

# 300Mbps 802.11n Wireless Ceiling Mount Range Extender

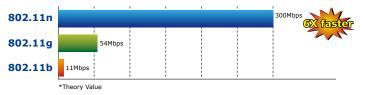


PLANET WNAP-C3220 is a stylish PoE Wireless Access Point featuring 802.11n wireless technology and unique ceiling-mount artistic design. It offers 300Mbps wireless speed, multiple operation modes and 802.3af Power over Ethernet features to increase client mobility and speed within a network. Sleek styling housing and ceiling mountable design makes the WNAP-C3220 blends unobtrusively into any ceiling or wall for various environments. This perfect product also creates a secure, cost-effective and highly scalable wireless LAN infrastructure. It is ideal for enterprises, hotels, hospitals and home users to extend wireless network coverage.



#### Ultra High Speed 802.11n Wireless Type

The WNAP-C3220 features IEEE 802.11n radio with 2T2R MIMO antenna technology to provide improved wireless speed and coverage with up to 300Mbps upload and download data rate. The incredible wireless speed makes it ideal for handling multiple HD movies stream, high resolution on-line game, stereo music, VoIP and data streams at the same time stably and smoothly. It is also backward compliant with 802.11g and 802.11b standards and thus there is no need to change the existing network for convenient maintenance. Just connect to the WNAP-C3220 and you can immediately enjoy the high-speed wireless sharing.



#### Standard Compliant Hardware Interface

- Complies with IEEE 802.11n and backward compatible with IEEE 802.11b/g standards
- 1 x 10/100BASE-TX Port with 1-port PoE (PD, Powered Device)
- Supports 802.3af standard-based PoE and local AC power

#### **RF Interface Characteristics**

- 2T2R MIMO technology and Ceiling Mountable Design for enhanced throughput and coverage
- High speed up to 300Mbps wireless data rate in 802.11n mode

#### **Secure Network Connection**

- Advanced security: 64/128-bit WEP, WPA / WPA2, WPA-PSK / WPA2-PSK (TKIP/AES encryption) and RADIUS authentication
- · Supports MAC address filtering

#### Comprehensive Advanced Features

- Multiple Wireless Modes: AP, WDS PtP/ PtMP, WDS Repeater, Universal Repeater
- Supports WMM (Wi-Fi Multimedia) and wireless QoS to enhance the efficiency of multimedia application
- Supports up to 4 multiple-SSIDs to allow users to access different networks through a single AP
- Supports VLAN function to limit the clients to access the specific internal network resource

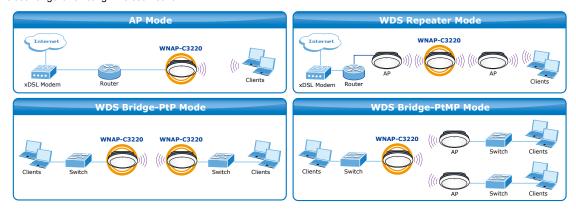
#### Easy Installation & Management

- · Stylish ceiling mount design
- Flexible deployment with standard 802.3af PoE / PD supported
- SNMP-based management interface and Planet Smart Discovery supported
- Centralized Management Utility allows administrator to monitor and configure remotely



#### Multiple Operating Modes

The WNAP-C3220 supports multiple wireless communication connectivity: wireless **AP**, wireless **Repeater**, **WDS Point-to-Point (PtP)** and **Point-to-Multipoint (PtMP)**, allowing various applications that give users more comprehensive experience. It also helps users to easily build wireless network and extend the wireless range of existing wireless network.



#### Advanced Wireless Security

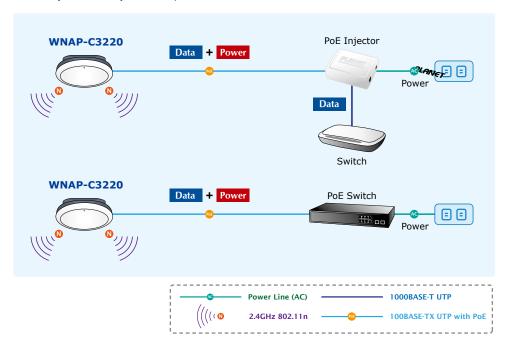
In aspect of security, besides 64/128-bit WEP encryption, the WNAP-C3220 integrates WPA / WPA2, WPA-PSK / WPA2-PSK and 802.1x authority to secure and protect your wireless LAN. It provides the wireless MAC filtering and SSID broadcast control to consolidate the wireless network security and prevent unauthorized wireless connection.

#### Unique Ceiling-mountable Design

Featuring attractive flying saucer appearance and ceiling-mountable design, the WNAP-C3220 can be firmly adsorbed on the ceiling or the wall, which is easy and convenient for client-side installation. Its streamlined body without protruding antennas also gives effects of embellishment on the surroundings.

#### Flexible Deployment with PoE Feature

Compliant with IEEE 802.3af Power over Ethernet standard, the WNAP-C3220 can be powered and networked by a single UTP cable. It thus reduces the needs of extra cables and dedicated electrical outlets on the wall, ceiling or any other place which is difficult to reach. The wireless AP deployment becomes more flexible and frees you from worry about the power outlet locations.



#### Easy Installation and Management

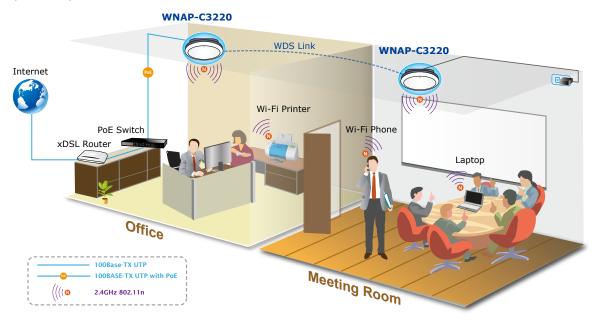
With user-friendly Web UI and step by step wizard of the WNAP-C3220, it is easy for users to install the device, even for a user who never experiences in setting up a wireless network. Its SNMP feature allows the system administrator to remotely monitor and control the network devices more efficiently.



## **Applications**

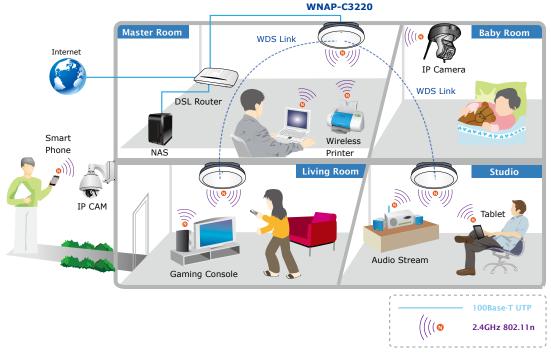
#### High Speed and Secure Wireless LAN Connection

The WNAP-C3220 is an ideal solution to providing 300Mbps high speed wireless networking to all residential and office users. Locate the WNAP-C3220 at the central point in an office or home, and connect it to an xDSL / cable modem, and then the WNAP-C3220 provides high speed Internet access capability for the office or home wireless networking. Furthermore, the WPA-PSK / WPA2-AES mechanism of the WNAP-C3220 can effectively prevent the information from eavesdropping by unauthorized users. For efficient enterprise applications, multiple WNAP-C3220 PoE APs can be powered directly from one PoE Switch, for example, PLANET SGSW-24040P 24-Port Gigabit PoE Switch, and perform advanced PoE management features, such as PoE power on/off schedule, usage monitoring, SNMP trap and email alarm.



#### Home Wireless Range Extender

The WNAP-C3220 is the characterization of ceiling mounting design and advanced MIMO technology which reduces the effect of dead spot, so that it can get a better coverage of the existing wireless network. The WDS and repeater modes by the WNAP-C3220 also help to minimize installation and cabling costs.



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# **Specifications**

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Model	WNAP-C	3220	
Hardware Specifications			
Interface	LAN	1x 10/100BASE-TX, Auto-MDI/MDIX, 802.3af PoE compliant	
menace	Wireless	IEEE 802.11b/g/n	
PoE	IEEE 802.3	af PoE	
Antenna	Built-in 3dBi antenna x 2		
Reset Button	Reset button on rear panel Press over 7 seconds to reset the device to factory default		
LED Indicators	PWR/SYS	·	
Material	Plastic		
Dimensions (Φ x H)	144 x 33 mm		
Weight	165g		
Power Requirements	Power Supply: DC 12V, 1A Power over Ethernet: IEEE 802.3af PoE, DC 48V, 0.35A		
Power Consumption	11.26W (max.)		
Wireless Interface Specifications	11.20VV (III	an.,	
Wileless interface openinoations	T	/ Fraincian Turne DOGG / OFDM	
Modulation Type	Transmission / Emission Type: DSSS / OFDM  Data modulation type: OFDM: BPSK, QPSK, 16-QAM, 64-QAM, DBPSK, DQPSK, CCK		
Frame Rate	Up to 60fps for all resolutions		
Operating Channel	America/ FCC: 2.412~2.462GHz (11 Channels) Europe/ ETSI: 2.412~2.472GHz (13 Channels)		
Channel Width	20 or 20/40MHz		
		1b: 1/ 2/ 5.5/ 11Mbps	
Data Rate	IEEE 802.1	1g: 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54Mbps 1n: 300 Mbps in 40MHz mode / 150Mbps in 20MHz mode	
Receiver Sensitivity	IEEE 802.11b: -92dBm @ 1Mbps; -85dBm @ 11Mbps, PER < 8% IEEE 802.11g: -88dBm @ 6Mbps; -73dBm @ 54Mbps, PER <10% IEEE 802.11n: -90dBm @ MCS8; -70dBm @ MCS15, PER <10%		
DE Douger (Intentional Padiator)			
RF Power (Intentional Radiator)	20dBm (Ma		
Transmission Distance	Indoor up to Outdoor up	to 300m (it is limited to the environment)	
Wireless Management Features			
Wireless Modes	Access Point, WDS PtP, WDS PtMP, Universal Repeater		
Multiple-SSID	Up to 4		
WDS Peer	Up to 4		
Encryption Security	WEP (64/128-bit) WPA-PSK (TKIP) / WPA2-PSK (AES) WPA (TKIP) / WPA2 (AES) 802.1x Authentication		
Wireless Security	Enable/Dis	able SSID Broadcast	
	Wireless LA	AN ACL (Access Control List) MAC filtering	
Wireless Advanced	AP Isolation	n: Enable it to isolate each connected wireless clients	
vvii ciess Auvanceu	Supports 8	02.11e WMM (Wi-Fi Multimedia)	
Max. Supported Clients	Wire	253	
max. Supported Olionia	Wireless	40	
		I (HTTP) management interface	
System Management		NMP v1, v2c	
_ ,		lanet Smart Discovery and Centralized Management Utility	
	System Log		
Standards Conformance			
	IEEE 802.1		
IEEE Standards	IEEE 802.11g IEEE 802.11b IEEE 802.11i IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX		
Other Protocols and Standards	CSMA/CA,	CSMA/CD, TCP/IP, DHCP, ICMP, SNTP	
Environment & Certification			
Temperature	Operating: -10 ~ 45 degrees C Storage: -30 ~ 70 degrees C		
Humidity	Operating: 10 ~ 90% (non-condensing) Storage: 10 ~ 90% (non-condensing)		
Regulatory		RoHS, WEEE	
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## **Ordering Information**

WNAP-C3220 300Mbps 802.11n Wireless Ceiling Mount Range Extender

### **Related Wireless Products**

WDL-U700	300Mbps Dual Band 802.11n Wireless USB Adapter
WNL-U600AC	433Mbps 802.11ac Dual Band Wireless USB Adapter
WNL-U556M	300Mbps 802.11n Wireless Micro USB Adapter
WNL-U555HA	High Power 802.11n Wireless Compact USB Adapter
WNL-U554A	802.11n Wireless USB 2.0 Adapter External 3dBi Antenna

### Related PoE Products

WGSD-10020HP	L2+ 8-Port 10/100/1000T + 2-Port 100/1000X SFP Managed 802.3at PoE Switch
WGSW-24040HP	24-Port 10/100/1000Mbps 802.3at PoE+ with 4-Port Shared SFP Managed Switch
GSD-802PS	8-Port 10/100/1000Mbps Web Smart PoE Switch with 2 Shared SFP Ports
POE-1200G	12-Port Gigabit IEEE 802.3af Power over Ethernet Injector Hub
POE-152	IEEE 802.3af Power Over Ethernet Injector (End-Span)
POE-2400G	24-Port Gigabit IEEE 802.3af Power over Ethernet Injector Hub
SGSW-24040P / SGSW-24040P4	24-Port Gigabit PoE Managed Stackable Switch

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