WA2600-726-PTE AX1800 Outdoor Wi-Fi6 AP Datasheet

Overview

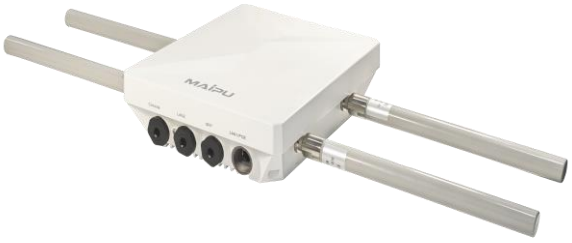
The new generation series 802.11ax wireless access point WA2600-726-PTE independently developed by Maipu is an outdoor wireless access device (AP) that supports the latest 802.11ax technical standard. The product complies with the IEEE 802.11a/b/g/n/ac/ax standard, adopts a hardware-independent dual-frequency design, four spatial streams, and the whole machine can provide up to 1.8 Gbps access rate.

WA2600-726-PTE(M1) adopts a built-in antenna design and WA2600-726-PTE(M2) adopts external antenna design, provide customers with different options of directional coverage and omnidirectional coverage, which are both simple and elegant with convenient deployment. WA2600-726-PTE is outdoor pole mounted design for outdoor wireless coverage. It is suitable for large outdoor wide area coverage in financial park square, outside office building, smart city, etc. It comprehensively meets the deployment requirements of customers' outdoor scenes.

WA2600-726-PTE(M1): Inbuilt directional antennas, dual frequency, dual mode, 1.8Gbps, 2:2 MIMO, PoE power input, IP68, 1*1000M Combo Port (PoE), 1*1000M LAN Port.

WA2600-726-PTE(M2): External omnidirectional antennas, dual frequency, dual mode, 1.8Gbps, 2:2 MIMO, PoE power input, IP68, 1*1000M Combo Port (PoE), 1*1000M LAN Port.

WA2600-726-PTE(M1)



WA2600-726-PTE(M2)

Highlight Features

- 802.11ax MU-MIMO Technology Supported
- Central Managed by WNC6600 Series Access Controller
- 802.11k/v and seamless Layer2/3 Roaming Supported
- Self-Provisioning Networking Supported
- Rich Security Features for Wireless Network
- 1*1000M Combo Ports + 1*1000M PoE Out Interface
- Outdoor Pole Mounted Installation Design

Key Features

Gigabit optical port multiplexing

The WA2600-726-PTE outdoor AP provides up to two gigabit Ethernet ports and one gigabit SFP port for multiplexing, which can adapt to different customer's wired network link forms on site. It supports the SFP optical port to undertake data transmission. The Ethernet uplink port is used for the power taking of the PoE adapter. The networking is more flexible and convenient.

High Performance Wi-Fi6 Access Point

The device supports dual-band concurrent 2.4GHz and 5GHz and supports Wi-Fi6 (802.11ax) standard protocol. It adopts 1024QAM modulation mode. The 5GHz band supports 2 spatial streams with a maximum negotiated rate of 1.2Gbps. The 2.4GHz band supports 2 spatial streams with a maximum negotiated rate of 0.6Gbps. The total wireless access rate of the device can reach 1.8Gbps.

It also integrates MU-MIMO and OFDMA technologies to subdivide the wireless channel into more sub channels, enabling simultaneous communication with multiple terminal devices. When multiple users access the internet at the same time, the user experience is significantly improved. It supports BSS Color spatial reuse function to color and use different mechanisms to process the basic service set, reducing interference, improving channel utilization, and achieving effects such as intelligent load balancing and 5G priority. It improves the 5G band utilization and increases the total number of devices.

Support 802.11k/v protocols for enhanced Wi-Fi roaming

The WA2600-726-PTE supports intelligent fast roaming technology, significantly improving user experience when mobile clients move between APs. By optimizing the switching process between APs and utilizing techniques like PMK Caching, it ensures seamless mobility and smooth roaming. This enhancement is crucial for maintaining service continuity and reliability, especially for latency-sensitive applications running over the WLAN.

Compared to basic roaming solutions, this fast-roaming technology provides quicker AP switching, reduced packet loss, and a smoother experience for roaming clients. This is essential for mobility-enabled WLAN applications.

Comprehensive Security Protection

Together with the Maipu independently developed wireless controller, WA2600-726-PTE supports 802.1x authentication, MAC authentication, WEB authentication and other authentication methods to ensure network security.

It supports Multiple SSID technology, WA2600-726-PTE supports up to 16*SSIDs, the administrator can set different passwords for each SSID, divide separate VLAN IDs, and easily achieve the effect of transmitting different services on different wireless networks (SSIDs). It can implement user isolation based on VLAN to ensure the security of data services in each VLAN.

It supports Wireless Intrusion Detection/Prevention (WIDS/WIPS), supports blacklists, whitelists and other wireless user access control features to detect, identify and counteract illegal wireless devices for effective blocking. At the same time, it also supports protection against ARP, SYN, port scanning and other network attacks to comprehensively build a secure and reliable network for users.

Convenient Deployment and Intelligent Management

WA2600-726-PTE provides a portable design with a single arm handle and installation to ensure that the construction personnel always have one hand holding the ladder during ladder construction, avoiding device falling or even personal injury in operations with high risks such as arm clips and hugging.

WA2600-726-PTE can be automatically discovered by Maipu WNC6600 Series Wireless Controller and automatically download the configuration. The device automatically goes online with zero parameter configuration. It can be installed where wireless signal coverage is required to achieve truly flexible deployment, on-demand purchase and plug-and-play.

It can be managed by Maipu Matrix Center SNMP management system, this is a wired and wireless management platform for configuration management, topology management, fault management, performance monitoring, and upgrade management to greatly improve network operation efficiency.

Environmentally Friendly Design and Energy Saving

WA2600-726-PTE integrates energy-saving technologies such as target wake-up time technology, MIMO power saving technology, and packet power control technology. By reducing the number of terminal wakeups, improving antenna efficiency, and integrating highly efficient power supply designs, it achieves energy saving and power saving.

Technical Specifications

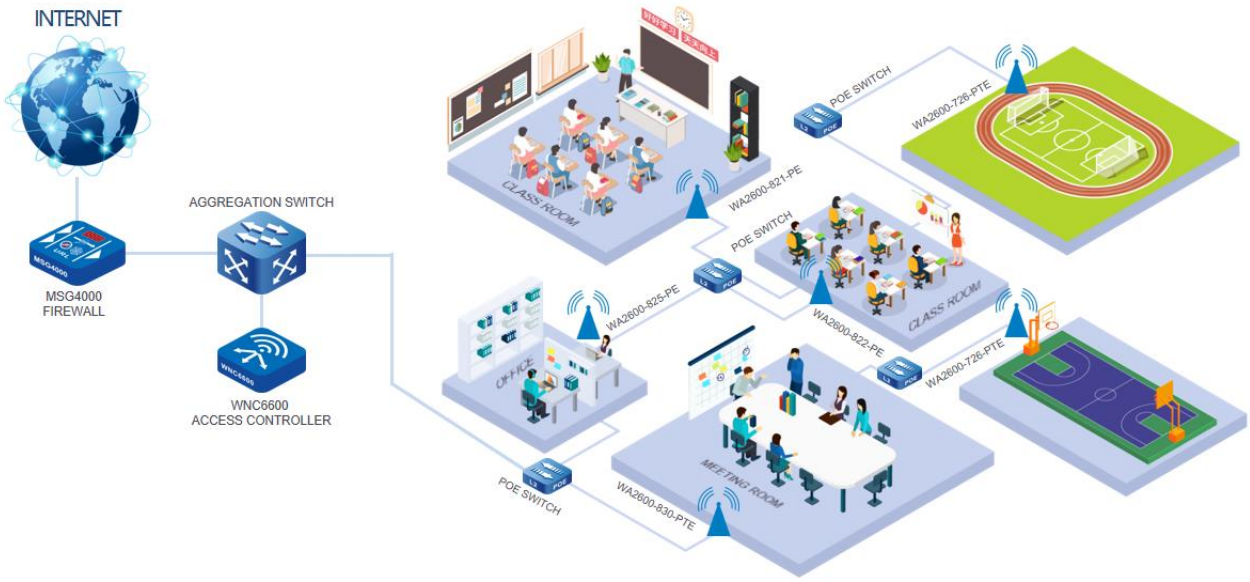
Product Model	WA2600-726-PTE	WA2600-726-PTE
Version	M1	M2
Interface Specification		
Service Port	1*10/100/1000M Base-T adaptive Ethernet Combo Port, 802.3at PoE (LAN1) 1*1000M Base-X SFP Fiber Combo Port 1*10/100/1000M Base-T adaptive Ethernet Port, 6.5W PoE Out (LAN2)	
Indicators	1*Multi-Color LED (For System and Radio status)	
Other Port	1*Rest Button (Factory reset; WPS) 1*RJ45 Console Port	
Environment Specification		
Working Temperature	-30℃ to +55℃	
Working Humidity	0% to 100% non-condensing	
Storage Temperature	-50℃ to +85℃	
Storage Humidity	0% to 100% non-condensing	
IP Rating	IP68	
Weight	1.9 kg	
Dimension (W*D*H) mm	275mm*230mm*80mm	
Hardware Specification		
Installation Mode	Pole Mounting	
Power Supply	PoE: IEEE 802.3af/802.3at-compliant (compatible).	
Power Consumption	<25W	
Radio Specification		
RF Design	Dual-radio design, one 2.4 GHz radio and one 5 GHz radio - Radio1: 2.4 GHz, 2 streams: 2*2 - Radio2: 5 GHz, 2 streams: 2*2	
Operating Bands (Country-specific restrictions apply)	- Radio1: 2.400 to 2.4835GHz - Radio2: 5.150–5.350GHz, 5.47–5.725GHz, 5.725–5.850GHz	
Transmission Rate	- 802.11b: 1Mbps, 2Mbps, 5.5Mbps, 11Mbps - 802.11a/g: 6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps - 802.11n: 6.5Mbps-300Mbps (MCS0-MCS31, HT20-HT40), 400Mbps with 256-QAM - 802.11ac: 6.5Mbps-866Mbps (MCS0-MCS9, NSS=1-2, VHT20-VHT80) - 802.11ax (2.4GHz): 8.6Mbps-574Mbps (MCS0-MCS11, NSS=1-2, HE20-HE40) - 802.11ax (5GHz): 8.6Mbps-1,202Mbps (MCS0-MCS11, NSS = 1-2, HE20-HE80)	
Antenna	Built-in Directional Antennas	External Omni-directional Antennas
Antenna Gain	2.4 GHz: 10 dBi 5 GHz: 10 dBi Directional Antenna	External Antenna (Fiberglass Antenna)： 2.4 GHz: 7 dBi 5 GHz: 8 dBi
Maximum Transmit Power	2.4 GHz: +27 dBm 5 GHz: +27 dBm The actual transmit power complies with the regulatory requirements for radio frequency emissions in various countries and regions	

Transmit Power Adjustment	1 dBm
Modulation Mode	- 802.11b: BPSK, QPSK, CCK - 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM - 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM - 802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
Modulation and Encoding	- Low Density Parity Check (LDPC) - Maximum Likelihood Detection (MLD) - Beamforming
Advanced RF Features	- Channel Rate Adjustment, include TPC (Transmit Power Control) - ACS (Automatic Channel Scanning)
WIFI Specification	
WIFI Standards	- IEEE 802/11a/b/g/n/ac/ax
SSID Numbers	8*SSIDs
Channelization	20, 40, 80 MHz
Recommend Users	64~125
Working Mode	Fit Mode
Security Type	Open, PSK, WPA-Personal, WPA-Enterprise, WPA2-Personal, WPA2-Enterprise, WPA3-Personal, WPA3-Enterprise, Portal, 802.1X, Radius
Working Bandwidth	- 802.11ax: HE80, HE40, HE20 - 802.11ac: VHT80, VHT40, VHT20 - 802.11n: HT40, HT20
Date Rate	- Radio1: 2.4 GHz, 574 Mbps - Radio2: 5 GHz, 1201Mbps - Combined: 1.8 Gbps
MIMO Technologies	- Multi-User Multiple Input Multiple Output (MU-MIMO) - Maximum Ratio Combining (MRC) - Space-Time Block Coding (STBC) - Cyclic Delay/Cyclic Shift Diversity (CDD/CSD) - Dynamic MIMO power saving
Energy Saving	- U-APSD - SM Power Save - Green AP mode
Advanced WIFI Features	- Orthogonal Frequency Division Multiple Access (OFDMA) - Short GI (Short Guard Interval) - DFS (Dynamic Frequency Selection) - Spectrum Navigation

Order Information

Model	Description
WA2600 Series Wi-Fi6 Access Point	
WA2600-726-PTE	M1 Version: WA2600-726-PTE, Outdoor pole mount Wi-Fi6 802.11a/b/g/n/ac/ax, Dual frequency, dual mode, forwarding performance of the whole device 1.8Gbps, 2:2 MIMO, PoE power input, inbuilt directional antennas, IP68, 1*1000M Combo Port (PoE), 1*1000M LAN Port. (installation accessory included)
WA2600-726-PTE	M2 Version: WA2600-726-PTE, Outdoor pole mount Wi-Fi6 802.11a/b/g/n/ac/ax, Dual frequency, dual mode, forwarding performance of the whole device 1.8Gbps, 2:2 MIMO, PoE power input, external omni-directional antennas(antennas not included), IP68, 1*1000M Combo Port (PoE), 1*1000M LAN Port. (installation accessory included)
External Antenna	
ANT-WQ3D-GN15	Outdoor Dual-Band Omnidirectional Integrated Fiberglass Antenna, 2.4 GHz 7 dBi, 5 GHz 8 dBi, N-Type Female Connector

Application Scenario



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