon for the dial-up connection you just set up and choose **Create Shortcut** from the shortcut menu. In the displayed dialog box, click **Yes**.

On Windows Vista

1. Choose **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center**.

2. Click **Set up a connection or network**.

3. In the displayed window, select **Connect to the Internet** and click **Next**.

4. Click **Broadband (PPPoE)**.

5. In **User name** and **Password**, enter the dial-up connection account name and password provided by your ISP. In **Connection name**, name the dial-up connection. Select or deselect **Allow other people to use this connection**. Then click **Connect**.

6. Return to the **Network and Sharing Center** page, Click **Manage network connections**. Right-click the icon for the dial-up connection you just set up and choose **Create Shortcut** from the shortcut menu. In the displayed dialog box, click **Yes**.

On Windows 8

1. Choose **Settings** > **Control Panel** > **Network and Internet** > **Network and Sharing Center**.

2. In the displayed window, click **Set up a new connection or network**.

3. In the displayed window, click **Connect to the Internet**.

4. Click **Broadband (PPPoE)**.

5. In **User name** and **Password**, enter the dial-up connection account name and password provided by your ISP. In **Connection name**, name the dial-up connection. Select or deselect **Allow other people to use this connection**. Then click **Connect**.

6. Return to the **Settings** page, Click **Available** to see a list of available connection types.

7. Under **Connections**, select the connection you just set up and click **Connect** to open the dial-up connection window.

8. Click **Dial** to connect.

On MAC OS X

1. Choose **System Preferences** > **Network**.

2. Click **+** to add a new network connection.

3. In the displayed dialog, select **PPPoE** from the **Interface** drop-down combo box, then select **Ethernet**(for cable connection) or **Airport**(for wireless connection) from the **Ethernet** drop-down combo box, and enter a service name (default is PPPoE) you specified in **Service Name**.

4. Choose the network name you set from the services list, and enter the dial-up connection account name and password provided by your ISP in **Account Name** and **Password**. Select or deselect **Remember this password**. Then click **Connect**.

5. Select **Show PPPoE status in menu bar**.

6. Click **Advanced**.

7. In the displayed dialog, select settings as needed.

8. Click **OK**.

9. Return to the **Network** page, click **Apply**.

After you successfully set up a PPPoE connection, a dial-up connection icon is displayed on your computer desktop.

To connect to the Internet, double-click the dial-up connection icon. In the displayed dialog box, click **Connect**.

Accessing Network through Data card

The HG531s V1 works in PPP mode by default，and starts to set up a dial-up connection automatically after you power it on. You do not need to install any dial-up software or perform any dial-up operations on your computer.

When the HG531s V1 is working in 3G uplink, connect the data card to the HG531s V1 so that your device can access the Internet through the 3G uplink service.

To set up a dial-up connection for Internet access:

1. Insert a SIM card into the data card, and connect the data card to the USB port of the HG531s V1.

2. Log in to the web management page.

3. Verify the PIN of your SIM card.

  • If your SIM card does not need to verify the PIN for Internet access, skip this step.

  • If your SIM card needs to verify the PIN for Internet access, verify the PIN of your SIM card as follows:

  a. In the navigation tree, choose Advanced > PIN.

  b. Select Verify from the PIN operation drop-down combo box.

  c. Enter the PIN that was provided by your SIM card operator in the PIN text box.

  d. Click Submit.

  i For security reasons or to make the PIN code easy to remember, you can change it.

  When you do not need to go online, remove the USB modem. Otherwise, your operator may continue to

charge you for data services.

4. In the navigation tree, choose **Basic** > **WAN**.

5. Enter the user name and password that are provided by your service provider in **Username** and
Password, and click **Submit**.

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.

4 **Wireless Connection Setup**

Enabling and Disabling the WLAN on the HG531s V1

The following two methods are available to enable and disable the WLAN on the HG531s V1.

Using the WLAN Button

Press the WLAN button in the HG531s V1 to enable or disable the WLAN. To ascertain whether the WLAN is enabled, view the WLAN indicator.

Using the Web Management Page

1. Log in to the web management page.

2. In the navigation tree, choose **Basic** > **WLAN**.

3. Configure wireless.

   • Select **Enable WLAN** to enable the WLAN.

   • Clear **Enable WLAN** to disable the WLAN.

Setting Up a Wireless Connection Using the WPS Button

Push the WPS button once to quickly set up a wireless connection between the HG531s V1 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 HG531s V1 is WPA2-PSK or WPA-PSK/WPA2–PSK.

• The wireless device (laptop, tablet, or mobile phone) to connect to the HG531s V1 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 (less than 3 seconds) on the HG531s V1. The WPS indicator blinks.

When the WPS indicator on the HG531s V1 is steady on, a connection between the HG531s V1 and wireless device is set up. The WPS indicator is on for 300 seconds, then turns off.

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 HG531s V1. The default WLAN name and password are printed on the HG531s V1 cover label.

Before setting up a wireless connection, record the WLAN name and password of the HG531s V1.

On Windows 7

1. Click ![icon] in the lower right corner of your desktop.

2. From the wireless network list, select the WLAN provided by the HG531s V1. 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 HG531s V1.

On Windows Vista

1. Choose **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center** > **Manage wireless networks**.

2. In the **Connecting to a network** window, double-click the WLAN provided by the HG531s V1.

3. In the displayed dialog box, enter the 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 HG531s V1.

On Windows 8

1. Choose **Settings** from the right side of the desktop.

2. Click **Available** to list the available wireless networks.

3. Under **Connections**, select the WLAN provided by the HG531s V1 and click **Connect**.

4. In the displayed dialog box, enter the your WLAN password and click **Next**.

5. You will be asked if you would like to enable sharing between computers and connect to devices within the network. Selecting **Yes** will turn on sharing and **No** will leave it off.

6. In the wireless network list, check the WLAN connection status. If the status is **Connected**, the computer is wirelessly connected to the HG531s V1.

On MAC OS X

1. Click ♢ at the top right side of your desktop.

2. Click **Turn Airport On**.

3. From the wireless network list, Select the WLAN provided by the HG531s V1.

4. In the displayed dialog box, enter your WLAN password and click **Join**.

5. When a check mark appears next to the HG531s V1's SSID, the computer is wireless connected to the HG531s V1.

5 **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 HG531s V1 and access the USB device from your computer.

Both the USB drive and removable hard disk can connect to your HG531s V1.

Your HG531s V1 supports the following file systems for reading and writing.

• FAT32/FAT

Connecting a USB Device

After you connect a USB device to your HG531s V1, computers or other devices connected to the HG531s V1 network can access and share the data in or applications provided by the USB device.

⚠️ If you connect a USB device to the HG531s V1, verify that the input voltage and current of the USB device do not exceed 5 V/0.65 A. Otherwise, the HG531s V1 may malfunction.

You can connect the following USB devices to your HG531s V1:

• USB storage device
• USB printer
• Data card

Setting the FTP Access Permission

To avoid unauthorized access to the USB storage device, you can set the FTP access permission on your HG531s V1. This allows only authorized users to access the USB storage device.

1. Connect a portable storage device to the HG531s V1's USB port.

2. Enable the FTP server.

   a. Log in to the web management page.

   b. In the navigation tree, choose **Advanced** > **USB Port**.

   c. In **FTP Server**, select **Enable** to enable the FTP server.

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

   a. In **Username** and **Password**, enter your desired user name and password for the FTP server.

   b. In **Path**, choose a file sharing path.

   c. In **Permission**, select your desired right.

   d. Click **Submit**.

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 HG531s V1 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 HG531s V1'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.

Sharing a USB Printer

HG531s V1 supports USB printers. After you connect a USB printer to your HG531s V1 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 HG531s V1.

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**.

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.

6 **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 **Maintenance** > **Account**.

3. In **New user name**, enter your desired user name.

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

5. In **New password**, enter your desired password. In **Confirm password** enter the new password again.

6. 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.

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 **Basic** > **WLAN**.

3. On the displayed page, enable your WLAN.

4. On the **Wireless Settings** area, enter your desired WLAN name and password in **SSID** and **WPA pre-shared key**, and click **Submit**.

Changing the PIN Code for Your SIM Card

For security reasons or to make the PIN code easy to remember, you can change the PIN code as follows:

1. Log in to the web management page.

2. In the navigation tree, choose **Advanced** > **PIN**.

3. Select **Verify** from the PIN operation drop-down combo box, and click **Submit**.

4. After the PIN code is verified, select **Change** from the PIN operation drop-down combo box.

5. In **PIN**, enter the PIN that was provided by your SIM card operator.

6. In **New PIN**, enter your desired PIN code. In **Confirm PIN**, enter the new PIN code again.

7. Click **Submit**.

Restoring Default Settings

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 HG531s V1 rear panel to restore the HG531s V1 to its default settings. Perform this operation with caution. After the HG531s V1 is restored to its default settings, all custom data and settings will be lost, and the password will be restored to @User1234.

1. Press the HG531s V1 power button to power the HG531s V1 on.

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

The HG531s V1 will restart, which will cause temporary network interruptions.

Using the Configuration Tool

If the HG531s V1 parameter settings were configured incorrectly, log in to the web management page to reload the default configuration file and restore the HG531s V1 to its default settings. Perform this operation with caution. After the HG531s V1 is restored to its default settings, all custom data and settings will be lost, and the password will be restored to @User1234.

1. Log in to the web management page.

2. In the navigation tree, choose **Maintenance** > **Device**.

3. In **Reset**, click **Restore Default Settings**.

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

7 **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 HG531s V1 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 HG531s V1 to its default settings.

What Can I Do If the HG531s V1 Cannot Access the Internet through a Wireless Network Adapter Sometimes or If the WLAN Connection Is Unsteady?

This is probably because the HG531s V1 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 HG531s V1.

2. Your computer and the HG531s V1 are far from electric appliances that generate strong magnetic or electric fields, such as microwave ovens, refrigerators, and cordless telephones.

3. The HG531s V1 is in an open area, and there are no obstacles, such as concrete or wooden walls, between the HG531s V1 and computer.

4. The HG531s V1 is close to the computer.

5. The angle between the HG531s V1 and computer is appropriate.

> *i* Do not use the HG531s V1 during thunderstorms, as the signal strength may be unsteady and the HG531s V1 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 HG531s V1 is steady on. If the **Power** indicator is off, perform further checks as follows:

   a. Check that the HG531s V1 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 HG531s V1's power adapter. If the voltage is unstable, for example, if the voltage is too high or too low, do not use the HG531s V1. Wait until the voltage recovers, and then use the HG531s V1.

   c. Check that the HG531s V1 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 HG531s V1, 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 HG531s V1 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 HG531s V1 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 HG531s V1. After 5 minutes, power on the HG531s V1, and use the PPP dial-up software to dial again.

   b. Restore the HG531s V1 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 HG531s V1 can access these websites. If the problem persists, contact your network service provider.

I Often Need to Restart the HG531s V1 to Display Web Pages. What Can I Do?

Verify the following:

1. The HG531s V1 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 HG531s V1 ports. Otherwise, network stability may suffer.

3. Your computer and the HG531s V1 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.

8 **Appendix**

Technical Specifications

Item	Specifications	
Power supply	12 V DC, 1 A	
Power consumption	< 5 W	
Ambient operating temperature	0°C to 40°C	
Ambient humidity	5% to 95% RH (non-condensing)	
Dimensions (H x W x D)	31.5 mm x 118 mm x 100 mm (1.24 in. x 4.65 in. x 3.94 in.), antenna excluded	
Weight	About 360 g	
DSL standard	ADSL standard	ITU G.992.1 (G.dmt) ITU G.994.1 (G.hs) ANSI T1.413 Issue 2
	ADSL2 standard	ITU G.992.3 (G.dmt.bis) Annex A ITU G.992.3 (G.dmt.bis) Annex L ITU G.992.3 (G.dmt.bis) Annex M
	ADSL2+ standard	ITU G.992.5 (G.dmt.bitplus) Annex A ITU G.992.5 (G.dmt.bitplus) Annex M
	WLAN standard	802.11b, 802.11g, and 802.11n (2.4 GHz)
DSL transmission rate	G.dmt T1.413	Downlink: 8 Mbit/s Uplink: 896 kbit/s
	ADSL	Downlink: 12 Mbit/s Uplink: 1024 kbit/s
	ADSL2+	Downlink: 24 Mbit/s Uplink: 1024 kbit/s

Item	Specifications	
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

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	@User1234
WLAN name (SSID)	Labeled on the product cover
WLAN password (WLAN Key)	Labeled on the product cover
Dynamic Host Configuration Protocol (DHCP) server	Enabled
WLAN	Enabled

9 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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The power consumption of product in networked standby if all wired network ports are connected and all wireless network ports are activated is 4.0 W.

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