

# Hisilicon high performance chip

Hisilicon A9 dual core 1GHz hi5671 CPU and hi5622 chip. The chip is a fully autonomous and controllable Wi Fi 6 chip. Hi5671 chip has gigabit network port and hardware security capabilities. Hi5622 is a 2.4G + 5g SOC chip, which supports 160MHz bandwidth and has a peak speed of 2.4Gbps

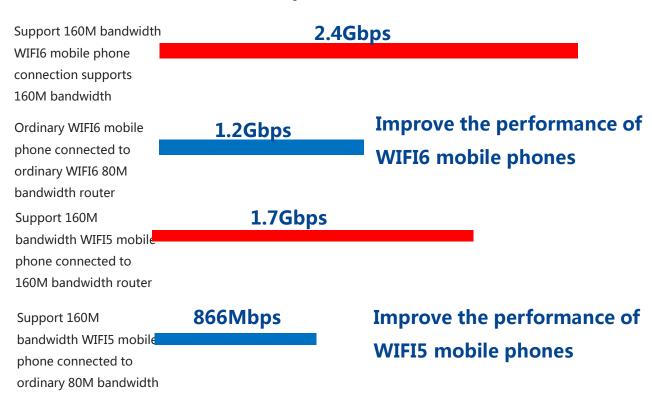


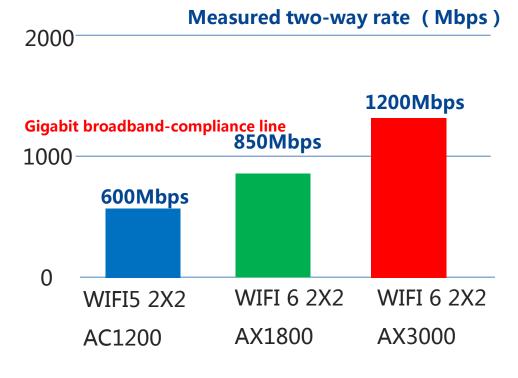
# **♦** True Gigabit, speed increased by more than 100%

Both 2.4G and 5g devices support 802.11ax, dual band concurrent, wireless rate up to 2976mbps, 5g band support 160MHz bandwidth, wireless rate can reach 2402mbps, 2.4G band wireless rate can reach 574mbps.

#### **Different mobile phones rate**

WIFI6 router





### **♦** More device access capabilities

The device uses 128MB flash memory and 256MB large memory, which can stably connect to 128 devices to meet the needs of more smart devices.

Both Flash and DDR adopt plug-in methods, which can quickly meet the hardware requirements of different operators .

More device access capabilities



### **♦** Multi-device Internet access delay is lower

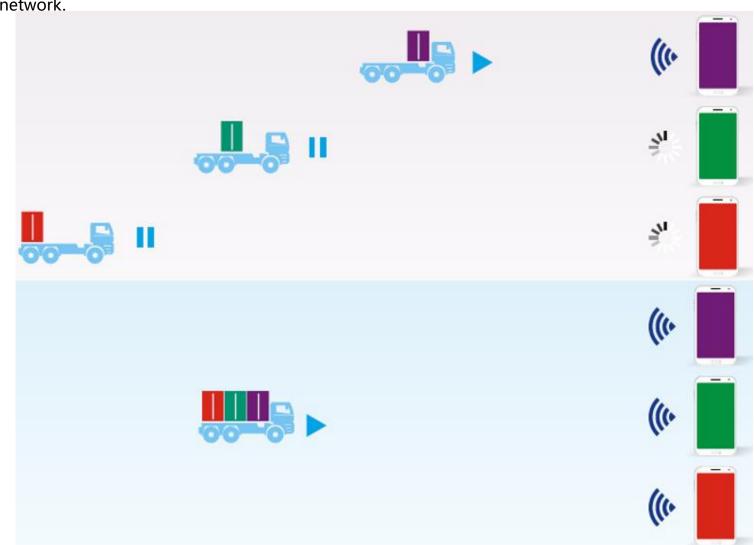
The device supports OFDMA technology. On the basis that only one user data can be transmitted per frame, OFDMA technology can realize simultaneous data transmission by multiple users, improve transmission efficiency, reduce waiting time, and reduce network delay of multiple devices by more than 50%. Let you enjoy a smooth network.

#### **OFDM:**

Regardless of the amount of traffic, only one user data can be transmitted per frame, and other users wait

#### **OFDMA:**

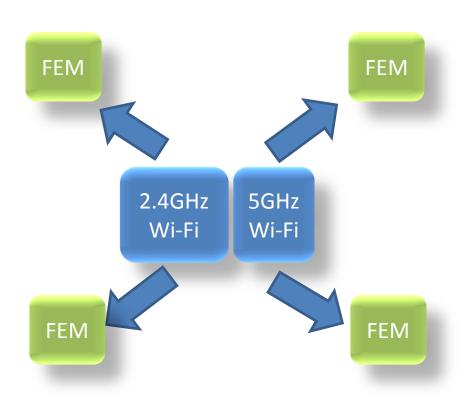
Each frame can transmit data of multiple users, reducing multi-user waiting and reducing delay



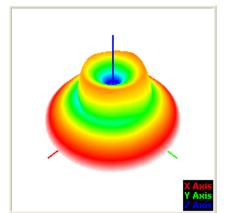
### **♦**Stronger coverage

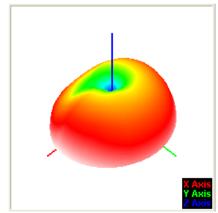
The 2.4G and 5G signal channels of the equipment use independent power amplifier circuits and 4 high-power independent power amplifiers (FEM). front-end modules in the hardware circuit complete the transmission and amplification of radio frequency signals. With the dynamically matched high-gain antenna,

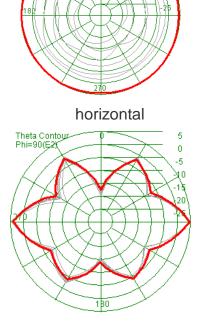
the signal capability is raised to the top and stronger signal coverage is achieved.











2.4G signal radiation3D diagram

5.8G signal radiation3D diagram

vertical

# Chip level security protection

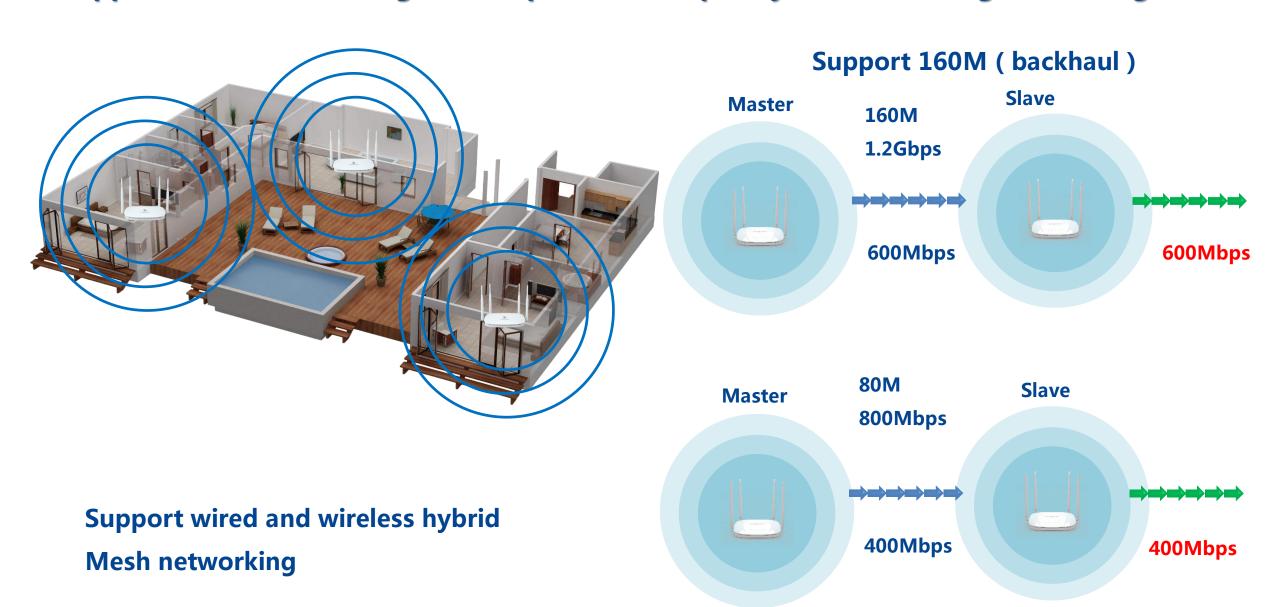
#### Secure startup, anti brush and malicious tampering

### The device supports chip-level security protection functions. Based on digital signature technology, the digital signature of each startup component is verified step by step during the startup process of the device. Only when the verification is passed can it run normally, and if the verification fails, it will stop running to realize the safe start of the device. Ensure that only the firmware version certified and authorized by the operator can run on the router to prevent the important data on the Flash from being illegally tampered with and replaced by a third party.

#### **Security upgrade**

When the device is upgrading the firmware, the firmware upgrade package needs to be verified to ensure that the upgraded firmware version is signed by the correct private key of the device manufacturer. If the verification fails, the upgrade is rejected.

#### **♦** Support Mesh networking of multiple devices, quickly realize WiFi signal coverage



# **♦**Specifications



parameter	Specification
Interface	$1 \times$ GE(WAN)+ $3 \times$ GE (LAN)
Button	Reset、 WPS
CPU	A9 Dual-core 1GHz
Flash	128MB
RAM	256MB
WLAN	2.4GHz support 802.11b/g/n/ax
	5GHz support 802.11a/n/ac/ax
Frequency	2.4GHz、5GHz
Bandwidth	2.4GHz -20/40MHz
	5GHz-20/40/80/160MHz
WLAN Speed	2.4GHz: 574Mbps
	5GHz: 2402Mbps
Antenna	4x 5dbi Omnidirectional antenna