

# ZYXEL



## WAC5302D-S

### 802.11ac Wall-Plate Unified Access Point

Today's business and leisure travelers expect to connect high-speed Wi-Fi when stepping into a hotel and would consider internet connectivity the top amenity. Most travelers won't hesitate to report bad Wi-Fi experience and bother to come back again. So do you want a breakout rating in TripAdvisor? The Zyxel WAC5302D-S 802.11ac Wall-Plate Unified Access Point is an adaptive Wi-Fi and Switch for hotels. It features smart antenna and beamforming to optimize RF as well as three downlink Gigabit Ethernet ports – one of which has PoE function to power up in-room services such as smart TV and VoIP. More importantly, the WAC5302D-S 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 WAC5302D-S' 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 nook out of sight, even simply on desktop. For the best aesthetics, the Ethernet cable and coaxial cable can run out from the cable channel that keeps WAC5302D-S slim and fit in a limited space.

#### Welcome your guest with high-speed Wi-Fi

Greet every guest with easy log-in and flicker-free Wi-Fi is as important as warm smiles. Designed for hotel guest rooms, the Zyxel WAC5302D-S features smart antenna and beamforming to dynamically change the signal direction to provide superb performance for each individual client. Zyxel smart antenna has been proven the best solution to mitigate interference from neighboring APs next door wherever it is mounted. The WAC5302D-S



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 nook or cranny



Equipped with smart antenna which is proven able to mitigate interference from neighboring APs



Enterprise-class 2x2 802.11ac AP 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



zyxel**one**network  
Redefining network integration

promises hotel guests with enjoyable, ubiquitous HD streaming experience on their mobile devices.

### Extending modern in-room services with a box

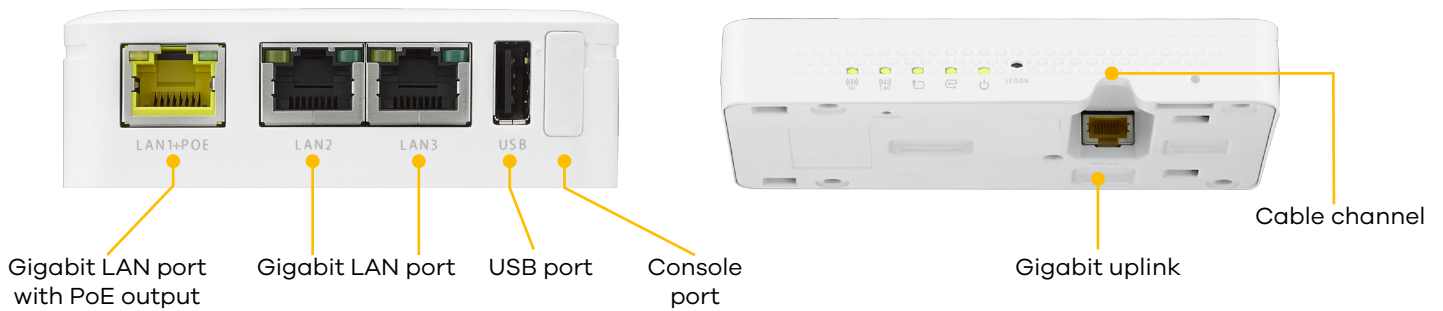
Nowadays, hotels provide guests with a range of in-room services including smart TV, VoIP and network for home-like comfort. To achieve this, each room has many cables and switches that require more investment and are difficult to maintain. Let's keep the budget and cabling effort to the minimum. More than just a Wi-Fi AP serving high-speed networks, the Zyxel WAC5302D-S 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.

### Zyxel one network experience

Aiming for relieving our customers from repetitive operations of deploying and managing a network, Zyxel one network is designed to simplify the configuration, management, and troubleshooting, allowing our customers to focus on the business priorities. Zyxel one network presents an easy-to-use tool, Zyxel one network Utility (ZON Utility), to realize speed network setup. Zyxel Smart Connect\*1 allows Zyxel networking equipment to be aware and recognize each other and further facilitating the network maintenance via one-click remote functions such as factory reset or power cycling. Zyxel One Network redefines the network integration across multiple networking products from switch to Wi-Fi AP and to Gateway.

\*1: Zyxel Smart Connect is supported on selected models. Please refer to the specifications for more details.

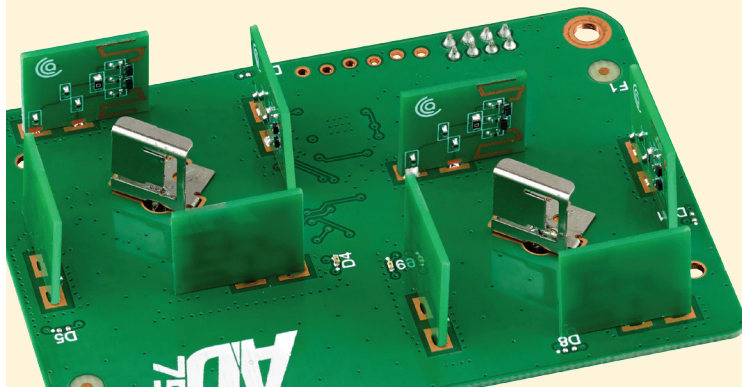
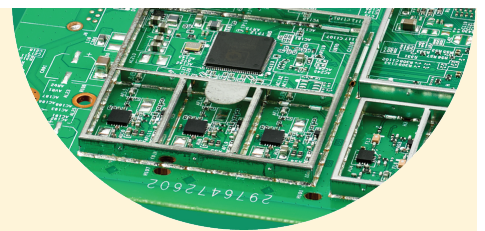
### Ports and LED Indicators



### Robust Hardware

#### Robust, reliable hardware

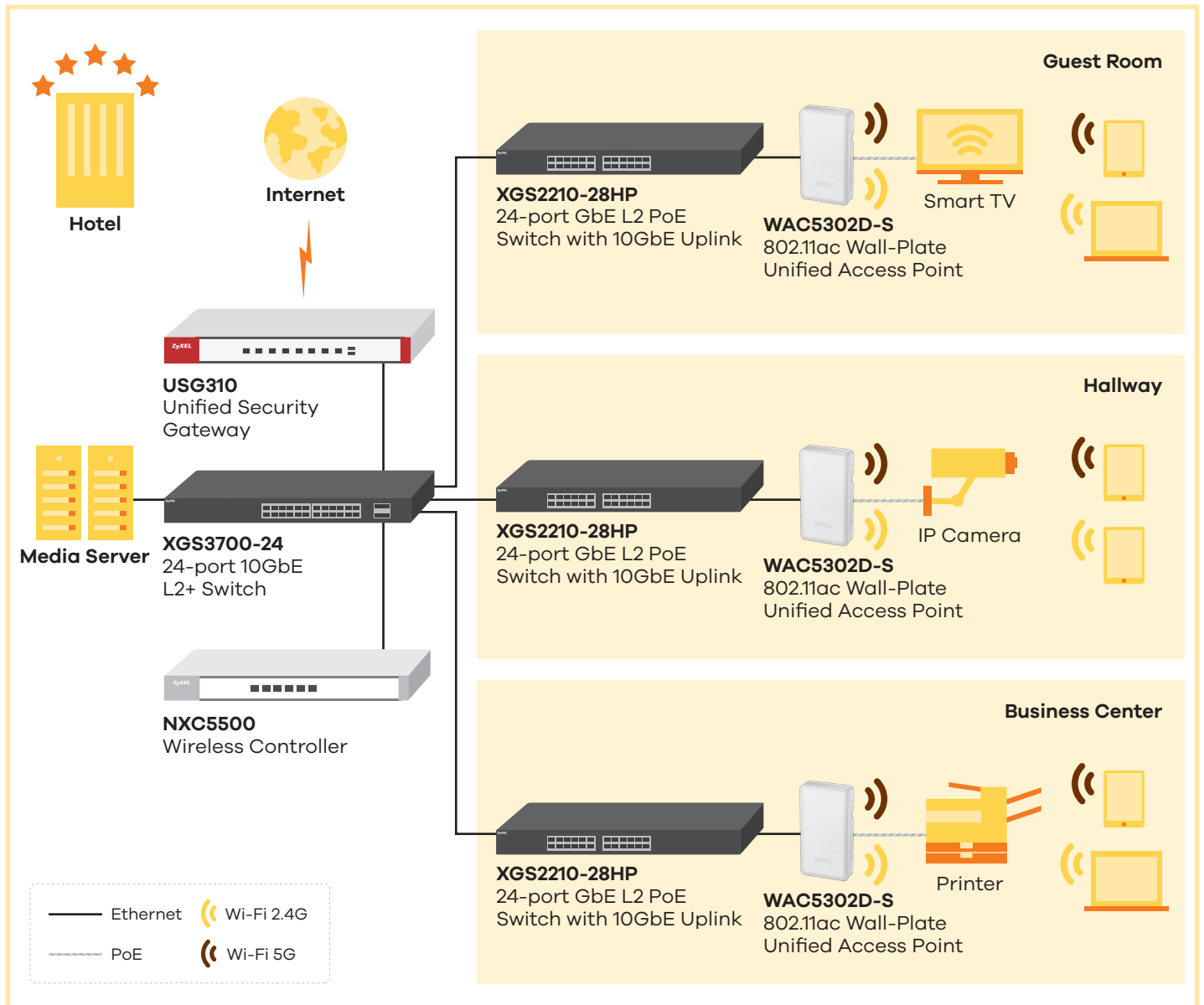
Ordered shielding frames prevent electromagnetic interference, while covers manage heat through thermal pads to mitigate overheating.




#### Zyxel Smart Antenna

With smart antenna and beamforming, WAC5302D-S is the best choice for an AP per room deployment. Zyxel smart antenna was proven an effective solution to fight co-channel interference and ensure flicker-free streaming experience to every user.

# Application Diagram



# Specifications

<b>Model</b>	<b>WAC5302D-S</b>	
<b>Product name</b>	802.11ac Wall-Plate Unified Access Point	
		
<b>Main Design</b>		
<b>Wireless frequency</b>	2.4 GHz & 5 GHz	
<b>Radio</b>	2	
<b>Antenna</b>	Embedded 2x2	
<b>RF Specifications</b>		
<b>Frequency band</b>	<b>2.4 GHz (11 g/n)</b>	2.4 GHz (IEEE 802.11 b/g/n) • USA (FCC): 2.412 to 2.462 GHz • Europe (ETSI): 2.412 to 2.472 GHz
	<b>5 GHz (11 a/n/ac)</b>	5 GHz (IEEE 802.11 a/n/ac) • USA (FCC): 5.15 to 5.35 GHz; 5.725 to 5.850 GHz • Europe (ETSI): 5.15 to 5.35 GHz; 5.470 to 5.725 GHz • Taiwan (TW): 5.15 to 5.35 GHz; 5.725 to 5.850 GHz
<b>802.11n/ac premium features</b>	<ul style="list-style-type: none"> <li>• 2x2 Multiple-Input Multiple-Output (MIMO) with two spatial streams</li> <li>• Maximal Ratio Combining (MRC)</li> <li>• 20-, 40- and 80-MHz channels</li> <li>• PHY data rates up to 300 + 866 Mbps</li> <li>• Transmit Beamforming (TxBF) support</li> <li>• Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx)</li> <li>• Cyclic Delay Diversity (CSD) support</li> </ul>	
<b>Conducted typical transmit output power</b>	<b>US (FCC) 2.4 GHz</b>	18 dBm, 2 antennas
	<b>US (FCC) 5 GHz</b>	19 dBm, 2 antennas
	<b>EU (ETSI) 2.4 GHz</b>	17 dBm, 2 antennas
	<b>EU (ETSI) 5 GHz</b>	19 dBm, 2 antennas
<b>Antenna gain</b>	5 dBi/5 dBi	
<b>Support data rate</b>	802.11 a/g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps 802.11n: up to 300 Mbps in MCS15 (40 MHz; GI = 400 ns) 802.11ac: up to 866 Mbps in MCS9 (80 MHz; 2 spatial streams; GI = 400 ns)	
<b>Receive sensitivity</b>	Min. Rx sensitivity to -98 dBm	
<b>LAN</b>		
<b>Number of LAN ports</b>	<b>Uplink</b>	1 x 100/1000 Mbps POE port (PD)
	<b>Downlink</b>	3 x 100/1000 Mbps RJ-45 (including one PoE PSE)
<b>PoE</b>	Yes	
<b>PoE power draw</b>	<ul style="list-style-type: none"> <li>• 802.3at PoE: 20W (include 7W for PoE PSE)</li> <li>• 802.3af PoE: 12W (PoE PSE disabled)</li> </ul>	
<b>WLAN Features</b>		
<b>WEP</b>	Yes	
<b>WPA/WPA2-PSK</b>	Yes	
<b>WPA2</b>	Yes	
<b>WPA/WPA2-Enterprise</b>	Yes	
<b>Fast roaming</b>	Pre-authentication and PMK caching	
<b>EAP types</b>	TLS, TTLS, PEAP, FAST, AKA and SIM	
<b>Number of multiple SSID</b>	16	
<b>IEEE 802.1x</b>	Yes	
<b>MAC filtering</b>	Yes	

<b>Model</b>	<b>WAC5302D-S</b>	
<b>WLAN Features</b>		
<b>Layer-2 isolation</b>	Yes, multiple profiles	
<b>RADIUS authentication</b>	Yes	
<b>Network</b>		
<b>VLANs</b>	Yes	
<b>DHCP client</b>	Yes	
<b>QoS</b>		
<b>WMM</b>	Yes	
<b>WMM power saving</b>	Yes	
<b>Heat dissipation (BTU/hr)</b>	81.9	
<b>Zyxel One Network</b>		
<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> </ul> </li> <li>▪ Web GUI access</li> <li>▪ Firmware upgrade</li> <li>▪ Password configuration</li> <li>▪ One-click quick association with Zyxel AP Configurator (ZAC)</li> </ul>	
<b>Smart Connect</b>	<ul style="list-style-type: none"> <li>• Discover neighboring devices</li> <li>• One-click remote management access to the neighboring Zyxel devices</li> </ul>	
<b>Management</b>		
<b>ZAC*</b>	<ul style="list-style-type: none"> <li>• Batch AP configuration</li> <li>• Batch AP firmware upgrade</li> <li>• Batch AP profile backup</li> </ul>	
<b>Standalone AP Mode</b>	Yes	
<b>Managed AP Mode</b>	Yes	
<b>CLI</b>	Yes	
<b>Web GUI</b>	Yes	
<b>SNMP</b>	Yes	
<b>Certification</b>		
<b>Radio</b>	ETSI EN 300 328, FCC Part 15C, LP0002, EN 60601-1-2	
<b>EMC</b>	EN 301 489-1, EN 301 489-17, EN55022, EN55024, EN61000-3-2/-3, FCC Part B, BSMI CNS13438	
<b>Safety</b>	EN 60950-1, IEC 60950-1, BSMI CNS14336-1	
<b>Physical Specifications</b>		
<b>Item</b>	<b>Dimensions (WxDxH)(mm/in.)</b>	90 x 170 x 29/3.54 x 6.69 x 1.14
	<b>Weight (kg/lb.)</b>	0.32/0.71
<b>Packing</b>	<b>Dimensions (WxDxH)(mm/in.)</b>	190 x 110 x 55/7.48 x 4.33 x 2.16
	<b>Weight (kg/lb.)</b>	0.54/1.19
<b>Included accessories</b>	Multi-purpose mounting bracket with screws	
<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 95% (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>MTBF (hr)</b>	809,263	

\* Work with ZAC v.11.2 or later

# ZYXEL

Your Networking Ally

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