IAP6018L

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

Product Introduction

IAP6018L is a next-generation indoor dual-band Wi-Fi 6 wireless Access Point (AP). It complies with IEEE 802.1a/b/g/n/ac/ax standards, adopts 2x2 MU-MIMO technology, supports 4 spatial streams, and provides up to 1.775Gbps bandwidth.

IAP6018L delivers optimal performance in dense indoor scenarios such as schools, SOHOs, and business centers.

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. Compared to 802.11ac technology, channel utilization is higher, overall performance is improved by 25%.
- Provides up to 1.775 Gbps bandwidth (1.2 Gbps in the 5GHz band and 0.575 Gbps in the 2.4GHz band).
- Supports up to 256 terminals.

Smart link 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.

Security audit

- Provides a security audit data interface.
- Collaborates with IDL's O&M platform to function as an information security management system at public Internet access service sites.

Flexible virtual AP technology

- Encrypts and isolates SSID subnets or VLANs.
- Configures separate authentication methods and encryption mechanisms for each SSID.

Robust security

- Supports MAC authentication, 802.1x authentication, Web authentication, and transparent authentication.
- Supports WEP, WPA/WPA2-PSK, WPA2/WPA3-PSK, WPA3-PSK, and OPEN authentications.
- Works with the cloud O&M platform to enable SMS-based and APP-based portal authentication.
- Supports rate limitation based on terminals and SSIDs.
- Supports terminal isolation based on SSIDs, APs, and VLANs.

Effortless deployment and simplified O&M

- Supports desk-mounted, wall-mounted, and ceiling-mounted installation methods.
- Supports both 12V DC and PoE power supply.
- Supports local, remote, cloud-based, and APP-based management options to simplify Operation and Maintenance.

Energy saving

- Power consumption is lower than 15W.
- Allows users to configure a timed shutdown policy for radio modules.

Product Specification

Hardware specification

Item	Parameter description
Port	• 1 x 10/100/1000Mbps auto-adaptive WAN port • 1 x 10/100/1000Mbps auto-adaptive LAN port
Reset button	• 1 x Reset button
Power supply	• 802.3af/at PoE/PoE+ • DC, 12V/1.5A
Antenna	• Internal antenna
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	• 23 dBm for combined channel, and 20 dBm per channel
Modulation technique	• IEEE 802.11b: DSSS (DBPSK, DQPSK, CCK) • IEEE 802.11a/g/n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) • IEEE 802.11ac: 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:11/5.5/2/1 Mbps • IEEE 802.11a/g: 54/48/36/24/18/12/9/6 Mbps • IEEE 802.11n: 20 MHz: 6.5 Mbps~144.44 Mbps 40 MHz: 13.5 Mbps~300 Mbps • IEEE 802.11ac: 20 MHz: 6.5 Mbps~173.3 Mbps 40 MHz: 13.5 Mbps~400 Mbps 80 MHz: 29.3 Mbps~867 Mbps • IEEE 802.11ax: 20 MHz: 7.3 Mbps~286.8 Mbps 40 MHz: 14.6 Mbps~573.6 Mbps 80 MHz: 30.6 Mbps~1201 Mbps
Indicator	• 1 x SYS indicator • 1 x LAN indicator • 1 x WAN indicator
Power consumption	• 15W
Dimensions	• 186mm x 186mm x 43mm
Weight	• 0.375kg
Environment	• Operating temperature: -5℃ ~ +45℃ • Storage temperature: -20℃ ~ +70℃ • Relative humidity: 5%-95%RH (non-condensing)

Software specification

Item	Parameter description
Max SSIDs	• 32
Max concurrent users	• 256
802.11n/ac	• 20 MHz/40 MHz/80 MHz channel bandwidth • Dynamic frequency selection (DFS) • Transmit power control (TPC)
802.11ax	• OFDMA • BSS Coloring • TWT (Target Wake Time)
Wi-Fi security and authentication	• OPEN • WEP, WPA/WPA2-PSK, WPA2/WPA3-PSK, WPA3-PSK • Portal-based, MAC-based and transparent authentication
Protocol	• IPv4 and IPv6
QoS	• Rate limitation based on terminals, SSIDs, and APs • Maximum concurrent user limitation based on SSIDs • Spectrum navigation
Management	• Network management and control via O&M platform or APP • Network management via local CLI or local WebUI • Network management via Telnet or SSH • Upgrade through CAPWAP or FTP • NTP, SYSLOG

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.