

## Product Datasheet

# WiFi6 dual-band 3000M 2.5G Ceiling Wireless AP (ONV-XAP3000-2.5GE1)



## OVERVIEW

The ONV-XAP3000-2.5GE1 is a high-performance, high-speed 11ax indoor dual-band ceiling wireless AP that can provide 2.4GHz and 5.8 GHz dual-band wireless services. 2.4G provides a max access rate of 574Mbps, and 5G provides a max access rate of 2402Mbps.

## FEATURE

- ◇ Support 48V PoE and DC12V power supply modes.
- ◇ Support hardware watchdog function, abnormal equipment automatically recovers, and is maintenance-free.
- ◇ It has better transmission quality, higher transmission rate, and the whole machine concurrent rate is up to 3000Mbps.

## TECHNICAL SPECIFICATION

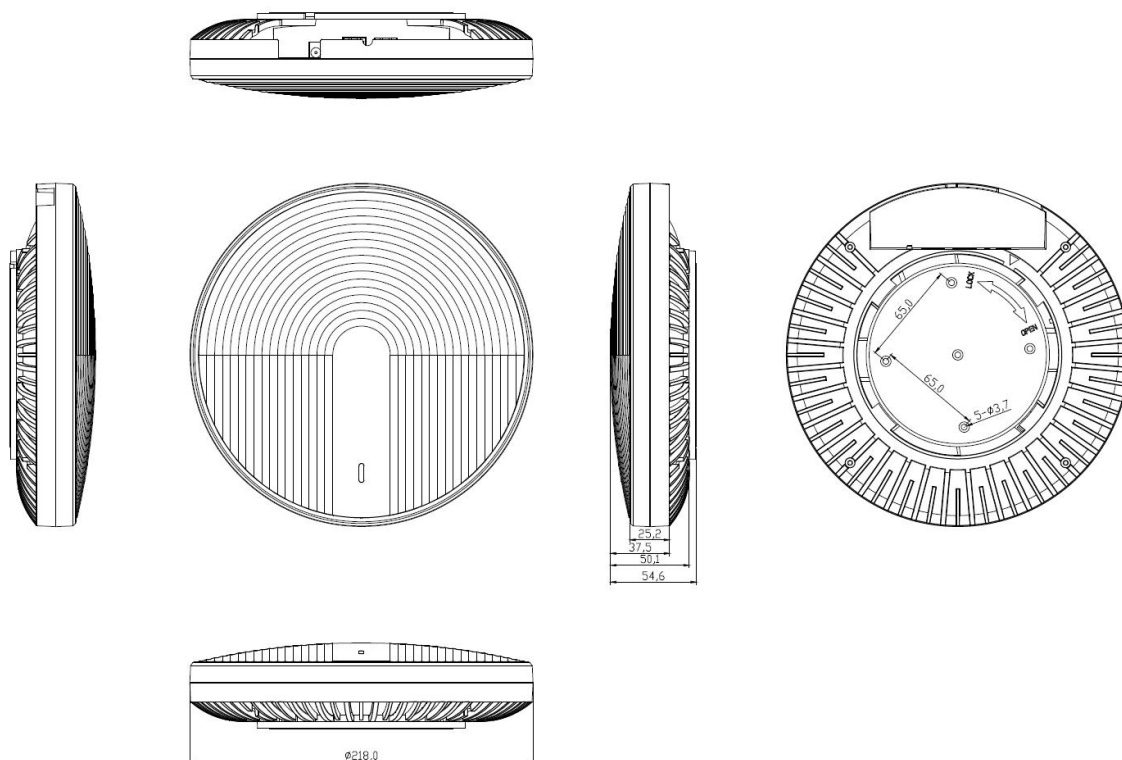
| Model                           | ONV-XAP3000-2.5GE1                                        |       |         |      |         |
|---------------------------------|-----------------------------------------------------------|-------|---------|------|---------|
| Hardware                        |                                                           |       |         |      |         |
| CPU                             | MT7981B+MT7976DA+GPY211                                   |       |         |      |         |
| Flash                           | SPI NOR 16MB                                              |       |         |      |         |
| Memory                          | 256M                                                      |       |         |      |         |
| 2.4G Working Frequency Band     | 2.4GHz-2.484GHz                                           |       |         |      |         |
| 2.4G WIFI Transmission Protocol | 802.11 b/g/n/ ax                                          |       |         |      |         |
| 5G Working Frequency Band       | 5.150GHz-5.850GHz                                         |       |         |      |         |
| 5G WIFI Transmission Protocol   | 802.11 a/n/ac/ax                                          |       |         |      |         |
| Built-in Antenna 2.4G           | 1*2.4G antenna, each gain: 3dBi                           |       |         |      |         |
| Built-in Antenna 5G             | 2*5G antennas, each gain: 3.5dBi                          |       |         |      |         |
| Built-in Dual-band Antenna      | 1*2.4G/5G dual-band antenna, each gain: 3dBi              |       |         |      |         |
| Max Speed                       | 2.4G max 574Mbps access rate, 5G max 2402Mbps access rate |       |         |      |         |
| Max Support Wireless Access     | 120+                                                      |       |         |      |         |
| 2.4G Wireless Power             | 802.11b                                                   | 11M   | 25±2dBm | 1M   | 25±2dBm |
|                                 | 802.11g                                                   | 54M   | 21±2dBm | 6M   | 24±2dBm |
|                                 | 802.11n HT20                                              | MCS7  | 21±2dBm | MCS0 | 24±2dBm |
|                                 | 802.11n HT40                                              | MCS7  | 21±2dBm | MCS0 | 23±2dBm |
|                                 | 802.11ax HE20                                             | MCS11 | 19±2dBm | MCS0 | 24±2dBm |
|                                 | 802.11ax HE40                                             | MCS11 | 19±2dBm | MCS0 | 23±2dBm |
| 5G Wireless Power               | 802.11a                                                   | 54M   | 20±2dBm | 6M   | 23±2dBm |
|                                 | 802.11n HT20                                              | MCS7  | 20±2dBm | MCS0 | 23±2dBm |
|                                 | 802.11n HT40                                              | MCS7  | 20±2dBm | MCS0 | 23±2dBm |
|                                 | 802.11ac VHT20                                            | MCS8  | 20±2dBm | MCS0 | 23±2dBm |

|                            |                                                                     |       |         |      |         |
|----------------------------|---------------------------------------------------------------------|-------|---------|------|---------|
|                            | 802.11ac VHT40                                                      | MCS9  | 19±2dBm | MCS0 | 23±2dBm |
|                            | 802.11ac VHT80                                                      | MCS9  | 19±2dBm | MCS0 | 23±2dBm |
|                            | 802.11ac VHT160                                                     | MCS9  | 19±2dBm | MCS0 | 22±2dBm |
|                            | 802.11ax HE20                                                       | MCS11 | 17±2dBm | MCS0 | 23±2dBm |
|                            | 802.11ax HE40                                                       | MCS11 | 17±2dBm | MCS0 | 23±2dBm |
|                            | 802.11ax HE80                                                       | MCS11 | 17±2dBm | MCS0 | 23±2dBm |
|                            | 802.11ax HE160                                                      | MCS11 | 17±2dBm | MCS0 | 22±2dBm |
| 2.4G Receiving Sensitivity | 802.11b                                                             | 11M   | -76dBm  | 1M   | -82dBm  |
|                            | 802.11g                                                             | 54M   | -65dBm  | 6M   | -82dBm  |
|                            | 802.11n HT20                                                        | MCS7  | -64dBm  | MCS0 | -82dBm  |
|                            | 802.11n HT40                                                        | MCS7  | -61dBm  | MCS0 | -79dBm  |
|                            | 802.11ax HE20                                                       | MCS11 | -52dBm  | MCS0 | -82dBm  |
|                            | 802.11ax HE40                                                       | MCS11 | -49dBm  | MCS0 | -79dBm  |
| 5G Receiving Sensitivity   | 802.11a                                                             | 54M   | -65dBm  | 6M   | -82dBm  |
|                            | 802.11n HT20                                                        | MCS7  | -64dBm  | MCS0 | -82dBm  |
|                            | 802.11n HT40                                                        | MCS7  | -61dBm  | MCS0 | -79dBm  |
|                            | 802.11ac VHT20                                                      | MCS8  | -59dBm  | MCS0 | -82dBm  |
|                            | 802.11ac VHT40                                                      | MCS9  | -54dBm  | MCS0 | -79dBm  |
|                            | 802.11ac VHT80                                                      | MCS9  | -51dBm  | MCS0 | -76dBm  |
|                            | 802.11ac VHT160                                                     | MCS9  | -48dBm  | MCS0 | -73dBm  |
|                            | 802.11ax HE20                                                       | MCS11 | -52dBm  | MCS0 | -82dBm  |
|                            | 802.11ax HE40                                                       | MCS11 | -49dBm  | MCS0 | -79dBm  |
|                            | 802.11ax HE80                                                       | MCS11 | -46dBm  | MCS0 | -76dBm  |
|                            | 802.11ax HE160                                                      | MCS11 | -43dBm  | MCS0 | -73dBm  |
| 2.4G EVM                   | 802.11b≤-10 dB, 802.11g≤-25 dB, 802.11n≤-28dB, 802.11ax≤-35 dB      |       |         |      |         |
| 5G EVM                     | 802.11a≤-25 dB, 802.11n≤-28 dB, 802.11ac≤-32 dB, 802.11ax≤-35 dB    |       |         |      |         |
| Frequency Deviation (ppm)  | ±20ppm                                                              |       |         |      |         |
| Interface (WAN)            | 1*10/100/1000/2500M adaptive WAN port, support 48V PoE power supply |       |         |      |         |
| Interface (LAN)            | 1*10/100/1000M adaptive LAN port                                    |       |         |      |         |

|                          |                                                                                                                                                                    |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Button                   | Reset button (press and hold for 6-10 seconds to restore to factory settings)                                                                                      |
| Status Indicator         | WAN port indicator, LAN port indicator, three-color indicator (SYS-red, 2.4G-green, 5.8G-blue)                                                                     |
| Power Supply             | DC2.0, 12V, 2A, PoE 802.3at                                                                                                                                        |
| Max Power Consumption    | <18W                                                                                                                                                               |
| Dimensions               | 218*54.6mm                                                                                                                                                         |
| Weight                   | 0.96kg                                                                                                                                                             |
| Operation Temp/ Humidity | -10°C~+45°C, 5%~95% RH non condensing                                                                                                                              |
| Storage Temp/ Humidity   | -40°C~+70°C, 5%~95% RH non condensing                                                                                                                              |
| ESD                      | Air discharge: +/-8K, contact discharge: +/-6K                                                                                                                     |
| Surge                    | Common mode 2K, differential mode 1K                                                                                                                               |
| <b>Software</b>          |                                                                                                                                                                    |
| Home Page                | <b>Working mode:</b> Fat AP mode and Thin AP mode                                                                                                                  |
|                          | Wireless AP download rate, wireless AP upload rate, running time                                                                                                   |
|                          | Device information, device description, intranet information, and WIFI information                                                                                 |
| Support Mode             | <b>Gateway mode:</b> After the device is connected to the WAN through the WAN port, it uses static IP, DHCP, or PPPoE to access the Internet                       |
|                          | <b>AP mode:</b> The device covers the wireless network signal to the client or device, and uses an Ethernet cable to connect to the router and then access the WAN |
| Wireless Function        | QoS: WMM                                                                                                                                                           |
|                          | SSID broadcast                                                                                                                                                     |
|                          | Hide SSID function                                                                                                                                                 |
|                          | Transmit power setting                                                                                                                                             |
|                          | WiFi timed shutdown function                                                                                                                                       |
|                          | Spectrum navigation (5G priority)                                                                                                                                  |
|                          | Limit the number of wireless clients                                                                                                                               |

|                   |                                                                                                       |
|-------------------|-------------------------------------------------------------------------------------------------------|
|                   | Wireless MAC address filtering: support whitelist                                                     |
|                   | Number of SSID: 4 (2.4GHz) + 4 (5GHz), support Chinese SSID                                           |
|                   | Wireless encryption: OPEN, WPA/WPA2PSK-TKIPAES, WPA3PSK-AES                                           |
|                   | User isolation: isolation between wireless networks, isolation within AP                              |
|                   | QoS: WMM                                                                                              |
|                   | SSID broadcast                                                                                        |
| Network Function  | Firewall function                                                                                     |
|                   | Cloud platform server                                                                                 |
|                   | PPPoE function: support PPPoE dial-up function                                                        |
|                   | DHCP server: built-in DHCP server or external DHCP server                                             |
|                   | Connection method: static address, obtained from the management server, and obtained from the gateway |
| Device Management | System log                                                                                            |
|                   | Firmware upgrade                                                                                      |
|                   | Restore factory settings                                                                              |
|                   | Restore configuration information                                                                     |
|                   | Backup configuration information                                                                      |
|                   | Fat and thin AP switching function                                                                    |
|                   | Restart includes scheduled restart and immediate restart                                              |
|                   | Time management includes system display time and time synchronization                                 |

## DIMENSION



## PACKING LIST

|              | Content                                        | Qty | Unit |
|--------------|------------------------------------------------|-----|------|
| Packing List | WiFi6 dual-band 3000M 2.5G ceiling wireless AP | 1   | PC   |
|              | Screw                                          | 4   | PC   |
|              | User Guide                                     | 1   | PC   |
|              | Warranty Card and Certificate of Conformity    | 1   | PC   |

## CONTACT US



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