

## Outdoor High Power Dual Radios Waterproof Access Point Router for Base Station / Mesh / Repeater / CPE

*WiBorne AP router, WAP-192AG, is a high-power outdoor Wi-Fi AP router operating in the 802.11 2.4 and 5GHz band, with IP 67 / NEMA 6 waterproof die cast enclosure for extremely long life outdoor environment. It's a feature-rich radio can be applied to many applications!*



The WAP-192AG is a feature-rich outdoor AP with features designed with the WISP in mind. The versatility of the operating modes means that one AP can be used in many different applications, reducing the number of spare units needed, installation time, and maintenance costs. The WAP-192AG can function as an AP, AP client, PtP bridge, AP Router, AP client router (w/ NAT), Universal Repeater Mode, AP Repeater mode using WDS (Wireless Bridge), and Mesh nodes

The WAP-192AG is equipped with 802.11a MiniPCI module, also comes with many features that are highly desired in the WISP market. For management, the WAP-192AG has Web configuration pages, an SSH CLI, and is also SNMP enabled. Firmware upgrades can also be performed over the air through the web interface. In addition, the high output power with RSSI indication allows longer shots to be made easily. Also, the many antenna options available means that the right antenna for the right shot may be used. The Power over Ethernet feature, when teamed with the hinged enclosure design, makes installation a breeze for any technician.

### WAP-192AG

The WAP-192AG is the perfect choice for any 802.11a and b/g based networks. Advanced features such as layer 2 isolation in AP mode and PPPoE client in AP client router mode make this radio one of the most advanced 802.11b/g radios and one of the best price / performance on the market.

### ❖ Features at a glance

- Compatible with IEEE 802.11a/b/g & IEEE 802.3 standards
- Rugged weatherproof design in a compact and stylish enclosure with all electronics protected in aluminum for EMF protection.
- Ideal for wireless LAN access in all indoor and outdoor areas.
- Flexible mounting on wall or antenna mast (up to 2.5 inch diameter)
- Can be mounted for Horizontal or Vertical Polarities
- Power over Ethernet cable using PoE injector
- Auto Fall back data rate for long distance communication in noisy environments
- High standard waterproof IP 67 (NEMA 6) and weatherproof
- Wireless security with 64/128Bit WEP, WPA (TKIP), WPA2 (AES or Mixed), 802.1x / RADIUS client, CCX V1.0-V3.0, and MAC Access Control.
- Firewall (Port / IP / MAC filtering, Port forwarding, MAC filter, DMZ)
- IPSec VPN and NAT Traversal with Pre-Shared Key between nodes
- Work with all operating system. Driver-less operation with true 'Plug and Play'
- Hardware Watchdog Timer to reset processor
- VoIP, gaming and video conference
- lighten protector with gas discharge tube (GDT) design with multi-strike capability
- Mesh routing protocol OSPF
- ACK Timing, RTS/CTS Fragmentation Threshold, Beacon, IAPP, and Preamble Type
- Adjustable output power up to 250 mW for 11b (CCK) and 100 mW for 11g (OFDM)
- 802.11a 4.9-5.85 GHz with 17dBm@54Mbps
- 802.11a with WMM(QoS) mode for Voice / Video / Gaming
- Configurable Multi-modes AP: AP, AP Client, WDS, AP Bridge, PtP & PtMP Bridging, AP Client and Routing
- Universal Repeater Mode that acts both AP and Client modes
- WDS Modes: Bus, Star, Ring, and Mesh with 802.1d Spanning Tree Algorithm
- Time zone setting with NTP client
- PPPoE and PPTP Client
- DHCP Server and Client
- Static and Dynamic NAT Routing
- Bandwidth Control for Client Mode
- Wireless Site Survey and Aiming Tool
- SNMP v1/v2c agent & MIB II management
- Web base Management and CLI console commands
- System Status and Log Reports
- Firmware can be remotely upgraded
- LED hardware and software aiming tool for easy alignment of antenna direction

## Outdoor High Power Dual Radio Waterproof Access Point Router

<b>Model No.</b>	WAP-192AG Outdoor High Power Dual Radio AP Router
<b>Standard</b>	IEEE 802.11a/b/g (Wireless LAN), IEEE 802.3 (Ethernet)
<b>Wireless &amp; Wired Security Functions</b>	Secure with 64/128Bit WEP, WPA (TKIP), WPA2 (AES or Mixed), CCX V1.0 – V3.0, 802.1x / RADIUS client, and MAC Access Control Firewall (Port / IP / MAC filtering, Port forwarding, MAC filter, DMZ) IPSec VPN and NAT Traversal with Pre-Shared Key between nodes
<b>Operation Functions</b>	ACK Timing, RTS/CTS Fragmentation Threshold, Beacon, IAPP, Preamble Type Adjustable transmit power up to 250 mW for 11b (CCK) & 100 mW for 11g (OFDM) Bandwidth Control for Client Mode. Optional 400mW or 500mW available. Static and NAT Router, DHCP server and Client SNMP v1/ v2c agent & MIB II management PPPoE and PPTP Client Wireless Site Survey, Clone MAC address, Channel auto selection Configuration Backup and Restore, uPnP, Hardware Watchdog Timer Quality of Service (QoS) or WMM 802.11e for priority of Voice / Video /Gaming Transparent Bridge to authenticate MAC address for VoIP phones Aiming tool with LED lights
<b>Operation Modes</b>	Wireless Access Point, AP Client (Ethernet to WLAN Bridge), WDS ( Wireless Repeater; P-to-P, P-to-MP Bridge, or Wireless Bridge), Wireless Router, AP Client with Routing function (WISP Mode), Universal Repeater Mode, Mesh OSPF
<b>Management</b>	Web-base management system and SSH CLI console commands
<b>External Power Jack (via POE)</b>	48 VDC @ 500mA, PoE and PS included. Optional 24VDC
<b>External Bulkhead connector</b>	External RJ-45 Bulkhead connector
<b>Lighten Protector</b>	Lighten protector with gas discharge tube (GDT) design with multi-strike capability
<b>Interface</b>	One RJ45 ( 12V ~ 48V PoE), one RP-SMA antenna connector (optional)
<b>Power Supply</b>	USA: 24V / 800mA linear International: 48V / 400mA switching
<b>Mounting</b>	Pole or wall mount (included)
<b>Enclosure</b>	IP67 / NEMA6 die cast aluminum with white epoxy powder coat paint
<b>Dimension</b>	H=10"/254mm W=7.1"/180mm D=2.25"/57mm
<b>Weight</b>	2.65 lbs (1.20 Kg)
<b>Temperature Range</b>	Operating: -20°C to 70°C (-4°F to 158°F). Storage: -40°C to 80°C (-40°F to 176°F)
<b>Relative Humidity</b>	10% to 95% non condensing
<b>Reset</b>	Remote reset / Manufacturing reset
<b>Approvals</b>	Radio FCC Part15, Section 15.247
<b>Radio Characteristics</b>	
<b>Radio Scheme</b>	802.11a/g: OFDM(64QAM, 16QAM, QPSK, BPSK) 802.11b: DSSS(CCK, DQPSK, DBPSK)
<b>Frequency Range</b>	802.11a: 4.9GHZ~5.85GHZ; 2.4 GHz ~2.497GHZ
<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) TELEC: 14 Channels (Japan)
<b>Range</b>	Varies based on antenna type
<b>Output Power</b>	802.11a: 50mW max. (17 dBm). 802.11g: 100mW max. (20 dBm). Optional 200mW max. 802.11b: 250mW max. (24 dBm). Optional 400mW or 500mW max.
<b>Receiver Sensitivity</b>	802.11a: -73 ± 2dBm @ 54Mbps 802.11g: -69 ± 2dBm @ 54Mbps 802.11b: -87 ± 2dBm @ 11Mbps