WIBORNE, INC.

Wall Plug / Ceiling High Power dual bands 802.11 AC and B/G/N Low Profile AP with Integrated Antennas

WAP-991

WiBorne WAP-991 is a 2.4GHz 800mW 802.11b/g/n and 5GHz 500mW a/n/c dual frequencies AP mounted on the ceiling or wall plug for the benefit of both RJ-45 wired connection and WiFi broadcast connection. It provides flexible yet cost-effective solutions for existing households, commercial areas, apartment buildings, hotels, schools, and hotspot.

WAP-991

Designed for high density, high-security next-generation deployment in large offices, schools, hospitals, luxury houses, and hotels. With high performance IEEE 802.11a/c, 802.11a/n, 802.11b/g/n radios, the WAP-991 provides a combined capacity of up to 867Mbps data rate to meet the needs of growing WLANs

For Ceiling Installation - Build-in antennas provide omnidirectional coverage specifically designed for today's open workspaces. A ceiling mounting easily secures WAP-991 access points to ceilings. With unobtrusive design, WAP-991 are aesthetically pleasing and blend into their environments. For maximum concealment, the access point may be placed above ceilings or suspended ceilings.

For Wall Plug - Build-in antennas provide omnidirectional coverage specifically designed for today's open workspaces. The small, compact form factor is designed for easy installation and can secure WAP-991 access points to walls securely without hassles of theft by intruders. With the aesthetically pleasing and sleek design, WAP-991 blends into a variety of indoor environments for optimal wireless coverage.

WAP-991 is a 500mW High Power Access Point with enhanced receive sensitivity that reliably distributes multimedia content over the standard 802.11 Wi-Fi. Unlike any other office Wi-Fi Access Point, WAP-991 integrates a long-range power amplifier and high sensitivity receiver to deliver unmatched reliability and performance at large coverage application, resulting in fewer required APs for a given deployment.

When plugged in the WAP-991 automatically connected to our Central Software Controller. The Controller's sophisticated, automated RF optimization without dedicated hardware and RF expertise typically required a tune a wireless network. An integrated spectrum analyzer monitors the air space for neighboring Wi-Fi devices. The controller then automatically tunes the WAP-991 channel selection, transmit power, and client connection settings for optimal performance.

❖ Features at a glance

- 800mW 2.4GHz (b/g/n) and 500mW 5GHz (a/c) output power with built in antennas.
- AP Mode with 32 associated clients per AP.
- Slot Time, ACK/CTS Timeout.
- RSSI threshold support, TX burst support.
- Beacon interval: adjustable to best adapt to the deployment environment.
- IAPP: faster roaming for the stations among nearby APs.
- 802.11n protection: to let the transmission rate of associated 802.11g and 802.11b not to be affected with surrounding existence of 802.11b stations.
- RTS and fragmentation control.
- Adjustable transmission power: 7 Levels.
- Wireless site survey: for scanning the surrounding access points for connection.
- Data encryption: WEP(64/128/152-bits), WPA/WPA2 with TKIP or AES-CCMP.
- Data encryption: WEP(64/128/152-bits) , WPA/WPA2 with TKIP or AES-CCMP.
- User Authentication: WEP, IEEE802.1X,WPA-PSK, WPA-Enterprise , MAC ACL.
- Support IEEE802.11 mixed mode, open and shared key authentication, and hidden ESSID.
- Station Isolation setting: when enabled, all stations associated with this AP cannot communicate with other.
- Quality of Service: DiffServ/TOS, 802.11p/COS, 802.11Q Tag VLAN priority control, 802.11e WMM.
- Web-Based management interface.
- Remote management and firmware upgradable.
- Software reset, backup and restoration.
- SNMP MIBII support (v2c/v3).
- NTP time synchronization.
- DHCP client, syslog and event logs.
- Support statistics on total transmission encountered and transmitting error occurred.

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High Power 802.11a/b/g/n/c AP with Ceiling Mount or Wall Plug-in	
Model No.	WAP-991
Ethernet Connection	10/100BASE-TX auto-negotiation Ethernet port x 2 (RJ-45 connector); Auto MDI/MDI-X. Support IEEE 802.3af Active Power over Ethernet compatible.
Standard	IEEE 802.11a/c, b/g/n (Wireless LAN), IEEE802.1x, IEEE802.3(Ethernet),IEEE802.3u
Wireless Features	Transmission power control: 9 Levels. Channel selection: Manual or Auto. No of associated clients per AP: 32. Setting for max no associated clients: Yes. No of BSSID (Virtual AP): 8. No of Max. WDS setting: 8. Preamble setting: Short/ Long. Setting for 802.11b/g mix, 802.11b/g only, n-only. Setting for transmission speed. Dynamic Wireless re-transmission. IEEE802.11f IAPP (Inter Access Point Protocol), hand over users to another AP. IEEE 802.11i Pre-auth (PMKSA Cache). IEEE 802.11h-Transmission Power Control. IEEE 802.11d -Multi country roaming.
Wireless Security	Layer 2 User Isolation; WEP 64/128/152 Bits; EAP-TLS + Dynamic WEP, EAP-TTLS + Dynamic WEP, PEAP/ MS-PEAP+Dynamic WEP; WPA (PSK +TKIP), WPA (802.1x certification + TKIP); 802.11i WPA2 (PSK, 802.1x certification + CCMP/ AES); Setting for TKIP/ CCMP/ AES key's refreshing period; Hidden ESSID support, Setting for " Deny ANY " connection request; MAC Address filtering (MAC ACL); No. of registered RADIUS servers: 2
Operation Mode	AP
Management	Web base Management System, CLI, SNMP, external software control center.
External Power Jack	12 VDC 1.5A, 110-220V AC power. Support 802.3af/at compliant. Power over Ethernet (48V/0.3A)
Form Factor	Wall or Ceiling mount
LEDs	Power, wireless, and Ethernet.
Mounting	Wall mounting or pole mount
Dimension	TBD
Weight	TBD
Operating Temperature	-0°C to 50°C (32°F to 122°F)
Operating Humidity	10% to 80% non-Condensing
Package Content	WAP-991, CD manual x 1, optional power adapter, mounting stand, or POE injector
Antenna Characteristics	
Gain	3 and 5 dBi built-in antennas
Frequency Range	2412 – 2484 and 5150~5825 GHz
Radio Characteristics	
Radio Scheme	802.11a/c: BPSK/QPSK/16QAM/64/128/256QAM 802.11b: DSSS (DBPK,DQPSK,CCK) 802.11g: OFDM (64-QAM,16-QAM,QPSK,BPSK) 802.11n: BPSK,QPSK,QPSK,16-QAM,64-QAM
Chipset	QCA 9557+QCA 9881+QCA8337
Platforms	720 MHz network processor, 64MB SDRAM; 8MB Flash
Frequency Range	2412 – 2484 and 5150~5825 GHz
Output Max. Power	2.4GHz : 800mW; 5GHz : 500mW
Data Rate	11b/g: 1 / 2 / 5.5 / 6 / 9 / 11 / 12 / 18 / 24 / 36 / 48 / 54 Mbps; 11n: 300Mbps (at 40MHz), 11ac: 867Mbps (at 80MHz)
Channel Width	20/40/80MHz
Channels	802.11b/g/n/ac: 11 for FCC;14 for Japan;13 for Europe, IEEE 802.11a/n/ac: 12 For FCC; 4 for Japan; 4, 18 for Europe
Range	Up to few miles for point-to-multi-points (P2MP); All above data is dependent on terrain and client radio
Receiver Sensitivity	-92dBm
Frequency Response	±2dB over operating range
Approvals	In progress for FCC, CE

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