ZYXEL
NETWORKS

30 Years of Networking Experience

Advanced ICSA Certified Firewalls

ZYXEL
N E T W O R K S

Zyxel Networks is a technology provider with over 30 years of experience, specializing in delivering solutions for small to medium- sized businesses and the enterprise-edge in partnership with VARs, MSPs and System Integrators. We enable network professionals to connect and protect organizations with greater ease by bringing together intuitive, scalable and secure cloud management with a complete portfolio of network devices.

Nebula Cloud Network Management

Zyxel Nebula cloud-based network management enables pre-configured deployment of network devices along with an advanced yet easy to use, graphical interface that makes network management fast and effective, optimizing IT professionals' time.

- Unified and centralized control/visibility at your fingertips
- No hardware controller is needed
- Free cloud management

nebula

Network ...agement

Comprehensive Range of Switches
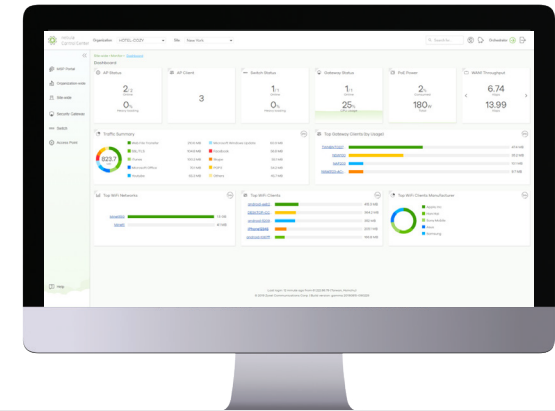
e: Security, Switching and Connectivity

Zyxel Switches

...es with port speeds of up ...ber and PoE++ with power ...ers comprehensive a ...uit a wide variety of

...ed switches

...bula Cloud Option ...S1930 Series)

.../XGS2220/XS3800 Series)

...ce (GS1300 Series)

Zyxel Firewalls

Robust ICSA Certified firewalls with advanced anti-malware services, including zero-day threat detection, provide an important layer of protection In a world of increasing ransomware and malware attacks. Zyxel is a member of the CVE Program that identifies and catalogs security vulnerabilities.

USG FLEX Series
Consolidate multiple security and networking functions all into one.

Now with a (H)igh* performance line giving you ultra firewall/UTM/VPN throughput with powerful multi-gig and PoE+ interfaces to get you ready for the multi-gig era.

SCR Series
A simpler approach to WiFi 6E and security.

SCR 50AXE is a WiFi 6E security router firewall designed for SOHO/small business /prosumer/self-installer, integrated with best-in-class security, and easy management with the Nebula cloud.

*Multi-Gig offering only available on USGFLEX200H/500H/700H

Zyxel WiFi Access Points

Early to market with an advanced WiFi 7 Tri-band Access Point in November 2023, Zyxel prides itself in being one of the first to deliver the latest technology. Zyxel Smart Antenna technology automatically optimizes WiFi signal patters for performance and reliability.

NebulaFlex AP (Cloud or Standalone) Built for small to medium deployments with flexible management.

Every Zyxel Nebula access point is completely cloud-managed; the comprehensive portfolio offers different product options to fit various needs of deploying networks. The Zyxel Nebula APs are built with innovative antenna technology such as Smart Antenna and Dual-optimized Antenna.

Nebula Flex PRO AP (Cloud with 1-yr Pro Pack or Standalone or Wireless Controller)

Built for high-density deployments with triple management.
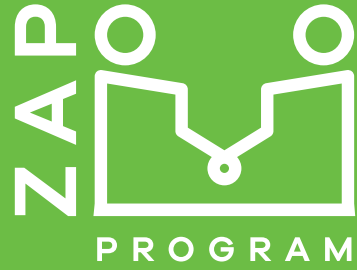
Zyxel Authorized Partner Program

Jump start your business to profitability

ZAP - Zyxel Authorized Partner Program – Rewards authorized partners with discounts for greatly enhanced profitability on business class products*.

ZAP — Zyxel Authorized Partner Program

	BRONZE	SILVER	GOLD
Distribution Discount**	8%	16%	20%
Deal Registration	●	●	●
Training Webinars	●	●	●
Tech Support	●	●	●
NFR/Demo Discount	-	●	●
Lead Referral	-	-	●
Sales Engineer Access	-	-	●
Advanced Replacement	-	-	●
Qualifying Sales / ½ Year Period	-	$6K	$12K

SILVER UPON SIGNING UP

All newly approved partners enter into the program at Silver level. Qualifying sales levels must then be attained to maintain or increase status.

Sign up at https://www.zyxel.com/us/en-us/partners/partner-program

* Business Class Products Qualifying for Partner Discounts:

Firewalls – All USG FLEX, ATP, and SCR Firewalls
Switches – Switches in the 1915 Series and higher and the 1350 series
WiFi Access Points – All models starting with "W"

** Discounts and Rebates only available through Zyxel Authorized Distributors.

nebula

CLOUD MANAGED NETWORKING

Switches, APs, Gateways

NETWORK SECURITY

SWITCHES

? Questions about joining the Partner Program?

Send an e-mail to **partner@zyxel.com** or find out more at **http://zyxel.us/partners**
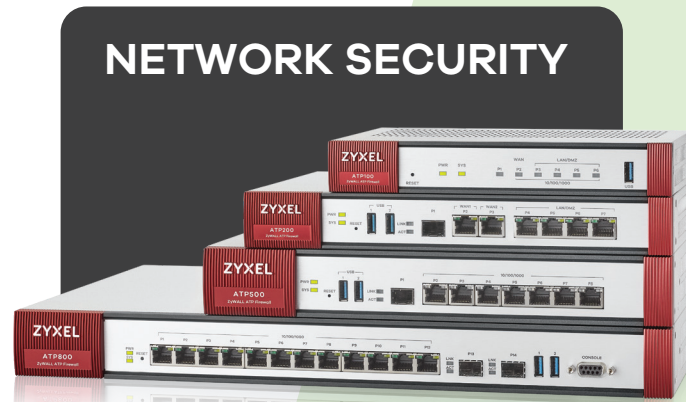
Receive discounts on our robust line of products!

For a complete Product List visit

▶▶ **http://zyxel.us/zapproducts**

WiFi Access Points

ZYXEL NETWORKS

		NWA55AXE	NWA90AX Pro	NWA130BE	WAX300H	WAX610D	WAX630S	WBE660S	WAX655E
Ubiquiti	Uniquiti doesn't offer true cloud management, requires you pay for phone support, and offers only a 1 year warranty	UAP AC Mesh	U6 LR	U7 Pro	U6 IW				
			U6 Pro			U6 Pro	U6 Pro		
TP Link	Zyxel offers a more capable cloud experience, broader product line, and Lifetime Warranty (On most APs)	EAP610-Outdoor		EAP773	EAP615-Wall	AP9650	AP9670	EAP783	
					EAP655-Wall	EAP673			
NETGEAR	Zyxel offers a more capable cloud experience, broader product line, and "Canada Ready" outdoor APs	WAX610Y	WAX615			WAX625			
			WAX610			WAX630			
WLAN	Wi-Fi Standard	WiFi 6	WiFi 6	WiFi 7	WiFi 6	WiFi 6	WiFi 6	WiFi 7	WiFi 6
	Wireless Radios/Bands	Dual-band	Dual-band	Tri-Band	Dual-band	Dual-band	Dual-band	Tri-band	Dual-band
	Spatial Streams	2x2	3x3:2, 2x2	2x2	2x2	4x4, 2x2	4x4, 2x2	4x4	4x4, 2x2
	2.4Ghz Max Data Rate	575 / 1200 / --	575 / 2400 / --	688 / 4324 / 5764	575 / 2400 / --	575 / 2400 / --	575 / 2400 / --	1376 / 8646 / 11530	575 / 4800
	160 Mhz Channels		•	5G-240, 6G-320	•	• (2x2 Mode)	• (2x2 Mode)	5G-240, 6G-320	•
	Antenna Type	Internal	Internal	Internal	Internal	Dual-Optimized	Smart	Smart	External (Not Inc)
	Gain (dBi) 2.4 / 5 / 6 GHz	4 / 5 / --	3 / 4 / --	3 / 4 / 4	3 / 4 / --	5 / 6 / --	3 / 4.5 / --	3 / 5 / 5	Anenna Dependent
	Output (dBm) 2.4 / 5 / 6 GHz	23 / 26 / --	23 / 28 / --	27 / 25 / 23	23 / 23 / --	23 / 28 / --	23 / 28 / --	29 / 28 / 23	24 / 28 / --
LAN	# LAN Ports	1	1 x 2.5G	2 x 2.5G	4 x 1GbE	2: 1 x 1G, 1 x 2.5G	2: 1 x 1G, 1 x 2.5G	2: 1 x 1G, 1 x 10G	1 x 2.5G
	PoE Power Draw	16W	20.5W	24W	19W	19W	19.5W	41W	25.5W
	PoE Standard	IEEE 802.3at	IEEE 802.3at	IEEE 802.3at	IEEE 802.3at	IEEE 802.3at	IEEE 802.3at	IEEE 802.3bt	IEEE 802.3at
Security & Hospitality	WPA3PSK	•	•	•	•	•	•	•	•
	WPA3Enterprise		•	•	•	•	•	•	•
	WLAN Access List / MAC Filtering / L2 Isolation		•	•	•	•	•	•	•
	RADIUS Authentication		•	•	•	•	•	•	•
	Captive Portal (Hospitality)		•	•	•	•	•	•	•
	Load Balancing			•	•	•	•	•	•
	DPPSK (Multiple Passwords / SSID)			•		•	•	•	•
	SSID NAT			•	•	•	•	•	•
	Auto-Optimization (Nebula Pro)			•	•	•	•	•	•
	Nebula SmartMesh	•	•	•	•	•	•	•	•
	VLANs	•	•	•	•	•	•	•	•
Management	Nebula Cloud Management Bundled	NebulaFlex	NebulaFlex	NebulaFlex	NebulaFlex Pro	NebulaFlex Pro	NebulaFlex Pro	NebulaFlex Pro	NebulaFlex Pro
	USGFLEX Management								
	Web UI / CLI / ZON	•	•	•	•	•	•	•	•
	SNMP			•					
Physical	Outdoor Rating	IP55	Acessory*			Accessory*	Accessory*		IP67
	item dimensions (WxDxH)(mm) / Inch	308 x 136.4 x 49.6 12.13 x 5.37 x 1.95	140 x 140 x 37.5	250 x 160 x 47	173 x 97 x 29 6.81 x 3.82 x 1.14	180 x 180 x 39 7.09 x 7.09 x 1.54	180 x 180 x 39 7.09 x 7.09 x 1.54	310 x 178 x 56 12.205 x 7.01 x 2.205	256 x 257 x 70 10.07 x 10.11 x 2.75
	Mounting	Screw Plate	Screw Plate	Screw Plate	Wall plate	Screw Plate	Screw Plate	Screw Plate	Pole / Wall Kit Inc
Warranty		2 Y	2 Y	Limited Lifetime	Limited Lifetime	Limited Lifetime	Limited Lifetime	Limited Lifetime	Limited Lifetime
Application Segment		Prosumer	SOHO	SOHO	Hospitality	SMB / Hospitality	SMB / Hospitality	SMB / Hospitality	Outdoor

* Outdoor Enclosure Sold Separately

Version: April 2024

Switches

		GS1915-8EP	GS1915-24EP	GS1920-8HPv2	GS1920-24HPv2	GS1920-48HPv2	XGS1930-28HP	XGS1930-52HP	XMG1930-30HP	XS1930-10	XS1930-12HP	GS2220-10HP	GS2220-28HP	GS2220-50HP	XGS2220-30HP	XGS2220-54HP	XGS2220-54FP
NETGEAR	Zyxel Better Cloud, Lower Price / Zyxel Full Stack, Lifetime Warranty	GS110TPv3			GS724TPP	GS752TPv2	M4300-28G-PoE+	M4300-52G-PoE+		MS510TXM	MS510TXUP		M4250-26G4F-PoE+	M4250-40G8F-PoE+	M4350-24G4XF	M4350-48G4XF	M4350-48G4XF
					GS728TPv2										M4300-28G PoE+		
TP Link	Zyxel Better Cloud, Similar Price / Zyxel Full Stack, More High End	TL-SG2008Pv2	TL-SG2428Pv2	TL-SG2210MP	TL-SG2428Pv2	TL-SG3452P	TL-SG3428X-MP	TL-SG3452XP			TL-SX-3206HPP		TL-SG3428MP	TL-SG3452P	TL-SG3428XMP		
		TL-SG2210P															
Ubiquiti	Zyxel Better Cloud, Similar Price / Zyxel Support, Lifetime Warranty	Lite 8 PoE	USW-24-PoE		USW-24-PoE	USW-48-PoE	USW-Pro-24-PoE	USW-Pro-48-PoE	USW-Pro-Max-24-PoE	USW-Pro-Aggregation			USW-24-PoE	USW-48-PoE	USW-Enterprise-24-PoE	USW-Enterprise-48-PoE	USW-Enterprise-48-PoE
		USW-16-PoE	USW-16-PoE														
Ports	Gigabit Ethernet (RJ45)	8	24	8	24	44	24	48				8	24	44	24	48	48
	2.5 Gigabit Ethernet (RJ45)								24								
	1/2.5/5/10 Gig Ethernet (RJ45)								4	8	10				2	2	2
	GbE/SFP Fiber			2	4	6						2	4	6			
	10G SFP+ Fiber						4	4	2	2					4	4	4
	10G/SFP+ Combo										2						
	Total # of Ports	8	24	10	28	50	28	52	30	10	12	10	28	50	30	54	54
PoE	Total PoE Budget (Watts)	60	130	130	375	375	375	375	700		375	180	375	375	400	600	960
	PoE Ports	8	12	8	24	48	24	48	28		8	8	24	48	26	50	50
	Smart PoE+ Feature	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
Performance	Switching Capacity (Gbps)	16	48	20	56	100	128	176	240	200	240	20	56	100	168	216	216
Stacking	Virtual (iStacking)			24	24	24	24	24				24	24	24	24	24	24
	Physical														2	2	2
	Link Aggregation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Loop Detection/Guard	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
OSI	Layer	L2	L2	L2	L2	L2	L2	L2	L3*	L3*	L3*	L2	L2	L2	L3	L3	L3
Management	Web GUI / SNMP / Syslog	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Command Line (CLI)									•	•	•	•	•	•	•	•
	Zyxel Nebula (Cloud)	Flex	Flex	Flex	Flex	Flex	Flex	Flex	Flex	Flex	Flex	Pro	Pro	Pro	Pro	Pro	Pro
	sFlow														•	•	•
Security	VLANs (Static/Dynamic)	Static 256	Static 256	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K	1K/4K
	QoS (Bandwidth Management)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Static Routes						32	32	32	32	32				64	64	64
	Advanced Port Security	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L2 Multicast Support	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	IGMP Snooping	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Physical	Rackmountable/Kit		•	Opt	•	•	•	•	•	•	•	•	•	•	•	•	•
	Fanless	•															
	Hardware Warranty	LL	LL	LL	LL	LL	LL	LL	LL	LL	LL	LL	LL	LL	LL	LL	LL

* Upgradable to L3 with License

Zyxel Networks — Firewalls

		SCR50AXE	USGFLEX 50	USGFLEX 100REV2 BUN	USGFLEX 100REV2	USGFLEX 200 BUN	USGFLEX 200	USGFLEX 500 BUN	USGFLEX 500	USGFLEX 700 BUN	USGFLEX 700
SonicWall	Zyxel Lower TCO, No Support Contracts, Nebula Cloud, Full Stack	SOHO 250	SOHO 250	SOHO 250	SOHO 250	TZ300	TZ300	TZ400	TZ400	TZ500	TZ500
Fortinet	Zyxel Lower TCO, No Support Contracts, Nebula Cloud, Full Stack					FG-40F	FG-40F	FG-60F	FG-60F	FG-80F	FG-80F
Ports	Gigabit Ethernet (RJ45)	5	5	5	5	5	5	7	7	12	12
	Internet (WAN) Ports	1	1	1	1	2	2	Configurable	Configurable	Configurable	Configurable
	Network (LAN/DMZ) Ports	4	4	4	4	4	4	Configurable	Configurable	Configurable	Configurable
	Fiber Ports					1	1	1	1	2	2
	Integrated Wireless	802.11axe (WiFi 6E)									
	Total # of Ports	5	5	5	5	7	7	8	8	14	14
Performance	SPI Firewall (Mbps)	900	350	900	900	1800	1800	2300	2300	5400	5400
	UTM (AV/IDP) (Mbps)	900		360	360	550	550	800	800	1450	1450
	IPSec VPN (Mbps)	55	90	270	270	450	450	810	810	1100	1100
	Max Sessions	20k	20k	300k	300k	600k	600k	1000k	1000k	1600k	1600k
UTM *Licenses Required BUN Models Include 1 Year License with these Features	Web Content/Social Media Filtering	Yes w/Upgrade License	•	•	•	•	•	•	•	•	•
	IPS/ IDP / P2P Download Blocking	•	•	•	•	•	•	•	•	•	•
	Anti-Virus/Malware/Application Patrol	•	•	•	•	•	•	•	•	•	•
	Anti-Spam (Email Security)	•	•	•	•	•	•	•	•	•	•
	Sandboxing / Unknown Threats			•	•	•	•	•	•	•	•
VPN	IPSec VPN / L2TP VPN	3	10	40	40	100	100	300	300	500	500
	SSL VPN (Default / Max)		2/15	30	30	60	60	150	150	150	150
	Concentrator Mode			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Secure Wifi	# of APs Supported Tunnel Mode			6	6	10	10	18	18	66	66
Advanced Features	WAN Load Balancing / Failover		•	•	•	•	•	•	•	•	•
	VLAN Support	4	8	8	8	16	16	64	64	128	128
	Device High Availability							•	•	•	•
	SSL Inspection			•	•	•	•	•	•	•	•
	Captive Portal / Terms of Service					•	•	•	•	•	•
Hotspot / Captive Portal	# of Devices Concurrent Authentication (Default/Max)			64	64	200	200	200/300	200/300	500/2000	500/2000
	Tiered Billing					•	•	•	•	•	•
Physical	Rackmountable					•	•	•	•	•	•
	Height		1U	1U	1U	1U	1U	1U	1U	1U	1U
	Fanless	•	•	•	•	•	•				
	Hardware Warranty	LL	LL	LL	LL	LL	LL	LL	LL	LL	LL
Recommended # of Users		<25		<40		<100		<300		<500	

* Outdoor Enclosure Sold Separately

Version: April 2024

Firewalls - USG FLEX H

KEY

Zyxel has **more** features	
Equal features	
Zyxel has fewer features	

		USGFLEX 100H (HP) BUN	USGFLEX 100H (HP)	USGFLEX 200H (HP) BUN	USGFLEX 200H (HP)	USGFLEX 500H BUN	USGFLEX 500H	USGFLEX 700H BUN	USGFLEX 700H
SonicWall	Zyxel Lower TCO, No Support Contracts, Nebula Cloud, Full Stack	TZ270	TZ270	TZ300	TZ300	TZ400	TZ400	TZ500	TZ500
Fortinet	Zyxel Lower TCO, No Support Contracts, Nebula Cloud, Full Stack			FG-40F	FG-40F	FG-60F	FG-60F	FG-80F	FG-80F
Ports	Gigabit / Multi-Gig Ethernet (RJ45)	8x GbE	8x GbE	2x 2.5 GbE 6x GbE	2x 2.5 GbE 6x GbE	2x 2.5 GbE 8x GbE	2x 2.5 GbE 8x GbE	2x 2.5 GbE 8x GbE	2x 2.5 GbE 8x GbE
	Internet (WAN) Ports	Configurable	Configurable	Configurable	Configurable	Configurable	Configurable	Configurable	Configurable
	Network (LAN/DMZ) Ports	Configurable	Configurable	Configurable	Configurable	Configurable	Configurable	Configurable	Configurable
	Fiber Ports							2x SFP+	2x SFP+
	PoE+ Ports	HP Model 1x 30W	HP Model 1x 30W	HP Model 1x 30W	HP Model 1x 30W	2x 2.5 GbE PoE+	2x 2.5 GbE PoE+	2x 2.5 GbE PoE+	2x 2.5 GbE PoE+
	Total # of Ports	8	8	8	8	12	12	14	14
Performance	SPI Firewall (Mbps)	3,000	3,000	5,000	5,000	10,000	10,000	15,000	15,000
	UTM (AV/IDP) (Mbps)	750	750	1,500	1,500	2,500	2,500	4,000	4,000
	IPSec VPN (Mbps)	750	750	1,200	1,200	2,000	2,000	3,000	3,000
	Max Sessions	300,000	300,000	600,000	600,000	1,000,000	1,000,000	2,000,000	2,000,000
UTM *Licenses Required BUN Models Include 1 Year License with these Features	Web Content/Social Media Filtering	•	•	•	•	•	•	•	•
	IPS/ IDP / P2P Download Blocking	•	•	•	•	•	•	•	•
	Anti-Virus/Malware/Application Patrol	•	•	•	•	•	•	•	•
	Anti-Spam (Email Security)	•	•	•	•	•	•	•	•
	Sandboxing / Unknown Threats	•	•	•	•	•	•	•	•
VPN	IPSec VPN / L2TP VPN	50	50	100	100	300	300	1000	1000
	SSL VPN (Default / Max)	25	25	50	50	150	150	500	500
	Concentrator Mode			Yes	Yes	Yes	Yes	Yes	Yes
Secure Wifi	APs Supported Tunnel Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Advanced Features	WAN Load Balancing / Failover	•	•	•	•	•	•	•	•
	VLAN Support	16	16	32	32	64	64	128	128
	Device High Availability					•	•	•	•
	SSL Inspection	•	•	•	•	•	•	•	•
	Captive Portal / Terms of Service			•	•	•	•	•	•
Hotspot / Captive Portal	# of Devices Concurrent Authentication (Default/Max)	64	64	200	200	300	300	4000	4000
Physical	Rackmountable			•	•	•	•	•	•
	Height	1U	1U	1U	1U	1U	1U	1U	1U
	Fanless	•	•	•	•				
	Hardware Warranty	LL	LL	LL	LL	LL	LL	LL	LL
Recommended # of Users		<40		<100		<300		<500	

SECURITY Solution Guide

Preparing against cyberattacks and ransomware

Licensed Security Services

For purchase/renewal of licenses, go directly on our new e-commerce platform Zyxel Marketplace or contact our reseller.

Services	Key Features
Security Service	
Anti-Virus/Malware	Scan files for viruses, Trojan, worms, malwares before they reach your network. • Stream-based scan technology without file size limitation • Daily data feed of top-ranked threats
Anti-Spam/Email Security	Fast detect with cloud-based database/mail fingerprints to block spam/phishing mail with malicious contents • IP reputation filter provides low latency reaction • Support black/white listing for custom policies • Cloud-based database provide real-time protection
Web Filtering	Cloud-based real-time access control for inappropriate, unproductive, illegal and malicious websites • Categorized website access management for increased efficiency • Granular policies controlled by IP address, user, group, or schedule
IPS	Deep-packet inspection across all ports and protocols at gateway to against known attacks from network • Shields vulnerabilities before they can be exploited and eliminates the operational pains of emergency patching • Customized signature support to create your own rules • Constant signature auto-updates
Application Patrol	Automatically categorize and manage the network applications usage • Granular policies control by IP address, user, group, schedule • Profile based policy to ensure network quality and easy manage business rule
Geo Enforcer	Manage network traffic by mapping IP address to geographical regions to prevent fraud or cyber attacks • Geographical visibility for traffic statistics and logs • IPv6 address support • Automatic IP/geography database update

Services	Key Features
Security Service	
Sandboxing	Cloud-based sandbox technology against unknown threats • Comprehensive inspection for a wide range file types • Cloud-based sandbox provide instant protection without needing a dedicated hardware or software upgrade
Reputation Filter	Block botnet infection and prevent drive-by download from infected websites • IP/URL feeds to detect/block botnet commands and control activities • Cloud-based URL feeds to block access to anomalous websites • IP-based reputation filter • Supports 10 Cyber Threat Categories • Inbound & Outbound traffic filtering • Blacklist and whitelist support
Secure WiFi	• Secure tunnel and managed AP service • L2 access between home and office network • Enforcing 2FA with Google Authenticator • WPA2 Enterprise (802.1x) supported
Cloud Security Service	
Astra	• Cloud-based service and email protection for Office 365, G Suite and on-premise e-mail • Stop unwanted spam, phishing and malware with real-time threat intelligence • No change to your existing infrastructure, zero maintenance • Reduce management overhead and stop wasting IT admin resources • Respond faster with web management and monitoring
Cloud Email Security	• Extend protection to mobile devices into network • Shows brief summary about the member activities • Monitor and analyze the usage and measure most used resources • Stop users from unsafe websites, record every attempt, and trigger time • Block, record all suspicious IP to get full range security monitoring and protection from online threats
Vertical Solutions	
Hotspot Management	• Authentication with Wall Garden • Advertisement and SMS billing & free time service accounting for guest • Support SP350E printer manager support purple WiFi and third-party social log in • Billing replenishment

Pick a bundle.
No more hassle

Licenses by Bundle

A bundle license consists of multiple services that are grouped together. They are designed for your best convenience when you need to ensure your network is empowered with holistic functionality such as seamless threat protection or full connectivity features. Pick the right bundle and experience less hassle.

Security — Licensed Service / Connectivity — Licensed Service

Service descriptions:
- **Anti-Malware/Virus** — Scan files at the gateway for viruses and other threats
- **Web Filtering/Content Filtering** — Block access to malicious or risky web sites
- **Sandboxing** — Cloud-based sandbox technology against unknown threats
- **Reputation Filter** — Block botnet infection and prevent drive-by download from infected websites via IP and URL detection
- **IPS/IDP** — Deep-packet inspection against known attacks from network
- **Application Patrol** — Automatically categorize and manage the network application usage
- **Email Security/Anti-Spam** — Fast detection to block spam/phishing mail with malicious contents
- **SecuReporter** — Cloud-based security analytics and report with 30-day log retention
- **Security Profile Sync** — An easy-to-use tool to help business sync up security profiles across multiple networks
- **Collaborative Detection & Response** — Automatically contain threats at the network edge
- **Ransomware Prevention Premium** — Real-time updated threat intelligence
- **Network Premium** — Simplified single sign in to multiple resources
- **Secure WiFi** — Secure tunnel and managed AP service
- **Hotspot Management** — Various Network Access Control
- **Concurrent Device Upgrade** — Top up allowed number of connected clients
- **Nebula Professional Pack** — A full feature set of cloud configuration, deployment, monitoring and management
- **Nebula Plus Pack** — A new feature set includes the most frequently requested advanced features

Pack	Firewall Series	Anti-Malware/Virus	Web Filtering/Content Filtering	Sandboxing	Reputation Filter	IPS/IDP	Application Patrol	Email Security/Anti-Spam	SecuReporter	Security Profile Sync	Collaborative Detection & Response	Ransomware Prevention Premium	Network Premium	Secure WiFi	Hotspot Management	Concurrent Device Upgrade	Nebula Professional Pack	Nebula Plus Pack
Gold Security Pack	USG FLEX H*4	●	●	●	●	●	●	●	●	●	●	●	●	●			●*4	
Gold Security Pack	USG FLEX*3	●	●	●	●	●	●	●	●	●	●	●	●	●			●	
UTM Security Pack	USG FLEX*3	●	●			●	●	●	●	●	●	●	●	●*2	●*2	●*2	●*2	●*2
Content Filter Pack	USG FLEX 50(AX)		●						●	●			●				●*2	●*2
SCR Pro Pack	SCR		●								●						●	

*1: The IPS and App Patrol service would be offered for free
*2: Pack Purchasing Options:
- Secure WiFi
- Hospitality Pack incl. Hotspot Management and Concurrent Device Upgrade
- Nebula Professional Pack
- Nebula Plus Pack

*3: USG FLEX 50 is not supported for Gold and UTM Security Pack
*4: Network Premium, Security Profile Sync, Collaborative Detection & Response, and Secure WiFi for USG FLEX H series will be available later and are subject to changes without notice

Includes Full Security 30 Day Free Trial

Complete Security Solution Guide

NEBULA SECURE CLOUD NETWORKING
Solution Guide

Zyxel has taken the complex task of managing and deploying multiple networks for multiple organizations into an easy to use single pane of glass on a secured cloud platform. Offering a full range of Access Points, PoE Switches, and Firewalls all managed through the same cloud hosted interface. An affordable cloud network management solution that offers features similar to those in Meraki, Aruba, and Aerohive.

Zyxel's NebulaFlex line of products make it easy for your customers whether they're ready today to jump into cloud networking or prefer to do things the old fashioned way. Zyxel's NebulaFlex products make it easy to transition from old school traditional management to modern day secured cloud management. NebulaFlex gives the freedom of switching between traditional management and cloud management any time. Best of all, Zyxel's Base Nebula Cloud Management platform is free.

Why Nebula?

• Designed from the ground up to deploy, configure, and monitor multiple sites and
  multiple customers through a single simple to use interface
• Unlike our competition, no subscription required
• Manage an unlimited number of customers, locations, and devices
• Setup in minutes, no local configuration required
• Ability to manage access points, switches, and firewalls from one system

NETCONF Standard

• Industry-first solution that implements NETCONF protocol
* Safe configuration changes in the cloud with secure transports
* Support of TCP and Callhome to overcome NAT
* Suitable for cloud networking

Why Zyxel?

• Outstanding Performance
• Lifetime warranty & technical support
• Robust partner program w/aggressive bid pricing support
• Comprehensive Portfolio
• Since 1989

Access Points
with NebulaFlex/
NebulaFlex Pro

Highlights

- Enjoy cloud features like zero-touch deployment, real-time configurations with Nebula
- Easy setup on SSID/SSID schedule/VLAN/Rate limiting.
- DPPSK (Dynamic Personal Pre-Shared Key) and standard-based WPA Personal support
- Enterprise wireless security and RF optimization
- Secure WiFi solution provides remote workers the same access to the corporate network and resources while being protected with the enterprise-grade security.
- Connect and Protect (CNP) service provides small business environments with a trusted and application visible WiFi hotspot network to enhance wireless user protection and experience
- DCS, smart load balancing and client roaming/steering
- Rich Captive Portal support Nebula Cloud Authentication Server accounts, social login with Facebook accounts, Facebook WiFi, and Voucher
- Support smart mesh and wireless bridge
- Wireless health monitoring and report
- WiFi Aid gives insights into the client's connection issues to optimize connectivity and troubleshoot

Switches
with NebulaFlex/
NebulaFlex Pro

Highlights

- Comprehensive Switch product portfolio includes wide-range port selection, multiple speed options (1G, Multi-Gig, 10G), PoE or non-PoE, and all fiber models.
- Smart fan and fanless designs offer silent operations in the office
- Check real-time status intuitively by cloud and PoE LED indicators
- The Multi-Gigabit (100M/1G/2.5G/5G/10G) switchs that can step up the network bandwidth via the cloud
- GS1350 Series Surveillance switches are designed with specialized PoE features for IP cameras and surveillance report that can be monitor and manage the surveillance networks via the Cloud
- Flexible to switch between standalone and Nebula Cloud management without additional costs
- Enjoy cloud features like zero-touch deployment, real-time configurations with Nebula
- Efficient network provisioning with multiple ports configuration all at once
- User-friendly ACL and PoE schedule configuration
- Intelligent PoE technology and network topology
- RADIUS, static MAC forwarding and 802.1X authentication
- Advanced Switch Control (Vendor Based VLAN, IP Interfacing & Static Routing, Remote CLI access)
- Advanced IGMP multicast functionality and IPTV report
- Auto PD Recovery to detect and recover failed powered devices automatically

Firewall Series

Highlights

- High assurance multi-layered protection includes IP/URL/DNS reputation filter, App Patrol, Web Filtering, Anti-malware and IPS
- Collaborating policy enforcement devices and eliminating repetitive logins with Collaborative Detection & Response
- Best practices for remote access with Secure WiFi and VPN management consolidates and ensures the same network control and security across multiple sites
- Level up security with two-factor authentication (2FA) network access let you quickly and easily verify users' identities with users accessing their networks through the edge devices
- Cloud sandboxing technology prevents zero-day attacks of all sorts
- Comprehensive summary reports for security events and network traffic through SecuReporter service
- Flexible to switch between on-premise and Nebula Cloud management without additional costs

Security Router Series

Highlights

- Subscription-free Security built-in as standard (inc. Ransomeware/Malware Protection)
- The latest WiFi technology provides the fastest wireless connection speed possible
- Self-configuring, plug-and-play deployment by Nebula Mobile app
- Central management via Zyxel Nebula Platform
- Auto VPN for easy deployment for site-to-site VPN Connectivity
- Up to 4 SSIDs with intergrade enterprise security and personal/guest access
- Four GbE ports for printers, phones and other wired devices
- Access security status and analytics through an informative dashboard
- Optional SCR Pro Pack Licensing to increase functionality and security

License Information

Per-device License Model

Nebula's per-device licensing allows IT teams to maintain various expiration dates across devices, sites or organizations. Each Organization can have a single shared expiration, which will be manageable through our new Circle license management platform for channel partners, namely Subscription Alignment.

Flexible Management License Subscription

Nebula Control Center (NCC) offers multiple subscription options to meet customers' needs. Whether you are looking for a complimentary option giving you some peace of mind at no extra cost, more control over your network updates and visibility, or even the most advanced management of cloud networking, Nebula is here to help you.

However, the devices must maintain the same NCC management License Pack Type across the organization.

Nebula MSP Pack further provides cross-organization management functionality, helping MSP streamlines multi-tenant, multi-site, multi-level network deployment and management, and deliver superior service to their customers.

MSP Pack

Per-admin account license that include cross-org. management features and can be used in conjunction with existing Packs (Base/Plus/Pro)

- MSP portal
- Create organization
- MSP branding

- Admins & teams
- Cross-org synchronization
- Alert templates

Base Pack

License-free feature set/service with a rich set of management features

Plus Pack

An add-on feature set/service that includes all the features from free Nebula Base Pack as well as the most frequently requested advanced features to enable additional control of network updates and visibility

Pro Pack

A full feature set/service that includes all the features from Nebula Plus Pack as well as additional advanced functionality and management features to enable maximum manageability of NCC for devices, sites, and organizations

Includes Full Security 30 Day Free Trial

Nebula Solutions for Target Applications

HOSPITALITY

Hotel/Restaurant/Café

▶ WiFi Requirements

Dedicated Guest WiFi

- Use voucher to charge guests with top-notch WiFi access in hotel lobbies or POS
- Set time limit for validity of voucher codes according to the amount of days the guest is staying
- Printable voucher codes

Secure Employee WiFi

- Encrypt and secure wireless traffic with WPA3-Enterprise
- Authenticate employees or hotel staff with a personal account and password using Nebula Cloud Authentication Server

Per Room SSID

- Programmable SSID automatically apply unique WiFi names according to Guest Room number
- Ensures that each guests connects to their respective room's SSID
- Prevents situation where guests connect under the same AP causing channel congestion
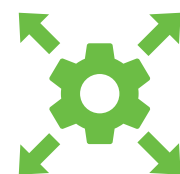
In-Room Service Box

- Install WAX300H support all in-room services from a single access panel

Enforced Guest Data Integrity and Privacy

- Enable Guest SSID for automatic setup of L2 Isolation with Intra-BSS Blocking
- Intra-BSS Blocking prevents the communication between devices connected under the same AP's SSID
- L2 Isolation allows client traffic to only reach the Internet

Backbone Requirements
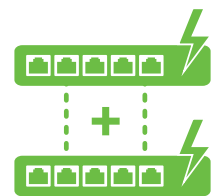
Handle High Traffic Volume

- Installing 10G-Ethernet Switch models
- Use Link Aggregation to increase inter-switch bandwidth

Robust Network Design

- Implement high availability and high bandwidth with Hardware Stacking and Link Aggregation
- Hardware Stacking allows full utilization of switch ports in ring topologies during normal conditions
- Link Aggregation allows traffic to cross between switches even when a physical link goes down

Easy IPTV Optimization

- Advanced IGMP allows administrators to easily apply multicast settings across a site-wide level
- Simplified setup by reducing IGMP complexity into simple role assignment

Maintenance Requirements

Maintaining WiFi Service Quality

- Use Wireless Health to analyze wireless performance using simplified graphs and visual indicators
- WiFi Aid organizes issue tracking by breaking down issues into specific causes

Maintaining IPTV Service Quality

- IPTV Reporting gathers analytic data of each viewers to discover which type of content are trending

Nebula Solutions for Target Applications

EDUCATION

K-12 High School

▶ WiFi Requirements

WiFi Dedicated for Student Tablets

- Select Dynamic Personal PSK (DPPSK) with MAC Authentication as the WiFi security option
- DPPSK ensures that each student's private data is secure from outsiders but traceable by network administrator
- MAC Authentication ensures that only the school provided hardware have access to school resources

Stable Classroom Connection

- Avoid wireless congestion from dense wireless clients in classrooms by deploying APs in clusters with Load Balance enabled
- Load Balance supports Smart Classroom mode that ensures smooth distribution of student devices in each classrooms

Secure Access for Faculty Members

- Encrypt and secure wireless traffic with WPA3-Enterprise
- Authenticate faculty members with a personal account and password using Nebula Cloud Authentication Server

▶ Backbone Requirements
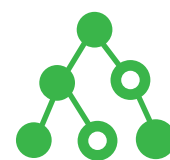
Robust Network Design

- Implement high availability and high bandwidth with Hardware Stacking and Link Aggregation
- Hardware Stacking allows full utilization of switch ports in ring topologies during normal conditions
- Link Aggregation allows traffic to cross between switches even when a physical link goes down
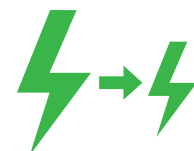
Reduce Power Consumption

- Automatically Power-down connected Access Points during weekends with PoE Schedules to reduce electric bills

Cover Various IP Camera Requirements

- Deploy GS1350 Series Switch for complete Surveillance Solution
- Reboot malfunctioning cameras to recover system stability with Auto PD Recovery
- Power-on cameras located outside campus with PoE Extended Range
- Avoid cameras from rebooting when switch undergoes critical software update with Continuous PoE

Security Requirements

Implement Parental Control

• Prevent access to child-inappropriate content using Content Filter with Parental Control template

Remote Access to Private Resources

• Use Remote Access VPN to provide faculty members or network administrators access to school resources from anywhere
• Install and Run SecuExtender VPN Client on client device to connect with Firewall

Building-to-Building Connection

• Use Nebula VPN to connect multiple buildings or site into the main building containing student records

Maintenance Requirements

Maintaining WiFi Service Quality

• Use Wireless Health to analyze wireless performance using simplified graphs and visual indicators
• WiFi Aid organizes issue tracking by breaking down issues into specific causes

Maintaining Surveillance Operations

• View Surveillance monitor page for unique port information essential for IP camera maintenance

Nebula Solutions for Target Applications

MSP

Managed Service Provider

▶ Deployment Requirements
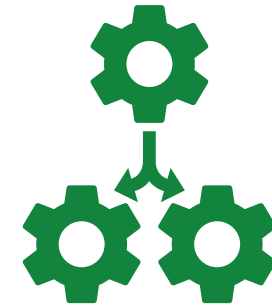
Decrease Labor Time

- Make use of Site Clone, Configuration Management, and Configuration Template to replicate successful network settings on similar types of clients/chain stores

  - Site Clone to copy settings for brand new sites
  - Configuration Management to copy settings for existing sites
  - Configuration Template to actively copy any changes to brand new or existing sites

Wide Range of Administrative Roles

- Meet customer requirements by providing their accounts with the right administrative roles

  - **FULL** - Full access to all site-wide settings and monitoring
  - **MONITOR-ONLY** - Access to all site-wide monitor pages
  - **READ-ONLY** - Full access with no option to change settings
  - **INSTALLERS** - Access to only device status and registration
  - **GUEST AMBASSADOR** - Access to voucher and cloud authentication

▶ Customer Relation Requirement

Brand Recognition

- Use MSP Branding to increase company visibility for end-customers visiting the platform

  - Place company logo at site dashboard for end-customers visiting the platform
  - Customize support request page to direct end-customers to company support channels

Maintenance Requirements
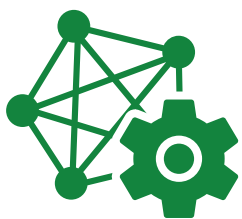
Site-to-Site VPN Management

- VPN Orchestrator allows full setup and monitoring of your VPN connections

    - Establish multiple VPN connections between customer chain stores with no prior documentations required
   - Monitor changes or failures between site locations within a single page

Notification to Service Failures

- Take advantage of Site-wide Alerts to proactively respond to system failures or security concerns even before the customer has reported any issues

    ALERTS
    - Device offline
    - WiFi Aid failures
    - Link failures
    - DHCP Pool limit exceeded
    - VPN failures
    - Changes to WAN status
    - Unauthorized configuration changes
    - CDR
    - Threats by Security Services
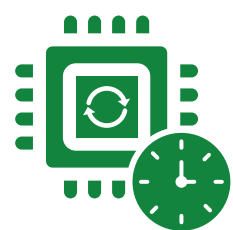
Automatic Software Maintenance

- Use various tiers of Firmware Management to strategize software maintenance schedule and avoid system downtime on customer's critical business hour

    TIERS OF FIRMWARE MANAGEMENT
    - Site-wide Firmware Management
    - Org-wide Firmware Management
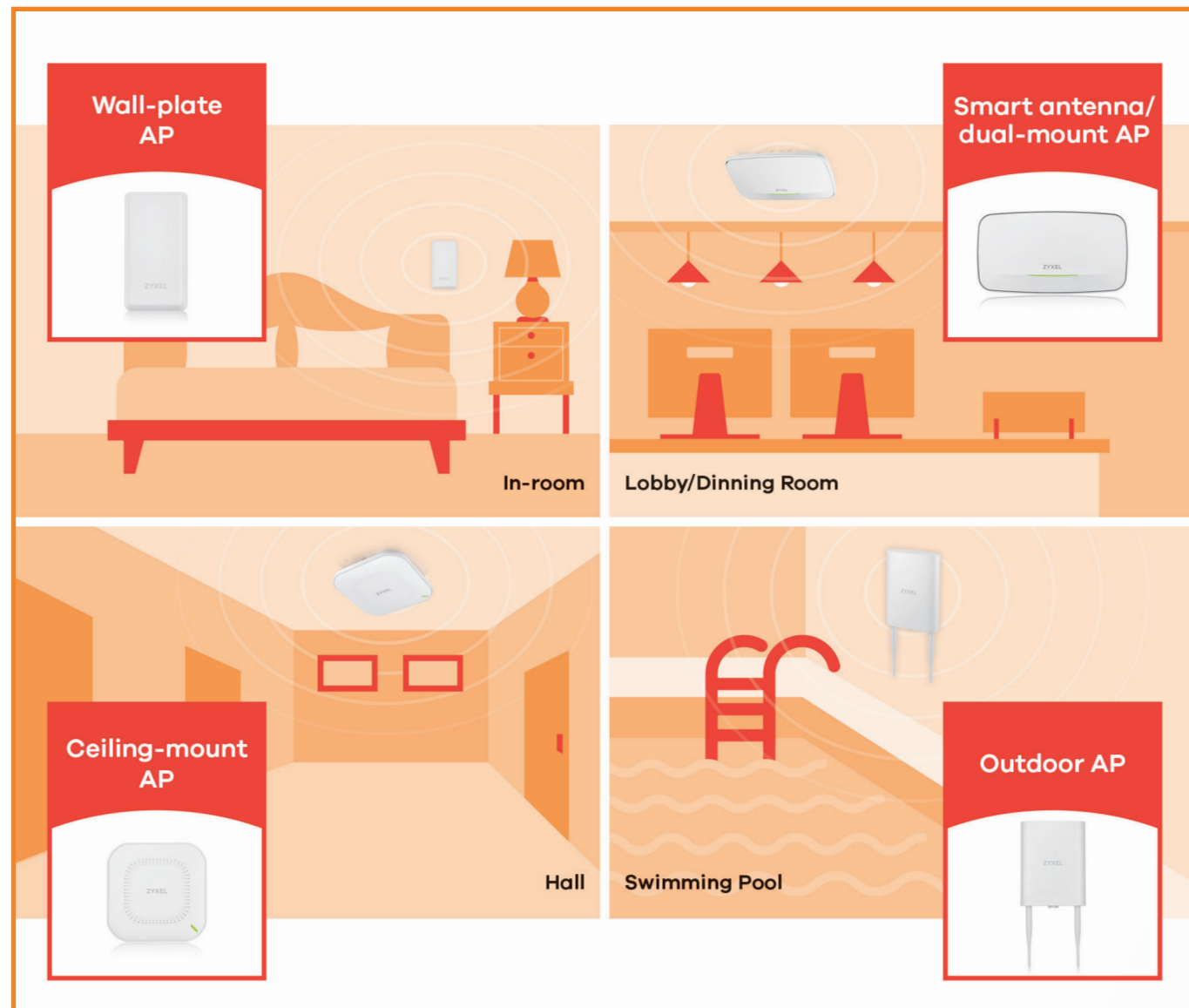   - MSP-wide Firmware Upgrades

Customer Network Documentation

- Instantly familiarize with each customer's unique network by reviewing Site-wide Topology
- Review and resolve long-term patterns of outages or sub-optimal performance with NCC's 1-year Log Retention

HOSPITALITY Solution Guide

Choose the Right WiFi Solution for Your Business

Wall-plate AP — In-room

Smart antenna/ dual-mount AP — Lobby/Dinning Room

Ceiling-mount AP — Hall

Outdoor AP — Swimming Pool

Hotspot WiFi Onboarding Solution

Features	Description
Click to continue with captive portal	Provides a simple captive portal to agree with the WiFi terms of use
Nebula Cloud authentication with captive portal	Provides Nebula's built-in authentication with captive portal
Radius server with captive portal	Integrates with third-party AAA service provider for captive portal with RADIUS authentication
Facebook Login	Allows the authentication of users to wireless network by using Facebook accounts to login
Voucher	Allows the authentication of users to the wireless network by signing in with voucher code
DPPSK (Dynamic Personal Pre-Shared Key)	Allows the authentication of users with an individual unique key to the wireless network, as well as allowing the use of DPPSK as 2-Factor Auth. for IoT devices by email

• High Capacity, High Speed Guest network access
* Tailor made network for Smart TV / IPTV
* Mobile POS Connectivity Solution
* Small Boutique or Large Resort, the Solution is Scalable

Deployed hospitality solutions in

6,720+ hotels
253,000 rooms

Zyxel worldwide achievement for hospitality in 2014-2022

WiFi Most Important in Customer Satisfaction

WiFi **75%**

Discount **70** %

Free Parking **65** %

Travelers' top 3 most desired amenities. (Source from Merrill Research verified by an Expedia survey)

Small to Medium Venues
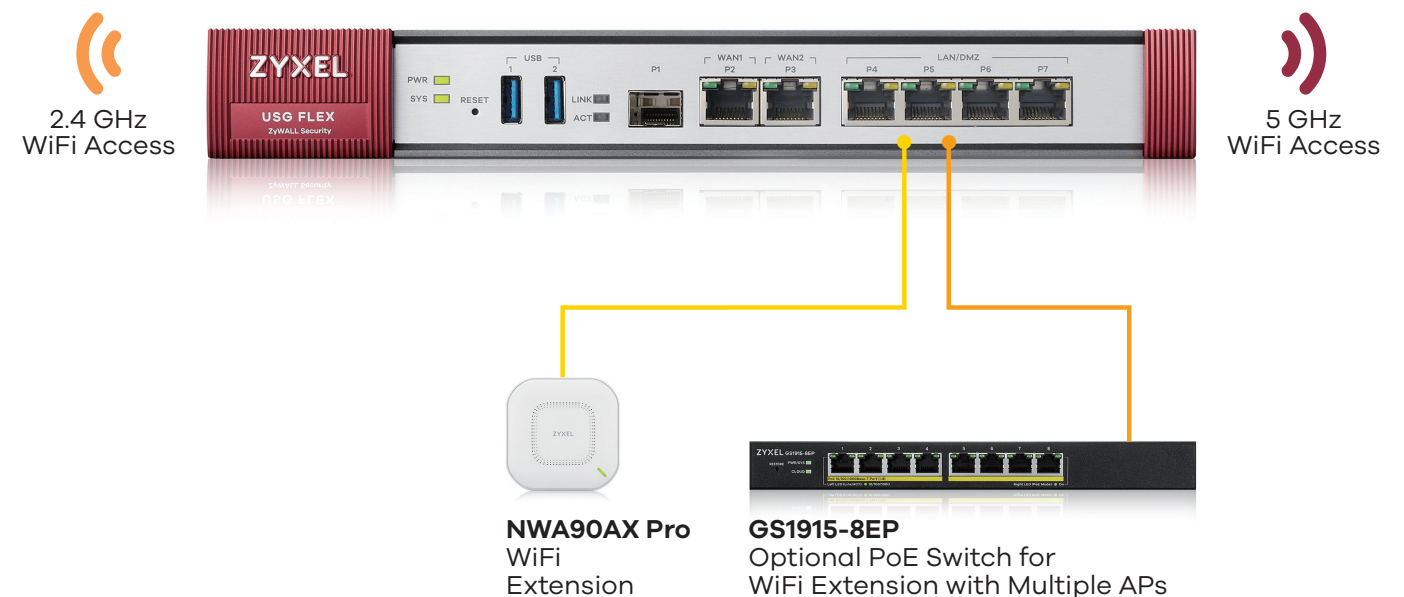## Cafes, Bistros, Clinics

Features & Benefits

Features	• Integrated server with registration and login • Facebook login • Connect & Protect (CNP) AP security service to protect small business WiFi (supported by Nebula-managed access point)	• Concurrent 2.4 GHz & 5 GHz WiFi connectivity • Integrate WLAN controller function to manage multiple APs • Zyxel Nebula features like WiFi Aid and Wireless Health help solve connection issues and optimize the wireless network before the problem arises
Benefits for hospitality	• Easy to deploy WLAN hotspot • Stay ahead of threats with Collaborative Detection & Response (CDR) • Blocks unsafe contents and brings application visibility with throttling to streamline connectivity (CNP	• Concurrent 2.4 GHz & 5 GHz WiFi connectivity • Integrate WLAN controller function to manage multiple APs • Zyxel Nebula features like WiFi Aid and Wireless Health help solve connection issues and optimize the wireless network before the problem arises
Benefits for hotel guest	• Surf on the Internet anytime and anywhere without interruption • Easy to register	• Peace of mind security WiFi experience • Support VPN for business guests

Application Scenario

All-in-one UTM Firewall **USG FLEX 200**

• Robust Internet service plus Firewall
• Data retention compliance

2.4 GHz WiFi Access

5 GHz WiFi Access

NWA90AX Pro
WiFi Extension

GS1915-8EP
Optional PoE Switch for WiFi Extension with Multiple APs

Small to Medium Venues
Hotels with Fewer than 100 Rooms

Features & Benefits

Features
- Dual-optimized antenna technology
- Managed AP scalability
- Excellent IPTV application support with rich multimedia features
- Zyxel Nebula features like WiFi Aid and Wireless Health help solve connection issues and optimize the wireless network before the problem arises
- QoS upgraded by rich VLAN and multicast functions
- L3 switch features dynamic routing to simplify cross-subnet communications
- Full, deep network protection

Benefits for hospitality
- "Dual-optimized" antenna simplifies WiFi planning because it adapts to both wall- and ceiling-mount installations
- Effective WiFi management features enable proactive WLAN optimization and troubleshooting, even before the problem arises
- Resiliency and availability for non-stop business continuity
- Enhances Internet safety by using firewall

Benefits for hotel guest
- Surf on the Internet with ease and security
- Anytime and anywhere WiFi connectivity
- Stay ahead of threats with Collaborative Detection & Response (CDR)
- Determine the usage time by requirement
- Support VPN for business guests
- Supports Hospitality features including Hotspot and concurrent device upgrade

Application Scenario

Internet

USG FLEX 500
USG FLEX Firewall

XGS4600-32F
L3 Aggregation Fiber Switch with 10G Uplink

NVR
Multicast VLAN

Monitor 1
Multicast VLAN

Monitor 2
Multicast VLAN

Monitoring & Control Center

GS2220-8HP
L2+ PoE Switch

GS2220-28HP
L2+ PoE Switch

GS2220-50HP
L2+ PoE Switch

Lobby

IP Cam 1
Multicast VLAN

WAX510D
AX1800 (WiFi 6) Dual-Radio Unified Access Point with Dual-Optimized Antenna

Meeting Room

WAX510D
AX1800 (WiFi 6) Dual-Radio Unified Access Point with Dual-Optimized Antenna

VoIP Phone

Guest Rooms

WAX300H
AX3000 (WiFi 6) Dual-Radio Wall-Plate Unified Access Point

Hallway

WAX510D
AX1800 (WiFi 6) Dual-Radio Unified Access Point with Dual-Optimized Antenna

IPTV Guest Rooms

IP Cam 2 IP Cam 3 IP Cam 4 IP Cam 5 IP Cam 6 Hallways

1G Fiber
1G
1G PoE

Medium to Large Venues

Features & Benefits

Features

- Concurrent 2.4 GHz, 5 GHz, and/or 6 GHz WiFi connectivity
- Zyxel Nebula features like WiFi Aid and Wireless Health help solve connection issues and optimize the wireless network before the problem arises
- Smart antenna technology
- Managed AP scalability

- Excellent IPTV application support with rich multimedia features
- QoS upgraded by rich VLAN and multicast functions
- Layer 3 feature set equipped with static, policy route and VRRP
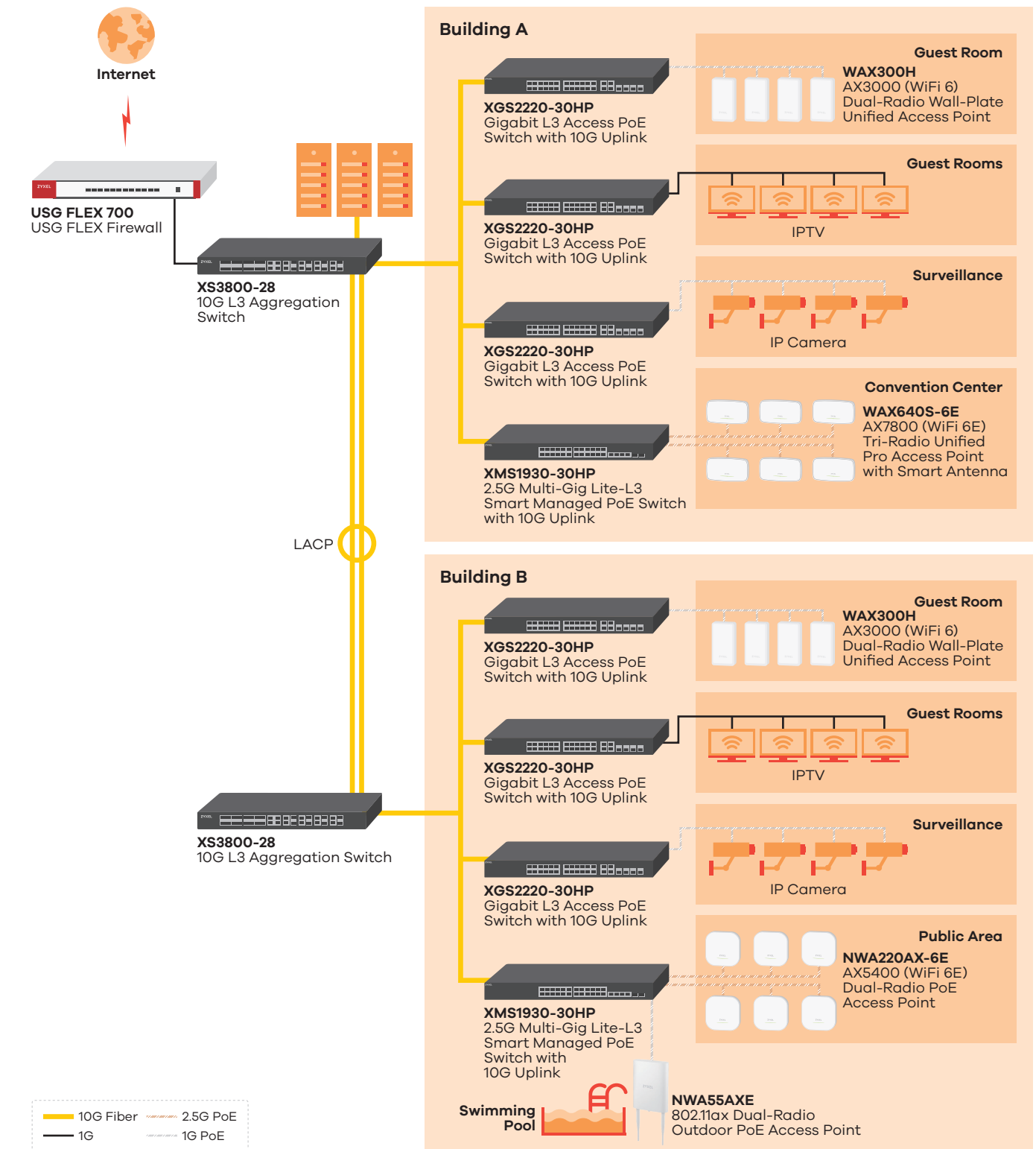- Full, deep network protection

Benefits for hospitality

- BandFlex radio supports either 5 GHz or 6 GHz by configuration, making it the budget-friendly choice for 6E upgrade
- Smart antenna delivers best signal in interference-laden environments
- Effective WiFi management features enable proactive WLAN optimization and troubleshooting, even before the problem arises

- Wall-plate AP integrates PoE and phone connectivity in a box to fit guest room application requirements
- Deal with high-bandwidth network easily by 10-gigabit aggregation
- Firewall can prevent from external and internal threats to ensure safe Internet of hotel

Benefits for hotel guest

- Surf on the Internet with ease and security
- Anytime and anywhere WiFi connectivity
- Stay ahead of threats with Collaborative Detection & Response (CDR)

- Determine the usage time by requirement
- Support VPN for business guests
- Supports Hospitality features including Hotspot and concurrent device upgrade

Application Scenario

Internet

USG FLEX 700
USG FLEX Firewall

XS3800-28
10G L3 Aggregation Switch

LACP

XS3800-28
10G L3 Aggregation Switch

Building A

XGS2220-30HP
Gigabit L3 Access PoE Switch with 10G Uplink

XGS2220-30HP
Gigabit L3 Access PoE Switch with 10G Uplink

XGS2220-30HP
Gigabit L3 Access PoE Switch with 10G Uplink

XMS1930-30HP
2.5G Multi-Gig Lite-L3 Smart Managed PoE Switch with 10G Uplink

Guest Room
WAX300H
AX3000 (WiFi 6) Dual-Radio Wall-Plate Unified Access Point

Guest Rooms
IPTV

Surveillance
IP Camera

Convention Center
WAX640S-6E
AX7800 (WiFi 6E) Tri-Radio Unified Pro Access Point with Smart Antenna

Building B

XGS2220-30HP
Gigabit L3 Access PoE Switch with 10G Uplink

XGS2220-30HP
Gigabit L3 Access PoE Switch with 10G Uplink

XGS2220-30HP
Gigabit L3 Access PoE Switch with 10G Uplink

XMS1930-30HP
2.5G Multi-Gig Lite-L3 Smart Managed PoE Switch with 10G Uplink

Guest Room
WAX300H
AX3000 (WiFi 6) Dual-Radio Wall-Plate Unified Access Point

Guest Rooms
IPTV

Surveillance
IP Camera

Public Area
NWA220AX-6E
AX5400 (WiFi 6E) Dual-Radio PoE Access Point

Swimming Pool

NWA55AXE
802.11ax Dual-Radio Outdoor PoE Access Point

10G Fiber	2.5G PoE
1G	1G PoE

Point of Sale Networking Solution Guide

For Coffee Shops, Restaurants, Bars, and Small Retail Stores

Secure Small Business WiFi Router
Model: SCR 50AXE

WiFi Access Point
Model: NWA90AX Pro

Secure Small Business WiFi Router

- Ideal for coffee shops, small restaurants, small retail stores
- Fast tri-band WiFi 6 AX5400
- Recommended for up to 25 users
- Expandable WiFi coverage, if needed, with add-on WiFi access points
- Separate guest WiFi network for customers
- 4 gigabit ethernet LAN ports for connecting terminals/cash registers or any device with an ethernet port
- Small business security features:
  - Ransomware & malware protection
  - Dark web & intrusion blockers
  - Anti-phishing
  - Website block and allow lists
  - Country restriction
- Manage remotely from anywhere with the Secure Nebula App
  - Change WiFi login password
  - Change security settings
- Product Lifetime Warranty* with US-based support during business hours

Effective WiFi Coverage Expansion

- Expand WiFi coverage of the WiFi router if needed by cabling-in one or two of these WiFi 6 AX3000 access points
- Plugs into an ethernet port on the Business WiFi Router or a separate network switch, using a standard ethernet cable (sold separately at a length to suit your needs)
- Can be powered in multiple ways:
  - Included power adapter
  - Power over Ethernet from a network switch (sold separately) (e.g. switch model GS1915-8EP by Zyxel Networks - 20.5W power draw)
  - Power over Ethernet from a power injector (sold separately) (e.g. power injector model PoE12-30W by Zyxel Networks - 20.5W power draw)
- Integrates into the same WiFi network as the WiFi router and is managed from the same secure Nebula app
- 2-year product warranty with US-based support during business hours

**Ethernet Cable Power Injector
for WiFi Access Points**
Model: PoE12-30W

Smart Managed PoE Switch
Model: GS1915-8EP

Power over Ethernet Injector

• Convenient way to power a WiFi access point over an ethernet data cable.
• Delivers up to 30W of Power over Ethernet
• Sits between the WiFi router and one WiFi access point
• Product Lifetime Warranty* with US-based support during business hours

Network Ethernet Port Expansion with a Gigabit Switch

• 8-port gigabit ethernet switch
• One gigabit ethernet port on the switch connects to a gigabit port on the WiFi router
• Increase the number of available gigabit ethernet ports on the WiFi router from 4 to 10
• Can power up to 2 WiFi access points (model NWA90AX Pro) - 60W Power over Ethernet budget
• Can be managed from the same secure Nebula app as the WiFi router and the WiFi access point
• Product Lifetime Warranty* with US-based support during business hours

Examples of Use

1 Network requiring only a WiFi router

2 Network with a WiFi router and an added WiFi access point to extend WiFi coverage

3 Larger network with a WiFi router, a gigabit switch, and multiple WiFi access points to extend WiFi coverage

Internet — WiFi Router — Terminal/Cash Register

Internet — WiFi Router — Power Injector — Terminal/Cash Register — Terminal/Cash Register — WiFi Access Point

Internet — WiFi Router — Gigabit Switch — WiFi Access Point — Terminal/Cash Register — Terminal/Cash Register — WiFi Access Point

*Product Lifetime Warranty - product warranty lasts for 5 years after the product has been discontinued.

IP SURVEILLANCE Solution Guide

Key of the Surveillance: PoE Switches

Following the increased development of IP camera technology, PoE switches have played an essential role in surveillance deployments. Current PoE switches' design on the market are too generic to keep up with the needs of modern surveillance installation. Zyxel, an industry leader in switch design and production, offers PoE switches designed specifically for surveillance applications.


Worry-free PoE Power Budget

Most CCTV installers have no idea how much power their cameras are consuming, larger PoE power budget brings a worry-free installation experience. It is capable of powering up multiple IP cameras, even when all ports are connected. The PoE LED indicator is the standard feature of Zyxel's PoE switches for an instant view of the PoE usage.
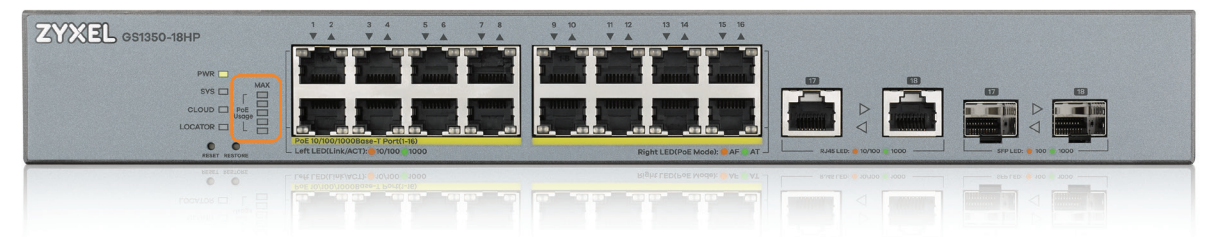
Uplink Ports

In surveillance installation, it's normal for one or two ports on PoE switch required to connect to Camera Management System (CMS), storage, or other switches. Our surveillance switches are equipped with additional uplink ports fulfilling the need for cascaded surveillance networks without occupying ports for IP cameras.
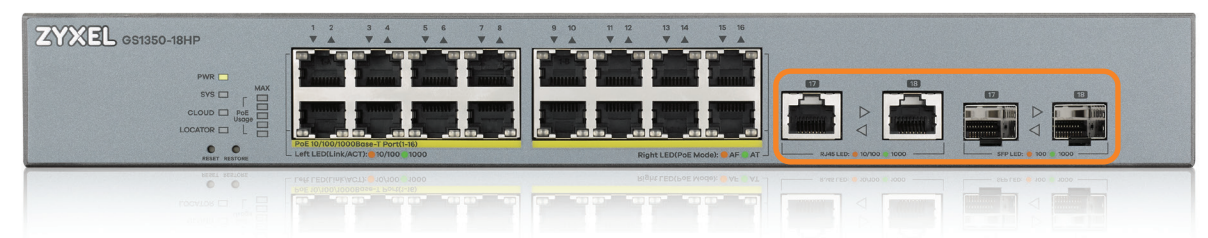
Go Farther than 100 Meters

How Zyxel Differentiates from Others

Long Distance Performance

Usually the max range of one Ethernet cable is 100 meters, making it common that there'll be one or two cameras out of this range in an CCTV installation and users require additional PoE switch or extension hardware to extend power and data over 100 meters, this adds up cost and time to the deployment.

The surveillance switch breaks through the 100-meter limitation with an extended range mode that achieves a remarkable 250 meters of transmission distance. No additional switches required, saving your time, effort, and money!

Specialized Hardware

- Selected Power Supply
- Stabilized Power
- Isolated Circuit Design
- Patented Ethernet Protection
- Intelligent System Monitoring

250M

Additional PoE switch

Standard mode

Extended range mode

> " When questioned about the impact of the new network on the customer experience, the most desirable outcome is that we receive no complaints or negative reports, which means we have effectively resolved any connection issues.
>
> **- Dario de Vincentiis CEO, Extratel srl**
> CEO, Extratel srl

Tailor Made Software

Auto Camera Recovery

IP cameras might experience an unexpected shutdown or disconnection due to the high-level of risks associated with the network attacks and probing. Once the IP camera goes offline, the only way to recover and bring it back to the normal state is to send a service engineer for onsite attention and troubleshooting. We feel your pain. Say goodbye to irritating downtime for onsite repairs and hello to auto-recovery!

Zyxel Surveillance Switch GS1350 Series features Auto Camera Recovery capability and is able to intelligently detect problems and automatically recover from IP camera malfunction, which not only reduces truck rolls, but also shortens the recovery time significantly. This feature supports both LLDP and PING modes to detect and reboot remotely for all IP camera brands.

Continuous PoE

It is quite common that PoE switches will stop supplying power to IP cameras temporarily during firmware upgrade, rebooting or configuration update takes time for IP cameras to go live again until the power supply is back on during the system maintenance. That's the major reason why many surveillance network devices still stay on outdated firmware, there is little to zero tolerance for shutting down the system for service upgrade.

Zyxel Surveillance Switch GS1350 Series features unprecedented Continuous PoE capability, which ensures non-stop power supply to IP cameras while the switch is undergoing firmware upgrade or rebooting. This function not only significantly shortens the system recovery time, but also makes sure the surveillance network stays up-to-date for the highest possible stability and security.
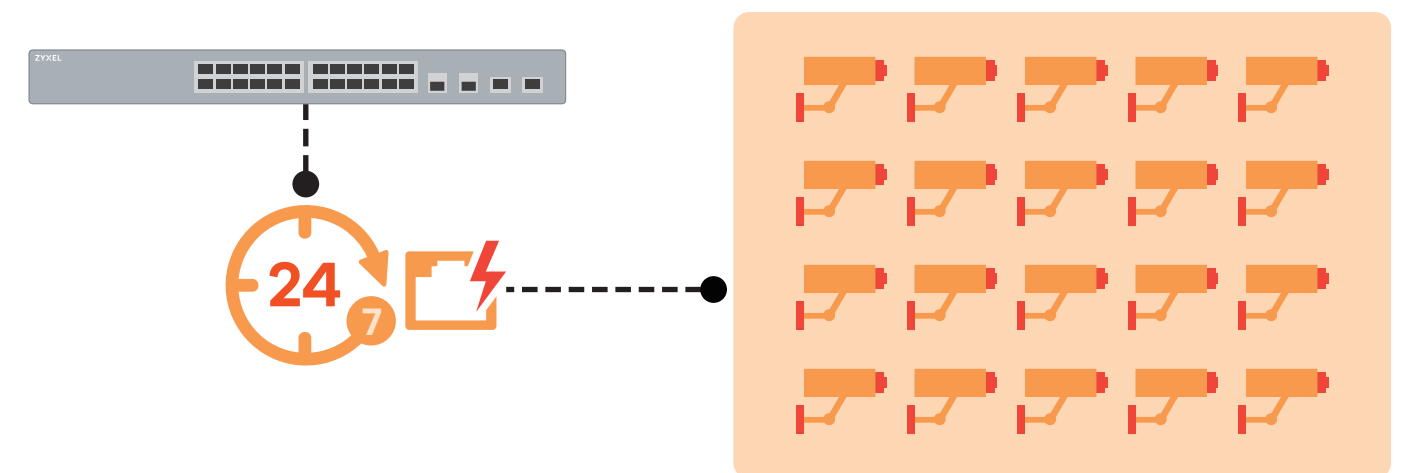
Supports All Brands of IP Camera

PING MODE
Detect the IP camera status by performing ping

LLDP MODE
Monitor LLDP packets from the IP camera

Professional Options

Total Port Count	6	12	18	26
Model				
	GS1350-6HP	GS1350-12HP	GS1350-18HP	GS1350-26HP
Type	Surveillance Managed/ NebulaFlex Pro	Surveillance Managed/ NebulaFlex Pro	Surveillance Managed/ NebulaFlex Pro	Surveillance Managed/ NebulaFlex Pro
PoE port	5	8	16	24
Uplink ports	1 SFP	2 SFP, 2 GbE	2 GbE Combo	2 GbE Combo
PoE power budget	60 W	130 W	250 W	375 W
Auto camera recovery	Yes	Yes	Yes	Yes
Continuous PoE	Yes	Yes	Yes	Yes
Extended range ports	5	8	16	24
802.3at PoE+	Yes, PoE++ (port 1-2)	Yes	Yes	Yes
Ethernet port surge protection	4 KV	4 KV	4 KV	4 KV
Power supply surge protection (Line-GND/Line-Line)	4 KV/2 KV	4 KV/2 KV	4 KV/2 KV	4 KV/2 KV
Ethernet port ESD protection (air/contact)	15 KV/8 KV	15 KV/8 KV	15 KV/8 KV	15 KV/8 KV

SUCCESS STORY
Tachi Palace Hotel

California's Tachi Palace Hotel Enhances WiFi Connectivity and Guest Satisfaction with Zyxel's Intelligent Cloud Service

View Video
Case Study

Discover More
Case Studies

Background

Located in the heart of central California's San Joaquin Valley, Tachi Palace Hotel & Casino is a sprawling resort that provides high-quality accommodations via 255 guest rooms ranging in size from 450 square feet for the standard rooms up to 1,400 square feet for the VIP suites. The property also includes a 140,000 square foot casino, 6,000 square feet of meeting space, convention facilities, and five restaurants.

Challenges

According to James Sarmiento, Operations Manager at Tachi Palace Hotel & Casino, the unreliable WiFi connectivity throughout the hotel had a negative impact on both guests and staff members. "On nights when the hotel was packed, we experienced issue after issue with guests complaining that they couldn't get onto our network. Guests expect to be able to connect to a strong WiFi so when we weren't able to provide reliable connectivity, it made our guests feel that our services weren't up to par; that we weren't living up to their expectations." To compensate their guests for the lack of WiFi, the hotel staff would offer guests free beverages or meals or would provide room discounts. Sarmiento stated that the financial impact of continuously having to provide compensation to guests due to the WiFi issues negatively impacted other critical investments that needed to be made to the property. "The WiFi was so weak that our hotel staff were restricted from using the network so that we could reserve every single bit of bandwidth and connectivity for the guests."

Solutions & Benefits

- NWA1302-AC 802.11ac Wall-Plate PoE Access Points
- GS1920-24v2 24-Port GbE Smart Managed Switch
- XGS4600-32F 28-port GbE L3 Managed Fiber Switch with 4 SFP+ Uplinks
- ZyWALL VPN300 VPN Firewall

"Using Zyxel Nebula draws another whole set of operational and cost efficiencies along with it. The ability to manage the network remotely means we don't have to have people on site and Tachi Palace doesn't have to send technicians to guests' rooms to actually physically touch devices to resolve issues," explained Dominic Locascio, President, Americas at InnSpire. He also explained that the ability to add and register access points to the network by simply scanning a QR code on the device eliminates the need to have technical expertise on-site making it simple to scale the network as needed to provide a better guest experience.

Locascio added that the deployment of the Zyxel Nebula system not only gave Tachi Palace a much more stable wireless network that worked much better for their guests, but it gave them extensibility into their confer-ence spaces.

Moreover, Sarmiento said gratefully that the fast, stable network opens up the possibility for new technology upgrades at the hotel. "The new network is so good that we're now looking into making our rooms smart rooms by adding technology such as automatic smart drapes and smart lights, things that would have been impossible with our old network."

SUCCESS STORY
Battleship Iowa

Zyxel Provides Fast, Reliable, Remotely-managed Network to Bring Historic Battleship into Digital Era

View Video Case Study

Discover More Case Studies

Background

Following the increased development of IP camera technology, PoE switches have played an essential role in surveillance deployments. Current PoE switches' design on the market are too generic to keep up with the needs of modern surveillance installation. Zyxel, an industry leader in switch design and production, offers PoE switches designed specifically for surveillance applications.

Challenges

"When you're trying to figure out how to deploy a wireless network aboard a 1943 battleship, you have to take into account the armored and steel structure," explained Jonathan Williams, president and CEO of Battleship IOWA Museum. "It is difficult to implement innovative technologies on a platform that is as compartmentalized as this battleship. Our office spaces, museum displays, ticketing software, ship store, donor and volunteer management software are all run through the network and in the cloud."

According to David Canfield, VP and Chief Information Officer for Battleship IOWA Museum, "It is difficult to run cable through armored bulkheads. It is difficult to drop a modern network into an older ship. This is a steel box, so wireless is challenging. This is probably the most challenging network environment you will ever encounter."

Solutions & Benefits

- **WAX650S 802.11ax (WiFi 6) Dual-Radio Unified Pro Access Points**
- **XS1930-12HP 8-Port Multi-Gigabit Smart Managed PoE Switch**
- **USG FLEX 700 Firewall**

"This was my first experience with WiFi 6 and Zyxel's APs performed a lot better than I expected," said Troy Vail, Innovation and Technology Manager. The Zyxel WAX650S features Smart Antenna technology which continually monitors and optimizes the connection with every client device to maximize performance and reliability even in challenging environments. "In areas that are separated by two to three inches of thick steel, I was able to get excellent speeds of between 100 to 200 Mbps throughput on the other side of what would effectively be six inches of steel plating and at over 200 feet away from the access point."

Providing secure remote access to the network was easily solved using Zyxel's Secure WiFi Service. Canfield remarked, "The ability to simply pre-program that device, send it to the remote office, and have them plug in and connect with no other interaction is really amazing!"

Zyxel's Nebula Cloud Management Solution was deployed to enable Canfield and Vail to monitor and manage the network via the cloud from anywhere at anytime. "Using Zyxel Nebula, we've reduced the difficulty of managing the large population of APs, and with the Zyxel WiFi 6 APs, we've increased reliability to the point that we no longer have to tell our users don't trust the WiFi," Canfield stated.

SUCCESS STORY
SpringBrook Assisted Living

Zyxel Nebula Improves Network Connectivity and Reliability, Streamlines Patient Care in Assisted Living Facility

View Video
Case Study

Discover More
Case Studies

Background

Established in 2006, SpringBrook Assisted Living offers a full continuum of 24-hour care to its residents. Apartment homes, assisted living residences, memory care, and advanced age studios are provided. Their two facilities, SpringBrook Community of Onalaska in Wisconsin and Spring-Brook Village of La Crescent in Minnesota, provide their residents with a full assortment of on-site amenities including lounges, dining rooms, fitness centers, activity rooms, theaters/chapels, therapy pools, and salons.

Challenges

According to Lisa Kulas, director of SpringBrook Village of La Crescent, the facility has about 50 staff members to support the residents living in the facility's 11 independent living, 25 assisted living, and 44 memory care apartments. She explained that the wire-less network is critical in supporting the various electronic charting, communica-tion, and security systems employed by the facility. "If we didn't have [a reliable network], we wouldn't be able to successfully run our building here," she stated.

DigitalBay General Manager, Brenton Twite, explained that the SpringBrook facility in Onalaska had major issues with their local network. "The WiFi was going down every day," he said. "The local IT company would have to connect in and reset the access points every day. It was a big issue and it's not normal for a company to have to do that."

Solutions & Benefits

- **NAP203 802.11ac Dual-Radio, Dual-Optimized Antenna 3x3 Nebula Cloud Managed Access Point**
- **GS2210 The Zyxel Gigabit Switch 2200 Series**

Brenton said they replaced the access points at the Onalaska facility with Zyxel Nebula access points.

"It's been night and day compared to the other products we've used in the past," Brenton explained. "Once we installed the Nebula access points, the entire network changed. They had connectivity throughout the building. They no longer had to reset the access points every day. In fact, we haven't had any calls about the WiFi since we installed the Nebula access points."

Alex Twite, operations manager for DigitalBay, stated, "Deploying the APs is super seamless and simple. You simply scan the QR code and then install it. I love the way that Zyxel really has made it quick and easy to deploy the Nebula system."

The Zyxel Nebula Network Management Solution, which includes a portfolio of high-performance 802.11ac indoor and outdoor wireless access points, security gateways, and managed Gigabit Ethernet Switches, enables service providers to easily monitor and manage multiple networks from anywhere via the Cloud.

According to Brenton Twite, the ability to centrally manage the Nebula solution from their office saves both time and money.

NOTES

ZYXEL
NETWORKS

ZYXEL
NETWORKS

ZYXEL

NETWORKS