ZYXEL NETWORKS

WAC500H

802.11ac Wave 2 Wall-Plate Unified Access Point

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. Most travelers won't hesitate to report bad WiFi experience and bother to come back again. So do you want a breakout rating in TripAdvisor? The Zyxel WAC500H 802.11ac Wave 2 Wall-Plate Unified Access Point is an adaptive WiFi and Switch for hotels. It features beamforming to optimize RF and two downlink Gigabit Ethernet ports – one of which has PoE function to power up in-room services, such as a VoIP phone. More importantly, the WAC500H can be easily mounted on outlet boxes, wall or desk without the need for any additional mounting kit.

Benefits

Versatile mounting options in hotel guest rooms

The Zyxel WAC500H' 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 WAC500H 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.

- Clever wired and wireless network solution for individual hotel guest rooms
- The versatile wall-plate AP design that can be mounted on wall plates or directly in anywhere
- Up to 300% more performance from MU-MIMO technology
- Enterprise-class 2x2 802.11ac Wave 2 AP supporting combined data rates of up to 1.2 Gbps
- Two downlink Gigabit Ethernet ports, including one with PoE to power for VoIP phones or other devices
- Protect against 4G/5G cellular network interference with Zyxel advanced cellular mitigation design

nebula

Zyxel one network
Redefining network integration

Welcome your guest with high-speed WiFi

Greet every guest with easy log-in and flicker-free WiFi is as important as warm smiles. Designed for hotel guest rooms, the Zyxel WAC500H features beamforming to dynamically change the signal direction to provide superb performance for each individual client. The WAC500H promises hotel guests with enjoyable, ubiquitous HD streaming experience on their mobile devices.

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 WAC500H has two 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.

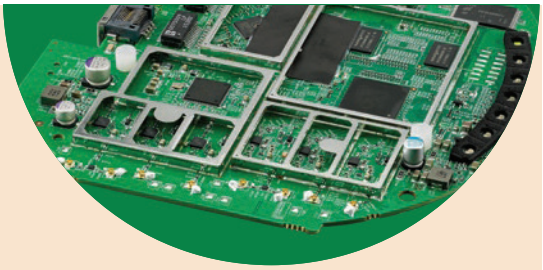
NebulaFlex Pro–simply manage it your way!

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.

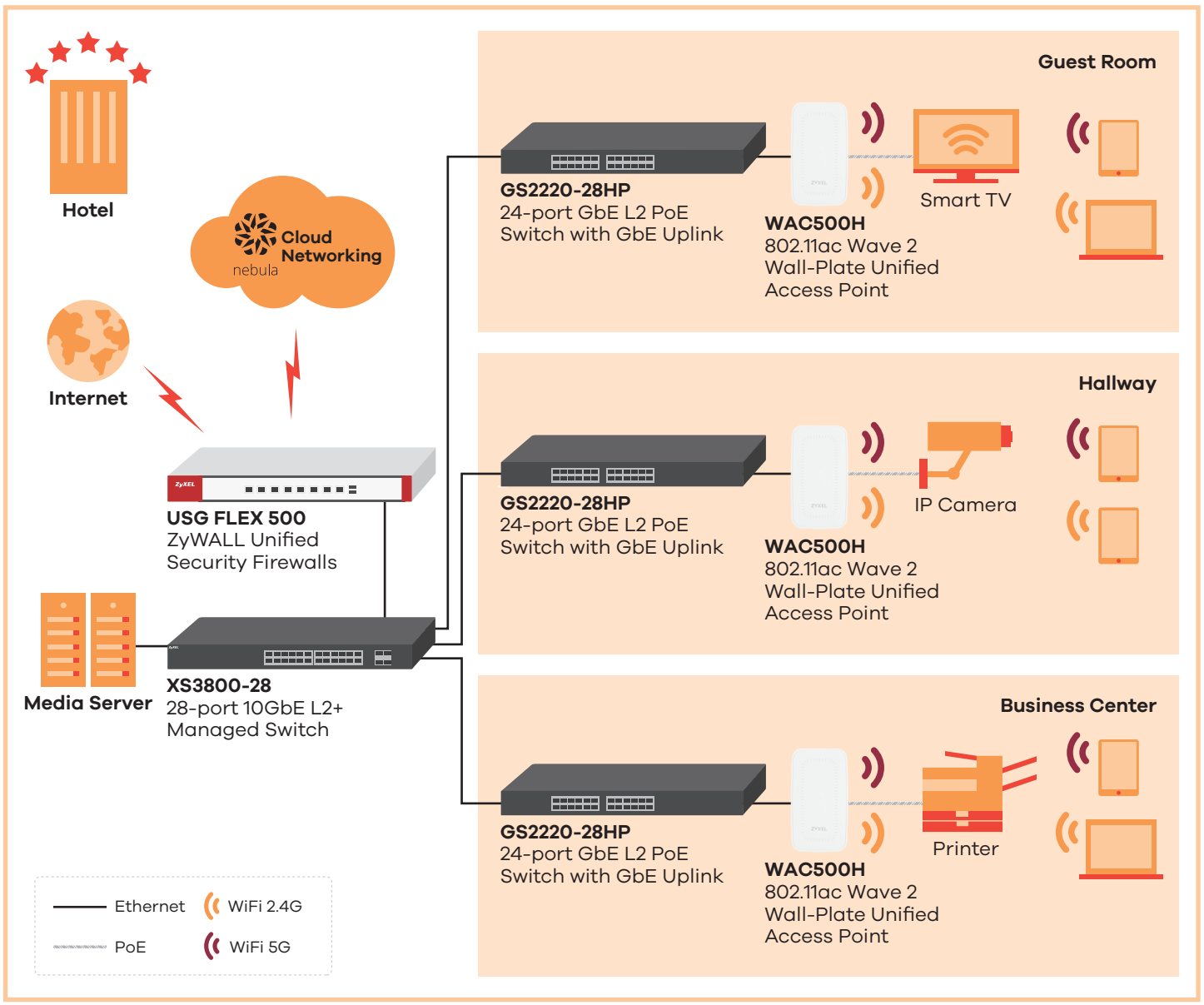
Robust Hardware

Robust, reliable hardware

Ordered shielding frames prevent electromagnetic interference, while covers manage heat through thermal pads to mitigate overheating.



Application Diagram



Specifications

Model		WAC500H
Product name		802.11ac Wave 2 Wall-Plate Unified Access Point
Wireless		
Standard		IEEE 802.11 ac/n/g/b/a
MIMO		MU-MIMO
Wireless speed	**2.4 GHz**	300 Mbps
	5 GHz	866 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 5.25 GHz; 5.725 to 5.850 GHz European (ETSI): 5.15 to 5.35 GHz; 5.470 to 5.725 GHz
Bandwidth		20-, 40- and 80-MHz
Conducted typical transmit output power*1 (limited by local regulatory requirements)	**US (2.4 GHz/5 GHz)**	23/26 dBm
	EU (2.4 GHz/5 GHz)	19/26 dBm
RF Design		
Antenna type		2x2 MIMO embedded antenna
Antenna gain	**2.4 GHz**	3 dBi
	5 GHz	4 dBi
Minimum receive 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		Yes
Security		
Encryption		WEP/WPA/WPA2/WPA3
Authentication		IEEE 802.1X/RADIUS authentication
Access management		L2-isolation/MAC filtering/Rogue AP detection
Networking		
IPv6		Yes
VLANs		Yes
WMM		Yes
U-APSD		Yes

*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		WAC500H
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
Zyxel Wireless Optimizer		• WiFi AP planning • WiFi coverage detection • Wireless health management
Web UI/CLI		Yes
SNMP		Yes
Physical Specifications		
Item	**Dimensions (WxDxH)(mm/in.)**	173 x 97 x 29/6.81 x 3.82 x 1.14
	Weight (g/lb.)	223/0.49
Packing	**Dimensions (WxDxH)(mm/in.)**	195 x 120 x 53/7.68 x 4.72 x 2.09
	Weight (g/lb.)	444/0.98
Included accessories		Multi-purpose mounting bracket with screws
Optional accessories (Sold separately)		WAC500H-DMNT10F: Desktop mount kit (10 sets)
MTBF (hr)		542,017
Physical Interfaces		
Ethernet port		1x 10/100/1000M uplink 2x 10/100/1000M downlink(including one PoE PSE)
Power		• Input: AC 100 - 240V - 50/60 Hz 0.3 A; Output: DC +12 V 1 A (PoE PSE disabled) • PoE 802.3at: power draw 18 W (include 7 W for PoE PSE) • PoE 802.3af: power draw 11 W (PoE PSE disabled)
Environmental Specifications		
Operating	**Temperature**	0°C to 50°C/32°F to 122°F
	Humidity	10% to 90% (non-condensing)
Storage	**Temperature**	-30°C to 70°C/-22°F to 158°F
	Humidity	10% to 90% (non-condensing)
Certifications		
Radio		FCC Part 15C, FCC Part 15E; ETSI EN 300 328, EN 301 893; LP0002, 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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