

Outdoor Intelligent AP

WAP2100-I Series



Product Overview

WAP2100-I is an outdoor wireless AP developed by BDCOM for various outdoor mid- and high-density wireless scenarios such as parks, scenic spots, factories, warehouses, and smart cities.

With Qualcomm chip, WAP2100-I has high throughput and strong concurrent access capability. WAP2100-I is compatible with two modes: built-in antenna and N-type connector external expansion antenna, to meet the wireless coverage requirements of various scenarios. WAP2100-I has built-in uplink optical ports and supports standard POE power supply, making AP networking solutions and installation sites more flexible. WAP2100-I can reach IP67 protection level and 6KV lightning protection, and is your best choice for various wireless network solutions.



- 802.3af/at standard POE power input
- Energy efficiency design



- 802.11a/b/g/n/ac/wave2 up to 32 SSID
- Max. 200 concurrent users



- FIT and FAT AP mode
- SNS, SMS and white-list login authentication



- Universal network management
- Cloud platform
- Portal 2.0

Product Characteristics

Flexible Multi-port Solutions

WAP2100-I provides multiple wired network ports. When the AP needs to carry key services, both two of AP's network ports are used for uplink bundling and backup to provide additional protection. When some areas are too far to be powered by POE, or the construction is too difficult, the second network port can be used to implement AP cascading deployment and simplify deployment.

High-performance Wireless Solutions

WAP2100-I adopts Qualcomm chip, supports 802.11a/b/g/n/ac/wave2 protocols, and has high throughput and good stability. WAP2100-I, with 2.4&5.8GHz frequency band, can support 1267Mbps air interface bandwidth, which can meet the maximum of 80 terminal user accesses.

WAP2100-I supports wireless load balancing. In high-density access scenarios, WAP2100-I can ensure balanced traffic distribution among multiple APs to avoid congestion; it can also achieve reasonable allocation of terminals within a single AP through the 2.4GHz and 5GHz spectrum, which ensures that the AP can access more end users, and provide a good Internet experience.

Reliable Security Protection

WAP2100-I has attained the IP67 protection level so that they can be mounted in various outdoor scenes such as iron towers, telegraph poles, and building exteriors. At the same time, WAP2100-I provides

Considerate Enterprise-level Wireless Network Optimization

WAP2100-I can not only access a large number of users, but also supports wired and wireless QoS, automatic terminal identification, automatic channel selection, automatic power adjustment, dynamic receiving sensitivity and other carrier-level network optimization features, providing enterprises with easy-to-use and practical WLAN services.

WAP2100-I can also work with WSC6100 series wireless controllers to realize the "one-key wireless automatic optimization", ensuring that users complete network tuning by themselves when the wireless environment changes and user experience declines, without waiting for manufacturers or agents to come to service.

Comprehensive Wireless Security Features

WAP2100-I supports WEP/WPA/WPA2 access modes, wireless IPS/IDS, the layer-2 user isolation, centralized ACL control.

WAP2100-I supports portal authentications such as local and WeChat, and supports docking with the BCP8200 cloud platform, to provide users with a wealth of access control solutions.

WAP2100-I provides illegal AP detection and subsequent processing, wireless attack defense, static black and white lists, to reduce the illegal intrusion on wireless networks.

Rich Manageable Features

WAP2100-I supports the integrated design of fat and thin APs, which can be individually configured, and can also be connected to BDCOM WSC6100 series wireless ACs to realize CLI, Web, SNMP and other management modes.

WAP2100-I can also be managed through the BDCOM BCP8200 cloud platform and operation and maintenance platform that can provide one-stop solutions for authentication, push, operation and maintenance, and security.

System Performance

Item	WAP2100-I22C	WAP2100-I22C-D
Interface		
Port	1 Console port 1 Gigabit SFP uplink port 1 Gigabit TX combo port (PoE)	1 Console port 1 Gigabit SFP uplink port 1 Gigabit TX combo port (PoE)
Button	RESET	RESET
Wireless parameters		
	802.11a/b/g/n/ac/wave2	802.11a/b/g/n/ac/wave2
Standard	MIMO 2x2/2x2 1267Mbps	MIMO 2x2/2x2 1267Mbps
	≥256 user access	≥256 user access
Best performance	≥60 users@2M	≥60 users@2M
	≥32 SSIDS	≥32 SSIDS
Working frequency	2.412-2.4835 GHz 5.150-5.250 GHz 5.250-5.350 GHz 5.470-5.725 GHz 5.745-5.825 GHz	2.412-2.4835 GHz 5.150-5.250 GHz 5.250-5.350 GHz 5.470-5.725 GHz 5.745-5.825 GHz
Antenna	External antennas	Built-in antennas
Output power(dBm)	27	27
Appearance		
Chassis	Size/Dimensions (WxDxH)(mm)	282x232x64
	Weight(Kg) (empty)	2.5
Package	Dimensions (WxDxH)(mm)	440x269x128
	Weight (Kg)	2.9
Power supply	802.3at POE	802.3at POE
Consumption	No-load(W)	10
	Full-load(W)	16
Operating	Temperature	-20℃ ~ 65℃
	Humidity (non-condensing)	10%~95% (non-condensing)

Technical Specifications

Working mode

- AP Mode
- Router mode
- Bridge Mode

IP functions

- IPv4
- DHCP
- NTP

Wireless access

- 802.11 protocols
- Multiple SSIDs
- Wireless user isolation (VLAN-based)
- SSID-based user limit
- Automatic aging for user without traffic
- Online state detection
- SSID hidden
- Multi-country code deployment
- Open System
- WPA authentication
- WPA2 authentication
- WPA & WPA2 hybrid authentication

Application added

- Option43 to discover AC
- DNS to discover AC

Wireless authentication

- Local Portal authentication
- Cloud Portal authentication
- WeChat authentication
- Account-based time period control
- Account-based bandwidth control
- Authentication-free whitelist

CAPWAP

- Option43 to discover AC
- DNS to discover AC
- AC and AP cross-layer three networking
- AC and AP cross-NAT networking
- Layer-2 roaming
- Layer-3 roaming
- AC and AP clock synchronization
- AC and AP version synchronization
- AC and AP configuration delivery

Management

- Telnet
- SSH
- Web
- SNMPv2 / v3
- Global LED switch
- Global AP states display
- Global terminal states display
- Network diagnostic tool
- Access to BDCOM Cloud Operating Platform

Security

- ACL filtration
- MAC filtration
- URL filtration
- DDoS anti-attack
- De-Auth anti-attack
- Rogue AP detection

QoS

- 802.11e/WMM
- ESS-based traffic rate limit
- Global traffic rate limit
- VLAN-based traffic rate limit
- User-based traffic rate limit
- AP-based flow load balancing
- Frequency-based flow load balancing

Wireless optimization

- AP channel and power static setting
- AP channel and power dynamic setting
- 5G prior access
- Restrict access of low-rate users
- Preset and customized scene management
- One-click network optimization

Standard Feature

- 802.11d
- 802.11e
- 802.11h
- 802.11i

Ordering Information

WAP2100-I22C	BDCOM WAP2100-I22C outdoor intelligent AP, 1 Gigabit TX/SFP combo port, 4 NK antenna interfaces, 802.11a/b/g/n/ac/wave2, 1257Mbps Wireless, protection grade IP67, POE power supply, POE devices need to purchase.
WAP2100-I22C-D	BDCOM WAP2100-I22C-D outdoor intelligent AP, 1 Gigabit TX/SFP combo port, built-in smart antenna, 802.11a/b/g/n/ac/wave2, 1257Mbps Wireless, protection grade IP67, POE power supply, POE devices need to purchase.
WAP-PSE-1000	Single-port Gigabit PSE power module
WAP-OANT-2458-N1	2.4G and 5G dual-frequency omnidirectional antenna, 6-8dBi gain, H360°/V25°, 1 N1 interface
WAP-DANT-2458-N4	2.4G and 5G dual-frequency directional antenna, 12dBi gain, H65°/V30°, 4 N1 interfaces
WAP-CAB-N-1	Outdoor antenna short circuit feeder (N1 connector, length 1m)
WAP-SPDB-2458	Outdoor arrester