

CW-400NAC

eXtreme Power 11n/ac 2.4/5GHz 2x2 Ceiling / Wall PoE Access Point (800mW)

EAN Code : 4712757153163

Introduction

Cerio CW-400NAC eXtreme Power AC1200 2.4GHz / 5GHz 2x2 Ceiling / Wall PoE Access Point is an AC1200 Wireless concurrent dual band WiFi device. CW-400NAC bundles Cerio CenOS 5.0 Software Core with Built-in CAP (controller-less AP) mode. The CAP mode can centralize management of up to 128 units of APs. Paired with our new CenOS 5.0 software, CW-400NAC 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-400NAC Ceiling / Wall PoE Access Point hardware utilizes **800mW (2.4GHZ) / 500mW (5GHZ) eXtreme power and 4 Omni directional antennas (2 x 2.4GHz & 2 x 5GHz)**. It supports **safe ceiling and wall 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-400NAC's **11ac chipset design provides enterprise grade CPU performance, allowing the device to handle up to 100 concurrent clients**. This 11ac dual-band AP hardware also includes 802.3af PoE capabilities that allows power and data to be supplied to the unit using CAT5 Ethernet cable. CW-400NAC many advanced software features, including our Cerio PoE Bridge function, which allows the device to provide PoE power to subsequent devices such as IP Cams

CW-400NAC supports **fast wireless roaming 802.11r/k protocol** for seamless roaming and smart client handoff.



CenOS 5.0 Demo
(CLICK HERE)

Highlight Features

- 2.4Ghz band supports standard 802.11 bgn protocol with maximum data transfer rate of 300Mbps
- 5Ghz band supports 802.11 an/ac wireless protocol with a maximum data transfer rate of 867Mbps
- 800mW at 2.4Ghz and 500mW at 5Ghz Output eXtreme High Power design
- 4 built-in (2x 2.4GHz & 2x 5GHz) Smart Omni Directional Antenna (IEEE 802.11ac/11nbg 2Tx / 2Rx Design)
- Supports CenOS 5.0 Software ([Click here for more](#))
- Operation Modes : Access Point Mode (includes Hotspot Portal Authentication, Pure AP Mode, and AP + WDS Mode), Control Access Point Mode (Centralized AP Management), Router AP Mode, Client Bridge + Repeater Mode, and WISP / CPE Repeater Mode
- IEEE 802.3af/at Power over Ethernet (48V) support
- Supports PoE Bridge function to allow power to be passed on to subsequent 802.3af/at PoE devices
- Provide customizable login and logout Captive portal page by Web Page
- Each Virtual ESSID supports 10 local built-in local accounts, And supports external RADIUS server, and
- OAuth2.0 Facebook / Google account
- CenOS 5.0 Control Access Point Mode (CAP) supports centralized management of up to 128 AP devices
- Supports at total of 32 Multiple-ESSIDs per device (16 ESSID on 2.4Ghz and 16 ESSID on 5Ghz)
- Supports x8 WDS per Radio (2.4Ghz band WDS x8 and 5Ghz band WDSx8) for a total of 16 WDS Links

Software Features

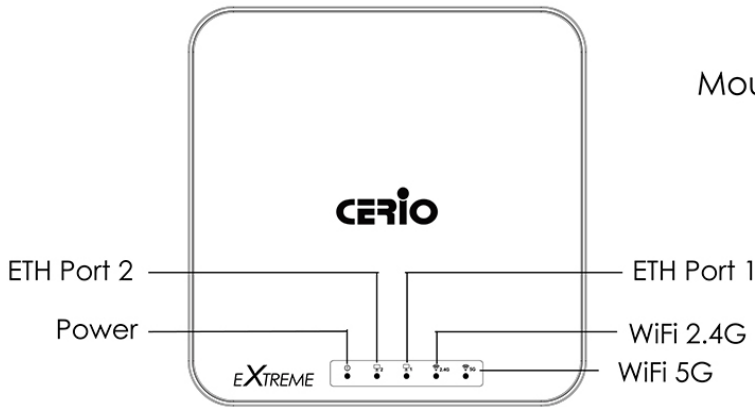
- Supports built-in 802.1x RADIUS authentication server account database for small and medium environments, removing the need to set up external server and avoiding additional costs. Also supports RADIUS Server authentication server account features to fit the needs of large-scale network environments
- 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 limit of each network user
- Supports IEEE802.11f IAPP and IEEE802.11r and IEEE802.11k 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 CLI access via Telnet and SSH
- Provides Traffic Monitor and Graphical GUI Status Interface for Network and Radio Overview.

Hardware Features

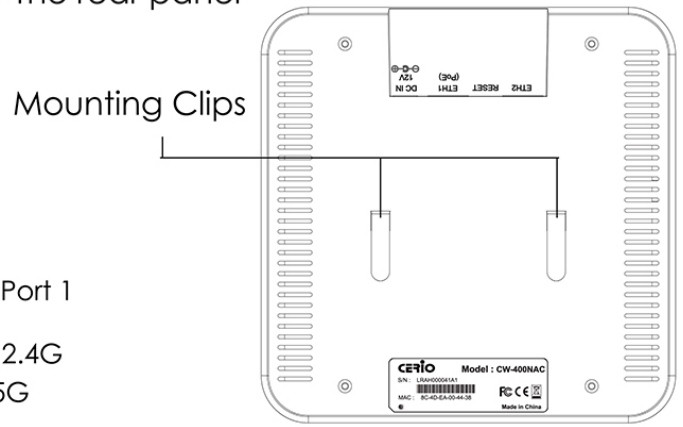
- 2.4Ghz Data Rate of up to 300Mbps(Tx), 300Mbps(Rx) link rate
- 5Ghz Data Rate of up to 867Mbps for 80MHz channel bandwidth
- 800mW at 2.4Ghz and 500mW at 5Ghz Output eXtreme High Power, 4 built-in (2x 2.4GHz & 2x 5GHz) Smart Omni Directional Antenna (IEEE 802.11ac/11nbg 2Tx / 2Rx Design)
- IEEE 802.3af/at Power over Ethernet (PoE) in this device, hardware also includes a DC 12V power input for multiple power source options
- Supports PoE Bridge function to allow power to be passed on to subsequent 802.3af/at PoE devices
- Integrates a long-range power amplifier and high sensitivity receiver to deliver unmatched reliability and performance at large coverage application
- Supports Hardware chipset base Watch Time Dog, allowing the OS to reboot automatically before a crash
- Easy to install Ceiling / Walling mounting using a Mounting Bracket form factor

Hardware Overview

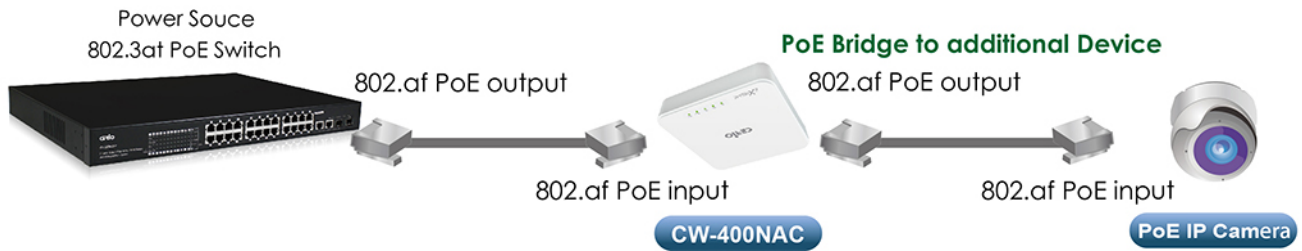
▪The front panel



▪The rear panel

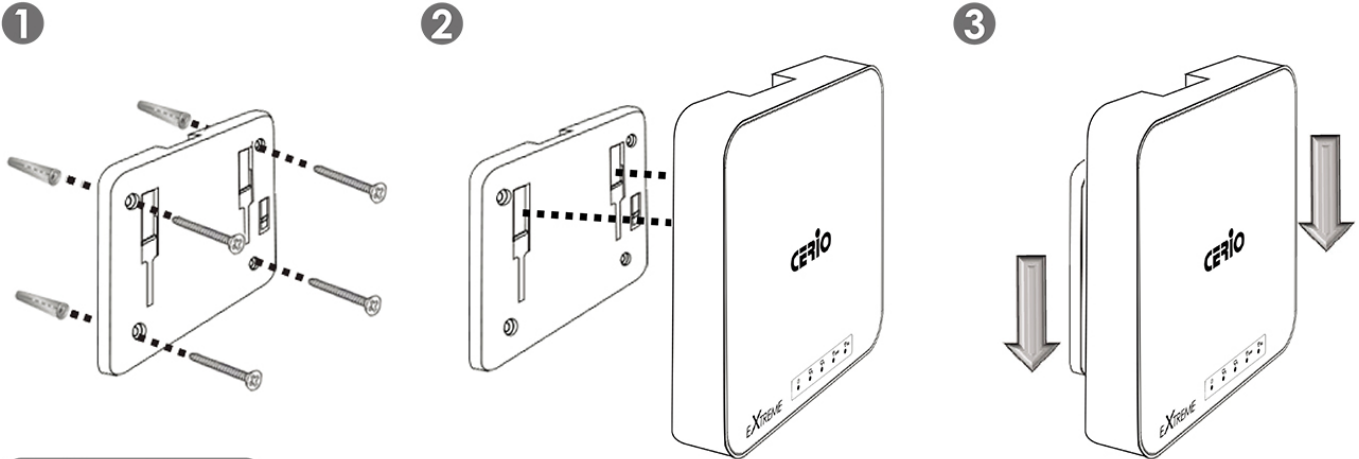


Power over Ethernet Bridge Application

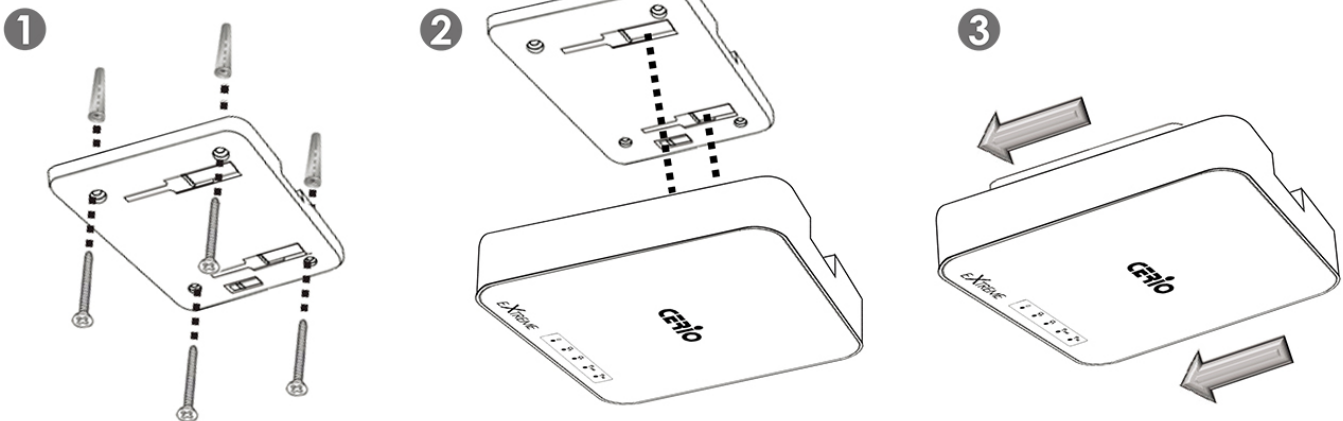


CW-400NAC Mounting Installation

Wall Mount



Ceiling Mount



Step 1

Position the Mounting Bracket in the desired location. Use the screws and anchors in the mounting kit to secure the Bracket into position.

Step 2

Align the device with the Mounting Hinges on the bracket. Ensure that the Mounting Clips fit correctly into each slot.

Step 3

Slide the CW-400NAC down until the device is locked into place.

Software

Application Software

Cerio CenOS 5.0 Software Core

Standards & Hardware Specifications

Network Standards Conformance

IEEE 802.11 b/g/n/ac compliant
 IEEE 802.3 / IEEE 802.3u
 IEEE 802.11 b/g/n compliant
 IEEE802.3af/at Power Over Ethernet compliant
 IEEE 802.11Q VLAN
 IEEE802.11r/IEEE802.11k Fast Roaming
 IEEE802.11e WMM

Ethernet Configuration

10/100/1000BASE-TX Auto MDI/MDI-X
 Ethernet Connector x 1
 (Power over Ethernet 802.3.af/at PoE in)

LED Indicators

PWR (Power) LED	x1
ETH1 (PoE In) LED	x1
ETH2 (PoE Bridge) LED	x1
2.4GHz Wifi LED	x1
5GHz Wifi 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
IEEE802.11n: 300Mbps (at 40MHz), 150Mbps (at 20MHz)
IEEE802.11ac: 867Mbps (at 80MHz) 400Mbps (at 40MHz)

Frequency Range

IEEE802.11nbg :

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

IEEE802.11a/an/11ac :

5.150 – 5.350 & 5.725 – 5.825 GHz(USA)
 4.900 – 5.250 GHz(Japan)
 5.150 – 5.350 & 5.470 – 5.725GHz (Europe ETSI)

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

Operating Channels

802.11b/g/n : 11 for FCC,14 for Japan,13 for Europe, 2 for Spain, 4 for France
IEEE 802.11an/ac @ 5GHz :

US : 12 (CH: 36, 40, 44, 48, 52, 56, 60, 64, 149, 153, 157, 161)
 Japan : 4 (CH: 34, 38, 42, 46)
 ETSI : 19 (CH: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140)

Transmit Power Variation

2.4Ghz : Max : 29 ± 1 dBm
5Ghz : Max : 27 ± 1 dBm

Receiver Sensitivity

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

Environmental & Mechanical Characteristics

Operating Temperature

-10 °C ~ 55 °C

Storage Temperature

-20 °C ~ 65°C

Operating Humidity

10% - 90% Non-Condensing

Storage Humidity

10% - 90% Non-Condensing

Antenna

Build in 2x2 Dual Band Omni Directional Antenna

Form Factor

Supports both Ceiling Mounting and Wall mounting, installed using a provided Mounting Bracket

System Power Consumption

24Watt (Max)

Power Supply

100 – 240V AC Power ;12 VDC
 Supports Power Over Ethernet (POE 48~57V voltage)
 Integrated IEEE 802.3af /at Power over Ethernet (PoE)

Package Contents

Input Power
AC to DC 12 VDC
Dimensions (W x H x D)
33x158x158 mm
Unit Weight
276g
Certifications
FCC,CE, NCC, ROHS compliant

Contents	
CW-400NAC Main Unit	x1
Mounting Bracket	x1
Mounting Screw Pack	x1
Gigabit PoE Injector	x1
CD Manual	x1
Quick Installation Service Card	x1