IAP6030L

Next-generation Wi-Fi 6 (802.11ax) Indoor Dual-band Wireless Access Point

Product Introduction

IAP6030L is a next-generation Wi-Fi 6 dual-band indoor access point and designed to meet rapidly rising demand for high capacity and bandwidth in indoor applications. Compliant with IEEE 802.11a/b/g/n/ac/ax standards, IAP6030L supports technologies such as OFDMA, MU-MIMO, TWT, and BSS coloring, providing a maximum bandwidth of 2.975 Gbps.
IAP6030L supports standalone mode, AC management mode, and cloud management mode.
IAP6030L delivers outstanding performance even in dense indoor deployment scenarios such as schools, hotels, stations, and airports.

Product Feature

High-performance Wi-Fi 6 access point

- Complies with Wi-Fi 6 (IEEE 802.11ax) standards
- Supports MU-MIMO and OFDMA to improve the user's Internet experience.
- Supports BSS Coloring mechanism.
- Provides up to 2.975 Gbps bandwidth (2.4 Gbps in the 5GHz band and 0.575 Gbps in the 2.4GHz band).

Robust security

- Supports PPSK for multi-password authentication and encryption.
- Supports MAC authentication, 802.1X authentication, Web authentication, and transparent authentication
- Supports WPA3 256-bit encryption.
- Supports VPN tunnel technologies such as IPSEC, SoftGRE, and CAPWAP.
- Supports WLAN DOS attack detection and protection, as well as suppression of wireless broadcast messages.
- Supports terminal isolation based on SSIDs, APs, and VLANs.

Intelligent Wi-Fi access point

- Works with the O&M platform to serve as a local Portal gateway, capable of managing 1 to 16 conventional APs.
- Enables local Portal authentication and customized Portal advertisement push on the web page.
- Provides various local data collection and statistical analysis services.
- Supports end-user network behavior management, recognition of mainstream domestic apps, and network behavior management and control based on SSID.

Smart Link connectivity management

- Actively monitors the link state with the access controller (AC) or gateway.
- Maintains existing terminal sessions and establishes new sessions when the AC is down.

Energy saving

- Power consumption is lower than 18W.
- Allows users to configure a timed shutdown policy for radio modules.

Effortless deployment and simplified O&M

- Supports PoE+ (802.3at) and local power options.
- Offers ceiling or wall-mounted installation options.
- Facilitates remote management via Telnet or SSH and automatic configuration retrieval from the cloud platform.
- Enables intelligent, visualized, and remote O&M, cloud diagnosis, fault alarms, and level-based and domain-based management.
- Supports centralized and local forward mode.

Feature-rich AP with centralized optimization and management

- Supports flexible operation modes including routing mode, Portal gateway mode, and bridge mode.
- Offers innovative AP functions, such as PPPoE, NAT, DHCP Server/Client, and wireless SSID and encryption settings.
- Supports up to 32 SSIDs and allows for setting parameters and security policies for each SSID individually.

Product Specification

Hardware specification

Item	Parameter description
Port	• 1 x 1 Gbps Ethernet port
Reset button	• 1 x Reset button
Power supply	• PoE+ (802.3at) • DC, 12V 1.5A
Antenna	• Internal antenna, 5 dBi gain
Operating frequency	• 802.11a/n/ac/ax: 5.150~5.350 GHz; 5.470~5.725 GHz; 5.725~5.850 GHz • 802.11b/g/n/ax: 2.40~2.4835 GHz
Spatial streams	• 2.4G: 2 × 2 MU-MIMO • 5G: 2 × 2 MU-MIMO
Max transmit power	• 26dBm (23 dBm per chain)
Modulation technique	• IEEE 802.11b:DSSS (DBPSK, DQPSK, CCK) • IEEE 802.11g/a: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) • IEEE 802.11n/ac: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM) • IEEE 802.11ax: OFDMA (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM)
Data rates	• IEEE 802.11b: 11/5.5/2/1Mbps • IEEE 802.11g/a: 54/48/36/24/18/12/9/6Mbps • IEEE 802.11n: 20 MHz: 6.5–144.4 Mbps 40 MHz: 13.5–300 Mbps • IEEE 802.11ac: 20 MHz: 6.5–173.3 Mbps 40 MHz: 13.5–400 Mbps 80 MHz: 29.3–867 Mbps • IEEE 802.11ax: 20MHz: 7.3 Mbps~286.8 Mbps 40MHz: 14.6 Mbps~573.6 Mbps 80MHz: 30.6 Mbps~1201 Mbps 160MHz: 61.3 Mbps~2402 Mbps
Indicator	• 1 x RUN indicator • 1 x WAN indicator • 1 x WiFi indicator
Power consumption	• 18W
Dimensions	• 6.30" x 6.30" x 1.57"(160 mm x 160 mm x 40 mm)
Weight	• 1.32 lbs (0.6 kg)
Operating temperature	• +23° F to +122° F (-5° C to +50° C)
Storage temperature	• -4° F to +158° F (-20° C to +70° C)
Relative humidity	• 5%–95% non-condensing

Software specification

Item	Parameter description
Max SSIDs	• 32
Max concurrent users	• 256 (Actual number of concurrent users varies according to the application environment and other factors.)
802.11n/ac/ax	• Automatic channel scan • 20MHz/40MHz/80MHz/160MHz channel bandwidth • DFS (Dynamic Frequency Selection) • TPC (Transmission Power Control) • U-APSD (Unscheduled Automatic Power Save Delivery)
802.11ax	• OFDMA • BSS Coloring • TWT (Target Wake Time)
Wi-Fi security and authentication	• WEP 64/128 • WPA/WPA2-PSK-TKIP • WPA/WPA2-PSK-CCMP • WPA/WPA2-802.1X-TKIP • WPA/WPA2-802.1X-CCMP • WPA/WPA2-PPSK • WPA3-ASE, WPA2/WPA3, WPA3-802.1X • WAPI-PSK/CA • MAC, Portal, Transparent Authentication and Dot1x Authentication (EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-SIM/AKA, EAP-FAST)
Local AP functions	• PPPoE Client, NAT, DHCP Server, DHCP Client • Configuration of local SSID, encryption and shared keys
QoS	• Rate limitation based on STAs, SSIDs, and APs • Maximum concurrent user limitation based on SSIDs • Radius bandwidth property delivery • voice QoS
Management	• Cloud-based and APP-based management • Network management and control: Telnet/SSH/CAPWAP • Remote upgrades through FTP • NTP, FTP/TFTP, local CLI command reference, and local Web (Web pages can be opened and closed locally or remotely.)

Note:
- Specifications are subject to change.
- Actual operating frequency varies according to the regulations of different countries and regions.
- Actual transmit power varies according to the regulations of different countries and regions.
- Actual number of concurrent users varies according to the application environment and other factors.