ZYXEL NETWORKS

NWA210AX

802.11ax (WiFi 6) Dual-Radio PoE Access Point

The NWA210AX is truly the next generation of wireless (WiFi 6) AP, especially for businesses looking to strike the right balance between performance and budget. It embodies the full range of WiFi 6 technologies including UL/DL, OFDMA, MU-MIMO, and 1024 QAM, which enables the ultra-fast speed of 2975 Mbps. The NWA210AX 4x4 (5G) + 2x2 (2.4G) antenna design boasts the most effective solution to guarantee that it provides smooth and consistently fast service to each client at all times. Also, it uses the second generation transmit beamforming technology incorporating Low End Sensitivity Improvements and Time Domain Channel Smoothing allowing data rates to increase for not only MU-MIMO clients, but for all existing ones as well.

The NWA210AX is not only efficient at delivering impressive speeds with its smooth and consistent delivery to wireless clients, but it is also efficient on power. The NWA210AX can deliver its impressive performance while keeping the consumption of PoE within the PoE+ standard, so that you can enjoy the latest WiFi 6 technology, experiencing first-hand the uncompromising multi-gigabit speed when coupling without the need of re-cabling.

Benefits

Bringing next generation WiFi within reach

WiFi 6 made tremendous improvement by introducing new technologies such as orthogonal frequency-division multiple access (ODFMA), and spatial re-use, which is also referred to as Basic Service Set (BSS) coloring. It aims to satisfy the all requirements from rapidly growing mobile users simultaneously. Zyxel's new NWA210AX is a true WiFi 6 access point which support essential 11ax functions that delivers faster performance and massive increased-capacity make the user experience even better.

- Dual-radio (dual 4x4 + 2x2) 802.11ax AP provides maximum data rate of 2975 Mbps
- OFDMA is arguably the best innovation of WiFi, delivering the highest performance and low latency for all scenarios
- NebulaFlex allows users to switch between standalone or intuitive Nebula cloud managed modes as needed
- Advanced Cellular Coexistence minimizes interferences from 4G/5G cellular networks
- The latest WPA3 security protocol provides safer connectivity
- Next generation beamforming technology delivers maximum coverage

Datasheet NWA210AX

nebula

Zyxel one network
Redefining network integration

Apart from running at 25% faster speed, the NWA210AX can also maximize the WiFi efficiency by allowing simultaneous data transmission for multiple clients; thus, the airtime contention is no longer an issue.

4G/5G cellular network coexistence

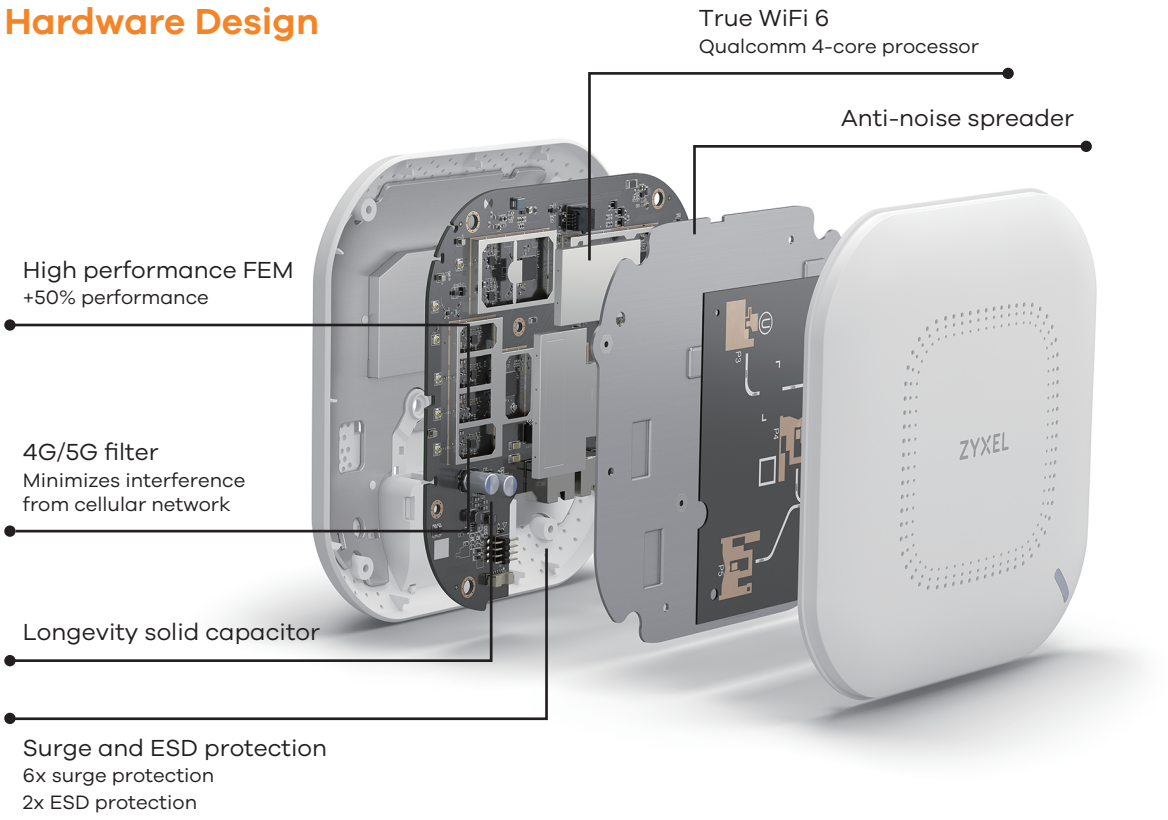
With the exponential growth of mobile devices in the wireless network, users start to experience degraded performance, such as ping drops and high latency, however whenever user shutdown the mobile equipment, wireless service resumes working smooth. Thus, to enable 4G/5G cellular network coexistence and minimize interference from 4G/5G antennas or signal boosters, the NWA210AX has built-in 4G/5G interference filters. As a result, the visible or invisible 4G/5G indoor antennas in the environment is no longer an issue when installing APs.

NebulaFlex – simply manage it your way!

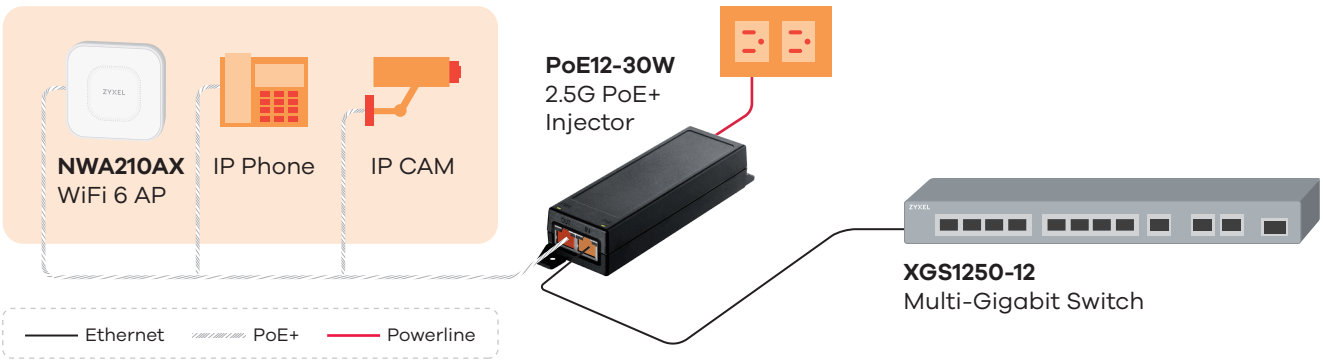
The NebulaFlex provides extended flexibility, allowing users to easily switch among standalone, or our intuitive cloud-managed NCC (Nebula Control Center) modes any time according to your needs without additional cost while protecting wireless technology investments.

The Nebula cloud management platform provides centralized control and visibility over all Nebula networking devices. Simply you only need to register the device on NCC, and it will automatically join, auto provision and begin to give real-time information. The intuitive platform allows you to group your access points together, control centrally, gain access to diagnostics tools and additional features like captive portal all under a single platform.

Powerful Hardware Design



Suggested PoE Injector



Specifications

Model		NWA210AX
Product name		802.11ax (WiFi 6) Dual-Radio PoE Access Point
		
Wireless		
Standard		IEEE 802.11 ax/ac/n/g/b/a
MIMO		MU-MIMO
Wireless speed	**2.4 GHz**	575 Mbps
	5 GHz	2400 Mbps
Frequency band	**2.4 GHz**	• USA (FCC): 2.412 to 2.462 GHz • Europe (ETSI): 2.412 to 2.472 GHz
	5 GHz	• USA (FCC): 5.15 to 5.35 GHz; 5.470 to 5.850 GHz • European (ETSI): 5.15 to 5.35 GHz; 5.470 to 5.725 GHz
Bandwidth		20-, 40-, 80- and 160-MHz
Conducted typical transmit output power*1 (limited by local regulatory requirements)	**US (2.4 GHz/5 GHz)**	23/25 dBm
	EU (2.4 GHz/5 GHz)	19/22 dBm
RF Design		
Antenna type		4x4 + 2x2 MIMO embedded antenna
Antenna gain	**2.4 GHz**	Peak gain 5 dBi
	5 GHz	Peak gain 6 dBi
Minimum receive sensitivity		Min. Rx sensitivity up to -101 dBm
WLAN Feature		
Band steering		Yes
WDS/Mesh*2		Yes (V6.10)
Fast roaming		Pre-authentication, PMK caching and 802.11r/k/v
DCS		Yes
Load balancing		Yes
Security		
Encryption		WEP/WPA/WPA2/WPA3
Authentication		IEEE 802.1X/RADIUS authentication
Access management		L2-isolation/MAC filtering/Rogue AP detection
Networking		
IPv6		Yes
VLANs		Yes
WMM		Yes
U-APSD		Yes
DiffServ marking		Yes
Management		
Operating mode		Cloud managed/standalone
ZON Utility		• Discovery of Zyxel switches, APs and gateways • Centralized and batch configurations ▪ IP configuration ▪ IP renew ▪ Device reboot ▪ Device locating ▪ Web GUI access ▪ Firmware upgrade ▪ Password configuration

*1: Conducted typical transmit output power excludes antenna gain. For total (EIRP) transmit power, add antenna gain.
*2: WDS, ZyMesh, Smart Mesh and Industry's Open Mesh, Easy Mesh are different mesh systems that do not work with one another.

Model		NWA210AX
Management		
Zyxel Wireless Optimizer		• WiFi AP planning • WiFi coverage detection • Wireless health management
Web UI/CLI		Yes
SNMP		Yes
Physical Specifications		
Item	**Dimensions (WxDxH)(mm/in.)**	180 x 180 x 39/7.09 x 7.09 x 1.54
	Weight (g/lb.)	545/1.20
Packing	**Dimensions (WxDxH)(mm/in.)**	329 x 212 x 64/12.95 x 8.35 x 2.52
	Weight (g/lb.)	1065/2.35
Included accessories		• Mount plate • Mounting screws • Power adaptor
MTBF (hr)		329,004
Physical Interfaces		
Ethernet port		1 x 10/100/1000/2500M LAN 1 x 10/100/1000M LAN
Power		• PoE (802.3) at: power draw 19 W • DC input: 12 VDC 2 A
Environmental Specifications		
Operating	**Temperature**	0°C to 50°C/32°F to 122°F
	Humidity	10% to 95% (non-condensing)
Storage	**Temperature**	-30°C to 70°C/-22°F to 158°F
	Humidity	10% to 90% (non-condensing)
Certifications		
Radio		FCC Part 15C, FCC Part 15E, ETSI EN 300 328, EN 301 893, LP0002
EMC		FCC Part 15B, EN 301 489-1, EN 301 489-17, EN55022, EN55024, EN61000-3-2/-3, EN60601-1-2, BSMI CNS13438
Safety		Safety EN 60950-1, IEC 60950-1, BSMI CNS14336-1

Accessory

Model	PoE12-30W
	
RJ-45 (Data) input	1
RJ-45 (Data + Power) output	1
Data rate	100 Mbps and 1/2.5 Gbps
PoE standard	PoE, PoE+
Total PoE budget	30 watts
Suggested WiFi 6 AP	NWA210AX

For more product information, visit us on the web at www.zyxel.com

08/04/24