





# 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.



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





#### 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, sitewide topology, 365-day statistics on the devices and clients monitoring along with more upcoming advanced features on NCC and its App.

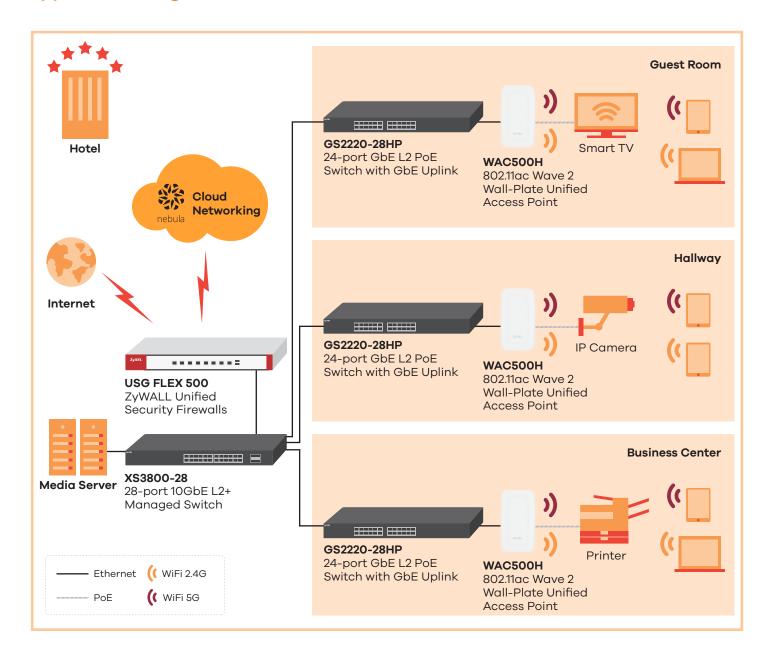
#### **Robust Hardware**

#### 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		IEEE802.11 ac/n/g/b/a
MIMO		MU-MIMO
Wireless speed	2.4GHz	300Mbps
	5GHz	866Mbps
Frequency band	2.4GHz	USA (FCC): 2.412 to 2.462 GHz Europe (ETSI): 2.412 to 2.472 GHz USA (FCC): 5.15 to 5.25 GHz; 5.725 to 5.850 GHz
	5GHz	European (ETSI): 5.15 to 5.35 GHz; 5.470 to 5.725 GHz
Bandwidth		20-, 40- and 80-MHz
Conducted	US (2.4GHz/5GHz)	23/26dBm
typical transmit output power	EU (2.4GHz/5GHz)	19/26dBm
RF Design		
Antenna type		2x2 MIMO Embedded Antenna
Antenna gain	2.4GHz	3 dBi
	5GHz	4 dBi
Minimum receiv	e sensitivity	Up to -99 dBm
WLAN feature		
Band steering		Yes
WDS/ Mesh		Yes
Fast roaming		Pre-authentication, PMK caching and 802.11r/k/v
DCS		Yes
Load balancing		Yes
Security		
Encryption		WEP/ WPA/WPA2-PSK/WPA3
Authentication		WPA/WPA2-Enterprise/ EAP/ IEEE 802.1X/ RADIUS authentication
Access manage	ement	L2-isolation/ MAC filtering
Networking		
IPv6		Yes
VLANs		Yes
WMM		Yes
U-APSD		Yes
DiffServ marking		Yes

Model		WAC500H
Managemer	nt	
Operating mode		Nebula Cloud managed/controller-managed / standalone
ZON Utility		<ul> <li>Discovery of Zyxel switches, APs and gateways</li> <li>Centralized and batch configurations</li> <li>IP configuration</li> <li>Web GUI access</li> <li>IP renew</li> <li>Firmware upgrade</li> <li>Device reboot</li> <li>Password configuration</li> </ul>
		Device locating
Zyxel Wireless Optimizer		<ul><li>WiFi AP planning</li><li>WiFi coverage detection</li><li>Wireless health management</li></ul>
Web UI/ CLI		Yes
SNMP		Yes
Physical Sp	ecifications	
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
MTBF(hr)		542,017
Physical Int	erfaces	4.40,400,4000,4
Ethernet port		1x 10/100/1000M uplink 2x 10/100/1000M downlink(including on PoE PSE)
Power		• Input: AC 100 - 240V - 50/60 Hz 0.3A; Output: DC +12V 1A • PoE (802.3at/af): power draw 18 W
Environmen	tal 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)
Certificatio	ns	
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









