

# AX1800J Product Specification

## Product Introduction

As a pioneer of Wi-Fi 6 (the 6th generation wireless technology), AX1800J features high speed, low latency, large capacity, enhanced security, and energy efficiency. It supports a 2.4G wireless rate of up to 574 Mbps, a 5G rate of up to 1201 Mbps, and a combined dual-band rate of 1800 Mbps. Compared with the previous Wi-Fi 5 standard, it significantly improves connection speed and network total capacity. In today's high-density and congested network environments, it provides lower latency and smoother experiences for gaming, education, and live streaming, and is more suitable for connecting a large number of smart home devices.

In terms of hardware, it adopts a high-performance MediaTek chip for stable internet access and easy multi-task processing. Paired with the corresponding smart APP, device operation is simple and convenient. It also supports MESH multi-unit self-networking to achieve seamless whole-home coverage. The product features a pure white casing for a simple and elegant appearance.

## Product Features

### Support for the Latest Wireless Protocol 802.11 AX (Wi-Fi 6)

As a groundbreaking 6th-generation wireless technology, it offers faster speed, lower latency, wider coverage, and a significantly higher stable connection capacity than Wi-Fi 5.

### High Speed

With 1024-QAM modulation technology, Multi-User Multiple-Input Multiple-Output (MU-MIMO) technology, and adaptive idle channel evaluation, it significantly reduces latency and lag for terminal devices compared to traditional routers.

### High Access Capacity

The 256MB large memory reduces congestion and allows up to 128 devices to connect simultaneously.

### Low Latency

Using technologies such as OFDMA and Spatial Reuse, Wi-Fi 6 enables multiple users to transmit in parallel during each time slot without queuing, reducing competition, improving efficiency, and lowering latency. Latency is reduced from 30ms in Wi-Fi 5 to 20ms (with Huawei's exclusive smart application acceleration technology, latency can be further reduced to 10ms), a 33% average reduction.

## Energy Efficiency

The TWT (Target Wake Time) technology in Wi-Fi 6 allows negotiation between the AP and terminals for communication, reducing the time required to maintain transmission and search for signals. This means reduced battery consumption and improved battery life, with terminal power consumption reduced by 30%.

## Continuous Function Updates and Performance Optimization

Our dedicated R&D team continuously updates functions to simply and efficiently meet various network environment needs, and meticulously optimizes performance to ensure the highest-quality network products and enhance user experience.

## Product Specifications

<b>Product Model</b>	AX1800J
<b>Chipset Solution</b>	MT7621AT+MT7905DAN+MT7975DN
<b>FLASH</b>	128MB
<b>DDR3</b>	256MB
<b>Wireless Rate</b>	2.4GHz: 574Mbps@2×2 Wi-Fi 65GHz: 1201Mbps@2×2 Wi-Fi 6
<b>Antenna</b>	2×3dBi built-in dual-band antenna
<b>Interfaces</b>	3×GE WAN/LAN adaptive ports
<b>Buttons</b>	1×MESH+1×RESET
<b>Indicator</b>	1×ring-shaped indicator (red & light blue)
<b>Wi-Fi Protocol</b>	Supports IEEE 802.11b/g/n/ac/ax
<b>MIMO Mode</b>	Supports MU-MIMO
<b>Working Modes</b>	Router mode, AP mode
<b>Management Method</b>	Chinese WEB remote management
<b>Status Monitoring</b>	System status, interface status, routing table

<b>Wireless Configuration</b>	Wi-Fi basic parameter configuration/blacklist
<b>Network Settings</b>	Working mode, LAN/WAN address settings
<b>System Functions</b>	System properties/password modification/backup & upgrade/system log/restart
<b>Setup Wizard</b>	Quick configuration wizard
<b>MTBF</b>	>20000H
<b>Maximum Power Consumption</b>	≤10W
<b>Operating Temperature</b>	0℃~40℃
<b>Storage Temperature</b>	-40℃~70℃
<b>Operating Humidity</b>	10%~95%, non-condensing
<b>Storage Humidity</b>	5%~95%, non-condensing
<b>Power Adapter</b>	DC 12V/1A