

OW-500 A3

eXtreme Power Wave2 4X 2x2 Tri-Band Outdoor Bridge/AP

EAN Code : 4712757159721



Introduction

CERIO's OW-500 A3 eXtreme Power Wave2 4X 2x2 Tri-Band Outdoor Bridge/AP provides superior functionality with an elegant and highly durable housing design. It's a concurrent Tri-Band access point with the latest MU-MIMO Wave2 technology for improvements in the speed, reliability and quality of wireless communications, provides wireless 4 channel (4x speed) simultaneous operation in 2.4GHz, 5GHz (Radio1) and 5GHz (Radio2) wireless coverage for maximum flexibility. It supports a maximum throughput of **2.2Gbps**, up to **400Mbps** on the 2.4GHz frequency band and **867Mbps** are on the 5GHz(Radio1) and 5GHz (Radio1)frequency band. In addition to the **multi-radio AP Station (Access Point)** that can be for more wireless client, It is also best for **long-distance point-to-multipoint wireless deployment**. A 5Ghz Radio can be used to bridge the upper WiFi connection while reconnecting. With another 5Ghz Radio to the down WiFi bridge connection, **it can easily complete a one-to-many bridge and then bridge for long distance transmissions**.

OW-500 A3 provides IP68 weather-proof durable design and supports four external N-Type antenna connectors are assigned to the 5GHz band and built-in one and 2x2 5dBi 2.4GHz High-Gain Omnidirectional antenna. OW-500 A3's high performance and durable design are made to withstand harsh environment deployment. This provides product durability and user peace of mind when deploying wireless devices in outdoor environments.

OW-500 A3's bundle with CenOS 5.0 Software core, Control Access Point Mode (CAP) supports centralized management of up to 64 AP devices. It's also supports fast wireless roaming 802.11r/k protocol for seamless roaming and smart client handoff.

Highlight Features

- 2.4GHz band supports wireless standard 802.11bgn protocol with maximum data transfer rate of 400Mbps.
- 5GHz (Radio1) and 5GHz (Radio2) bands support wireless standard 802.11an/ac protocol each with a maximum data transfer rate of 867Mbps.
- 300mW at 2.4GHz/5GHz/5GHz Output eXtreme High Power design.
- Supports 2.4/5/5GHz concurrent Tri-Band function.
- Support 4 external N-Type connectors are assigned to the 5GHz band and one built-in 2x2 2.4GHz 5dBi High-Gain Omnidirectional Antenna.
- Supports CenOS 5.0 Software.
- **Operation Modes** : Access Point Mode (includes Hotspot Portal Authentication, Pure AP Mode, and AP + WDS Mode), Control Access Point Mode (Centralized AP Management), Client Bridge + Repeater Mode and WISP / CPE Repeater Mode.
- IEEE 802.3at Power over Ethernet supported.
- Built in 802.1x RADIUS authentication server and supports up to 50 User Accounts.
- Provide customizable login and logout Captive portal page by Web Page.
- Weather-proof Housing (IP68 Approved).
- Built-in OAuth2.0 Facebook / Google account and support advanced features to create OAuth2.0 new service provider.
- CenOS 5.0 Control Access Point Mode (CAP) supports centralized management of up to 64 AP devices.
- With AP mode supports at total of 48 Multiple-ESSIDs per device (16 ESSID on 2.4GHz Radio0, 16 ESSID on 5GHz Radio 1 and 16 ESSID on 5GHz Radio 2).
- With AP mode supports x8 WDS per Radio (2.4GHz Radio0 band WDS x8 and 5Ghz Radio1 band WDSx8 and 5Ghz Radio2 band WDSx8) for a total of 24 WDS Links.

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.
- Built-in Time Policy function can set multiple times schedule apply to RF on/off and IP/MAC filter or other security function.
- Captive Portal Authentication supports by remote RADIUS server, Local account, third-party OAuth2.0, LDAP (AD), POP3, Guest and remote bulk MAC Address.
- Wireless AP group management - Automatic configuration and setting of intelligent control of AP.
- Each SSID supports 802.1q VLAN Tag standards, supporting up to 4096 group VLAN Tag capability.
- With AP mode supports WPA-PSK/TKIP,WPA-802.1x/TKIP, 802.11i WPA2-PSK/CCMP/AES,WPA2 (802.1x /CCMP / AES), No. of registered RADIUS servers: 1.
- 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 limit of each network user.
- Supports IEEE802.11f IAPP and IEEE802.11r and IEEE802.11k Fast Roaming.
- Support Band steering technology to automatically switch between frequency bands. When using dual-band network cards with 802.11ac, users can always automatically connect to 5Ghz Radio.
- Support Ping Watchdog function, which automatically monitoring device operations and reboots the device before a crash can occur.
- Supports Location Tracking function, which can provide the wireless user's distance location information to the database for analysis.
- Software Web UI supports auto reboot setting function. Software setting allows automatically reboot by Daily/Weekly/Monthly settings.
- Supports intelligent auto channel scanning function, automatic scanning the most undisturbed and suitable wireless channel in the field environment, which is convenient and time-saving.
- Administrative Access : Supports Telnet and SSH.
- Provides Traffic Monitor and Graphical GUI Status Interface for Network and Radio Overview.

Hardware Features

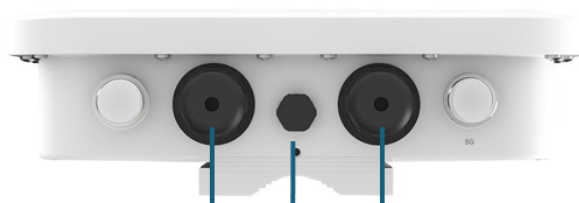
- Supports 2.4GHz/5GHz/5GHz tri-band and the maximum transmission rates are 400/867/867Mbps respectively while operating up to 2200Mbps.
- Supports 300mW at 2.4GHz/5GHz/5GHz Output eXtreme High Power design.
- Supports 2 10/100/1000Mbps Gigabit Ethernet Port and ETH1 port supports PoE function.
- IEEE 802.3at Power over Ethernet supported.
- Support 4 external N-Type connectors are assigned to the 5GHz band and one built-in 2x2 2.4HGz 5dBi High-Gain Omnidirectional Antenna.
- With IP68 weather-proof durable design are made to withstand harsh environment deployment.
- Integrates a long-range power amplifier and high sensitivity receiver to deliver unmatched reliability and performance at large coverage application.
- ESD protection (Electro Static Discharge): Conductive: 4KV ; Air: 8KV.
- Complying with Open Circuit Voltage and Short Circuit Current hardware standard design.
- Pressure vent (prevents internal condensation).

Hardware Overview

External for 5GHz (Radio1) N-Type Connector



Built-in 2x2 2.4GHz (Radio0)
5dBi High-Gain Antenna



Gigabit ETH2

Gigabit ETH1 / PoE in

Pressure Vent

External for 5GHz (Radio2) N-Type Connector

Mounting Application



Pole Mounting



Adjustable Wall Mounting
(OW-PKUR)



Wall Mounting



Adjustable Wall Mounting
(OW-PKUR)

Related Products



ANT-23AD

5GHz 2x2 Outdoor
Directional 23dBi with RF
Cables Panel Antenna



ANT-12A

5GHz Outdoor Omni 12dBi with RF
Cable Pole / Wall Mount Antenna



ANT-05FN-S

2.4GHz Outdoor thin type
Omni 5dBi Plug Antenna



ANT-07AN-S

5GHz Outdoor thin type
Omni 7dBi Plug Antenna



POE-OSP

Gigabit Ethernet PoE Pass-
Through Outdoor Surge Protector



LP-300

11nabg 2.4GHz / 5GHz N-Female
to N-Male Lightning Protector

Software

Application Software

Cerio CenOS 5.0 Software Core

Standards & Hardware Specifications

Network Standards Conformance

IEEE 802.11b/g/n/a/ac compliant
 IEEE 802.3 / IEEE 802.3u
 IEEE 802.3at Power Over Ethernet compliant
 IEEE 802.11Q VLAN
 IEEE 802.11r/IEEE802.11k Fast Roaming
 IEEE 802.11e WMM
 IEEE 802.1x RADIUS

Ethernet Configuration

RJ45 10/100/1000M Ethernet Connector x2 Ports
 (ETH1: Power over Ethernet 802.3at PoE in)

LED Indicators

PWR (Power)	x1
ETH1 (PoE In)	x1
ETH2	x1
5G Signal	x2

Wireless Specifications

Data Transfer Rate

IEEE802.11b : 1 / 2 / 5.5 / 11Mbps (auto sensing)
IEEE801.11g : 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54Mbps
IEEE802.11n : 400Mbps (@ 40MHz 256QAM)
IEEE802.11ac : 867Mbps(@ 80MHz 256QAM)

Frequency Range

IEEE802.11nbg :
 Supports 2.412 ~ 2.472 GHz
IEEE802.11a/an/11ac :
 Supports 5.180 – 5.240 & 5.725 – 5.825 GHz

Channel Spacing

IEEE802.11b/g/n : 20/40MHz
IEEE802.11ac: 20/40/80MHz

Media Access Protocol

CSMA / CA with ACK

Modulation Method

IEEE802.11b : DSSS (DBPK,DQPSK,CCK)
IEEE802.11a/g : OFDM(64-QAM,16-QAM,QPSK,BPSK)
IEEE802.11n/ac : OFDM (256-QAM, 64,-QAM, 16-QAM, QPSK,BPSK)

Operating Channels

2.4GHz : 1-13
5GHz : 36-64, 100-140, 149-165
 (Depends on configured regulatory domain)

Transmit Power Variation

2.4GHz : Max : 24 ± 1 dBm
5GHz : Max : 24 ± 1 dBm

Receiver Sensitivity

2.4GHz : Max : -96 dBm
5GHz : Max : -92 dBm

Environmental & Mechanical Characteristics

Operating Temperature

-25 °C ~ 70 °C

Storage Temperature

-30 °C ~ 80 °C

Operating Humidity

10% - 95% Non-Condensing

Storage Humidity

10% - 95% Non-Condensing

Antenna

4 N-Type Connectors for external antennas for 5GHz band and built-in one 2.4GHz 5dBi High-Gain antennas

Vent

Automatically adjustable Vent design

Form Factor

Supports both Pole / Wall Mounting installed using a provided Mounting Bracket. With IP68 Rating

ESD

Conductive: 4KV
 Air: 8KV

Surge Protection

L to L: 1KV
 L to G: 4KV (EN61000-4-5)

System Power Consumption

21Watt (Max)

Power Supply

Supports Power Over Ethernet (POE 48~57V)

Input Power

IEEE802.3at 48~57V PoE In

Dimensions (W x D x H)

252 x 200 x 78 mm

Unit Weight

1.32kg

Production Location

TW

Certifications

CE, FCC, NCC, ROHS Compliant

Package Contents

Package Contents	
OW-500 A3 Main Unit	x1
PoE Power supply Kit	x1
Wall/Pole Mounting Bracket Set	x1
Adjustable Mounting Bracket Set (OW-PKUR)	x1
Quick Installation Guide(Chinese/English)	x2
Warranty Card	x1