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CERIO Corporation

WP-300N

eXtreme Power 11n 2.4Ghz

2x2 Wall-Plate PoE Access Point

(500mW)

Quick Start Guide

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1. Overview

CERIO's WP-300N eXtreme Power 11n 2.4Ghz 2x2 Wall-Plate PoE Access Point bundles Cerio's CenOS 3.0 Software core and supports Cerio Wireless Management Software (CWMS), enabling connection to Wireless Indoor Networks for service providers deploying last mile services to education facilities, hospitality businesses (hotels/resorts), and luxury homes. Network administrators can create and centrally manage multiple subscriber service tiers using per-subscriber rate limiting features. The WP-300N Structure (Form Factor) supports both Wall-Plate installation and Wall Mounting.

The WP-300N eXtreme Power 11n 2.4Ghz 2x2 Wall-Plate PoE Access Point hardware utilizes 500mW eXtreme power and built-in 2.4 GHz 2x2 Omni directional antennas. WP-300N's design makes it the ideal solution for inconspicuous and high performance deployment. Cerio's WP-300N provides in-room connectivity for a variety of environments such as hotels, resorts, universities, and luxurious homes. WP-300N focuses on customers looking for a modern and aesthetically appealing way to improve their network. Strategic placement of WP-300N can replace unaesthetic RJ-45 wall ports and add a sense of modernism to a room or hallway.

The WP-300N can provide subscribers with an Ethernet connection for a local access to extend the range and increase the performance of a wireless network. The WP-300N hardware also **includes 802.3af/at PoE** capabilities that allows power and data to be supplied to the unit using CAT5 Ethernet cable. A **USB port** located on the side of the device allows users to **conveniently charge devices through a USB Charger**. Finally, when deployed in public places such as hotels and university campuses, WP-300N's ensures product safety from theft through its wall-plate design.

Smart of PoE Bridge Application

CERIO WP-300N eXtreme Power 11n 2.4Ghz 2x2 Wall-Plate PoE Access Point hardware is designed with a smart PoE Bridge function. The PoE Bridge function support provides next AP power and allows for the structure to be very convenient. The PoE Bridge supports CERIO PoE AP,, and other Passive PoE and 802.3af PoE IPCAM solution.



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2. Package Content

WP-300N Main Unit	x1
Power Adapter	x1
CD Manual	x1
Quick Installation Guide	x1
Warranty Card	x1

3. Hardware Specifications

Application Software			
OS System Compatible edition	Cerio CenOS 3.0/4.0 Software Core		
	Specifications		
Network Standards	IEEE 802.11 b/g/n compliant		
Conformance	IEEE 802.3 / IEEE 802.3u Fast Ethernet		
	IEEE 802.3af/at Power over Ethernet		
	IEEE 802.11i Preauth (PMKSA Cache)		
	IEEE 802.11Q VLAN		
	IEEE802.11f IAPP		
	IEEE802.11e WMM		
Ethernet Configuration	Ethernet Connector x 3 (802.3af/at Power over		
	Ethernet PoE in and PoE Bridge LAN Port and LAN		
	Port)		
USB Port	USB A Type : Only for Power Charger		
Telephone Configuration	RJ-11 Pass Through In x1 connector , Out x1 connector		
LED Indicators	Power LED x 1,		
	Ethernet LED x 3 (ETH PoE in x1 / ETH1 LAN1		
	/ETH2LAN2)		
	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 (auto
	sensing)
	IEEE802.11n : 300Mbps (Tx), 300Mbps (Rx)
Frequency Range	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)
Channel Spacing	IEEE802.11b/g/n : 20/40MHz
Media Access Protocol	CSMA / CA with ACK
Modulation Method	IEEE 802.11b: DSSS (DBPK,DQPSK,CCK)
	IEEE 802.11g/n: OFDM
	(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
Transmit Power Variation	Max : $27 \pm 1 \text{ dBm}$
Transmit Power Variation Receiver Sensitivity	Max : 27 ± 1 dBm Max : -92 dBm
Transmit Power Variation Receiver Sensitivity Environm	Max : 27 ± 1 dBm Max : -92 dBm ental & Mechanical Characteristics
Transmit Power Variation Receiver Sensitivity Environm Operating Temperature	Max : 27 ± 1 dBm Max : -92 dBm ental & Mechanical Characteristics -10 °C ~ 55 °C
Transmit Power Variation Receiver Sensitivity Environm Operating Temperature Storage Temperature	Max : 27 ± 1 dBm Max : -92 dBm ental & Mechanical Characteristics -10 °C ~ 55 °C -20 °C ~ 65°C
Transmit Power Variation Receiver Sensitivity Environm Operating Temperature Storage Temperature Operating Humidity	Max : 27 ± 1 dBm Max : -92 dBm ental & Mechanical Characteristics $-10 \ ^{\circ}C \sim 55 \ ^{\circ}C$ $-20 \ ^{\circ}C \sim 65 \ ^{\circ}C$ 10% - 90% Non-Condensing
Transmit Power Variation Receiver Sensitivity Environm Operating Temperature Storage Temperature Operating Humidity Storage Humidity	Max : 27 ± 1 dBm Max : -92 dBm ental & Mechanical Characteristics $-10 \ ^{\circ}C \ \sim 55 \ ^{\circ}C$ $-20 \ ^{\circ}C \ \sim 65 \ ^{\circ}C$ 10% - 90% Non-Condensing 10% - 90% Non-Condensing
Transmit Power Variation Receiver Sensitivity Environm Operating Temperature Storage Temperature Operating Humidity Storage Humidity Antenna	Max : 27 ± 1 dBm Max : -92 dBm ental & Mechanical Characteristics -10 °C ~ 55 °C -20 °C ~ 65 °C 10% - 90% Non-Condensing 10% - 90% Non-Condensing Build in 2x2 Smart Omni Directional Antenna
Transmit Power VariationReceiver SensitivityEnvironmOperating TemperatureStorage TemperatureOperating HumidityStorage HumidityAntennaForm Factor	Max : 27 ± 1 dBm Max : -92 dBm ental & Mechanical Characteristics -10 °C ~ 55 °C -20 °C ~ 65 °C 10% - 90% Non-Condensing 10% - 90% Non-Condensing Build in 2x2 Smart Omni Directional Antenna Support Wall Plate and Wall Mount
Transmit Power VariationReceiver SensitivityEnvironmOperating TemperatureStorage TemperatureOperating HumidityStorage HumidityAntennaForm FactorSystem Power Consumption	Max : 27 ± 1 dBm Max : -92 dBm ental & Mechanical Characteristics -10 °C ~ 55 °C -20 °C ~ 65 °C 10% - 90% Non-Condensing 10% - 90% Non-Condensing Build in 2x2 Smart Omni Directional Antenna Support Wall Plate and Wall Mount 9 Watt Max.
Transmit Power VariationReceiver SensitivityEnvironmOperating TemperatureStorage TemperatureOperating HumidityStorage HumidityAntennaForm FactorSystem Power ConsumptionPower Supply	Max : 27 ± 1 dBmMax : -92 dBmental & Mechanical Characteristics-10 °C ~ 55 °C-20 °C ~ 65°C10% - 90% Non-Condensing10% - 90% Non-CondensingBuild in 2x2 Smart Omni Directional AntennaSupport Wall Plate and Wall Mount9 Watt Max.110 – 220V AC Power; 12 VDC, 1A Input.
Transmit Power VariationReceiver SensitivityEnvironmOperating TemperatureStorage TemperatureOperating HumidityStorage HumidityAntennaForm FactorSystem Power ConsumptionPower Supply	Artor FranceMax : 27 ± 1 dBmMax : -92 dBmental & Mechanical Characteristics-10 °C ~ 55 °C-20 °C ~ 65°C10% - 90% Non-Condensing10% - 90% Non-CondensingBuild in 2x2 Smart Omni Directional AntennaSupport Wall Plate and Wall Mount9 Watt Max.110 – 220V AC Power;12 VDC,1A Input.Supports Power Over Ethernet (POE 48~57V voltage)
Transmit Power VariationReceiver SensitivityEnvironmOperating TemperatureStorage TemperatureOperating HumidityStorage HumidityAntennaForm FactorSystem Power ConsumptionPower Supply	Max : 27 ± 1 dBm Max : -92 dBm ental & Mechanical Characteristics -10 °C ~ 55 °C -20 °C ~ 65 °C 10% - 90% Non-Condensing 10% - 90% Non-Condensing Build in 2x2 Smart Omni Directional Antenna Support Wall Plate and Wall Mount 9 Watt Max. 110 – 220V AC Power;12 VDC,1A Input. Supports Power Over Ethernet (POE 48~57V voltage) Integragted IEEE 802.3af /at Power over Ethernet (PoE)
Transmit Power VariationReceiver SensitivityEnvironmOperating TemperatureStorage TemperatureOperating HumidityStorage HumidityAntennaForm FactorSystem Power ConsumptionPower SupplyInput Power	And interfereMax : 27 ± 1 dBmMax : -92 dBmental & Mechanical Characteristics-10 °C ~ 55 °C-20 °C ~ 65°C10% - 90% Non-Condensing10% - 90% Non-CondensingBuild in 2x2 Smart Omni Directional AntennaSupport Wall Plate and Wall Mount9 Watt Max.110 – 220V AC Power;12 VDC,1A Input.Supports Power Over Ethernet (POE 48~57V voltage)Integragted IEEE 802.3af /at Power over Ethernet (PoE)AC to DC 12 VDC, 1 A



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Unit Weight	TBD
Certifications	CE _, FCC , NCC \ BSMI _\ ROHS compliant

4. Product Outward Appearance

Front Side Panel

Side Panel



Top Panel



Bottom Panel



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5. Product Outward Appearance and Function Description



- (1) The three LED indicator of LAN Port.
- (2) The LED indicator of Wi-Fi.
- (3) The LED indicator of Power.
- (4) Reset default button. (Hold the reset button for more than 15 sec. to system default configuration)
- (5) The Ethernet(RJ-45) port for LAN1
- (6) The Ethernet (RJ-45) port for LAN2 and PoE Bridge function.
- (7) The RJ-11 port for Phone line out.
- (8) Power DC in.
- (9) USB Charging port
- (10) The RJ-11 Phone line-in port.
- (11) The Ethernet (RJ-45) port for LAN0(PoE in)

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6. Product with Bracket Variations (U.S.A Type & E.U Type)



7. Wall Plate and Device Installation



U.S.A Type Outlet Box (Used in U.S.A, Japan, & Taiwan) E.U Type Outlet Box (Used in Europe & China)

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8. Product and Outlet Box Interlocking Schematics







U.S.A Type Outlet Box (Used in U.S.A, Japan, & Taiwan)

E.U Type Outlet Box (Used in Europe & China)

9. Software Configuration

Example of Segment: (Windows 7) IP Segment Set-up for Administrator's PC/NB

Set the IP segment of the administrator's computer to be in the same range as WP-300N for accessing the system. Do not duplicate the IP Address used here with IP Address of WP-300N or any other device within the network.

Step 1 :

Please click on the computer icon in the bottom right window, and click "**Open Network and Sharing Center**"



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Step 2 :

In the Network and Sharing Center page, Please click on the left side of "Change adapter setting" button



Step 3 :

In "Change adapter setting" Page. Please find Local LAN and Click the right button on the mouse and Click "Properties"





Step 4 :

In "Properties" page, please Click "Properties" button to TCP/IP setting

🃮 Local LAN Status		— ×
General		
Connection		
IPv4 Connectivity:		Internet
IPv6 Connectivity:		No Internet access
Media State:		Enabled
Duration:		00:09:00
Speed:		1.0 Gbps
Details		
Activity		
	Sent —	Received
Bytes:	158,449	492,051
Properties	Disable	Diagnose

Step 5:

In Properties page to setting IP address, please find "Internet Protocol Version 4 (TCP/IPv4)" and double click or click "Install" button.



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Step 6:

Select "Use the following IP address", and fix in IP Address : 192.168.2.#

ex. The # is any number by 1 to 253

Subnet mask : 255.255.255.0

And Click "OK" to complete the fixed computer IP setting

Internet Protocol Version 4 (TCP/IPv4)	Properties ? 🔀	
General		
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.		
Obtain an IP address automatical	у	
─		
IP address:	192 . 168 . 2 . 100	
Subnet mask:	255 . 255 . 255 . 0	
Default gateway:		
Obtain DNS server address automatically Obtain DNS conver addresses		
Preferred DNS server:		
Vaļidate settings upon exit	Ad <u>v</u> anced	
	OK Cancel	

Step 7:

Open Web Browser

Launch as web browser to access the web management interface of system by entering the default IP Address, http://192.168.2.254, in the URL field, and then press Enter. Browser will pop up "login" page. Please key in username and password into the system on WP-300N.





Windows Security		x
The server 192.168.2.253 is asking for your user name and password. The server reports that it is from WP-300N.		
Warning: Your authentication	user name and password will be sent using basic on a connection that isn't secure.	_
	User name Password Remember my credentials	
	OK Cancel	

The system manager Login Page then appears.

Enter "root" as User name and "default" as Password, and then click "OK" to login to the system.

Login information

By CenOS3.0 Software	Router / AP / WDS/Client Bridge + Repeater AP/ WISP+ Repeater AP mode
Default IP Address	192.168.2.254
Account	root
Password	default
By CenOS4.0 Software	AP / Client Bridge + Repeater AP mode
Default IP Address	192.168.2.254
Account	root
Password	default

Please base your Software version check to GS CenOS3.0 or NGS CenOS4.0 User's Manual