CERIO

Amplify your Wireless Network

OW-300N2-A2

eXtreme Power 11N 2.4Ghz 2x2 Outdoor Access Point (1000mW)

EAN Code : 4712757155099

CenOS 5.0 Demo (CLICK HERE)

Introduction

CERIO's OW-300N2-A2 eXtreme Power 11n 2.4GHz 2x2 +10dBi + Heater Outdoor Bridge/Access Point (1000mW) is an outdoor AP that combined superior functionality with an elegant and highly durable housing design. The hardware also includes a **built-in lightning arrester (15kV ESD) design** and **Heater control**, when PCB operating temperatures drop below 0℃ the heater will turn on automatically. OW-300N2-A2 is the perfect outdoor device for reliably delivering last mile wireless services to businesses or residential broadband subscribers.

OW-300N2-A2 utilizes 1000mW output Tx Power with built-in 10dBi patch antennas, and also **supports 2x2 external N-Type Antenna Connectors** (users must enter the software UI to select either built-in antennas or external N-Type antennas, they cannot be used simultaneously). This device use Wifi Mesh or WDS to provide clients with an Ethernet connection to an expanded local wireless network.

The CERIO OW-300N2-A2 supports **fast wireless roaming 802.11r/k** protocol for seamless roaming and smart client handoff.

Highlight Features

- IEEE 802.11n Compliance in 2Tx / 2Rx Design
- 1000mW at 2.4Ghz Output eXtreme High Power design
- Built in +10dBi , 2.4GHz (H110, E60) Directional Panel Antenna
- Supports CenOS 5.0 Software **(Click here for more)**
- Operation Modes : Router AP mode/ Router AP + WDS mode, Pure AP / AP + WDS Mode, Pure WDS Mode, Client Bridge + Universal Repeater AP Mode, and finally WISP + Repeater AP Mode.
- Built-in heater with temperature sensor
- Provide customizable login and logout Captive portal page by Web Page
- Weather-proof Housing (IP67/IP68 Approved)
- Each Virtual ESSID supports 10 local built-in local accounts, and OAuth2.0 Facebook / Google account
- CenOS5.0 Control Access Point Mode (CAP) supports centralized management of up to 16 AP devices
- Supports 8 virtual ESSID and associated clients per AP to 32 and the Pure WDS Max. 4
- Supports 0~6 WDS, total up to 7 WDS links.
- Software UI includes 2.4Ghz antenna selection of either: Built-in 2.4Ghz for 10dBi patch antennas or 2x2 2.4Ghz External N-Type Antenna Connectors
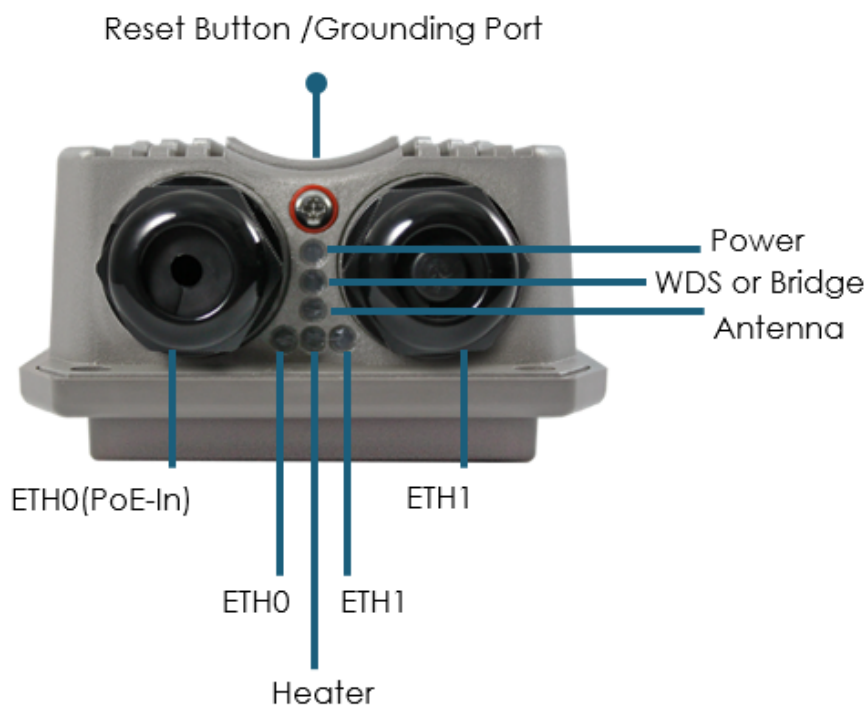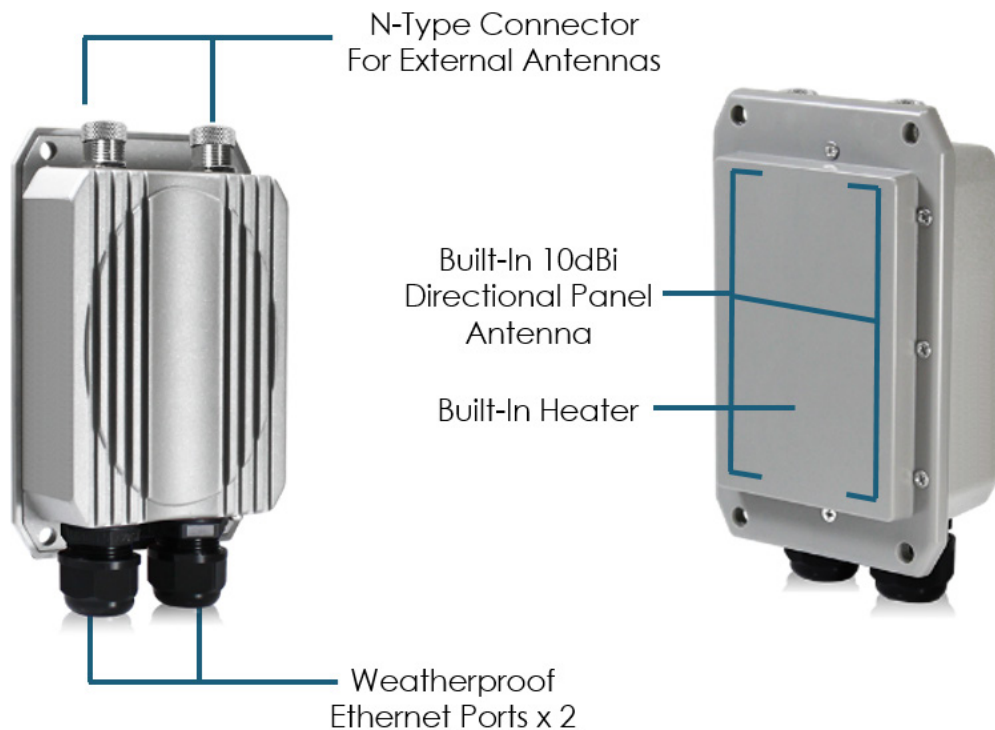
Software Features

- Supports built-in 802.1x RADIUS authentication server account database for small and medium environments, removing the need to set up external server and avoiding additional costs. Also supports RADIUS Server authentication server account features to fit the needs of large-scale network environments
- CAP Mode Group management –maintain a set of setting templates that simplify the task of assigning the same setting to multiple APs
- Each SSID supports 802.1q VLAN Tag standards, supporting up to 4096 group VLAN Tag capability
- QoS(Quality of Service) for bandwidth management and traffic prioritization and supports network
- Users Upload/Download Bandwidth Control speed limits, and User Device (Total) bandwidth control. Administrators can regulate the 3limit of each network user
- Supports IEEE802.11f IAPP and IEEE802.11r and IEEE802.11k Fast Roaming
- Support Ping Watchdog function, which automatically monitoring device operations and reboots the device before a crash can occur
- Software UI supports Auto reboot setting function. Software setting allows automatically reboot by Daily/Weekly/Monthly settings
- Supports CenOS5.0 built-in Control Access Point Mode (Controller-less Wireless LAN), and CenOS5.0 compatible management platforms
- Administrative Access : Supports CLI access via Telnet and SSH
- Provides Traffic Monitor and Graphical GUI Status Interface for Network.
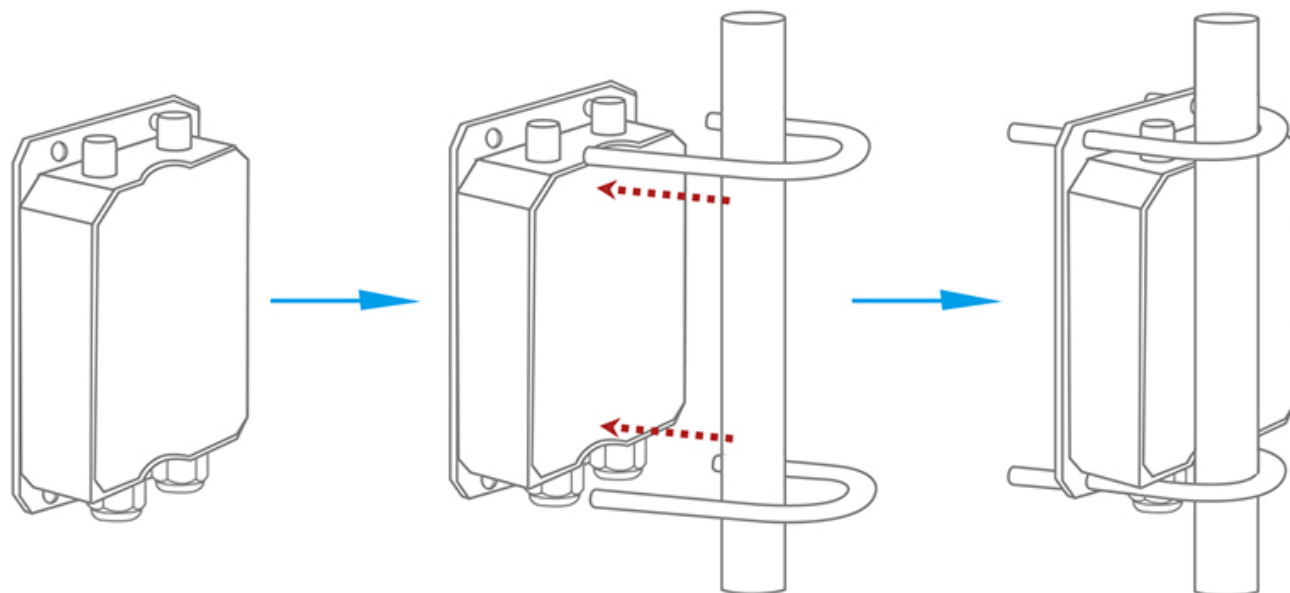
Hardware Features

- IEEE 802.11n Compliance in 2Tx / 2Rx Design
- Enables Bandwidth of up to 300Mbps(Tx), 300Mbps(Rx) link rate
- Support IEEE 802.11n, Operates in the 2.4GHz ISM Band
- 1000mW at 2.4Ghz eXtreme High Power
- Built in +10dBi , 2.4GHz (H110, E60) Directional Panel Antenna
- Support 2x2 External N-Type Antenna Connectors
- Topology : Point to Point , Point to Multi Point
- Support Over load current protection for the board design and 3 LEDs Wireless Signal Strength
- Weather-Proof Housing (IP67/ 68 Approved)
- Weather-Proof M-13 RJ45 Connector
- Wide Range Voltage Input PoE Power support (12-68VDC)
- Built-in lightning arrester (15kV ESD)
- Built-in Heater

Hardware Overview

N-Type Connector
For External Antennas

Built-In 10dBi
Directional Panel
Antenna

Built-In Heater

Weatherproof
Ethernet Ports x 2

Reset Button /Grounding Port

Power

WDS or Bridge

Antenna

ETH0(PoE-In)

ETH1

ETH0   ETH1

Heater

*Ethernet Ports utilize **Weatherproof**
protective design

OW-300N2-A2 Mounting Application

Software

Application Software
Cerio CenOS 5.0 Software Core

Standards & Hardware Specifications

Network Standards Conformance
IEEE 802.11 b/g/n/ compliant
IEEE 802.3 / IEEE 802.3u
IEEE 802.11i Preauth (PMKSA Cache)
IEEE 802.11d -Multi country roaming
IEEE 802.11Q VLAN
IEEE802.11f
IEEE802.11r/IEEE802.11k Fast Roaming
IEEE802.11e WMM

Ethernet Configuration
Die Case Housing Weatherproof Protection Ethernet Connector x 2

LED Indicators	
ETH1 (PoE In) LED	x1
ETH2 LED	x1
PWR (Power) LED	x1
WDS Bridge LED	x1
Heater LED	x1
Antenna Type LED	x1

Wireless Specifications

Data Transfer Rate
IEEE802.11b : 1 / 2 / 5.5 / 11Mbps (auto sensing)
IEEE801.11g : 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54Mbps (auto sensing)
IEEE802.11n : 300Mbps (Tx), 300Mbps (Rx)

Frequency Range
2.412 ~ 2.462GHz (USA)
2.412 ~ 2.484GHz (Japan)
2.412 ~ 2.472 GHz (Europe ETSI)
2.457 ~ 2.462 GHz (Spain)
2.457 ~ 2.472 GHz (France)

Channel Spacing
IEEE802.11b/g/n : 20/40MHz

Media Access Protocol
CSMA / CA with ACK

Modulation Method
IEEE802.11b：DSSS (DBPK,DQPSK,CCK)
IEEE 802.11g/n : OFDM(64-QAM,16-QAM,QPSK,BPSK)

Operating Channels
802.11b/g : 11 for FCC,14 for Japan,13 for Europe, 2 for Spain, 4 for France

Transmit Power Variation
Max : 30± 2 dBm

Receiver Sensitivity
Max : -97dBm

Environmental & Mechanical Characteristics

Operating Temperature
-20 °C ~ 70 °C
Storage Temperature
-30 °C ~ 80°C
Operating Humidity
100% Non-Condensing
Storage Humidity
100% Non-Condensing
Antenna
Built in 10dBi Directional Antenna (H : 110 , E : 60) Support 2x2 External N-Type Antenna Connectors
Form Factor
Supports both wall mount and pole mount ability, Die-Cast aluminum Enclosure with IP67/IP68 Rating
System Power Consumption
12Watt (Max)
Power Supply
Support Power Over Ethernet (48V) input (PoE Power Injector) , AC Input : 110-220V
Input Power
12~68 Voltage Wide Range PoE in
Dimensions (W x H x D)
102 x 162 x 58 mm
Unit Weight
744g
Certifications
CE, FCC, NCC, BSMI, ROHS compliant

Package Contents

Contents	
OW-300N2-A2 Main Unit	x1
PoE Power Inject Kit (Power supply)	x1
Wall/Pole Mounting Bracket Kit	x1
CD Manual	x1
Warranty Card	x1