

ZYXEL



WAC6550 Series

802.11ac Outdoor Access Point

Almost nothing can make users to put down mobile gadgets even in awesome festivals or parties as people are so busy recording and sharing their life with their phones. If there's something that can really stop them, it must be bad WiFi access. Bad WiFi experiences can easily turn into negative reviews on the Internet.

Designed for crowded public outdoor venues, the Zyxel WAC6550 Series access points provide Gigabit wireless connectivity to hundreds of users. With Zyxel's commitment to RF First, the WAC6550 Series is able to improve both performance and user satisfaction in public environments.

Benefits

Optimized wireless experience for mobile clients

Users won't always stay on the same spot, but mobile gadgets may stick with the same AP even they could have better choices. To provide superior user experience, the Zyxel WAC6550 Series supports Band Select that steers mobile devices to the best AP and channel in real time.

- The WAC6552D-S features Zyxel's field-proven smart antenna that dynamically changes signal pattern and mitigate interference to extend coverage and provide higher reliability to mobile clients
- The WAC6553D-E is a dual-radio outdoor access point with 3x3 MIMO technology, for which Zyxel offers a series of compatible external antenna to suit different environments.



802.11ac outdoor access points deliver Gigabit wireless connectivity in crowded public outdoor environments



Excellence performance with integrated smart antenna or high-gain MIMO antenna options proven to provide better coverage and reliability



Designed for harsh outdoor environments with up to IP67 industrial-grade weather proofing



Supports ZON utility and operates as a standalone or controller-managed access point

Ideal for harsh outdoor environments

Extending wireless connection to outdoor spots in harsh weather is another challenge. The WAC6550 Series offers up to IP67 industry-grade weather proofing and the capability to work in extremely high- or low-temperature conditions. Moreover, the built-in surge protector of WAC6552D-S provides an extra layer of protection for your investments against surges caused by lightning.

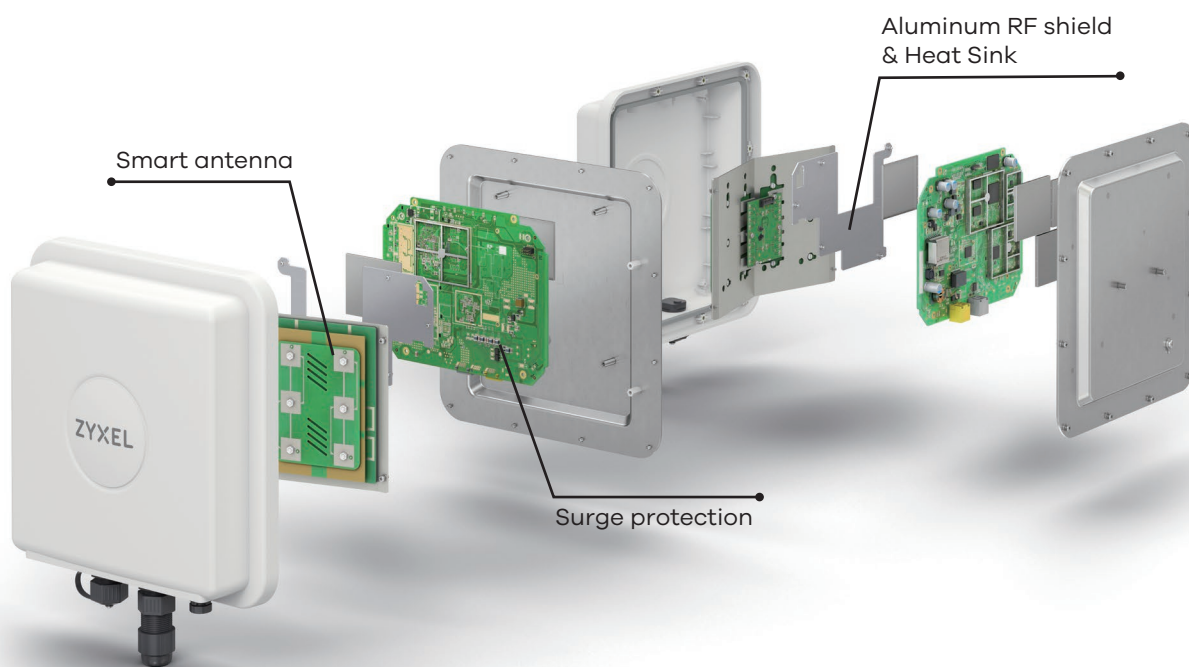
Effortless deployments and lower initial investment

Deployment of outdoor access points is a complex task that involves cabling, installation and maintenance. The WAC6552D-S simplifies the process with its embedded sectorial antenna and pole-mounting kit that save your effort to install and adjust signal patterns. This makes WAC6552D-S an ideal solution to extend reliable wireless connectivity to outdoor venues at an affordable price.

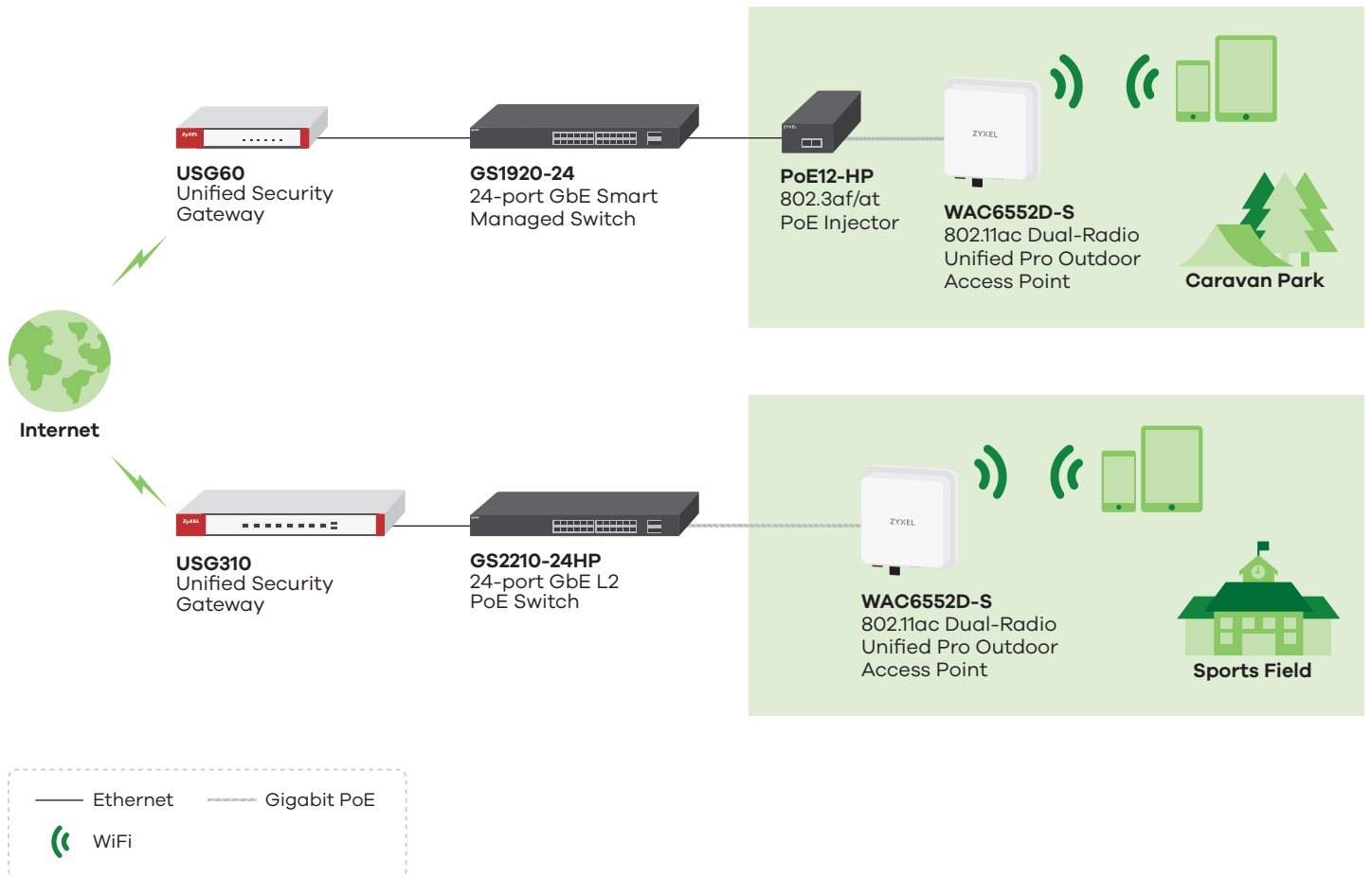
Flexible Management

To meet various deployment and environment requirements, the WAC6550 Series can be managed in two ways: you can build a simple network with ZON, a free utility that configures, manages and troubleshoots across switches, wireless access points and gateways. As your organization scales up, you can manage network with physical wireless controllers, such as the NXC Series, that offer more advanced features.

RF First Design



Application Diagram



Specifications

Model	WAC6552D-S		WAC6553D-E	
Product name	802.11ac Dual-Radio Unified Pro Outdoor Access Point		802.11ac Dual-Radio External Antenna 3x3 Outdoor Access Point	
				
Wireless				
Standard	IEEE802.11 ac/n/g/b/a		IEEE802.11 ac/n/g/b/a	
MIMO	MIMO		MIMO	
Wireless speed	2.4 GHz (Mbps)	300	450	
	5 GHz (Mbps)	866	1300	
Frequency band	2.4 GHz (IEEE 802.11 b/g/n)	<ul style="list-style-type: none"> • USA (FCC): 2.412 to 2.462 GHz • Europe (ETSI): 2.412 to 2.472 GHz 	<ul style="list-style-type: none"> • USA (FCC): 2.412 to 2.462 GHz • Europe (ETSI): 2.412 to 2.472 GHz 	
	5 GHz (IEEE 802.11 a/n/ac)	<ul style="list-style-type: none"> • USA (FCC): 5.15 to 5.35 GHz; 5.725 to 5.850 GHz • European (ETSI): 5.15 to 5.35 GHz; 5.470 to 5.725 GHz 	<ul style="list-style-type: none"> • USA (FCC): 5.15 to 5.35 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		20-, 40- and 80-MHz	
Conducted typical transmit output power*1	2.4 GHz (dBm)	28	29	
	5 GHz (dBm)	28	29	
Switching Capacity (Gbps)				
Antenna type	2x2 MIMO Smart antenna		6 N-type connectors*2	
Antenna gain	2.4 GHz (dBi)	5	-	
	5 GHz (dBi)	10	-	
Minimum Receive sensitivity	Min. Rx sensitivity up to -101 dBm		Min. Rx sensitivity up to -102 dBm	
WLAN Feature				
Band Steering	Yes		Yes	
WDS	Yes		Yes	
Mesh AP (By License)*3	Yes		Yes	
Mesh AP for multiple SSID with VLAN*3	Yes		Yes	
Fast roaming*3	Pre-authentication, PMK caching and 802.11r/k/v		Pre-authentication, PMK caching and 802.11r/k/v	
Security				
Encryption	WEP/WPA/WPA2-PSK		WEP/WPA/WPA2-PSK	
Authentication	WPA/WPA2-Enterprise/EAP/IEEE 802.1X/RADIUS authentication		WPA/WPA2-Enterprise/EAP/IEEE 802.1X/RADIUS authentication	
Access management	L2-isolation/MAC filtering/Rogue AP detection		L2-isolation/MAC filtering/Rogue AP detection	
Networking				
IPv6	Yes		Yes	
VLANs	Yes		Yes	
WMM	Yes		Yes	
U-APSD	Yes		Yes	
DiffServ marking	Yes		Yes	

*1: Maximum transmit power is limited by local regulatory settings.

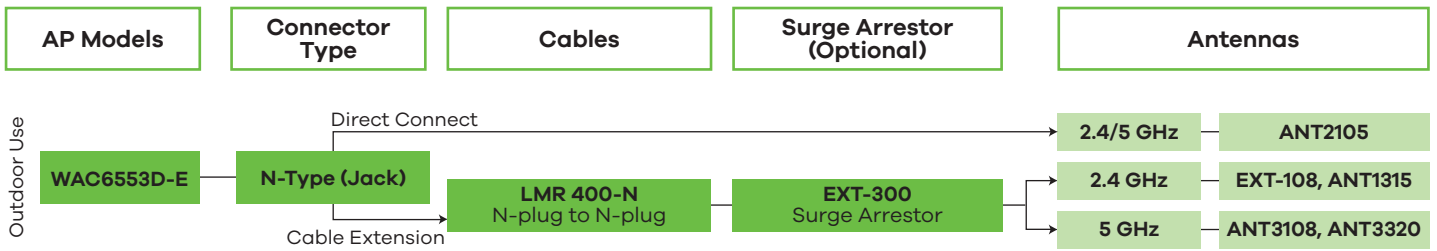
*2: The antenna is not embedded and external antennas are separately sold.

*3: Features supported when working with Zyxel NXC controller series.

Model		WAC6552D-S	WAC6553D-E
Management			
Operating mode		Standalone/controller-managed	Standalone/controller-manage
ZON Utility		<ul style="list-style-type: none"> • Discovery of Zyxel switches, APs and gateways • Centralized and batch configurations <ul style="list-style-type: none"> ▪ IP configuration ▪ IP renew ▪ Device reboot ▪ Device locating ▪ Web GUI access ▪ Firmware upgrade ▪ Password configuration ▪ One-click quick association with Zyxel AP Configurator (ZAC) 	<ul style="list-style-type: none"> • Discovery of Zyxel switches, APs and gateways • Centralized and batch configurations <ul style="list-style-type: none"> ▪ IP configuration ▪ IP renew ▪ Device reboot ▪ Device locating ▪ Web GUI access ▪ Firmware upgrade ▪ Password configuration ▪ One-click quick association with Zyxel AP Configurator (ZAC)
ZAC		<ul style="list-style-type: none"> • Batch AP configuration • Batch AP firmware upgrade • Batch AP profile backup 	<ul style="list-style-type: none"> • Batch AP configuration • Batch AP firmware upgrade • Batch AP profile backup
Zyxel Wireless Optimizer		<ul style="list-style-type: none"> • WiFi AP planning • WiFi coverage detection • Wireless health management 	<ul style="list-style-type: none"> • WiFi AP planning • WiFi coverage detection • Wireless health management
Web UI/CLI		Yes	Yes
SNMP		Yes	Yes
Physical Specifications			
Item	Dimensions (WxDxH)(mm/in.)	255 x 256 x 66/10.04 x 10.08 x 2.60	255 x 256 x 62/10.04 x 10.08 x 2.44
	Weight (g/lb.)	1590/3.51	1708/3.77
Packing	Dimensions (WxDxH)(mm/in.)	455 x 341 x 131/17.91 x 13.43 x 5.16	393 x 158 x 430/15.47 x 6.22 x 16.93
	Weight (g/lb.)	3500/7.72	3904/8.63
Included accessories		<ul style="list-style-type: none"> • Pole mounting kits 	<ul style="list-style-type: none"> • Pole/wall mounting kits • PoE injector (optional) • Power cord (optional)
MTBF (hr)		775,977	562,413
Physical Interfaces			
Ethernet port		1 x 10/100/1000M LAN	1 x 10/100/1000M LAN
Power		PoE (802.3af): power draw 15.12 W	PoE (802.3af): power draw 25 W
Environmental Specifications			
Weather protection		IP67	IP66 (Embedded heater for harsh weather)
Operating environment	Temperature	-20°C to 60°C/-4°F to 140°F	-40°C to 60°C/-40°F to 140°F
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage environment	Temperature	-40°C to 70°C/-40°F to 158°F	-40°C to 70°C/-40°F to 158°F
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Certifications			
Radio		FCC Part 15C, FCC Part 15E, ETSI EN 300 328, EN 301 893, LP0002	FCC Part 15C, FCC Part 15E, ETSI EN 300 328, EN 301 893, LP0002
EMC		FCC Part 15B, EN 301 489-1, EN 301 489-17, EN55022, EN55024, EN61000-3-2/-3, EN60601-1-2, BSMI CNS13438	FCC Part 15B, EN 301 489-1, EN 301 489-17, EN55022, EN55024, EN61000-3-2/-3, EN60601-1-2, BSMI CNS13438
Safety		EN 60950-1, IEC 60950-1, BSMI CNS14336-1	EN 60950-1, IEC 60950-1, BSMI CNS14336-1

Optional Accessories

Antenna & Cable Compatibility



Power Modules

Part Number	Description
POE12-HP-EU0102F	802.3at PoE injector, ROHS
POE12-HP-US0102F	802.3at PoE injector, ROHS

For more product information, visit us on the web at www.zyxel.com

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Datasheet [WAC6550 Series](#)

