

ZYXEL

Your Networking Ally



Wireless LAN

Quick Sales Guide

WLAN Portfolio Lineup

On-premise management

Features/Scalability



Standalone AP Series



Unified AP Series



Unified Pro AP Series

Business Scale

Small

*: Works in the Nebula cloud or on-premise environments



Nebula cloud management

 NXC5500	 NXC2500	 NebulaFlex AP Series	 NebulaFlex Pro AP Series	 Nebula AP Series
Large	Small			Large

Wireless LAN Controller Quick Finder

Segment		Model
Medium-Sized Business to Enterprise	<ul style="list-style-type: none">• Centralized WLAN Management• User/Application Management	<ul style="list-style-type: none">• Wireless LAN Controller  NXC5500
Small- to Medium-Sized Business	<ul style="list-style-type: none">• Centralized WLAN Management• User/Application Management	<ul style="list-style-type: none">• Wireless LAN Controller  NXC2500

*: Zyxel wireless controller solutions include not only NXC series but USG series; please find AP Controller Technology Solution Brief for more details.

Wireless LAN Access Point Quick Finder

Segment	Series	Management	Model
Medium-Sized Business to Enterprise	Unified Pro/ NebulaFlex Pro	<ul style="list-style-type: none">• Controller managed• Cloud managed• Standalone	WAX650S 
			WAX610D 

Key Features

Model	Key Features	License
NXC5500	<ul style="list-style-type: none">Auto provisioning and centralized management of up to 1024* APsAdvanced ZyMesh technology for simplified AP deployment and WLAN extensionEnhanced RF management with auto healingFlexible traffic forwarding with tunnel and distributed modesComprehensive guest network management and granular access control	<ul style="list-style-type: none">Managed up to 1024 APsZyMesh
NXC2500	<ul style="list-style-type: none">Auto provisioning and centralized management of up to 64 APsZyxel Wireless Optimizer for easily planning, deployment and maintenanceAdvanced ZyMesh technology for simplified AP deployment and WLAN extensionEnhanced RF management with auto healingFlexible traffic forwarding with tunnel and distributed modesComprehensive guest network management and granular access control	<ul style="list-style-type: none">Managed up to 64 APsZyMesh

Key Features

Main Design	Key Features
<ul style="list-style-type: none">802.11ax (Wi-Fi 6) Dual-Radio Unified Pro Access Point5GHz: 4x4; 2.4GHz: 4x4Smart antenna technology5GbE uplink	<ul style="list-style-type: none">Dual-radio (dual 4x4 MIMO) 802.11ax AP provides maximum data rate of 3550 Mbps, and is equipped with the 3rd dedicated monitoring radio and BLEOFDMA is arguably the best innovation of WiFi, delivering the highest performance and low latency for all scenariosSmart antenna is the proven technology that can mitigate interference and boost WiFi 6 performanceAdvanced Cellular Coexistence minimizes interferences from 4G/5G cellular networksNebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed
<ul style="list-style-type: none">802.11ax (Wi-Fi 6) Dual-Radio Unified Access Point5GHz: 4x4; 2.4GHz: 2x2Dual-optimized antenna2.5 GbE uplink	<ul style="list-style-type: none">Dual-radio (dual 4x4+2x2 MIMO) 802.11ax AP provides maximum data rate of 2975 MbpsCoupled the capacity with Zyxel XS1930 Series switches, the 2.5GbE uplink delivers uncompromising multi-gigabit speed without the need of re-cablingDual-optimized antenna provides wall-/ceiling-mounting modes to fit in your deploymentAdvanced Cellular Coexistence minimizes interferences from 4G/5G cellular networksNebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed

Segment	Series	Management	Model
Medium-Sized Business to Enterprise	Unified Pro/ NebulaFlex Pro	<ul style="list-style-type: none"> • Controller managed • Cloud managed • Standalone 	WAC6503D-S 
			WAC6502D-S 
			WAC6552D-S 
			WAC6553D-E 
			WAC6303D-S 
			WAC6103D-I 

Main Design	Key Features
<ul style="list-style-type: none"> • 802.11ac dual radio concurrent 2.4 and 5 GHz support • Smart antenna technology • 3 spatial streams 	<ul style="list-style-type: none"> • NebulaFlex Pro enables the deployment flexibility to be standalone, controller managed or cloud managed mode • Zyxel smart antenna provides premium performance anywhere • Advanced IEEE 802.11ac offers up to 1.75 Gbps combined data rates • Dynamic Channel Selection, Load Balancing and Smart Client Steering ensure optimal wireless experience in high density environments • APFlexTM and tool-less bracket design ease deployment • Unified Pro AP with high scalability to convert from standalone to managed mode • Outdoor AP are designed for harsh outdoor environments with up to IP67 industrial-grade weather proofing • Enterprise-grade security for the wireless network edge • Streamlined network initialization, troubleshooting and configuration by supporting ZON utility, Zyxel Smart Connect and ZAC • Simplified WiFi planning, deployment and management by supporting ZWO • Plenum rated housing
<ul style="list-style-type: none"> • 802.11ac dual radio concurrent 2.4 and 5 GHz support • Smart antenna technology • Outdoor coverage • IP67 weather protection 	
<ul style="list-style-type: none"> • 802.11ac dual radio concurrent 2.4 and 5 GHz support • Outdoor coverage • 3 spatial streams • IP66 weather protection 	
<ul style="list-style-type: none"> • 802.11ac Wave 2 MU-MIMO dual radio concurrent 2.4 and 5 GHz support • Smart antenna technology • 3 spatial streams 	<ul style="list-style-type: none"> • NebulaFlex Pro enables the deployment flexibility to be standalone, controller managed or cloud managed mode • Enterprise-class 802.11ac Wave 2 access point with 3x3: 3SS supporting 3 streams MU-MIMO for high-density deployments • Next generation beamforming and smart antenna technology deliver excellent WiFi experience • Unbeatable coverage from maximized sensitivity • Advanced Cellular Coexistence minimizes interference from 3G/4G cellular networks • ZON Utility and APFlexTM make deployment simple and fast
<ul style="list-style-type: none"> • 802.11ac dual radio concurrent 2.4 and 5 GHz support • Dual-optimized antenna • 3 spatial streams 	<ul style="list-style-type: none"> • NebulaFlex Pro enables the deployment flexibility to be standalone, controller managed or cloud managed mode • Enterprise class 3x3 802.11ac AP supports combined data rates of up to 1.75 Gbps • “Dual-optimized antenna” allows pattern optimization adapting to wall- or ceiling-mount installations • Dynamic Channel Selection, Load Balancing and Smart Client Steering ensure optimal wireless experience in medium to high density environments • Stylish, ultra-slim ID design as the 32 mm height blends perfectly into modern interior decorations • APFlexTM and Zyxel one networking utilities make deployment simple and fast

Segment	Series	Management	Model
Medium-Sized Business to Enterprise	Unified/ NebulaFlex Pro	<ul style="list-style-type: none"> • Controller managed • Cloud managed • Standalone 	WAC500 
			WAC500H
			
			NWA5123-AC HD
			
	Unified series	<ul style="list-style-type: none"> • Controller managed • Standalone 	NWA5123-AC 
			NWA5121-NI
			
			WAC5302D-Sv2
			
			NWA5301-NJ
			

Main Design	Key Features
<ul style="list-style-type: none"> • 802.11ac Wave2, MU-MIMO • 5GHz: 2x2; 2.4GHz: 2x2 • 1GbE 802.3af uplink • Interference Immunity 	<ul style="list-style-type: none"> • Enterprise class 2x2 802.11ac Wave 2 AP supports combined data rates of up to 1200 Mbps • Optimized RF performance for ceiling mounting deployment • The latest WPA3 security protocol provides safer connectivity • Advanced Cellular Coexistence minimizes interferences from 4G/5G cellular networks • NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed
<ul style="list-style-type: none"> • 802.11ac Wave2, MU-MIMO • 5GHz: 2x2; 2.4GHz: 2x2 • 1GbE 802.3at/af uplink • Interference Immunity • Wall-mounted and desktop-mounted options 	<ul style="list-style-type: none"> • Enterprise class 2x2 802.11ac Wave 2 AP supports combined data rates of up to 1200 Mbps • Two downlink Gigabit Ethernet ports, including one with PoE to power for VoIP phones or other devices • Clever wired and wireless network solution for individual hotel guest rooms • Versatile installation options allow the APs to be converted to desktop-mount by using an optional stand to better suit the work-from-home scenarios • Advanced Cellular Coexistence minimizes interferences from 4G/5G cellular networks • NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed
<ul style="list-style-type: none"> • 802.11ac Wave 2 MU-MIMO dual radio concurrent 2.4 and 5 GHz support • Embedded antenna 	<ul style="list-style-type: none"> • NebulaFlex Pro enables the deployment flexibility to be standalone, controller managed or cloud managed mode • Achieve reliable connectivity, support for more connected clients and better wireless coverage with the latest Wave 2 WiFi standard • Unified AP with high scalability to convert from standalone to managed mode • Achieve reliable connectivity, support for more connected clients and better wireless coverage with the latest Wave 2 WiFi standard • Ceiling- and wall-mount design with optimized RF performance • Enterprise grade security • APFlex™ and Zyxel One Network utilities make deployment simple and fast
<ul style="list-style-type: none"> • 802.11ac Dual radio 2.4 and 5 GHz support • Embedded antenna 	<ul style="list-style-type: none"> • Unified AP with high scalability to convert from standalone to managed mode • Ceiling- and wall-mount design with optimized RF performance • Enterprise grade security • APFlex™ and Zyxel One Network utilities make deployment simple and fast
<ul style="list-style-type: none"> • Single radio 2.4 GHz support • Embedded antenna 	<ul style="list-style-type: none"> • Clever wired and wireless network solution for individual hotel guest rooms • The world's first wall-plate AP design that can be mounted on wall plates or directly in any corner • Enterprise-class 2x2 802.11ac AP with smart antenna supporting combined data rates of up to 1.2 Gbps • Three downlink Gigabit Ethernet ports, including one with PoE to power for VoIP phones or other devices
<ul style="list-style-type: none"> • Dual radio 2.4 and 5 GHz support • Smart antenna technology 	<ul style="list-style-type: none"> • Unique back panel design that fits the majority of outlet boxes in the world • 2.4 GHz 802.11n technology providing data rates of up to 300 Mbps • High-gain antenna that optimizes WiFi services for mobile devices • Streamlined network initialization, troubleshooting and configuration by supporting ZON utility, Zyxel Smart Connect and ZAC • Simplified WiFi planning, deployment and management by supporting ZWO
<ul style="list-style-type: none"> • Single radio 2.4 GHz support • Embedded antenna 	<ul style="list-style-type: none"> • Unique back panel design that fits the majority of outlet boxes in the world • 2.4 GHz 802.11n technology providing data rates of up to 300 Mbps • High-gain antenna that optimizes WiFi services for mobile devices • Streamlined network initialization, troubleshooting and configuration by supporting ZON utility, Zyxel Smart Connect and ZAC • Simplified WiFi planning, deployment and management by supporting ZWO

Segment	Series	Management	Model
Small to Medium-Sized Business	Unified Pro/ NebulaFlex Pro	<ul style="list-style-type: none"> • Controller managed • Cloud managed • Standalone 	WAX510D 
	Nebula AP series	<ul style="list-style-type: none"> • Cloud managed 	NAP102 
			NAP203 
			NAP303 
			NAP353 
	NebulaFlex series	<ul style="list-style-type: none"> • Cloud managed • Standalone • SNMP management 	NWA210AX 

Main Design	Key Features
<ul style="list-style-type: none"> • 802.11ax (Wi-Fi 6) Dual-Radio Unified Access Point • 5GHz: 2x2; 2.4GHz: 2x2 • Dual-optimized antenna 	<ul style="list-style-type: none"> • Dual-radio (dual 2x2 MIMO) 802.11ax AP provides maximum data rate of 1775 Mbps • OFDMA is arguably the best innovation of WiFi, delivering the highest performance and low latency for all scenarios • Dual-optimized antenna provides wall-/ceiling-mounting modes to fit in your deployment • Advanced Cellular Coexistence minimizes interferences from 4G/5G cellular networks • NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed
<ul style="list-style-type: none"> • 802.11ac Dual radio 2.4 and 5 GHz support • Embedded antenna 	<ul style="list-style-type: none"> • 2x2 802.11ac AP supports up to 1.2 Gbps combined data rates (NAP102) • 3x3 802.11ac AP supports up to 1.75 Gbps combined data rates (NAP203, NAP303, NAP353) • Dual-optimized Antenna adopts both wall- and ceiling-mount installations (NAP203) • Smart Antenna provides breakthrough performance (NAP303) • IP66-rated weather protection (NAP353) • Self-configuring, zero-touch deployments • Enterprise security and RF optimization • DCS, load balancing and smart client steering
<ul style="list-style-type: none"> • 802.11ac dual radio concurrent 2.4 and 5 GHz support • Dual-optimized antenna • 3 spatial streams 	<ul style="list-style-type: none"> • 802.11ac dual radio concurrent 2.4 and 5 GHz support • Smart antenna technology • 3 spatial streams
<ul style="list-style-type: none"> • 802.11ac dual radio concurrent 2.4 and 5 GHz support • Outdoor coverage • 3 spatial streams 	<ul style="list-style-type: none"> • 802.11ax (Wi-Fi 6) Dual-Radio PoE Access Point • 5GHz: 2x2; 2.4GHz: 2x2 • 2.5 GbE uplink • Cellular network coexistence
	<ul style="list-style-type: none"> • 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 • Advanced Cellular Coexistence minimizes interferences from 4G/5G cellular networks • The latest WPA3 security protocol provides safer connectivity • NebulaFlex allows users to switch between standalone or intuitive Nebula cloud managed modes as needed

Segment	Series	Management	Model
Small Business	NebulaFlex series	<ul style="list-style-type: none"> • Cloud managed • Standalone • SNMP management 	NWA110AX 
			NWA1123-AC HD 
			NWA1123-AC PRO 
			NWA1123-ACv2 
			NWA1123-ACv3 
			NWA1302-AC 
	Standalone AP series	<ul style="list-style-type: none"> • Standalone • SNMP management 	NWA1100-NH 

Main Design	Key Features
<ul style="list-style-type: none"> • 802.11ax (Wi-Fi 6) Dual-Radio PoE Access Point • 5GHz: 2x2; 2.4GHz: 2x2 • Cellular network coexistence 	<ul style="list-style-type: none"> • NebulaFlex delivers the flexibility to switch between standalone and License Free Nebula Cloud management • Nebula Cloud management allows easy deployment, real-time configurations and access to manage network anytime • Achieve reliable connectivity, support for more connected clients and better wireless coverage with the latest Wave 2 WiFi standard (NWA1123-AC HD/NWA1123ACv3) • Dual-optimized antenna for both wall/ceiling-mount installations (NWA1123-AC PRO) • Provides wireless, wired and PoE connectivity with 802.11ac as well as a built-in Gigabit switch (NWA1302-AC) • Robust build quality including solid-state capacitors and advanced heat dissipation design to ensure long life and operational reliability
<ul style="list-style-type: none"> • 802.11ac Wave 2 MU-MIMO dual radio concurrent 2.4 and 5 GHz support • Embedded antennaW 	
<ul style="list-style-type: none"> • 802.11ac Dual radio 2.4 and 5 GHz support • Dual-optimized antenna 	
<ul style="list-style-type: none"> • 802.11ac support • Dual radio concurrent 2.4 and 5 GHz 	
<ul style="list-style-type: none"> • 802.11ac Wave2, MU-MIMO • 5GHz: 2x2; 2.4GHz: 2x2 • 1GbE 802.3af uplink • Interference Immunity 	
<ul style="list-style-type: none"> • 802.11ac Dual radio 2.4 and 5 GHz support • Smart antenna technology • Gigabit switch and PoE supply 	
<ul style="list-style-type: none"> • 802.11n support • Long range AP 	<ul style="list-style-type: none"> • Fast 802.11n WiFi with 5 dBi antenna speeds up to 300 Mbps • High output power of up to 28 dBm delivers extended coverage • Flexible operating modes and IEEE 802.3af PoE support • APFlex™ and Zyxel One Network utilities make deployment simple and fast • Certified WPA2 Enterprise, access control management and user traffic control for strict network protection • Streamlined network initialization and configuration by supporting ZON utility and ZAC

Wireless LAN Feature Matrix

Controller

Model	NXC Controller	
	NXC5500	NXC2500
Port Density		
10/100/1000 Mbps RJ-45 ports	6	6
USB	2	2
Capacity & Performance		
Managed APs (default/max.)	64/1024	8/64
Throughput (Gbps)	6	1
Deployment Tools		
AP planning	-	Yes
Coverage detection	-	Yes
WLAN quality map	-	Yes
WLAN Management		
CAPWAP	Yes	Yes
Controller address assignment	Manual/Auto discovery/DHCP option/DNS	Manual/Auto discovery/DHCP option/DNS
Auto provisioning	Yes	Yes
NAT pass-through	Yes	Yes
Encrypted managed frame (DTLS)	Yes	Yes
Primary/Backup controller	Yes	Yes
Managed AP firmware auto upgrade	Yes	Yes
Scheduled firmware upgrade	Yes	Yes
Dynamic channel selection	Yes	Yes
Client RSSI threshold	Yes	Yes
Wireless multicast setting	Yes	Yes
ZyMesh*	Yes	Yes
Auto healing	Yes	Yes
Fast roaming	Pre-authentication, PMK caching and 802.11r/k/v	Pre-authentication, PMK caching and 802.11r/k/v
Authentication & Security		
Authentication protocol	802.1X, MS AD, LDAP	802.1X, MS AD, LDAP
MAC authentication	Yes	Yes
Embedded RADIUS server	Yes (4,096 users)	Yes (512 users)
Rogue AP detection	Yes	Yes
Rogue AP containment	Yes	Yes
Customizable captive portal	Yes	Yes
External captive portal	Yes	Yes
Guest account (dynamic)	Yes (1,024)	Yes (512)
Layer-2 isolation	Yes	Yes
Network Features		
VLAN	Yes (512)	Yes (256)
DHCP client/server/relay	Yes/Yes/Yes	Yes/Yes/Yes
NAT	Yes	Yes
Static routing	Yes	Yes
Policy routing	Yes	Yes
Firewall	Yes	Yes
QoS		
WMM power save	Yes	Yes
Diffserv marking	Yes	Yes
AP load balancing	Yes	Yes
Rate limiting (firewall)	Yes	Yes
Station bandwidth limit (per SSID)	Yes	Yes
Data tunneling	Yes (up to 64 APs suggested)	Yes (up to 16 APs suggested)
Management Features		
CLI with SSH	Yes	Yes
Web UI with SSL	Yes	Yes
SNMP	v1, v2c, v3	v1, v2c, v3
Multi-level administration roles	Yes	Yes
Remote configuration and management	Yes	Yes
Management VLAN	Yes	Yes
System log	Yes	Yes
System log save to USB drive	Yes	Yes
Others		
Packet capture	Yes	Yes
High availability	Primary/Secondary controller	Primary/Secondary controller
2nd controller configuration	Yes	Yes
System diagnostic tool	Yes	Yes
Band select (steering)	Yes	Yes
IPv6 host	Yes	Yes
Power supply	270 W ATX SPS; Input: 100 to 240 V @50 to 60 Hz	12 V DC; 100 to 240 V AC
MTBF (hr)	55,555	815,464
Heat dissipation (BTU/hr)	467	64.83
Physical Specifications		
Dimensions (WxDxH)(mm/in.)	520 x 435 x 42/20.47 x 17.13 x 1.65	242 x 175 x 35.5/9.53 x 6.89 x 1.38
Weight (g/lb.)	5,350/11.79	805/1.77
Included accessories	<ul style="list-style-type: none"> • Ethernet cable • Console cable 	<ul style="list-style-type: none"> • Power cord • Rack mounting kit

*: ZyMesh can be enabled with a license upgrade. Without a license, 1 root AP is supported as a trial.

Access Point

Model	POE AP 1000 series			
	NWA1120 series			
	NWA1123-ACv2	NWA1123ACv3	NWA1123-AC PRO	NWA1123-AC HD
Product Name	802.11ac Dual-Radio Ceiling Mount PoE Access Point	802.11ac Wave 2 Dual-Radio Ceiling Mount PoE Access Point	802.11ac Dual-Radio Dual Mount PoE Access Point	802.11ac Wave 2 Dual-Radio Dual Mount PoE Access Point
				
Main Design				
Wireless Frequency	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
Radio	2	2	2	2
RF Specifications				
Number of Antenna	4 embedded (2T2R MIMO)	2 dual band embedded (2T2R MIMO)	8 embedded dual-optimized antenna	5 embedded (2.4G: 2T2R MIMO / 5G: 3T3R MIMO)
Antenna Gain	3dBi@2.4Ghz 4dBi@5Ghz	3dBi@2.4Ghz 4dBi@5Ghz	Ceiling: 3 dBi@2.4 GHz ; 4 dBi@5 GHz Wall: 4 dBi@2.4 GHz ; 5 dBi@5 GHz	3dBi@2.4Ghz 3dBi@5Ghz
LAN				
Number of 10/100/1000M LAN	1	1	2	2
PoE	Yes	Yes	Yes	Yes
PoE Power Draw	9W	11W	12.48 W (802.3at PoE)*	15.5 W (802.3at PoE)
WLAN Features				
WLAN Maximum Net Throughput	Up to 300 Mbps	Up to 450 Mbps	Up to 900 Mbps	Up to 900 Mbps
WDS	Yes	Yes	Yes	Yes(V6.00 or above)
Smart Mesh (Nebula)	Yes	Yes	Yes	Yes(V6.00 or above)
Fast Roaming (PMK Cache & Pre-Auth)	Yes (Nebula)	Yes (Nebula)	Yes (Nebula)	Yes (Nebula)
Fast Roaming (802.11r, k, v)	Yes (Nebula)	Yes (Nebula)	Yes (Nebula)	Yes (Nebula)
Wireless Security				
WPA/WPA2-PSK	Yes	Yes	Yes	Yes
WPA/WPA2-Enterprise	Yes	Yes	Yes	Yes
WPA3	-	Yes	-	-
DPPSK	-	Yes (Nebula)	-	-
EAP Types	TLS, TTLS, PEAP, FAST, AKA and SIM	TLS, TTLS, PEAP, FAST, AKA and SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM
IEEE 802.1X	Yes	Yes	Yes	Yes
Number of SSID	16	16	16	16
MAC Filtering	Yes	Yes	Yes	Yes
Layer-2 Isolation	Yes, Multiple Profile	Yes, Multiple Profile	Yes, Multiple Profile	Yes, Multiple Profile
RADIUS Authentication	Yes	Yes	Yes	Yes
Rogue AP Detection	Yes	Yes	Yes	Yes
Rogue AP Containment	Yes	Yes	Yes	-
Firewall	-	-	-	-
Network				
IPv6 Host	Yes	Yes	Yes	Yes
VLANs	Yes	Yes	Yes	Yes
DHCP Client	Yes	Yes	Yes	Yes
NAT	-	Yes (Nebula)	-	Yes (Nebula;V6.10)
Management				
Controller Mode	-	-	-	-
Standalone AP Mode	Yes	Yes	Yes	Yes
NebulaFlex	Yes	Yes	Yes	Yes
Web UI/CLI	Yes	Yes	Yes	Yes
SNMP	Yes	Yes	Yes	Yes
Others				
Power Supply	Input AC 100~240V ~ 50/60Hz 0.3A Output DC +12V 1A	Input AC 100~240V ~ 50/60Hz 0.3A Output DC +12V 1A	802.3at PoE Injector	Input: AC 100 - 240 V -50/60 Hz 0.3 A; Output: DC +12 V 2A
MTBF (hrs)	1,727,244	630,794	1,005,235	1,306,790
Heat Dissipation (BTU/hr)	30.7	37.5	42.7	52.9
Physical Specifications				
Item Dimensions (WxDxH)(mm/in.)	130 x 130 x 54.7 / 5.12 x 5.12 x 2.17	140 x 140 x 37.5 / 5.51 x 5.51 x 1.48	203.9 x 191.7 x 34.7 / 8.03 x 7.55 x 1.37	211 x 223 x 39 / 8.31 x 8.78 x 1.54
Item Weight (g/lb.)	300 / 0.67	249 / 0.55	445 / 0.98	750 / 1.653
Included Accessories	• Power adapter • Wall/ceiling mount plate	• Power adapter • Wall/ceiling mount plate	• PoE injector • Wall/ceiling mount plate • Mounting screws	• PoE injector • Wall/ceiling mount plate • Mounting screws

*: Max. power draw is 12.48 W. In extreme cases, the inrush current is greater than 802.3af limit, thus 802.3at PoE is required.

Access Point

Model	POE AP 1000 series			UniFi AP 5000 series	
	WiFi 6		NWA1300 series	NWA5120 series	
	NWA110AX	NWA210AX	NWA1302-AC	NWA5121-NI REV. 2	NWA5123-AC
Product Name	802.11ax (WiFi 6) Dual-Radio PoE Access Point	802.11ax (WiFi 6) Dual-Radio PoE Access Point	802.11ac Unified Wall Plate Access Point	802.11 b/g/n Unified Access Point	802.11ac Unified Dual Radio Access Point
					
Main Design					
Wireless Frequency	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 GHz	2.4 and 5 GHz
Radio	2	2	2	1	2
RF Specifications					
Number of Antenna	4 embedded (2T2R MIMO)	6 embedded (2.4G: 2T2R MIMO / 5G: 4T4R MIMO)	4 embedded smart antenna	2 embedded (2T2R MIMO)	4 embedded (2T2R MIMO)
Antenna Gain	5dBi@2.4Ghz 6dBi@5Ghz	5dBi@2.4Ghz 6dBi@5Ghz	5dBi@2.4Ghz 5dBi@5Ghz	7dBi	3dBi@2.4Ghz 4dBi@5Ghz
LAN					
Number of 10/100/1000M LAN	1	1	4 (One PoE PSE)	1	1
PoE	Yes	Yes	Yes	Yes	Yes
PoE Power Draw	17W	19W	24W (Include 7W for PoE PSE)	6W	9W
WLAN Features					
WLAN Maximum Net Throughput	Up to 900 Mbps	Up to 1000 Mbps	Up to 450 Mbps	Up to 110 Mbps	Up to 450 Mbps
WDS	Yes(V6.10 or above)	Yes	Yes(V6.00 or above)	-	Yes
Smart Mesh (Nebula)	Yes(V6.10 or above)	Yes	Yes(V6.00 or above)	-	-
Fast Roaming (PMK Cache & Pre-Auth)	Yes (Nebula)	Yes (Nebula)	Yes (Nebula)	*	*
Fast Roaming (802.11r, k, v)	Yes (Nebula)	Yes (Nebula)	Yes (Nebula)	*	*
Wireless Security					
WPA/WPA2-PSK	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-Enterprise	Yes	Yes	Yes	Yes	Yes
WPA3	Yes	Yes	-	-	-
DPPSK	Yes (Nebula;V6.10)	Yes (Nebula;V6.10)	-	-	-
EAP Types	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	TLS, TTLS, PEAP, FAST, AKA and SIM	TLS, TTLS, PEAP, FAST, AKA and SIM	TLS, TTLS, PEAP, FAST, AKA and SIM
IEEE 802.1X	Yes	Yes	Yes	Yes	Yes
Number of SSID	16	16	16	8	16
MAC Filtering	Yes	Yes	Yes	Yes	Yes
Layer-2 Isolation	Yes, Multiple Profile	Yes, Multiple Profile	Yes, Multiple Profile	Yes, Multiple Profile	Yes, Multiple Profile
RADIUS Authentication	Yes	Yes	Yes	Yes	Yes
Rogue AP Detection	Yes	Yes	-	Yes	Yes
Rogue AP Containment	-	-	-	Yes (V4.1)	Yes
Firewall	-	-	*	*	*
Network					
IPv6 Host	Yes	Yes	Yes	Yes (V4.1)	Yes
VLANs	Yes	Yes	Yes	Yes	Yes
DHCP Client	Yes	Yes	Yes	Yes	Yes
NAT	Yes (Nebula;V6.10)	Yes (Nebula;V6.10)	Yes (Nebula;V6.10)	-	-
Management					
Controller Mode	-	-	-	-	-
Standalone AP Mode	Yes	Yes	Yes	Yes	Yes
NebulaFlex	Yes	Yes	Yes	N/A	N/A
Web UI/CLI	Yes	Yes	Yes	Yes	Yes
SNMP	Yes	Yes	Yes	Yes	Yes
Others					
Power Supply	Input: AC 100 - 240 V -50/60 Hz 0.3 A; Output: DC +12 V 1.5A	Input: AC 100 - 240 V -50/60 Hz 0.3 A; Output: DC +12 V 2A	N/A	Input AC 100-240V ~ 50/60Hz 0.3A Output DC +12V 1A	Input AC 100-240V ~ 50/60Hz 0.3A Output DC +12V 1A
MTBF (hrs)	635,837	329,004	809,263	5 years / 627152	1,727,244
Heat Dissipation (BTU/hr)	58.0	64.8	81.9	13.7	30.7
Physical Specifications					
Item Dimensions (WxDxH)(mm/in.)	180 x 180 x 39 / 7.09 x 7.09 x 1.54	180 x 180 x 39 / 7.09 x 7.09 x 1.54	90 x 170 x 29 / 3.54 x 6.69 x 1.14	130 x 130 x 54.5 / 5.12 x 5.12 x 2.17	130 x 130 x 54.7 / 5.12 x 5.12 x 2.17
Item Weight (g/lb.)	453 / 1.00	545 / 1.20	0.32 / 0.71	230 / 0.51	300 / 0.67
Included Accessories	• Power adapter • Mount plate • Mounting screws	• Power adapter • Mount plate • Mounting screws	• Bracket • Mounting screws	• Power adapter • Mounting screws	• Power adapter • Wall/ceiling mount plate

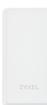
*: Supported when work with NXC5200 and NXC2500 and NXC5500

Model	UniFi AP 5000 series				
	NWA5120 series		WiFi 6		
	WAC500	NWA5123-AC HD	WAX510D	NWA5301-NJ	WAC500H
Product Name	802.11ac Unified Dual Radio Access Point	802.11ac Wave 2 Dual-Radio Unified Access Point	802.11ax (WiFi 6) Dual-Radio Unified Access Point	802.11 b/g/n Unified In-wall Access Point	802.11ac wave 2 Unified Wall Plate Access Point
					
Main Design					
Wireless Frequency	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 GHz	2.4 and 5 GHz
Radio	2	2	2	1	2
RF Specifications					
Number of Antenna	2 dual band embedded (2T2R MIMO)	5 embedded (2.4G: 2T2R MIMO/ 5G: 3T3R MIMO)	4 embedded dual-optimized antenna(2T2R MIMO)	2 embedded (2T2R MIMO)	2 dual band embedded (2T2R MIMO)
Antenna Gain	3dBi@2.4Ghz 4dBi@5Ghz	3dBi@2.4Ghz 3dBi@5Ghz	5dBi@2.4Ghz 6dBi@5Ghz	5dBi	3dBi@2.4Ghz 4dBi@5Ghz
LAN					
Number of 10/100/1000M LAN	1	2	1	-	1
PoE	Yes	Yes	Yes	Yes	Yes
PoE Power Draw	11W	15.5 W (802.3at PoE)	17W	13W (Include 7W for PoE PSE)	18W (Include 7W for PoE PSE)
WLAN Features					
WLAN Maximum Net Throughput	Up to 450 Mbps	Up to 900 Mbps	Up to 1000 Mbps	Up to 90 Mbps (Limited by 10/100 uplink)	Up to 450 Mbps
WDS	Yes	Yes(V6.00 or above)	Yes(V6.10 or above)	Yes	Yes
Smart Mesh (Nebula)	Yes	Yes(V6.00 or above)	Yes(V6.10 or above)	-	Yes
Fast Roaming (PMK Cache & Pre-Auth)	Yes	*	Yes	*	Yes
Fast Roaming (802.11r, k, v)	Yes	*	Yes	*	Yes
Wireless Security					
WPA/WPA2-PSK	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-Enterprise	Yes	Yes	Yes	Yes	Yes
WPA3	Yes	-	Yes	-	Yes
DPPSK	Yes (Nebula)	-	Yes (Nebula;V6.10)	-	Yes (Nebula)
EAP Types	TLS, TTLS, PEAP, FAST, AKA and SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	TLS, TTLS, PEAP, FAST, AKA and SIM	TLS, TTLS, PEAP, FAST, AKA and SIM
IEEE 802.1X	Yes	Yes	Yes	Yes	Yes
Number of SSID	16	16	16	8	16
MAC Filtering	Yes	Yes	Yes	Yes	Yes
Layer-2 Isolation	Yes, Multiple Profile	Yes, Multiple Profile	Yes, Multiple Profile	Yes, Multiple Profile	Yes, Multiple Profile
RADIUS Authentication	Yes	Yes	Yes	Yes	Yes
Rogue AP Detection	Yes	Yes	Yes	Yes	Yes
Rogue AP Containment	Yes	-	-	Yes (V4.1)	Yes
Firewall	*	*	*	*	*
Network					
IPv6 Host	Yes	Yes	Yes	Yes (V4.1)	Yes
VLANs	Yes	Yes	Yes	Yes	Yes
DHCP Client	Yes	Yes	Yes	Yes	Yes
NAT	Yes (Nebula)	Yes (Nebula;V6.10)	Yes (Nebula;V6.10)	-	Yes (Nebula)
Management					
Controller Mode	-	-	-	-	-
Standalone AP Mode	Yes	Yes	Yes	Yes	Yes
NebulaFlex	Yes	Yes (1 yr Pro License)	Yes (1 yr Pro License)	N/A	Yes (1 yr Pro License)
Web UI/CLI	Yes	Yes	Yes	Yes	Yes
SNMP	Yes	Yes	Yes	Yes	Yes
Others					
Power Supply	Input AC 100-240V ~ 50/60Hz 0.3A Output DC +12V 1A**	Input: AC 100 - 240 V ~50/60 Hz 0.3 A; Output: DC +12 V 2A**	Input: AC 100 - 240 V ~50/60 Hz 0.3 A; Output: DC +12 V 1.5A**	N/A	Input AC 100-240V ~ 50/60Hz 0.3A Output DC +12V 1A**
MTBF (hrs)	630,794	4,134,738	329,004	531,785	542,017
Heat Dissipation (BTU/hr)	37.5	52.9	58.0	17.7	61.4
Physical Specifications					
Item Dimensions (WxDxH)(mm/in.)	140 x 140 x 37.5 / 5.51 x 5.51 x 1.48	211 x 223 x 39 / 8.31 x 8.78 x 1.54	180 x 180 x 39 / 7.09 x 7.09 x 1.54	85 x 138 x 37.4 / 3.35 x 5.43 x 1.47	173 x 97 x 29 / 6.81 x 3.82 x 1.14
Item Weight (g/lb.)	249 / 0.55	750 / 1.653	453 / 1.00	172 / 0.379	223 / 0.49
Included Accessories	• Wall/ceiling mount plate	• Wall/ceiling mount plate • Mounting screws	• Mount plate • Mounting screws	• Bracket • Mounting screws	• Multi-purpose mounting • bracket with screws

*: Supported when work with NXC5200 and NXC2500 and NXC5500

**: PSU sold separately

Access Point

Model	UniFi AP 5000 series		UniFi AP 6000 series		
	NWA5120 series		WAC6100 Series	WiFi 6	WAC6300 Series
	WAC5302D-S	WAC5302D-Sv2	WAC6103D-I	WAX610D	WAC6303D-S
Product Name	802.11ac Unified Wall Plate Access Point	802.11ac Unified Wall Plate Access Point	802.11 a/b/g/n/ac Dual-Radio Business Access Point	802.11ax (WiFi 6) Dual-Radio Unified Access Point	802.11ac Wave 2 Dual-Radio Unified Pro Access Point
					
Main Design					
Wireless Frequency	2.4 and 5 GHz	2.4 and 5 GHz			
Radio	2	2	2	2	2
RF Specifications					
Number of Antenna	4 embedded smart antenna	4 embedded smart antenna	8 embedded dual-optimized antenna	6 embedded dual-optimized antenna (4T4R+2T2R MIMO)	5 embedded (2.4G: 2T2R MIMO / 5G: 3T3R MIMO)
Antenna Gain	5dBi@2.4GHz 5dBi@5GHz	5dBi@2.4GHz 5dBi@5GHz	Ceiling: 3 dBi@2.4 GHz ; 4 dBi@5 GHz Wall: 4 dBi@2.4 GHz ; 5 dBi@5 GHz	5dBi@2.4GHz 6dBi@5GHz	3dBi@2.4GHz 4dBi@5GHz
LAN					
Number of 10/100/1000M LAN	4 (One PoE PSE)	4 (One PoE PSE)	2	1	2
PoE	Yes	Yes	Yes	Yes	Yes
PoE Power Draw	24W (Include 7W for PoE PSE)	24W (Include 7W for PoE PSE)	12.48 W (802.3at PoE)*	19W	16.2 W (802.3at PoE)
WLAN Features					
WLAN Maximum Net Throughput	Up to 450 Mbps	Up to 450 Mbps	Up to 900 Mbps	Up to 1200 Mbps	Up to 900 Mbps
WDS	Yes(V6.00 or above)	Yes	Yes	Yes	Yes
Smart Mesh (Nebula)	-	Yes	Yes	Yes	Yes
Fast Roaming (PMK Cache & Pre-Auth)	*	Yes	*	Yes	*
Fast Roaming (802.11r, k, v)	*	Yes	*	Yes	*
Wireless Security					
WPA/WPA2-PSK	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-Enterprise	Yes	Yes	Yes	Yes	Yes
WPA3	-	-	-	Yes	-
DPPSK	-	-	-	Yes (Nebula;V6.10)	-
EAP Types	TLS, TTLS, PEAP, FAST, AKA and SIM	TLS, TTLS, PEAP, FAST, AKA and SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM
IEEE 802.1X	Yes	Yes	Yes	Yes	Yes
Number of SSID	16	16	16	16	16
MAC Filtering	Yes	Yes	Yes	Yes	Yes
Layer-2 Isolation	Yes, Multiple Profile	Yes, Multiple Profile	Yes	Yes, Multiple Profile	Yes, Multiple Profile
RADIUS Authentication	Yes	Yes	Yes	Yes	Yes
Rogue AP Detection	-	-	Yes	Yes	Yes
Rogue AP Containment	-	-	Yes	-	-
Firewall	*	*	*	*	*
Network					
IPv6 Host	Yes	Yes	Yes	Yes	Yes
VLANs	Yes	Yes	Yes	Yes	Yes
DHCP Client	Yes	Yes	Yes	Yes	Yes
NAT	-	Yes (Nebula)	-	Yes (Nebula;V6.10)	Yes (Nebula;V6.10)
Management					
Controller Mode	-	-	-	-	-
Standalone AP Mode	Yes	Yes	Yes	Yes	Yes
NebulaFlex	N/A	Yes (1 yr Pro License)	Yes (1 yr Pro License)	Yes (1 yr Pro License)	Yes (1 yr Pro License)
Web UI/CLI	Yes	Yes	Yes	Yes	Yes
SNMP	Yes	Yes	Yes	Yes	Yes
Others					
Power Supply	N/A	N/A	802.3at PoE only (No DC jack)	Input: AC 100 - 240 V ~50/60 Hz 0.3 A; Output: DC +12 V 2A**	Input: AC 100 - 240 V ~50/60 Hz 0.3 A; Output: DC +12 V 2A**
MTBF (hrs)	809,263	809,263	1,005,235	635,837	3,960,217
Heat Dissipation (BTU/hr)	81.9	81.9	42.7	64.8	55.3
Physical Specifications					
Item Dimensions (WxDxH)(mm/in.)	90 x 170 x 29 / 3.54 x 6.69 x 1.14	90 x 170 x 29 / 3.54 x 6.69 x 1.14	203.9 x 191.7 x 34.7 / 8.03 x 7.55 x 1.37	180 x 180 x 39 / 7.09 x 7.09 x 1.54	211 x 223 x 39 / 8.31 x 8.78 x 1.54
Item Weight (g/lb.)	0.32 / 0.71	0.32 / 0.71	445 / 0.98	545 / 1.20	800 / 1.763
Included Accessories	• Bracket • Mounting screws	• Bracket • Mounting screws	• wall/ceiling mount plate • screws	• Mount plate • Mounting screws	• Wall/ceiling mount plate • bracket with screws

*: Supported when work with NXC5200 and NXC2500 and NXC5500

**: PSU sold separately

Model	UniFi AP 6000 series				
	WAC6500 series		WiFi 6	WAC6550 series	
	WAC6503D-S	WAC6502D-S	WAX650S	WAC6553D-E	WAC6552D-S
Product Name	802.11 a/b/g/n/ac Dual-Radio Business Access Point	802.11 a/b/g/n/ac Dual-Radio Business Access Point	802.11ax (WiFi 6) Dual-Radio Business Access Point	802.11 a/b/g/n/ac Dual-Radio Business Access Point	802.11 a/b/g/n/ac Dual-Radio Business Access Point
					
Main Design					
Wireless Frequency	2.4 and 5 GHz	2.4 and 5 GHz			
Radio	2	2	3 (1 for monitor)	2	2
RF Specifications					
Number of Antenna	6 embedded smart antenna	4 embedded smart antenna	Smart Antenna	6 external (optional accessory)	4 embedded smart antenna
Antenna Gain	4dBi@2.4Ghz 6dBi@5Ghz	4dBi@2.4Ghz 6dBi@5Ghz	3dBi @ 2.4Ghz 5.8dBi @ 5Ghz	N/A	5dBi@2.4Ghz 10dBi@5Ghz
LAN					
Number of 10/100/1000M LAN	2	2	1	1	1
PoE	Yes	Yes	Yes	Yes	Yes
PoE Power Draw	21W	17W	31W	25W	15.12W
WLAN Features					
WLAN Maximum Net Throughput	Up to 900 Mbps	Up to 600 Mbps	Up to 2000 Mbps	Up to 900 Mbps	Up to 600 Mbps
WDS	Yes	Yes	Yes(V6.10 or above)	Yes	Yes
Smart Mesh (Nebula)	Yes	Yes	Yes(V6.10 or above)	Yes	Yes
Fast Roaming (PMK Cache & Pre-Auth)	*	*	Yes	*	*
Fast Roaming (802.11r, k, v)	*	*	Yes	*	*
Wireless Security					
WPA/WPA2-PSK	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-Enterprise	Yes	Yes	Yes	Yes	Yes
WPA3	-	-	Yes	-	-
DPPSK	-	-	Yes (Nebula;V6.10)	-	-
EAP Types	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM			
IEEE 802.1X	Yes	Yes	Yes	Yes	Yes
Number of SSID	16	16	16	8	16
MAC Filtering	Yes	Yes	Yes	Yes	Yes
Layer-2 Isolation	Yes	Yes	Yes, Multiple Profile	Yes	Yes
RADIUS Authentication	Yes	Yes	Yes	Yes	Yes
Rogue AP Detection	Yes	Yes	Yes	Yes	Yes
Rogue AP Containment	Yes	Yes	-	Yes	Yes
Firewall	*	*	*	*	*
Network					
IPv6 Host	Yes	Yes	Yes	Yes	Yes
VLANs	Yes	Yes	Yes	Yes	Yes
DHCP Client	Yes	Yes	Yes	Yes	Yes
NAT	-	-	Yes (Nebula;V6.10)	-	-
Management					
Controller Mode	-	-	-	-	-
Standalone AP Mode	Yes	Yes	Yes	Yes	Yes
NebulaFlex	Yes (1 yr Pro License)	Yes (1 yr Pro License)			
Web UI/CLI	Yes	Yes	Yes	Yes	Yes
SNMP	Yes	Yes	Yes	Yes	Yes
Others					
Power Supply	Input: AC 100 - 240 V -50/60 Hz 0.3 A; Output: DC +12 V 2 A (not included)	Input: AC 100 - 240 V -50/60 Hz 0.3 A; Output: DC +12 V 2 A (not included)	Input: AC 100 - 240 V -50/60 Hz 0.3 A; Output: DC +12 V 2.5A*	PoE12HP (not included)	PoE12HP (not included)
MTBF (hrs)	1,202,489	1,407,374	180,653	562,413	775,977
Heat Dissipation (BTU/hr)	71.7	58.0	105.8	85.3	51.6
Physical Specifications					
Item Dimensions (WxDxH)(mm/in.)	236 x 227 x 62 / 9.28 x 8.95 x 2.43	236 x 227 x 62 / 9.28 x 8.95 x 2.43	230 x 235 x 53.5 / 9.06 x 9.25 x 2.11	255 x 256 x 62 / 10.04 x 10.08 x 2.44	255 x 256 x 66 / 10.04 x 10.08 x 2.60
Item Weight (g/lb.)	982 / 2.17	961 / 2.12	1160 / 2.56	1708 / 3.77	1590 / 3.51
Included Accessories	• Ceiling mount plate • Screw	• Ceiling mount plate • Screw	• Mount plate • Mounting screws	• Power injector • Power cord • Pole mount kit • Wall-mount kit • Water-proof • Water-tape • screw	• Pole mount kit • screw

*: Supported when work with NXC5200 and NXC2500 and NXC5500

**: PSU sold separately

Nebula Cloud Managed Access Points Feature Matrix

Model	Nebula Cloud Managed Access Points			
	NAP102	NAP203	NAP303	NAP353
Product description	802.11ac Dual-Radio Nebula Cloud Managed Access Point	802.11ac Dual-Radio, Dual-Optimized Antenna 3x3 Nebula Cloud Managed Access Point	802.11ac Dual-Radio Smart Antenna 3x3 Nebula Cloud Managed Access Point	802.11ac Dual-Radio External Antenna 3x3 Outdoor Nebula Cloud Managed Access Point
Basic Design				
Wireless frequency	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
Radio	2	2	2	2
RF Specifications				
Number of antenna	4 embedded	8 internal dual-optimized antenna	6 embedded smart antenna	6 N-type connectors*
Antenna gain	3 dBi @2.4 GHz 4 dBi @5 GHz	Ceiling: 2.4 GHz 3 dBi; 5 GHz 4 dBi Wall: 2.4 GHz 4 dBi; 5 GHz 5 dBi	4 dBi @2.4 GHz 6 dBi @5 GHz	-
LAN				
Number of 10/100/1000M LAN	1	2	2	1
PoE	Yes	Yes	Yes	Yes
PoE Power draw (watt)	9	12.48 (802.3at PoE)**	17.04	25
WLAN Features				
Wireless speed	1200 Mbps	1750 Mbps	1750 Mbps	1750 Mbps
Mesh AP	Yes	Yes	Yes	Yes
Fast roaming	Pre-authentication, PMK caching and 802.11r/k/v	Pre-authentication, PMK caching and 802.11r/k/v	Pre-authentication, PMK caching and 802.11r/k/v	Pre-authentication, PMK caching and 802.11r/k/v
Wireless Security				
WEP	Yes	Yes	Yes	Yes
WPA/WPA2-PSK	Yes	Yes	Yes	Yes
WPA/WPA2-Enterprise	Yes	Yes	Yes	Yes
WLAN access control list	Yes	Yes	Yes	Yes
EAP types	TLS, TTLS, PEAP, FAST, AKA and SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM
IEEE 802.1X	Yes	Yes	Yes	Yes
Number of SSID	8 (per radio)	8 (per radio)	8 (per radio)	8 (per radio)
MAC filtering	Yes	Yes	Yes	Yes
Layer-2 isolation	Yes	Yes	Yes	Yes
RADIUS authentication	Yes	Yes	Yes	Yes
Captive portal	Yes	Yes	Yes	Yes
Network				
VLANs	Yes	Yes	Yes	Yes
DHCP client	Yes	Yes	Yes	Yes
QoS (PG)				
WMM	Yes	Yes	Yes	Yes
WMM power save	Yes	Yes	Yes	Yes
DiffServ marking	Yes	Yes	Yes	Yes
Management				
Cloud managed	Yes	Yes	Yes	Yes
ZON utility	Support	Support	Support	Support
Smart connect	Neighbor device discovery	Neighbor device discovery	Neighbor device discovery	Neighbor device discovery
Others				
Chassis rating	Plenum-rated	Plenum-rated	Plenum-rated	IP66 (Embedded heater for harsh weather)
Power supply	DC input: 12 V DC 1 A; PoE: 802.3at compliant	PoE: 802.3at compliant	DC input: 12 V DC 2 A; PoE: 802.3at compliant	PoE: 802.3at compliant
MTBF (hr)	1,241,824	1,005,235	1,202,489	562,413
Physical Specifications				
Item dimensions (WxDxH)(mm/in.)	130 x 130 x 54.7/ 5.12 x 5.12 x 2.17	203.9 x 191.7 x 34.7/ 8.03 x 7.55 x 1.37	236 x 227 x 62/ 9.28 x 8.95 x 2.43	255 x 256 x 62/ 10.04 x 10.08 x 2.44
Item weight (g/lb.)	300/0.67	445/0.98	982/2.17	1,708/3.77
Included accessories	• Power adapter • Wall/Ceiling-mount plate	• Wall/Ceiling-mount plate	• Ceiling mount plate • Mounting screws	• Pole/wall mounting kits • PoE injector • Power cord

* The antenna is not embedded and external antennas are separately sold.

**: Max. power draw is 12.48 W. In extreme cases, the inrush current is greater than 802.3af limit, thus 802.3at PoE is required.

Antenna Series

For Indoor and Outdoor

Model	EXT-108	EXT-109	EXT-118
Product photo			
Space	Outdoor	Outdoor	Outdoor
Type	Omni, 1 port	Directional, 1 port	Directional, 1 port
Frequency band (MHz)	2400 - 2500	2400 - 2500	2400 - 2500
Gain	8 dBi	8.5 dBi	18 dBi
VSWR	2.0:1 Max.	1.5:1 Max.	1.5:1 Max.
Polarization	Linear, vertical	Linear, vertical	Linear, vertical
HPBW/Horizontal	● 360°	▼ 65°	! 15°
HPBW/Vertical	— 15°	► 60°	— 15°
Connector	N type jack	N type jack	N type jack
Temperature	-40°C to 80°C/-40°F to 176°F	-40°C to 80°C/-40°F to 176°F	-40°C to 80°C/-40°F to 176°F
Weight (g/lb.)	340/0.75	107/0.24	1600/3.53
Dimensions (mm/in.)	80 x 78 x 520/ 3.15 x 3.07 x 20.47	114 x 114 x 40/ 4.49 x 4.49 x 1.57	360 x 360 x 16/ 14.17 x 14.17 x 0.63
Accessory kit	<ul style="list-style-type: none"> • Screw kit • N-plug adapter • Mounting kit • Quick installation guide 	<ul style="list-style-type: none"> • Cable: N-plug, RP-SMA plug; 3 m • Mounting plate • Quick installation guide 	<ul style="list-style-type: none"> • Cable: N-plug, RP-SMA plug; 3 m • Mounting set • Quick installation guide

Model	ANT2206	ANT2105	ANT3108	ANT3218
Product photo				
Space	Indoor	Outdoor	Outdoor	Outdoor
Type	Directional, 1 port	Omni, 1 port	Omni, 1 port	Directional, 1 port
Frequency band (MHz)	2400 - 2500 4900 - 5875	2400 - 2483	5150 - 5875	5150 - 5875
Gain	6 dBi	8 dBi	4.5 dBi	7 dBi
VSWR	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.
Polarization	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical
HPBW/Horizontal	▼ 65°	▼ 50°	● 360°	● 360°
HPBW/Vertical	► 75°	► 50°	► 30°	— 15°
Connector	RP-SMA plug	N type plug	N type jack	N type jack
Temperature	-10°C to 55°C/14°F to 131°F	-10°C to 70°C/14°F to 158°F	-40°C to 80°C/-40°F to 176°F	-40°C to 80°C/-40°F to 176°F
Weight (g/lb.)	110/0.24	70/0.15	206/0.46	700/1.54
Dimensions (mm/in.)	76 x 86 x 118/ 2.99 x 3.39 x 4.65	ø22 x 183	ø20 x 260	210 x 210 x 73/ 8.27 x 8.27 x 2.87
Accessory kit	<ul style="list-style-type: none"> • Screw kit • Quick installation guide 	-	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide

Model	ANT1310	ANT1313	ANT1314	ANT1315
Product photo				
Space	Indoor	Outdoor	Outdoor	Outdoor
Type	Directional, 2x2	Directional, 2x2	Sector, 2x2	Directional, 3x3
Frequency band (MHz)	2300 - 2700	2400 - 2500	2400 - 2500	2400 - 2500
Gain	9 - 10 dBi	13 - 13.5 dBi	14±0.5 dBi	14.5 - 15 dBi
VSWR	1.5:1 Max.	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.
Polarization	Linear/Horizontal	Cross polarization ±45°	Linear, ±45°	Linear, cross polarization
HPBW/ Horizontal	51°	33°	60°	39° - 48°
HPBW/ Vertical	66°	35°	13°	19° - 20°
Side lobes level	-14 dB Max.	-13 dB Max.	-	-10 dB Max.
Front to back ratio	-13 dB Max.	-25 dB Max.	-25 dB Max.	-19 dB Max.
Connector	SMA jack x 2	N type jack x 2	N type jack x 2	N type jack x 3
Temperature	-10°C to 55°C/14°F to 131°F	-40°C to 80°C/-40°F to 176°F	-40°C to 80°C/-40°F to 176°F	-40°C to 80°C/-40°F to 176°F
Weight (g/lb.)	130/0.29	800/1.76	800/1.76	1140/2.51
Dimensions (mm/in.)	ø133 x 42/ ø5.24 x 1.65	210 x 210 x 73/ 8.27 x 8.27 x 2.87	560 x 120 x 145/ 22.04 x 4.72 x 5.71	320 x 320 x 43/ 12.60 x 12.60 x 1.69
Accessory kit	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide

Model	ANT3315	ANT3316	ANT3320
Product photo			
Space	Outdoor	Outdoor	Outdoor
Space	Sector, 2x2	Directional, 2x2	Directional, 3x3
Frequency band (MHz)	5150 - 5875	5150 - 5875	5150 - 5875
Gain	15±0.5 dBi	15 - 16 dBi	20±1 dBi
VSWR	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.
Polarization	Linear, ±45°	Linear, ±90°	Linear, cross polarization
HPBW/ Horizontal	60°	19°	17°
HPBW/ Vertical	18°	21°	18°
Side lobes level	-5 dB Max.	-	-10 dB Max.
Front to back ratio	-30 dB Max.	-20 dB Max.	-35 dB Max.
Connector	N type jack x 2	N type jack x 2	N type jack x 3
Temperature	-40°C to 80°C/ -40°F to 176°F	-40°C to 80°C/ -40°F to 176°F	-40°C to 80°C/ -40°F to 176°F
Weight (g/lb.)	1400/3.09	800/1.76	2500/5.51
Dimensions (mm/in.)	560 x 120 x 145/ 22.04 x 4.72 x 5.71	210 x 210 x 73/ 8.27 x 8.27 x 2.87	371 x 371 x 165/ 14.61 x 14.61 x 6.50
Accessory kit	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide

Cable Series

Product	LMR 200-N	LMR 400-N	EXT-300
Product Photo			
Description	RP-SMA plug to N-plug Cable length: 3 m, 9 m	N-plug to N-plug Cable length: 1 m, 9 m	RP-SMA plug, N-jack (Jumper Cable)/N-plug, N-jack (Surge Arrestor): 0.5 m

Enclosure

Product	Weather-Proof Enclosure
Product Photo	
Description	<ul style="list-style-type: none">Operating temperature range from 50°C to -20°CIPX5 ratingWall/Pole mounting (pole mount kit is sold separately)
Compatible models	<ul style="list-style-type: none">NWA1123-ACv2NWA1123-AC PRONWA5121-NNWA5121-NINWA5123-ACNAP102NAP203WAC6103D-I



Your Networking Ally

Corporate Headquarters

Zyxel Communications Corp.

Tel: +886-3-578-3942
Fax: +886-3-578-2439
Email: sales@zyxel.com.tw
<http://www.zyxel.com>

Europe

Zyxel Belarus
Tel: +375 17 334 6099
Fax: +375 17 334 5899
Email: sales@zyxel.by
<http://www.zyxel.by>

Zyxel BeNeLux
Tel: +31 23 557 3689
Fax: +31 23 557 8492
Email: sales@zyxel.nl
<http://www.zyxel.nl>
<http://www.zyxel.be>

Zyxel Bulgaria (Bulgaria, Macedonia, Albania, Kosovo)
Tel: +3592 4443343
Email: info@cz.zyxel.com
<http://www.zyxel.bg>

Zyxel Czech Republic
Tel: +420 241 091 350
Hotline: +420 241 774 665
Fax: +420 241 091 359
Email: sales@cz.zyxel.com
<http://www.zyxel.cz>

Zyxel Denmark A/S
Tel: +45 39 55 07 00
Fax: +45 39 55 07 07
Email: sales@zyxel.dk
<http://www.zyxel.dk>

Zyxel Finland
Tel: +358 9 4780 8400
Email: myynti@zyxel.fi
<http://www.zyxel.fi>

Zyxel France
Tel: +33 (0)4 72 52 97 97
Fax: +33 (0)4 72 52 19 20
Email: info@zyxel.fr
<http://www.zyxel.fr>

Zyxel Germany GmbH
Tel: +49 (0) 2405-6909 0
Fax: +49 (0) 2405-6909 99
Email: sales@zyxel.de
<http://www.zyxel.de>

Zyxel Hungary & SEE
Tel: +36 1 848 0690
Email: info@zyxel.hu
<http://www.zyxel.hu>

Zyxel Iberia
Tel: +34 911 792 100
Email: ventas@zyxel.es
<http://www.zyxel.es>

Zyxel Italy
Tel: +39 011 2308000
Email: info@zyxel.it
<http://www.zyxel.it>

Asia

Zyxel Norway
Tel: +47 22 80 61 80
Fax: +47 22 80 61 81
Email: salg@zyxel.no
<http://www.zyxel.no>

Zyxel Poland
Tel: +48 223 338 250
Hotline: +48 226 521 626
Fax: +48 223 338 251
Email: info@pl.zyxel.com
<http://www.zyxel.pl>

Zyxel Romania
Tel: +40 31 0809 888
Fax: +40 31 0809 890
Email: info@cz.zyxel.com
<http://www.zyxel.ro>

Zyxel Russia
Tel: +(495) 539-9935
Fax: +(495) 542-8925
Email: info@zyxel.ru
<http://www.zyxel.ru>

Zyxel Slovakia
Tel: +421 220 861 847
Hotline: +421 220 861 848
Fax: +421 243 193 990
Email: info@cz.zyxel.com
<http://www.zyxel.sk>

Zyxel Sweden A/S
Tel: +46 8 55 77 60 60
Fax: +46 8 55 77 60 61
Email: sales@zyxel.se
<http://www.zyxel.se>

Zyxel Switzerland
Tel: +41 (0)44 806 51 00
Fax: +41 (0)44 806 52 00
Email: info@zyxel.ch
<http://www.zyxel.ch>

Zyxel Turkey A.S.
Tel: +90 212 314 18 00
Fax: +90 212 220 25 26
Email: bilgi@zyxel.com.tr
<http://www.zyxel.com.tr>

Zyxel UK Ltd.
Tel: +44 (0) 118 9121 700
Fax: +44 (0) 118 9797 277
Email: sales@zyxel.co.uk
<http://www.zyxel.co.uk>

Zyxel Ukraine
Tel: +380 (50) 440 88 61
Email: evelichko@zyxel.eu
<http://www.zyxel.ua>

Zyxel Middle East FZE

Tel: +971 4 372 4483
Cell: +971 562146416
Email: sales@zyxel-me.com
<http://www.zyxel-me.com>

Zyxel Philippine
Email: sales@zyxel.com.ph
<http://www.zyxel.com.ph>

Zyxel Singapore
Tel: +65 6339 3218
Hotline: +65 6339 1663
Fax: +65 6339 3318
Email: sales@zyxel.com.sg
<http://www.zyxel.com.sg>

Zyxel Taiwan (Taipei)
Tel: +886-2-2739-9889
Fax: +886-2-2735-3220
Email: sales_tw@zyxel.com.tw
<http://www.zyxel.com.tw>

Zyxel Thailand
Tel: +66-(0)-2831-5315
Fax: +66-(0)-2831-5395
Email: info@zyxel.co.th
<http://www.zyxel.co.th>

Zyxel Vietnam
Tel: (+848) 35202910
Fax: (+848) 35202800
Email: sales_vn@zyxel.com.tw
<http://www.zyxel.com.vn/vi/>

The Americas

Zyxel USA
North America Headquarters
Tel: +1-714-632-0882
Fax: +1-714-632-0858
Email: sales@zyxel.com
<http://us.zyxel.com>

Zyxel Brazil
Tel: +55 (11) 3373-7470
Fax: +55 (11) 3373-7510
Email: comercial@zyxel.com.br
<http://www.zyxel.com.br/pt/>

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

Copyright © 2020 Zyxel and/or its affiliates. All rights reserved.
All specifications are subject to change without notice.

