ZYXEL





ZyWALL 110/310/1100 and USG20(W)-VPN

VPN Firewall

Networking brings convenience and efficiency to business environments; however it introduces significant security and safety concerns at the same time. Today, businesses or branch offices really need a complete yet affordable solution that not only bridges communications between two or more remote sites, but also connects multiple VPNs and ensures data security to prevent the network from threats.



Safer, more reliable VPN connections

Faster processors today have vastly boosted the capabilities of attackers to decrypt VPN tunnels. Legacy VPN cryptographic algorithms like Message Digest 5 (MD5) and Secure Hash Algorithm 1 (SHA-1) are no longer sufficient to guarantee secure outbound communications. With supports to the more advanced Secure Hash Algorithm 2 (SHA-2), the VPN Firewall provides the safest VPN connections in its class to ensure maximum security for business communications.

The complete range of Zyxel VPN Firewalls deliver reliable, non-stop VPN services with dual-WAN failover and fallback support. With two WAN connections—one primary and one for redundancy—the Zyxel VPN Firewall automatically switches to the backup connection should the primary link fail, and automatically switches back to the primary connection once it is back online.









Robust hybrid VPN (IPSec/ SSL/L2TP over IPSec)



Facebook WiFi, Intelligence social media authentication



Auto-provisioned client-to-site IPsec setup with Easy VPN



More secure VPN connections with SHA-2 cryptographic



Device HA Pro dedicated heartbeat port ensures smart handover



Hotspot management for authentication, access control and billing



SecuReporter, cloud-based intelligent analytics and report service



COMMUNITY

To support dynamic, mobile business operations in today's BYOD (bring your own device) business environments, the VPN Firewalls offer unlimited business mobility with Layer-2 Tunneling Protocol (L2TP) VPN for mobile devices. The VPN Firewall supports L2TP/IPSec VPN on a wide variety of mobile Internet devices running the iOS, Android and Windows mobile platforms.

Zero-configuration remote access

Virtual private networks provide businesses a secure and convenient way of sharing company resources with partners, customers, or employees on business trips. Yet typical VPN solutions are hard for non-technical users to configure, which greatly reduces their usability and convenience. The Zyxel VPN Firewalls feature Easy VPN to provide auto-provisioned client-to-site IPSec VPN setup. A wizard is available with the Zyxel IPSec VPN client-software that automatically retrieves the VPN configuration file from the remote Zyxel VPN Firewall and completes the IPSec VPN setup in 3 simple steps. Zyxel's Easy VPN lowers administration effort and allows partner, customers, or traveling employees to access company servers, email, or data centers easily and securely.

Best TCO for access expansion

People expect network access regardless of time or location. As a result, hotspots are in demand in an ever-expanding assortment of locations. The Zyxel VPN firewalls integrated with Zyxel AP Controller technology enables users from a centralized user interface. In addition, Zyxel Hotspot Management delivers a unified solution for business networks with user-friendly tools like Billing System, Walled Garden, Multiple Authentication, 3rd Party Social Login and User Agreement. With ZyWALL series businesses can now deploy or expand a managed WiFi network with minimal effort.

Swift and secure firmware upgrades

Locating firmware updates — not to mention identifying correct versions for your device and managing their installation — can be a complex and confusing ordeal. The Zyxel VPN Firewall solves this with its new Cloud Helper service. Cloud Helper provides a simple step to look for upto-date firmware information. New firmware is immediately made available upon release from our official database to ensure its authenticity and reliability.

Simplified management procedure

Managing complex configuration settings can be confusing and time-consuming. Zyxel USG 20-VPN and USG20W-VPN provides an "easy mode" setting in the GUI for entry-level and SOHO users. Easy mode provides an iconbased feature set and attractive dashboard to simplify management and monitoring of the device. Application and function settings also have integrated wizards for user-friendly setup. Zyxel USG 20-VPN and USG20W-VPN easy mode helps entry-level users and SOHO users effortlessly take advantage of high-speed and secure networking.

Zyxel One Network experience

Aiming for relieving our customers from repetitive operations of deploying and managing a network, Zyxel One Network is designed to simplify the configuration, management, and troubleshooting, allowing our customers to focus on the business priorities. Zyxel One Network presents an easy-to-use tool, Zyxel One Network Utility (ZON Utility), to realize speed network setup. Zyxel Smart Connect allows Zyxel networking equipment to be aware and recognize each other and further facilitating the network maintenance via one-click remote functions such as factory reset or power cycling. Zyxel One Network redefines the network integration across multiple networking products from switch to WiFi AP and to Gateway.

Enhanced Visibility

SecuReporter is a cloud-based intelligent analytics and report service with data collection and correlation capabilities. USG is bundled with 1-year SecuReporter service, giving 7 days of log retention and visual analytics. SecuReporter provides multiple analytical perspectives on overall Threat Trend, Spam Mail, Unsafe Website Categories, Most Frequent Security Threat (Malware, IDP, Spam) and user behaviors, delivering holistic visibility for security professionals.

VPN Firewall Quick Finder



USG20(W)-VPN	ZyWALL 110	ZyWALL 310	ZyWALL 1100
SB	SB	SMB	SMB
350	1,600	5,000	6,000
20,000	150,000	500,000	1,000,000
90	400	650	800
10	100	300	1,000
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
-	Yes	Yes	Yes
-	Yes	Yes	Yes
	\$B 350 20,000 90 10 Yes Yes Yes	SB SB 350 1,600 20,000 150,000 90 400 10 100 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	SB SB SMB 350 1,600 5,000 20,000 150,000 500,000 90 400 650 10 100 300 Yes Yes Yes Yes Yes Yes

^{*1:} With Zyxel service license to enable or extend the feature capacity

Subscription Services

The Zyxel VPN Firewall Series provides a complete feature set to perfectly fit different business requirements as well as to enable the maximum performance and security with an all-in-one appliance. Comprehensive network modularity also empowers IT professionals to customize the system to meet their individual needs.

- 1. USG20(W)-VPN provides Anti-Spam, Content Filtering and SecuReporter only
- $2. \ Hotspot\ Management\ supports\ for\ ZyWALL\ 310\ and\ ZyWALL\ 1100\ in\ firmware\ ZLD4.20\ or\ later;\ and\ for\ ZyWALL\ 1100\ in\ firmware\ ZLD4.25\ or\ later.$

















Anti-Virus

Anti-Spam

Intrusion Detection Application Patrol Content Filtering 2.0 & Prevention

SecuReporter

AP Controller

Hotspot Management

^{*2:} ZyWALL/USG still be able to support by CLIs

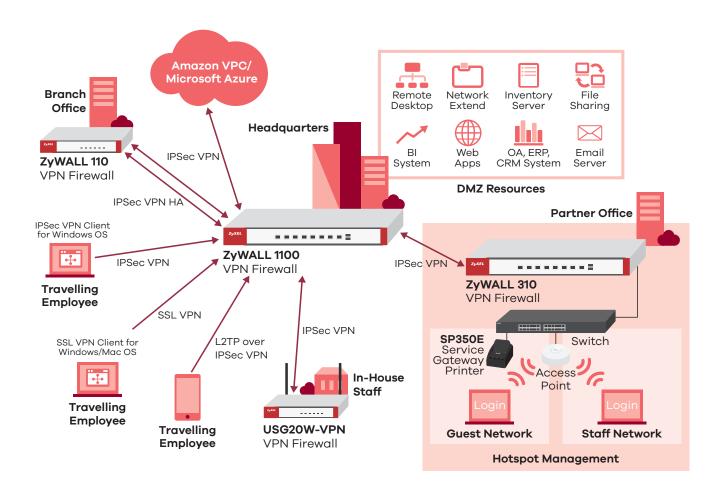
Key Applications

VPN application

- High-speed, high-security communications between local servers, remote devices and cloud-hosted applications with deployments of the ZyWALL Firewalls.
- Secure, reliable VPN connectivity with IPSec VPN load balancing and failover features delivers high-availability services for exceptional uptime.
- Easy-to-use, secure remote access via SSL, IPSec and L2TP over IPSec VPN.
- The headquarter ZyWALL Series can also establish an IPSec VPN connection with Amazon VPC/Microsoft Azure for secured access to leverage the benefits of cloudbased applications and to expend on-premise networks that extend into the cloud center.

Hotspot management

- High speed internet access
- Tier of service
- Log record for regulatory compliance
- Premium security control
- Various Network access control (free or paid access, social login)
- *: Hotspot Management supports for ZyWALL 310 and ZyWALL 1100 in firmware ZLD4.20 or later; and for ZyWALL 110 in firmware ZLD4.25 or later.



Specifications

Product photo Image: Product	Model	ZyWALL 110	ZyWALL 310	ZyWALL 1100	USG20-VPN	USG20W-VPN
Netrotaces	Product photo					1 1 1
Interfaces 4 x L AND/MX, 2017 8 (Configurable) 4 (Configurable) 4 x L AND/MX, 2017 4 x L AND/MX, 2017 4 x L AND/MX, 2017 2 x L AND/MX, 2017 4 x L AND/MX, 2017		Iv II manage	to n'h n'h n'h n'h n'h n'h n'h n'h n'h n'h 	1. 東東東東東東東東 2 · 秦		·
1	Hardware Specifications					
Console port Yes (DB9)	Interfaces		8 (Configurable)	8 (Configurable)		•
Rack-mountable Ves Ves	USB ports	2	2	2	1	1
System Capacity & Performance** SPI firewall throughput (Mbps)** 6600 5,000 6,000 350 350 VPN throughput (Mbps)** 400 650 800 90 90 Max. TCP concurrent sessions** 150,000 500,000 1,000,000 20,000 20,000 Max. concurrent IPSec VPN 100 300 1,000 10 10 Concurrent SSL VPN users 25/150 50/150 250/500 5/15 5/15 Concurrent devices logins 200/300 500/800 800/1,500 6 4 8 Concurrent devices logins 200/300 500/800 800/1,500 6 4 8 Speedtest Performance FPI firewall throughput (Mbps)** 900 90 93 320 320 320 Speedtest Performance PPI firewall throughput (Mbps)** 90 93 320 320 320 Management 2 734 2/130 2 2	Console port	Yes (DB9)	Yes (DB9)	Yes (DB9)	Yes (RJ-45)	Yes (RJ-45)
SPH firewall throughput (Mbps)³ 400 500 600 90 90 VPN throughput (Mbps)³ 400 600 800 90 90 Max. TOP concurrent sessors** 100 900 100 10 90 Max. concurrent SSL VPN users (default/max.)³ 25/150 80/150 250/500 5/15 5/15 Concurrent decise logins (default/max.)³ 26/130 6 4 128 8 8 Concurrent decise logins (default/max.)³ 20/300 80/300 80/1500 6 4 PH firewall throughput (Mbps)* 20/300 80/300 80/1500 8 6 PH firewall throughput (Mbps)* 20/300 90 90 30 30 20 PH firewall throughput (Mbps)* 90 90 90 30 30 20 PH firewall throughput (Mbps)* 90 90 90 30 30 20 PH firewall throughput (Mbps)* 90 90 90 30 30 </td <td>Rack-mountable</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> <td>-</td> <td>-</td>	Rack-mountable	Yes	Yes	Yes	-	-
VPN throughput (Mbps)**s 400 650 800 90 90 Max. CPO concurrent sessions**s 150,000 500,000 1,000 20,000 20,000 Max. concurrent SSL VPN users 28/150 50/150 250/500 5/15 7/15 Concurrent Gevices logins (default/max,)**a 20/300 50/800 800/1,500 64 8 Speedtest Performance Speedtest Performance Speedtest Performance Speedtest Performance Speedtest Performance WLAN Management 4/34 2/34 2/130 320 320 Managed AP number (default/max,1** 2/34 2/130 6 4 - Recommend max. Ap in 1Ap Group 2/34 2/130 6 - - - Report (default/max,1** 4 8 8 9 9 3 3 3 3 Managed AP number (default/max,1** 8 8 9	System Capacity & Performance	4				
Max. CPC poncurrent iPSec VPN tunnels** 150,000 500,000 1,000,000 20,000 10 Max. concurrent IPSec VPN tunnels** 100 300 1,000 175 5/15 Concurrent SSL VPN users (default/mox.)** 25/150 50/150 250/500 5/15 5/15 VLAN interface 16 64 128 8 8 Concurrent devices logins (default/mox.)*** 200/300 500/800 800/1,500 64 64 Specificates Performance SPI firewall throughput (Mbps)** 900 90 930 320 320 SPI firewall throughput (Mbps)** 900 90 930 320 320 WILLIAM Management 2/34 2/130 - - - SPI firewall throughput (Mbps)** 90 90 90 320 320 320 WILLIAM Management 2/34 2/34 2/130 - - - - - - - - - -	SPI firewall throughput (Mbps)*2	1,600	5,000	6,000	350	350
Max. concurrent IPSec VPN tunnels* 100 300 1,000 10 10 Concurrent SSL VPN users (default/max.)** 25/150 50/150 250/500 5/150 5/150 VLAN interface 16 64 128 8 8 Concurrent devices logins (default/max.)*** 20/300 50/800 800/1,500 64 6 Seperturent devices logins (default/max.)*** 20/300 900 30 320 320 Seperturent devices logins (default/max.)*** 90 930 320 320 Seperturent devices logins (default/max.)*** 2/34 2/34 2/130 2 2 Management 2/34 2/34 2/130 2 2 Recommend max. Ap in 1AP Group 2/34 2/34 2/130 2 2 Sepertics Septices 4 9 9 9 2 2 Anti-virus (AV)*6 9 8 9 9 2 2 Anti-virus	VPN throughput (Mbps) ^{*3}	400	650	800	90	90
tonoirent SSL VPN users (default/max.)** 25/150 50/150 250/500 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15 7/15	Max. TCP concurrent sessions*4	150,000	500,000	1,000,000	20,000	20,000
Kdefault/max.)¹° Incompany (appendix particle) Incompany (app		100	300	1,000	10	10
Concurrent devices logins (default/max,)*** Solvison Solvis		25/150	50/150	250/500	5/15	5/15
Gefeatk/max,)*** Speciest Performance SPI firewall throughput (Mbps)** 900 900 300 300 300 300 300 300 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 <	VLAN interface	16	64	128	8	8
SPI firewall throughput (Mbps)** 900 900 930 320 320 WLAN Management Managed AP number (default/max,)** 2/34 2/130 - - Recommend max. AP in 1 AP Group 20 90 60 - - - Security Service Anti-AP in 1 AP Group Security Service Anti-AP Group Yes Yes Yes Yes - - Intrusion Detection and Prevention (IDP) & Application Patrol** Yes	_	200/300	500/800	800/1,500	64	64
WLAN Management 2/34 2/34 2/130 - - 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)*6 Yes Yes Yes - - - Anti-virus (AV)*6 Yes Yes Yes - - - Anti-virus (AV)*6 Yes Yes Yes - - - Intrusion Detection and Prevention (IDP) & Application Patris* Yes Yes Yes - - - - Anti-spam*6 Yes Yes <th< td=""><td>Speedtest Performance</td><td></td><td></td><td></td><td></td><td></td></th<>	Speedtest Performance					
Managed AP number (default/max.)*° 2/34 2/34 2/130 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <	SPI firewall throughput (Mbps)*8	900	900	930	320	320
Managed AP number (default/max.)*° 2/34 2/34 2/130 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <	WLAN Management					
Net	Managed AP number	2/34	2/34	2/130	-	-
Security Service Anti-virus (AV)°6 Yes Yes Yes - - Intrusion Detection and Prevention (IDP) & Application Patrol°6 Yes Yes - - Anti-spam°6 Yes Yes Yes Yes Yes Content filtering (CF 2.0)°6°0 Yes Yes Yes Yes Yes SecuReporter Premium°6 Yes		20	20	60	-	-
Anti-virus (AV)**YesYesYesIntrusion Detection and Prevention (IDP) & Application Patrol*YesYesYesAnti-spam**YesYesYesYesYesContent filtering (CF 2.0)****YesYesYesYesYesSecuReporter Premium**YesYesYesYesYesKey FeaturesYesKEV2, IPSec, SL, L2TP/IPSecKEV2, IPSec, SL, L2TP/IPSec, SL, L2TP/IPSecKEV2, IPSec, SL, L2TP/IPSec, SSL, L2TP/IPSec, SSL, L2TP/IPSec, SSL, L2TP/IPSecKEV2, IPSec, SSL, L2TP/IPSec, SSL, L2TP/	•					
Prevention (IDP) & Application Patrol's Anti-spam's Yes		Yes	Yes	Yes	-	-
Content filtering (CF 2.0)****YesYesYesYesYesSecuReporter Premium***YesYesYesYesYesKey FeaturesIKEv2, IPSec, SSL, L2TP/IPSecIKEv2, IPSec, SSL, L2TP/IPSecSSL, L2TP/IPSecSSL, L2TP/IPSecSSL, L2TP/IPSecIKEv2, IPSec, SSL, L2TP/IPSecIKEv2, IPSec, SSL, L2TP/IPSecIKEv2, IPSec, SL, L2TP/IPSecIKEv2, IPSec, SSL,	Prevention (IDP) & Application	Yes	Yes	Yes	-	-
SecuReporter Premium*6YesYesYesYesYesKey FeaturesIKEv2, IPSec, SSL L2TP/IPSecIKEv2, IPSec, SSL, L2TP/IPSecIKEv2, IPSec, SSL, L2TP/IPSecIKEv2	Anti-spam*6	Yes	Yes	Yes	Yes	Yes
Key Features VPN IKEv2, IPSec, SSL, L2TP/IPSec	Content filtering (CF 2.0)*6*9	Yes	Yes	Yes	Yes	Yes
VPNIKEV2, IPSec, SSL, L2TP/IPSecIKEV2, IPSec, SSL, L2TP/IPSecSSL (HTTPS) InspectionYesYesYes2-Factor AuthenticationYesYesYesYesYesEZ ModeYesYesYesHotspot Management **YesYesYesYesYesYesTicket printer support **O' Support Q'ty (max.)Yes (SP350E)/10Yes (SP350E)/10Yes (SP350E)/10Yes (SP350E)/10YesYesYesMicrosoft AzureYesYesYesYesYesYesYesAmazon VPCYesYesYesYesYesYesPacebook WiFiYesYesYesYesYesYesDevice HA ProYesYesYes	SecuReporter Premium*6	Yes	Yes	Yes	Yes	Yes
SSL (HTTPS) InspectionYesYesYes722-Factor AuthenticationYesYesYesYesYesEZ ModeYes-YesYesYesHotspot Management*6YesYesYesTicket printer support*10/Support Q'ty (max.)Yes (SP350E)/10Yes (SP350E)/10Yes (SP350E)/10Yes (SP350E)/10YesYesYesAmazon VPCYesYesYesYesYesYesFacebook WiFiYesYesYesYesYesYesDevice HA ProYesYesYesYes	Key Features					
2-Factor AuthenticationYesYesYesYesEZ ModeYesYesYesHotspot Management*6YesYesYesYesTicket printer support*10/Support Q'ty (max.)Yes (SP350E)/10Yes (SP350E)/10Yes (SP350E)/10Microsoft AzureYesYesYesYesYesAmazon VPCYesYesYesYesYesFacebook WiFiYesYesYesYesYesDevice HA ProYesYesYesYes	VPN					
EZ ModeYesYesYesHotspot Management *6YesYesYesTicket printer support *10/ Support Q'ty (max.)Yes (SP350E)/10Yes (SP350E)/10Yes (SP350E)/10Microsoft AzureYesYesYesYesYesAmazon VPCYesYesYesYesYesFacebook WiFiYesYesYesYesYesDevice HA ProYesYesYes	SSL (HTTPS) Inspection	Yes		-		_
Hotspot Management '6 Yes Yes Yes Yes Ticket printer support '10/ Support Q'ty (max.) Microsoft Azure Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	2-Factor Authentication	Yes	Yes	Yes	Yes	Yes
Ticket printer support***0/ Support Q'ty (max.) Yes (SP350E)/10 Yes (SP350E)/10 Yes (SP350E)/10 - - Microsoft Azure Yes Yes Yes Yes Yes Amazon VPC Yes Yes Yes Yes Yes Facebook WiFi Yes Yes Yes Yes Yes Device HA Pro Yes Yes Yes - - -	EZ Mode	Yes	-	-	Yes	Yes
Support Q'ty (max.) Microsoft Azure Yes Yes Yes Yes Yes Yes Amazon VPC Yes Yes Yes Yes Yes Yes Facebook WiFi Yes Yes Yes Yes Yes Yes Device HA Pro Yes Yes Yes	Hotspot Management*6	Yes	Yes	Yes	-	-
Amazon VPCYesYesYesYesYesFacebook WiFiYesYesYesYesYesDevice HA ProYesYesYes		Yes (SP350E)/10	Yes (SP350E)/10	Yes (SP350E)/10	-	-
Facebook WiFiYesYesYesYesYesDevice HA ProYesYesYes		Yes	Yes	Yes	Yes	Yes
Device HA Pro Yes Yes Yes	Amazon VPC	Yes	Yes	Yes	Yes	Yes
	Facebook WiFi	Yes	Yes	Yes	Yes	Yes
	Device HA Pro	Yes	Yes	Yes	-	-
	Link Aggregation (LAG)	_	Yes		_	-

Model		ZyWALL 110	ZyWALL 310	ZyWALL 1100	USG20-VPN	USG20W-VPN
Power Require	ements					
Power input		12V DC, 3.33A max.	110 - 240V AC, 50/60 Hz, 1.3A max.	110 - 240V AC, 50/60 Hz, 1.3A max.	12V DC, 2.0A max.	12V DC, 2.0A max.
Max. power co	onsumption	37	58.5	58.5	12	18
Heat dissipat	ion (BTU/hr)	126.25	199.61	199.61	40.92	61.38
Physical Spec	ifications					
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	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.)	2/4.41	3.3/7.28	3.3/7.28	0.88/1.94	0.94/2.06 (Antenna included)
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	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.)	2.83/6.24	4.74/10.45	4.74/10.45	1.41/3.11	1.50/3.31
Included acce	essories	Power adaptorPower cordRack mounting kit	Power cordRack mounting kit	Power cordRack mounting kit	 Power adapter RJ-45 - RS-232 cable for console connection 	 Power adapter RJ-45 - RS-232 cable for console connection Antenna
Environmento	al Specification	ns				
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	0°C to 40°C/ 32°F to 104°F
	Humidify	10% to 90% (non-condensing)	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	-30°C to 70°C/ -22°F to 158°F
	Humidify	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)		787109.3	560811.5	560811.5	44000	44000
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 B), IC, CE EMC (Class B), RCM, BSMI	FCC Part 15 (Class B), IC, CE EMC (Class B), RCM, BSMI
Safety		LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	BSMI, UL	BSMI, UL

Note:

^{*:} 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	USG20W-VPN	
Standard compliance	802.11 a/b/g/n/ac	
Wireless frequency	2.4 GHz/5 GHz	
Radio	1	
SSID number	8	
Maximum transmit power	US (FCC) 2.4 GHz: 25 dBm, 3 antenno	as
(Max. total channel)	US (FCC) 5 GHz: 25 dBm, 3 antennas	
	EU (ETSI) 2.4 GHz: 20 dBm (EIRP), 3 d	ntennas
	EU (ETSI) 5 GHz: 20 dBm (EIRP), 3 an	tennas
No. of antenna	3 detachable antennas	
Antenna gain	• 2 dBi @2.4 GHz	
	• 3 dBi @5 GHz	
Data rate	• 802.11n: Up to 450 Mbps	
	• 820.11ac: Up to 1300 Mbps	
Frequency band	2.4 GHz (IEEE 802.11 b/g/n):	5 GHz (IEEE 802.11 a/n/ac):
	• USA (FCC): 2.412 to 2.462 GHz	• USA (FCC): 5.150 to 5.250 GHz; 5.250 to 5.350 GHz;
	 Europe (ETSI): 2.412 to 2.472 GHz 	5.470 to 5.725 GHz; 5.725 to 5.850 GHz
	• TWN (NCC): 2.412 to 2.462 GHz	 Europe (ETSI): 5.15 to 5.35 GHz; 5.470 to 5.725 GHz
		 TWN (NCC): 5.15 to 5.25 GHz; 5.25 to 5.35 GHz;
		5.470 to 5.725 GHz; 5.725 to 5.850 GHz
Receive sensitivity	2.4 GHz:	5 GHz:
	• 11 Mbps ≤ -87 dBm	• 54 Mbps ≤ -74 dBm
	• 54 Mbps ≤ -77 dBm	• HT40, MCS23 ≤ -68 dBm
	• HT20 ≤ -71 dBm	• VHT40, MCS9 ≤ -62 dBm
	• HT40 ≤ -68 dBm	• HT20, MCS23 ≤ -71 dBm
		• VHT20, MCS8 ≤ -66 dBm
		• VHT80, MCS9 ≤ -59 dBm

Features Set

Software Features

Firewall

- ICSA-certified corporate firewall (ongoing)
- Routing and transparent (bridge) modes
- Stateful packet inspection
- User-aware policy enforcement
- SIP/H.323 NAT traversal
- ALG support for customized ports
- Protocol anomaly detection and protection
- Traffic anomaly detection and protection
- Flooding detection and protection
- DoS/DDoS protection

IPv6 Support

- Dual stack
- IPv4 tunneling (6rd and 6to4 transition tunnel)
- IPv6 addressing

- DNS
- DHCPv6
- Bridge
- VLAN
- PPPoE
- Static routing
- Policy routing
- Session control
- Firewall and ADP
- IPSec VPN
- IDP
- Application Patrol
- Content Filtering 2.0
- Anti-Virus, Anti-Malware
- Anti-Spam

IPSec VPN

- Encryption: AES (256-bit), 3DES and DES
- Authentication: SHA-2 (512-bit), SHA-1 and MD5

- Support route-based VPN Tunnel Interface (VTI)
- Key management: manual key, IKEv1 and IKEv2 with EAP
- Perfect forward secrecy (DH groups) support 1, 2, 5, 14., 15-18
- IPSec NAT traversal
- Dead peer detection and relay detection
- PKI (X.509) certificate support
- VPN concentrator
- Simple wizard support
- VPN auto-reconnection
- VPN High Availability (HA): loadbalancing and failover
- L2TP over IPSec
- GRE and GRE over IPSec
- NAT over IPSec
- Zyxel VPN client provisioning
- Support iOS L2TP/IKE/IKEv2 VPN Client provision

SSL VPN

- Supports Windows and Mac OS X
- Supports full tunnel mode
- Supports 2-step authentication

Networking

- Routing mode, bridge mode and hybrid mode
- Ethernet and PPPoE
- NAT and PAT
- VLAN tagging (802.1Q)
- Virtual interface (alias interface)
- Policy-based routing (user-aware)
- Policy-based NAT (SNAT)
- Dynamic routing (RIPv1/v2 and OSPF)
- DHCP client/server/relay
- Dynamic DNS support
- WAN trunk for more than 2 ports
- Per host session limit
- Guaranteed bandwidth
- Maximum bandwidth
- Priority-bandwidth utilization
- Bandwidth limit per user
- Bandwidth limit per IP
- GRE
- BGP

WLAN Management (ZyWALL Series support only)

- Support AP controller version 3.40
- Wireless L2 isolation
- Supports auto AP FW update
- Scheduled WiFi service
- Dynamic Channel Selection (DCS)
- Client steering for 5GHz priority and sticky client prevention
- Auto healing provides a stable and reliable coverage
- IEEE 802.1x authentication
- Captive portal Web authentication
- Customizable captive portal page
- RADIUS authentication
- WiFi Multimedia (WMM) wireless QoS
- CAPWAP discovery protocol
- Multiple SSID with VLAN
- Supports ZyMesh
- Support AP forward compatibility

Authentication

- Local user database
- Built-in user database
- Microsoft Windows Active Directory integration
- External LDAP/RADIUS user database
- XAUTH, IKEv2 with EAP VPN authentication
- Web-based authentication
- Forced user authentication (transparent authentication)
- IP-MAC address binding
- SSO (Single Sign-On) support
- Supports 2-Factor authentication

Logging/Monitoring

- Comprehensive local logging
- Syslog (send to up to 4 servers)
- E-mail alert (send to up to 2 servers)
- Real-Time traffic monitoring
- System status monitoring
- Built-in daily report
- Cloud-based analytics and reporting with SecuReporter

System Management

- Role-based administration
- Multiple administrator logins
- Supports Cloud Helper
- Multi-lingual Web GUI (HTTPS and HTTP)
- Command line interface (console, Web console, SSH and telnet)
- SNMP v1, v2c, v3
- System configuration rollback
- Firmware upgrade via FTP, FTP-TLS and Web GUI
- Dual firmware images
- Cloud CNM SecuManager

Zyxel One Network

- ZON Utility
 - IP configuration
 - Web GUI access
 - Firmware upgrade
 - Password configuration
- Smart Connect
 - Location and System Name update
 - Discover neighboring devices
 - One-click remote management access to the neighboring Zyxel devices

Hotspot Management

- ZyWALL 110, ZyWALL 310, and ZyWALL 1100 support only
- Integrated account generator, Webbased authentication portal and billing system
- Supports external RADIUS servers
- Per account bandwidth management
- User agreement login
- SP350E Service Gateway Printer enables one-click account and billing generation
- Built-in billing system
 - Time-to-finish accounting mode
 - Accumulation accounting mode
- Supports PayPal online payment
- Marketing tool
 - Advertisement link
 - Walled garden
 - Portal page
- Billing Replenish

Device High Availability Pro (HA Pro)

- Device failure detection and notification
- Supports ICMP and TCP ping check
- Link monitoring
- Configuration auto-sync
- Dedicated Heartbeat Link
- Smart handover
- NAT/Firewall/VPN Sessions synchronization

Subscription Services

- Anti-Virus
- Application Patrol & IDP
- Content Filtering 2.0
- Anti-Spam
- Hotspot Management
- Managed AP
- SecuReporter Premium

Licenses

Security

Product	Anti-Virus	Application Patrol & IDP	Content Filtering 2.0	Anti-Spam	SecuReporter Premium
ZyWALL 110 ZyWALL 310 ZyWALL 1100	1 year/2 years	1 year/2 years	1 year/2 years	1 year/2 years	1 year/2 years
USG20-VPN USG20W-VPN	-	-	1 year/2 years	1 year/2 years	1 year/2 years

- 1. Licenses can be easily activated, renewed and managed at myZyxel.
- 2. License bundles may vary according to region. Please contact your local sales representative for more information.
- 3. ZyWALL Series provides all security services with 30-day trial.
- 4. USG20(W)-VPN provide Content Filtering 2.0 and Anti-Spam services with 30-day trial.

Connectivity & Industrial Solution

Product	SSL VPN Tunnels	SSL VPN Client*	IPSec VPN Client
ZyWALL 110 ZyWALL 310 ZyWALL 1100	Add 5/10/50 tunnels	For 1/5/10 client(s)	For 1/5/10/50 client(s)
USG20-VPN USG20W-VPN	Add 5/10 tunnels	For 1/5/10 client(s)	For 1/5/10/50 client(s)

^{*:} Support OS: MAC OS 10.7 or later

Product	Concurrent Device Upgrade⁴	Hotspot Management*2	Managed APs
ZyWALL 110	100 nodes	1 year/One-time	Add 2/4/8 APs
ZyWALL 310	100/300 nodes	1 year/One-time	Add 2/4/8 APs
ZyWALL 1100	100/300 nodes	1 year/One-time	Add 2/4/8/64 APs
USG20-VPN	-	-	-
USG20W-VPN	-	-	-

^{*1:} With firmware ZLD4.20 or later

Access Point Compatibility List

Product	Unified AP		Unified Pro AP	
Models	NWA5121-NINWA5121-NNWA5123-NINWA5123-AC	 NWA5123-AC HD NWA5301-NJ WAC5302D-S Forward Compatible APs* 	WAC6103D-IWAC6303D-SWAC6502D-EWAC6502D-S	 WAC6503D-S WAC6552D-S WAC6553D-E Forward Compatible APs*
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.

^{*2:} Hotspot Management supports for ZyWALL 310 and ZyWALL 1100 in firmware ZLD4.20 or later; and for ZyWALL 110 in firmware ZLD4.25 or later.

Accessories

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 7 (32/64-bit) Windows 8/8.1 (32/64-bit) Windows 10 (32/64-bit) MAC OS 10.7 or later

^{*:} 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.

Service Gateway Printer

Model	Feature	Supported mo	odel	
SP350E	 Buttons: 3 Paper roll width: 58 (+0/-1) mm Interface: 10/100 Mbps RJ-45 port Power input: 12V DC, 5A 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.) 	• VPN100 • VPN300	USG60USG60WUSG110USG210USG310USG1100USG1900USG2200 Series	• ZyWALL110 • ZyWALL310 • ZyWALL1100

^{1.} Hotspot management licenses required

Transceivers (Optional)

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

^{*:} Only USG2200 series supports 10-Gigabit SFP+



Copyright © 2019 Zyxel Networks Corp. All rights reserved. Zyxel, Zyxel logo are registered trademarks of Zyxel Networks Corp. All other brands, product names, or trademarks mentioned are the property of their respective owners. All specifications are subject to change without notice.



