





# Ultra-fast Performance for Tomorrow's VPN Deployments

- Multi-core CPUs deliver up to 6 Gbps firewall throughput and 800 Mbps VPN throughput
- Up to 15x faster firewall performance and 4.4x faster VPN performance than preceding models
- More secure VPN connections with SHA-2 encryption
- VPN High Availability (HA) with dual-WAN failover and fallback support
- L2TP/IPSec support for iOS, Android and Windows mobile devices
- Auto-provisioned client-to-site IPsec setup with Easy VPN

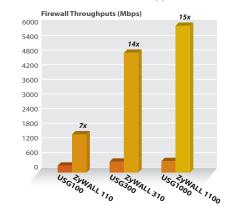
Business operations have become more mobile than ever. New and advanced business applications have also created demand for faster VPN performance, which legacy firewall and UTM appliances cannot satisfy. To keep up with the dynamic business environment, business networks today need to provide branch offices, chain stores and mobile employees faster remote access to headquarter resources. Moreover, they must do so without exposing company resources and customer information to threat and data breach.

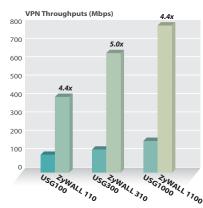
ZyXEL's new ZyWALL Series VPN Firewalls are business-grade VPN gateways purpose-built to deliver the fastest performance for multi-site VPN deployments. These high performance VPN Firewalls feature multi-core CPUs and are fine-tuned to deliver ultra-fast performance with up to 6 Gbps firewall and 800 Mbps VPN throughputs. The new ZyWALL Series VPN Firewalls also feature the most advanced VPN functionality—SHA-2 encryption, VPN HA and L2TP—for more secure, more reliable and more mobile VPN connectivity.

## **Benefits**

# **Best-in-class VPN and firewall throughput**

The new ZyWALL Series VPN Firewalls are designed with multi-core CPUs to deliver the fastest VPN and firewall performance on the market. High-speed networking performance is guaranteed with up to 6 Gbps firewall throughput and 800 Mbps VPN throughput—up to 15x the firewall performance and 4.4x the VPN performance of preceding models. Designed with completely new and advanced hardware platforms, the new ZyWALL Series VPN Firewalls deliver uncompromising performance for high-speed site-to-site and client-to-site VPN applications.







ZyWALL 1100/310/110 VPN Firewall











# ZyWALL 1100/310/110 VPN Firewall

#### Safer, more reliable VPN connections

Faster processors today have greatly boosted the capabilities of attackers to decrypt VPN tunnels. Legacy VPN encryption algorithms like Message Digest 5 (MD5) and Secure Hash Algorithm 1 (SHA-1) are no longer sufficient to guarantee secured external communications. Supporting the more advanced Secure Hash Algorithm 2 (SHA-2), the ZyWALL Series provides the safest VPN connections in its class and ensures maximum security for business communications.

The complete range of ZyWALL Series 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 ZyWALL 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.

#### **Unlimited business mobility**

To support dynamic, mobile business operations in today's BYOD (bring your own device) business environment, the ZyWALL Series VPN Firewalls offer unlimited business mobility with Layer 2 Tunneling Protocol (L2TP) VPN for mobile devices. The ZyWALL Series supports L2TP 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 ZyWALL Series 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 ZyWALL 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.

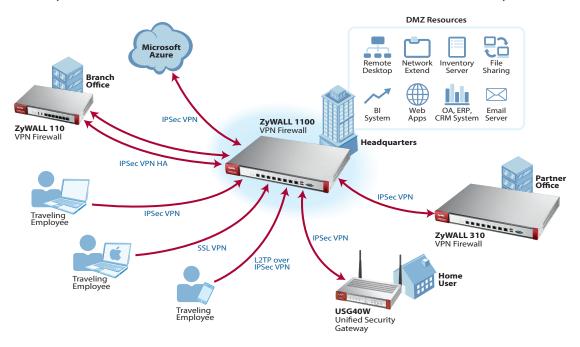
#### **ZyXEL One Network experience**

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 Wi-Fi AP and to Gateway.

# **Key Applications**

#### **VPN** application

- Branch offices, partners and home users can deploy ZyXEL USGs/ZyWALLs for site-to-site IPSec VPN connections
- Branch offices can additionally deploy IPSec VPN HA (load balancing and failover) for always online VPN connectivity
- Remote users can securely access company resources with their computers or smartphones via SSL, IPSec and L2TP over IPSec VPN
- The headquarter USG/ZyWALL can also establish an IPSec VPN connection with Microsoft Azure for secured access to a variety of cloud-based applications





# **Specifications**

Model		ZyWALL 1100	ZyWALL 310	ZyWALL 110
Product pho	to	- INTINES	**************************************	THE REAL PROPERTY OF THE PARTY
Hardware Sp	ecifications			
10/100/1000	Mbps RJ-45 ports	8 (configurable)	8 (configurable)	2 x WAN, 1 x OPT, 4 x LAN/DMZ
USB ports		2	2	2
Console port	1	Yes (DB9)	Yes (DB9)	Yes (DB9)
Rack-mounta	able	Yes	Yes	Yes
System Capa	city & Performance*1			
SPI firewall t	hroughput (Mbps)*2	6,000	5,000	1,600
AES VPN thro	oughput (Mbps)*3	800	650	400
Unlimited user licenses		Yes	Yes	Yes
Max. concurrent sessions*4		500,000	100,000	60,000
New session rate		12,000	12,000	3,500
Max. concurrent IPsec VPN tunnels		1,000	300	100
Max. concurrent SSL VPN users		250	50	25
Included SSL VPN user no.		250	50	25
Customizable zones		Yes	Yes	Yes
IPv6 support		Yes	Yes	Yes
WLAN Manag	gement*5			
AP Controller (APC) support		Yes	Yes	Yes
Managed AP	number (default/max.)	2/18	2/18	2/18
Power Requi	rements			
Power input		100 - 240 V AC, 50/60 Hz, 1.3 A max.	100 - 240 V AC, 50/60 Hz, 1.3 A max.	12 V DC, 3.33 A max.
Max. power	consumption (watt)	58.5	58.5	37
Physical Spe	cifications			
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	300 x 178 x 44/ 11.81 x 7 x 1.73
	Weight (kg/lb.)	3.3/7.28	3.3/7.28	2/4.41
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 6.42	245 x 152 x 351/ 9.65 x 5.98 x 13.82
	Weight (kg/lb.)	4.74/10.45	4.74/10.45	2.83/6.24
Included accessories		• Power cord • Rack mounting kit	• Power cord • Rack mounting kit	<ul><li>Power adaptor</li><li>Power cord</li><li>Rack mounting kit</li></ul>
Environment	tal Specifications			
	Temperature	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F
Operating	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
C4	Temperature	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F
Storage	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)		560,811.5	560,811.5	787,109.3
Certification	s			
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

- Note:
  \*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: AES VPN throughput measured based on RFC 2544, using UDP traffic with 1,424-byte packets.
  \*4: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.
  \*5: With firmware ZLD 4.11 or later.

# **ZyWALL 1100/310/110**VPN Firewall

### **Features Set**

#### **Software Features**

#### **Firewall**

- Routing and transparent (Bridge) modes
- Zone-based access control list
- · Stateful packet inspection
- · User-aware policy enforcement
- SIP/H.323 NAT traversal
- ALG supports custom ports

#### **IPv6 Support**

- IPv6 ready gold logo certified
- Dual stack
- IPv4 tunneling (6rd and 6to4 transition tunnel)
- · Host, router, firewall

#### **Virtual Private Network (VPN)**

- ICSA-certified IPsec VPN
- · Algorithm: AES, 3DES, DES
- Authentication: SHA-2, SHA-1, MD5
- Key management: manual key, IKEv1 and IKEv2 with EAP
- Perfect forward secrecy (DH groups) support 1, 2, 5
- IPsec NAT traversal
- Dead peer detection/relay detection
- PKI (X.509) certificate support
- Centralize VPN support
- VPN Wizard support
- Auto reconnect VPN
- VPN HA (Redundant remote VPN gateways)

### SSL VPN

- Clientless secure remote access
- Reverse proxy mode and full tunnel mode
- · Unified policy enforcement
- Supports two-factor authentication

#### **High Availability**

- Active-passive mode
- Device failure detection and notification
- ICMP and TCP ping check
- Link monitoring
- Auto-sync configurations

#### Networking

- Routing mode, bridge mode & mixed mode
- Ethernet/PPPoE
- NAT/PAT
- Tagged VLAN (802.1Q)
- · Virtual interface (Alias interface)
- Policy-based routing (User-aware)
- Policy-based NAT (SNAT)
- Dynamic routing (RIP v1/v2, OSPF)
- DHCP client/server/relay
- Dynamic DNS support
- WAN trunk (More than 2 ports)
- Per host session limit
- Guaranteed bandwidth
- Maximum bandwidth
- Priority-bandwidth utilization
- Bandwidth limit per user
- Bandwidth limit per IP

#### Authentication

- Local user database
- Microsoft Windows active directory integrate
- External LDAP/RADIUS user database
- Xauth over RADIUS for IPsec VPN
- Forced user authentication (Transparent authentication)
- IP/MAC address binding

## System Management

- Role-based administration
- Multiple administrator login
- Multi-lingual Web GUI (HTTPS/HTTP)
- Object-based configuration
- Command line interface (Console/Web console/SSH/telnet)

- SNMPv2c (MIB-II)
- System configuration rollback
- Firmware upgrade via FTP/Web GUI

#### **Logging & Monitoring**

- Comprehensive local logging
- Syslog
- Email alert
- Real-time traffic monitoring
- · Built-in daily report
- Advanced reporting (VRPT)

#### WLAN Management

- Wireless L2 isolation
- Scheduled Wi-Fi 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
- · Wi-Fi Multimedia (WMM) wireless QoS
- CAPWAP discovery protocol

#### **Optional Security Services**

- Kaspersky Anti-Virus
- Application Intelligence & IDP
- Content Filtering
- Anti-Spam

#### **ZyXEL One Network**

- ZON Utility
- IP configuration
- Web GUI accessFirmware upgrade
- Password configuration
- Smart Connect
- Discover neighboring devices
- One-click remote management access to the neighboring ZyXEL devices

# License

### Security (with firmware ZLD v4.10 or after)

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Product	Kaspersky Anti-Virus	Application Intelligence & IDP	Content Filtering	Anti-Spam
ZyWALL 1100	1 year 2 years	1 year 2 years	1 year 2 years	1 year 2 years
ZyWALL 310	1 year 2 years	1 year 2 years	1 year 2 years	1 year 2 years
ZyWALL 110	1 year	1 year	1 year 2 years	1 year

Notes:

1. It requires the ZyWALL Series to upgrade to ZLD V4.10 or above and to register on myZyXEL.com in order to activate the 30-day trial security licenses.

2. License bundles may vary according to region. Please contact your local sales representative for more information.

# **VPN, Management and Reporting**

Product	Managed APs	IPSec VPN Client	Vantage Report
ZyWALL 1100	Add 8 APs	For 1 client	For 1 device
ZyWALL 310	Add 8 APs	For 5 clients For 10 clients For 50 clients	For 5 devices For 25 devices For 100 devices
ZyWALL 110	Add 8 APs		



# **Access Point Compatibility List**

Control	NWA5120 Series	NWA5000 Series	NWA3000-N Series
Series	Unified Access Point	Managed Access Point	Unified Pro Access Point
Models	NWA5121-NI NWA5121-N NWA5123-NI	NWA5160N NWA5560-N NWA5550-N	NWA3160-N NWA3560-N NWA3550-N
Functions			
Central management	Yes	Yes	Yes
Auto provisioning	Yes	Yes	Yes
Data forwarding	Local bridge	Local bridge	Local bridge

# **Accessories**

Item	Description	Supported OS
IPSec VPN Client  ZyXEL  DOTE: DATE:	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)
SecuExtender—SSL VPN Client  ZyXEL  BEOLE-TET-DER	SSL VPN client software for the ZyWALL and USG Series with auto-installation in Windows, and lite set up for MAC user	• Windows OS • MAC OS 10.7 or later

Notes:

1. 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.

2. SSL VPN client for Windows OS is pushed from USG/ZyWALL device and launches automatically. It does not require a license key to activate the application.













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