Maipu IAP300-815-PE Wall Mount Wi-Fi6 AP Datasheet

Overview

Maipu IAP300 series access point is brand new series based on Wi-Fi6 technology. IAP300-815-PE is a high-performance entry level Wi-Fi6 AP for indoor room Wi-Fi coverage scenarios. It supports PoE power supply. Compliant with 802.11a/b/g/n/ac/ax Wi-Fi protocol, IAP300-815-PE supports MU-MIMO dual-stream technology and offers built-in omnidirectional antennas. It can operate under 2.4GHz and 5GHz frequency, providing high-speed wireless access up to 1775Mbps bandwidth. It is wall mounted design for room wireless coverage. It is an ideal choice for many wireless scenarios, such as hotels, resorts, branch offices, chain stores, schools, etc.

IAP300-815-PE(V2)   IAP300-815-PE(V3)

Highlight Features
- Support 802.11ax MU-MIMO Technology
- Central Managed by IGW500 Internet Gateway
- Seamless Layer2 Roaming Supported
- Self-Provisioning Networking Supported
- Lifetime Free Maipu MMC Cloud Management

Key Features

● **High-speed Gigabit dual-band wireless**

The device supports 2.4GHz and 5GHz dual-band concurrent communication. The 2.4GHz and 5GHz bands adopt a new generation of Wi-Fi wireless standard 802.11ax, providing 2.4GHz 574mbps and 5GHz 1201mbps. The highest access rate of the whole device is 1775Mbps. Compared with the traditional 802.11ac wireless mode, the throughput is significantly improved, bringing a real gigabit high-speed extreme experience.

● **Intelligent AP management technology, AP zero configuration, plug and play**

In the fit AP application mode, the zero-configuration fit AP can be found and automatically connected to the IGW500 series converged internet gateway through the L2/L3 network. The converged gateway can configure, operate and manage the fit AP. IGW500 converged gateway supports rich L2/L3 functions, and forms the management and monitoring of fit AP through the networks.

● **Support uplink and downlink MU-MIMO, and the wireless effective capacity exceeds 100**

IAP300-815-PE supports MU-MIMO (multi-user multi-input multi-output), realize concurrent transmission of multiple Wi-Fi users, double the wireless effective capacity, and easily deal with high-density scenes. The wired adopts two gigabit ethernet interfaces for uplink, without the bottleneck of wireless bandwidth.

5GHz has more abundant bandwidth resources and less wireless interference. 802.11ax protocol adopts the latest modulation technology to greatly improve the wireless rate. Compared with traditional device, it has higher speed and larger capacity. At the same time, it realizes the effects of intelligent load and 5GHz prior, improves the utilization of 5GHz band, and improves the total capacity.

● **Unique antenna signal optimization algorithm, improving AP signal coverage**

The unique antenna signal optimization algorithm is adopted to make IAP300-815-PE signal have wide coverage and strong penetration ability. In the standard scenario, a single AP can cover more than 25 meters reducing customers' investment in hardware equipment.

● **SSID + VLAN binding, ensuring information security**

IAP300-815-PE supports transmitting four SSIDs at the same time. By setting different passwords for each SSID, dividing individual VLAN ID and assigning different network segments, it is easy to realize the effect that different wirelesses (SSID) transmit different services. By this way, sensitive information can be safely isolated internally.

● **One-key network optimization, improving the maintenance efficiency**

IAP300-815-PE support one-key network auto channel optimization function. This will greatly improve the maintenance efficiency and reduce the troubleshooting cost.

● **Green design and energy saving**

IAP300-815-PE adopts professional green environmental protection and low power consumption design. The device has low calorific value and supports standard PoE power supply mode. It can be powered by Maipu PoE switch, and the PoE distance can reach around 100m.

Technical Specifications

Product Model	IAP300-815-PE(V2)	IAP300-815-PE(V3)
Hardware Specification		
Interface	1*1000M Ethernet WAN(PoE) 1*1000M Ethernet LAN	1*1000M Ethernet WAN(PoE) 4*1000M Ethernet LAN
PoE Power supply	Support 802.3af	
Wireless Band	2.4-2.483GHz 5.150-5.350GHz, 5.725-5.850GHz	
MU-MIMO	Support IEEE 802.11a/b/g/n/ac/ax MU-MIMO 2*2@2.4GHz, 2*2@5GHz	
RF transmission speed	1775Mbps (2.4GHz 2*2: 574Mbps, 5GHz 2*2: 1201Mbps)	
RF working bandwidth	802.11ax: HT80, HT40, HT20 802.11ac: HT80, HT40, HT20 802.11n: HT40, HT20	
RF transmission power (max.)	2.4G:14dbm+/-1.5db@1Mbps 5G:14dbm+/-1.5db@6Mbps	
Modulation	OFDMA: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM OFDM: BPS@6/9Mbps, QPSK@12/18Mbps,16-QAM@24Mbps,64-QAM@48/54Mbps, DSSS: DBPSK@1Mbps, DQPSK@2Mbps, CCK@5.5/11Mbps MU-MIMO-OSDM (11n): MCS 0-15 MU-MIMO-OSDM (11ac): MCS 0-9ß MU-MIMO-OSDM (11ax): MCS 0-11	
Overall power consumption	≤10W	
Working temperature	0~45℃	
Working humidity	10%~90%/RH, non-condensing	
Altitude	≤5000m	
Overall dimension (L * W * H)	86mm*86mm*54mm	162mm*86mm*45mm
Software specification (Collaborating with IGW500 Internet Gateway)		
Recommend STAs	64-128	
Multiple SSIDs	8	
STA Authentication	OPEN, Portal, WPA2-Personal, WPA2-Enterprise	
AP Working Mode	Fit AP (Access Controller Management)	
AC Discovery	Broadcast, DHCP Option43, DHCP Option52(DNS)	
AP Remote Control	Limit Numbers of Access Client, Restore AP, Restart AP Manually/Regularly	
AP Status Report	Traffic Statistics, RF Parameters, Memory/CPU Utilization, STA Information	
STA Management	Load Balance Based on Wireless Clients/RF(2.4GHz&5GHz), L2 Roaming	
Portal Authentication	Local Portal, External portal, Authentication-free IP, Authentication-free MAC, Password-free Authentication SSID, Portal No-sense Authentication	
Wireless QoS	Bandwidth Limitation Based on AP Group/Service Name, Downlink/Uplink Bandwidth Control	
Wireless ACL	IP Access List, Time Rule List	
Management	Access Controller Management, Cloud Management	

Order Information

Model	Description
IAP300 Series Wi-Fi6 Access Point	
IAP300-815-PE	V2 Version: Wall mount Wi-Fi6 802.11a/b/g/n/ac/ax, Dual frequency band, dual mode, forwarding performance of the whole device 1775Mbps, 2:2 MU-MIMO, inbuilt antennas, PoE power input, 1*1000M RJ45 WAN (PoE), 1*1000M RJ45 LAN
IAP300-815-PE	V3 Version: Wall mount Wi-Fi6 802.11a/b/g/n/ac/ax, Dual frequency band, dual mode, forwarding performance of the whole device 1775Mbps, 2:2 MU-MIMO, inbuilt antennas, PoE power input, 1*1000M RJ45 WAN (PoE), 4*1000M RJ45 LAN

Application Scenario

Scenario One: Campus Networking
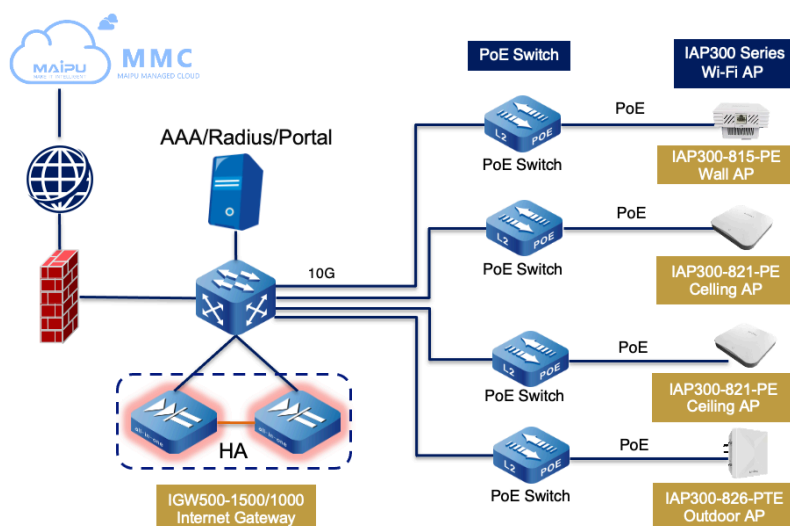
Highlights:
- IGW500-1500/1000 for large sized network
- IGW500 deployed as controller mode
- IGW500 1+1 backup for high availability
- IGW500 working with existing radius server

Scenario Two: Branch Networking
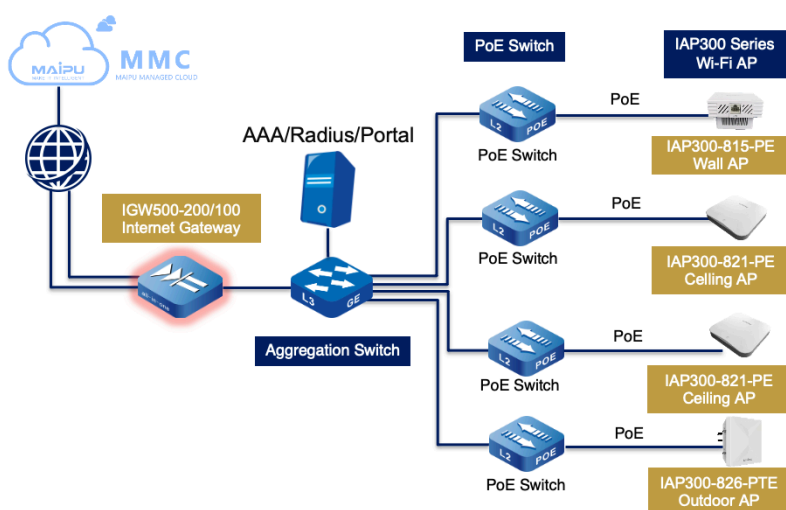
Highlights:
- IGW500-200/100 for Small sized network
- IGW500 deployed as gateway mode
- IGW500 working with existing radius server

Scenario Three: Office Networking

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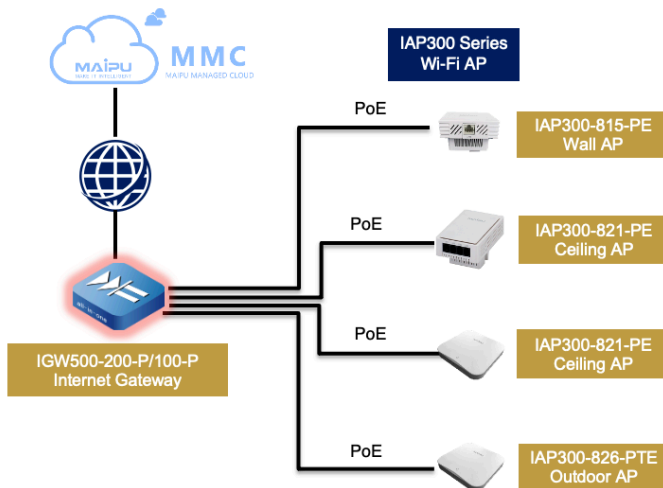
Highlights:
- IGW500-200/100-P for office network
- IGW500-200/100-P integrated PoE interfaces
- IGW500-200/100-P integrated with local portal

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