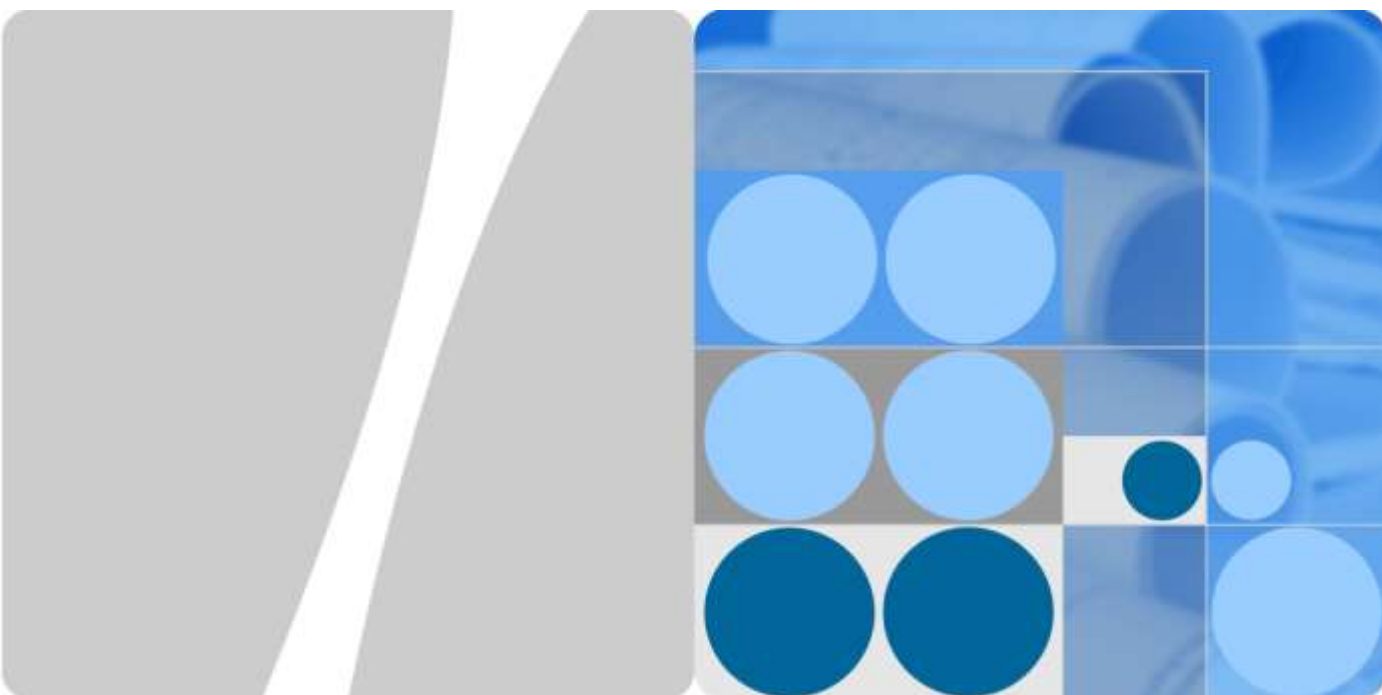


Part Number: 203356



HUAWEI WiFi Q2 Product Description

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1 Overview

1.1 Introduction

Figure 1-1 HUAWEI WiFi Q2 (3 Pack · Hybrid)



Real Plug & Play

Q2's Hybrid backhaul gives users a peace of mind that have more flexibility to locate each router.

High Speed Wi-Fi Everywhere

Hybrid technology with gigabit PLC & AC1200 mesh Wi-Fi can establish a high speed family backhaul network, so you can enjoy high speed Wi-Fi everywhere.

Fits homes of any size or shape

Q2 can cover about 360-600m²(multi-storey, 5-7 rooms), if you want more coverage, you can add on Satellites. A system can support maximum to 16 hot spots.

A Single Network, Seamless Roaming

Only one Wi-Fi network in your entire home, the system will always automatically connect the fastest hot spot and frequency for you.

192 Devices Connect Simultaneously

Q2 can support 192 Devices Connect Simultaneously, so if you live a large house and have lots of devices including smart home device, Q2 is a good choice.

Figure 1-2 HUAWEI WiFi Q2 (1 Base + 2 Satellite)



Real Plug & Play

Q2's PLC backhaul gives users a peace on mind that have more flexibility to locate satellite.

High Speed Wi-Fi Everywhere

Dedicated gigabit PLC between Base and Satellite can establish a high speed family backhaul network, so you can enjoy high speed Wi-Fi everywhere.

Fits Homes of Any Size or Shape

Q2 can cover about 150-200m²(4-5 rooms), if you want more coverage, you can add on Satellites. A system can support maximum to 16 hot spots.

A Single Network, Seamless Roaming

Only one Wi-Fi network in your entire home, the system will always automatically connect the fastest hot spot and frequency for you.

1.2 Button/Ports

Figure 1-3 Button/Ports (Base router)



Table 1-1 button and ports (Base router)

No.	Button/ Port	Description
1	H button	<p>The indicator will flash slowly when the router discovers a device that supports HUAWEI HiLink. You can press the H button to connect the device to the router's Wi-Fi.</p> <p>NOTE</p> <p><i>Devices that support HUAWEI HiLink include: HUAWEI routers, HUAWEI mobile phones (EMUI 5.0 or later), etc.</i></p>
2	Power port	Connect to power supply.
3	Self-adaptive WAN/LAN ports	<p>Connect to the Internet (e.g., a fiber optic modem or broadband modem) or network devices like computer.</p> <p>NOTE</p> <p><i>Self-adaptive WAN/LAN ports: you can plug cable to any port on the router to access the Internet.</i></p>
5	Reset button	<p>Power on the router and wait for a moment (until the router completes the startup process). Use a needle or pin to press the Reset button on the router for approximately two seconds and release it until the indicator light goes out. Once the router reboots, its factory settings are restored.</p>

Figure 1-4 Button/Ports (Satellite router)

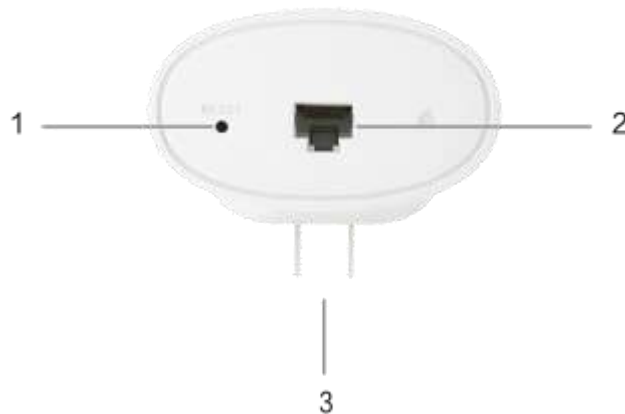


Table 1-2 button and ports (Satellite router)

No.	Button/ Port	Description
1	Reset button	Power on the router and wait for a moment (until the router completes the startup process). Use a needle or pin to press the Reset button on the router for approximately two seconds and release it until the indicator light goes out. Once the router reboots, its factory settings are restored.
2	LAN port	Connect to network devices like computer.
3	Power plug	Connect to a wall power socket. <div style="display: flex; align-items: center;"> 📖 NOTE </div> <p><i>Do not use power strip. Some power strips have EMI filters that may cause a satellite router to be unable to connect to the network.</i></p>

1.3 Indicator

Figure 1-5 Indicator (Base router)



Table 1-3 Indicator (Base router)

Router Status	Indicator Status	Description
Powering on	Red	The base router is starting up.
Connecting to the Internet	Blue	The base router is connected to the Internet.
	Red	The base router is not connected to the Internet.
Connecting through HUAWEI HiLink	Slowly flashing	The base router has discovered a device that supports HUAWEI HiLink. For example, another HUAWEI router, a HUAWEI mobile phone (EMUI 5.0 or later), etc.
	Quickly flashing	The base router is pairing with the device that supports HUAWEI HiLink.
	Steady on	HUAWEI HiLink pairing succeeded.
Upgrade in progress	Quickly flashing blue	The base router is being updated.

Figure 1-6 Indicator (Satellite router)

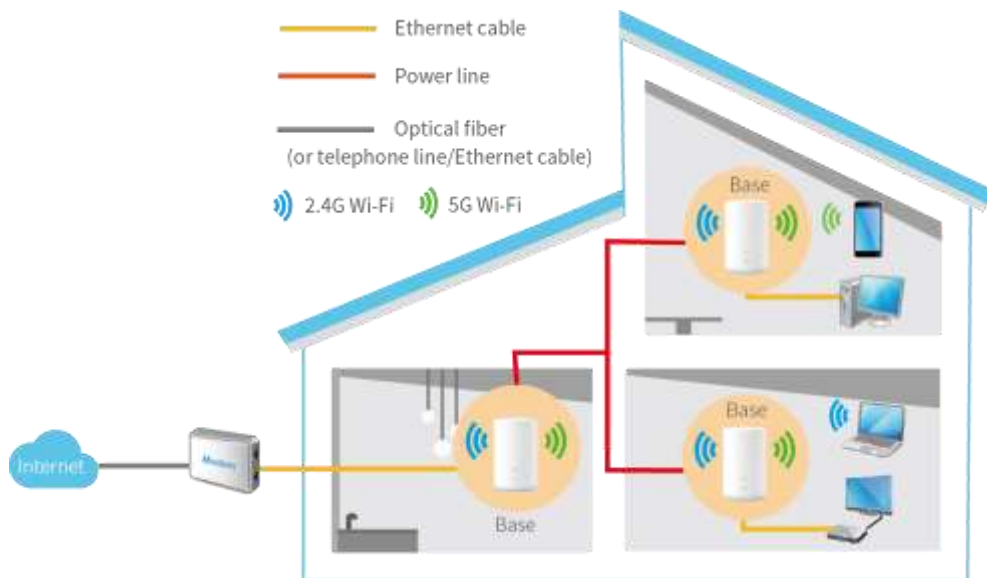


Table 1-4 Indicator (Satellite router)

Router Status	Indicator Status	Description
Powering on	Red	The satellite router is starting up.
Connecting to the Internet	Blue	The satellite router is connected to the Internet.
	Red	The satellite router is not connected to the Internet.
Connecting through HUAWEI HiLink	Flashing	The satellite router is pairing with the base router.
	Steady on	HUAWEI HiLink pairing succeeded.
Upgrade in progress	Quickly flashing blue	The satellite router is being updated.

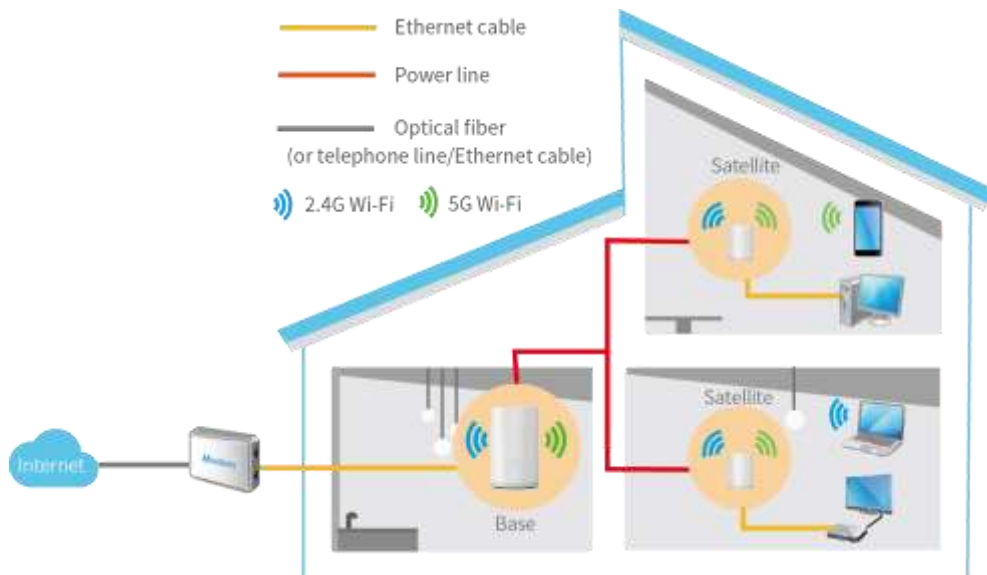
1.4 Network Architecture

Figure 1-7 HUAWEI WiFi Q2 (3 Pack · Hybrid) network architecture



Hybrid technology with gigabit PLC & AC1200 mesh Wi-Fi can establish a high speed family backhaul network, so you can enjoy high speed Wi-Fi everywhere.

Figure 1-8 HUAWEI WiFi Q2 (1 Base + 2 Satellites) network architecture



Dedicated gigabit PLC between Base and Satellite can establish a high speed family backhaul network, so you can enjoy high speed Wi-Fi everywhere.

2 Functions and Features

2.1 Use base and satellite routers to extend the network

- Only the base router needs to be configured. The satellite routers are plug and play.
- The satellite routers can automatically sync to its base router's Wi-Fi settings. If you change the Wi-Fi name, password, or admin password on the base router, the same changes will be automatically synced to the satellite routers.
- You will automatically connect to the faster Wi-Fi network.

2.2 Automatically identify Internet access mode

The router can automatically identify your Internet access mode (PPPoE/DHCP). No manual operation is required.

 **NOTE**

PPPoE, DHCP, static IP, and bridge are the most commonly used Internet access modes and are all supported by HUAWEI WiFi Q2.

2.3 Obtain the broadband account and password from the old router

- Supports obtaining broadband account and password from the old router. Manual input is not required.
- Supports the cloning of your old router's MAC address. When broadband is enabled, some service providers will bind your broadband account to a MAC address to limit the number of Internet devices, and only allow bound devices to access the Internet. To resolve this issue, the MAC address cloning feature allows the base router to use the MAC address of a bound device to access the Internet.

2.4 Connect to another HUAWEI router

- By pressing the H button, you can connect two HUAWEI routers that support HUAWEI HiLink to form a network with expanded coverage.
- You can also use an Ethernet cable to connect two HUAWEI routers that support HUAWEI HiLink to form a network with expanded coverage.
- The router can automatically sync to its primary router's Wi-Fi settings. If you changed the Wi-Fi name, Wi-Fi password, or admin password on the primary router, the same changes will be automatically synced to the secondary router. When there are multiple routers at home, you will be automatically connected to the router with the optimal Wi-Fi network.

2.5 Connect to your old router (through wired bridge or wireless repeater mode) to form a network

- You can use an Ethernet cable to cascade HUAWEI WiFi Q2 base router to an old router and form a network. In this case, HUAWEI WiFi Q2 base router works as the secondary router.
- HUAWEI WiFi Q2 base router can also connect to your old router's Wi-Fi as a wireless repeater. When it functions as a wireless repeater, it has the same Wi-Fi name and password as your old router. There will be only one Wi-Fi network at your home.



NOTE

If you have two HUAWEI routers that support HUAWEI HiLink, using HUAWEI HiLink to connect the two routers will be more convenient.

2.6 Ensure privacy with multiple security mechanisms

- HUAWEI WiFi Q2 controls Wi-Fi access and disconnects unwanted devices to prevent unauthorized access.
- It supports guest Wi-Fi. You can set up a dedicated Wi-Fi network for your guests. Guests have access to the guest Wi-Fi but cannot manage the router or access other devices on the home network. This is to protect home network and privacy security.
- You can hide your Wi-Fi name to improve the network security. If a Wi-Fi name is hidden, wireless devices (like PCs and mobile phones) cannot search for the Wi-Fi name. To connect a wireless device to a hidden Wi-Fi network, you must enter the correct Wi-Fi name.
- Associating your computer's IP address and MAC address can effectively protect against ARP spoofing attacks. After association, attackers will be unable to use ARP spoofing techniques to steal your computer's IP address.
- The built-in firewall can protect you from DoS/ARP attacks by scanning all data communication between the Internet and your home network.
- It supports DMZ feature that allows you to expose the DMZ host to the Internet, while other devices are protected by the firewall. For example, when setting up a server, you can set the computer connected to the external network as the DMZ host to allow it to provide Internet services while ensuring the security of other devices on your home network.

- HUAWEI WiFi Q2 supports PAP and CHAP for secure password transmission.

2.7 Power-saving features

- The router supports three different power plans: passthrough mode (highest power), standard mode, and sleep mode (lowest power) to cater to your different needs at different time of a day and in different environments.
- Wi-Fi timer allows you to disable Wi-Fi for a specified time (such as after midnight or when you're at work) in order to reduce power consumption.

2.8 Parental control

The parental control feature allows you to set Internet access time limits and restrict access to certain websites to keep your family members (especially minors) healthy and safe.

2.9 Router management

You can access your router's web-based management page from your computer, mobile phone or tablet. Alternatively, you can download and install HUAWEI Smart Home app on your mobile phone or tablet for faster configuration.

2.10 Virtual Private Networks (VPNs)

Supports VPN passthrough (requires LAN-side device to dial the VPN connection).

2.11 Other supported features

- NAT and NAPT (RFC 1631, RFC 2663, RFC 2766, and RFC 3022)
- DHCP server and clients
The DHCP server can automatically assign the IP address, gateway, and DNS.
- DDNS and DNS proxies
The router will associate its dynamic WAN IP to a fixed domain name. This allows you to use a fixed domain name to access the router's services over the Internet instead of having to manually check the WAN IP address of the router each time.
- Universal Plug and Play (UPnP)
Computers in the LAN can request the router to automatically switch the port. This allows computers connected to the Internet to access the resources on any LAN computers (such as MSN Messenger and other apps that support UPnP protocols) when needed, allowing you to enjoy a more stable network while watching online videos or using apps to download files.

3 Technical Specifications

3.1 Product Specifications

3.1.1 Chipsets

3.1.1.1 Base router

- 2.4 GHz Wi-Fi chip: RTL8197FS (2x2 Wi-Fi 2.4GHz)
- 5 GHz Wi-Fi chip: RTL8812BR (2x2 Wi-Fi 5GHz 11ac)
- PLC chip: Hi5630

3.1.1.2 Satellite router

- 2.4 GHz Wi-Fi chip: Hi1151
- 5 GHz Wi-Fi chip: Hi1151
- PLC chip: Hi5630

3.1.2 RAM and Flash Memory

3.1.2.1 Base router

- RAM: 128 Mbytes
- Flash memory: 128 Mbytes

3.1.2.2 Satellite router

- RAM: 64 Mbytes
- Flash memory: 16 Mbytes

3.1.3 Wi-Fi

- 802.11b/g/n (up to 300 Mbit/s over a 2.4 GHz Wi-Fi network)
- 802.11ac/a/n (up to 867 Mbit/s over a 5 GHz Wi-Fi network)
- Dual-band transmission (11n 2.4GHz 300Mbit/s and 11ac 5GHz 867Mbit/s) with a maximum wireless transmission rate of 1167 Mbit/s.
- The 2.4GHz and 5GHz networks allow for the connection of up to 32 devices each.

- Advanced Encryption Standard (AES) and Temporal Key Integrity Protocol (TKIP) are supported.
- WPA1.0 and WPA2.0 PSK are supported.
- The 2.4 GHz network supports 13 channels: 1 – 13. The 5GHz network supports channels: 36, 40, 44, 48, 52, 56, 60, 64, 149, 153, 157 and 161.
- Supports 5G Wi-Fi preferred: The 2.4 GHz and 5 GHz Wi-Fi names are the same. You will automatically connect to the faster Wi-Fi network.

3.1.4 PLC Rate

- up to 800 Mbit/s

3.2 Ethernet Port

3.2.1 Base router

- Supports WAN/LAN self-adaptive: you can plug cable to any port on the router to access the Internet.
- 10/100/1000 Mbit/s self-adaptive Ethernet port: 3

3.2.2 Satellite router

- 10/100/1000 Mbit/s self-adaptive Ethernet port: 1

3.3 Power Supply Specification

- Power supply: 220V AC
- Power consumption:
 - Base router: < 24W
 - Satellite router: <12W

3.4 Physical Specifications

3.4.1 Base router

- Dimensions (Depth x Width x Height): 73.4mm x 120.0mm x 183.5mm
- Weight without packaging: about 495 g
- Operating temperature: 0°C to 40°C (32°F to 104°F)
- Storage temperature: -40°C to +70°C (-40°F to +158°F)
- Operating humidity: 5% to 95% RH (non-condensing)
- Storage humidity: 5% to 95%, non-condensing

3.4.2 Satellite router

- Dimensions (Depth x Width x Height): 46.3mm x 75.0mm x 103.0mm
- Weight without packaging: about 200 g
- Operating temperature: 0°C to 40°C (32°F to 104°F)
- Storage temperature: -40°C to +70°C (-40°F to +158°F)
- Operating humidity: 5% to 95% RH (non-condensing)
- Storage humidity: 5% to 95%, non-condensing

3.5 Accessories

HUAWEI WiFi Q2 (1 Base + 2 Satellites)

- Power cable: 1
- Network cable: 1
- Quick Start Guide and Safety Information: 1

HUAWEI WiFi Q2 (3 Pack · Hybrid)

- Power cable: 3
- Network cable: 1
- Quick Start Guide and Safety Information: 1

4 Abbreviations

Table 4-1 Abbreviations

Abbreviation	Formal Name
AC	Alternating current
AES	Advanced Encryption Standard
ARP	Address Resolution Protocol
CPU	Central processing unit
CHAP	Challenge Handshake Authentication Protocol
DC	Direct current
DDNS	Dynamic Domain Name Server
DDR	Double Data Rate
DHCP	Dynamic Host Configuration Protocol
DMZ	Demilitarized Zone
DNS	Domain Name System
DoS	Denial of Service
IP	Internet Protocol
LAN	Local Area Network
L2TP	Layer 2 Tunneling Protocol
MAC	Media Access Control
NAT	Network Address Translation
NAPT	Network Address and Port Translation
PAP	Password Authentication Protocol
PPPoE	Point to Point Protocol over Ethernet
PPTP	Point to Point Tunneling Protocol

Abbreviation	Formal Name
PSK	Pre-Shared key
QoS	Quality of Service
TKIP	Temporal Key Integrity Protocol
UPnP	Universal Plug and Play
VPN	Virtual Private Network
WAN	Wide Area Network
WPA	Wireless Fidelity Protected Access