

**ZYXEL**  
NETWORKS



# Wireless LAN

Quick Sales Guide

# WLAN Portfolio Lineup

Work in both On-premise management and Nebula cloud management

## Features/Scalability



NWA90AX



NWA55AXE



NWA50AX



NWA220AX-6E



NWA1123AC-PRO



NWA210AX



NWA1123ACv3



NWA110AX

 Simplicity

 Flexibility

Business  
Scale

Small



nebula



WAX640S-6E



WAX6303D-S



WAC6552D-S



WAX620D-6E



WAC5123-AC HD



WAC6553D-E



WAX650S



WAC500



WAC6503D-S



WAX630S



WAC500H



WAC6103D-I



WAX610D



WAC5302D-Sv2



WAX510D

 Ultimate







Large

# Wireless LAN Access Point Quick Finder

Segment	Series	Management	Model
Medium-Sized Business to Enterprise	Ultimate	<ul style="list-style-type: none"><li>• Controller managed</li><li>• Cloud managed</li><li>• Standalone</li></ul>	WAX640S-6E
			
			WAX620D-6E
			
			WAX650S
			
WAX630S			
			
WAX610D			
			

# Key Features

Main Design	Key Features
<ul style="list-style-type: none"><li>• 802.11ax (WiFi 6E) Tri-Radio Unified Pro Access Point</li><li>• 6 GHz: 4x4; 5 GHz: 2x2; 2.4 GHz: 2x2</li><li>• Smart antenna technology</li><li>• Interference Immunity</li><li>• 2.5GbE uplink</li></ul>	<ul style="list-style-type: none"><li>• Tri-band coverage, 2.4 GHz, 5 GHz, and 6 GHz (2x2 + 2x2 + 4x4) 802.11ax AP to deliver maximum data rate of 7.8 Gbps</li><li>• Zyxel 6E Boost, using the high-gain 4 streams in 6 GHz, helps extend range and maximize performance of the new band</li><li>• The smart antenna technology mitigates interference and boosts WiFi performance</li><li>• The advanced RF filter prevents interference between the 5 GHz and 6 GHz bands while guaranteeing performance in all channels</li><li>• NebulaFlex Pro offers the full flexibility for users to easily switch between Nebula cloud-managed, controller-managed, and standalone modes</li></ul>
<ul style="list-style-type: none"><li>• 802.11ax (WiFi 6E) Dual-Radio Unified Pro Access Point</li><li>• 6 GHz/5 GHz: 4x4 (Selectable); 2.4 GHz: 2x2</li><li>• Dual-optimized antenna</li><li>• Interference Immunity</li><li>• 2.5GbE uplink</li></ul>	<ul style="list-style-type: none"><li>• 802.11ax AP (4x4 in 6 GHz/5 GHz selectable, 2x2 in 2.4 GHz) to deliver maximum data rate of 5.4 Gbps</li><li>• The BandFlex radio design can support either 5 GHz or 6 GHz by configuration, to fit into your 5 GHz coverage as well as futureproofing the use of 6 GHz</li><li>• Zyxel 6E Boost, using the high-gain 4 streams in 6 GHz, helps extend range and maximize performance of the new band</li><li>• Dual-optimized antenna provides the optimum radio patterns for both wall and ceiling mounting to fit into your installation</li><li>• NebulaFlex Pro offers the full flexibility for users to easily switch between Nebula cloud-managed, controller-managed, and standalone modes</li></ul>
<ul style="list-style-type: none"><li>• 802.11ax (WiFi 6) Dual-Radio Unified Pro Access Point</li><li>• 5 GHz: 4x4; 2.4 GHz: 4x4</li><li>• Smart antenna technology</li><li>• 5GbE uplink</li></ul>	<ul style="list-style-type: none"><li>• 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 BLE</li><li>• OFDMA is arguably the best innovation of WiFi, delivering the highest performance and low latency for all scenarios</li><li>• Smart antenna is the proven technology that can mitigate interference and boost WiFi 6 performance</li><li>• Advanced Cellular Coexistence minimizes interferences from 4G/5G cellular networks</li><li>• NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed</li></ul>
<ul style="list-style-type: none"><li>• 802.11ax (WiFi 6) Dual-Radio Unified Pro Access Point</li><li>• 5 GHz: 4x4; 2.4 GHz: 2x2</li><li>• Smart antenna technology</li><li>• 2.5GbE uplink</li></ul>	<ul style="list-style-type: none"><li>• Dual-radio (dual 4x4 + 2x2 MIMO) 802.11ax AP provides maximum data rate of 2975 Mbps</li><li>• Smart antenna is the proven technology that can mitigate interference and boost WiFi 6 performance</li><li>• Coupled the capacity with Zyxel XS1930 Series switches, the 2.5GbE uplink delivers uncompromising multigigabit speed without the need of re-cabling</li><li>• NebulaFlex Pro allows users to switch among standalone, on-premise controller managed or intuitive Nebula cloud managed modes as needed</li><li>• Advanced Cellular Coexistence minimizes interferences from 4G/5G cellular networks</li></ul>
<ul style="list-style-type: none"><li>• 802.11ax (WiFi 6) Dual-Radio Unified Access Point</li><li>• 5 GHz: 4x4; 2.4 GHz: 2x2</li><li>• Dual-optimized antenna</li><li>• 2.5GbE uplink</li></ul>	<ul style="list-style-type: none"><li>• Dual-radio (dual 4x4 + 2x2 MIMO) 802.11ax AP provides maximum data rate of 2975 Mbps</li><li>• Coupled the capacity with Zyxel XS1930 Series switches, the 2.5GbE uplink delivers uncompromising multi-gigabit speed without the need of re-cabling</li><li>• Dual-optimized antenna provides wall-/ceiling-mounting modes to fit in your deployment</li><li>• Advanced Cellular Coexistence minimizes interferences from 4G/5G cellular networks</li><li>• NebulaFlex Pro allows users to switch among standalone, on-premises controller managed or intuitive Nebula cloud managed modes as needed</li></ul>

Segment	Series	Management	Model
Medium-Sized Business to Enterprise	Ultimate	<ul style="list-style-type: none"> <li>• Controller managed</li> <li>• Cloud managed</li> <li>• Standalone</li> </ul>	WAX510D
			
			WAC6503D-S
			
			WAC6552D-S
			
WAC6553D-E			
			
WAC6303D-S			
			
WAC6103D-I			
			

## Main Design

- 802.11ax (WiFi 6) Dual-Radio Unified Access Point
- 5 GHz: 2x2; 2.4 GHz: 2x2
- Dual-optimized antenna

## Key Features

- 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

- 802.11ac dual radio concurrent 2.4 and 5 GHz support
- Smart antenna technology
- 3 spatial streams

- NebulaFlex Pro enables the deployment flexibility to be standalone, controller managed or cloud managed mode
- Zyxel smart antenna provides premium performance anywhere (WAC6503D-S, WAC6552D-S)
- Advanced IEEE 802.11ac offers up to 1.75 Gbps combined data rates (WAC6503D-S, WAC6553D-E)
- Dynamic Channel Selection, Load Balancing and Smart Client Steering ensure optimal wireless experience in high density environments
- Tool-less bracket design for easy deployment
- Outdoor AP are designed for harsh outdoor environments with up to IP67 industrial-grade weather proofing (WAC6552D-S, WAC6553D-E)
- Enterprise-grade security for the wireless network edge
- Plenum rated housing

- 802.11ac dual radio concurrent 2.4 and 5 GHz support
- Smart antenna technology
- Outdoor coverage
- IP67 weather protection







- 802.11ac dual radio concurrent 2.4 and 5 GHz support
- Outdoor coverage
- 3 spatial streams
- IP66 weather protection

- 802.11ac Wave 2 MU-MIMO dual radio concurrent 2.4 and 5 GHz support
- Smart antenna technology
- 3 spatial streams

- NebulaFlex Pro enables the deployment flexibility to be standalone, controller managed or cloud managed mode
- Enterprise-class 802.11ac Wave 2 access point 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 4G/5G cellular networks

- 802.11ac dual radio concurrent 2.4 and 5 GHz support
- Dual-optimized antenna
- 3 spatial streams

- 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

Segment	Series	Management	Model
<b>Medium-Sized Business to Enterprise</b>	Ultimate	<ul style="list-style-type: none"> <li>• Controller managed</li> <li>• Cloud managed</li> <li>• Standalone</li> </ul>	WAC5302D-Sv2
			
			WAC500
			
			WAC500H
			
			NWA5123-AC HD
			
<b>Small to Medium-Sized Business</b>	Flexibility	<ul style="list-style-type: none"> <li>• Cloud managed</li> <li>• Standalone</li> </ul>	NWA220AX-6E
			
			NWA210AX
			



## Main Design

## Key Features

- 802.11ac dual radio concurrent 2.4 and 5 GHz support
- Smart antenna technology

- 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

- 802.11ac Wave 2, MU-MIMO
- 5 GHz: 2x2; 2.4 GHz: 2x2
- 1GbE 802.3af uplink
- Interference Immunity

- 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

- 802.11ac Wave 2, MU-MIMO
- 5 GHz: 2x2; 2.4 GHz: 2x2
- 1GbE 802.3at/af uplink
- Interference Immunity
- Wall-mounted and desktop-mounted options

- 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

- 802.11ac Wave 2 MU-MIMO dual radio concurrent 2.4 and 5 GHz support
- Embedded antenna







- 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
- Next generation beamforming technology delivers maximum coverage
- Solid state capacitors and advanced heat dissipation ensure high reliability and long life — even in the toughest environments
- Ceiling- and wall-mount design with optimized RF performance

- 802.11ax (WiFi 6E) Dual-Radio PoE Access Point
- 6 GHz/5 GHz: 4x4 (Selectable); 2.4 GHz: 2x2
- 2.5GbE uplink
- Cellular network coexistence

- 802.11ax AP (4x4 in 6 GHz/5 GHz selectable, 2x2 in 2.4 GHz) to deliver maximum data rate of 5.4 Gbps
- The BandFlex radio design can support either 5 GHz or 6 GHz by configuration, to fit into your 5 GHz coverage as well as futureproofing the use of 6 GHz
- Zyxel 6E Boost, using the high-gain 4 streams in 6 GHz, helps extend range and maximize performance of the new band
- 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

- 802.11ax (WiFi 6) Dual-Radio PoE Access Point
- 5 GHz: 2x2; 2.4 GHz: 2x2
- 2.5GbE uplink
- Cellular network coexistence

- 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 to Medium-Sized Business	Flexibility	<ul style="list-style-type: none"> <li>• Cloud managed</li> <li>• Standalone</li> </ul>	NWA110AX
			
			NWA1123-AC PRO
			
			NWA1123-ACv3
			
Small Business, Simplicity Series	Simplicity	<ul style="list-style-type: none"> <li>• Cloud managed</li> <li>• Standalone</li> </ul>	NWA90AX
			
			NWA55AXE
			
			NWA50AX
			

## Main Design

## Key Features

- 802.11ax (WiFi 6) Dual-Radio PoE Access Point
- 5 GHz: 2x2; 2.4 GHz: 2x2
- Cellular network coexistence

- 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
- OFDMA is arguably the best innovation of WiFi, delivering the highest performance and low latency for all scenarios (NWA110AX)
- Achieve reliable connectivity, support for more connected clients and better wireless coverage with the 802.11ac Wave 2 WiFi standard (NWA1123ACv3)
- Dual-optimized antenna for both wall/ceiling-mount installations (NWA1123-AC PRO)
- Robust build quality including solid-state capacitors and advanced heat dissipation design to ensure long life and operational reliability

- 802.11ac Dual radio 2.4 and 5 GHz support
- Dual-optimized antenna

- 802.11ac Wave 2, MU-MIMO
- 5 GHz: 2x2; 2.4 GHz: 2x2
- 1GbE 802.3af uplink
- Interference Immunity

- 802.11ax (WiFi 6) Dual-Radio PoE Access Point
- 5 GHz: 2x2; 2.4 GHz: 2x2
- Captive portal and IEEE 802.1X authentication support
- Cellular network coexistence

- Dual-radio (dual 2x2) 802.11ax AP provides maximum data rate of 1775 Mbps
- Captive portal and IEEE 802.1X authentication support provides enterprise-level security
- 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
- Smart Mesh automatically forms dynamic wireless links and mitigates complex, inconvenient cabling WiFi deployments

- 802.11ax (WiFi 6) Dual-Radio Outdoor PoE Access Point
- Outdoor coverage up to IP55 weatherproof rating




- Dual-radio (2x2) 802.11ax AP provides maximum data rate of 1775 Mbps
- Smart Mesh automatically forms dynamic wireless links to bridge networks for interbuilding settings and mitigates complex, inconvenient cabling WiFi deployments
- External, detachable antenna design allows users to attach other antennas that better suit different demands
- Designed for harsh outdoor environment with up to IP55 weatherproof rating
- Easy configuration setup with Zyxel's intuitive Nebula Cloud to get the network up and running in no time

- 802.11ax (WiFi 6) Dual-Radio PoE Access Point
- 5 GHz: 2x2; 2.4 GHz: 2x2
- Cellular network coexistence





- Dual-radio (dual 2x2) 802.11ax AP provides maximum data rate of 1775 Mbps
- 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 WPA3 Personal provides safer encryption
- Smart Mesh automatically forms dynamic wireless links and mitigates complex, inconvenient cabling WiFi deployments

# Wireless LAN Feature Matrix

## Access Point

Model	POE AP 500 series		
	WiFi 6		
	NWA50AX	NWA55AXE	NWA90AX
<b>Product name</b>	802.11ax (WiFi 6) Dual-Radio PoE Access Point	802.11ax (WiFi 6) Dual-Radio Outdoor PoE Access Point	802.11ax (WiFi 6) Dual-Radio PoE Access Point
			
<b>Main Design</b>			
<b>Wireless frequency</b>	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
<b>Radio</b>	2	2	2
<b>RF Specifications</b>			
<b>Number of antenna</b>	2 embedded dual band (2T2R MIMO)	2 external (2T2R MIMO)	2 embedded dual band (2T2R MIMO)
<b>Antenna gain</b>	3 dBi @2.4 GHz 4 dBi @5 GHz	4 dBi @2.4 GHz 5 dBi @5 GHz	3 dBi @2.4 GHz 4 dBi @5 GHz
<b>LAN</b>			
<b>Number of 10/100/1000M LAN</b>	1	1	1
<b>Number of multigig LAN</b>	-	-	-
<b>PoE</b>	Yes	Yes	Yes
<b>PoE power draw</b>	16 W	16 W	16 W
<b>WLAN Features</b>			
<b>WLAN maximum net throughput</b>	Up to 900 Mbps	Up to 900 Mbps	Up to 900 Mbps
<b>WDS</b>	Yes	Yes	Yes
<b>Smart Mesh (Nebula)</b>	Yes	Yes	Yes
<b>Fast roaming (802.11r, k, v)</b>	Yes*	Yes*	Yes*
<b>Wireless Security</b>			
<b>WPA/WPA2-PSK</b>	Yes	Yes	Yes
<b>WPA/WPA2-Enterprise (IEEE 802.1x)</b>	No	No	Yes
<b>WPA3</b>	Yes (Personal)	Yes (Personal)	Yes
<b>DPPSK (WPA2 only)</b>	-	-	-
<b>EAP types</b>	No	No	TLS, TTLS, PEAP, FAST, AKA and SIM
<b>Number of SSID</b>	16	16	Yes
<b>MAC filtering</b>	Yes	Yes	16
<b>Layer-2 isolation</b>	-	-	Yes
<b>RADIUS authentication</b>	-	-	Yes, multiple profile
<b>Microsoft AD authentication</b>	-	-	Yes
<b>Rogue AP detection</b>	Yes	Yes	Yes
<b>Rogue AP containment</b>	-	-	Yes
<b>Firewall</b>	-	-	-
<b>Network</b>			
<b>IPv6 host</b>	Yes	Yes	Yes
<b>VLANs</b>	Yes	Yes	Yes
<b>DHCP client</b>	Yes	Yes	Yes
<b>NAT</b>	-	-	-
<b>Management</b>			
<b>Standalone AP mode</b>	Yes	Yes	Yes
<b>Controller mode</b>	-	-	-
<b>NebulaFlex</b>	Yes	Yes	Yes
<b>Web UI/CLI</b>	Yes	Yes	Yes
<b>SNMP</b>	-	-	-
<b>Others</b>			
<b>Power supply</b>	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 1.5 A	802.3at PoE injector	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 1.5 A
<b>MTBF (hrs)</b>	1,010,980	1,091,186	1,010,980
<b>Heat dissipation (BTU/hr)</b>	54.6	54.6	54.6
<b>Physical Specifications</b>			
<b>Item dimensions (WxDxH)(mm/in.)</b>	140 x 140 x 37.5/5.51 x 5.51 x 1.48	308 x 136.4 x 49.6/12.13 x 5.37 x 1.95	140 x 140 x 37.5/5.51 x 5.51 x 1.48
<b>Item weight (g/lb.)</b>	290/0.64	580/1.28	290/0.64
<b>Included accessories</b>	<ul style="list-style-type: none"> <li>Power adapter</li> <li>Mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>PoE injector</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Power adapter</li> <li>Mount plate</li> <li>Mounting screws</li> </ul>





\*: Supported when work with Nebula Control Center.

Model	POE AP 1000 series			
	WiFi 5		WiFi 6	
	NWA1123ACv3	NWA1123-AC PRO	NWA110AX	NWA210AX
<b>Product name</b>	802.11ac Wave 2 Dual-Radio Ceiling Mount PoE Access Point	802.11ac Dual-Radio Dual Mount PoE Access Point	802.11ax (WiFi 6) Dual-Radio PoE Access Point	802.11ax (WiFi 6) Dual-Radio PoE Access Point
				
<b>Main Design</b>				
<b>Wireless frequency</b>	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
<b>Radio</b>	2	2	2	2
<b>RF Specifications</b>				
<b>Number of antenna</b>	2 embedded dual band (2T2R MIMO)	8 embedded dual-optimized antenna	4 embedded (2T2R MIMO)	6 embedded (2.4G: 2T2R MIMO/ 5G: 4T4R MIMO)
<b>Antenna gain</b>	3 dBi @2.4 GHz 4 dBi @5 GHz	Ceiling: 3 dBi @2.4 GHz; 4 dBi @5 GHz Wall: 4 dBi @2.4 GHz; 5 dBi @5 GHz	5 dBi @2.4 GHz 6 dBi @5 GHz	5 dBi @2.4 GHz 6 dBi @5 GHz
<b>LAN</b>				
<b>Number of 10/100/1000M LAN</b>	1	2	1	1
<b>Number of multigig LAN</b>	-	-	-	1 (2.5GbE)
<b>PoE</b>	Yes	Yes	Yes	Yes
<b>PoE power draw</b>	11 W	12.48 W (802.3at PoE)* * 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.	17 W	19 W
<b>WLAN Features</b>				
<b>WLAN maximum net throughput</b>	Up to 450 Mbps	Up to 900 Mbps	Up to 900 Mbps	Up to 1000 Mbps
<b>WDS</b>	Yes	Yes	Yes	Yes
<b>Smart Mesh (Nebula)</b>	Yes	Yes	Yes	Yes
<b>Fast roaming (802.11r, k, v)</b>	Yes**	Yes**	Yes**	Yes**
<b>Wireless Security</b>				
<b>WPA/WPA2-PSK</b>	Yes	Yes	Yes	Yes
<b>WPA/WPA2-Enterprise (IEEE 802.1x)</b>	Yes	Yes	Yes	Yes
<b>WPA3</b>	Yes	-	Yes	Yes
<b>DPPSK (WPA2 only)</b>	Yes**	-	Yes**	Yes**
<b>EAP types</b>	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
<b>Number of SSID</b>	16	16	16	16
<b>MAC filtering</b>	Yes	Yes	Yes	Yes
<b>Layer-2 isolation</b>	Yes, multiple profile	Yes, multiple profile	Yes, multiple profile	Yes, multiple profile
<b>RADIUS authentication</b>	Yes	Yes	Yes	Yes
<b>Microsoft AD authentication</b>	-	-	-	-
<b>Rogue AP detection</b>	Yes	Yes	Yes	Yes
<b>Rogue AP containment</b>	Yes	Yes	-	-
<b>Firewall</b>	-	-	-	-
<b>Network</b>				
<b>IPv6 host</b>	Yes	Yes	Yes	Yes
<b>VLANs</b>	Yes	Yes	Yes	Yes
<b>DHCP client</b>	Yes	Yes	Yes	Yes
<b>NAT</b>	Yes**	-	Yes**	Yes**
<b>Management</b>				
<b>Standalone AP mode</b>	Yes	Yes	Yes	Yes
<b>Controller mode</b>	-	-	-	-
<b>NebulaFlex</b>	Yes	Yes	Yes	Yes
<b>Web UI/CLI</b>	Yes	Yes	Yes	Yes
<b>SNMP</b>	Yes	Yes	Yes	Yes
<b>Others</b>				
<b>Power supply</b>	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 1 A	802.3at PoE injector	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 1.5 A	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 2 A
<b>MTBF (hrs)</b>	630,794	1,005,235	635,837	329,004
<b>Heat dissipation (BTU/hr)</b>	37.5	42.7	58.0	64.8
<b>Physical Specifications</b>				
<b>Item dimensions (WxDxH)(mm/in.)</b>	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	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
<b>Item weight (g/lb.)</b>	249/0.55	445/0.98	453/1.00	545/1.20
<b>Included accessories</b>	<ul style="list-style-type: none"> <li>Power adapter</li> <li>Wall/ceiling mount plate</li> </ul>	<ul style="list-style-type: none"> <li>PoE injector</li> <li>Wall/ceiling mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Power adapter</li> <li>Mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Power adapter</li> <li>Mount plate</li> <li>Mounting screws</li> </ul>

\*: Supported when work with AP Controller

\*\* : Supported when work with Nebula Control Center





## Access Point

Model	POE AP 1000 series		UniFi AP 5000 series	
	WiFi 6E	WiFi 5	WiFi 5	WiFi 6
	NWA220AX-6E	WAC500	NWA5123-AC HD	WAX510D
<b>Product name</b>	802.11ax (WiFi 6E) Dual-Radio PoE Access Point	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
				
<b>Main Design</b>				
<b>Wireless frequency</b>	2.4 and 5/6 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
<b>Radio</b>	2	2	2	2
<b>RF Specifications</b>				
<b>Number of antenna</b>	6 embedded (4T4R+2T2R MIMO)	2 embedded dual band (2T2R MIMO)	5 embedded (2.4G: 2T2R MIMO/ 5G: 3T3R MIMO)	4 embedded dual-optimized antenna (2T2R MIMO)
<b>Antenna gain</b>	3 dBi @2.4 GHz 5 dBi @5 GHz 6 dBi @6 GHz	3 dBi @2.4 GHz 4 dBi @5 GHz	3 dBi @2.4 GHz 3 dBi @5 GHz	5 dBi @2.4 GHz 6 dBi @5 GHz
<b>LAN</b>				
<b>Number of 10/100/1000M LAN</b>	1	1	2	1
<b>Number of multigig LAN</b>	1 (2.5GbE)	-	-	-
<b>PoE</b>	Yes	Yes	Yes	Yes
<b>PoE power draw</b>	21 W	11 W	15.5 W (802.3at PoE)	17 W
<b>WLAN Features</b>				
<b>WLAN maximum net throughput</b>	Up to 1200 Mbps	Up to 450 Mbps	Up to 900 Mbps	Up to 1000 Mbps
<b>WDS</b>	Yes	Yes	Yes	Yes
<b>Smart Mesh (Nebula)</b>	Yes	Yes	Yes	Yes
<b>Fast roaming (802.11r, k, v)</b>	Yes**	Yes***	Yes***	Yes***
<b>Wireless Security</b>				
<b>WPA/WPA2-PSK</b>	Yes	Yes	Yes	Yes
<b>WPA/WPA2-Enterprise (IEEE 802.1x)</b>	Yes	Yes	Yes	Yes
<b>WPA3</b>	Yes	Yes	-	Yes
<b>DPPSK (WPA2 only)</b>	Yes* (No in 6 GHz)	Yes**	-	Yes**
<b>EAP types</b>	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-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
<b>Number of SSID</b>	16	16	16	16
<b>MAC filtering</b>	Yes	Yes	Yes	Yes
<b>Layer-2 isolation</b>	Yes, multiple profile	Yes, multiple profile	Yes, multiple profile	Yes, multiple profile
<b>RADIUS authentication</b>	Yes	Yes	Yes	Yes
<b>Microsoft AD authentication</b>	-	Yes*	Yes*	Yes*
<b>Rogue AP detection</b>	Yes	Yes	Yes	Yes
<b>Rogue AP containment</b>	-	Yes	-	-
<b>Firewall</b>	-	Yes*	Yes*	Yes*
<b>Network</b>				
<b>IPv6 host</b>	Yes	Yes	Yes	Yes
<b>VLANS</b>	Yes	Yes	Yes	Yes
<b>DHCP client</b>	Yes	Yes	Yes	Yes
<b>NAT</b>	Yes*	Yes**	Yes**	Yes**
<b>Management</b>				
<b>Standalone AP mode</b>	Yes	Yes	Yes	Yes
<b>Controller mode</b>	-	Yes	Yes	Yes
<b>NebulaFlex</b>	Yes	Yes (1 yr Pro License)	Yes (1 yr Pro License)	Yes (1 yr Pro License)
<b>Web UI/CLI</b>	Yes	Yes	Yes	Yes
<b>SNMP</b>	Yes	Yes	Yes	Yes
<b>Others</b>				
<b>Power supply</b>	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 2 A (Note: PSU sold separately)	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 1 A	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 2 A (Note: PSU sold separately)	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 1.5 A (Note: PSU sold separately)
<b>MTBF (hrs)</b>	711,333	630,794	4,134,738	329,004
<b>Heat dissipation (BTU/hr)</b>	71.7	37.5	52.9	58.0
<b>Physical Specifications</b>				
<b>Item dimensions (WxDxH)(mm/in.)</b>	180 x 180 x 42/ 7.09 x 7.09 x 1.65	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
<b>Item weight (g/lb.)</b>	650/1.43	249/0.55	750/1.653	453/1.00
<b>Included accessories</b>	<ul style="list-style-type: none"> <li>Mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Wall/ceiling mount plate</li> </ul>	<ul style="list-style-type: none"> <li>Wall/ceiling mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Mount plate</li> <li>Mounting screws</li> </ul>

\*: Supported when work with AP Controller

\*\* : Supported when work with Nebula Control Center

\*\*\*: Supported when work with AP Controller or Nebula Control Center





Model	UniFi AP 5000 series		UniFi AP 6000 series	
	WiFi 5		WiFi 5	WiFi 6
	WAC500H	WAC5302D-Sv2	WAC6103D-I	WAX610D
<b>Product name</b>	802.11ac Wave 2 Unified Wall Platel Access Point	802.11ac Unified Wall Platel Access Point	802.11 a/b/g/n/ac Dual-Radio Business Access Point	802.11ax (WiFi 6) Dual-Radio Unified Access Point
				
<b>Main Design</b>				
<b>Wireless frequency</b>	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
<b>Radio</b>	2	2	2	2
<b>RF Specifications</b>				
<b>Number of antenna</b>	2 embedded dual band (2T2R MIMO)	4 embedded smart antenna	8 embedded dual-optimized antenna	6 embedded dual-optimized antenna (4T4R+2T2R MIMO)
<b>Antenna gain</b>	3 dBi @2.4 GHz 4 dBi @5 GHz	5 dBi @2.4 GHz 5 dBi @5 GHz	Ceiling: 3 dBi @2.4 GHz; 4 dBi @5 GHz Wall: 4 dBi @2.4 GHz; 5 dBi @5 GHz	5 dBi @2.4 GHz 6 dBi @5 GHz
<b>LAN</b>				
<b>Number of 10/100/1000M LAN</b>	1	4 (One PoE PSE)	2	1
<b>Number of multigig LAN</b>	-	-	-	1 (2.5GbE)
<b>PoE</b>	Yes	Yes	Yes	Yes
<b>PoE power draw</b>	18 W (Include 7 W for PoE PSE)	24 W (Include 7 W for PoE PSE)	12.48 W (802.3at PoE)* * 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.	19 W
<b>WLAN Features</b>				
<b>WLAN maximum net throughput</b>	Up to 450 Mbps	Up to 450 Mbps	Up to 900 Mbps	Up to 1200 Mbps
<b>WDS</b>	Yes	Yes	Yes	Yes
<b>Smart Mesh (Nebula)</b>	Yes	Yes	Yes	Yes
<b>Fast roaming (802.11r, k, v)</b>	Yes***	Yes***	Yes***	Yes***
<b>Wireless Security</b>				
<b>WPA/WPA2-PSK</b>	Yes	Yes	Yes	Yes
<b>WPA/WPA2-Enterprise (IEEE 802.1x)</b>	Yes	Yes	Yes	Yes
<b>WPA3</b>	Yes	-	-	Yes
<b>DPPSK (WPA2 only)</b>	Yes**	-	-	Yes**
<b>EAP types</b>	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
<b>Number of SSID</b>	16	16	16	16
<b>MAC filtering</b>	Yes	Yes	Yes	Yes
<b>Layer-2 isolation</b>	Yes, multiple profile	Yes, multiple profile	Yes	Yes, multiple profile
<b>RADIUS authentication</b>	Yes	Yes	Yes	Yes
<b>Microsoft AD authentication</b>	Yes*	Yes*	Yes*	Yes*
<b>Rogue AP detection</b>	Yes	-	Yes	Yes
<b>Rogue AP containment</b>	Yes	-	Yes	-
<b>Firewall</b>	Yes*	Yes*	Yes*	Yes*
<b>Network</b>				
<b>IPv6 Host</b>	Yes	Yes	Yes	Yes
<b>VLANs</b>	Yes	Yes	Yes	Yes
<b>DHCP client</b>	Yes	Yes	Yes	Yes
<b>NAT</b>	Yes**	Yes**	-	Yes**
<b>Management</b>				
<b>Standalone AP mode</b>	Yes	Yes	Yes	Yes
<b>Controller mode</b>	Yes	Yes	Yes	Yes
<b>NebulaFlex</b>	Yes (1 yr Pro License)	Yes (1 yr Pro License)	Yes (1 yr Pro License)	Yes (1 yr Pro License)
<b>Web UI/CLI</b>	Yes	Yes	Yes	Yes
<b>SNMP</b>	Yes	Yes	Yes	Yes
<b>Others</b>				
<b>Power supply</b>	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 1 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 2 A (Note: PSU sold seperately)
<b>MTBF (hrs)</b>	542,017	809,263	1,005,235	635,837
<b>Heat dissipation (BTU/hr)</b>	61.4	81.9	42.7	64.8
<b>Physical Specifications</b>				
<b>Item dimensions (WxDxH)(mm/in.)</b>	173 x 97 x 29/ 6.81 x 3.82 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
<b>Item weight (g/lb.)</b>	223/0.49	0.32/0.71	445/0.98	545/1.20
<b>Included accessories</b>	<ul style="list-style-type: none"> <li>Multi-purpose mounting bracket with screws</li> </ul>	<ul style="list-style-type: none"> <li>Bracket</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Wall/ceiling mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Mount plate</li> <li>Mounting screws</li> </ul>

\*: Supported when work with AP Controller

\*\* : Supported when work with Nebula Control Center

\*\*\*: Supported when work with AP Controller or Nebula Control Center

## Access Point





Model	UniFi AP 6000 series			
	WiFi 6E	WiFi 6	WiFi 5	
	WAX620D-6E	WAX630S	WAC6303D-S	WAC6503D-S
<b>Product name</b>	802.11ax (WiFi 6E) Dual-Radio Unified Pro Access Point	802.11ax (WiFi 6) Dual-Radio Unified Pro Access Point	802.11ac Wave 2 Dual-Radio Unified Pro Access Point	802.11 a/b/g/n/ac Dual-Radio Business Access Point
				
<b>Main Design</b>				
<b>Wireless frequency</b>	2.4 and 5/6 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
<b>Radio</b>	2	2	2	2
<b>RF Specifications</b>				
<b>Number of antenna</b>	6 embedded dual-optimized antenna (4T4R+2T2R MIMO)	6 embedded smart antenna (4T4R+2T2R MIMO)	5 embedded (2.4G: 2T2R MIMO/ 5G: 3T3R MIMO)	6 embedded smart antenna
<b>Antenna gain</b>	3 dBi @2.4 GHz 5 dBi @5 GHz 6 dBi @6 GHz	3 dBi @2.4 GHz 4.5 dBi @5 GHz	3 dBi @2.4 GHz 4 dBi @5 GHz	4 dBi @2.4 GHz 6 dBi @5 GHz
<b>LAN</b>				
<b>Number of 10/100/1000M LAN</b>	1	1	2	2
<b>Number of multigig LAN</b>	1 (2.5GbE)	1 (2.5GbE)	-	-
<b>PoE</b>	Yes	Yes	Yes	Yes
<b>PoE power draw</b>	21 W	19 W	16.2 W (802.3at PoE)	21 W
<b>WLAN Features</b>				
<b>WLAN maximum net throughput</b>	Up to 1200 Mbps	Up to 1200 Mbps	Up to 900 Mbps	Up to 900 Mbps
<b>WDS</b>	Yes	Yes	Yes	Yes
<b>Smart Mesh (Nebula)</b>	Yes	Yes	Yes	Yes
<b>Fast roaming (802.11r, k, v)</b>	Yes***	Yes***	Yes***	Yes***
<b>Wireless Security</b>				
<b>WPA/WPA2-PSK</b>	Yes	Yes	Yes	Yes
<b>WPA/WPA2-Enterprise (IEEE 802.1x)</b>	Yes	Yes	Yes	Yes
<b>WPA3</b>	Yes	Yes	-	-
<b>DPPSK (WPA2 only)</b>	Yes** (No in 6 GHz)	Yes**	-	-
<b>EAP types</b>	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	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM
<b>Number of SSID</b>	16	16	16	16
<b>MAC filtering</b>	Yes	Yes	Yes	Yes
<b>Layer-2 isolation</b>	Yes, multiple profile	Yes, multiple profile	Yes, multiple profile	Yes
<b>RADIUS authentication</b>	Yes	Yes	Yes	Yes
<b>Microsoft AD authentication</b>	Yes*	Yes*	Yes*	Yes*
<b>Rogue AP detection</b>	Yes	Yes	Yes	Yes
<b>Rogue AP containment</b>	-	-	-	Yes
<b>Firewall</b>	Yes*	Yes*	Yes*	Yes*
<b>Network</b>				
<b>IPv6 host</b>	Yes	Yes	Yes	Yes
<b>VLANs</b>	Yes	Yes	Yes	Yes
<b>DHCP client</b>	Yes	Yes	Yes	Yes
<b>NAT</b>	Yes**	Yes**	Yes**	-
<b>Management</b>				
<b>Standalone AP mode</b>	Yes	Yes	Yes	Yes
<b>Controller mode</b>	Yes	Yes	Yes	Yes
<b>NebulaFlex</b>	Yes (1 yr Pro License)	Yes (1 yr Pro License)	Yes (1 yr Pro License)	Yes (1 yr Pro License)
<b>Web UI/CLI</b>	Yes	Yes	Yes	Yes
<b>SNMP</b>	Yes	Yes	Yes	Yes
<b>Others</b>				
<b>Power supply</b>	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 2 A (Note: PSU sold seperately)	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 2 A (Note: PSU sold seperately)	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 2 A (Note: PSU sold seperately)	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 2 A (not included)
<b>MTBF (hrs)</b>	711,333	635,837	3,960,217	1,202,489
<b>Heat dissipation (BTU/hr)</b>	71.7	64.8	55.3	71.7
<b>Physical Specifications</b>				
<b>Item dimensions (WxDxH)(mm/in.)</b>	180 x 180 x 42/ 7.09 x 7.09 x 1.65	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	236 x 227 x 62/ 9.28 x 8.95 x 2.43
<b>Item weight (g/lb.)</b>	650/1.43	545/1.20	800/1.763	982/2.17
<b>Included accessories</b>	<ul style="list-style-type: none"> <li>Mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Wall/ceiling mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Ceiling mount plate</li> <li>Screw</li> </ul>

\*: Supported when work with AP Controller

\*\* : Supported when work with Nebula Control Center

\*\*\*: Supported when work with AP Controller or Nebula Control Center



Model	UniFi AP 6000 series			
	WiFi 6E	WiFi 6	WiFi 5	
	WAX640S-6E	WAX650S	WAC6553D-E	WAC6552D-S
<b>Product Name</b>	802.11ax (WiFi 6E) Tri-Radio Unified Pro Access Point	802.11ax (WiFi 6) Dual-Radio Business Access Point	802.11ac Dual-Radio Unified Pro Outdoor Access Point	802.11ac Dual-Radio Unified Pro Outdoor Access Point
				
<b>Main Design</b>				
<b>Wireless frequency</b>	2.4, 5 and 6 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
<b>Radio</b>	3	3 (1 for monitor)	2	2
<b>RF Specifications</b>				
<b>Number of antenna</b>	Smart antenna	Smart antenna	6 external (optional accessory)	4 embedded smart antenna
<b>Antenna gain</b>	4 dBi @2.4 GHz 6 dBi @5 GHz 6 dBi @6 GHz	3 dBi @2.4 GHz 5.8 dBi @5 GHz	N/A	5 dBi @2.4 GHz 10 dBi @5 GHz
<b>LAN</b>				
<b>Number of 10/100/1000M LAN</b>	1	1	1	1
<b>Number of multigig LAN</b>	1 (2.5GbE)	1 (up to 5GbE)	-	-
<b>PoE</b>	Yes	Yes	Yes	Yes
<b>PoE power draw</b>	28 W	31 W	25 W	15.12 W
<b>WLAN Features</b>				
<b>WLAN maximum net throughput</b>	Up to 2500 Mbps	Up to 2000 Mbps	Up to 900 Mbps	Up to 600 Mbps
<b>WDS</b>	Yes	Yes	Yes	Yes
<b>Smart Mesh (Nebula)</b>	Yes	Yes	Yes	Yes
<b>Fast Roaming (802.11r, k, v)</b>	Yes***	Yes***	Yes***	Yes***
<b>Wireless Security</b>				
<b>WPA/WPA2-PSK</b>	Yes	Yes	Yes	Yes
<b>WPA/WPA2-Enterprise (IEEE 802.1x)</b>	Yes	Yes	Yes	Yes
<b>WPA3</b>	Yes	Yes	-	-
<b>DPPSK (WPA2 only)</b>	Yes** (No in 6 GHz)	Yes**	-	-
<b>EAP types</b>	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	EAP-TLS, EAP-TTLS, EAP-PEAP, EAP-FAST, EAP-AKA and EAP-SIM
<b>Number of SSID</b>	24	16	16	16
<b>MAC filtering</b>	Yes	Yes	Yes	Yes
<b>Layer-2 isolation</b>	Yes, multiple profile	Yes, multiple profile	Yes	Yes
<b>RADIUS authentication</b>	Yes	Yes	Yes	Yes
<b>Microsoft AD authentication</b>	Yes*	Yes*	Yes*	Yes*
<b>Rogue AP detection</b>	Yes	Yes	Yes	Yes
<b>Rogue AP containment</b>	-	-	Yes	Yes
<b>Firewall</b>	Yes*	Yes*	Yes*	Yes*
<b>Network</b>				
<b>IPv6 host</b>	Yes	Yes	Yes	Yes
<b>VLANs</b>	Yes	Yes	Yes	Yes
<b>DHCP client</b>	Yes	Yes	Yes	Yes
<b>NAT</b>	Yes**	Yes**	-	-
<b>Management</b>				
<b>Standalone AP mode</b>	Yes	Yes	Yes	Yes
<b>Controller mode</b>	Yes	Yes	Yes	Yes
<b>NebulaFlex</b>	Yes (1 yr Pro License)	Yes (1 yr Pro License)	Yes (1 yr Pro License)	Yes (1 yr Pro License)
<b>Web UI/CLI</b>	Yes	Yes	Yes	Yes
<b>SNMP</b>	Yes	Yes	Yes	Yes
<b>Others</b>				
<b>Power supply</b>	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 2.5 A (Note: PSU sold separately)	Input: AC 100 - 240 V - 50/60 Hz 0.3 A; Output: DC +12 V 2.5 A (Note: PSU sold separately)	PoE12HP (not included)	PoE12HP (not included)
<b>MTBF (hrs)</b>	361,400	180,653	562,413	775,977
<b>Heat dissipation (BTU/hr)</b>	95.9	105.8	85.3	51.6
<b>Physical Specifications</b>				
<b>Item eimensions (WxDxH)(mm/in.)</b>	270 x 150 x 47/ 10.63 x 5.91 x 1.85	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
<b>Item weight (g/lb.)</b>	900/1.98	1160/2.56	1708/3.77	1590/3.51
<b>Included accessories</b>	<ul style="list-style-type: none"> <li>Mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Mount plate</li> <li>Mounting screws</li> </ul>	<ul style="list-style-type: none"> <li>Power injector</li> <li>Power cord</li> <li>Pole mount kit</li> <li>Wall-mount kit</li> <li>Water-proof</li> <li>Water-tape</li> <li>Screw</li> </ul>	<ul style="list-style-type: none"> <li>Pole mount kit</li> <li>Screw</li> </ul>



\*: Supported when work with AP Controller



\*\* : Supported when work with Nebula Control Center

\*\*\*: Supported when work with AP Controller or Nebula Control Center



# Antenna

## For Indoor and Outdoor


Model	EXT-118	ANT2105	
Product photo			
Space	Outdoor	Outdoor	
Type	Directional, 1 port	Omni, 1 port	
Frequency band (MHz)	2400 - 2500	2400 - 2483	5150 - 5875
Gain	18 dBi	4.5 dBi	7 dBi
VSWR	1.5:1 Max.	2.0:1 Max.	2.0:1 Max.
Polarization	Linear, vertical	Linear, vertical	Linear, vertical
HPBW/Horizontal	↓ 15°	● 360°	● 360°
HPBW/Vertical	—  15°	▶  30°	▶  15°
Connector	N type jack	N type plug	
Temperature	-40°C to 80°C/-40°F to 176°F	-10°C to 70°C/14°F to 158°F	
Weight (g/lb.)	1600/3.53	70/0.15	
Dimensions (mm/in.)	360 x 360 x 16/14.17 x 14.17 x 0.63	ø22 x 183	
Accessory kit	<ul style="list-style-type: none"> <li>• Cable: N-plug, RP-SMA plug; 3 m</li> <li>• Mounting set</li> <li>• Quick installation guide</li> </ul>	-	

Model	ANT1315	ANT3320	
Product photo			
Space	Outdoor	Outdoor	
Type	Directional, 3x3	Directional, 3x3	
Frequency band (MHz)	2400 - 2500	5150 - 5875	
Gain	14.5 - 15 dBi	20±1 dBi	
VSWR	2.0:1 Max.	2.0:1 Max.	
Polarization	Linear, cross polarization	Linear, cross polarization	
HPBW/Horizontal	▼ 39° - 48°	↓ 17°	
HPBW/Vertical	▶  19° - 20°	—  8°	
Side lobes level	-10 dB Max.	-10 dB Max.	
Front to back ratio	-19 dB Max.	-35 dB Max.	
Connector	N type jack x 3	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	
Weight (g/lb.)	1140/2.51	2500/5.51	
Dimensions (mm/in.)	320 x 320 x 43/12.60 x 12.60 x 1.69	371 x 371 x 165/14.61 x 14.61 x 6.50	
Accessory kit	<ul style="list-style-type: none"> <li>• Mounting kit</li> <li>• Quick installation guide</li> </ul>	<ul style="list-style-type: none"> <li>• Mounting kit</li> <li>• Quick installation guide</li> </ul>	

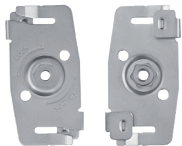

# Cable

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"> <li>• Operating temperature range from 50°C to -20°C</li> <li>• IPX5 rating</li> <li>• Wall/Pole mounting (pole mount kit is sold separately)</li> </ul>		
Compatible models	<ul style="list-style-type: none"> <li>• WAX630S</li> <li>• WAX620D-6E</li> <li>• WAX610D</li> <li>• WAX510D</li> <li>• WAC6103D-I</li> </ul>	<ul style="list-style-type: none"> <li>• WAC500</li> <li>• NWA220AX-6E</li> <li>• NWA210AX</li> <li>• NWA110AX</li> </ul>	<ul style="list-style-type: none"> <li>• NWA1123-AC Pro</li> <li>• NWA1123ACv3</li> <li>• NWA90AX</li> <li>• NWA50AX</li> </ul>

# Mounting Accessory

Product	ACCESSORY-ZZ0105F	ACCESSORY-ZZ0106F
Product photo		
Description	BAR ceiling clips for ceiling mount Zyxel AP (5 sets)	Pole mounting kit for outdoor AP enclosure

# ZYXEL

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