

# WiBORNE, INC.

## Outdoor High Power 5GHz CPE/AP/Bridge/Router with 15dBi Dual Polarity Antenna or N-Type Connector, and Die-Casting Enclosure

### CAP-5015D

**WiBorne CAP-5015D is a 5GHz 500mW 802.11a/n compatible multi-client/bridge/access point/route/WDS. It has built-in 15dBi dual polarity antenna with IP67/68 long-durable metal enclosure for long term solutions!**



**15 dBi Antenna or N-type Models  
CAP-5015D**

WiBorne outdoor CAP-5015D is the point of connection to Wireless Outdoor Network for service provider deploying last mile services to business or residential broadband subscribers.. Network administrators can create multiple subscriber service tier using per-subscriber rate limiting features, and manage centrally. CAP-5015D utilizes a 500mW high power with a Built-in 5GHz 15dBi dual polarity directional antenna. It also offers 2 N-type connectors for different model such that you can connect with external antennas. CAP-5015D may connect to the WiFi mesh or WDS infrastructure and provides the subscriber with an Ethernet connection for a local access. CAP-5015D supports two operational modes, the AP mode and the WDS mode, respectively with built-in remote management features simplify the deployment and reduce cost for continued maintenance of the outdoor bridge:

- **Access Point** : It can be deployed as a traditional fixed wireless Access Point
- **WDS** : It can be expanded Wireless Service as WDS Link
- **CPE (Customer Premises Equipment)**: That connects to Wireless Internet Service Provider's (WISP)
- **Universal Repeater** with client bridge mode.

### ❖ Features at a glance

- IEEE 802.11n draft 2.0 compliance in 2Tx / 2Rx design
- 500mW at 5 GHz output power with up to 300Mbps of Tx/Rx bandwidth.
- Option of built in 15dBi (H60, E30) dual polarity directional antenna, or 2 N-type connectors without antenna.
- Topology: Point to Point , Point to Multi Point
- Operation Modes : Access Point and AP/WDS , WDS (Repeater , Bridge), CPE (Client Router)
- Security with 802.1X, WAP, and WPA2
- Integrated Power over Ethernet (PoE)
- Quality of Service (QoS) and WMM for bandwidth management
- Multiple B-SSID capability (Virtual AP) and Client Isolation
- Client Isolation through Layer 2 VLAN Technology
- 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
- Weather-Proof Housing (IP 68 Approved)
- Weater-Proof M-13 RJ45 Connector and N-Type Connector
- QoS: DiffServ / TOS, IEEE802.11p/ COS, IEEE 802.11Q Tag VLAN priority control, IEEE802.11e WMM
- Pure AP Mode & AP/WDS Mode: wireless access point that allows wireless clients, or stations(STA) to access
- WDS Mode (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.
- Support Static IP, Dynamic IP(DHCP Client) and PPPoE on WiFi WAN Connection. DHCP Server
- Support PPTP/L2TP client/server/pass through
- MAC Cloning, Support MAC & IP filtering
- 802.3 Bridging, Spanning Tree Protocol (STP)
- Masquerading (NAT), NTP Client
- Proxy DNS, Dynamic DNS
- Virtual DMZ, Virtual Server (IP / Port Forwarding)
- Bandwidth traffic shaping
- Full Statistics and Status Reports; Event logs
- CLI access via Telnet
- Support SNMP v1, v2c, v3; SNMP traps
- Profiles Configuration Backup and Restore
- Remote Link Test – Display connect statistics
- Support SIP pass-throughput NAT

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

<b>Model No.</b>	<b>CAP-5015D (with option for Integrated 15 dBi Antenna, or 2-N type Connectors)</b>
<b>Ethernet Connection</b>	External IEEE 802.3 100BaseT (RJ-45) Bulkhead connector
<b>Standard</b>	IEEE 802.11a/n(draft 2.0), 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): 7; No of Max. WDS setting: 4; Preamble setting: Short/Long; Setting for 802.11a/n mix, 802.11a 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; Wireless site survey; Channel width 20/40 MHz; HT Tx/Rx stream selection: 1 or 2; support A-MSDU and A-MPDU; Maximal MPDU density for Tx aggregation setting; Short slot support; RTS Threshold and Fragment Threshold support.
<b>Wireless Security</b>	Layer 2 User or AP Isolation; Blocks client to client discovery within a specified VLAN; 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-256 bits); 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: 1; VALN assignment on ESSID; Support VLAN tag over WDS link
<b>Operation Modes</b>	AP, AP Client (Ethernet to WLAN Bridge), WDS (Wireless Repeater; P-to-P, P-to-MP Bridge), Universal Repeater plus Client Bridge Mode. UPnP
<b>Management</b>	Web base Management System with HTTP or HTTPS, CLI via telnet or SSH.
<b>External Power Jack</b>	12~68 VDC with passive 48V 0.4A Power over Ethernet, 110-220VAC Power. One internal console
<b>Form Factor</b>	Die-cast aluminum enclosure with IP 67/68 rating
<b>LEDs</b>	Power, wireless, and Ethernet.
<b>Mounting</b>	Wall mounting or pole mount
<b>CPE Weight</b>	0.68 KG (1.5 LBS)
<b>Dimension</b>	157(L) x 96(W) x 45(H) mm
<b>Operating Temperature</b>	-30°C to 60°C (-22°F to 140°F)
<b>Operating Humidity</b>	100% non-Condensing
<b>Package Content</b>	CAP-5015D, PoE Injector x 1 , Power Code x 1 , Mounting Kit (with screw package) x 1, Weatherproof connector x 1 , CD manual x 1. Optional N-type connectors x 2, or integrated 15 dBi antenna x 1
<b>Approval</b>	FCC, CE (in-progress), C-TICK (in-progress)
<b>Antenna Characteristics</b>	
<b>Gain</b>	15dBi 5GHz (H60, E30) built-in dual polarity directional antenna, , or optional N-type connector
<b>Frequency Range</b>	5.150 ~ 5.825GHz
<b>Radio Characteristics</b>	
<b>Radio Scheme</b>	802.11a: OFDM (64QAM, QAM, QPSK, BPSK) 802.11n: BPSK, QPSK, 16QAM, 64QAM
<b>Chipset</b>	Ralink RT2880 + RT2850
<b>Platforms</b>	266MHz MIPS 4Kc, 32MB16-bit SDRAM; 4MB Flash
<b>Frequency Range</b>	5.150 ~ 5.825GHz (Europe/USA); 4.9 ~ 5.25GHz (Japan)
<b>Output Power</b>	500mW RF output power, transmit power variation: 27 dBm
<b>Data Rate</b>	1 / 2 / 5.5 / 6 / 9 / 11 / 12 / 18 / 24 / 36 / 48 / 54 Mbps
<b>Channels</b>	North America: 12 Channels (US, Canada) ETSI: 18 (11n) or 19 (11a) Channels (Most European Countries) TELEC: 4 Channels (Japan)
<b>Receiver Sensitivity</b>	-97dBm