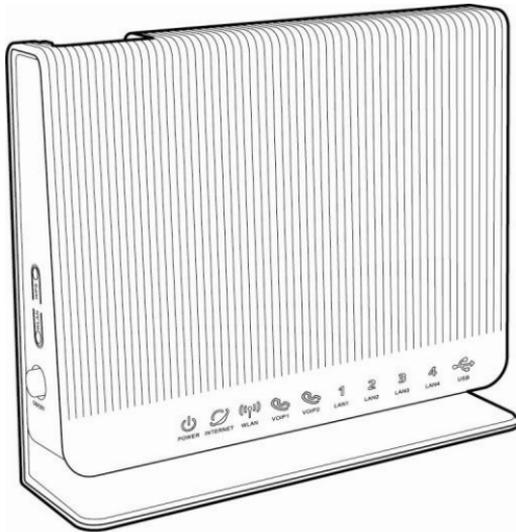


HUAWEI HG256s

Home Gateway Quick Start

1 Introduction

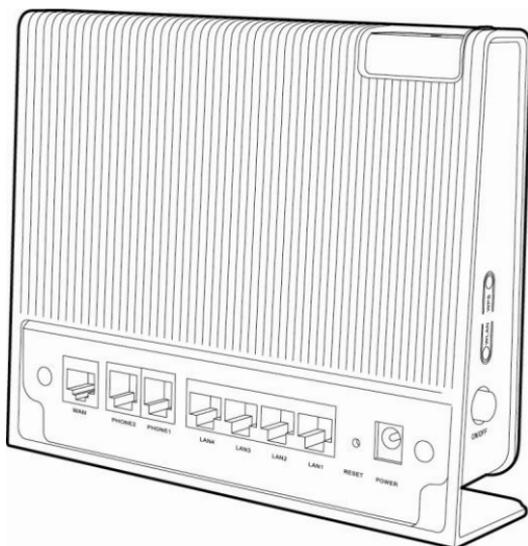
The Front Panel of the HG256s



The front panel of the HG256s provides the following indicators:

- One power indicator: **POWER**
- One Internet indicator: **INTERNET**
- One WiFi indicator: **WLAN**
- Two VoIP indicators: **VOIP1, VOIP2**
- Four LAN indicators: **LAN1, LAN2, LAN3, LAN4**
- One USB indicator: **USB**

The Rear and Side Panel of the HG256s



1. The rear panel of the HG256s provides the following interfaces and button:

- One WAN interface: **WAN**
- Two PHONE interfaces: **PHONE1, PHONE2**
- Four LAN interfaces: **LAN1, LAN2, LAN3, LAN4**
- One Reset button: **RESET**
- One power interface: **POWER**

2. The side panel of the HG256s provides the following buttons:

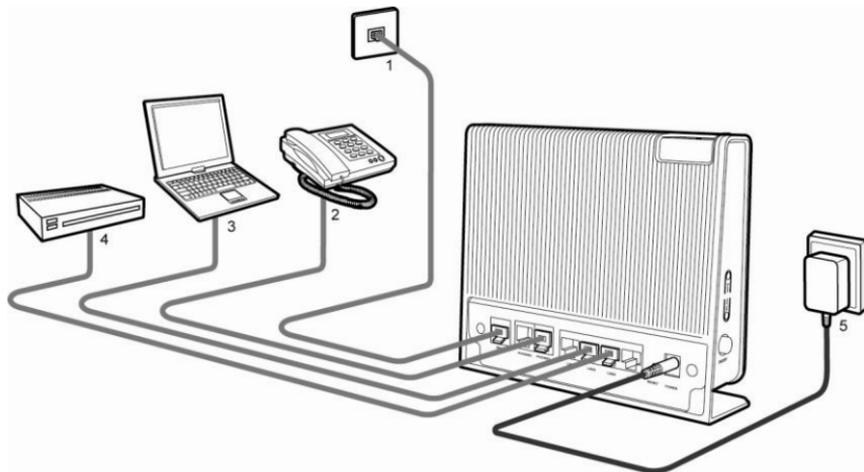
- One WPS button: **WPS**
- One WLAN button: **WLAN**
- One ON/OFF button: **ON/OFF**



The USB interface is on the top of the HG256s. Portable storage devices, such as USB flash drives and portable hard disks, can be connected to the USB interface.

2 Installation Guide

The figure as below shows the cable connections.



- | | | | | | |
|---|--------------------------|---|---------------|---|----|
| 1 | Network jack on the wall | 2 | Phone | 3 | PC |
| 4 | Set-top box | 5 | Power adapter | | |

3 Getting Started

To power on the HG256s, press the **ON/OFF** button on the side panel of the HG256s.

After you power on the HG256s, the **POWER** and **INTERNET** indicators turn solid on, which indicates that the HG256s is working properly.

4 Configuring the Wireless Network Connection

If a wireless network adapter is installed on your computer, you can connect your computer to the HG256s through a wireless connection.

There are two methods to configure the wireless network connection.

Setting Up a Wireless Connection Manually

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

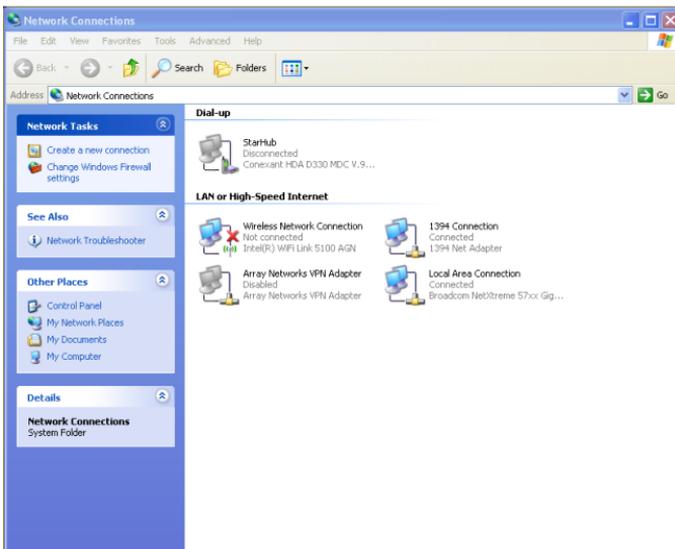
Step 1 Record the WLAN name.



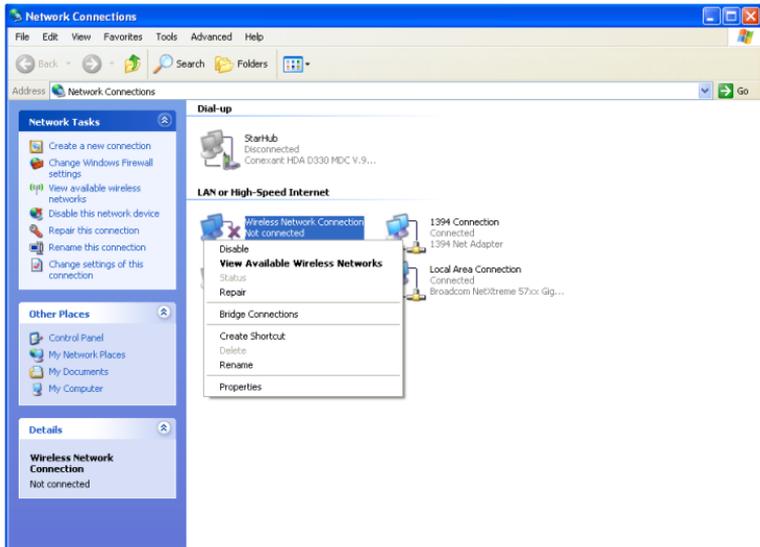
The WLAN name (SSID) of the HG256s is preset before delivery. You can find it from the label on the rear panel of the HG256s or consult the Internet Service Provider (ISP).

Step 2 Configure the wireless network connection on your computer (taking the Windows XP operating system as an example):

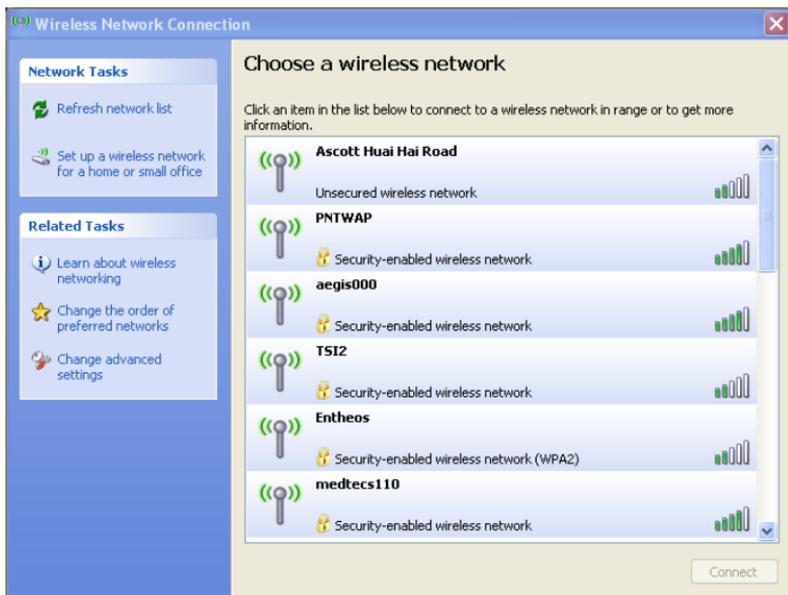
1. Choose **Start > All Programs > Accessories > Communications > Network Connections**.



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.

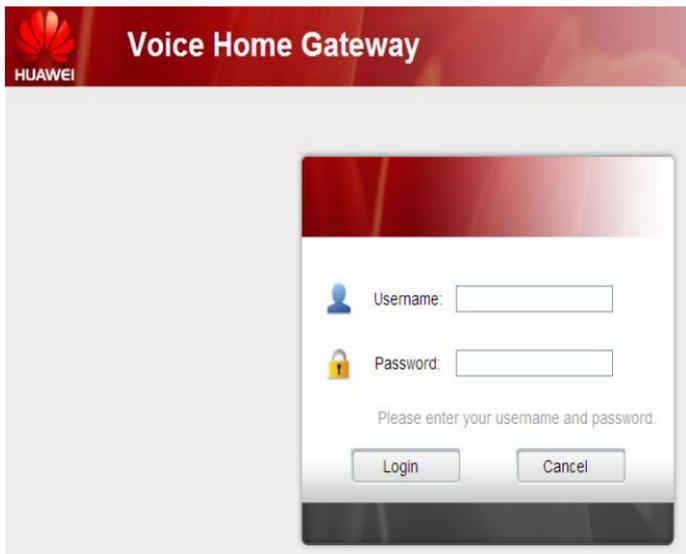


Connected appears on the icon of the wireless network in the wireless network list, which indicates that your computer is connected to the HG256s through wireless connection.

Setting Up a Wireless Connection by the WPS button

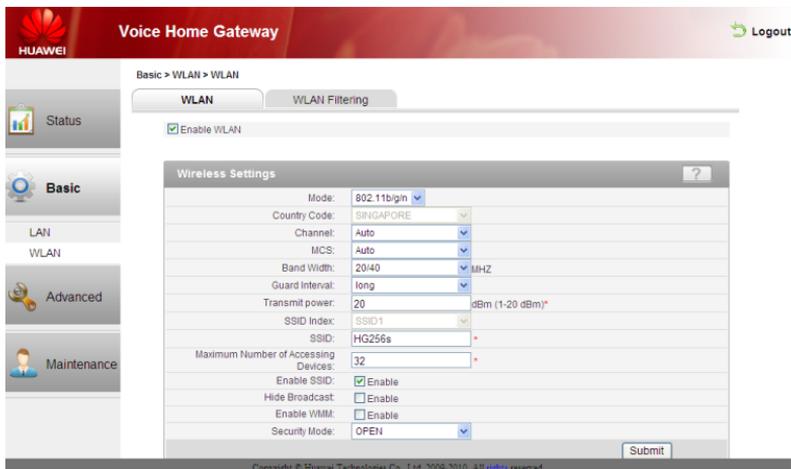
If the wireless network adapter on your computer can support the WPS function, you can connect your computer to the HG256s wirelessly as follows:

- Step 1** Set the network connection of your PC and ensure that your PC obtains an IP address automatically.
By default, the DHCP function of the HG256s is enabled. In this case, the HG256s assigns an IP address to your PC automatically and you do not need to configure the IP address of your PC.
- Step 2** In the address bar of the Internet Explorer, enter **http://192.168.1.1**, and then press **Enter**.



Step 3 In the **Login** dialog box, enter the user account (**admin** by default) and the password (**admin** by default), and then click **OK**.

Step 4 In the navigation tree, choose **Basic** > **WLAN**.
The WLAN configuration page is displayed.



Step 5 Set the Security Mode to WPA-PSK, WPA2-PSK or WPA-PSK/WPA2-PSK.

The screenshot displays the 'Wireless Settings' configuration page for a Huawei Voice Home Gateway. The page is titled 'Voice Home Gateway' and includes a 'Logout' button in the top right corner. The navigation menu on the left shows 'Basic' selected, with sub-menus for 'LAN', 'WLAN', 'Advanced', and 'Maintenance'. The 'WLAN' sub-menu is active, showing 'WLAN' and 'WLAN Filtering' tabs. The 'Wireless Settings' form includes the following fields:

Mode:	802.11b/g/n
Country Code:	SINGAPORE
Channel:	Auto
MCS:	Auto
Band Width:	20/40 MHz
Guard Interval:	long
Transmit power:	20 dBm (1-20 dBm)*
SSID Index:	SSID1
SSID:	HG256s
Maximum Number of Accessing Devices:	32
Enable SSID:	<input checked="" type="checkbox"/> Enable
Hide Broadcast:	<input type="checkbox"/> Enable
Enable WMM:	<input type="checkbox"/> Enable
Security Mode:	WPA-PSK
WPA Pre-Shared Key:	●●●●●●●●●●
WPA Encryption:	AES
Enable WPS:	<input checked="" type="checkbox"/> Enable
WPS Mode:	PBC



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 6 In **WPA Pre-Shared Key**, enter a WLAN access password.

Step 7 Select **AES** for **WPA Encryption**.

Step 8 Click **Submit**.

Step 9 Press the WPS button to enable the HG256s to start the WPS negotiation.

Step 10 Enable the WPS negotiation function of the wireless network adapter on your PC within two minutes, and then wait for a moment (typically 10s).

The WLAN indicator of the HG256s becomes on from the blinking state, indicating that the HG256s is connected to your PC through the WLAN.



For more information about the functions and the configuration of the HG256s, please see the User Guide contained in the CD-ROM.

5 Configuring the WLAN MAC filtering

By default, the security mode of the WLAN is set to **OPEN** without any encryption and authentication mechanism. You can protect a wireless network by the WLAN MAC filtering function of the HG256s.

To protect a wireless network by the WLAN MAC filtering function, do as follows:

Step 1 View and record the MAC address of the laptop.

Take the Windows XP operating system as an example. To view the MAC address of a PC, do as follows:

1. Choose **Start > Run**, enter **cmd**.



2. In the displayed command line window, enter **ipconfig/all**.

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 5.2.3790]
(C) Copyright 1985-2003 Microsoft Corp.

C:\Documents and Settings\Administrator>ipconfig/all

Windows IP Configuration

Host Name . . . . . : admin
Primary Dns Suffix . . . . . : arcor-ip.de
Node Type . . . . . : Unknown
IP Routing Enabled. . . . . : Yes
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : arcor-ip.de

Ethernet adapter Local Area Connection 2:

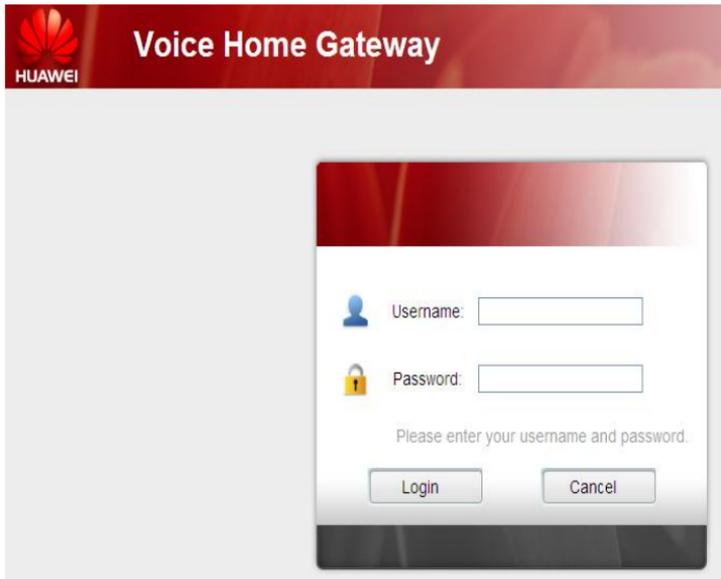
Connection-specific DNS Suffix . :
Description . . . . . : Broadcom NetXtreme Gigabit Ethernet #2
Physical Address. . . . . : 00-19-B9-F9-59-BB
DHCP Enabled. . . . . : No
IP Address. . . . . : 171.100.100.200
Subnet Mask . . . . . : 255.255.0.0
Default Gateway . . . . . : 171.100.100.254
DNS Servers . . . . . : 171.100.100.200

C:\Documents and Settings\Administrator>
```

3. You can find a line of information that is similar to **Physical Address. : 00-19-B9-F9-59-BB.**
00-19-B9-F9-59-BB is the MAC address of the PC.

Step 2 Log in to the home page of the HG256s.

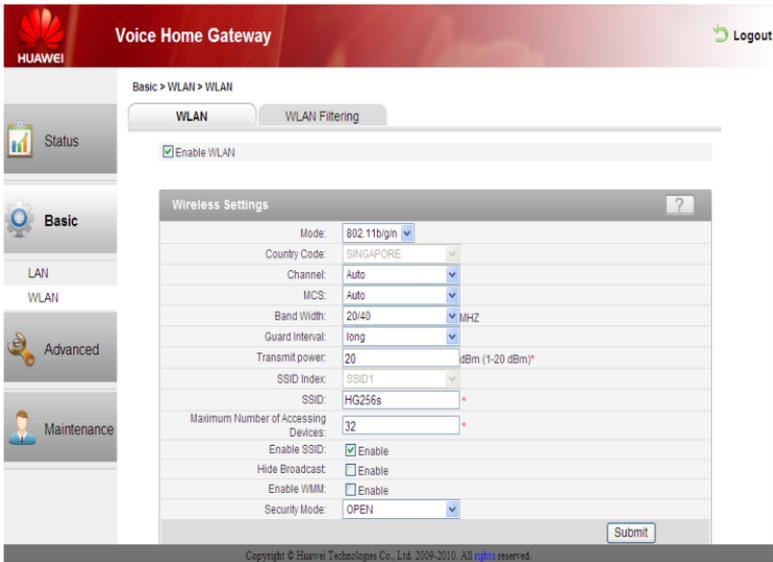
1. In the address bar of the Internet Explorer, enter **http://192.168.1.1**, and then press **Enter**.



2. In the **Login** dialog box, enter the user account (**admin** by default) and the password (**admin** by default), and then click **OK**.

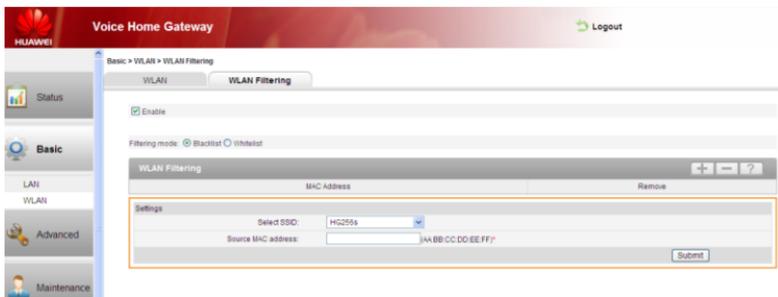
Step 3 Specify the SSID name of WLAN.

1. In the navigation tree, choose **Basic** > **WLAN**.
The WLAN page will be shown as below:



2. Enter the SSID name in the **SSID** text box (for example **HG256s**) and keep the other parameters as default.

Step 4 Click **WLAN Filtering** and select **Enable**.



Step 5 Select **Whitelist** for **Filtering mode** and then click .

Basic > WLAN > WLAN Filtering

WLAN Filtering

Enable

Filtering mode: Blacklist Whitelist

WLAN Filtering	MAC Address	Remove
----------------	-------------	--------

Settings

Select SSID: HG256s

Source MAC address: (AA-BB-CC-DD-EE-FF)*

Submit

Step 6 In **Source MAC address**, enter the MAC address of the laptop.
For example, the MAC address can be **00:19:B9:F9:59:BB**.



The format of the MAC address entered in **Source MAC address** is different from that of the MAC address displayed in the command line window of a Windows XP operating system. The colons (:) replace the hyphens (-).

Step 7 Click **Submit**.

Basic > WLAN > WLAN Filtering

WLAN Filtering

Enable

Filtering mode: Blacklist Whitelist

WLAN Filtering	MAC Address	Remove
	00 19 B9 F9 59 BB	<input type="checkbox"/>

Settings

Select SSID: HG256s

Source MAC address: 00 19 B9 F9 59 BB (AA-BB-CC-DD-EE-FF)*

Submit

After finish the settings, you can allow only the PC with the MAC address is **00:19:B9:F9:59:BB** to connect to the WLAN.

When you select **Blacklist** for **Filtering mode**, you can use the same way to prohibit specified PCs from being connected to the WLAN.



By default, the security mode of the WLAN is set to **OPEN**. It is highly recommended that you should set the security mode to **WPA2-PSK** for the WLAN and set the encryption as **AES**. In advance, you need to ensure your wireless adapter can support the security and encryption mode.

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