



W818AP

**Wi-Fi 7 Tri-band Ceiling AP**

**Fore**edge

## Product Introduction

The W818AP is a Wi-Fi 7 tri-band ceiling wireless AP. It supports a 320MHz channel width and can work on three bands at the same time, with a maximum concurrent connection rate of up to 14000Mbps (2.4G: 688Mbps, 5G: 4323Mbps, 5G: 8643Mbps). It is ideal for building stable and high-speed wireless networks for users. The AP supports 12V DC and the IEEE802.3af/at power supply protocols, meeting the deployment requirements of different scenarios.

The W818AP supports fast client roaming technology, which guides clients to actively associate with the access point offering better wireless quality, so that clients stay online without interruption.

The W818AP supports local management and centralized AC management, allowing administrators to easily perform remote configuration management and status monitoring. It is suitable for enterprises, universities, hospitals, hotels and other scenarios.

## Main Features

- Compliant with the Wi-Fi 7 standard, IEEE 802.11a/b/g/n/ac/ax/be
- 320MHz ultra-wide channel width and 14000M-class wireless rate for smooth 8K ultra-HD video
- 10G SFP+ uplink optical port and 2.5G Ethernet port, breaking the Gigabit uplink bottleneck

- Support MLO technology, which can aggregate multiple bands for a significant increase in effective data throughput, or automatically switch to another band when a band suffers interference or heavy load, improving interference immunity, reducing latency and optimizing the online experience
- MU-MIMO (Multi-User Multiple-Input Multiple-Output) technology enables simultaneous transmission for multiple clients on the same channel, so users can enjoy the network without contention
- OFDMA (Orthogonal Frequency Division Multiple Access) technology transmits data for multiple users in each frame, greatly improving Wi-Fi transmission efficiency
- Standard af/at PoE and 12V DC power supply options to meet the deployment requirements of different scenarios
- Fast wireless roaming keeps clients online without interruption
- Multiple management methods for various application scenarios

Specifications

| Hardware Features   |                                               |
|---------------------|-----------------------------------------------|
| Product Dimensions  | 331mm×331mm×48mm (excluding mounting bracket) |
|                     |                                               |
| Installation Method | Ceiling mount, wall mount                     |
|                     |                                               |
| Wireless Protocols  | IEEE 802.11a/b/g/n/ac/ax/be                   |
|                     |                                               |

|                                 |                                                                                                                                                     |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Physical Ports</b>           | 1 x 10G SFP+ optical port<br>1 x 10/100M/1000/2500M port (Auto MDI/MDIX)                                                                            |
| <b>Physical Button</b>          | Reset button                                                                                                                                        |
| <b>Status LED</b>               | One multi-color status LED                                                                                                                          |
| <b>Power Input</b>              | IEEE802.3af/at (48V POE)<br>DC 12V/2A (outer diameter: 5.5mm, inner diameter: 2.1mm)                                                                |
| <b>Max Power Consumption</b>    | 22W                                                                                                                                                 |
| <b>2.4G Operating Frequency</b> | 2412~2472MHz (channels 1~13)                                                                                                                        |
| <b>5G Operating Frequency</b>   | 5180MHz - 5320MHz (channels 36 - 64)<br>5745MHz - 5825MHz (channels 149 - 165)                                                                      |
| <b>6G Operating Frequency</b>   | 5955MHz - 7115MHz (channels 1~233)                                                                                                                  |
| <b>Wireless Rate</b>            | 2.4G: 688Mbps<br>5G: 4323Mbps<br>6G: 8643Mbps                                                                                                       |
| <b>Spatial Streams</b>          | 2.4G: 2 streams, 2×2 MU-MIMO<br>5G: 3 streams, 3×3 MU-MIMO<br>6G: 3 streams, 3×3 MU-MIMO                                                            |
| <b>Max Transmit Power</b>       | 2.4G: 22dBm±2dB<br>5G: 23dBm±2dB<br>6G: 23dBm±2dB<br>(Actual transmit power varies according to the regulations of different countries and regions) |
| <b>Antenna Gain</b>             | 2.4G: 5dBi<br>5G: 5dBi<br>6G: 4dBi                                                                                                                  |

## Specifications

| Operating Environment     |                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESD Standard              | Air: 8kV, contact: 6kV                                                                                                                                                                                                                                                                                                                                            |
| Port Lightning Protection | ±2kV                                                                                                                                                                                                                                                                                                                                                              |
|                           |                                                                                                                                                                                                                                                                                                                                                                   |
| Operating Temperature     | 0°C□45°C                                                                                                                                                                                                                                                                                                                                                          |
|                           |                                                                                                                                                                                                                                                                                                                                                                   |
| Operating Humidity        | 10%□90%RH (non-condensing)                                                                                                                                                                                                                                                                                                                                        |
|                           |                                                                                                                                                                                                                                                                                                                                                                   |
| Storage Temperature       | -40°C□70°C                                                                                                                                                                                                                                                                                                                                                        |
|                           |                                                                                                                                                                                                                                                                                                                                                                   |
| Storage Humidity          | 5%□90%RH (non-condensing)                                                                                                                                                                                                                                                                                                                                         |
| Software Features         |                                                                                                                                                                                                                                                                                                                                                                   |
| Working Mode              | AP mode                                                                                                                                                                                                                                                                                                                                                           |
| Status Monitoring         | Device information monitoring                                                                                                                                                                                                                                                                                                                                     |
|                           | Network connection status monitoring                                                                                                                                                                                                                                                                                                                              |
| Network Settings          | Support IPv4 and IPv6 dual protocol stack<br>Support static IP and DHCP access<br>Support hardware-accelerated forwarding<br>Support static routing<br>Support dynamic and static DHCP server                                                                                                                                                                     |
| RF Settings               | Support switching between different countries/regions<br>Support modification of the RF working mode<br>Support automatic and manual channel setting<br>Support manual channel width setting<br>Support setting the minimum client access signal<br>Support multi-level wireless transmit power adjustment<br>Support weak-signal client connection and rejection |

| Software Features                       |                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>RF Settings</b>                      | Support Short-GI<br>Support WMM<br>Support DTIM<br>Support LDPC<br>Support STBC<br>Support AP isolation                                                                                                                                                                                                                         |
| <b>Wireless Efficiency Technologies</b> | MLO<br>MRU<br>Preamble Puncture<br>OFDMA<br>MU-MIMO<br>BSS Color                                                                                                                                                                                                                                                                |
| <b>Wi-Fi Settings</b>                   | Support up to 12 SSIDs working simultaneously<br>Support dual-band unification<br>Support WPA-PSK, WPA2-PSK and WPA3-PSK authentication and encryption<br>Support SSID VLAN<br>Support SSID hiding<br>Support wireless blacklist and whitelist<br>Support guest network<br>Support SSID isolation<br>Support TWT client wake-up |
| <b>Client Monitoring</b>                | Support monitoring of IP, MAC and online time of connected clients<br>Support uplink and downlink rate limiting for connected clients                                                                                                                                                                                           |
| <b>Security Settings</b>                | Support Internet behavior filtering based on IP, MAC, port and domain name<br>Support application access filtering based on user and time<br>Support port forwarding                                                                                                                                                            |

|                          |                                                                                                                                                                                                                                              |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>System Management</b> | Support NTP time synchronization<br>Support system operation logs and kernel logs<br>Support configuration backup<br>Support restore to factory settings<br>Support system reboot<br>Support Apollo cloud platform and mobile APP management |
| <b>System Upgrade</b>    | Local upgrade<br>Online upgrade                                                                                                                                                                                                              |
| <b>System Language</b>   | Simplified Chinese<br>English                                                                                                                                                                                                                |

## Ordering Information

| Model         | Description                                                                                                                                                                                                                                                             |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>W818AP</b> | Wi-Fi 7 tri-band ceiling AP, with a total wireless rate of up to 14000Mbps, 1 x 2.5G port, 1 x 10G SFP+ optical port, support for standard af/at PoE and 12V DC power supply, and support for local WEB management, unified AC management and cloud platform management |