

Introduction to OW-300N2 & OW-300N2-A2

CERIO
Amplify your Wireless Network



eXtreme Power 11n 2.4GHz
2x2 Outdoor Access Point (1000mW)

Contents

Product Introduction & Comparison	3
Hardware Overview	5
Advanced Features	10
AP Station Deployment	11
Highlight Features	13
AP Management	15
Software Overview	16
What we do	24
Contact Information	25

Product Introduction





OW-300N2-A2

Our **CERIO OW-300 Series** includes two outdoor access point models that both operate on the 2.4GHz frequency.

OW-300N2 is our standard AP model, and utilizes external N-type antennas and a weatherproof housing to make it the ideal product for outdoor deployment.

OW-300N2-A2 is our high end model, and boasts additional features to make it a more durable and versatile option. **OW-300N2-A2** includes both built-in and external antennas, making it a more flexible product. It also includes an built-in heater which is ideal device for cold weather deployment.

Model	OW-300N2	OW-300N2-A2
Features		
Transmit Power	30± 2 dBm (1000mW)	30± 2 dBm (1000mW)
Max Data Rate	2.4GHz 300Mbps (2x2)	2.4GHz 300Mbps (2x2)
CenOS Firmware Version	CenOS 3.0	CenOS3.0
External Antennas	2 N-Type Connectors	2 N-Type Connectors
Internal Antennas	N/A	2x2 Built-In 10dBi Directional Panel Antenna (H110, E60)
Antenna Selection in Software UI	N/A	Yes
Built-In Heater with temperature sensor	N/A	Yes
Die-Cast Aluminum Weatherproof Housing	IP67/IP68	IP67/IP68
Overload Current Protection and Built-in Lightning Arrester	Yes	Yes
PoE Bridge Function	Yes	Yes
Mounting Support	Pole / Wall	Pole / Wall

OW-300N2-A2 Overview — CERIO

Front Panel



N-Type Connector
For External Antennas

Built-In 10dBi
Directional Panel
Antenna

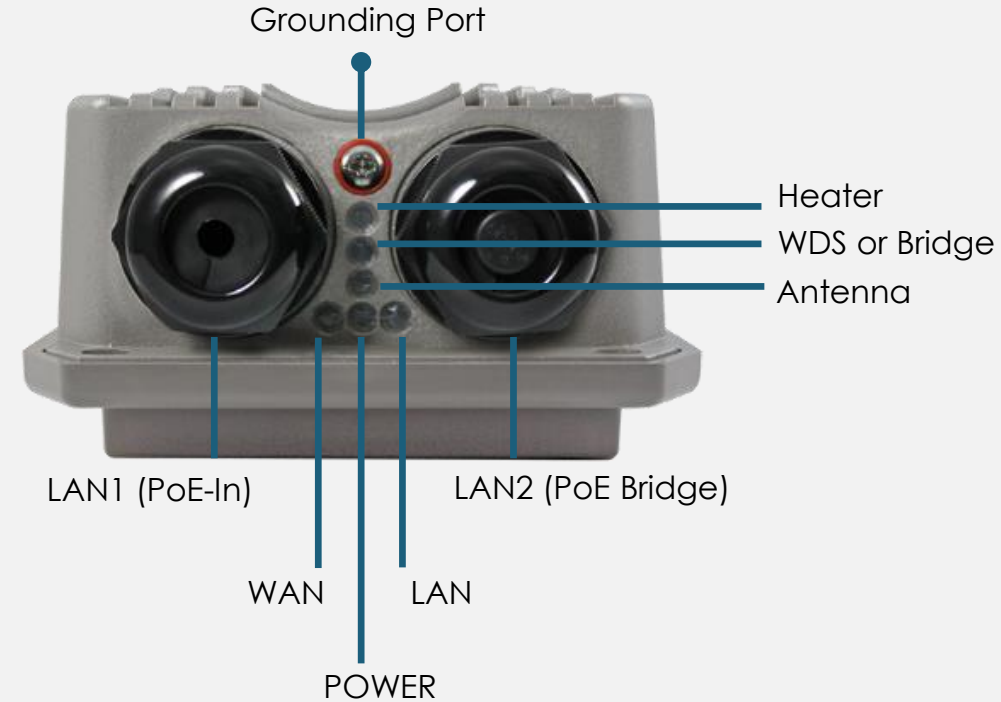
Built-In Heater

Weatherproof
Ethernet Ports x 2

Back Panel



Bottom Panel



Grounding Port

Heater
WDS or Bridge
Antenna

LAN1 (PoE-In)

LAN2 (PoE Bridge)

WAN

LAN

POWER

*Ethernet Ports utilize **Weatherproof**
protective design

OW-300N2-A2 Features — CERIO



OW-300N2-A2 incorporates a built-in heater with smart sensory control that automatically turns on when device PCB temperatures drop below 0°C. This makes OW-300N2-A2 perfect for cold weather deployment.



OW-300N2-A2 utilizes a 10dBi built-in panel antenna and also 2 eternal N-Type antenna connectors. Users have the option of choosing which design to use. (Users cannot operate built-in and external antennas simultaneously)



OW-300N2-A2 supports passive Power over Ethernet in to conveniently power the device through CAT5 cabling.



OW-300N2-A2 utilizes IP67/IP68 approved weatherproof aluminum die-cast housing for quality device protection and durability.

OW-300N2 Overview

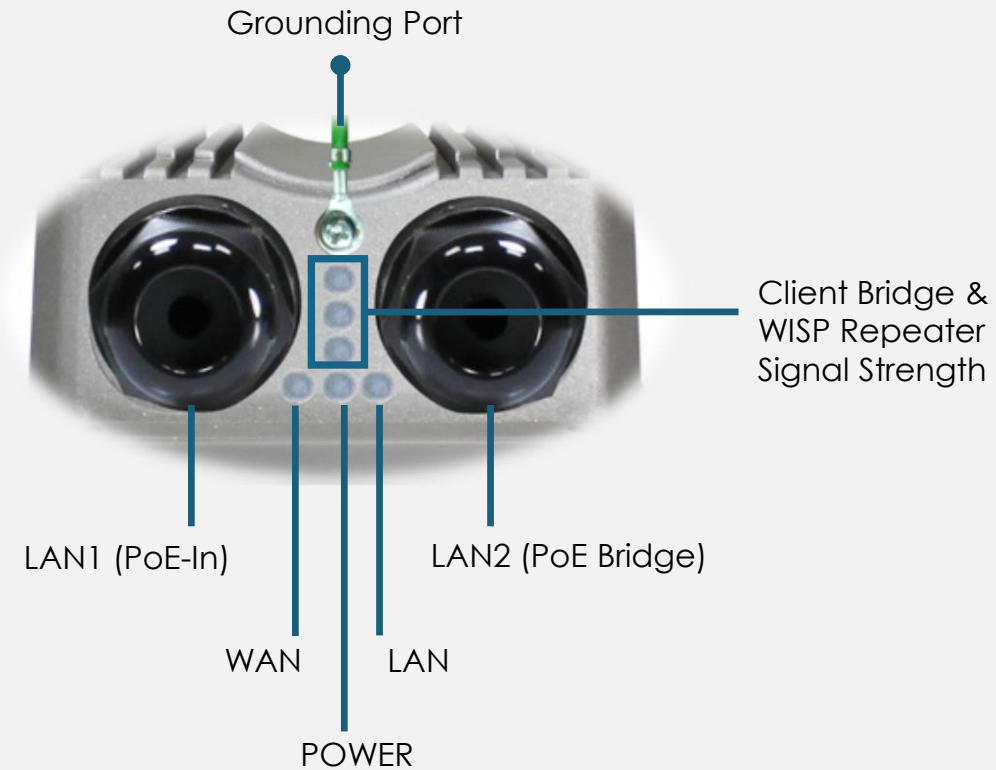
Front Panel



Back Panel

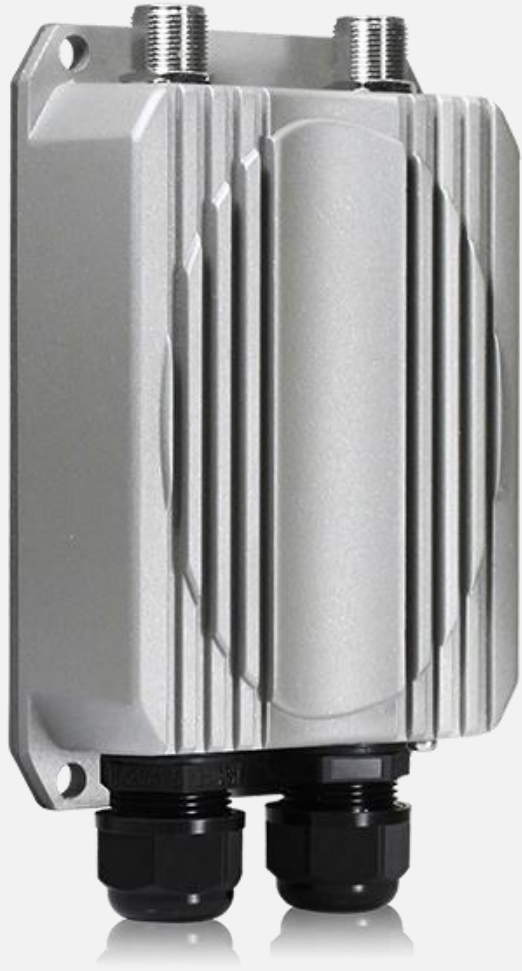


Bottom Panel



*Ethernet Ports utilize **Weatherproof** protective design

OW-300N2 Features



 **Cost Effective**

OW-300N2 is a cost effective outdoor solution for the 2.4GHz band. Because of reduced hardware features, this device is offered at a lower price point compared to our high featured OW-300N2-A2.

Support
POE 

OW-300N2 support passive Power over Ethernet in to conveniently power the device through CAT5 cabling.

 **IP67/IP68 Weather Proof**

OW-300N2 utilizes IP67/IP68 approved weatherproof aluminum die-cast housing for quality device protection and durability.

Versatile Mounting

Wall Mount Supported



Pole Mount Supported



- **5 Operation Modes** : Router+AP Mode, AP Mode, WDS Mode, Client Bridge + Repeater AP Mode and WISP Repeater + AP Mode
- 1000mW at 2.4Ghz Output High Power
- Supports **8 Multiple-BSSID** and IEEE802.1d Spanning Tree
- Supports Static Routing and RIP and OSPF Dynamic Routing through CPE mode.
- QoS(Quality of Service) for **bandwidth management** and traffic prioritization
- Supports IGMP v1/v2/v3 snooping, Web management and SNMP MIB-II
- Software interface allows for communicating with **CWMS Software** and CERIO AM-Series AP Management WLAN Switch or Access Controller of network management servers.

AP Station Deployment — CERIO



OW-300N2-A2 and **OW-300N2** operate on the 2.4GHz frequency band, and are perfect for AP station deployment

CERIO's OW-300 series utilizes weather proof die-cast housing, making it a reliable device for outdoor deployment.

Users can deploy OW-300 series as an **Access Point Station** in:

- Public Spaces- Parks, Pools, etc
- Schools and Universities
- Company campuses
- Businesses/Restaurants with outdoor seating

Ideal Deployment — CERIO





Wireless Bridge

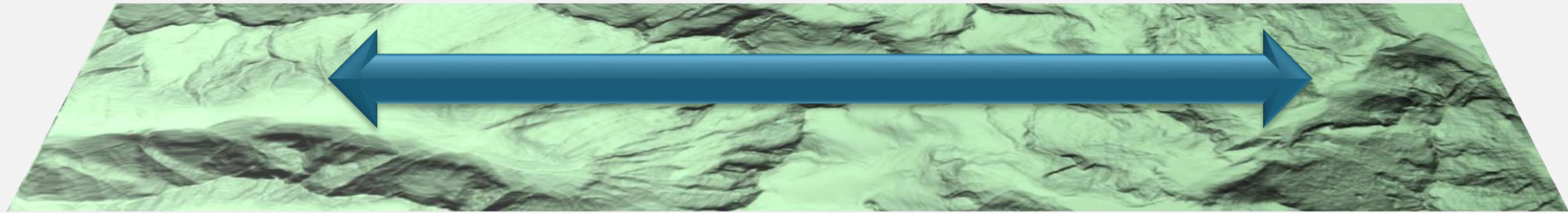
CERIO's OW-300N2/OW-300N2-A2 outdoor access points support built-in network bridging capabilities, connecting wired devices to a wireless network.

Spanning Tree Protocol

The Spanning Tree Network Protocol ensures loop free topology. This effectively blocks any bridge loops in the networking infrastructure. This guarantees that there is only one possible active path between two network devices.

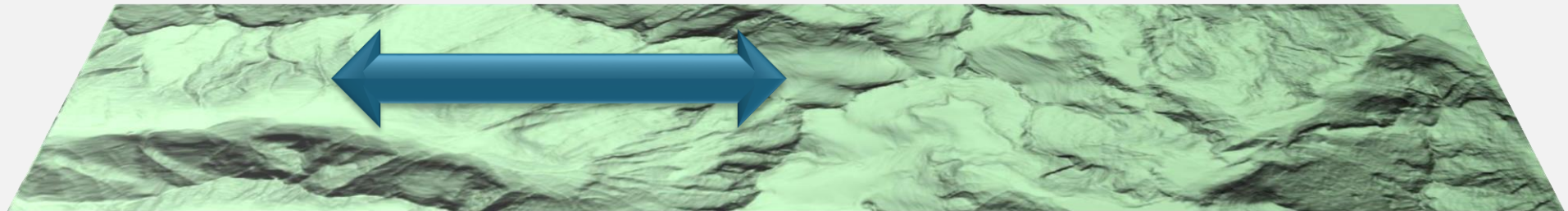
Tested connection distances using **OW-300N2** and **OW-300N2-A2** with external antennas

10+ Kilometers



Tested connection distances using **OW-300N2-A2** with built-in 10dBi directional panel antenna.

3.7+ Kilometers



AP Management — CERIO

OW-300N2/OW-300N2-A2 support management by CERIO Wireless Management Software and AMR-3204G hardware AP controller. This provides centralized and convenient control of a wireless network.

CERIO Wireless Management Software



Maximum
500
Access
Points

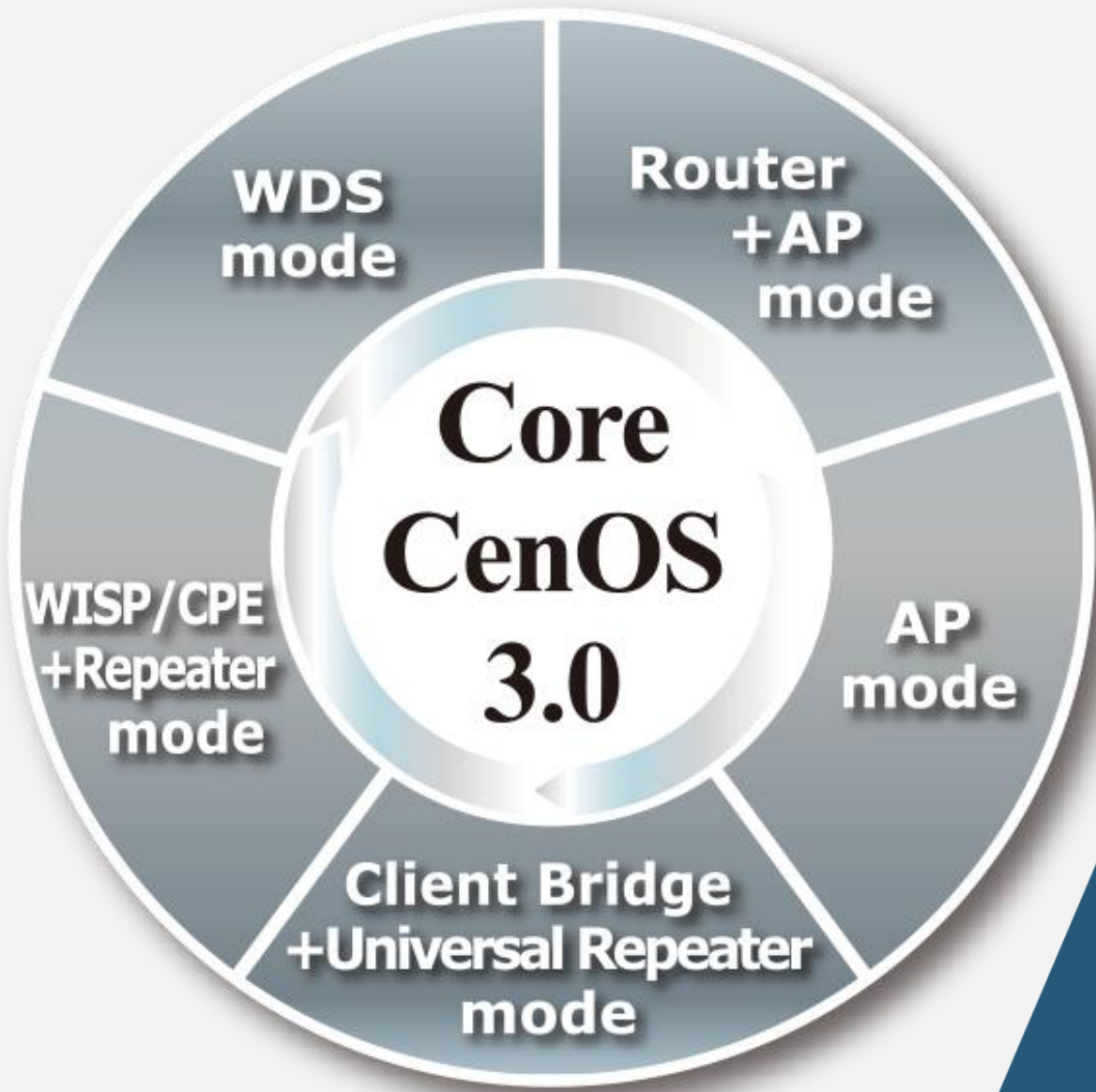
AMR-3204G Access Point Controller



Maximum
128
Access
Points

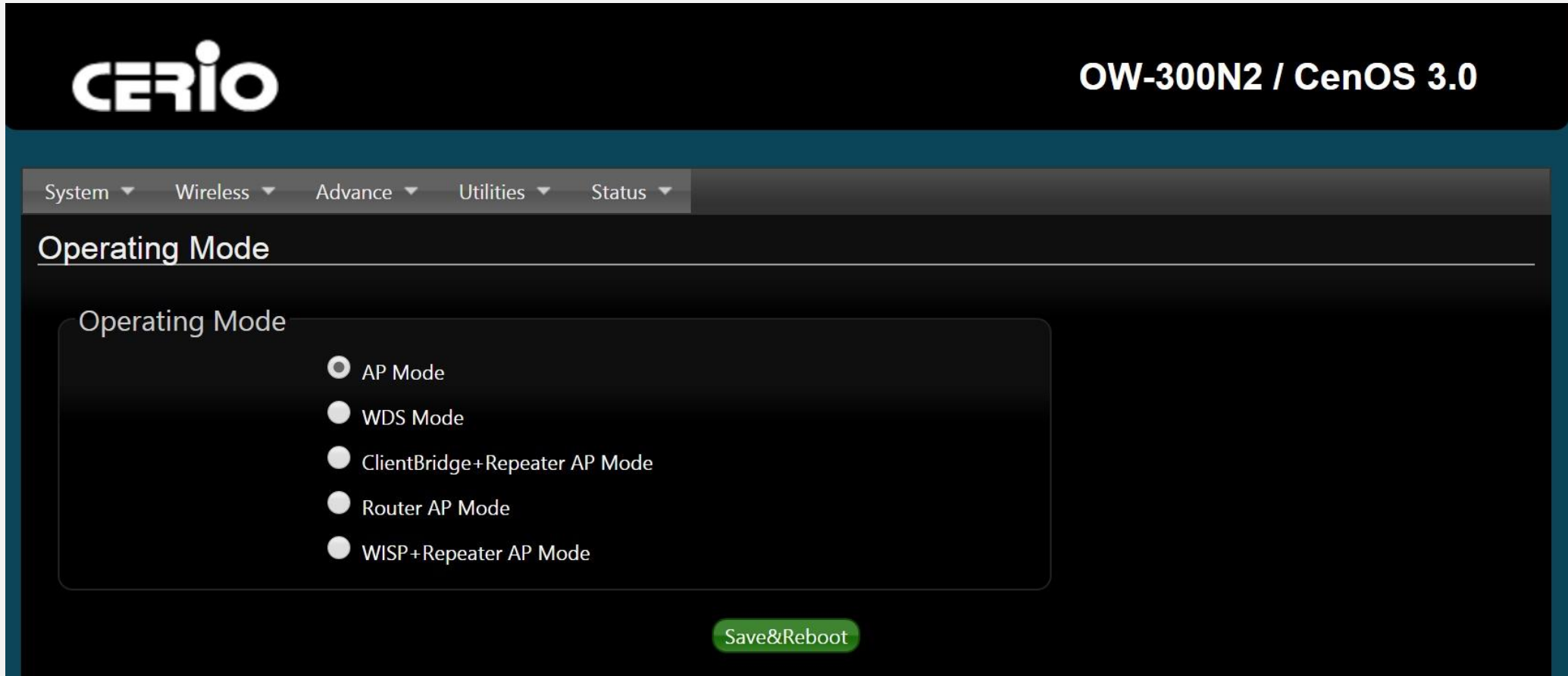
Dual WAN
ISP 1 ISP 2
Load Balancing

AAA
Authentication Authorization
Accounting



CenOS 3.0 Software Overview

Cerio's OW-300N2 and OW-300N2-A2 support **5 Operation Modes**. The default operation mode for this device is Pure AP Mode.



The screenshot displays the CERIO web interface for the OW-300N2 / CenOS 3.0 device. The interface features a dark theme with a navigation menu at the top containing 'System', 'Wireless', 'Advance', 'Utilities', and 'Status'. The main content area is titled 'Operating Mode' and contains a list of five radio button options: 'AP Mode', 'WDS Mode', 'ClientBridge+Repeater AP Mode', 'Router AP Mode', and 'WISP+Repeater AP Mode'. The 'AP Mode' option is selected. A green 'Save&Reboot' button is located at the bottom right of the configuration area.

CERIO OW-300N2 / CenOS 3.0

System ▾ Wireless ▾ Advance ▾ Utilities ▾ Status ▾

Operating Mode

Operating Mode

- AP Mode
- WDS Mode
- ClientBridge+Repeater AP Mode
- Router AP Mode
- WISP+Repeater AP Mode

Save&Reboot

SSIDs & VLAN Tagging

VAP List

VAP	MAC Address	ESSID
VAP0	00:11:A3:1C:07:D0	AP00
VAP1		AP01
VAP2		AP02
VAP3		AP03
VAP4		AP04
VAP5		AP05
VAP6		AP06
VAP7		AP07

Cerio's CenOS 3.0 Software allows each OW-300N2/OW-300N2-A2 device to broadcast 8 SSIDs. Each SSID can be configured to a specified SSID by the network administrator. This is known as VLAN tagging.

VLAN tagging effectively marks packets with a VLAN ID to properly determine which VLAN the packet belongs to. This allows users to deploy multiple VLANs (Guest/VIP) on a port, and distinguish which network each packet belongs to.

Create and manage up to **8 ESSIDs** to segment your network. This allows administrators to **separate traffic** within VLANs, allowing for more organized network construction.



The screenshot shows the 'VAP0 Setup' interface with the 'Security' section expanded. The interface includes a navigation bar at the top with tabs for 'System', 'Wireless', 'Advance', 'Utilities', and 'Status'. The 'Security' section contains the following configuration options:

- ESSID:
- Hidden SSID: Enable Disable
- Client Isolation: Enable Disable
- IAPP: Enable Disable
- Maximum Clients:
- VLAN ID(Tag):
- Security Type:

System ▾ Wireless ▾ Advance ▾ Utilities ▾ Status ▾

QoS Setup

Bandwidth Control

Service: Enable Disable

Mode: Total Bandwidth Per Rule Bandwidth

Upload: kbps

Download: kbps

Per Rule

Comment:

Type: ▾

IP:

Upload: kbps

Download: kbps

QoS List

#	Comment	Rule	Bandwidth(U/D)	Action
No items in the list!				

Quality of Service (QoS) allows for bandwidth control which permits Administrators to allocate bandwidth to parties as they see fit.

QoS also allows for Rule setting customization, where admins can enact QoS Rules to specific individual IP Addresses, Segments, MAC addressed, and even Ports.

Wi-Fi RF Signal on/ off By scheduling control

Time Policy Setup

Policy 3

Policy: Policy 3

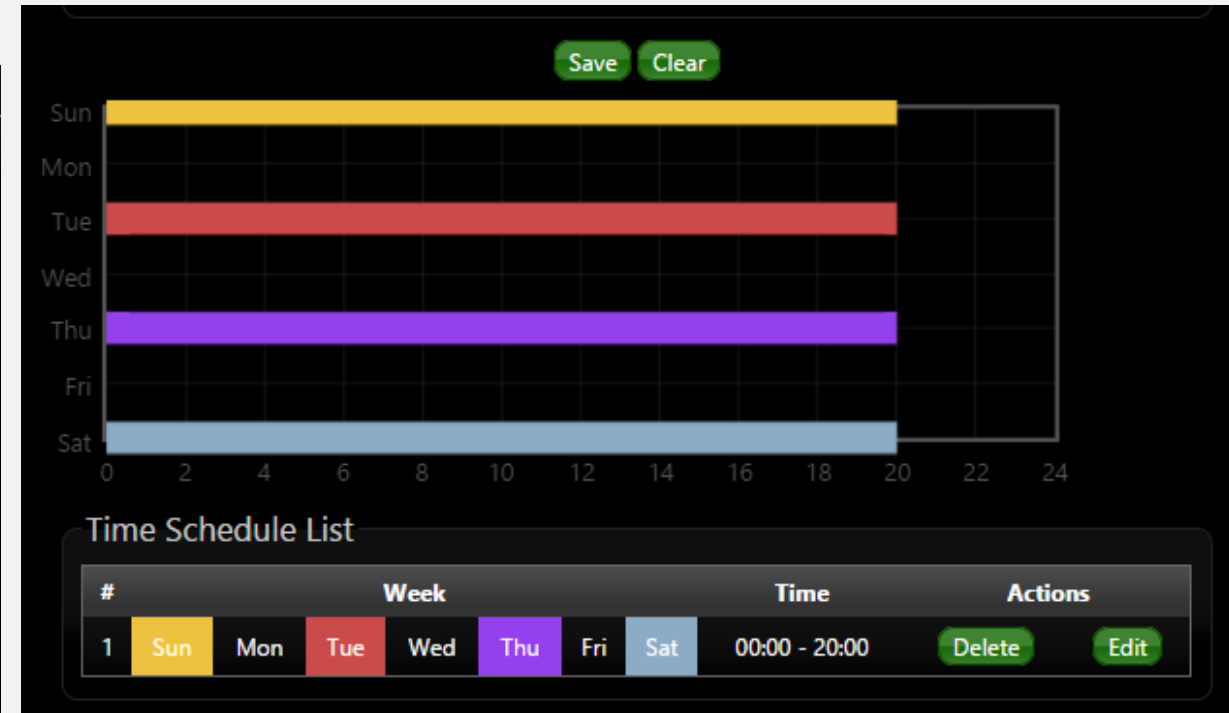
Schedule Rule: On Schedule Out of Schedule

Time Schedule

Day of Week: Sun Mon Tue Wed Thu Fri Sat

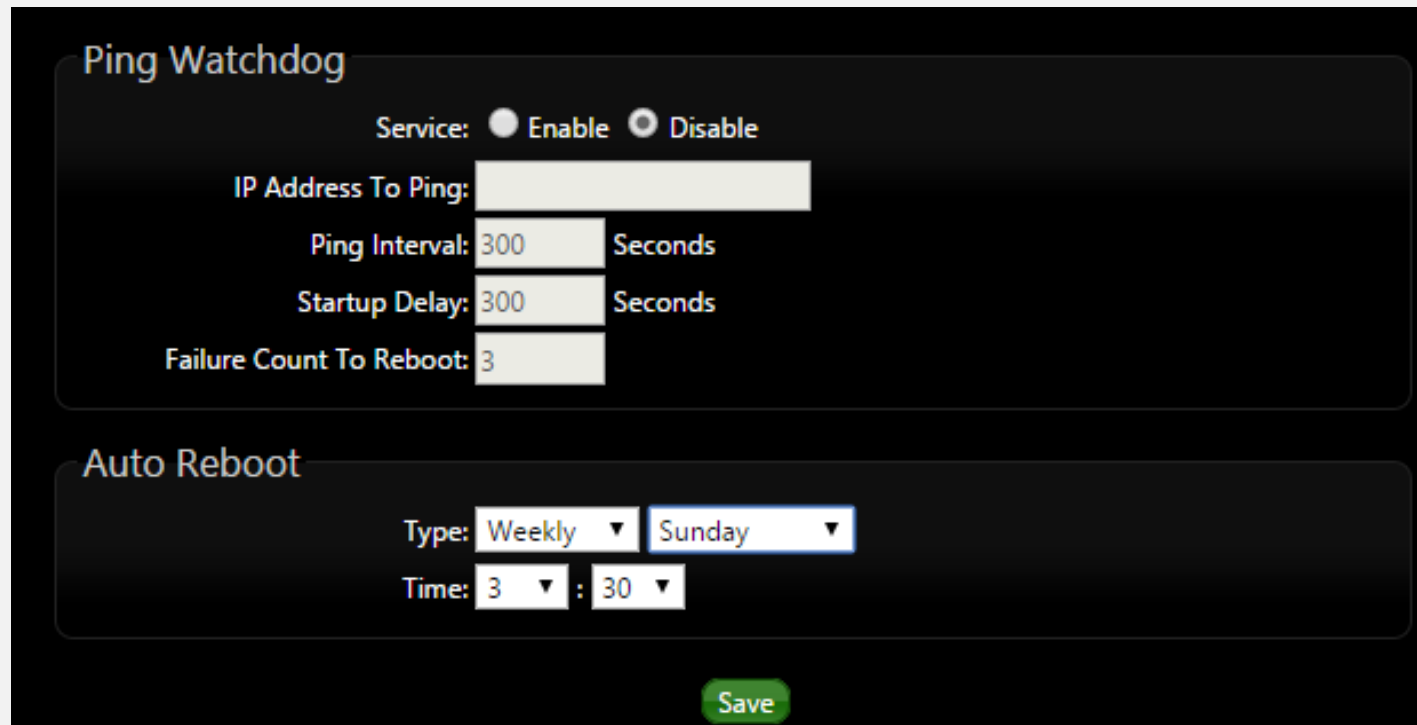
Start From: 00 : 00

End At: 20 : 00



OW-300N2/OW-300N2-A2's CenOS 3.0 Time Policy function allows **for management of usage time** within a network. CenOS 3.0's interface allows for simple configuration of Day/Time restrictions that administrators can place on users within the network.

Administrators can activate the CenOS 3.0 Auto Reboot function which effectively reboots the network system routinely based on admin settings. This enables better system reliability and a lower likelihood of crashes. It also reduces the need for constant on-site system maintenance in case of system crashes. This setting is ideal for Hotel deployment.



Ping Watchdog

Service: Enable Disable

IP Address To Ping:

Ping Interval: Seconds

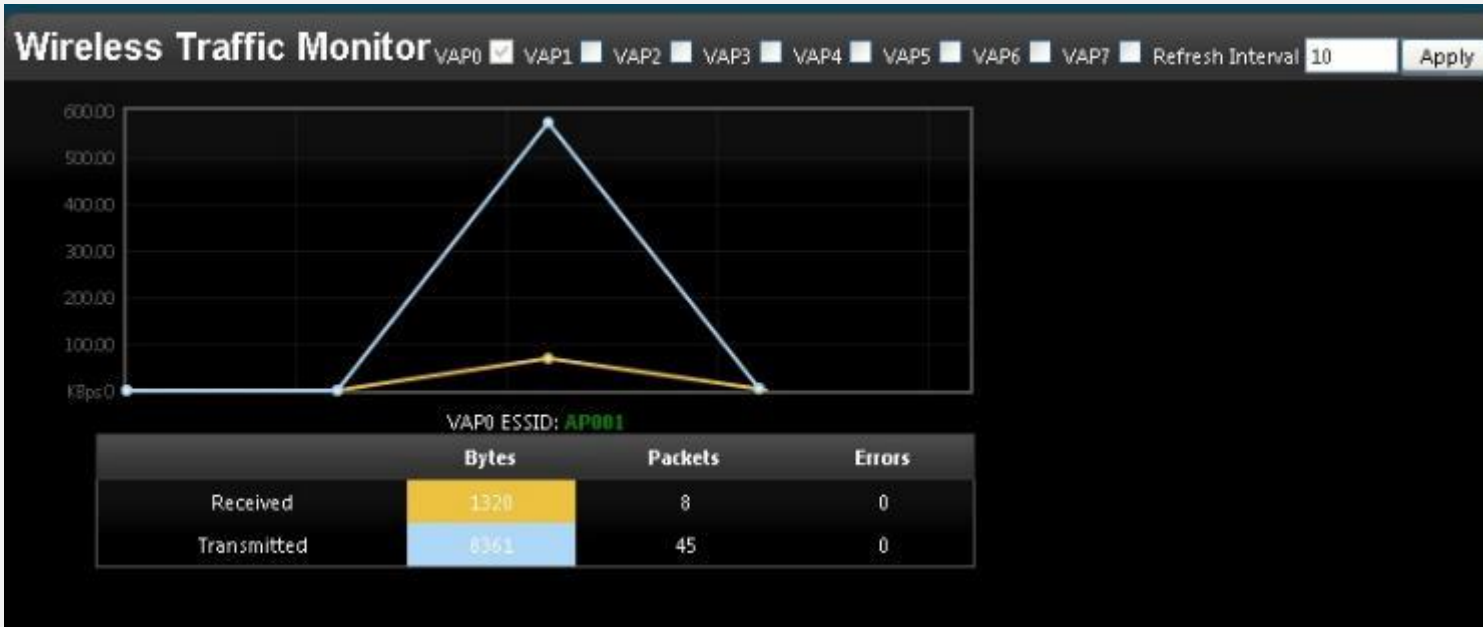
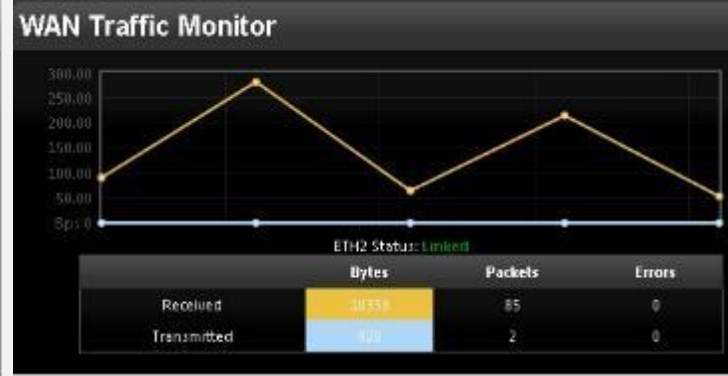
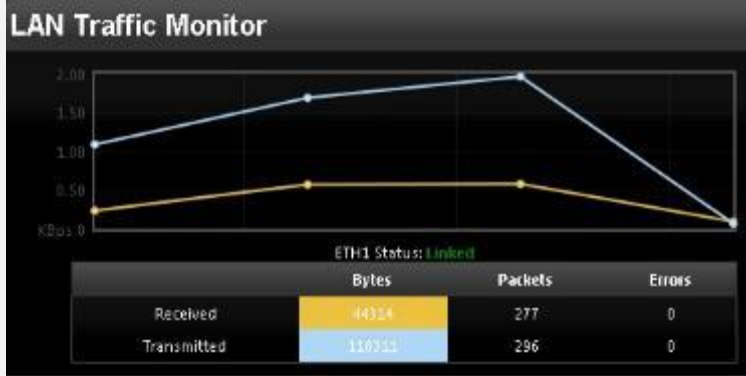
Startup Delay: Seconds

Failure Count To Reboot:

Auto Reboot

Type:

Time: :



CenOS 3.0 provides a Traffic Monitor and Graphical User Interface for Network and Radio Overview

This allows administrators to monitor network statuses and ensure operations are all functioning correctly.

What we do



Innovation & Design

Our R&D team continues to incorporate the newest wireless protocols and features to make our products perfect for enterprise deployment.



Wireless Solutions

Our Field Application Engineers and Specialists have unparalleled experience providing the perfect solution for any wireless projects (e.g. Hotels, Long Distance PTP Backhaul, Universities)



Software Development & Design

Our software provides a high featured and easily operated User Interface and also supports centralized AP Management for convenient device deployment.



Outstanding Customer Service

CERIO's customer service staff are experts on our products and possess clear and patient communication skills.

Contact Information

CERIO

CERIO Corporation

4F.-3., No.192, Sec. 2, Zhongxing Rd., Xindian Dist.,
New Taipei City 231, Taiwan (R.O.C.)

Telephone : +(886) 02-8911-6160

Fax : +(886) 02-8911-6180



www.cerio.com.tw



issales@cerio.com.tw



www.facebook.com/center.ww



<https://goo.gl/hqjOkR>



www.linkedin.com/company/cerio-corporation



www.youtube.com/channel/UCejUL-o3rQavyItXEEMyK1A

CERIO

Amplify your Wireless Network