





# **Ultra-fast Performance for Tomorrow's VPN Deployments**

- Multi-core CPUs deliver up to 3.6 Gbps firewall throughput and 800 Mbps VPN throughput
- Up to 9x 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 support for iOS, Android and Windows mobile devices
- Auto-provisioned client-to-site IPsec setup with Easy VPN

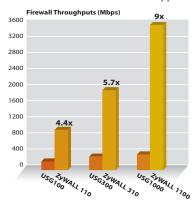
Business operations have become more mobile than ever. New and advanced business applications have also created demand for faster VPN performance, which legacy firewall and UTM appliances cannot satisfy. To keep up with the dynamic business environment, business networks today need to provide branch 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.

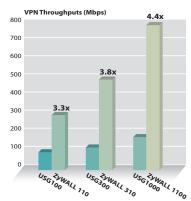
ZyXEL's new ZyWALL Series VPN Firewalls are business-grade VPN gateways purpose-built to deliver the fastest performance for multi-site VPN deployments. These high performance VPN Firewalls feature multi-core CPUs and are fine-tuned to deliver ultra-fast performance with up to 3.6 Gbps firewall and 800 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 3.6 Gbps firewall throughput and 800 Mbps VPN throughput—up to 9x 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 110/310/1100 VPN Firewall





# ZyWALL 110/310/1100 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**

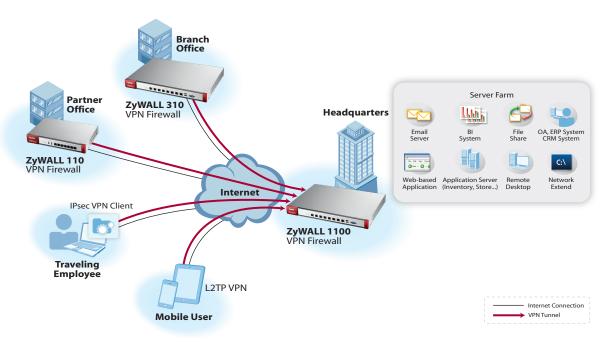
To support dynamic, mobile business operations in today's BYOD (bring your own device) business environment, the ZyWALL Series VPN Firewalls offer unlimited business mobility with Layer 2 Tunneling Protocol (L2TP) VPN for mobile devices. The ZyWALL Series supports L2TP VPN on a wide variety of mobile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

# **Key Applications**

### **Centralized Service Deployment via VPN**





# **Specifications**

Model		ZyWALL 110	ZyWALL 310	ZyWALL 1100
Product pho	oto	III MANAGE	in the state of th	- THE STATE OF THE
Hardware Sp	pecifications			
10/100/1000 Mbps RJ-45 ports		2 x WAN, 1 x OPT, 4 x LAN/DMZ	8 (configurable)	8 (configurable)
USB ports		2	2	2
System Capa	acity & Performance*1			
SPI firewall throughput (Mbps)*2		1,000	2,000	3,600
AES VPN throughput (Mbps)*3		300	500	800
Unlimited user licenses		Yes	Yes	Yes
Max. concurrent sessions*4		60,000	100,000	500,000
New session rate		2,800	8,000	8,000
Max. concurrent IPsec VPN tunnels		100	200	1,000
Max. concurrent SSL VPN users		25	50	250
Included SSL VPN user no.		25	50	250
Customizable zones		Yes	Yes	Yes
IPv6 support		Yes	Yes	Yes
Power Requi	irements			
Power input		12 V DC, 3.33 A max.	100 - 240 V AC, 50/60 Hz, 1.3 A max.	100 - 240 V AC, 50/60 Hz, 1.3 A max.
Max. power consumption (watt)		37	58.5	58.5
Physical Spe	cifications			
Item	Dimensions (WxDxH)(mm/in.)	300 x 178 x 44/ 11.81 x 7 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.)	2/4.41	3.3/7.28	3.3/7.28
Packing	Dimensions (WxDxH)(mm/in.)	245 x 152 x 351/ 9.65 x 5.98 x 13.82	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	4.74/10.45	4.74/10.45
Environmen	tal Specifications			
Operating	Temperature	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F	0°C to 40°C/32°F to 104°F
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Storage	Temperature	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F	-30°C to 70°C/-22°F to 158°F
	Humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
MTBF (hr)		787,109.3	560,811.5	560,811.5
Certification	ns .			
EMC		FCC Part 15 (Class B), CE EMC (Class B), C-Tick (Class B), BSMI	FCC Part 15 (Class A), CE EMC (Class A), C-Tick (Class A), BSMI	FCC Part 15 (Class A), CE EMC (Class A), C-Tick (Class A), BSMI
Safety		LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI

<sup>\*\*1:</sup> 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.



# ZyWALL 110/310/1100 VPN Firewall

### **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, IKE
- 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
- · Layer 2 port grouping
- 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

#### **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
- Svsloa
- Email alert
- · Real-time traffic monitoring
- · Built-in daily report
- Advanced reporting (VRPT)

# **Accessories**

Item	Description	Supported OS	
ZyWALL IPsec VPN Client	VPN client software for the ZyWALL and USG Series with Easy VPN for zero-configuration remote access	<ul> <li>Windows XP (32-bit)</li> <li>Windows Server 2003 (32-bit)</li> <li>Windows Server 2008 (32/64-bit)</li> <li>Windows Vista (32/64-bit)</li> <li>Windows 7 (32/64-bit)</li> <li>Windows 8 (32/64-bit)</li> </ul>	

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