ZYXEL NETWORKS

WAX300H

AX3000 Dual-Radio Wall-Plate Unified Access Point

Greet every guest with easy log-in and flicker-free WiFi is as important as warm smiles. Designed for hotel guest rooms, the Zyxel WAX300H features the latest WiFi 6 technology to provide a superb performance for in-room guests connecting online.

The access point also supports the use of 160 MHz channels, doubling the throughput compared to 80 MHz channels to accommodate more bandwidth-hungry applications and provide faster speeds.

Zyxel WAX300H is not only a wireless AP, but also a switch which can support a wide range of in-room services from wired to wireless without the need for extra electrical power ports. The four Ethernet ports (1 uplink + 3 downlinks) transfer data at Gigabit speeds, allowing you to connect multiple devices to your network. One of the downlink ports provides PoE power for wired services like VoIP phones to keep the budget and cabling effort to the minimum.

Benefits

Versatile mounting options in hotel guest rooms

The Zyxel WAX300H' low profile and versatile mounting design make it a perfect choice for hotel guest rooms. It easily blends into tasteful decorations and can be mounted directly on an outlet box or any obscure locations, even simply on desktop. For the best aesthetics, the Ethernet cable and coaxial cable can run out from the cable channel that keeps WAX300H slim and fit in a limited space.

For desktop mount, the WAC500H-DMNT10F is a desk mount kit perfectly made compatible for Zyxel's WAC500H access point for an additional option, which is also suitable for desktop mounting for WAX300H.

Datasheet WAX300H

- Clever wired and wireless network solution for individualhotel guest rooms
- AX3000 (2x2: 2 in 2.4 GHz and 5 GHz) PoE-powered access point provides maximum data rate of 3000 Mbps with 160 MHz channels support to enable seamless and faster connectivity
- 4 Gigabit Ethernet ports (1x 802.3at uplink port + 3x LAN ports) including one downlink PD port supporting 802.3at PoE power (5 W) for wired application
- The versatile wall-plate AP design that can be mounted on wall plates or directly in anywhere
- NebulaFlex Pro allows users to switch between standalone, on-premises controller, or intuitive Nebula cloud managed modes as needed

nebula

Zyxel one network
Redefining network integration

Extending modern in-room services with a box

Nowadays, hotels provide guests with a range of in-room services including smart TV, VoIP and network for home-like comfort. To achieve this, each room has many cables and switches that require more investment and are difficult to maintain. Let's keep the budget and cabling effort to the minimum. More than just a WiFi AP serving high-speed networks, the Zyxel WAX300H has three local Gigabit Ethernet ports to securely attach wired devices while one of these ports supplies PoE power to the attached devices without the need for electric outlets and power cables.

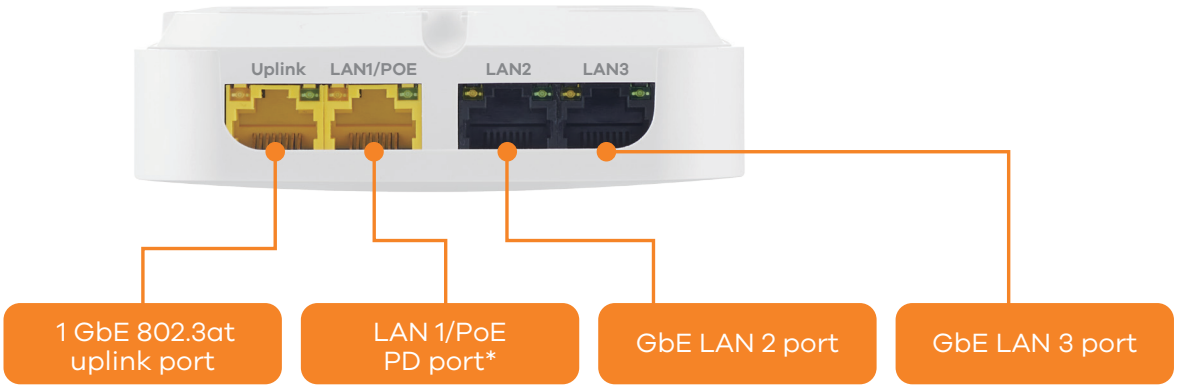
NebulaFlex Pro–simply manage it your way!

The NebulaFlex Pro provides extended flexibility, allowing users to easily switch among standalone, on-promises controller or our intuitive NCC (Nebula Control Center) modes any time according to your needs without additional cost while protecting wireless technology investments. The privilege of one-year professional pack you can get once upon registration on Nebula includes wireless health, site-wide topology, 365-day statistics on the devices and clients monitoring along with more upcoming advanced features on NCC and its App.

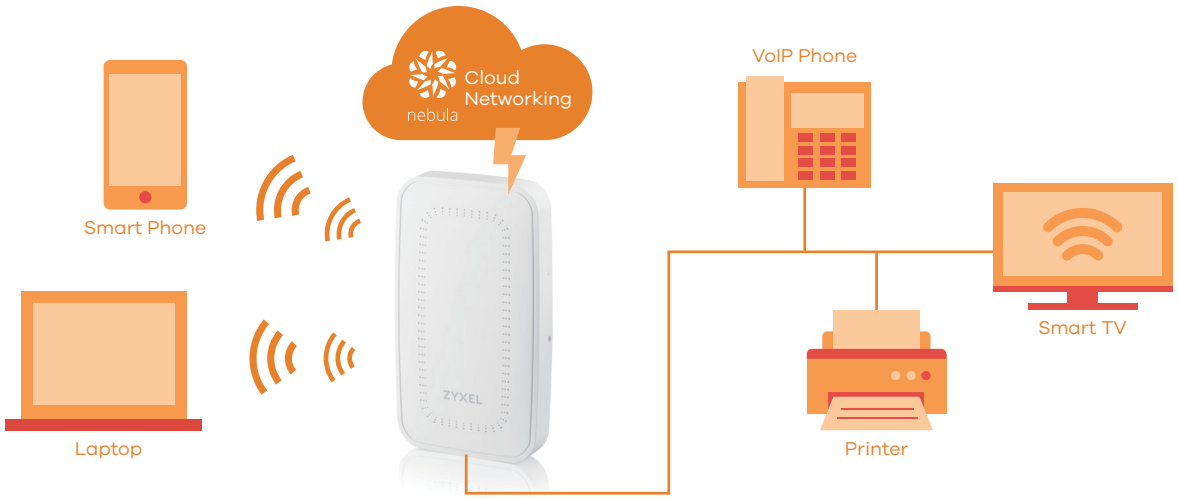
Nebula WiFi Aid assists management and deliver the best WiFi user experience

Today's business and leisure travelers expect to connect high-speed WiFi when stepping into a hotel and would consider internet connectivity the top amenity. Nebula offers the hotel IT/network admins a powerful tool, WiFi Aid* to give comprehensive data and insights to their hotel guests' WiFi connection issues and the ability to look into them more actively even before their guests make a complaint.

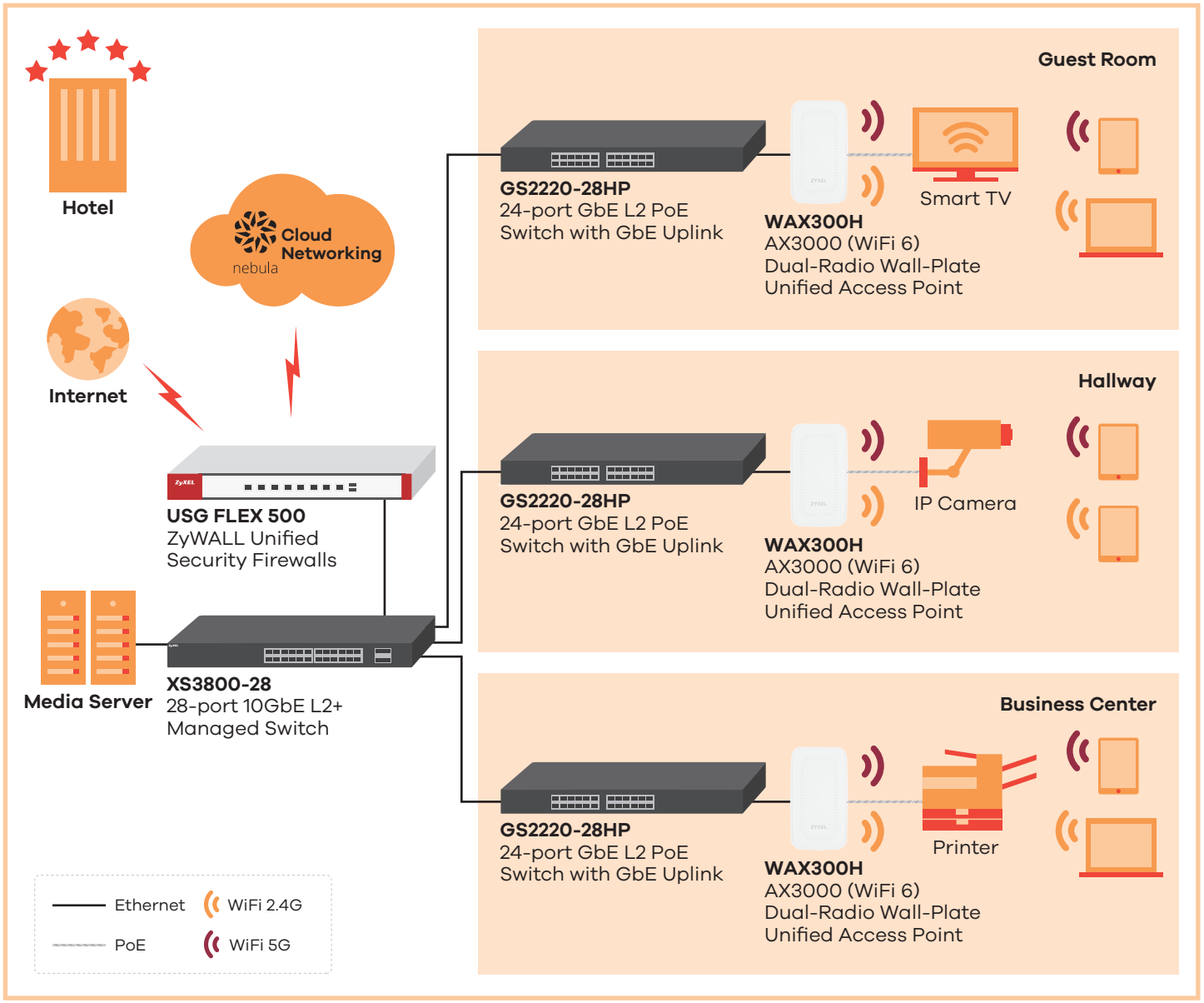
*Nebula Pro Pack license is needed to enable this feature.



*PoE PD port won't supply power (5 W) when the AP is powered by 30 W passive PoE injector.



Application Diagram



Specifications

Model		WAX300H
Product name		AX3000 Dual-Radio Wall-Plate Unified 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	**US (2.4 GHz/5 GHz)**	23/23 dBm
	EU (2.4 GHz/5GHz)	19/23 dBm
RF Design		
Antenna type		Internal antenna
Antenna gain	**2.4 GHz**	3 dBi, 2x2: 2SS
	5 GHz	4 dBi, 2x2: 2SS
Minimum receive sensitivity		Min. Rx sensitivity up to -99 dBm
WLAN Feature		
Band Steering		Yes
WDS/Mesh*2		Yes
Fast roaming		Pre-authentication, PMK caching and 802.11r/k/v
DCS		Yes
Load balancing		No
Advanced Cellular Coexistence		Yes
Security		
Encryption		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

*1: Maximum transmit power is limited by local regulatory settings.
*2: WDS, ZyMesh, Smart Mesh and Industry's Open Mesh, Easy Mesh are different mesh systems that do not work with one another.

Model		WAX300H
Management		
Operating mode		Nebula Cloud managed/controller-managed/standalone
ZON Utility		• Discovery of Zyxel switches, APs and gateways • Centralized and batch configurations ▪ IP configuration ▪ Web GUI access ▪ IP renew ▪ Firmware upgrade ▪ Device reboot ▪ Password configuration ▪ Device locating
Web UI/CLI		Yes
SNMP		No
Physical Specifications		
Item	**Dimensions (WxDxH)(mm/in.)**	173 x 97 x 29/6.81 x 3.82 x 1.14
	Weight (g/lb.)	310/0.68
Packing	**Dimensions (WxDxH)(mm/in.)**	195 x 120 x 53/7.68 x 4.72 x 2.09
	Weight (g/lb.)	483/1.068
Included accessories		Multi-purpose mounting bracket with screws
Optional accessories (Sold separately)		WAC500H-DMNT10F: Desktop mount kit (10 sets)
MTBF (hr)		750,816
Physical Interfaces		
Ethernet port		1x 10/100/1000M uplink 3x 10/100/1000M downlink (including one PoE PSE)
Power		PoE (802.3at): power draw 19 W (include 5 W for PoE PSE)
PoE modes	**IEEE 802.3af**	Not supported
	IEEE 802.3at	Unrestricted
	IEEE 802.3bt	-
Environmental Specifications		
Operating	**Temperature**	0°C to 50°C/32°F to 122°F
	Humidity	10% to 90% (non-condensing)
Storage	**Temperature**	-40°C to 70°C/-40°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, EN 60601-1-2
EMC		FCC Part 15B, EN 301 489-1; EN 301 489-17, EN55022, EN55024, EN61000-3-2/-3, BSMI CNS13438
Safety		EN 60950-1, IEC 60950-1; BSMI CNS14336-1

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

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