IAP6018-O

Wi-Fi 6 (802.11ax) Outdoor Dual-band Wireless Access Point

Product Introduction

IAP6018-O is a next-generation Wi-Fi 6 dual-band access point, designed to collaborate with IDL's AC, providing an enterprise-grade wireless experience. Compliant with IEEE 802.11a/b/g/n/ac/ax standards, IAP6018-O provides a maximum bandwidth of 1.775 Gbps.
IAP6018-O supports standalone, controller-managed, and cloud-managed modes.

IAP6018-O is designed with an IP68-rated enclosure and can adapt to various scenarios, such as schools, enterprises, stations, stadiums, oil fields, scenery spots, and remote settlements.

Product Feature

High-performance Wi-Fi AP

- Complies with Wi-Fi 6 (IEEE 802.11ax) standards.
- Provides up to 1.775 Gbps bandwidth (0.575 Gbps in the 2.4 GHz band; 1.2 Gbps in the 5 GHz band).
- The integrated BLE beacon technology enables the AP to cooperate with third-party beacon management platforms to boost user engagement.

Intelligent Wi-Fi AP

- 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.

Robust security

- With PPSK, each user obtains a unique PSK and the temporary password expires automatically, thus reducing the impact of password leakage.
- Supports 802.1X, MAC-based, Web-based, and transparent authentication mechanisms.
- Supports WPA3 with 256-bit encryption.
- Supports VPN access such as IPSEC, SoftGRE, and CAPWAP.
- Allows use of SMS, Facebook®, or WeChat® to complete authentication.
- Supports WLAN DOS protection and attack detection, as well as radio broadcast message suppression.
- User isolation is based on SSID, AP, or VLAN.

Easy to deploy, simple to manage

- With the highest level of dustproof and waterproof (that is IP68), the device is adaptable to harsh environments.
- Supports PoE+ (802.3at) power mode and built-in high-performance antennas.

- Supports ceiling or wall-mounted installation options.
- Supports remote management over Telnet or SSH and automatic download of configurations from the cloud platform.
- Supports intelligent, visualized, and remote O&M, cloud diagnosis, fault alarm, and level-based and domain-based management.
- Supports centralized forward mode and local forward mode.

Feature-rich AP with centralized optimization and management

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

Energy saving

- Power consumption is lower than 25W.
- Allows users to configure a timed shutdown policy for radio modules.

Product Specification

Hardware specification

Item	Parameter description
Port	• 1 x GE WAN port • 1 x SFP port • 1 x GE LAN port
Bluetooth	• 1x Internal Bluethooth 4.2
Reset	• 1 x Reset button
Power supply	• 802.3at (PoE+)
Antenna	• Internal antenna with 8 dBi gain
Operating frequency	• 802.11a/n/ac/ax: 5.150~5.850 GHz • 802.11b/g/n/ax: 2.40~2.4835 GHz
Spatial streams	• 2.4G: 2x2 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: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM)
Data rates	• IEEE 802.11b: 11/5.5/2/1Mbps • IEEE 802.11g: 54/48/36/24/18/12/9/6Mbps • IEEE 802.11n: 20 MHz: 6.5 Mbps~144.4 Mbps 40 MHz: 13.5 Mbps~400 Mbps • IEEE 802.11a: 54/48/36/24/18/12/9/6Mbps • 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: 20MHz: 7.3 Mbps~286.8 Mbps 40MHz: 14.6 Mbps~573.6 Mbps 80MHz: 30.6 Mbps~1201 Mbps
Indicator	• 1 x Power/status indicator • 1 x WAN/SFP indicator • 1 x WLAN indicator
Power consumption	• 25W
Dimensions	• 10.24" x 8.27" x 3.15" (260 mm x 210 mm x 80 mm)
Weight	• 5.28 lbs (2.40 kg)
Operating temperature	• -40° F to +131° F (−40° C to +55° C)
Storage temperature	• −40° F to +185° F (−40° C to +85° C)
Relative humidity	• 0–95% noncondensing
Ingress protection ratings	• IP68

Software specification

Item	Parameter description
Max SSIDs	• 32
Max concurrent users	• 256
802.11n/ac/ax	• Automatic channel scanning • 20 MHz/40 MHz/80 MHz channel bandwidth • A-MPDU, A-MSDU • Dynamic frequency selection (DFS) • Transmit power control (TPC) • Unscheduled automatic power save delivery (U-APSD)
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-limiting based on STA/SSID/AP • Maximum concurrent user limiting based on SSID • Radius bandwidth property delivery • Voice QoS
Management	• Platform-based and APP-based management • Remote management: Telnet, SSH, CAPWAP • Network management and control: CAPWAP • Remote upgrades through FTP • Batch upgrades through multi-service gateway

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.