

WiBORNE, INC.

Outdoor High Power CPE/AP/Bridge/Router with 19 or 15 dBi Integrated Antenna Up To 42dBm/16 Watts EIRP



CAP-1920



CAP-1915



CAP-192W

WiBorne CAP-1900 series is a 2.4GHz 802.11b/g Compatible client bridge/route. This is completely integrated in to 19/15 dBi antennas delivering up to 42dBm or 16 Watts EIRP of power!

Designed with ease of installation in mind, CAP-1900 series simplifies subscriber installation with its Integrated Antennas, Power over Ethernet (PoE), 'Plug and Play' installation and software power controlled capability. Housed in a weatherproof aluminum enclosure, CAP-1900 is built to operate in harsh environments. This device can be installed on the building exterior as well as indoors. CAP-1900 delivers reliable performance under all climatic conditions, withstanding temperatures between -15°C~+65°C. Driverless Operation - The self-contained CAP-1900 unit can be mounted on a pole or wall. With the included POE CAP-1900 can be powered over the standard Ethernet CAT 5 cable. CAP-1900 also features plug-and-play installation that enables quick and efficient deployment. It works with all WiFi compatible IEEE 802.11b/g Access Points and eliminates complicated client installations and driver conflicts with various OS. CAP-1900 delivers outstanding network availability and end-to-end system throughput. Perfect for applications requiring high bandwidth at a fraction of the cost of T1/E1 leased-line, with the additional advantage of zero monthly recurring cost from the service carrier. Typical usages include bridging satellite offices, corporate LANs, school campus, as well as wireless Internet services, VoIP, gaming and video conference, at distances up to 15+ miles (24+ KM). WiBorne CAP-1900 is also the solution of choice for bridging networks that are impossible to connect using wired alternatives, including networks separated by difficult terrain, railroads, or bodies of water.

CAP-192W is outdoor AP model equipped with same radio, NEMA 6 housing, and multi-strike gas discharge lightening protector. It can be bundled with [24 dBi grid antenna OA-2424](#).

Features:

- Compatible with IEEE 802.11b/g & IEEE 802.3 standards
- Detachable 19 or 15 dBi panel antenna
- Rugged weatherproof design in a compact and stylish enclosure with all electronics protected in aluminum for EMF protection.
- Ideal for wireless LAN access in indoor / 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 watertight (IP66/67) and weatherproof
- Wireless security with 64/128Bit WEP, WPA (TKIP), WPA2 (AES or Mixed), 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
- Mesh routing protocol OSPF
- Client Isolation is equivalent with VLAN mode
- 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). Optional 500mW available.
- Configurable Multi-modes AP: AP, AP Client, AP & AP Client modes concurrently, WDS, AP Bridge, PtP & PtMP Bridging, AP Client and Routing (WISP), Universal Repeater mode for both AP and Client modes.
- WDS Modes: Bus, Star, Ring, Mesh with 802.1d Spanning Tree Algorithm
- PPPoE and PPTP Client, DHCP Server and Client
- Static and Dynamic NAT Routing
- Bandwidth Control for Client Mode
- Wireless Site Survey
- SNMP v1/v2c agent & MIB II management
- Web base Management System and CLI
- System Status and Log Reports
- Firmware can be remotely upgraded
- VoIP, Uni/Multi cast for video streaming / conferencing, messaging
- Hardware Watchdog Timer to reset processor
- LED hardware and software aiming tool for easy alignment of antenna direction

Outdoor High Power CPE/AP/Bridge/Router With 19/15 dBi Integrated Antenna(s)

Model No.	CAP-1920 / CAP-1915 / CAP-192W
Ethernet Connection	IEEE 802.3 100BaseT (RJ-45)
Standard	IEEE 802.11b/g (Wireless LAN), IEEE 802.3 (Ethernet CSMA/CD)
Wireless & Wired Security Functions	Secure with 64/128Bit WEP, WPA (802.11i TKIP), WPA2 (AES or Mixed), 802.1x / RADIUS client with EAP-MD5/TLS/TTLS, MAC Access Control / Authentication Firewall (Port / IP / Protocol / MAC filters, Port forwarding, MAC filter, DMZ) IPSec VPN and NAT Traversal with Pre-Shared Key between nodes
Operation Functions	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). Optional 500mW for 11b and 200mW for 11g is available Static and Dynamic NAT Routing, DHCP server and Client, PPPoE and PPTP Client SNMP v1/v2c agent & MIB II management Layer 2 Client Isolation is equivalent with VLAN mode Wireless Site Survey, Clone MAC address Configuration Backup / Restore, uPnP, hardware watchdog timer for auto reboot Quality of Service (QoS) or WMM 802.11e for priority of Voice / Video /Gaming Transparent Bridge to authenticate MAC address for VoIP phones LED light software / hardware aiming tool
Operation Modes	Support universal repeater mode (one WLAN interface used as AP and client concurrently), AP Client (Ethernet to WLAN Bridge), WDS (Wireless Repeater; P-to-P, P-to-MP Bridge), Wireless Router, AP Client with Routing function (WISP Mode), Mesh OSPF
Management	Web base Management System
External Power Jack (via POE)	48 VDC @ 500mA (O.D-5.5mm, I.D-2.1mm)(POE and PS included)
External Bulkhead connector	External RJ-45 Bulkhead connector - Optional
Surge or Lighten Protector	CAP-1920/CAP-1915: PoE. Polyphaser / Citel or equivalent – optional CAP-192W: multi-strike gas discharge tube lighten protector
Mounting	Pole or wall mount via 2pc clamps (included)
Enclosure	CAP-1920 / CAP-1915: UV stabilized ABS plastic with electronics protected in aluminum for EMF protection; CAP-192W: NEMA 6 housing
CPE Weight	CAP-1920: 3.5 lbs (1.5kg); CAP-1915: 2.2 lbs (1kg); CAP-192W: 2.65 lbs (1.20 Kg)
Dimension (L x W x H)	CAP-1920: 18.5"x16.8"x 2.5" (470x427x64mm) CAP-1915: 10.75"x10.75"x 2.6" (267x267x67mm) CAP-192W: 10" X 7.1" X 2.25" (254x180x57mm)
Temperature Range	-30°C ~ +65°C
Relative Humidity	10% to 90% non condensing
Antenna Characteristics	
Gain	CAP-1920: 19dBi; CAP-1915: 15dBi; CAP-192W: None
Frequency Range	2400 - 2485 GHz
Polarization	Horizontal or Vertical
3dB Beam Angle (degree)	CAP-1920: E-Plane: 15; H-Plane: 20; CAP-1915: E-Plane: 30; H-Plane: 30
Front to Back	CAP-1920: > 30 dB; CAP-1915: 20 Degree
Wind loading (Lbs)	CAP-1920: 100MPH:77.8; 125MPH: 121; CAP-1915: 100MPH:27.8; 125MPH: 43.4;
Radio Characteristics	
Radio Scheme	802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK); 802.11b: DSSS(CCK, DQPSK, DBPSK)
Frequency Range	2.4 GHz ~2.497GHz
Data Rate	802.11g: 54 / 48 / 36 / 24 / 12 / 9 / 6 Mbps; 802.11b: 11 / 5.5 / 2 / 1 Mbps
Channels	North America: 11 Channels (US, Canada) ETSI: 13 Channels (Most European Countries); TELEC: 14 Channels (Japan)
Range	20+ km/12.5+ miles or more for point-to-multi-points; 32+ km/20+ miles for point-to-point. Possible average link distance up to 20+ miles, depends on terrain and throughput
Output Power	802.11b: 250mW max.; 802.11g: 100mW max. Optional 500mW available
Receiver Sensitivity	802.11g: 54Mb@-65dBm. With antenna: 54Mb@-84dBm 802.11b: 11Mb@-87dBm. With antenna: 11Mb@-106dBm
Approvals	Radio FCC Part15, Section 15.247