

# WiBORNE, INC.

## Outdoor 802.11a 5 GHz High Power 400mW AP/CPE/ Bridge/Router with 24dBi or 19dBi Integrated Antenna: CAP-5000L



CAP-5024L



CAP-5019L



CAP-500L

**WiBorne CAP-5024L or CAP-5019L is a 5 GHz 802.11a compatible Access Point (AP) and subscriber station (CPE) specifically designed for long range point-to-multipoint. This is completely 400mW integrated in to a 24dBi wideband antenna delivering up to 50 dBm or 100 Watts EIRP of power with superior radio performance as a carrier AP/CPE!**

The 24dBi / 19dBi integrated antennas comply with 802.11a standards. Designed with ease of installation in mind, WiBorne simplifies subscriber installation with its Integrated Antenna, Power over Ethernet (PoE), 'Plug and Play' installation and software power controlled capability. Housed in a weatherproof aluminum enclosure, the CAP-5024L/5019L is built to operate in harsh environments. This device can be installed on the building exterior as well as indoors. CAP-5024L/5019L delivers reliable performance under all climatic conditions, withstanding temperatures between -20°C ~ +60°C. Driverless Operation - The self-contained CAP-5024L/5019L unit can be mounted on a pole or wall. With the included PoE the CAP-5024L/5019L can be powered over the standard Ethernet CAT 5 cable. CAP-5024L/5019L also features plug-and-play installation that enables quick and efficient deployment. It works with all WiFi™ compatible IEEE 802.11a Access Points and eliminates complicated client installations and driver conflicts with various OS. The CAP-5024L/5019L 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, at distances up to 65+ miles (105+ kilometers). The WiBorne CAP-5024L/5019L 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-500L is outdoor AP model equipped with same radio, NEMA 6 housing, and multi-strike gas discharge lighten protector.

### Features

- Compatible with IEEE 802.11a & IEEE 802.3 standards
- Detachable 19 dBi patch antenna
- Rugged wideband weatherproof design in a compact and UV stabilized ABS plastic with electronics protected in aluminum for EMF protection.
- Ideal for wireless LAN access in all 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
- Back plate is alodine coated aluminum with stainless steel fasteners. All bracket fasteners are stainless steel for corrosion protection.
- Automatic ACK Timing based on specified distance / range
- SNMP agent for monitoring
- Adjustable output power up to 400mW
- Hardware LEDs and Software Antenna Alignment Tool
- Statistics of wireless errors
- Wireless Site Survey for connectivity
- DHCP Server / Client
- Secure with 64/128Bit WEP / WPA / WPA2
- Custom heat sink allows performance over extended temperature ranges while inside compact enclosure
- Wireless security with 64/128Bit WEP, WPA PreShared Key
- Web base management with logo customization
- Advanced Link Setup for RTS Threshold, Fragmentation Threshold, Distance, ACK Timeout
- SuperA feature with fast frame, bursting, and compression
- 802.11e QoS (WMM) Setting for priority of Video and Voice
- Remote Firmware upgrade from WEB GUI
- Work with all operating system, true 'Plug and Play'
- SDK kits available for customization

## Outdoor High Power AP/CPE/Bridge/Router With 24dBi or 19dBi Integrated Antenna

<b>Model No.</b>	CAP-5024L / CAP-5019L / CAP-500L
<b>Standard</b>	IEEE 802.11a (Wireless LAN), IEEE 802.3 (Ethernet)
<b>Wireless Security Functions</b>	Secure with WPA, WPA2, AES-CCM & TKIP Encryption, 802.1x, 64/128/152bit WEP 802.1x / RADIUS client, and MAC Access Control
<b>Operation Functions</b>	Distance Adjustment: CTS/RTS, automatic ACK Timing, RTS Fragmentation Threshold Adjustable transmit power up to 400mW SuperA mode (Hardware compression, aggregation and bursting) 802.11e QoS (WMM) for Video and Voice Priority, Wireless Traffic Shaping DHCP Server / Client SNMP agent, DNS, PPPoE Client, Wireless Site Survey Hardware LEDs and Software Antenna Alignment Firmware upgradeable; Logo / Link Customization Atheros 5/10/20/40 MHz Channels, Fast Frames, Compression, Super Frames
<b>Operation Modes</b>	AP, AP Client, Bridging, WDS, Ethernet to WLAN Bridge, AP Client with Routing function
<b>Management</b>	Web base Management System
<b>External Power Jack (POE)</b>	18 VDC Passive
<b>Processor / Memory</b>	220MHz / 16MB SDRAM, 4MB Parallel Flash
<b>Interface</b>	One RJ45 (PoE), one RF connector, one Reset button, LEDs for signal strength. CAP-500L comes with one N-type connector.
<b>Mounting</b>	Pole or wall mount via 2pc clamps(included)
<b>Enclosure</b>	CAP-5024L/CAP-5019L: UV stabilized ABS plastic with electronics protected in aluminum for EMF protection. CAP-500L: NEMA 6 housing
<b>Weight</b>	CAP-5000L: 3.5 lbs (1.5kg); CAP-5000L : 2.2 lbs (1kg); CAP-500L: 2.65 lbs (1.20 Kg)
<b>Dimension (L x W x H)</b>	CAP-5024L: 18.5"x16.8"x 2.5" (470x427x64mm) CAP-5019L: 10.75"x10.75"x 2.6" (267x267x67mm) CAP-500L: 10" X 7.1" X 2.25" (254x180x57mm)
<b>Temperature Range</b>	-20°C ~ +60°C
<b>Relative Humidity</b>	10% to 90% non condensing
<b>Surge Protector</b>	CAP-5024L/CAP-5019L: PoE surge protector – optional CAP-500L: multi-strike gas discharge tube lighten protector
<b>Antenna Characteristics</b>	
<b>Gain</b>	CAP-5024L: 19dBi; CAP-5019L: 15dBi
<b>Frequency Range</b>	4940 - 5850 GHz
<b>Polarization</b>	Horizontal or Vertical
<b>3dB Beam Angle</b>	CAP-5024L: E-Plane: 9; H-Plane: 9 Deg; CAP-5019L: E-Plane: 15; H-Plane: 15 Deg
<b>Front to Back</b>	CAP-5024L: 30 dB; CAP-5019L: 25 dB
<b>Wind loading</b>	CAP-5024L: 100MPH: 77.8; 125MPH: 121 Lbs; CAP-5019L: 100MPH: 27.8; 125MPH: 43.4 Lbs
<b>Radio Characteristics</b>	
<b>Radio Scheme</b>	802.11a: OFDM
<b>Frequency Range</b>	5.1 GHz ~5.8GHz
<b>Data Rate</b>	802.11a: 54 / 48 / 36 / 24 / 18 /12 / 9 / 6 Mbps; SuperA: 108Mbps
<b>Range</b>	Up to 50+ km/31+ miles for point-to-multi-points; 56+ km/35+ miles for point-to-point. Depends on terrain, antenna, and throughput
<b>Output Power</b>	802.11a: 400mW standard, optional 600mW
<b>Receiver Sensitivity (without antenna)</b>	54Mb@-74dBm. 48Mb@-77dBm, 36Mb@-83dBm, 24Mb@-86dBm, 18Mb@-90dBm, 12Mb@-91dBm, 9Mb@-93dBm, 6Mb@-94dBm
<b>Approvals</b>	FCC Part15, Section 15,247, CE