

# ZYXEL

Your Networking Ally



# WiFi Expansion with Centralized Management

**AP Controller Technology**  
Solution Brief



Zyxel**one** network  
Redefining network integration

# Budget-friendly One Network Solution

With massive growth of mobile devices, the expectation for a secure, reliable and high-performance wireless experience is no different to companies of all sizes. Zyxel brings versatility and reliability to wireless network solution through its advanced AP Controller (APC) technology, enabling WLAN management option not only on NXC WLAN controller but also on Zyxel security appliances.

With APC technology on USG/ATP series, SMBs or enterprises can scale up their wireless network on demand, manage wired and wireless network through a single console and enjoy One Network Experience.

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## Key Benefits

### Best TCO

- Lower initial investment on equipment procurements
- Less configuring and maintaining efforts on multiple devices

### Pay as You Grow

- Scalable license-based WiFi AP management for more flexibility
- myZyxel.com offers a single friendly portal for managing the licensed services

### Comprehensive AP Portfolio

- Wall mount, ceiling mount or even wall-plate installation for different needs
- Indoor/outdoor wide-coverage installation for all locations
- Comprehensive technology options: ultra-high speed 11ac Wave 1 and Wave 2 and smart antenna technology for high-density deployments



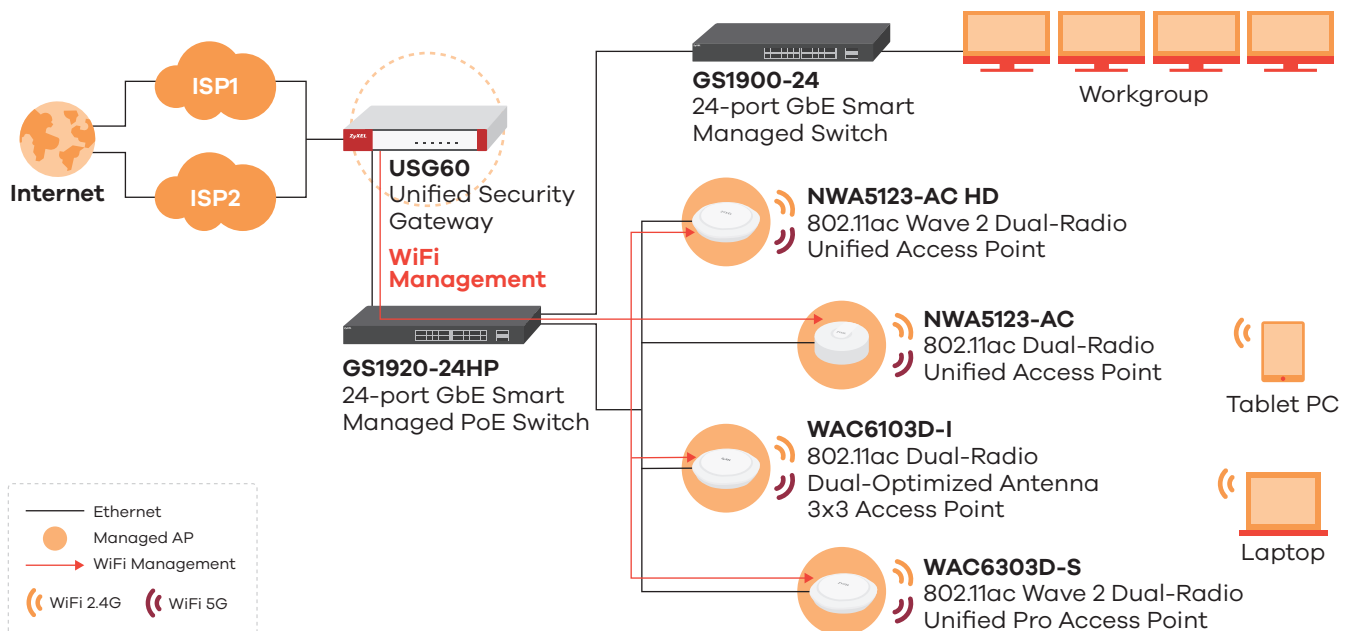


# Application diagram

## SMB

Zyxel's USG/ATP series integrates AP Controller Technology. It performs business Gateway, anti-malware protection and WiFi centralized management at the same time.

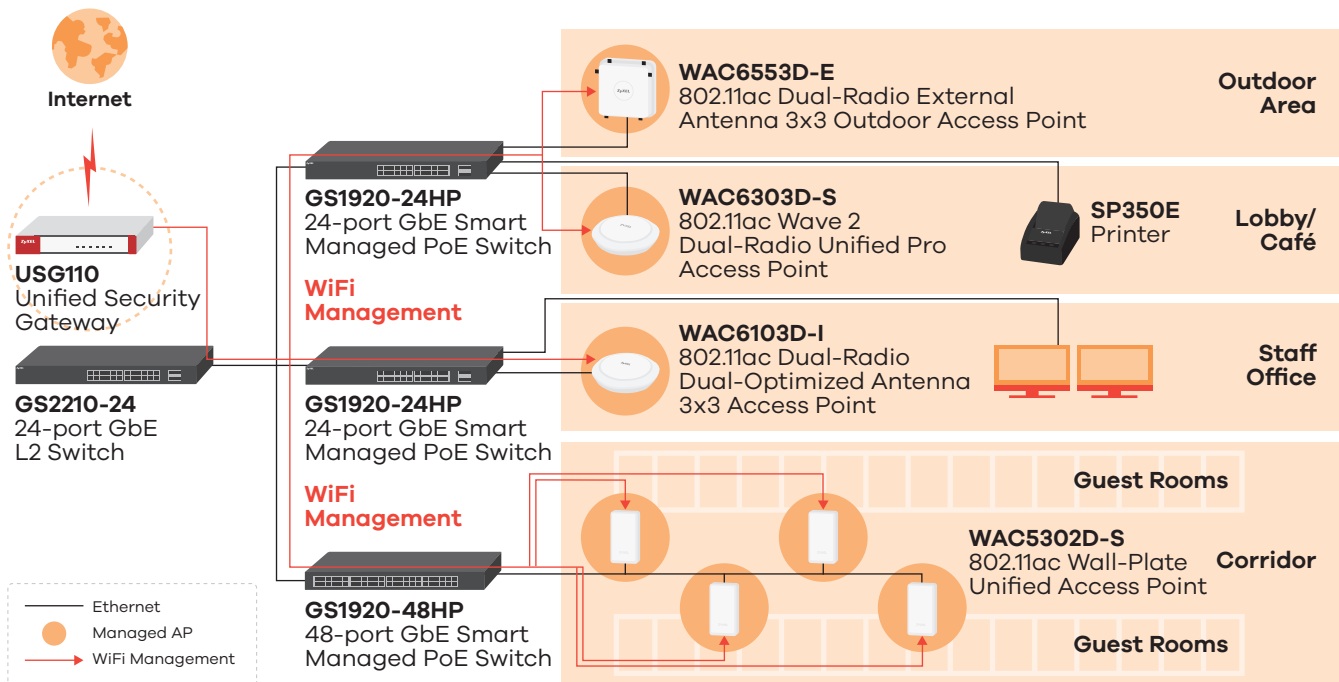
Zyxel provides a wide range of wireless controller choices for different deployment scale and demand.



# Hotel

Apart from performing business Gateway and AAA Gateway, ZyWALL, USG, ATP series are also able to perform WiFi centralized management with built-in AP Controller Technology or adding hotspot management license (ZyWALL and USG).

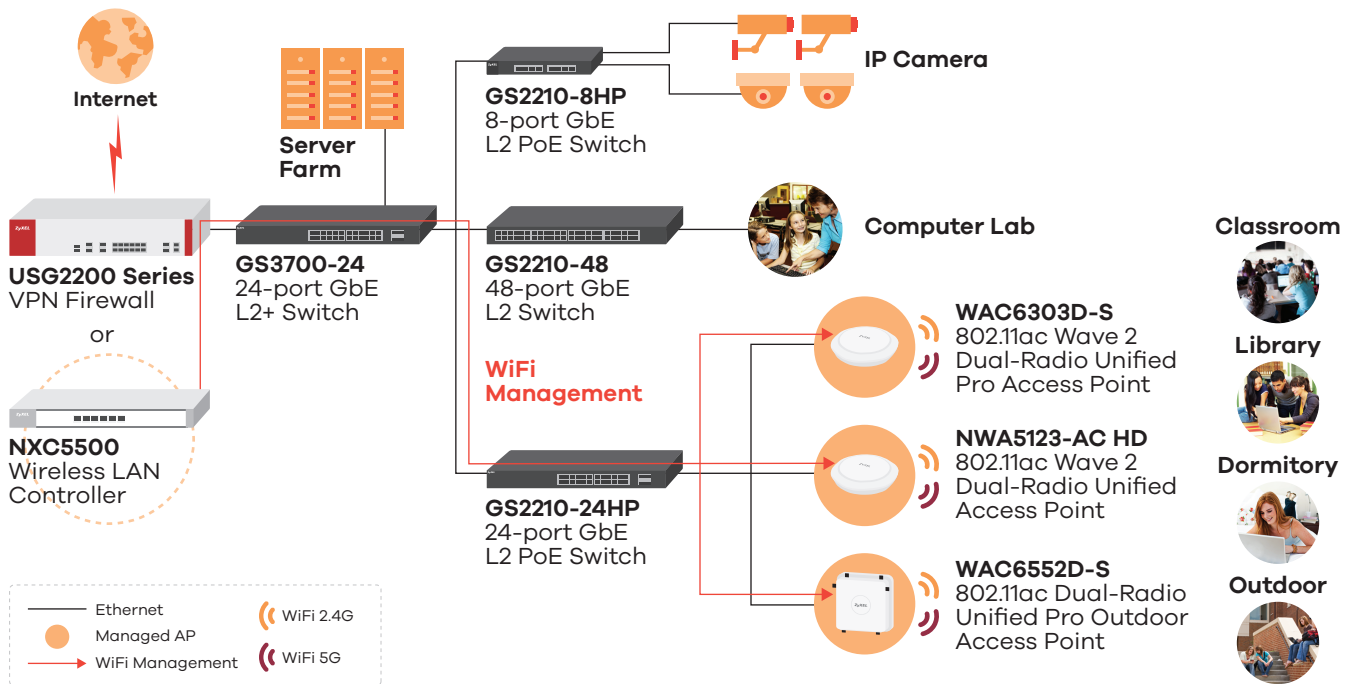
Zyxel APC solution is ideal for lean-IT resource in hotel industry, providing a single, easy-to-management platform for both wired and wireless network.



# Education

Digital learning is essential in today's education environment and leads to high density wireless network requirement.

Zyxel APC technology controller can manage up to 1026 APs, together with smart antenna APs providing high scalability and outstanding performance in campus deployment.





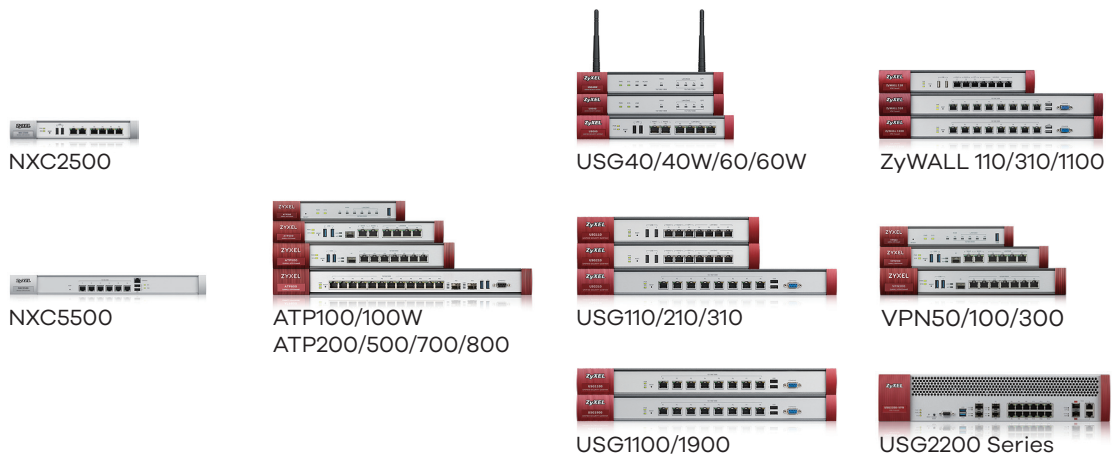
# Feature matrix

APC Version	APC3.4	APC3.0
<b>RRM (Radio Resource Management)</b>		
Client RSSI threshold	Yes	Yes
Dynamic channel selection	DCS3.0	DCS3.0
Band steering (Band select)	Yes (2.0)	Yes (2.0)
Auto power (Auto healing)	Yes	Yes
Wireless client capability information	Yes	-
Channel utilization	Yes	-
<b>Security Control</b>		
MAC filtering	Yes	Yes
Blocking intra-BSS traffic	Yes	Yes
Role-based access control	Yes	Yes
Wireless L2 isolation	Yes	Yes
Rogue AP detection in Monitor mode	Yes	Yes
Rogue AP detection in AP mode	Yes	-
<b>AAA (Authentication, Authorization, Accounting)</b>		
MAC authentication with local database	Yes	Yes
MAC authentication with external radius	Yes	Yes
Captive portal (internal & external)	Yes	Yes
Captive portal customizable web login page	Yes	Yes
Dynamic guest account	Yes	Yes
RADIUS authentication	Yes	Yes
Microsoft AD authentication	Yes	Yes
LDAP authentication	Yes	Yes
Embedded RADIUS server	Yes	Yes
RADIUS accounting	Yes	Yes
RADIUS session resumption	Yes	Yes
Log-out page	Yes	Yes
802.1X accounting with managed AP	Yes	Yes
<b>Wireless QoS</b>		
AP load balancing	Yes (1.5)	Yes (1.5)
Smart classroom load balancing	Yes	Yes
802.11r/k/v support for Fast Roaming enhancement	Yes	Yes, 802.11r only
WLAN station bandwidth limiting	Yes	Yes
<b>Deployment</b>		
Data tunneling	Yes	Yes
ZyMesh	Yes	Yes
ZWO (Zyxel Wireless Optimizer) AP planning	Yes	Yes
ZWO (Zyxel Wireless Optimizer) coverage detection	Yes	Yes
AP group	Yes	Yes
CAPWAP discovery method	Yes	Yes
NebulaFlex Pro support on NWA5123-AC HD & WAC6303D-S	Yes	-
Proxy ARP per SSID on AP	Yes	-
Fallback SSID when controller offline	Yes	-
<b>Diagnostic Tool</b>		
Wireless frame capture	Yes	Yes
AP Broadcast counter	Yes	-
<b>High Availability</b>		
Primary/Secondary controller support	Yes	Yes
<b>License SKU</b>		
MAPS	Yes	Yes
ZyMesh license	Yes*	Yes*

\*: NXC series support one Root AP for ZyMesh by default. To support more Root APs, NXC series needs ZyMesh license.

# Supported models

<b>APC Technology</b>	<b>APC3.4</b>			
<b>Product Series</b>	<b>Wireless Controller</b>	<b>ATP</b>	<b>ZyWALL USG</b>	<b>ZyWALL VPN</b>
<b>Applied Products</b>	NXC2500 NXC5500	ATP100/100W <sup>*1</sup> ATP200/500/700 <sup>*1</sup> /800	USG40/40W/60/60W USG110/210/310 USG1100/1900	ZyWALL 110/310 ZyWALL 1100 VPN50/100/300 USG2200 Series



<b>Supported managed AP</b>	WAC6502D-E WAC6502D-S WAC6503D-S WAC6553D-E WAC6103D-I WAC5302D-S NWA5123-AC NWA5121-NI NWA5123-NI NWA5301-NJ	WAC6502D-E WAC6502D-S WAC6503D-S WAC6553D-E WAC6552D-S WAC6303D-S WAC6103D-I WAC5302D-S NWA5123-AC HD NWA5123-AC NWA5121-NI NWA5123-NI NWA5301-NJ Forward compatible APs <sup>*2</sup> (11ax AP)	WAC6502D-E WAC6502D-S WAC6503D-S WAC6553D-E WAC6552D-S WAC6303D-S WAC6103D-I WAC5302D-S NWA5123-AC HD NWA5123-AC NWA5121-NI NWA5123-NI NWA5301-NJ Forward compatible APs <sup>*2</sup> (11ax AP)	WAC6502D-E WAC6502D-S WAC6503D-S WAC6553D-E WAC6552D-S WAC6303D-S WAC6103D-I WAC5302D-S NWA5123-AC HD NWA5123-AC NWA5121-NI NWA5123-NI NWA5301-NJ Forward compatible APs <sup>*2</sup> (11ax AP)
<b>Default managed AP number</b>	NXC2500: 8 NXC5500: 64	ATP100/100W: 2 ATP200/500/700/800: 2	USG40/40W/60/60W: 2 USG110/210/310: 2 USG1100/1900: 2	ZyWALL 110/310: 2 ZyWALL 1100: 2 VPN50: 4 VPN100/300: 4 USG2200 Series: 2
<b>Maximum managed AP number</b>	NXC2500: 64 NXC5500: 1024	ATP100/100W: 10 ATP200: 18 ATP500: 34 ATP700: 130 ATP800: 130	USG40/40W/60/60W: 18 USG110/210/310: 34 USG1100/1900: 130	ZyWALL 110/310: 34 ZyWALL 1100: 130 VPN50: 36 VPN100: 68 VPN300: 132 USG2200 Series: 1026

\*1: Supported form ZLD4.36.

\*2: From APC3.0, commercial gateways supporting APC technology are able to recognize APs with FW release higher than APC3.0 as Forward Compatible APs. Customers are able to introduce new AP technology with basic features support while staying with existing APC device FW if needed.

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