

# WiBORNE, INC.

## Outdoor High Power CPE/AP/Bridge/Router with 9dBi Integrated Antenna or Optional External Antenna

### **CAP-2409**

**WiBorne CAP-2409 is a 2.4GHz 802.11b/g compatible multi-client/bridge/access point/router/WDS (wireless distribution system). These are completely integrated in to compact 9dBi antenna delivering superior radio power for cost effective solution!**



**CAP-2409**

Designed with ease of installation and cost effective in mind, CAP-2409 simplify subscriber installation with its integrated antenna, Power over Ethernet (PoE), 'Plug and Play' installation and software power controlled capability. Housed in a weatherproof enclosure, CAP-2409 is built to operate in harsh environments. This device can be installed on the building exterior as well as indoors. CAP-2409 delivers reliable performance under all climatic conditions, withstanding temperatures between -30°C ~ +80°C. Driverless Operation - The self-contained CAP-2409 unit can be mounted on a pole or wall. With the included PoE, CAP-2409 can be powered over the standard Ethernet CAT 5 cable. Optional external N-Type connector is available for high gain antennas. It has built-in Atheros SoC chipset that is compatible with most of today's WiFi base radio. CAP-2409 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.

### ❖ Features at a glance

- Compatible with IEEE 802.11b/g & IEEE 802.3 standards
- Ideal for wireless LAN access in all indoor and outdoor areas.
- Power over Ethernet cable using PoE injector
- Auto fall back data rate for long distance communication in noisy environments
- High standard watertight (IP66) and weatherproof
- Wireless security with 64/128Bit WEP, WPA (TKIP or AES), WPA2 (TKIP or AES), and MAC Access Control.
- Bandwidth control for up / down data stream, WMM (wireless multimedia) support
- Configurable modes: AP, AP Client, WDS, AP Bridge
- Static and dynamic NAT routing
- DHCP server and client
- Wireless site survey
- Web base management system
- Firmware can be remotely upgraded
- Work with all operating system. driver-less operation with true 'Plug and Play'
- NTP client and country code settings
- Capable of handling heavy data payloads such as MPEG video streaming
- Excellent output power spreads the operation distance
- Let users transfer data between two buildings or multiple buildings
- Built-in lightening protection
- Make wireless AP and bridge mode simultaneously as a wireless repeater
- Delivers reliable, top performance in the most demanding environments
- Flexible access point locations and cost savings
- WPA/IEEE 802.1x Authenticator support
- WDS (Wireless Distribution System)
- Wide temperature range and robust mechanical design
- High speed data rate up to 54Mbps
- High output power up to 25 dBm (400mW for 11b)
- Point-to-point, point-to-multipoint wireless connectivity
- System status and log reports
- SNMP support
- Hardware watchdog

## Outdoor High Power CPE/AP/Bridge/Router with Integrated Antennas

<b>Model No.</b>	CAP-2409
<b>Ethernet Connection</b>	IEEE 802.3 100BaseT (RJ-45)
<b>Standard</b>	IEEE 802.11b/g (Wireless LAN), IEEE802.1x, IEEE802.3(Ethernet),IEEE802.3u
<b>Wireless &amp; Wired Security Functions</b>	Secure with 64/128Bit WEP, WPA (TKIP or AES), WPA2 (TKIP or AES), 802.1x, and MAC Access Control.
<b>Operation Functions</b>	DHCP Server and Client, Static and Dynamic NAT Routing Wireless Site Survey, Clone MAC address Configuration Backup and Restore
<b>Operation Modes</b>	AP Client (Ethernet to WLAN Bridge), WDS ( Wireless Repeater; P-to-P, P-to-MP Bridge)
<b>Management</b>	Web base Management System
<b>External Power Jack</b>	12 VDC with passive Power over Ethernet
<b>External Bulkhead connector</b>	External RJ-45 Bulkhead connector
<b>LEDs</b>	Power, wireless, and Ethernet.
<b>Mounting</b>	Wall mounting kit and Mast mounting kit
<b>CPE Weight</b>	2.6 lbs (1.2 Kg) with mounting kits; 1.3lbs(0.6Kg) if unit only
<b>Dimension</b>	H=4.72"/12cm W=4.72"/12cm, D=2.56"/6.5cm
<b>Temperature Range</b>	-30°C to 80°C (-22°F to 176°F)
<b>Relative Humidity</b>	95% @ 55°C
<b>Approvals</b>	FCC Part 15/UL (for a/b/g model)
<b>Package Content</b>	CAP-2409, POE Injector x 1 , Power Code x 1 , Mounting Kit (with screw package) x 1, Weatherproof connector x 1 , CD-ROM x 1
<b>Antenna Characteristics</b>	
<b>Gain</b>	9dBi
<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 AR2313A + AR2112
<b>Platforms</b>	180MHz MIPS 4Kc, 32MB 16-bit SDRAM; 8MB Flash
<b>Frequency Range</b>	2.412 GHz ~2.484GHz
<b>Output Power</b>	802.11g: 25dBm @ 6Mbps, 22dBm @ 54Mbps. 802.11b: 25dBm @ 1Mbps, 25dBm @ 11Mbps Max. 34dBm or 2.54 Watts EIRP of power
<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>	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>	802.11g: 54Mbps@-66dBm, 48Mbps@-71dBm, 36Mbps@-78dBm, 24Mbps@-80dBm, 18Mbps@-81dBm, 12Mbps@-82dBm, 9Mbps@-85dBm, 6Mbps@-87dBm 802.11b: 11Mbps@-82dBm, 5.5Mbps@-86dBm, 1,2Mbps@-90dBm