

# WiBORNE, INC.

## 500mW High Power 802.11g AP/CPE/Bridge/Universal Repeater/Router with Ceiling/Swift/Wall Mount

### WAP-981

WiBorne WAP-981 is a 2.4GHz 500mW 802.11b/g AP and universal repeater mounted on the wall or in-wall 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.



Main unit

WAP-981

WiBorne WAP-981 is a multiple applications in one device. It repeats connection from wireless outdoor network for service provider deploying last mile services to business or residential broadband subscribers; a wireless access gateway; a range extender as indoor 802.11 b/g access point; and a wired connection for each room that offers wireless connection.

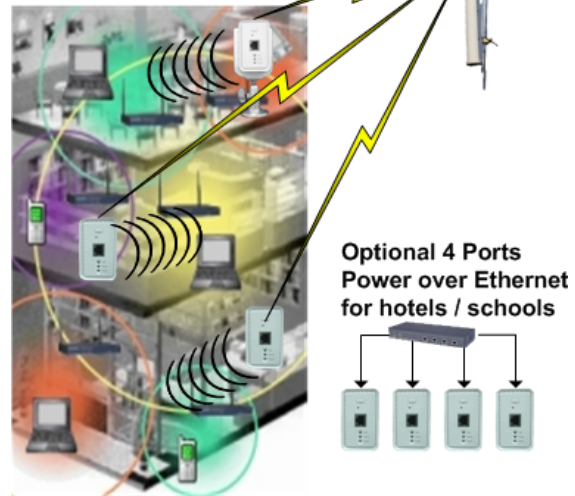
The WAP-981 lets subscribers connect faster and more reliably to outdoor metro WiFi networks by using its mesh-WDS software, while offering large installation inside the building with optional PoE switch that powers up multiple units of WAP-981 access points built in-wall or ceiling mount that are closer the users for best WiFi connection and faster speed.

- **Pure AP Mode & AP/WDS Mode:** wireless access point that allows wireless clients, or stations(STA) to access
- **Bridge/Repeater:** allows a wireless network to be expanded using multiple access point without the need for a wired backbone.
- **CPE Mode (Router Client)** that run as DHCP server to assign IP address to clients out of a private IP address pool behind a NAT.

### ❖ Features at a glance

- 500mW 2.4GHz output power with built in antenna
- Operation Modes: Router AP, AP+WDS, WDS Repeater Bridge, and Client Bridge + Universal Repeater.
- Security with 802.1X, WAP, and WPA2
- Hardware auto push button to simplify configuration security
- 8 Multiple B-SSID capability, hidden ESSID support
- Client Isolation with zone privacy
- Business –class WLAN Security and client authentications
- Provide advanced wireless Setting (ACK/CTS )
- Support Web management and SNMP MIB-II
- Wide range voltage support (12-68VDC), PoE
- Quality of Service (QoS): DiffServ/ TOS, IEEE802.11p/ COS, IEEE802.11e WMM
- Profiles configuration backup and restore
- Remote link test – display connect statistics
- UPnP (Universal Plug and Play)
- Support Static IP, Dynamic IP(DHCP Client) and PPPoE on WiFi WAN Connection
- Support PPTP/L2TP client/server/pass through
- MAC Cloning, Support MAC & IP filtering
- DHCP server / client
- 802.3 Bridging
- Masquerading (NAT), NTP Client

WAP-981 acts as a repeater for receiving metro link and broadcast to wired or wireless users



WAP-981 acts as Repeater and in-wall wired/wireless AP

- Proxy DNS, Dynamic DNS
- Virtual DMZ, Virtual Server (IP / Port Forwarding)
- Full statistics and status reports; event logs
- CLI access via Telnet
- Support SNMP v1, v2c, v3, SNMP traps

## High Power 802.11g AP Repeater with Ceiling / In-Wall Mount

<b>Model No.</b>	WAP-981
<b>Ethernet Connection</b>	<ul style="list-style-type: none"> <li>10/100BASE-TX auto-negotiation Ethernet port x 1 (RJ-45 connector); Auto MDI/MDI-X.</li> <li>Support IEEE 802.3af Active Power over Ethernet X 1</li> </ul>
<b>Standard</b>	IEEE 802.11b/g (Wireless LAN), IEEE802.1x, IEEE802.3(Ethernet),IEEE802.3u
<b>Wireless Features</b>	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 only or 802.11g 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
<b>Wireless Security</b>	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
<b>Operation Modes</b>	AP, AP Client (Ethernet to WLAN Bridge), Wireless Repeater; WDS, P-to-P, P-to-MP Bridge
<b>Management</b>	Web base Management System, CLI, SNMP
<b>External Power Jack</b>	12-64 VDC 1.5A, 110-220V AC power. Support Power over Ethernet (48V/0.3A)
<b>Form Factor</b>	Wall / Ceiling mount, or in-wall installation
<b>LEDs</b>	Power, wireless, and Ethernet.
<b>Mounting</b>	Wall mounting or pole mount
<b>Dimension</b>	Main unit with plate: 129.98(H)x79.98(W)x67(L) mm Main unit: 79.98(H)x34(W)x67(L); plate: 129.98(H)x7.98(W)x8.8(L)
<b>Weight</b>	60g
<b>Operating Temperature</b>	-20°C to 50°C (-4°F to 122°F)
<b>Operating Humidity</b>	10% to 80% non-Condensing
<b>Package Content</b>	WAP-981, CD manual x 1, optional power adapter, mounting stand, or POE injector
<b>Antenna Characteristics</b>	
<b>Gain</b>	3dBi built-in antenna
<b>Frequency Range</b>	2412 – 2484 GHz
<b>Radio Characteristics</b>	
<b>Radio Scheme</b>	802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11b: DSSS (CCK, DQPSK, DBPSK)
<b>Chipset</b>	Atheros AR2315
<b>Platforms</b>	180MHz MIPS 4Kc, 32MB16-bit SDRAM; 8MB Flash
<b>Frequency Range</b>	2.412 GHz ~2.484GHz
<b>Output Power</b>	802.11g: 27dBm @ 6Mbps, 23dBm @ 54Mbps. 802.11b: 27dBm @ 1Mbps, 25dBm @ 11Mbps Max. 27dBm (radio only) or 12.55 Watts EIRP of power (with antenna)
<b>Data Rate</b>	1 / 2 / 5.5 / 6 / 9 / 11 / 12 / 18 / 24 / 36 / 48 / 54 Mbps
<b>Channels</b>	North America: 11 Channels (US, Canada) ETSI: 13 Channels (Most European Countries), 2 for Spain, 4 for France TELEC: 14 Channels (Japan)
<b>Range</b>	Up to 10+ km/6.25+ miles for point-to-multi-points (P2MP); 13+ km/8+ miles for point-to-point (P2P). Possible average link distance up to 12+ miles. All above data is dependent on terrain and base radio
<b>Receiver Sensitivity</b>	1Mbps: -97dBm, 6Mbps:-93dBm, 11Mbps:-89dBm,54Mbps:-74dBm
<b>Frequency Response</b>	±1dB over operating range
<b>Approvals</b>	FCC, CE, RoHS Compliant