

ZYXEL
NETWORKS



Security

Quick Sales Guide

Preparing for the next wave of cyberattacks

How Safe is Your Network?

Today, network attacks have become more sophisticated and targeted. Social networking applications have also opened up more channels for data breach than ever before. With the rise of BYOD (Bring Your Own Device), threats to business networks come from both outside and inside. It is now increasingly challenging for businesses to keep up with the changing threat landscape; and this is especially true for small-and medium-sized businesses, which do not have the staff and resources of larger corporations. Small-and medium-sized businesses need a solution that is efficient, inexpensive and provides an array of techniques to combat sophisticated network attacks.

Network Security that Works







Businesses deploy network security appliances for two main purposes: to protect company resources against a multitude of threats and to enable secured communications between multiple locations via Virtual Private Network (VPN). For many years, Zyxel's highly-acclaimed Unified Security Gateway (USG) Series has helped businesses satisfy all these demands. Fortifying businesses against a new generation of threats, Zyxel is offering a new line of ZyWALL ATP Firewall Series and Nebula SD-WAN solution that deliver unmatched capacity, performance and protection for businesses of all sizes. Visit Zyxel One Security page ([Home > Solution > One security](#)) for more resources and support.



ZyWALL ATP Next Generation Firewall

**Timely Defense
for Ultimate Protection**

Zyxel Security Portfolio

Business Scale	Small Businesses	Small and Medium-sized Businesses	Medium-sized Businesses
Model Series			
ATP	 <p>ATP200 ATP100 (W)</p>	 <p>ATP500</p>	 <p>ATP800 ATP700</p>
USG FLEX	 <p>USG FLEX 200 USG FLEX 100</p>	 <p>USG FLEX 500</p>	
USG	 <p>USG60 (W) USG40 (W)</p>	 <p>USG310 USG210 USG110</p>	 <p>USG2200 USG1900 USG1100</p>
VPN	 <p>VPN2S</p>  <p>USG20W-VPN USG20-VPN VPN50</p>	 <p>ZyWALL 310 ZyWALL 110</p>  <p>VPN300 VPN100</p>	 <p>ZyWALL 1100</p>  <p>VPN1000</p>
NSG	 <p>NSG50</p>	 <p>NSG200 NSG100</p>	 <p>NSG300</p>

Zyxel security solutions

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.

VPN Firewalls

The ZyWALL VPN Firewall Series complies with GDPR regulations and features a robust VPN gateway with the ability to access enterprise information across the corporate sites and connect business partners, cloud providers as well as telecommuters.

UTM Firewalls

Zyxel's UTM Firewall Series offers businesses with robust, user-aware security all in one package. It offers multi-threat protection and effective policy enforcement through a wide range of mechanisms. The all-in-one design helps businesses to minimize management efforts and total cost of ownership (TCO) while maximizing network security.

Nebula SD-WAN

Combining the flexibility of cloud-based technology and its high-speed deployment benefit, the Nebula SD-WAN solution helps IT administrators to simplify branch network deployment. With the variety of optimization design for Internet connectivity and applications, the Nebula SD-WAN also enables the ZyWALL VPN Series to support online application growth, efficiency WAN bandwidth usage and increase network agility.

Nebula Cloud Managed Security Gateway

Built with remote management and ironclad security for organizations with increasing distributed sites, the Zyxel Nebula Cloud Managed Security Gateway Series provides extensive protection every small- to mid-size business would need.

Security Services and Licenses

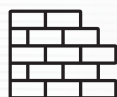
Flexible licensing options for your security devices. Choose the perfect one that best suit your business needs. Our security licenses include, but not limited to: security, connectivity, management & reporting and vertical solution licenses. Learn more about our flexible licensing options for your security devices. ([Home > Product > Security Services and Licenses](#))

USG FLEX

Precise Protection.
Flexible Subscription.



Cloud Query
Detection



Multi-layered
Protection



Flexible
Subscription










Zyxel.com/USGFLEX

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. <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• IP reputation filter provides low latency reaction• Support black/white listing for custom policies• Cloud-based database provide real-time protection
Web Filtering/Content Filtering 	Cloud-based real-time access control for inappropriate, unproductive, illegal and malicious websites <ul style="list-style-type: none">• Categorized website access management for increased efficiency• Granular policies controlled by IP address, user, group, or schedule
IDP/IPS 	Deep-packet inspection across all ports and protocols at gateway to against known attacks from network <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• Geographical visibility for traffic statistics and logs• IPv6 address support• Automatic IP/geography database update
Sandboxing 	Cloud-based sandbox technology against unknown threats <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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







Services	Key Features
Vertical Solutions	
Hotspot Management 	<ul style="list-style-type: none"> • 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
Managed AP Service 	<ul style="list-style-type: none"> • Integrated AP controller as central management to provide flexible deployment options • AP auto discovery and provisioning • AP forwarding compatibility
Device High Availability Pro 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Providing solutions of both SSL VPN and IPSec VPN remote access • Enhanced layered security incorporating Zyxel security appliances • Easy and intelligent installation
Single Sign-On Service	
SSO Agent 	<ul style="list-style-type: none"> • Simplified single sign in to multiple resources • Improved user experience without repetitive logging in between various web browsers • Secure communication via shared key encryption for data transmission protection • Login mechanism works with any protocol, not just HTTP
Management & Analytics	
Cloud CNM SecuReporter 	<ul style="list-style-type: none"> • Multidimensional analytics on abnormal behaviors • Cloud-based real-time monitoring and alerts • Effective event correlation and user behavior analytics • Intuitive dashboard and customizable report
Nebula SD-WAN	
Nebula SD-WAN  nebula	<ul style="list-style-type: none"> • Advanced WAN technology boosts throughput performance • Improve network quality without extra bandwidth investment • Quick installation, remote control, and centralized monitoring

License by Model






Security

Compatible Security Appliances	License & Licensed Features			
	Web Filtering/ Content Filtering	Geo Enforcer	Application Patrol	Anti-Malware/Virus
				
	Block access to malicious or risky web sites	Manage network traffic by mapping IP address to geographical regions	Automatically categorize and manage the network application usage	Scan files at the gateway for viruses and other threats
ATP100/100W/200	●	●	●	●
ATP500/700/800	●	●	●	●
USG FLEX 100	●	●	●	●
USG FLEX 200	●	●	●	●
USG FLEX 500	●	●	●	●
USG40/40W	●	●	●	●
USG60/60W	●	●	●	●
USG110/210/310	●	●	●	●
USG1100/1900/2200	●	●	●	●
USG20(W)-VPN	●	●		
ZyWALL 110/310/1100	●	●	●	●
NSG50/100/200	●	●	●	●
VPN50	●	●	●	
VPN100/300/1000	●	●	●	
VPN2S	●			








Connectivity

Compatible Security Appliances	License & Licensed Features					
	SecuExtender VPN Client	Managed AP Service	Hotspot Management	Concurrent Device Upgrade	Nebula SD-WAN	Nebula Professional Pack
						
	SSL VPN and IPSec VPN remote access tool	AP auto discovery and provisioning	Various Network Access Control	Top up allowed number of connected clients	Simplify the delivery of WAN services across the organization	Easy Cloud management of Nebula gateways
ATP100/100W/200	●	●				
ATP500/700/800	●	●				
USG FLEX 100	●	●				
USG FLEX 200	●	●	●			
USG FLEX 500	●	●	●	●		
USG40/40W	●	●				
USG60/60W	●	●	●			
USG110/210/310	●	●	●	●		
USG1100/1900/2200	●	●	●	●		
USG20(W)-VPN	●					
ZyWALL 110/310/1100	●	●	●	●		
NSG50/100/200	●*					●
VPN50	●	●			●	
VPN100/300/1000	●	●	●	●	●	
VPN2S	●*					

*: NSG50/100/200 and VPN2S support IPSec VPN only.






IDP/IPS	Email Security/Anti-Spam	SecuReporter Premium	Sandboxing	Reputation Filter
				
Deep-packet inspection against known attacks from network	Fast detection to block spam/phishing mail with malicious contents	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
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Default Support for Registered Devices

License & Licensed Features						
Amazon VPC	Microsoft Azure	Single Sign-On	Device High Availability Pro	SecuReporter	ZyxeOne Network	Nebula Basic Pack
						
Easy network integration with AWS	Easy network integration with Azure	Simplified single sign in to multiple resources	Device failure detection and failover	Cloud-based security analytics and report with 7-day log retention	A Unified installation tool for ZyxeOne switches, WLAN and gateways	Easy Cloud management of Nebula gateways
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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 hospitality features. Pick the right bundle and there is no more hassle.

		Security				
Firewall Series	Bundle	License & Licensed Features				
		Anti-Malware/ Virus	Web Filtering/ Content Filtering	Sandboxing	Reputation Filter	IDP/IPS
						
		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
ATP	Gold Security Pack	●	●	●	●	●
USG FLEX	UTM Bundle	●	●			●
USG FLEX	Web Filtering with Email Security Bundle		●			
USG FLEX	Hospitality Bundle					
USG	UTM Bundle	●	●			●
NSG	Nebula Security Service - Security Pack (NSS-SP)	●	●			●

Connectivity

License & Licensed Features

Application Patrol

Geo Enforcer

Email Security/
Anti-Spam

SecuReporter
Premium

Managed AP
Service

Hotspot
Management

Concurrent Device
Upgrade



Automatically categorize and manage the network application usage

Manage network traffic by mapping IP address to geographical regions

Fast detection to block spam/phishing mail with malicious contents

Cloud-based security analytics and report with 30-day log retention

AP auto discovery and provisioning

Various Network Access Control

Top up allowed number of connected clients

•	•	•	•	•		
•	•	•	•			
	•	•				
•	•	•	•	•	•	•
•	•					

Specifications

ZyWALL ATP Firewalls

Model	ZyWALL ATP100	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	
WLAN Management				
Managed AP number (default/max.) (1 Year bundled)^{*8}	8/24	8/24	8/40	
Recommend max. AP in 1 AP Group	10	10	20	
Security Services^{*8}				
Sandboxing	Yes	Yes	Yes	
Web Security	Yes	Yes	Yes	
Application Security	Yes	Yes	Yes	
Malware Blocker	Yes	Yes	Yes	
Intrusion Prevention (IDP)	Yes	Yes	Yes	
Reputation Filter	Yes	Yes	Yes	
Geo Enforcer	Yes	Yes	Yes	
SecuReporter Premium	Yes	Yes	Yes	
Key Features				
VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	
SSL (HTTPS) Inspection	Yes	Yes	Yes	
2-Factor Authentication	Yes	Yes	Yes	
Microsoft Azure	Yes	Yes	Yes	
Amazon VPC	Yes	Yes	Yes	
Device HA Pro	-	-	-	
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
	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
	Weight (kg/lb.)	1.4/3.09	1.4/3.09	2.42/5.34
Included accessories	<ul style="list-style-type: none"> • Power adapter • RJ-45 cable • RS-232 cable 	<ul style="list-style-type: none"> • Power adapter • RJ-45 cable • RS-232 cable 	<ul style="list-style-type: none"> • Power adapter • Rack mounting kit (optional, by regions) 	
Environmental Specifications				
Operating environment	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 environment	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)		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 EMC (Class B), C-Tick (Class B), BSMI	
Safety	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	

*: This matrix with firmware ZLD4.50 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.

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	
WLAN Management				
Managed AP number (default/max.) (1 Year bundled)^{*8}	8/72	8/264	8/520	
Recommend max. AP in 1 AP Group	60	200	300	
Security Services^{*8}				
Sandboxing	Yes	Yes	Yes	
Web Security	Yes	Yes	Yes	
Application Security	Yes	Yes	Yes	
Malware Blocker	Yes	Yes	Yes	
Intrusion Prevention (IDP)	Yes	Yes	Yes	
Reputation Filter	Yes	Yes	Yes	
Geo Enforcer	Yes	Yes	Yes	
SecuReporter Premium	Yes	Yes	Yes	
Key Features				
VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	
SSL (HTTPS) Inspection	Yes	Yes	Yes	
2-Factor Authentication	Yes	Yes	Yes	
Microsoft Azure	Yes	Yes	Yes	
Amazon VPC	Yes	Yes	Yes	
Device HA Pro	Yes	Yes	Yes	
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		<ul style="list-style-type: none"> Power adapter Power cord Rack mounting kit 	<ul style="list-style-type: none"> Power cord Rack mounting kit 	<ul style="list-style-type: none"> Power cord Rack mounting kit
Environmental Specifications				
Operating environment	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 environment	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 ZLD4.50 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.

ZyWALL USG FLEX Firewalls

Model	USG FLEX 100	USG FLEX 200	USG FLEX 500
Hardware Specifications			
Interfaces	4 x LAN/DMZ, 1 x WAN, 1 x SFP	4 x LAN/DMZ, 2 x WAN, 1 x SFP	7 x (Configurable), 1 x SFP
USB 3.0 ports	1	2	2
Console port	Yes (RJ-45)	Yes (DB9)	Yes (DB9)
Rack-mountable	-	Yes	Yes
Fanless	Yes	Yes	-
System Capacity & Performance¹			
SPI firewall throughput (Mbps) ²	900	1,800	2,300
VPN throughput (Mbps) ³	270	450	810
IDP throughput (Mbps) ⁴	540	1,100	1,150
AV throughput (Mbps) ⁴	360	570	800
UTM throughput (AV and IDP) ⁴	360	550	800
Max. TCP concurrent sessions ⁵	300,000	600,000	1,000,000
Max. concurrent IPSec VPN tunnels ⁶	40	100	300
Concurrent SSL VPN users	30	60	150
VLAN interface	8	16	64
Concurrent devices logins (default/max.) ^{7,8}	64	200	200/300
Speedtest Performance			
SPI firewall throughput (Mbps) ¹¹	760	810	810
WLAN Management			
Managed AP number (default/max.) ⁷	8/24	8/40	8/72
Recommend max. AP in 1 AP Group	10	20	60
Security Service			
Anti-Malware ⁷	Yes	Yes	Yes
IPS (IDP)	Yes	Yes	Yes
Application Patrol ⁷	Yes	Yes	Yes
Email Security	Yes	Yes	Yes
Web Filtering (CF) ^{7,9}	Yes	Yes	Yes
SecuReporter Premium ⁷	Yes	Yes	Yes
Key Features			
VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec
SSL (HTTPS) Inspection	Yes	Yes	Yes
2-Factor Authentication	Yes	Yes	Yes
Hotspot Management ⁷	-	Yes	Yes
Ticket printer support ¹⁰ / Support Q'ty (max.)	-	Yes (SP350E)/10	Yes (SP350E)/10
Microsoft Azure	Yes	Yes	Yes
Amazon VPC	Yes	Yes	Yes
Device HA Pro	-	-	Yes
Power Requirements			
Power input	12 V DC, 2 A max.	12 V DC, 2.5 A max.	12 V DC, 4.17 A max.
Max. power consumption (watt)	12.5	13.3	24.1
Heat dissipation (BTU/hr)	42.65	45.38	82.23
Physical Specifications			
Item	Dimensions (WxDxH)(mm/in.)	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
	Weight (kg/lb.)	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	427 x 247 x 73/16.81 x 9.72 x 2.87
	Weight (kg/lb.)	1.40/3.09	2.23 (W/O bracket) 2.42 (W/ bracket)
Included accessories	<ul style="list-style-type: none"> Power adapter RJ-45 - RS-232 cable for console connection 	<ul style="list-style-type: none"> Power adapter Rack mounting kit (optional, by regions) 	<ul style="list-style-type: none"> Power adapter Power cord Rack mounting kit
Environmental Specifications			
Operating environment	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 environment	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	529,688.2	529,688.2
Acoustic noise	-	-	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), BSMI	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
Safety	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI

*: This matrix with firmware ZLD4.50 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).

*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: SafeSearch function in CF need to enable SSL inspection firstly and not for small business models.

*10: With Hotspot Management license support

*11: The Speedtest result is conducted with 1Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.

ZyWALL UTM Firewalls

Model	USG40	USG40W	USG60	USG60W
Hardware Specifications				
Interfaces	3 x LAN/DMZ, 1 x WAN, 1 x OPT	3 x LAN/DMZ, 1 x WAN, 1 x OPT	4 x LAN/DMZ, 2 x WAN	4 x LAN/DMZ, 2 x WAN
USB ports	1	1	2	2
Console port	Yes (RJ-45)	Yes (RJ-45)	Yes (DB9)	Yes (DB9)
Rack-mountable	-	-	Yes	Yes
Fanless	Yes	Yes	Yes	Yes
System Capacity & Performance^{*1}				
SPI firewall throughput (Mbps) ^{*2}	400	400	1,000	1,000
VPN throughput (Mbps) ^{*3}	100	100	180	180
IDP throughput (Mbps) ^{*4}	95	95	150	150
AV throughput (Mbps) ^{*4}	50	50	90	90
UTM throughput (AV and IDP) ^{*4}	50	50	90	90
Max. TCP concurrent sessions ^{*5}	50,000	50,000	100,000	100,000
Max. concurrent IPsec VPN tunnels ^{*5}	20	20	40	40
Concurrent SSL VPN users (default/max.) ^{*7}	5/15	5/15	5/20	5/20
VLAN interface	8	8	16	16
Concurrent devices logins (default/max.) ^{*7*8}	64	64	200	200
Speedtest Performance				
SPI firewall throughput (Mbps) ^{*9}	320	320	470	470
WLAN Management				
Managed AP number (default/max.) ^{*7}	2/18	2/18	2/18	2/18
Recommend max. AP in 1 AP Group	10	10	10	10
Security Service				
Anti-Virus (AV) ^{*7}	Yes	Yes	Yes	Yes
Intrusion Detection and Prevention (IDP) & Application Patrol ^{*7}	Yes	Yes	Yes	Yes
Anti-Spam ^{*7}	Yes	Yes	Yes	Yes
Content Filtering (CF 2.0) ^{*7*10}	Yes	Yes	Yes	Yes
SecuReporter Premium ^{*7}	Yes	Yes	Yes	Yes
Key Features				
VPN	IKEv2, IPsec, SSL, L2TP/IPsec	IKEv2, IPsec, SSL, L2TP/IPsec	IKEv2, IPsec, SSL, L2TP/IPsec	IKEv2, IPsec, SSL, L2TP/IPsec
SSL (HTTPS) Inspection	-	-	-	-
2-Factor Authentication	Yes	Yes	Yes	Yes
EZ Mode	Yes	Yes	Yes	Yes
Hotspot Management ^{*7}	-	-	-	-
Ticket printer support ^{**11} / Support Q'ty (max.)	-	-	Yes (SP350E)/10	Yes (SP350E)/10
Microsoft Azure	Yes	Yes	Yes	Yes
Amazon VPC	Yes	Yes	Yes	Yes
Facebook WiFi	Yes	Yes	Yes	Yes
Device HA Pro	-	-	-	-
Link Aggregation (LAG)	-	-	-	-
Power Requirements				
Power input	12 V DC, 2.0 A max.	12 V DC, 2.0 A max.	12 V DC, 2.5 A max.	12 V DC, 2.5 A max.
Max. power consumption (watt)	14	17	19	28
Heat dissipation (BTU/hr)	47.77	58.01	64.83	95.54
Physical Specifications				
Item	Dimensions (WxDxH)(mm/in.)	216 x 143 x 33/ 8.50 x 5.63 x 1.30	216 x 143 x 33/ 8.50 x 5.63 x 1.30	242 x 175 x 36/ 9.53 x 6.89 x 1.42
	Weight (kg/lb.)	0.89/1.96	0.91/2	1.25/2.76
Packing	Dimensions (WxDxH)(mm/in.)	381 x 261 x 79/ 15.00 x 8.50 x 3.11	381 x 261 x 79/ 15.00 x 8.50 x 3.11	394 x 240 x 101/ 15.51 x 9.45 x 3.98
	Weight (kg/lb.)	1.57/3.46	1.63/3.59	2.25/4.96
				2.23 (W/O bracket) 2.42 (W/ bracket)
Included accessories	<ul style="list-style-type: none"> Power adapter DB9 - RJ-45 for console connection 	<ul style="list-style-type: none"> Power adapter DB9 - RJ-45 cable for console connection Antenna 	<ul style="list-style-type: none"> Power adapter Rack mounting kit 	<ul style="list-style-type: none"> Power adapter Rack mounting kit (optional, by regions) Antenna
Environmental Specifications				
Operating environment	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 environment	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)	414,329.4	386,931.7	815,463.9	497,644
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 B), CE EMC (Class B), C-Tick (Class B), 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	LVD (EN60950-1), BSMI

*: This matrix with firmware ZLD4.50 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).

*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.

ZyWALL UTM Firewalls

Model	USG110	USG210	USG310
Hardware Specifications			
Interfaces	4 x LAN/DMZ, 2 x WAN, 1 x OPT	4 x LAN/DMZ, 2 x WAN, 1 x OPT	8 x GbE (configurable)
USB ports	2	2	2
Console port	Yes (DB9)	Yes (DB9)	Yes (DB9)
Rack-mountable	Yes	Yes	Yes
Fanless	-	-	-
System Capacity & Performance¹			
SPI firewall throughput (Mbps) ²	1,600	1,900	5,000
VPN throughput (Mbps) ³	400	500	650
IDP throughput (Mbps) ⁴	590	660	900
AV throughput (Mbps) ⁴	450	500	550
UTM throughput (AV and IDP) ⁴	450	500	550
Max. TCP concurrent sessions ⁵	150,000	200,000	500,000
Max. concurrent IPSec VPN tunnels ⁶	100	200	300
Concurrent SSL VPN users (default/max.) ⁷	25/150	35/150	50/150
VLAN interface	16	32	64
Concurrent devices logins (default/max.) ^{7,8}	200/300	200/300	500/800
Speedtest Performance			
SPI firewall throughput (Mbps) ⁹	900	900	900
WLAN Management			
Managed AP number (default/max.) ⁷	2/34	2/34	2/34
Recommend max. AP in 1 AP Group	20	20	20
Security Service			
Anti-Virus (AV) ⁷	Yes	Yes	Yes
Intrusion Detection and Prevention (IDP) & Application Patrol ⁷	Yes	Yes	Yes
Anti-Spam ⁷	Yes	Yes	Yes
Content Filtering (CF 2.0) ^{7,10}	Yes	Yes	Yes
SecuReporter Premium ⁷	Yes	Yes	Yes
Key Features			
VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec
SSL (HTTPS) Inspection	Yes	Yes	Yes
2-Factor Authentication	Yes	Yes	Yes
EZ Mode	Yes	-	-
Hotspot Management ⁷	Yes	Yes	Yes
Ticket printer support ¹¹ /Support Q'ty (max.)	Yes (SP350E)/10	Yes (SP350E)/10	Yes (SP350E)/10
Microsoft Azure	Yes	Yes	Yes
Amazon VPC	Yes	Yes	Yes
Facebook WiFi	Yes	Yes	Yes
Device HA Pro	Yes	Yes	Yes
Link Aggregation (LAG)	-	-	Yes
Power Requirements			
Power input	12 V DC, 3.33 A max.	12 V DC, 3.33 A max.	100 - 240 V AC, 50/60 Hz, 1.3 A max.
Max. power consumption (watt)	37.0	37.0	58.5
Heat dissipation (BTU/hr)	126.25	126.25	199.61
Physical Specifications			
Item	Dimensions (WxDxH)(mm/in.)	300 x 188 x 44/ 11.81 x 7.4 x 1.73	300 x 188 x 44/ 11.81 x 7.4 x 1.73
	Weight (kg/lb.)	2/4.4	2/4.4
Packing	Dimensions (WxDxH)(mm/in.)	351 x 149 x 243/ 13.82 x 5.98 x 9.65	351 x 152 x 245/ 13.82 x 5.98 x 9.65
	Weight (kg/lb.)	3.264/7.20	3.264/7.20
Included accessories	• Power adapter • Power cord • Rack mounting kit	• Power adapter • Power cord • Rack mounting kit	• Power cord • Rack mounting kit
Environmental Specifications			
Operating environment	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 environment	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)	787,109.3	787,109.3	560,811.5
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 ZLD4.35 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 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: The Speedtest result is conducted with 1Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.

*10: SafeSearch function in CF2.0 need to enable SSL inspection firstly and not for small business models.

*11: With Hotspot Management license support.

ZyWALL UTM Firewalls

Model	USG1100	USG1900	USG2200
Hardware Specifications			
Interfaces	8 x GbE (configurable)	8 x GbE (configurable)	12 x GbE (configurable), 4 x SFP (configurable), 2 x 10G Combo
USB ports	2	2	2
Console port	Yes (DB9)	Yes (DB9)	Yes (DB9)
Rack-mountable	Yes	Yes	Yes
Fanless	-	-	-
System Capacity & Performance¹			
SPI firewall throughput (Mbps) ²	6,000	7,000	25,000
VPN throughput (Mbps) ³	800	900	2,500
IDP throughput (Mbps) ⁴	1,000	1,200	2,000
AV throughput (Mbps) ⁴	650	710	1,000
UTM throughput (AV and IDP) ⁴	650	710	1,000
Max. TCP concurrent sessions ⁵	1,000,000	1,000,000	1,500,000
Max. concurrent IPSec VPN tunnels ⁶	1,000	2,000	3,000
Concurrent SSL VPN users (default/max.) ⁷	250/500	250/750	250/1,000
VLAN interface	128	128	256
Concurrent devices logins (default/max.) ^{7,8}	800/1,500	1,500/2,000	2,000/5,000
Speedtest Performance			
SPI firewall throughput (Mbps) ⁹	930	930	930
WLAN Management			
Managed AP number (default/max.) ⁷	2/130	2/130	2/1026
Recommend max. AP in 1 AP Group	60	60	300
Security Service			
Anti-Virus (AV) ⁷	Yes	Yes	Yes
Intrusion Detection and Prevention (IDP) & Application Patrol ⁷	Yes	Yes	Yes
Anti-Spam ⁷	Yes	Yes	Yes
Content Filtering (CF 2.0) ^{7,10}	Yes	Yes	Yes
SecuReporter Premium ⁷	Yes	Yes	Yes
Key Features			
VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec
SSL (HTTPS) Inspection	Yes	Yes	Yes
2-Factor Authentication	Yes	Yes	Yes
EZ Mode	-	-	-
Hotspot Management ⁷	Yes	Yes	Yes
Ticket printer support ¹¹ /Support Q'ty (max.)	Yes (SP350E)/10	Yes (SP350E)/10	Yes (SP350E)/10
Microsoft Azure	Yes	Yes	Yes
Amazon VPC	Yes	Yes	Yes
Facebook WiFi	Yes	Yes	Yes
Device HA Pro	Yes, activate once registered	Yes, activate once registered	Yes, activate once registered
Link Aggregation (LAG)	Yes	Yes	-
Power Requirements			
Power input	100 - 240 V AC, 50/60 Hz, 1.3 A max.	100 - 240 V AC, 50/60 Hz, 1.3 A max.	2 x AC-DC redundant power supply 110 - 240 V AC, 50/60 Hz, 2.5 A max.
Max. power consumption (watt)	58.5	58.5	119
Heat dissipation (BTU/hr)	199.61	199.61	406.045
Physical Specifications			
Item	Dimensions (WxDxH)(mm/in.)	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.)	3.3/7.28	3.3/7.28
Packing	Dimensions (WxDxH)(mm/in.)	519 x 392 x 163/ 20.43 x 15.43 x 6.42	519 x 392 x 163/ 20.43 x 15.43 x 6.425
	Weight (kg/lb.)	4.8/10.58	4.8/10.58
Included accessories		• Power cord • Rack mounting kit	• Power cord x 2 • Rack mounting (slide) kit
Environmental Specifications			
Operating environment	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 environment	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)		560,811.5	560,811.5
Certifications			
EMC		FCC Part 15 (Class A), CE EMC (Class A), C-Tick (Class A), BSMI	FCC Part 15 (Class A), IC, CE EMC (Class A), C-Tick (Class A), BSMI
Safety		LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI

*: This matrix with firmware ZLD4.35 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 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: The Speedtest result is conducted with 1Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.

*10: SafeSearch function in CF2.0 need to enable SSL inspection firstly and not for small business models.

*11: With Hotspot Management license support.

Advanced ZyWALL VPN Firewalls

Model	VPN2S	
Hardware Specifications		
VPN Firewall interfaces	3 x LAN, 1 x OPT, 1 x WAN	
Nebula SD-WAN interfaces	-	
USB ports	2 x USB 2.0	
Console port	-	
Rack-mountable	-	
System Capacity & Performance^{*1}		
SPI firewall throughput (Mbps) ^{*2}	1,500	
VPN throughput (Mbps) ^{*3}	35	
Max. TCP concurrent sessions ^{*4}	50,000	
Max. concurrent IPSec VPN tunnels ^{*5}	20	
Concurrent SSL VPN users (default/max.) ^{*6}	-	
VLAN interface	16	
Concurrent devices logins (default/max.) ^{*6,7}	-	
WLAN Management		
Managed AP number (default/max.) ^{*6}	-	
Security Service		
Content filtering ^{*6,8}	1 Year Free	
Geo Enforcer ^{*6}	-	
Key Features		
DPI Firewall	Yes	
VPN	IKEv2, IPSec, L2TP/IPSec	
SSL (HTTPS) inspection	-	
EZ Mode	-	
Hotspot Management ^{*6}	-	
Ticket printer support ^{*9} /Support Q'ty (max.)	-	
Amazon VPC	-	
Facebook WiFi	-	
Device HA Pro ^{*10}	-	
2-Factor Authentication	-	
SD-WAN Feature^{*11}		
Dynamic Path Selection	-	
WAN Optimization	-	
Zero Touch Provision (ZTP)	-	
Auto VPN	Site-to-Site	
	Client-to-Site	
App Patrol	-	
Content Filter	-	
Geo Enforcer (GeoIP)	-	
Management	-	
Monitor/Log Storage	-	
Power Requirements		
Power input	110 to 240 V AC, 50/60 Hz, 1.5 A max.	
Max. power consumption (watt)	13.1	
Heat dissipation (BTU/hr)	44.7	
Physical Specifications		
Item	Dimensions (WxDxH)(mm/in.)	210 x 115 x 33/8.27 x 6.06 x 1.57
	Weight (kg/lb.)	0.495/1.09
Packing	Dimensions (WxDxH)(mm/in.)	288 x 189 x 83/11.34 x 7.44 x 3.27
	Weight (kg/lb.)	1.13/2.49
Included accessories	Power adapter	
Environmental Specifications		
Operating environment	Temperature	0°C to 40°C/32°F to 104°F
	Humidity	20% to 95% (non-condensing)
Storage environment	Temperature	-30°C to 60°C/-22°F to 140°F
	Humidity	20% to 95% (non-condensing)
MTBF (hr)	44,000	
Certifications		
EMC	FCC Part 15B (Class B), FCC Part 68, CE EMC (Class B)	
Safety	CE LVD	

*: The matrix with firmware ZLD 4.31 and OPAL BE 1.12 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: Maximum sessions measured using the industry standard IXIA IxLoad testing tool

*5: Including Gateway-to-Gateway and Client-to-Gateway.

*6: With Zyxel service license to enable or extend the feature capacity.

*7: This is the recommend maximum number of concurrent logged-in devices.

*8: SafeSearch function in Content Filtering need to enable SSL inspection firstly and not for small business.

*9: With Hotspot Management license support.

*10: ZyWALL VPN100 or above supports Device HA Pro once registered.

*11: After device upgrading firmware to SD-OS v10.01 and was transformed to SD-WAN mode.

Advanced ZyWALL VPN Firewalls

Model	ZyWALL VPN50 (SBs)		ZyWALL VPN100 (SMBs)	
Operation Mode	Standalone	Nebula SD-WAN	Standalone	Nebula SD-WAN
Interfaces	4 x LAN/DMZ (GbE), 1 x WAN (GbE), 1 x SFP	4 x LAN/DMZ (GbE), 1 x WAN (GbE, Configurable), 1 x SFP	4 x LAN/DMZ (GbE), 2 x WAN (GbE), 1 x SFP	4 x LAN/DMZ (GbE), 2 x WAN (GbE, Configurable), 1 x SFP
Hardware Specifications				
USB 3.0 ports	1	1	2	2
Console port	Yes (RJ-45)	Yes (RJ-45)	Yes (DB9)	Yes (DB9)
Rack-mountable	-	-	Yes	Yes
System Capacity & Performance*1				
SPI firewall throughput (Mbps)*2	800	800	2,000	2,000
VPN throughput (Mbps)*3	150	150	500	500
Max. TCP concurrent sessions*4	400,000	400,000	800,000	800,000
Max. concurrent IPSec VPN tunnels*5	50	50	100	100
Concurrent SSL VPN users (default/max.)*6	10/50	-	30/200	-
VLAN interface	8	64	16	64
Concurrent device logins (default/max.)*6*7	64	-	200/300	-
WLAN Management				
Managed AP number (default/max.)*8	4/36	-	4/68	-
Key Features				
Firewall	Yes	Yes	Yes	Yes
VPN	IPSec, SSL, L2TP/IPSec	IPSec, L2TP/IPSec	IPSec, SSL, L2TP/IPSec	IPSec, L2TP/IPSec
SSL (HTTPS) Inspection	-	-	Yes	-
Application Patrol	-	Yes (bundle 1 year License)	-	Yes (bundle 1 year License)
Content Filtering*6*8	Yes (bundle 1 year License)	Yes (bundle 1 year License)	Yes (bundle 1 year License)	Yes (bundle 1 year License)
Geo Enforcer*6	Yes (bundle 1 year License)	Yes (bundle 1 year License)	Yes (bundle 1 year License)	Yes (bundle 1 year License)
EZ Mode	Yes	-	-	-
Hotspot Management*6	Yes	-	Yes	-
Ticket printer support*9/ Support Q'ty (max.)	Yes (SP350E)/10	-	Yes (SP350E)/10	-
Amazon VPC	Yes	-	Yes	-
Facebook WiFi	Yes	-	Yes	-
Device HA Pro*10	-	-	Yes	Yes (SD-OS v10.03 or after)
SD-WAN Features*11				
Dynamic Path Selection	-	Yes	-	Yes
WAN Optimization	-	Yes	-	Yes
Zero Touch Provision (ZTP)	-	Yes	-	Yes
Auto VPN				
Site to Site	-	Yes	-	Yes
Client to Site	-	Yes	-	Yes
App Patrol	-	Yes	-	Yes
Content Filter	-	Yes	-	Yes
Geo Enforcer (GeolP)	-	Yes	-	Yes
Cloud/Central Management	-	Yes	-	Yes
Monitor/Log Storage	-	Yes	-	Yes
Power Requirements				
Power input	12 V DC, 2.0 A max.	12 V DC, 2.0 A max.	12 V DC, 2.5 A max.	12 V DC, 2.5 A max.
Max. power consumption (watt)	12	12	13.3	13.3
Heat dissipation (BTU/hr)	40.92	40.92	45.38	45.38
Physical Specifications				
Item				
Dimensions (WxDxH)(mm/in.)	216 x 143 x 33/ 8.50 x 5.63 x 1.30	216 x 143 x 33/ 8.50 x 5.63 x 1.30	272 x 187 x 36/ 10.7 x 7.36 x 1.42	272 x 187 x 36/ 10.7 x 7.36 x 1.42
Weight (kg/lb.)	0.88/1.94	0.88/1.94	1.4/3.09	1.4/3.09
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	427 x 247 x 73/ 16.81 x 9.72 x 2.87	427 x 247 x 73/ 16.81 x 9.72 x 2.87
Weight (kg/lb.)	1.41/3.11	1.41/3.11	2.23/4.91	2.23/4.91
Included accessories	• Power adapter • RJ-45 - RS-232 cable for console connection	• Power adapter • RJ-45 - RS-232 cable for console connection	• Power adapter • Rack mounting kit (optional, by regions)	• Power adapter • Rack mounting kit (optional, by regions)
Environmental Specifications				
Operating environment				
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
Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage environment				
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
Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)	44,000	44,000	529,688.2	529,688.2
Certifications				
EMC	FCC Part 15 (Class B), IC, CE EMC (Class B), RCM, BSMI	FCC Part 15 (Class B), IC, CE EMC (Class B), RCM, BSMI	FCC Part 15 (Class B), CE EMC (Class B), C-Tick (Class B), BSMI	FCC Part 15 (Class B), CE EMC (Class B), C-Tick (Class B), BSMI
Safety	BSMI, UL	BSMI, UL	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI

*1: The matrix was measured with SD-OS v10.02P1 firmware version.

*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: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.

*5: Including Gateway-to-Gateway and Client-to-Gateway.

*6: With Zyxel service license to enable or extend the feature capacity.

*7: This is the recommend maximum number of concurrent logged-in devices.

*8: SafeSearch function in Content Filtering need to first enable SSL inspection and not for small businesses.

*9: With Hotspot Management license support.

*10: ZyWALL VPN100 or above supports Device HA Pro once registered.

*11: After upgrading device firmware to SD-OS v10.02 and was transformed to SD-WAN mode.

Advanced ZyWALL VPN Firewalls

Model	ZyWALL VPN300 (SMBs)		ZyWALL VPN1000 (MBs)	
Operation Mode	Standalone	Nebula SD-WAN	Standalone	Nebula SD-WAN
Interfaces	7 x GbE (Configurable), 1 x SFP	7 x GbE (Configurable), 1 x SFP	12 x GbE (Configurable), 2 x SFP	12 x GbE (Configurable), 2 x SFP
Hardware Specifications				
USB 3.0 ports	2	2	2	2
Console port	Yes (DB9)	Yes (DB9)	Yes (DB9)	Yes (DB9)
Rack-mountable	Yes	Yes	Yes	Yes
System Capacity & Performance*1				
SPI firewall throughput (Mbps)*2	2,600	2,600	8,000	8,000
VPN throughput (Mbps)*3	1,000	1,000	1,500	1,500
Max. TCP concurrent sessions*4	2,000,000	2,000,000	3,000,000	3,000,000
Max. concurrent IPsec VPN tunnels*5	300	300	1,000	1,000
Concurrent SSL VPN users (default/max.)*6	50/300	-	250/500	-
VLAN interface	64	64	128	128
Concurrent device logins (default/max.)*6*7	500/800	-	800/4000	-
WLAN Management				
Managed AP number (default/max.)*6	4/132	-	8/1032	-
Key Features				
Firewall	Yes	Yes	Yes	Yes
VPN	IPsec, SSL, L2TP/IPsec	IPsec, L2TP/IPsec	IPsec, SSL, L2TP/IPsec	IPsec, L2TP/IPsec
SSL (HTTPS) inspection	Yes	-	Yes	-
Application Patrol	-	Yes (bundle 1 year License)	-	Yes (bundle 1 year License)
Content Filtering*6*8	Yes (bundle 1 year License)	Yes (bundle 1 year License)	Yes (bundle 1 year License)	Yes (bundle 1 year License)
Geo Enforcer*6	Yes (bundle 1 year License)	Yes (bundle 1 year License)	Yes (bundle 1 year License)	Yes (bundle 1 year License)
EZ Mode	-	-	-	-
Hotspot Management*6	Yes	-	Yes	-
Ticket printer support*9/ Support Q'ty (max.)	Yes (SP350E)/10	-	Yes (SP350E)/10	-
Amazon VPC	Yes	-	Yes	-
Facebook WiFi	Yes	-	Yes	-
Device HA Pro*10	Yes	Yes (SD-OS v10.03 or after)	Yes	Yes (SD-OS v10.03 or after)
SD-WAN Features*11				
Dynamic Path Selection	-	Yes	-	Yes
WAN Optimization	-	Yes	-	Yes
Zero Touch Provision (ZTP)	-	Yes	-	Yes
Auto VPN	Site to Site	Yes	-	Yes
	Client to Site	Yes	-	Yes
App Patrol	-	Yes	-	Yes
Content Filter	-	Yes	-	Yes
Geo Enforcer (GeoIP)	-	Yes	-	Yes
Cloud/Central Management	-	Yes	-	Yes
Monitor/Log Storage	-	Yes	-	Yes
Power Requirements				
Power input	12 V DC, 4.17 A max.	12 V DC, 4.17 A max.	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	24.1	46.0	46.0
Heat dissipation (BTU/hr)	82.23	82.23	120.10	120.10
Physical Specifications				
Item	Dimensions (WxDxH)(mm/in.)	300 x 188 x 44/ 16.93 x 7.4 x 1.73	300 x 188 x 44/ 16.93 x 7.4 x 1.73	400 x 250 x 44/ 16.93 x 9.84 x 1.73
	Weight (kg/lb.)	1.65/3.64	1.65/3.64	3.3/7.28
Packing	Dimensions (WxDxH)(mm/in.)	351 x 152 x 245/ 13.82 x 5.98 x 9.65	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.)	2.83/6.24	2.83/6.24	2.83/6.24
Included accessories	• Power adapter • Power cord • Rack mounting kit	• Power adapter • Power cord • Rack mounting kit	• Power cord • Rack mounting kit	• Power cord • Rack mounting kit
Environmental Specifications				
Operating environment	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 environment	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	947,736
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	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	LVD (EN60950-1), BSMI

*: The matrix was measured with SD-OS v10.02P1 firmware version.

*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: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.

*5: Including Gateway-to-Gateway and Client-to-Gateway.

*6: With Zyxel service license to enable or extend the feature capacity.

*7: This is the recommend maximum number of concurrent logged-in devices.

*8: SafeSearch function in Content Filtering need to first enable SSL inspection and not for small businesses.

*9: With Hotspot Management license support.

*10: ZyWALL VPN100 or above supports Device HA Pro once registered.

*11: After upgrading device firmware to SD-OS v10.02 and was transformed to SD-WAN mode.

ZyWALL VPN Firewalls

Model	ZyWALL 110	ZyWALL 310	ZyWALL 1100
Hardware Specifications			
Interfaces	4 x LAN/DMZ, 2 x WAN, 1 x OPT	8 (Configurable)	8 (Configurable)
USB ports	2	2	2
Console port	Yes (DB9)	Yes (DB9)	Yes (DB9)
Rack-mountable	Yes	Yes	Yes
System Capacity & Performance¹			
SPI firewall throughput (Mbps) ²	1,600	5,000	6,000
VPN throughput (Mbps) ³	400	650	800
Max. TCP concurrent sessions ⁴	150,000	500,000	1,000,000
Max. concurrent IPSec VPN tunnels ⁵	100	300	1,000
Concurrent SSL VPN users (default/max.) ⁶	25/150	50/150	250/500
VLAN interface	16	64	128
Concurrent devices logins (default/max.) ^{6,7}	200/300	500/800	800/1,500
Speedtest Performance			
SPI firewall throughput (Mbps) ⁸	900	900	930
WLAN Management			
Managed AP number (default/max.) ⁶	2/34	2/34	2/130
Recommend max. AP in 1 AP Group	20	20	60
Security Service			
Anti-Virus (AV) ⁹	Yes	Yes	Yes
Intrusion Detection and Prevention (IDP) & Application Patrol ⁶	Yes	Yes	Yes
Anti-Spam ⁹	Yes	Yes	Yes
Content Filtering (CF 2.0) ^{6,8}	Yes	Yes	Yes
SecuReporter Premium ⁶	Yes	Yes	Yes
Key Features			
VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec
SSL (HTTPS) Inspection	Yes	Yes	Yes
2-Factor Authentication	Yes	Yes	Yes
EZ Mode	Yes	-	-
Hotspot Management ⁶	Yes	Yes	Yes
Ticket printer support ¹⁰ / Support Q'ty (max.)	Yes (SP350E)/10	Yes (SP350E)/10	Yes (SP350E)/10
Microsoft Azure	Yes	Yes	Yes
Amazon VPC	Yes	Yes	Yes
Facebook WiFi	Yes	Yes	Yes
Device HA Pro	Yes	Yes	Yes
Link Aggregation (LAG)	-	Yes	Yes
Power Requirements			
Power input	12 V DC, 3.33 A max.	110 - 240 V AC, 50/60 Hz, 1.3 A max.	110 - 240 V AC, 50/60 Hz, 1.3 A max.
Max. power consumption (watt)	37	58.5	58.5
Heat dissipation (BTU/hr)	126.25	199.61	199.61
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
	Weight (kg/lb.)	2/4.41	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
	Weight (kg/lb.)	2.83/6.24	4.74/10.45
Included accessories	<ul style="list-style-type: none"> Power adapter Power cord Rack mounting 	<ul style="list-style-type: none"> Power adapter Rack mounting kit 	<ul style="list-style-type: none"> Power cord Rack mounting kit
Environmental Specifications			
Operating environment	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 environment	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)	787,109.3	560,811.5	560,811.5
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 ZLD4.35 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: Maximum sessions measured using the industry standard IXIA IxLoad testing tool

*5: Including Gateway-to-Gateway and Client-to-Gateway.

*6: With Zyxel service license to enable or extend the feature capacity.

*7: This is the recommend maximum number of concurrent logged-in devices.

*8: The Speedtest result is conducted with 1Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.

*9: SafeSearch function in CF2.0 need to enable SSL inspection firstly and not for small business models.

*10: With Hotspot Management license support.

ZyWALL VPN Firewalls

Model	USG20-VPN	USG20W-VPN	
Hardware Specifications			
Interfaces	4 x LAN/DMZ, 1 x WAN, 1 x SFP	4 x LAN/DMZ, 1 x WAN, 1 x SFP	
USB ports	1	1	
Console port	Yes (RJ-45)	Yes (RJ-45)	
Rack-mountable	-	-	
System Capacity & Performance^{*1}			
SPI firewall throughput (Mbps) ^{*2}	350	350	
VPN throughput (Mbps) ^{*3}	90	90	
Max. TCP concurrent sessions ^{*4}	20,000	20,000	
Max. concurrent IPSec VPN tunnels ^{*5}	10	10	
Concurrent SSL VPN users (default/max.) ^{*6}	5/15	5/15	
VLAN interface	8	8	
Concurrent devices logins (default/max.) ^{*6,7}	64	64	
Speedtest Performance			
SPI firewall throughput (Mbps) ^{*8}	320	320	
WLAN Management			
Managed AP number (default/max.) ^{*6}	-	-	
Recommend max AP in 1 AP Group	-	-	
Security Service			
Anti-Virus (AV) ^{*6}	-	-	
Intrusion Detection and Prevention (IDP) & Application Patrol ^{*6}	-	-	
Anti-Spam ^{*6}	Yes	Yes	
Content Filtering (CF 2.0) ^{*6,8}	Yes	Yes	
SecuReporter Premium ^{*6}	Yes	Yes	
Key Features			
VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	
SSL (HTTPS) Inspection	-	-	
2-Factor Authentication	Yes	Yes	
EZ Mode	Yes	Yes	
Hotspot Management ^{*6}	-	-	
Ticket printer support ^{*10} /Support Q'ty (max.)	-	-	
Microsoft Azure	Yes	Yes	
Amazon VPC	Yes	Yes	
Facebook WiFi	Yes	Yes	
Device HA Pro	-	-	
Link Aggregation (LAG)	-	-	
Power Requirements			
Power input	12 V DC, 2.0 A max.	12 V DC, 2.0 A max.	
Max. power consumption (watt)	12	18	
Heat dissipation (BTU/hr)	40.92	61.38	
Physical Specifications			
Item	Dimensions (WxDxH)(mm/in.)	216 x 143 x 33/8.50 x 5.63 x 1.30	216 x 143 x 33/8.50 x 5.63 x 1.30
	Weight (kg/lb.)	0.88/1.94	0.94/2.06 (Antenna included)
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	1.50/3.31
Included accessories	<ul style="list-style-type: none"> Power adapter RJ-45 - RS-232 cable for console connection 	<ul style="list-style-type: none"> Power adapter RJ-45 - RS-232 cable for console connection Antenna 	
Environmental Specifications			
Operating environment	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 environment	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)	44,000	44,000	
Certifications			
EMC	FCC Part 15 (Class B), IC, CE EMC (Class B), RCM, BSMI	FCC Part 15 (Class B), IC, CE EMC (Class B), RCM, BSMI	
Safety	BSMI, UL	BSMI, UL	

*: This matrix with firmware ZLD4.35 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: Maximum sessions measured using the industry standard IXIA IxLoad testing tool

*5: Including Gateway-to-Gateway and Client-to-Gateway.

*6: With Zyxel service license to enable or extend the feature capacity.

*7: This is the recommend maximum number of concurrent logged-in devices.

*8: The Speedtest result is conducted with 1Gbps WAN link in real world and it is subject to fluctuate due to quality of the ISP link.

*9: SafeSearch function in CF2.0 need to enable SSL inspection firstly and not for small business models.

*10: With Hotspot Management license support.

Wireless Specifications

Model	ATP Firewall	VPN Firewall	Unified Security Gateway	
	ZyWALL ATP100W	USG20W-VPN	USG40W	USG60W
Standard compliance	802.11 a/b/g/n/ac	802.11 a/b/g/n/ac	802.11 b/g/n	802.11 a/b/g/n
Wireless frequency	2.4/5 GHz	2.4/5 GHz	2.4 GHz	Concurrent 2.4 & 5 GHz
Radio	2	1	1	2
SSID number	8	8	8	16
Maximum transmit power (Max. total channel)	<ul style="list-style-type: none"> US (FCC) 2.4 GHz: 25 dBm, 3 antennas US (FCC) 5 GHz: 25 dBm, 3 antennas EU (ETSI) 2.4 GHz: 20 dBm (EIRP), 3 antennas EU (ETSI) 5 GHz: 20 dBm (EIRP), 3 antennas 	<ul style="list-style-type: none"> US (FCC) 2.4 GHz: 25 dBm, 3 antennas US (FCC) 5 GHz: 25 dBm, 3 antennas EU (ETSI) 2.4 GHz: 20 dBm (EIRP), 3 antennas EU (ETSI) 5 GHz: 20 dBm (EIRP), 3 antennas 	<ul style="list-style-type: none"> US (FCC) 2.4 GHz: 24.3 dBm, 2 antennas EU (ETSI) 2.4 GHz: 19.6 dBm (EIRP), 2 antennas 	<ul style="list-style-type: none"> US (FCC) 2.4 GHz: 24.3 dBm, 2 antennas US (FCC) 5 GHz: 25.8 dBm, 2 antennas EU (ETSI) 2.4 GHz: 18.6 dBm (EIRP), 2 antennas EU (ETSI) 5 GHz: 28.4 dBm (EIRP), 2 antennas
No. of antenna	3 detachable antennas	3 detachable antennas	2.4 GHz: 2T2R MIMO (Detachable, SMA-R)	2.4 GHz: 2T2R MIMO 5 GHz: 2T2R MIMO (Detachable, SMA-R)
Antenna gain	2 dBi @2.4 GHz 3 dBi @5 GHz	2 dBi @2.4 GHz 3 dBi @5 GHz	3 dBi	3 dBi
Data rate	<ul style="list-style-type: none"> 802.11n up to 450 Mbps 802.11ac up to 1300 Mbps 	<ul style="list-style-type: none"> 802.11n up to 450 Mbps 802.11ac up to 1300 Mbps 	<ul style="list-style-type: none"> 802.11b/g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps 802.11n: up to 300 Mbps in MCS15 (40 MHz; GI = 400 ns) 	<ul style="list-style-type: none"> 802.11b/g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps 802.11a: 6, 9, 12, 18, 24, 36, 48 and 54 Mbps 802.11n: up to 300 Mbps in MCS15 (40 MHz; GI = 400 ns)
Frequency band	2.4 GHz (IEEE 802.11 b/g/n) <ul style="list-style-type: none"> USA (FCC): 2.412 to 2.462 GHz Europe (ETSI): 2.412 to 2.472 GHz TWN (NCC): 2.412 to 2.462 GHz 5 GHz (IEEE 802.11 a/n/ac) <ul style="list-style-type: none"> USA (FCC): 5.15 to 5.25 GHz; 5.250 to 5.350 GHz; 5.470 to 5.725 GHz; 5.7250 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; 5.250 to 5.350 GHz; 5.470 to 5.725 GHz; 5.7250 to 5.850 GHz 	2.4 GHz (IEEE 802.11 b/g/n) <ul style="list-style-type: none"> USA (FCC): 2.412 to 2.462 GHz Europe (ETSI): 2.412 to 2.472 GHz TWN (NCC): 2.412 to 2.462 GHz 5 GHz (IEEE 802.11 a/n/ac) <ul style="list-style-type: none"> USA (FCC): 5.15 to 5.25 GHz; 5.250 to 5.350 GHz; 5.470 to 5.725 GHz; 5.7250 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; 5.250 to 5.350 GHz; 5.470 to 5.725 GHz; 5.7250 to 5.850 GHz 	2.4 GHz (IEEE 802.11 b/g/n) <ul style="list-style-type: none"> USA (FCC): 2.412 to 2.462 GHz Europe (ETSI): 2.412 to 2.472 GHz TWN (NCC): 2.412 to 2.462 GHz 	2.4 GHz (IEEE 802.11 b/g/n) <ul style="list-style-type: none"> USA (FCC): 2.412 to 2.462 GHz Europe (ETSI): 2.412 to 2.472 GHz TWN (NCC): 2.412 to 2.462 GHz 5 GHz (IEEE 802.11 a/n) <ul style="list-style-type: none"> USA: 5.150 to 5.250 GHz; 5.725 to 5.850 GHz European (ETSI): 5.15 to 5.35 GHz; 5.470 to 5.725 GHz Taiwan (TW): 5.25 to 5.35 GHz; 5.725 to 5.850 GHz
Receive sensitivity	2.4 GHz: <ul style="list-style-type: none"> 11 Mbps ≤ -87 dBm 54 Mbps ≤ -77 dBm HT20 ≤ -71 dBm HT40 ≤ -68 dBm 5 GHz: <ul style="list-style-type: none"> 54 Mbps ≤ -74 dBm HT40, MCS23 ≤ -68 dBm VHT40, MCS9 ≤ -62 dBm HT20, MCS23 ≤ -71 dBm VHT20, MCS8 ≤ -66 dBm VHT80, MCS9 ≤ -59 dBm 	2.4 GHz: <ul style="list-style-type: none"> 11 Mbps ≤ -87 dBm 54 Mbps ≤ -74 dBm HT20, MCS15 ≤ -71 dBm HT40, MCS15 ≤ -67 dBm 5 GHz: <ul style="list-style-type: none"> 54 Mbps ≤ -74 dBm HT40, MCS23 ≤ -68 dBm VHT40, MCS9 ≤ -62 dBm HT20, MCS23 ≤ -71 dBm VHT20, MCS8 ≤ -66 dBm VHT80, MCS9 ≤ -59 dBm 	2.4 GHz: <ul style="list-style-type: none"> 11 Mbps ≤ -87 dBm 54 Mbps ≤ -74 dBm HT20, MCS15 ≤ -71 dBm HT40, MCS15 ≤ -68 dBm 	2.4 GHz: <ul style="list-style-type: none"> 11 Mbps ≤ -87 dBm 54 Mbps ≤ -74 dBm HT20 ≤ -71 dBm HT40 ≤ -68 dBm 5 GHz: <ul style="list-style-type: none"> 54 Mbps ≤ -75 dBm HT20, MCS15 ≤ -71 dBm HT40, MCS15 ≤ -69 dBm

Nebula Cloud Managed Security Gateways

Model	NSG50	NSG100	NSG200	NSG300	
Hardware Specifications					
10/100/1000 Mbps RJ-45 ports	4 x LAN (GbE), 2 x WAN (1 x SFP, 1 x GbE)	4 x LAN (GbE), 2 x WAN (GbE)	5 x LAN (GbE), 2 x WAN (GbE)	6 x Individual LAN (GbE), 2 x WAN (GbE)	
USB ports	1	2	2	2	
Console port	Yes (RJ-45)	Yes (DB9)	Yes (DB9)	Yes (DB9)	
Rack-mountable	-	Yes	Yes	Yes	
Wall-mountable	Yes	-	-	-	
Fanless	Yes	Yes	No	No	
System Capacity & Performance¹					
SPI firewall throughput (Mbps) ²	300	450	1,250	4,000	
VPN throughput (Mbps) ³	100	150	500	750	
IDP throughput (Mbps) ⁴	110	160	500	950	
AV throughput (Mbps) ^{4a}	50	90	300	450	
SP throughput (Mbps, AV and IDP) ^{4a}	50	90	300	450	
Unlimited user	Yes	Yes	Yes	Yes	
Max. TCP concurrent sessions ⁵	20,000	40,000	80,000	500,000	
Max. TCP session rate	2,000	2,000	8,000	10,000	
Max. concurrent IPsec VPN tunnels ⁶	10	40	200	300	
VLAN interface	8	16	16	16	
Key Software Features					
Firewall	Yes	Yes	Yes	Yes	
Virtual Private Network (VPN)	Yes (IPSec, L2TP over IPSec)	Yes (IPSec, L2TP over IPSec)	Yes (IPSec, L2TP over IPSec)	Yes (IPSec, L2TP over IPSec)	
Application Patrol	Yes	Yes	Yes	Yes	
Intrusion Detection and Prevention (IDP)	Yes	Yes	Yes	Yes	
Bandwidth management	Yes	Yes	Yes	Yes	
Logging and Monitoring	Yes	Yes	Yes	Yes	
Content Filtering	Yes	Yes	Yes	Yes	
Anti-Virus	Yes	Yes	Yes	Yes	
WAN Failover	Yes	Yes	Yes	Yes	
Power Requirements					
Power input	12 V DC, 2.0 A max.	12 V DC, 3.0 A max.	12 V DC, 3.33 A max.	100 - 240 V AC, 50/60 Hz, 1.3 A max.	
Max. power consumption (watt)	12.0	19.0	37.0	58.5	
Heat dissipation (BTU/hr)	40.95	64.83	199.61	199.61	
Physical Specifications					
Item	Dimensions (WxDxH)(mm/in.)	216 x 143 x 33/ 8.50 x 5.63 x 1.30	242 x 175 x 36/ 9.53 x 6.89 x 1.42	300 x 178 x 44/ 11.81 x 7.0 x 1.73	430 x 250 x 44/ 16.93 x 9.84 x 1.73
	Weight (kg/lb.)	1.04/2.29	1.25/2.76	2.0/4.4	3.3/7.28
Packing	Dimensions (WxDxH)(mm/in.)	276 x 185 x 98/ 10.87 x 7.28 x 3.86	394 x 240 x 101/ 15.51 x 9.45 x 3.98	351 x 243 x 149/ 13.82 x 9.57 x 5.87	519 x 392 x 163/ 20.43 x 15.43 x 6.42
	Weight (kg/lb.)	1.41/3.11	2.25/4.96	3.264/7.20	4.8/10.58
Included accessories	<ul style="list-style-type: none"> Power adapter (with plug) RJ45-RS232 console cable 	<ul style="list-style-type: none"> Power adapter Rack mounting kit 	<ul style="list-style-type: none"> Power cord Power adapter Rack mounting kit 	<ul style="list-style-type: none"> Power cord Rack mounting kit 	
Environmental Specifications					
Operating environment	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
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage environment	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
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)	44,000.0	815,463.90	787,109.3	560,811.50	
Certifications					
EMC	FCC Part 15 (Class B), IC, CE EMC (Class B), RCM, BSMI	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	BSMI, UL	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	

*1: Actual performance may vary depending on network conditions and activated applications.

*2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets), and without enabling Intrusion Detection and Prevention.

*3: VPN throughput measured based on RFC 2544 (1,424-byte UDP packets), and without enabling Intrusion Detection and Prevention.

*4: AV and IDP throughput measured using the industry standard HTTP performance test (1,460-byte HTTP packets). Testing was done with multiple sessions.

*5: Maximum sessions measured using the industry-standard IXIA IxLoad testing tool.

*6: Including Gateway-to-Gateway and Client-to-Gateway

Compatibility & Accessories

Access Point

Product	Unified AP	Unified Pro AP	
Models	<ul style="list-style-type: none"> • NWA5121-NI • NWA5121-N • NWA5123-NI • NWA5123-AC 	<ul style="list-style-type: none"> • NWA5123-AC HD • NWA5301-NJ • WAC5302D-S • WAX510D* 	<ul style="list-style-type: none"> • WAC6103D-I • WAC6303D-S • WAC6502D-E • WAC6502D-S
	<ul style="list-style-type: none"> • WAC6503D-S • WAC6552D-S • WAC6553D-E • WAX650S* 		
Functions			
Central management	Yes	Yes	
Auto provisioning	Yes	Yes	
Data forwarding	Local bridge	Local bridge/Data tunnel	
ZyMesh	Yes	Yes	

*: From APC3.0, commercial gateways supporting APC technology are able to recognize APs with FW release higher than APC3.0 as Forward Compatible APs. Resellers can introduce newly-available Zyxel APs with basic features supported without upgrading any new controller firmware.

Service Gateway Printer

Model	Feature	Supported Model
SP350E	<ul style="list-style-type: none"> • Buttons: 3 • Paper roll width: 58 (+0/-1) mm • Interface: 10/100 Mbps RJ-45 port • Power input: 12 V DC, 5 A max. • Item dimensions (WxDxH): 176 x 111 x 114 mm (6.93" x 4.37" x 4.49") • Item weight: 0.8 kg (1.76 lb.) 	<ul style="list-style-type: none"> • USG FLEX 100 • USG FLEX 200 • USG FLEX 500 • VPN50 • VPN100 • VPN300 • VPN1000 • USG60 • USG60W • USG110 • USG210 • USG310 • USG1100 • USG1900 • USG2200 Series • ZyWALL 110 • ZyWALL 310 • ZyWALL 1100

1: Hotspot management licenses required

Transceivers (Optional)*

Functions	Model	Speed	Connector	Wavelength	Max. Distance	DDMI
ATP100/100W/200/	SFP10G-SR*	10-Gigabit SFP+	Duplex LC	850 nm	300 m (328 yd)	Yes
ATP500/700/800/	SFP10G-LR*	10-Gigabit SFP+	Duplex LC	1310 nm	10 km (10936 yd)	Yes
USG FLEX 100/200/500/	SFP-1000T	Gigabit	RJ-45	-	100 m (109 yd)	-
VPN50/100/300/1000/	SFP-LX-10-D	Gigabit	LC	1310 nm	10 km (10936 yd)	-
USG20-VPN/20W-VPN/	SFP-SX-D	Gigabit	LC	850 nm	550 m (601 yd)	-
USG2200 Series						

*: Only USG2200 series supports 10-Gigabit SFP+

Supported Model List

Model	Access Point	Service Gateway Printer	Transceivers	Direct Attach Cables
	Managed AP Service Required	Hotspot Management License Required	Optional	Optional
ATP100	Yes	-	Yes	-
ATP100W	Yes	-	Yes	-
ATP200	Yes	-	Yes	-
ATP500	Yes	-	Yes	-
ATP700	Yes	-	Yes	-
ATP800	Yes	-	Yes	-
USG FLEX 100	Yes	-	Yes	-
USG FLEX 200	Yes	Yes	Yes	-
USG FLEX 500	Yes	Yes	Yes	-
VPN50	Yes	Yes*	Yes	-
VPN100	Yes	Yes*	Yes	-
VPN300	Yes	Yes*	Yes	-
VPN1000	Yes	Yes*	Yes	-
USG20 (W)-VPN	-	-	Yes	-
USG40 (W)	Yes	-	-	-
USG60 (W)	Yes	Yes**	-	-
USG110	Yes	Yes	-	-
USG210	Yes	Yes	-	-
USG310	Yes	Yes	-	-
USG1100	Yes	Yes	-	-
USG1900	Yes	Yes	-	-
USG2200	Yes	Yes	Yes	Yes
ZyWALL 110	Yes	Yes	-	-
ZyWALL 310	Yes	Yes	-	-
ZyWALL 1100	Yes	Yes	-	-

*: After upgrading firmware to SD-OS v10.02 or later

** : Hotspot Management supports USG60/60W with firmware ZLD4.35 or later.

License for VPN Client Service

SecuExtender Software

Item	Description	Supported OS
IPSec VPN Client*	IPSec VPN client software for the ZyWALL and USG Series with Easy VPN for zero configuration remote access	Windows XP (32-bit) Windows Server 2003 (32-bit) Windows Server 2008 (32/64-bit) Windows Vista (32/64-bit) Windows 7 (32/64-bit) Windows 8 (32/64-bit) Windows 10 (32/64-bit)
SSL VPN Client*	Secured VPN connection between PC/MAC and ZyWALL Firewall	Windows XP Windows 7 (32/64-bit) Windows 8/8.1 (32/64-bit) Windows 10 (32/64-bit) MAC OS 10.7 - 10.13

*: A 30-day trial version of IPSec VPN client and SSL VPN client for MAC OS can be downloaded from official Zyxel website.

To continue using the application, please contact your regional sales representatives and purchase a commercial license for the application.

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