

# WAP5800

**3000Mbps Outdoor WiFi6 Dual Band High Power  
Wireless AP**

## Product Specifications



- External 6dBi~8dBi Omni-Directional Antenna
- Qualcomm Chipset Solution, up to 100 devices
- Waterproof Outdoor Casing, IP67 Protection
- Standard PoE Power Input or DC Power Input (Optional)
- 3000Mbps, Dual Band WiFi6 802.11ax MU-MIMO
- FIT and FAT AP Mode, Adjustable TX Power, Coverage Radius 1200 Square Meter (m<sup>2</sup>)

## Product Description

WAP5800 is an outdoor 2x2 dual-band WiFi6 wireless AP, suitable for outdoor areas that require wireless coverage such as scenic spots, parks, schools, and squares. WAP5800 supports 2x2 11ax, and the maximum concurrent connection rate of dual-band can reach up to 3000Mbps, which can build a stable and high-speed wireless network for users. WAP5800 has high-performance wireless indicators, can get a larger wireless coverage area and better wall penetration performance. WAP5800 supports the access of up to hundreds of wireless terminals to meet the application scenarios of high-density wireless terminals. At the same time, WAP5800 also has good compatibility and supports the access of most wireless terminals on the market. Users can use mobile phones, tablets or laptops to easily connect.

WAP5800 supports standard 48V PoE power supply and pole installation, and the installation and configuration are flexible and convenient. Users only need to spend a short time to complete the settings, you can enjoy the fun of surfing the Internet.

## Product Features

### Wi-Fi6 (IEEE 802.11ax) Standard

- 802.11ax, as the latest generation of IEEE 802.11 Wi-Fi standard, can increase user access capacity and bandwidth in high-density access scenarios, reduce service delays, and enhance user experience.
- Support 2.4GHz and 5GHz dual-frequency UL/DL MU-MIMO, enabling AP to send data to multiple terminals at the same time, and the utilization rate of wireless spectrum resources is higher than predecessor 802.11ac.
- Support 1024QAM modulation, data transmission efficiency is increased by 40% compared with 802.11ac (256QAM).
- Support UL/DL OFDMA technology, use different subcarriers to transmit data to multiple terminals at the same time, reduce delay and improve network efficiency.
- Support spatial multiplexing technology, through the BSS coloring mechanism (BSS coloring) so that AP and terminal can distinguish overlapping BSS (basic service set), to minimize co-channel interference.
- Support target wake time\* mechanism, allowing AP and terminal to negotiate sleep and wake time, reducing conflicts between terminals and unnecessary wake-up times, saving terminal power, and improving battery life.

### Multi-User Uplink and Downlink-multiple Input and Multiple Output Technology (MU-MIMO)

Support MU-MIMO technology, support up to 4 spatial streams, 2.4GHz frequency band supports 2 spatial streams, 5GHz frequency band supports 2 spatial streams, through DL/UL MU-MIMO technology, AP can send data to multiple terminals at the same time, The utilization rate of wireless spectrum resources has been doubled, increasing the number of access users and bandwidth, and improving user experience in high-density access scenarios.

### High-Speed Access

Supports 160MHz bandwidth. The increase in bandwidth has increased the available data sub-carriers and expanded the transmission channel; in addition, the use of 1024QAM modulation, MU-MIMO and other technologies makes the 5GHz single frequency band rate up to 2.4Gbps, and the whole machine rate is up to 3Gbps.

### 5GHz Priority

The AP supports both 2.4GHz and 5GHz dual-band access. By controlling the terminal to preferentially access the 5GHz frequency band, dual-frequency end users in the 2.4GHz frequency band are migrated to the 5GHz frequency band, reducing the load and interference on the 2.4GHz frequency band, and improving user experience.

### High-level Protection

- It adopts metal shell and overall heat dissipation design, suitable for wide temperature operation of -30°C to +65°C and adopts IP68 waterproof and dustproof design. Ethernet interface supports
- 6KA/6KV enhanced lightning protection, fully meet the requirements of industrial-grade use;
- Reinforced with metal fasteners and cable connectors to ensure connection fastening performance and equipment working stability;

### External Indicator

The external high-bright status indicator light makes the equipment running status clear at a glance, saving troubleshooting time.

## Hardware Specifications

Model	WAP5800
Dimension	240mm x 195mm x 80mm (L x W x H) (Including N-Type connector)
Weight	1823g
Installation	Wall or Pole Installation
LED Indicators	PWR / SYS / 2.4GHz / 5GHz / SFP
Interfaces	1 x GbE Uplink, Support 802.3at Power Supply 1 x SFP Fiber Optical Port (Optional) 4 x N-Type Antenna Connector (WIFI)
Power Input	48V ~ 57V, 802.3at PSE
<b>Environment</b>	
Operating Temperature	-30°C to +65°C
Storage Temperature	-40°C to +85°C

Operating Humidity	5% - 95% (non-condensing)				
Air Pressure	86kPa ~ 106kPa Altitude				
IP Rating	IP67				
Safety Certification	SRRC, Can do according to the customer's request				
<b>Stability</b>					
Annual Failure Rate	AFR < 1.5% (Continuous Operation Status)				
<b>Chipset Solution</b>					
CPU	Qualcomm IPQ5018 + QCA8337N + QCN6122				
Flash	32MB SPI NOR Flash + 128MB NAND Flash				
RAM	512MB DDR3L Memory				
<b>Wi-Fi Characteristics</b>					
Wi-Fi Standards	2.4GHz: 802.11b/g/n/ax 5GHz: 802.11a/n/ac/ax				
Max Speed Rate	2.4GHz: Max. 574Mbps 5GHz: Max. 2400Mbps				
Antenna	2 x Fiberglass Antenna (Each Radio), 6dBi Antenna Gain				
Working Frequency	2.4GHz Radio: 2.4000GHz ~ 2.4835GHz				
	5GHz Radio: 5.150 ~ 5.850GHz				
Max. Transmit Power	2.4GHz Radio: 24dBm@MCS0, 21dBm@MCS7 5GHz Radio: 24dBm@MCS0, 21dBm@MCS7				
Data Rate	2.4G Radio: 802.11b: 1, 2, 5.5, and 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps 802.11n HT20/ HT40: MCS0~MCS15 (400/ 800ns GI) 802.11ax HE20/ HE40: MSC0 ~ MCS11(400/ 800ns GI)				
	5G Radio: 802.11a: 6, 9, 12, 18, 24, 36, 48 and 54Mb/s 802.11n HT20/ HT40: MCS0~MCS15(400/ 800ns GI) 802.11ac VHT20/VHT40/VHT80: MCS0 ~ MCS9(400/ 800ns GI) 802.11ax HE20/ HE40/HE80: MSC0 ~ MCS11(400/ 800ns GI)				
2.4GHz Reception Sensitivity	802.11g	54M	-76dBm	6M	-92dBm
	802.11n HT20	MCS7	-87dBm	MCS0	-89dBm
	802.11n HT40	MCS7	-71dBm	MCS0	-73dBm

5GHz Reception Sensitivity	802.11a	54M	-76dBm	6M	-92dBm
	802.11ac HT20	MCS7	-70dBm	MCS0	-90dBm
	802.11ac HT40	MCS7	-68dBm	MCS0	-87dBm
	802.11ac HT80	MCS9	-59dBm	MCS0	-84dBm

### Product Views



### Order Information

Product Model	Product Description
WAP5800	<p>Complete Product Unit including</p> <ul style="list-style-type: none"> <li>1 x 48V PoE Power Supply (Optional) / 12VDC Power Adapter (Optional)</li> <li>2 x 6dBi Omni-Directional Fiberglass Antenna (2.4GHz WIFI)</li> <li>2 x 6dBi Omni-Directional Fiberglass Antenna (5GHz WIFI)</li> <li>1 x Pole Mounting Gear (Set)</li> <li>1 x Network Cable</li> </ul>