

CW-400 A1

**eXtreme Power Wave2 4x 11N/ac 2.4/5Ghz 2x2
Ceiling / Wall PoE Access Point**

EAN Code : 4712757159523



Introduction

Cerio CW-400 A1 eXtreme Power Wave2 4x 11N/ac 2.4/5Ghz 2x2 Ceiling / Wall PoE Access Point is an AC1300 Wireless concurrent dual band WiFi device. CW-400 A1 bundles Cerio CenOS 5.0 Software Core with Built-in CAP (controller-less AP) mode. **The CAP mode can centralize management of up to 64 units of APs.** Paired with CenOS 5.0 software, the **CW-400 A1** also supports two additional operate modes, Authentication Access Point Mode (AAP Mode with built-in 802.1x RADIUS Server) and WISP Repeater Mode (to extend the coverage of an existing network). This device is perfect for enterprise deployment such as corporate offices, public venues, conferences, and other high traffic indoor environments.

The CW-400 A1 Ceiling / Wall PoE Access Point Built-in dual band 2x2 3dBi Omni Antennas. The antenna diversity design enhances the connection reliability to improve data transmission capability. It supports safe ceiling, wall and T-Bar Rail mounting through its mounting bracket lock design. Users must use a thin tool to properly remove the device from its installation location, which ultimately reduces device theft as well as damage. **CW-400 A1's 11ac chipset design provides enterprise grade CPU performance, allowing the device to handle up to 200 concurrent clients.** This 11ac dual-band AP hardware also includes 802.3af/at PoE capabilities that allows power and data to be supplied to the unit using CAT5 Ethernet cable. **CW-400 A1 supports fast wireless roaming 802.11r protocol for seamless roaming and smart client handoff.**

Highlight Features

- 2.4Ghz band supports standard 802.11 bgn protocol with maximum data transfer rate of 400Mbps
- 5Ghz band supports 802.11 an/ac wireless protocol with a maximum data transfer rate of 867Mbps
- Support 2 10/100/1000Mbps Gigabit Ethernet Ports and 1 RJ45 Console Management Port
- Built-in dual band 2x2 3dBi Omni Antennas. The antenna diversity design enhances the connection reliability to improve data transmission capability
- Supports CenOS 5.0 Software Core
- **Operation Modes :** Access Point Mode (includes Hotspot Portal Authentication, Pure AP Mode, and AP + WDS Mode), Controller-less Access Point (CAP) Mode, Client Bridge + Repeater Mode, and WISP / CPE Repeater Mode, Router AP Mode
- IEEE 802.3af/at Power over Ethernet support that allows power and data to be supplied to the unit using CAT5 Ethernet cable.
- Provide customizable login and logout Captive portal page by Web Page
- Captive Portal function default built-in Facebook and Google authentication of Third-party OAuth2.0.
- CenOS 5.0 Control Access Point Mode (CAP) supports centralized management of up to 64 AP devices
- With AP Mode supports at total of 32 Multiple-ESSIDs per device (16 ESSID on 2.4Ghz and 16 ESSID on 5Ghz)
- With AP mode supports x8 WDS per Radio (2.4Ghz band WDS x8 and 5Ghz band WDSx8) for a total of 16 WDS Links

Software Features

- 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.
- CAP Mode Group management –maintain a set of setting templates that simplify the task of assigning the same setting to multiple APs
- Captive Portal Authentication supports by remote RADIUS server, Local account, third-party OAuth2.0, LDAP (AD), POP3, Guest and remote bulk MAC Address.
- Each SSID supports 802.1q VLAN Tag standards, support setting 1~ 4096 VLAN Tagging 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 limit of each network user
- Supports IAPP and IEEE802.11r Fast Roaming
- Supports Band steering technology which detects dual-band capable clients, and directs these clients to the less saturated 5GHz network.
- 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 compatible management platforms
- Administrative Access : Supports Telnet and SSH
- Provides Traffic Monitor and Graphical GUI Status Interface for Network and Radio Overview.

Hardware Features

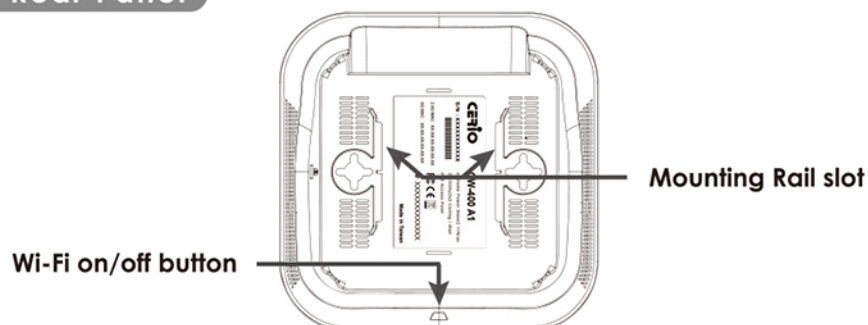
- 2.4Ghz Data Rate of up to 400Mbps(Tx), 400Mbps(Rx) link rate
- 5Ghz Data Rate of up to 867Mbps for 80MHz channel bandwidth
- Support 2 10/100/1000Mbps Gigabit Ethernet Ports and 1 RJ45 Console Management Port
- Supports IEEE 802.3af/at Power over Ethernet (PoE) that allows power and data to be supplied to the unit using CAT5 Ethernet cable
- Built-in dual band 2x2 3dBi Omni Antennas. The antenna diversity design enhances the connection reliability to improve data transmission capability
- Supports hardware reset button
- Except for reset button function, it also bundles RJ45 Function Kit, which is able to reset the device to default remotely. It can save extra re-installation cost and time
- Easy to install Ceiling / Walling / T-Bar Rail mounting using a Mounting Bracket form factor
- Supports hardware RF on/off base on your needs to turn on or turn off , easy to use

Hardware Overview

Front



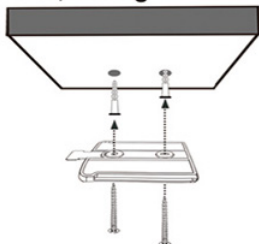
Rear Panel



Ceiling & Wall Mounting

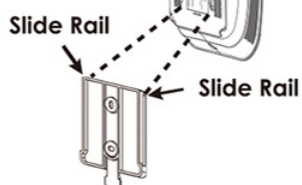
Step 1

Wall/Ceiling



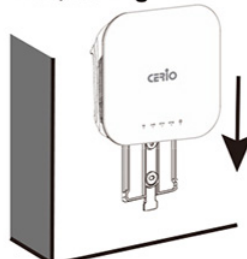
Step 2

Mounting Rail slot

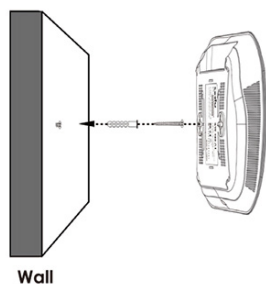


Step 3

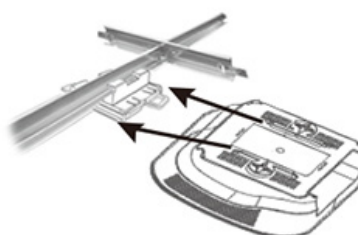
Wall/Ceiling



Ceiling & Wall Mounting



T-Bar Mounting



Software

Application Software

Cerio CenOS 5.0 Software Core

Standards & Hardware Specifications

Network Standards Conformance

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

Ethernet Configuration

RJ45 10/100/1000M Ethernet Port x2
(ETH1: Power over Ethernet 802.3.af/at PoE in)
RJ45 Console Port x1

Reset Button

Reset to default

LED Indicators

PWR (Power) x1
ETH1 (PoE In) x1
ETH2 x1
2.4G Signal x1
5G Signal 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
IEEE802.11n : 400Mbps (@ 40MHz 256QAM)
IEEE802.11ac : 867Mbps(@ 80MHz 256QAM)

Frequency Range

IEEE802.11nbg :
2.412 ~ 2.472 GHz
IEEE802.11a/an/11ac :
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/n : OFDM(64-QAM,16-QAM,QPSK,BPSK)

IEEE802.11n : OFDM (256-QAM, 64,-QAM, 16-QAM, QPSK,BPSK)

IEEE802.11ac : 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 : 22 ± 1 dBm
5Ghz : Max : 20 ± 1 dBm

Receiver Sensitivity

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

Environmental & Mechanical Characteristics

Operating Temperature

-0 °C ~ 45 °C

Storage Temperature

-40 °C ~ 70°C

Operating Humidity

10% - 95% Non-Condensing

Storage Humidity

10% - 95% Non-Condensing

Antenna

Built-in dual band 2x2 3dBi Omni Antennas

Form Factor

Desktop , Ceiling , Wall and T-Bar Rail Mounting

ESD

Conductive: 4KV
Air: 8KV

System Power Consumption

8Watt (Max)

Power Supply

Supports Power Over Ethernet (PoE 48~57V voltage)

Input Power

IEEE 802.3af/at 48V~57V PoE In

Dimensions (W x D x H)

162 x 162 x 42 mm

Unit Weight

0.267kg

Case of Material

ABS

Certifications

FCC,CE, NCC, ROHS compliant

Package Contents

Contents	
CW-400A1 Main Unit	x1
PoE power supply kit	x1
Wall/Ceiling/T-Bar Rail Mounting Bracket	x1
RJ45 Function Kit	x1
Quick Installation Guide	x1
Warranty Card	x1