



## 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.

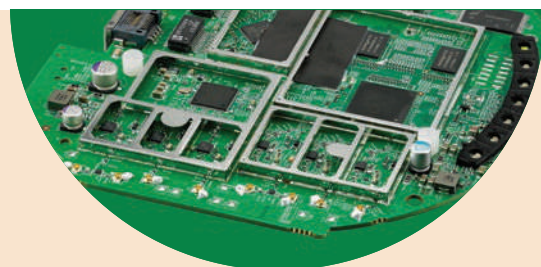
## NebulaFlex Pro—simply manage it your way!

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

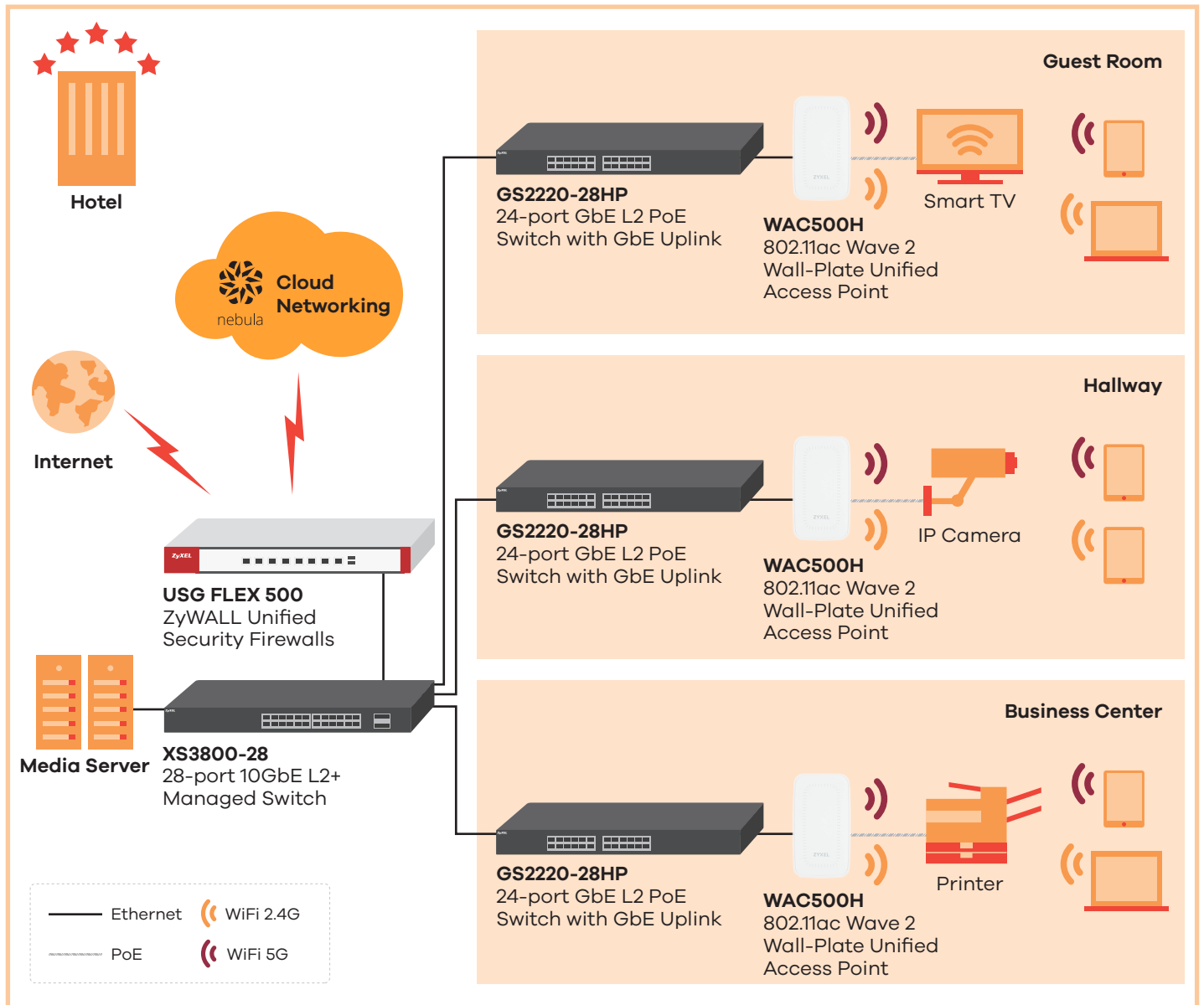
## Robust Hardware

### Robust, reliable hardware


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



# Application Diagram



## Specifications

|  |   |  |
|--|---|--|
| <b>Model</b>                                   | <b>WAC500H</b>  |  |
| <b>Product name</b>                            | 802.11ac Wave 2 Wall-Plate Unified Access Point                                   |  |
|  |  |  |
| <b>Wireless</b>                                |   |  |
| <b>Standard</b>                                | IEEE802.11 ac/n/g/b/a   |  |
| <b>MIMO</b>                                    | MU-MIMO   |  |
| <b>Wireless speed</b>                          | <b>2.4GHz</b>   | 300Mbps  |
|  | <b>5GHz</b>   | 866Mbps  |
| <b>Frequency band</b>                          | <b>2.4GHz</b>   | USA (FCC): 2.412 to 2.462 GHz<br>Europe (ETSI): 2.412 to 2.472 GHz                                       |
|  | <b>5GHz</b>   | USA (FCC): 5.15 to 5.25 GHz; 5.725 to 5.850 GHz<br>European (ETSI): 5.15 to 5.35 GHz; 5.470 to 5.725 GHz |
| <b>Bandwidth</b>                               | 20-, 40- and 80-MHz   |  |
| <b>Conducted typical transmit output power</b> | <b>US (2.4GHz/5GHz)</b>   | 23/26dBm   |
|  | <b>EU (2.4GHz/5GHz)</b>   | 19/26dBm   |
| <b>RF Design</b>                               |   |  |
| <b>Antenna type</b>                            | 2x2 MIMO Embedded Antenna   |  |
| <b>Antenna gain</b>                            | <b>2.4GHz</b>   | 3 dBi  |
|  | <b>5GHz</b>   | 4 dBi  |
| <b>Minimum receive sensitivity</b>             | Up to -99 dBm   |  |
| <b>WLAN feature</b>                            |   |  |
| <b>Band steering</b>                           | Yes   |  |
| <b>WDS/ Mesh</b>                               | Yes   |  |
| <b>Fast roaming</b>                            | Pre-authentication, PMK caching and 802.11r/k/v                                   |  |
| <b>DCS</b>                                     | Yes   |  |
| <b>Load balancing</b>                          | Yes   |  |
| <b>Security</b>                                |   |  |
| <b>Encryption</b>                              | WEP/ WPA/WPA2-PSK/WPA3  |  |
| <b>Authentication</b>                          | WPA/WPA2-Enterprise/ EAP/ IEEE 802.1X/ RADIUS authentication                      |  |
| <b>Access management</b>                       | L2-isolation/ MAC filtering   |  |
| <b>Networking</b>                              |   |  |
| <b>IPv6</b>                                    | Yes   |  |
| <b>VLANs</b>                                   | Yes   |  |
| <b>WMM</b>                                     | Yes   |  |
| <b>U-APSD</b>                                  | Yes   |  |
| <b>DiffServ marking</b>                        | Yes   |  |

|                                     |   |                                     |
|-------------------------------------|---|-------------------------------------|
| <b>Model</b>                        | <b>WAC500H</b>  |                                     |
| <b>Management</b>                   |   |                                     |
| <b>Operating mode</b>               | Nebula Cloud managed/controller-managed / standalone  |                                     |
| <b>ZON Utility</b>                  | <ul style="list-style-type: none"> <li>• Discovery of Zyxel switches, APs and gateways</li> <li>• Centralized and batch configurations <ul style="list-style-type: none"> <li>▪ IP configuration</li> <li>▪ IP renew</li> <li>▪ Device reboot</li> <li>▪ Device locating</li> <li>▪ Web GUI access</li> <li>▪ Firmware upgrade</li> <li>▪ Password configuration</li> </ul> </li> </ul> |                                     |
| <b>Zyxel Wireless Optimizer</b>     | <ul style="list-style-type: none"> <li>• WiFi AP planning</li> <li>• WiFi coverage detection</li> <li>• Wireless health management</li> </ul>   |                                     |
| <b>Web UI/ CLI</b>                  | Yes   |                                     |
| <b>SNMP</b>                         | Yes   |                                     |
| <b>Physical Specifications</b>      |   |                                     |
| <b>Item</b>                         | <b>Dimensions (WxDxH)(mm/in.)</b>   | 173 x 97 x 29 / 6.81 x 3.82 x 1.14  |
|                                     | <b>Weight (g/lb.)</b>   | 223 / 0.49                          |
| <b>Packing</b>                      | <b>Dimensions (WxDxH)(mm/in.)</b>   | 195 x 120 x 53 / 7.68 x 4.72 x 2.09 |
|                                     | <b>Weight (g/lb.)</b>   | 444 / 0.98                          |
| <b>Included accessories</b>         | Multi-purpose mounting bracket with screws  |                                     |
| <b>MTBF(hr)</b>                     | 542,017   |                                     |
| <b>Physical Interfaces</b>          |   |                                     |
| <b>Ethernet port</b>                | 1x 10/100/1000M uplink<br>2x 10/100/1000M downlink(including one PoE PSE)   |                                     |
| <b>Power</b>                        | <ul style="list-style-type: none"> <li>• Input: AC 100 - 240V - 50/60 Hz 0.3A; Output: DC +12V 1A (PoE PSE disabled)</li> <li>• PoE 802.3at: power draw 18 W (include 7W for PoE PSE)</li> <li>• PoE 802.3af: power draw 11 W (PoE PSE disabled)</li> </ul>   |                                     |
| <b>Environmental Specifications</b> |   |                                     |
| <b>Operating</b>                    | <b>Temperature</b>  | 0°C to 50°C/32°F to 122°F           |
|                                     | <b>Humidity</b>   | 10% to 90% (non-condensing)         |
| <b>Storage</b>                      | <b>Temperature</b>  | -30°C to 70°C/-22°F to 158°F        |
|                                     | <b>Humidity</b>   | 10% to 90% (non-condensing)         |
| <b>Certifications</b>               |   |                                     |
| <b>Radio</b>                        | FCC Part 15C, FCC Part 15E; ETSI EN 300 328, EN 301 893; LP0002, EN 60601-1-2   |                                     |
| <b>EMC</b>                          | FCC Part 15B, EN 301 489-1; EN 301 489-17, EN55022, EN55024, EN61000-3-2/-3, BSMI CNS13438  |                                     |
| <b>Safety</b>                       | EN 60950-1, IEC 60950-1; BSMI CNS14336-1  |                                     |

For more product information, visit us on the web at [www.zyxel.com](http://www.zyxel.com)

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