ZYXEL
NETWORKS

Simplify and Strengthen Your Security

Security Solution Guide

Simplify and strengthen your security
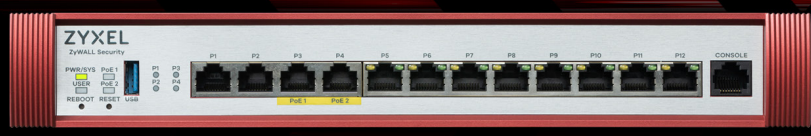
How safe is your network?

In today's digital landscape, cyber threats are evolving at an alarming rate. With over 8 billion data breaches reported in 2023* alone, the need for robust network security has never been more critical. Cybercriminals continuously refine their tactics, targeting vulnerabilities in both traditional IT infrastructure and cloud-based systems. The surge in remote work and increased reliance on digital services have exposed businesses of all sizes to unprecedented risks. Small and medium-sized businesses (SMBs) are particularly vulnerable, often lacking the resources to effectively counter these sophisticated threats. It's crucial to implement a security solution that not only addresses current risks but also adapts to emerging threats efficiently and cost-effectively.

*Source: https://www.itgovernance.co.uk/blog/list-of-data-breaches-and-cyber-attacks-in-2023

Effective and scalable protection

Zyxel believes it's really important to make protecting the network as simple as possible, and it's why we've been developing a new range of unified security gateways that provide all the protection that small businesses need, without the complexity. By deploying one of our firewall appliances at the bridge between your network and the internet, you can safeguard against threats such as viruses and ID theft, repel spam emails, and apply simple rules that will govern what sort of content can be sent across the connection. The new USG LITE 60AX gives you firewall protection and automatic security for your whole setup without the need for a licensing fee.

USG FLEX H
Secure. Fast. Protection.

Find the ideal appliance for your business

Users	Ultimate H USG FLEX H	Ultimate ATP	Flexibility USG FLEX	Effortless USG LITE
Up to 500	USG FLEX 700H	ATP800		
Up to 350		ATP700	USG FLEX 700	
Up to 150	USG FLEX 500H	ATP500	USG FLEX 500	
Up to 50	USG FLEX 200H USG FLEX 200HP	ATP200	USG FLEX 200	
Up to 20	USG FLEX 100H USG FLEX 100HP	ATP100	USG FLEX 100 USG FLEX 100AX	
Up to 10			USG FLEX 50 USG FLEX 50AX	
Up to 5				USG LITE 60AX SCR 50AXE

Zyxel security solutions

USG FLEX H Firewalls

The high-performance USG FLEX H series provides 3x firewall/UTM/VPN throughput and PoE+ interfaces to prepare for the multi-G era. It offers multi-layered protection against cyber threats through Zyxel AI cloud and extends the same security to remote networks with enhanced SecuExtender. Get enterprise-grade security at lightning speed for your small or mid-sized business.

USG FLEX Firewalls

The USG FLEX series provides cloud-based management and collaborative protection for small and mid-sized businesses. It offers powerful UTM performance with automatic responses to expand protection from firewalls to access points, all while minimizing computing power usage.

ATP Firewalls

The ZyWALL ATP Firewall Series is empowered with smart cloud intelligence giving seamless protection against all those Advanced Persistent Threats, achieving ultimate in-depth defense of future unknown attacks.

Security Router

The USG LITE series is a secure cloud-managed router that offers business-class firewall, VPN gateway, blazingly fast WiFi, and built-in security to safeguard against ransomware and other threats. It's a perfect solution for teleworkers or small businesses/offices looking for easy-to-manage and subscription-free network security.

Security services and licenses

Find the perfect licensing option for your security devices with our flexible options tailored to meet your business needs. Our security licenses cover a range of solutions, including security, connectivity, management, reporting, and vertical-specific licenses. With our expert guidance and support, you can rest assured that your business is fully protected from all potential security threats, now and in the future.

Security services and licenses

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

Services	Key Features
Vertical Solutions	
Managed AP Service	• Integrated AP controller as central management to provide flexible deployment options • AP auto discovery and provisioning • AP forwarding compatibility
Device High Availability Pro	• Device failure detection and notification • Configuration auto-sync and link monitoring • Smart handover through dedicated Heartbeat Link • NAT/Firewall/VPN Sessions synchronization
VPN Client Software	
SecuExtender VPN Client	• Providing solutions of both SSL VPN and IPSec VPN remote access • Enhanced layered security incorporating Zyxel security appliances • Easy and intelligent installation
Network Premium	
Single Sign-On	• Simplified single sign in to multiple resources • Improved user experience without repetitive logging in between various web browsers • Login mechanism works with any protocol, not just HTTP
Management & Reporting	
Cloud CNM SecuReporter	• Multidimensional analytics on abnormal behaviors • Cloud-based real-time monitoring and alerts • Effective event correlation and user behavior analytics • Intuitive dashboard and customizable report

Pick a bundle.
No more hassle

License 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.

Pack	Firewall Series	Security — Licensed Service											Connectivity — Licensed Service					
		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
		Scan files at the gateway for viruses and other threats	Block access to malicious or risky web sites	Cloud-based sandbox technology against unknown threats	Block botnet infection and prevent drive-by download from infected websites via IP and URL detection	Deep-packet inspection against known attacks from network	Automatically categorize and manage the network application usage	Fast detection to block spam/phishing mail with malicious contents	Cloud-based security analytics and report with 30-day log retention	An easy-to-use tool to help business sync up security profiles across multiple networks	Automatically contain threats at the network edge	Real-time updated threat intelligence	Simplified single sign in to multiple resources	Secure tunnel and managed AP service	Various Network Access Control	Top up allowed number of connected clients	A full feature set of cloud configuration, deployment, monitoring and management	A new feature set includes the most frequently requested advanced features
Gold Security Pack	USG FLEX H*3	●	●	●	●	●	●	●	●	●	●		●	●			●*3	
	ATP	●	●	●	●	●	●	●	●	●	●		●	●			●	
	USG FLEX*2	●	●	●	●	●	●	●	●	●	●		●	●			●	
UTM Security Pack	USG FLEX*2	●	●			●	●	●	●	●	●		●	●*1	●*1	●*1	●*1	●*1
Content Filter Pack	USG FLEX 50(AX)	●							●	●			●				●*1	●*1
	USG20(W)-VPN	●							●	●			●				●*1	●*1
3-in-1 UTM Security Pack	USG	●	●						●									
2-in-1 Nebula Security Pack	NSG	●	●														●*1	●*1
Elite Pack	USG LITE SCR	●										●					●	

*1: Pack Purchasing Options:
• Secure WiFi
• Hospitality Pack incl. Hotspot Management and Concurrent Device Upgrade
• Nebula Professional Pack
• Nebula Plus Pack

*2: USG FLEX 50(AX) is not supported for Gold and UTM Security Pack

*3: 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.

Licensed service by model

Security

Compatible Security Appliances	Web Filtering/ Content Filtering	Application Patrol	Anti-Malware/Virus	IPS/IDP	Email Security/ Anti-Spam	Security Profile Sync	Collaborative Detection & Response	SecuReporter	Sandboxing	Reputation Filter	SecuExtender VPN Client
	Block access to malicious or risky web sites	Automatically categorize and manage the network application usage	Scan files at the gateway for viruses and other threats	Deep-packet inspection against known attacks from network	Fast detection to block spam/phishing mail with malicious contents	An easy-to-use tool to help business sync up security profiles across multiple networks	Automatically contain threats at the network edge	Cloud-based security analytics and report with 30-day log retention	Cloud-based sandbox technology against unknown threats	Block botnet infection and prevent drive-by download from infected websites via IP and URL detection	SSL VPN and IPSec VPN remote access tool
USG FLEX 100H/200H/500H/700H*	•	•	•	•	•			•	•	•	•
ATP100(W)/200	•	•	•	•	•	•	•	•	•	•	•
ATP500/700/800	•	•	•	•	•	•	•	•	•	•	•
USG FLEX 50(AX)	•					•		•			
USG FLEX 100(AX/W)	•	•	•	•	•	•	•	•	•	•	•
USG FLEX 200	•	•	•	•	•	•	•	•	•	•	•
USG FLEX 500/700	•	•	•	•	•	•	•	•	•	•	•
USG LITE 60AX	•	•									
SCR 50AXE	•	•									

*: 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.

Connectivity

Compatible Security Appliances	Secure WiFi	Network Premium	Hotspot Management	Concurrent Device Upgrade	Nebula Professional Pack	Nebula Plus Pack
	Secure tunnel and managed AP service	Simplified single sign in to multiple resources	Various Network Access Control	Top up allowed number of connected clients	A full feature set of cloud configuration, deployment, monitoring and management	A new feature set includes the most frequently requested advanced features
USG FLEX 100H/200H/500H/700H*					•	•
ATP100(W)/200	•	•			•	
ATP500/700/800	•	•			•	
USG FLEX 50(AX)		•			•	•
USG FLEX 100(AX/W)	•	•			•	•
USG FLEX 200	•	•	•		•	•
USG FLEX 500/700	•	•	•	•	•	•
USG LITE 60AX					•	
SCR 50AXE					•	

Default Support for Registered Devices

Compatible Security Appliances	Amazon VPC	Microsoft Azure	Managed AP Service	Two-Factor Authentication	Threat Management	Geo Enforcer	SSL (HTTPS) Inspection	Device Insight	Device High Availability Pro	Zyxel One Network	Nebula Base Pack
	Easy network integration with AWS	Easy network integration with Azure	AP auto discovery and provisioning	Add an extra layer of protection to mitigate the risk of credential leakage or brute force attack	Prevent ransomware, intrusion, exploit, dark web, ads, VPN proxy and mail fraud & phishing	Manage network traffic by mapping IP address to geographical regions	Unlock encrypted sessions, scan encrypted packets, find threats, and block them	Deploy agentless scanning of the network for discovery and classification of devices	Device failure detection and failover	A Unified installation tool for Zyxel switches, WLAN and gateways	License-free feature set with a rich set of management features
USG FLEX 100H/200H/500H/700H*				•		•	•	•			•
ATP100(W)/200	•	•	•	•		•	•	•		•	
ATP500/700/800	•	•	•	•		•	•	•	•	•	
USG FLEX 50(AX)	•	•				•				•	•
USG FLEX 100(AX/W)	•	•	•			•		•		•	•
USG FLEX 200	•	•	•			•		•		•	•
USG FLEX 500/700	•	•	•			•	•	•		•	•
USG LITE 60AX					•	•					
SCR 50AXE					•	•					

*: 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.

Specifications

ZyWALL USG FLEX H Firewalls

Model	USG FLEX 100H/100HP	USG FLEX 200H/200HP	USG FLEX 500H	USG FLEX 700H
Hardware Specifications				
Interface ports	100H: 8 x 1GbE Ethernet 100HP: 1 x PoE+ Ethernet (802.3at, 30W max.)	200H: 2 x 2.5GbE Ethernet 6 x 1GbE Ethernet 200HP: 1 x PoE+ Ethernet (802.3at, 30W max.)	2 x 2.5GbE Ethernet 2 x 2.5GbE/PoE Ethernet (802.3at, total 30 W) 8 x 1GbE Ethernet	2 x 2.5GbE Ethernet 2 x 10GbE/PoE Ethernet (802.3at, total 30 W) 8 x 1GbE Ethernet 2 x 10GbE SFP+
USB 3.0 ports	1	1	1	1
Console port	Yes (RJ-45)	Yes (RJ-45)	Yes (RJ-45)	Yes (RJ-45)
Rack-mountable	-	Yes	Yes	Yes
Fanless	Yes	Yes	-	-
System Capacity & Performance[1]				
SPI firewall throughput (Mbps)[2]	3,000	5,000	10,000	15,000
VPN throughput (Mbps)[3]	750	1,200	2,000	3,000
IPS throughput (Mbps)[4]	1,500	2,000	3,500	6,300
Anti-Malware throughput (Mbps)[4]	750	1,500	2,500	4,000
UTM throughput (Anti-Malware and IPS)[4]	750	1,500	2,500	4,000
Max. TCP concurrent sessions[5]	300,000	600,000	1,000,000	2,000,000
Max. concurrent IPsec VPN tunnels[6]	50	100	300	1,000
Recommended gateway-to-gateway IPsec VPN tunnels	20	50	150	300
Concurrent SSL VPN users	25	50	150	500
VLAN interface	16	32	64	128
Max. concurrent devices logins[7]	64	200	300	4,000
Security Services[8]				
Anti-Malware	Yes	Yes	Yes	Yes
IPS	Yes	Yes	Yes	Yes
Application Patrol	Yes	Yes	Yes	Yes
Web Filtering	Yes	Yes	Yes	Yes
Reputation Filter	Yes	Yes	Yes	Yes
SecuReporter	Yes	Yes	Yes	Yes
Sandboxing	Yes	Yes	Yes	Yes
Device Insight	Yes	Yes	Yes	Yes
Secure WiFi[9]	Yes	Yes	Yes	Yes
Key Features				
VPN	IKEv2, IPSec, SSL	KEv2, IPSec, SSL	KEv2, IPSec, SSL	KEv2, IPSec, SSL
SSL (HTTPS) Inspection	Yes	Yes	Yes	Yes
Two-Factor Authentication	Yes	Yes	Yes	Yes
Link Aggregation (LAG)[10]	Yes	Yes	Yes	Yes
Power Requirements				
Power input	100H: 12 V DC, 2 A max. 100HP: 19 V DC, 3.42 A	200H: 12 V DC, 2 A max. 200HP: 19 V DC, 3.42 A	19 V DC, 4.736 A	100 - 240 V AC, 50/60 Hz, 2 A max
Max. power consumption (watt max.)	100H: 17 100HP: 51.2	200H: 22 200HP: 62	68	86.7
Heat dissipation (BTU/hr)	100H: 40.365 100HP: 194.5	200H: 58.75 200HP: 191.9	211.3	235
PoE power budget (watt max.)	-	-	30	30
Physical Specifications				
Item — Dimensions (WxDxH)(mm/in.)	216 x 143 x 33/ 8.50 x 5.80 x 1.30	272 x 187 x 36/ 10.7 x 7.36 x 1.42	300 x 182 x 43.5/ 11.81 x 7.17 x 1.71	430 x 250 x 43.5/ 16.93 x 9.84 x 1.71
Item — Weight (kg/lb.)	100H: 1.04/2.29 100HP: 1.05/2.31	200H: 1.52/3.34 200HP: 1.52/3.35	1.64/3.62	3.14/6.93
Packing — Dimensions (WxDxH)(mm/in.)	278 x 189 x 99/ 10.94 x 7.44 x 3.89	427 x 247 x 73/ 16.81 x 9.72 x 2.87	350 x 149 x 244/ 13.78 x 5.87 x 9.61	512 x 395 x 162/ 20.16 x 15.55 x 6.38
Packing — Weight (kg/lb.)	100H: 1.62/3.57 100HP: 1.91/4.21	200H: 2.43/5.36 200HP: 2.68/5.92	2.93/6.46	4.90/10.81
Included accessories	• Power adapter • Power cord (100HP) • RJ-45 – RS-232 cable for console connection	• Power adapter • Power cord (200HP) • RJ-45 – RS-232 cable for console connection • Rack mounting kit (optional, by regions)	• Power adapter & power cord • RJ-45 – RS-232 cable for console connection • Rack mounting kit	• Power adapter • RJ-45 – RS-232 cable for console connection • Rack mounting kit
Environmental Specifications				
Operating — Temperature	0°C to 40°C/ 32°F to 104°F	0°C to 40°C/ 32°F to 104°F	0°C to 40°C/ 32°F to 104°F	0°C to 40°C/ 32°F to 104°F
Operating — Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage — Temperature	-30°C to 70°C/ -22°F to 158°F	-30°C to 70°C/ -22°F to 158°F	-30°C to 70°C/ -22°F to 158°F	-30°C to 70°C/ -22°F to 158°F
Storage — Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)	100H: 40°C/289845.2327 hr 25°C/518347.4294 hr 100HP: 40°C/291183.7887 hr 25°C/550382.5753 hr	200H: 40°C/306768.409 hr 25°C/528037.0106 hr 200HP: 40°C/227747.9662 hr 25°C/392638.3847 hr	40°C/346653.298 hr 25°C/491775.8384 hr	40°C/431877.9743 hr 25°C/669031.2966 hr
Acoustic noise	-	-	16.86 dBA on < 25°C operating temperature, 43.76 dBA on full FAN speed	16.85 dBA on < 25d°C operating temperature, 47.84 dBA on full FAN speed
Certifications				
EMC	FCC Part 15 (Class B), CE EMC (Class B), RCM (Class B), BSMI	FCC Part 15 (Class B), CE EMC (Class B), RCM (Class B), BSMI	FCC Part 15 (Class A), CE EMC (Class A), RCM (Class A), BSMI	FCC Part 15 (Class A), CE EMC (Class A), RCM (Class A), BSMI
Safety	LVD (EN62368-1), BSMI	LVD (EN62368-1), BSMI	LVD (EN60950-1), BSMI	LVD (EN62368-1), BSMI

*: This matrix with firmware uOS1.10 or later.
*1: Actual performance may vary depending on system configuration, network conditions, and activated applications.
*2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets).
*3: VPN throughput measurement are based on RFC 2544 (1,424-byte UDP packets); IMIX: UDP throughput based on a combination of 64 byte, 512 byte, and 1424 byte packet sizes.
*4: Anti-Malware (with Express Mode) and IPS throughput is measured using the industry standard HTTP performance test (1,460-byte HTTP packets). Testing done with multiple flows.
*5: Maximum sessions are measured using the industry standard IXIA IxLoad testing tool.
*6: Including Gateway-to-Gateway and Client-to-Gateway.
*7: This is the recommend maximum number of concurrent logged-in devices.
*8: With Zyxel service license to enable or extend the feature capacity.
*9: Available in Q2, 2024.

ZyWALL ATP Firewalls

Model	ZyWALL ATP100[*9]	ZyWALL ATP100W	ZyWALL ATP200
Hardware Specifications			
Interfaces	3 x LAN/DMZ, 1 x WAN, 1 x SFP, 1 x OPT	3 x LAN/DMZ, 1 x WAN, 1 x SFP, 1 x OPT	4 x LAN/DMZ, 2 x WAN, 1 x SFP
USB 3.0 ports	1	1	2
Console port	Yes (RJ-45)	Yes (RJ-45)	Yes (DB9)
Rack-mountable	-	-	Yes
Fanless	Yes	Yes	Yes
System Capacity & Performance[1]			
SPI firewall throughput (Mbps)[2]	1,000	1,000	2,000
VPN throughput (Mbps)[3]	300	300	500
IDP throughput (Mbps)[4]	600	600	1,200
AV throughput (Mbps)[4]	380	380	630
UTM throughput (AV and IDP)[4]	380	380	630
Max. TCP concurrent sessions[5]	300,000	300,000	600,000
Max. concurrent IPSec VPN tunnels[6]	40	40	100
Concurrent SSL VPN users	30	30	60
VLAN interface	8	8	16
Speedtest Performance			
SPI firewall throughput (Mbps)[7]	850	850	900
Key Features			
Security Service — Sandboxing[8]	Yes	Yes	Yes
Security Service — Web Filtering[8]	Yes	Yes	Yes
Security Service — Application Patrol[8]	Yes	Yes	Yes
Security Service — Anti-Malware[8]	Yes	Yes	Yes
Security Service — IPS[8]	Yes	Yes	Yes
Security Service — Reputation Filter[8]	Yes	Yes	Yes
Security Service — Geo Enforcer	Yes	Yes	Yes
Security Service — SecuReporter[8]	Yes	Yes	Yes
Security Service — Collaborative Detection & Response[8]	Yes	Yes	Yes
Security Service — Device Insight	Yes	Yes	Yes
Security Service — Security Profile Sync (SPS)[8]	Yes	Yes	Yes
Security Service — SSL (HTTPS) Inspection	Yes	Yes	Yes
Security Service — Two-Factor Authentication	Yes	Yes	Yes
VPN Features — VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec
VPN Features — Microsoft Azure	Yes	Yes	Yes
VPN Features — Amazon VPC	Yes	Yes	Yes
WLAN Management — Default Number of Managed AP	8	8	8
WLAN Management — Recommend Max. AP in 1 AP Group	10	10	20
WLAN Management — Secure WiFi Service[8]	Yes	Yes	Yes
WLAN Management — Maximum Number of Tunnel-Mode AP	6	6	10
WLAN Management — Maximum Number of Managed AP	24	24	40
Management & Connectivity — Nebula Cloud Mode	Yes	Yes	Yes
Management & Connectivity — Nebula Cloud Monitoring Mode	Yes	Yes	Yes
Management & Connectivity — Device HA Pro	-	-	-
Management & Connectivity — Link Aggregation (LAG)	-	-	-
Management & Connectivity — Concurrent Devices Logins (max.)	64	64	200
Power Requirements			
Power input	12 V DC, 2 A max.	12 V DC, 2 A max.	12 V DC, 2.5 A max.
Max. power consumption (watt)	12.5	12.5	13.3
Heat dissipation (BTU/hr)	42.65	42.65	45.38
Physical Specifications			
Item — Dimensions (WxDxH)(mm/in.)	216 x 143 x 33/8.50 x 5.80 x 1.30	216 x 147.3 x 33/8.50 x 5.80 x 1.30	272 x 187 x 36/10.7 x 7.36 x 1.42
Item — Weight (kg/lb.)	0.85/1.87	0.85/1.87	1.4/3.09
Packing — Dimensions (WxDxH)(mm/in.)	284 x 190 x 100/11.18 x 7.48 x 3.94	284 x 190 x 100/11.18 x 7.48 x 3.94	427 x 247 x 73/16.81 x 9.72 x 2.87
Packing — Weight (kg/lb.)	1.4/3.09	1.4/3.09	2.42/5.34
Included accessories	• Power adapter • RJ-45 cable • RS-232 cable	• Power adapter • RJ-45 cable • RS-232 cable	• Power adapter • Rack mounting kit (optional, by regions)
Environmental Specifications			
Operating — Temperature	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F
Operating — Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage — Temperature	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F
Storage — Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)	989,810.8	989,810.8	529,688.2
Acoustic noise	-	-	-
Certifications			
EMC	FCC Part 15 (Class B), CE EMC (Class B), BSMI	FCC Part 15 (Class B), CE EMC (Class B), BSMI	FCC Part 15 (Class B), CE (Class B), C-Tick (Class B), BSMI
Safety	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI

*: This matrix with firmware ZLD5.37 or later.
*1: Actual performance may vary depending on network conditions and activated applications.
*2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets).
*3: VPN throughput measured based on RFC 2544 (1,424-byte UDP packets).
*4: AV (with Express mode) and IDP throughput measured using the industry standard HTTP performance test (1,460-byte HTTP packets). Testing done with multiple flows.
*5: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.
*6: Including Gateway-to-Gateway and Client-to-Gateway.
*7: The Speedtest result is conducted with 1 Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.
*8: Enable or extend feature capacity with Zyxel service license.
*9: ATP100 rev1 is adapting new hardware design equipped with 4 x LAN/DMZ, 1 x WAN.

ZyWALL ATP Firewalls

Model	ZyWALL ATP500	ZyWALL ATP700	ZyWALL ATP800
Hardware Specifications			
Interfaces	7 (configurable), 1 x SFP	12 (configurable), 2 x SFP (configurable)	12 (configurable), 2 x SFP (configurable)
USB 3.0 ports	2	2	2
Console port	Yes (DB9)	Yes (DB9)	Yes (DB9)
Rack-mountable	Yes	Yes	Yes
Fanless	-	-	-
System Capacity & Performance[*1]			
SPI firewall throughput (Mbps)[*2]	2,600	6,000	8,000
VPN throughput (Mbps)[*3]	900	1,200	1,500
IDP throughput (Mbps)[*4]	1,700	2,200	2,700
AV throughput (Mbps)[*4]	900	1,600	2,000
UTM throughput (AV and IDP)[*4]	890	1,500	1,900
Max. TCP concurrent sessions[*5]	1,000,000	1,600,000	2,000,000
Max. concurrent IPSec VPN tunnels[*6]	300	1,000	1,000
Concurrent SSL VPN users	150	150	500
VLAN interface	64	128	128
Speedtest Performance			
SPI firewall throughput (Mbps)[*7]	900	930	930
Key Features			
Security Service — Sandboxing[*8]	Yes	Yes	Yes
Web Filtering[*8]	Yes	Yes	Yes
Application Patrol[*8]	Yes	Yes	Yes
Anti-Malware[*8]	Yes	Yes	Yes
IPS[*8]	Yes	Yes	Yes
Reputation Filter[*8]	Yes	Yes	Yes
Geo Enforcer	Yes	Yes	Yes
SecuReporter[*8]	Yes	Yes	Yes
Collaborative Detection & Response[*8]	Yes	Yes	Yes
Device Insight	Yes	Yes	Yes
Security Profile Sync (SPS)[*8]	Yes	Yes	Yes
SSL (HTTPS) Inspection	Yes	Yes	Yes
Two-Factor Authentication	Yes	Yes	Yes
VPN Features — VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec
Microsoft Azure	Yes	Yes	Yes
Amazon VPC	Yes	Yes	Yes
WLAN Management — Default Number of Managed AP	8	8	8
Recommend Max. AP in 1 AP Group	60	200	300
Secure WiFi Service[*8]	Yes	Yes	Yes
Maximum Number of Tunnel-Mode AP	18	66	130
Maximum Number of Managed AP	72	264	520
Management & Connectivity — Nebula Cloud Mode	Yes	Yes	Yes
Nebula Cloud Monitoring Mode	Yes	Yes	Yes
Device HA Pro	Yes	Yes	Yes
Link Aggregation (LAG)	Yes	Yes	Yes
Concurrent Devices Logins (max.)	300	1500	1500
Power Requirements			
Power input	12 V DC, 4.17 A	100 - 240 V AC, 50/60 Hz, 2.5 A max.	100 - 240 V AC, 50/60 Hz, 2.5 A max.
Max. power consumption (watt)	24.1	46	46
Heat dissipation (BTU/hr)	82.23	120.1	120.1
Physical Specifications			
Item — Dimensions (WxDxH)(mm/in.)	300 x 188 x 44/11.81 x 7.4 x 1.73	430 x 250 x 44/16.93 x 9.84 x 1.73	430 x 250 x 44/16.93 x 9.84 x 1.73
Weight (kg/lb.)	1.65/3.64	3.3/7.28	3.3/7.28
Packing — Dimensions (WxDxH)(mm/in.)	351 x 152 x 245/13.82 x 5.98 x 9.65	519 x 392 x 163/20.43 x 15.43 x 6.42	519 x 392 x 163/20.43 x 15.43 x 6.42
Weight (kg/lb.)	2.83/6.24	4.8/10.58	4.8/10.58
Included accessories	• Power adapter • Power cord • Rack mounting kit	• Power cord • Rack mounting kit	• Power cord • Rack mounting kit
Environmental Specifications			
Operating — Temperature	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F
Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage — Temperature	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F
Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)	529,688.2	947,736	947,736
Acoustic noise	24.5 dBA on < 25°C operating temperature, 41.5 dBA on full FAN speed	25.3 dBA on < 25°C operating temperature, 46.2 dBA on full FAN speed	25.3 dBA on < 25°C operating temperature, 46.2 dBA on full FAN speed
Certifications			
EMC	FCC Part 15 (Class A), CE EMC (Class A), C-Tick (Class A), BSMI	FCC Part 15 (Class A), CE EMC (Class A), C-Tick (Class A), BSMI	FCC Part 15 (Class A), CE EMC (Class A), C-Tick (Class A), BSMI
Safety	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI

*: This matrix with firmware ZLD5.37 or later.
*1: Actual performance may vary depending on network conditions and activated applications.
*2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets).
*3: VPN throughput measured based on RFC 2544 (1,424-byte UDP packets).
*4: AV (with Express mode) and IDP throughput measured using the industry standard HTTP performance test (1,460-byte HTTP packets). Testing done with multiple flows.
*5: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.
*6: Including Gateway-to-Gateway and Client-to-Gateway.
*7: The Speedtest result is conducted with 1 Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.
*8: Enable or extend feature capacity with Zyxel service license.
*9: ATP100 rev1 is adapting new hardware design equipped with 4 x LAN/DMZ, 1 x WAN.

ZyWALL USG FLEX Firewalls

Model	USG FLEX 50	USG FLEX 50AX
Hardware Specifications		
WiFi standard	N/A	802.11 ax/ac/n/g/b/a
10/100/1000 Mbps RJ-45 ports	4 x LAN/DMZ, 1 x WAN	4 x LAN/DMZ, 1 x WAN
USB 3.0 ports	2	2
Console port	Yes (RJ-45)	Yes (RJ-45)
Rack-mountable	N/A	N/A
Fanless	Yes	Yes
System Capacity & Performance[*1]		
SPI firewall throughput (Mbps)[*2]	350	350
VPN throughput (Mbps)	90	90
VPN IMIX throughput (Mbps)[*3]	40	40
Max. TCP concurrent sessions[*4]	20,000	20,000
Max. concurrent IPsec VPN tunnels[*5]	20	20
Recommended gateway-to-gateway IPsec VPN tunnels	5	5
Concurrent SSL VPN users (default/max.)	5/15	15
VLAN interface	8	8
Speedtest Performance		
SPI firewall throughput (Mbps)[*6]	320	320
Key Features		
Security Service — Web Filtering[*7]	Yes	Yes
SecuReporter[*7]	Yes	Yes
Two-Factor Authentication	Yes	Yes
Device Insight	Yes	Yes
Security Profile Synchronize[*7]	Yes	Yes
VPN Features — VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec
Microsoft Azure	Yes	N/A
Amazon VPC	Yes	Yes
Management & Connectivity — Nebula Cloud Mode	Yes	Yes
Nebula Cloud Monitoring Mode	Yes	Yes
Easy Mode[*8]	Yes	Yes
Concurrent Devices Logins[*9]	64	64
Power Requirements		
Power input	12 V DC, 2.0 A max.	12 V DC, 2.5 A max.
Max. power consumption (watt max.)	12	24.3
Heat dissipation (BTU/hr)	40.92	55.37
Physical Specifications		
Item — Dimensions (WxDxH)(mm/in.)	216 x 143 x 33/8.50 x 5.63 x 1.30	216 x 149.28 x 33/8.50 x 5.88 x 1.30
Weight (kg/lb.)	0.88/1.94	1.00/2.20
Packing — Dimensions (WxDxH)(mm/in.)	276 x 185 x 98/10.87 x 7.28 x 3.86	276 x 185 x 98/10.87 x 7.28 x 3.86
Weight (kg/lb.)	1.41/3.11	1.53/3.37
Included accessories	• Power adapter • RJ-45 – RS-232 cable for console connection	• Power adapter with plug • RJ-45 – RS-232 cable for console connection • Antenna
Environmental Specifications		
Operating — Temperature	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F
Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage — Temperature	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F
Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)	655,130	766,228.2
Certifications		
EMC	FCC Part 15 (Class B), IC, CE EMC (Class B), RCM, BSMI	FCC Part 15 (Class B), IC EMC (Class B), CE EMC (Class B), RCM (Class B), BSMI
Safety	BSMI, UL	LVD (EN62368-1), BSMI

*: This matrix with firmware ZLD5.37 or later.
*1: Actual performance may vary depending on system configuration, network conditions, and activated applications.
*2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets).
*3: VPN throughput measured based on RFC 2544 (1,424-byte UDP packets); IMIX: UDP throughput based on a combination of 64 byte, 512 byte and 1424 byte packet sizes.
*4: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.
*5: Including Gateway-to-Gateway and Client-to-Gateway.
*6: The Speedtest result is conducted with 1 Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.
*7: With Zyxel service license to enable or extend the feature capacity.
*8: Only applicable when devices are in on-premise mode.
*9: This is the recommend maximum number of concurrent logged-in devices.

ZyWALL USG FLEX Firewalls

Model	USG FLEX 100*¹¹	USG FLEX 100AX
Hardware Specifications		
WiFi standard	N/A	802.11 ax/ac/n/g/b/a
10/100/1000 Mbps RJ-45 ports	4 x LAN/DMZ, 1 x WAN	4 x LAN/DMZ, 1 x WAN
USB 3.0 ports	1	1
Console port	Yes (RJ-45)	Yes (RJ-45)
Rack-mountable	N/A	N/A
Fanless	Yes	Yes
System Capacity & Performance*¹		
SPI firewall throughput (Mbps)*²	900	900
VPN throughput (Mbps)*³	270	270
VPN IMIX throughput (Mbps)*³	100	100
IPS throughput (Mbps)*⁴	540	540
Anti-Malware throughput (Mbps)*⁴	360	360
UTM throughput (Anti-Malware and IPS)(Mbps)*⁴	360	360
Max. TCP concurrent sessions*⁵	300,000	300,000
Recommended gateway-to-gateway IPsec VPN tunnels	20	20
Max. concurrent IPsec VPN tunnels*⁶	50	50
Concurrent SSL VPN users	30	30
VLAN interface	8	8
Speedtest Performance		
SPI firewall throughput (Mbps)*¹¹	848	848
Key Features		
Security Service	Sandboxing*⁷	Yes	Yes
	Web Filtering*⁷	Yes	Yes
	Application Patrol*⁷	Yes	Yes
	Anti-Malware*⁷	Yes	Yes
	IPS*⁷	Yes	Yes
	Reputation Filter*⁷	Yes	Yes
	Geo Enforcer*⁷	Yes	Yes
	SecuReporter*⁷	Yes	Yes
	Collaborative Detection & Response*⁷	Yes	Yes
	Device Insight	Yes	Yes
	Security Profile Sync*⁷	Yes	Yes
	SSL (HTTPS) Inspection	Yes	Yes
	Two-Factor Authentication	Yes	Yes
	Email Security	Yes	Yes
VPN Features	VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec
	Microsoft Azure	Yes	Yes
	Amazon VPC	Yes	Yes
WLAN Management	Default Number of Managed AP	8	8
	Recommend Max. AP in 1 AP Group	10	10
	Secure WiFi Service*⁷	Yes	Yes
	Maximum Number of Tunnel-Mode AP	6	6
	Maximum Number of Managed AP	24	24
Management & Connectivity	Nebula Cloud Mode	Yes	Yes
	Nebula Cloud Monitoring Mode	Yes	Yes
	Device HA Pro	N/A	N/A
	Link Aggregation (LAG)	N/A	N/A
	Hotspot Management*⁷	N/A	N/A
	Ticket Printer Support*⁹/Support Q'ty (max.)	N/A	N/A
	Concurrent Devices Logins (default/max.)*⁷*⁸	64	64
Power Requirements		
Power input	12 V DC, 2 A max.	12 V DC, 2.5 A max.
Max. power consumption (watt Max.)	12.5	24.3
Heat dissipation (BTU/hr)	42.65	55.37
Physical Specifications		
Item	Dimensions (WxDxH)(mm/in.)	216 x 147.3 x 33/8.50 x 5.80 x 1.30	216 x 149.28 x 33/8.50 x 5.88 x 1.30
	Weight (Kg/lb.)	0.85/1.87	1.00/2.20
Packing	Dimensions (WxDxH)(mm/in.)	284 x 190 x 100/11.18 x 7.48 x 3.94	284 x 190 x 100/11.18 x 7.48 x 3.94
	Weight (kg/lb.)	1.40/3.09	1.53/3.37
Included accessories		• Power adapter • RJ-45 - RS-232 cable for console connection	• Power adapter with plug • RJ-45 - RS-232 cable for console connection • Antenna
Environmental Specifications		
Operating	Temperature	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage	Temperature	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)		989,810.8	766,228.2
Certifications		
EMC		FCC Part 15 (Class B), CE EMC (Class B), BSMI	FCC Part 15 (Class B), CE EMC (Class B), C-Tick (Class B), BSMI
Safety		LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI

*: This matrix with firmware ZLD5.37 or later.
*1: Actual performance may vary depending on system configuration, network conditions, and activated applications.
*2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets).
*3: VPN throughput measurement are based on RFC 2544 (1,424-byte UDP packets); IMIX: UDP throughput based on a combination of 64 byte, 512 byte, and 1424 byte packet sizes.
*4: AV (with Express Mode) and IDP throughput measured using the industry standard HTTP performance test (1,460-byte HTTP packets). Testing done with multiple flows.
*5: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.
*6: Including Gateway-to-Gateway and Client-to-Gateway.
*7: With Zyxel service license to enable or extend the feature capacity.
*8: This is the recommend maximum number of concurrent logged-in devices.
*9: With Hotspot Management license support.
*10: The Speedtest result is conducted with 1 Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.
*11: USG FLEX 100 rev1 is adopting a new hardware design equipped with 4 x LAN/DMZ, 1 x WAN.

ZyWALL USG FLEX Firewalls

Model	USG FLEX 200	USG FLEX 500	USG FLEX 700
Hardware Specifications			
10/100/1000 Mbps RJ-45 ports	4 x LAN/DMZ, 2 x WAN, 1 x SFP	7 (configurable), 1 x SFP (configurable)	12 (configurable), 2 x SFP (configurable)
USB 3.0 ports	2	2	2
Console port	Yes (DB9)	Yes (DB9)	Yes (DB9)
Rack-mountable	Yes	Yes	Yes
Fanless	Yes	N/A	N/A
System Capacity & Performance*¹			
SPI firewall throughput (Mbps)*²	1,800	2,300	5,400
VPN throughput (Mbps)*³	450	810	1,100
VPN IMIX throughput (Mbps)*³	160	240	550
IPS throughput (Mbps)*⁴	1,100	1,500	2,000
Anti-Malware throughput (Mbps)*⁴	570	800	1,450
UTM throughput (Anti-Malware and IPS)(Mbps)*⁴	550	800	1,350
Max. TCP concurrent sessions*⁵	600,000	1,000,000	1,600,000
Recommended gateway-to-gateway IPsec VPN tunnels	50	150	250
Max. concurrent IPsec VPN tunnels*⁶	100	300	500
Concurrent SSL VPN users	60	150	150
VLAN interface	16	64	128
Speedtest Performance			
SPI firewall throughput (Mbps)*¹¹	931	935	934
Key Features			
Security Service	Sandboxing*⁷	Yes	Yes	Yes
	Web Filtering*⁷	Yes	Yes	Yes
	Application Patrol*⁷	Yes	Yes	Yes
	Anti-Malware*⁷	Yes	Yes	Yes
	IPS*⁷	Yes	Yes	Yes
	Reputation Filter*⁷	Yes	Yes	Yes
	Geo Enforcer*⁷	Yes	Yes	Yes
	SecuReporter*⁷	Yes	Yes	Yes
	Collaborative Detection & Response*⁷	Yes	Yes	Yes
	Device Insight	Yes	Yes	Yes
	Security Profile Sync*⁷	Yes	Yes	Yes
	SSL (HTTPS) Inspection	Yes	Yes	Yes
	Two-Factor Authentication	Yes	Yes	Yes
	Email Security	Yes	Yes	Yes
VPN Features	VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec
	Microsoft Azure	N/A	N/A	N/A
	Amazon VPC	Yes	Yes	Yes
WLAN Management	Default Number of Managed AP	8	8	8
	Recommend Max. AP in 1 AP Group	20	60	200
	Secure WiFi Service*⁷	Yes	Yes	Yes
	Maximum Number of Tunnel-Mode AP	10	18	130
	Maximum Number of Managed AP	40	72	520
Management & Connectivity	Nebula Cloud Mode	Yes	Yes	Yes
	Nebula Cloud Monitoring Mode	Yes	Yes	Yes
	Device HA Pro	N/A	Yes	Yes
	Link Aggregation (LAG)	N/A	Yes	Yes
	Hotspot Management*⁷	Yes	Yes	Yes
	Ticket Printer Support*⁹/Support Q'ty (max.)	Yes (SP350E)/10	Yes (SP350E)/10	Yes (SP350E)/10
	Concurrent Devices Logins (default/max.)*⁷*⁸	200	200/300	500/2000
Power Requirements			
Power input	12 V DC, 2.5 A max.	12 V DC, 4.17 A	100-240 V AC, 50/60 Hz, 2.5 A max.
Max. power consumption (watt Max.)	13.3	24.1	46
Heat dissipation (BTU/hr)	45.38	82.23	120.1
Physical Specifications			
Item	Dimensions (WxDxH)(mm/in.)	272 x 187 x 36/10.7 x 7.36 x 1.42	300 x 188 x 44/16.93 x 7.4 x 1.73	430 x 250 x 44/16.93 x 9.84 x 1.73
	Weight (Kg/lb.)	1.4/3.09	1.65/3.64	3.3/7.28
Packing	Dimensions (WxDxH)(mm/in.)	427 x 247 x 73/16.81 x 9.72 x 2.87	351 x 152 x 245/13.82 x 5.98 x 9.65	519 x 392 x 163/20.43 x 15.43 x 6.42
	Weight (kg/lb.)	2.23 (W/O bracket) 2.42 (W/ bracket)	2.83/6.24	4.8/10.58
Included accessories		• Power adapter • Rack mounting kit	• Power adapter • Power cord • Rack mounting kit	• Power cord • Rack mounting kit
Environmental Specifications			
Operating	Temperature	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage	Temperature	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)		529,688.2	529,688.2	947,736
Acoustic Noise		N/A	24.5 dBA on < 25°C operating temperature, 41.5 dBA on full FAN speed	24.5 dBA on < 25°C operating temperature, 41.5 dBA on full FAN speed
Certifications			
EMC		FCC Part 15 (Class B), CE EMC (Class B), C-Tick (Class B), BSMI	FCC Part 15 (Class A), CE EMC (Class A), C-Tick (Class A), BSMI	FCC Part 15 (Class A), CE EMC (Class A), C-Tick (Class A), BSMI
Safety		LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI

*: This matrix with firmware ZLD5.37 or later.
* 1: Actual performance may vary depending on system configuration, network conditions, and activated applications.
* 2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets).
* 3: VPN throughput measurement are based on RFC 2544 (1,424-byte UDP packets); IMIX: UDP throughput based on a combination of 64 byte, 512 byte, and 1424 byte packet sizes.
* 4: AV (with Express Mode) and IDP throughput measured using the industry standard HTTP performance test (1,460-byte HTTP packets). Testing done with multiple flows.
*5: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.
*6: Including Gateway-to-Gateway and Client-to-Gateway.
*7: With Zyxel service license to enable or extend the feature capacity.
*8: This is the recommend maximum number of concurrent logged-in devices.
*9: With Hotspot Management license support.
*10: The Speedtest result is conducted with 1 Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.
*11: USG FLEX 100 rev1 is adopting a new hardware design equipped with 4 x LAN/DMZ, 1 x WAN.

USG LITE

Model	USG LITE 60AX
Hardware Specifications	
WiFi standard	802.11 ax/ac/n/g/b/a
CPU	Quad-core, 2.00GHz
RAM / FLASH	1GB/512MB

Ethernet ports	WAN	1 x 100/1000/2500 Mbps
	LAN	1 x 100/1000/2500 Mbps 4 x 100/1000 Mbps

System Capacity & Performance[*1]	
SPI firewall throughput (Mbps)[*2]	2,000
Throughput with Application management on (Mbps)	2,000
Throughput with Threat management on (Mbps)	2,000
VPN throughput (Mbps)[*3]	300
Max. TCP concurrent sessions[*4]	20,000
Max. gateway-to-gateway IPsec VPN tunnels	3
Max. concurrent IPSec VPN tunnels	5
Max. remote VPN tunnels	5
VLAN interface	4
Wireless Features	
MIMO	MU-MIMO
MU-MIMO	Open, WPA2-PSK, WPA3-Personal
Fast roaming	802.11r/k/v
MESH Networking	Smart Mesh
Wireless bridge	Yes
Site-wide SSID provisioning from Nebula cloud	Yes
See wireless client info from the Nebula dashboard	Yes
Auto / Fixed Channel Selection	Yes
Security Features	
Ransomware/Malware Prevention	Yes
Intrusion Blocker	Yes
Dark Web Blocker	Yes
Stop Mail Fraud & Phishing	Yes
Block Ads	Yes
Block VPN Proxy	Yes
Firewall	Yes
Country Restriction (GeoIP blocking)	Yes
Exception list	Yes
Custom allowed / blocked domain	Yes
Traffic Management (applications & clients)	Yes
Security event analytics	Nebula Threat Report
Real-time threat intelligence[*5]	Yes
Web Filtering (Content Filter)[*5]	Yes
VPN Features	
Site2site VPN	IPSec
Remote access VPN	Yes
Networking Features	
WAN Type	DHCP/Static IP/PPPoE
Reserve IP (static DHCP)	Yes
Block clients	Yes
NAT - Virtual server	Yes
DHCP server and DHCP relay	Yes
Dynamic DNS (DDNS)	Yes
Static route	Yes
Guest Network	Yes
VLAN Segmentation	Yes
Management	
Onboarding WAN setting method	Yes
Site-wide SSID management	Yes
Multi-site management	Yes
Client report	Yes
Firmware upgrade	Yes
Remote support and diagnostics	Yes
Keep device settings in the Nebula	Yes
Live tools	Yes
Event Log	Yes
Nebula Pro Pack - Advance feature set[*5]	Yes

Power Requirements		
Power input		12 V DC, 3.0 A
Max. power consumption (watt max.)		31W
Physical Specifications		
Item	Dimensions(L x W x H)(mm/in.)	161.7 x 65 x 229/6.37 x 2.56 x 9.02
	Weight(g/lb.)	707/1.56
Environmental Specifications		
Operating	Temperature	0°C to 40°C/32°F to 104°F
	Humidity	Humidity:5% to 95% (Non-condensing)
Storage	Temperature	-30°C to 70°C/-22°F to 158°F
	Humidity	5% to 95% (Non-condensing)
Certifications		
Certifications		CE, FCC, BSMI

*1: Actual performance may vary depending on system configuration,network conditions, and activated applications.
*2: Maximum throughput is measured using FTP with a 2 GB file and 1,460-byte packets across multiple sessions.
*3: VPN throughput is measured based on RFC 2544 using 1,424-byte UDP packets.
*4: Maximum sessions are measured using the industry-standard IXIA IxLoad testing tool.
*5: Requiring Elite Pack.

SCR

Model	SCR 50AXE
Hardware Specifications	
CPU	Dual-core, 1.00 GHz, Cortex A53
RAM/FLASH	1 GB/256 MB
10/100/1000 Mbps RJ-45 ports	(1) WAN: 1 GbE RJ-45 port (4) LAN: 1 GbE RJ-45 ports
Fanless	Yes
System Capacity & Performance	
SPI firewall throughput LAN to WAN (Mbps)	900
Threat mgmt ON/App mgmt OFF (Mbps)	900
Wireless Specifications	
Standard compliance	IEEE 802.11 ax 6 GHz IEEE 802.11 ax/ac/n/a 5 GHz IEEE 802.11 ax/n/b/g 2.4 GHz
Wireless security	WPA2-PSK, WPA3-PSK
Wireless frequency	2.4/5/6 GHz
Radio	3
SSID number	4
WPS	Yes
No. of antenna	4 (internal)
Antenna gain	2.0 dBi @2.4 GHz 3.0 dBi @5 GHz 3.5 dBi @6 GHz
Data rate	2.4 GHz: up to 575 Mbps 5 GHz: up to 2400 Mbps 6 GHz: up to 2400 Mbps
Security Features	
Ransomware/Malware Prevention	Yes
Intrusion Blocker	Yes
Dark Web Blocker	Yes
Stop Mail Fraud & Phishing	Yes
Block Ads	Yes
Block VPN Proxy	Yes
Content Filter*	Yes
Firewall	Yes
Country Restriction (GeoIP)	Yes
Exception List	Yes
Custom Allowed/Blocked Domain	Yes
Traffic Management (Applications & Clients)	Yes
Security Event Analytics	Threat Management Report
VPN Features	
Site2site VPN	IPSec (site-to-site, spoke only)
Networking	
WAN type	DHCP/Static IP/PPPoE/PPPoE with static IP
Networking features	NAT - Virtual server DHCP IP/MAC binding Block clients Guest network**
IPTV passthrough	IGMP Proxy
Management	
Site-wide SSID management	Nebula
Multi-site management	Nebula
Topology*	Nebula
Diagnostics	Yes
Remote support**	Yes
Onboarding WAN setting method	WiFi
Power Requirements	
Power input	12 V DC, 2.0 A
Max. power consumption (watt max.)	21 W
Physical Specifications	
Item — Dimensions (WxDxH)(mm/in.)	178.0 x 54.6 (stand 68.2) x 242.2/7.00 x 2.14 (stand 2.68) x 9.54
Item — Weight (g/lb.)	651/1.44 (with stand)
Environmental Specifications	
Operating — Temperature	0°C to 40°C/32°F to 104°F
Operating — Humidity	10% to 90% (non-condensing)
Storage — Temperature	-30°C to 70°C/-22°F to 158°F
Storage — Humidity	10% to 95% (non-condensing)
Certifications	
Certifications	CE, FCC, BSMI

*: Requiring SCR Pro Pack license.
**: Available in Q3 2023.

Wireless Specifications

Model	USG FLEX	USG LITE	SCR
	USG FLEX 50/100AX	USG LITE 60AX	SCR 50AXE
Standard compliance	802.11 ax/ac/n/g/b/a	IEEE802.11 ax/ac/n/g/b/a	802.11 ax/ac/n/g/b/a
Wireless frequency	2.4/5 GHz	2.4/5 GHz	2.4/5/6 GHz
Radio	2	2	3
SSID number	4	8	4

Maximum transmit power (Max. total channel)	• US (FCC) 2.4 GHz:
	  29.8 dBm, 2 antennas
	• US (FCC) 5 GHz:
	  32.6 dBm, 2 antennas
	• EU (ETSI) 2.4 GHz:
	  19.93 dBm (EIRP), 2 antennas
	• EU (ETSI) 5 GHz:
	  22.99 dBm (EIRP), 2 antennas
		• US(FCC) 2.4GHz:
		  29.98dBm,4 antennas
		• US(FCC)5GHz:
		  29.82dBm,4 antennas
		• EU(ETSI)2.4GHz:
		  19.92dBm(EIRP),4 antennas
		• EU(ETSI)5GHz:
		  29.90dBm(EIRP),4 antennas
			• US (FCC) 2.4 GHz:
			  26.5 dBm, 2 antennas
			• US (FCC) 5 GHz:
			  29.5 dBm, 2 antennas
			• US (FCC) 6 GHz:
			  24.5 dBm, 2 antennas
			• EU (ETSI) 2.4 GHz:
			  19.31 dBm (EIRP), 2 antennas
			• EU (ETSI) 5 GHz:
			  25.24 dBm (EIRP), 2 antennas
			• EU (ETSI) 6 GHz:
			  22.26 dBm (EIRP), 2 antennas

No. of antenna	2 detachable antennas	4 internal antennas	4 internal antennas
Antenna gain	3 dBi @2.4 GHz/5 GHz	3.65 dBi @2.4 GHz 4.63 dBi @5 GHz	2 dBi @2.4 GHz 3 dBi @5 GHz 3.5 dBi @6 GHz
Data rate	• 2.4 GHz: up to 600 Mbps • 5 GHz: up to 1200 Mbps	• 2.4 GHz: up to 1150 Mbps • 5 GHz: up to 4802 Mbps	• 2.4 GHz: up to 575 Mbps • 5 GHz: up to 2400 Mbps • 6 GHz: up to 2400 Mbps

Frequency band	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
	• TWN (NCC):
	  2.412 to 2.462 GHz
	
	5 GHz (IEEE 802.11 a/n/ac/ax)
	• USA (FCC):
	  5.150 to 5.250 GHz; 5.725 to 5.850 GHz
	• Europe (ETSI):
	  5.15 to 5.35 GHz; 5.470 to 5.725 GHz
	• TWN (NCC):
	  5.15 to 5.25 GHz; 5.725 to 5.850 GHz
		2.4 GHz(IEEE 802.11 b/g/n/ac/ax)
		• USA (FCC):
		  2.412 to 2.462 GHz
		• Europe (ETSI):
		  2.417 to 2.472 Ghz
		• TWN (NCC):
		  2.412 to 2.462 GHz
		
		5 GHz(IEEE 802.11 a/n/ac/ax)
		• USA (FCC):
		  5.150 to 5.250 GHz; 5.250 to 5.350 GHz;
		  5.470 to 5.725 GHz; 5.725 to 5.895 GHz
		• Europe (ETSI):
		  5.150 to 5.250 GHz; 5.250 to 5.350 GHz;
		  5.470 to 5.725 GHz
		• TWN (NCC):
		  5.150 to 5.250 GHz; 5.250 to 5.350 GHz;
		  5.470 to 5.725 GHz; 5.725 to 5.850 GHz
			2.4 GHz (IEEE 802.11 b/g/n/ax)
			• USA (FCC):
			  2.412 to 2.462 GHz
			• Europe (ETSI):
			  2.412 to 2.472 GHz
			• TWN (NCC):
			  2.412 to 2.462 GHz
			
			5 GHz (IEEE 802.11 a/n/ac/ax)
			• USA (FCC):
			  5.150 to 5.250 GHz; 5.250 to 5.350 GHz;
			  5.470 to 5.725 GHz; 5.725 to 5.850 GHz
			• Europe (ETSI):
			  5.150 to 5.350 GHz; 5.470 to 5.725 GHz
			• TWN (NCC):
			  5.150 to 5.250 GHz; 5.250 to 5.350 GHz;
			  5.470 to 5.725 GHz; 5.725 to 5.850 GHz
			
			6 GHz (IEEE 802.11 ax)
			• USA (FCC):
			  5.925 to 7.125 GHz
			• European (ETSI):
			  5.925 to 6.425 GHz

Receive sensitivity	2.4 GHz: • 11 Mbps ≤ -99 dBm • 54 Mbps ≤ -95 dBm • HT20, MCS7 ≤ -90 dBm • HT40, MCS7 ≤ -86 dBm 5 GHz: • 54 Mbps ≤ -90 dBm • HT20, MCS7 ≤ -85 dBm • HT40, MCS7 ≤ -81 dBm • VHT20, MCS8 ≤ -90 dBm +/-2 dBm • VHT40, MCS9 ≤ -85 dBm +/-2 dBm • VHT80, MCS9 ≤ -68 dBm +/-2 dBm • HE20, MCS11 ≤ -61 dBm +/-2 dBm • HE40, MCS11 ≤-58 dBm +/-2 dBm • HE80, MCS11 ≤ -55 dBm +/-2 dBm	2.4 GHz: • 11Mbps ≤ -89dBm • 54Mbps ≤ -76dBm • HT20, MCS7 ≤ -74dBm • HT40, MCS7 ≤ -71dBm • VHT20, MCS8 ≤ -74dBm • VHT40, MCS9 ≤-65dBm • HE20, MCS11 ≤ -63dBm • HE40, MCS11 ≤ -60dBm 5 GHz: • 54Mbps ≤ -76dBm • HT20, MCS7 ≤ -74dBm • HT40, MCS7 ≤ -71dBm • VHT20, MCS8 ≤ -71dBm • VHT40, MCS9 ≤ -65dBm • VHT80, MCS9 ≤ -62dBm • HE20, MCS11 ≤ -65dBm • HE40, MCS11 ≤ -62dBm • HE80, MCS11 ≤ -59dBm • HE160, MCS11 ≤ -56dBm	2.4 GHz: • 11 Mbps ≤ -82 dBm • 54 Mbps ≤ -69 dBm • HT20, MCS7 ≤ -68 dBm • HT40, MCS7 ≤ -67 dBm • VHT20, MCS8 ≤ -64 dBm +/- 2 dBm • VHT40, MCS9 ≤ -62 dBm +/- 2 dBm • HE20, MCS11 ≤ -58 dBm +/- 2 dBm • HE40, MCS11 ≤ -55 dBm +/- 2 dBm 5 GHz: • 54 Mbps ≤ -72 dBm • HT20, MCS7 ≤ -71 dBm • HT40, MCS7 ≤ -68 dBm • HT80, MCS7 ≤ -65 dBm • VHT20, MCS8 ≤ -65 dBm +/- 2 dBm • VHT40, MCS9 ≤ -62 dBm +/- 2 dBm • VHT80, MCS9 ≤ -59 dBm +/- 2 dBm • HE20, MCS11 ≤ -60 dBm +/- 2 dBm • HE40, MCS11 ≤ -58 dBm +/- 2 dBm • HE80, MCS11 ≤ -55 dBm +/- 2 dBm • HE (80+80), MCS11 ≤ -52 dBm +/- 2 dBm 6 GHz: • HE20, MCS11 ≤ -61 dBm +/- 2 dBm • HE40, MCS11 ≤ -58 dBm +/- 2 dBm • HE80, MCS11 ≤ -55 dBm +/- 2 dBm • HE160, MCS11 ≤ -52 dBm +/- 2 dBm

Compatibility & Accessories

Access Point

Product	Unified AP		Unified Pro AP	
Models	• NWA5123-AC • NWA5123-AC HD* • WAC5302D-S • WAC5302D-Sv2 • WAC500* • WAC500H*	• WBE530* • WAX300H • WAX510D*	• WAC6103D-I • WAC6303D-S • WAC6502D-E • WAC6502D-S • WAC6503D-S • WAC6552D-S • WAC6553D-E	• WBE660S • WAX650S • WAX610D • WAX630S • WAX640S-6E • WAX620D-6E • WAX655E
Functions				
Central management	Yes		Yes	
Auto provisioning	Yes		Yes	
Data forwarding	Local bridge		Local bridge/Data tunnel	
ZyMesh	Yes		Yes	

*: Support both local bridge and data tunnel for data forwarding

Transceivers (Optional)

Model	Speed	Connector	Wavelength	Max. Distance	Optical Fiber Type	DDMI
SFP10G-SR*	10-Gigabit SFP+	Duplex LC	850 nm	300 m/328 yd	Multi Mode	Yes
SFP10G-LR*	10-Gigabit SFP+	Duplex LC	1310 nm	10 km/10936 yd	Single Mode	Yes
SFP-1000T	Gigabit	RJ-45	-	100 m/109 yd	Multi Mode	-
SFP-LX-10-D	Gigabit	Single LC	1310 nm	10 km/10936 yd	Single Mode	Yes
SFP-SX-D	Gigabit	Single LC	850 nm	550 m/601 yd	Multi Mode	Yes
SFP-BX1310-10-D*[1]	Gigabit	Single LC	1310 nm (TX) 1490 nm (RX)	10 km/10936 yd	Single Mode	Yes
SFP-BX1490-10-D*[1]	Gigabit	Single LC	1490 nm (TX) 1310 nm (RX)	10 km/10936 yd	Single Mode	Yes

*: Only USG2200-VPN supports 10-Gigabit SFP+
*1: SFP-BX1310-10-D and SFP-BX1490-10-D are must used in pairs.

VPN client subscription

Item	Description	Supported OS
SecuExtender Zero Trust IPSec/SSL VPN Client Subscription*	SecuExtender supports popular VPN protocols including IKEv2/EAP, SSL VPN. Building secure tunnel with industry-leading strong cipher, the SecuExtender guarantees your confidentiality and data integrity.	• Windows 10 64-bit • Windows 11 64-bit • macOS 10.15 or above

*: One subscription license to activate IPSec or SSL VPN from selected OS Windows/macOS.

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