ZYXEL

USG2200-VPN

VPN Firewall

Zyxel's USG2200-VPN has been built on a powerful multi-core platform to deliver high performance that helps growing businesses to overcome challenges during expansion. In order to satisfy the needs for always-online communications, USG2200-VPN features multi-WAN load balancing/failover and a comprehensive mobile broadband USB modem support list for WAN backup operations. In addition, USG2200-VPN supports IPSec load balancing and failover to provide additional resiliency for the most mission-critical VPN deployments.

Benefits

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 Firewall delivers 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.

- Up to 12.0 Gbps Firewall Throughput
- Over 3,000 VPN tunnels capability
- Robust hybrid VPN (IPSec/SSL/L2TP over IPSec)
- More secure VPN connections with SHA-2 cryptographic
- Auto-provisioned client-to-site IPSec setup with Easy VPN
- Cloud helper provides friendly firmware upgrades
- Device HA Pro ensures smart handover
- Hotspot management supported

ICSAlabs CERTIFIED FIREWALL-CORPORATE

Zyxelonenetwork
Redefining network integration

To support dynamic, mobile business operations in today's BYOD (bring your own device) business environments, the VPN Firewall offers 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.

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 USG2200-VPN integrated with Zyxel AP Controller technology enables users to manage up to 258 APs 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 Zyxel USG2200-VPN, businesses can now deploy or expand a managed Wi-Fi 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 up-to-date firmware information. New firmware is immediately made available upon release from our official database to ensure its authenticity and reliability.

Stay secure and Up-to-Date with OneSecurity

Zyxel provides frequent and timely updates in response to the latest security threats and advisories through OneSecurity — our free online service portal. OneSecurity offers informative network security resources and the know-how to assist businesses and IT administrators in keeping their network operations safe in the digital age. Information and resources can be found with one click via the GUI of Zyxel USG Extreme and ZyWALL series products. IT staff can quickly and easily catch up on the latest threats, and then proceed to walkthroughs and troubleshooting protocols with the help of easy-to-follow FAQs — all provided to help users secure their networks and simplify management of our UTM products.

VPN Firewall Quick Finder

Model	USG20(W)-VPN	ZyWALL 110	ZyWALL 310	ZyWALL 1100	USG2200-VPN
Description	SBs		SMBs		MBs
Multi-WAN	Yes	Yes	Yes	Yes	Yes
Unified security policy	Yes	Yes	Yes	Yes	Yes
SSL inspection	-	Yes	Yes	Yes	Yes
Link Aggregation (LAG)*1	-	-	Yes	Yes	Yes
Port grouping	Yes	Yes	-	-	-
Device HA	-	Yes	Yes	Yes	Yes
Device HA Pro	-	Yes	Yes	Yes	Yes
Easy Mode	Yes	-	-	-	-
Cloud Helper	Yes	Yes	Yes	Yes	Yes
PCI DSS Compliance	Yes	Yes	Yes	Yes	Yes
Content Filtering 2.0*2	Yes	Yes	Yes	Yes	Yes
Hotspot Management*3	-	Yes	Yes	Yes	Yes

*1: Link Aggregation of USG2200-VPN is available with firmware upgradeable.
*2: SSL Inspection must be enabled for Content Filtering 2.0 Safe Search to function properly.
*3: 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.

Key Services

Anti-Spam   **Content Filtering 2.0**   **Hotspot Management**   **Device HA Pro**

The Zyxel VPN Firewall 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.
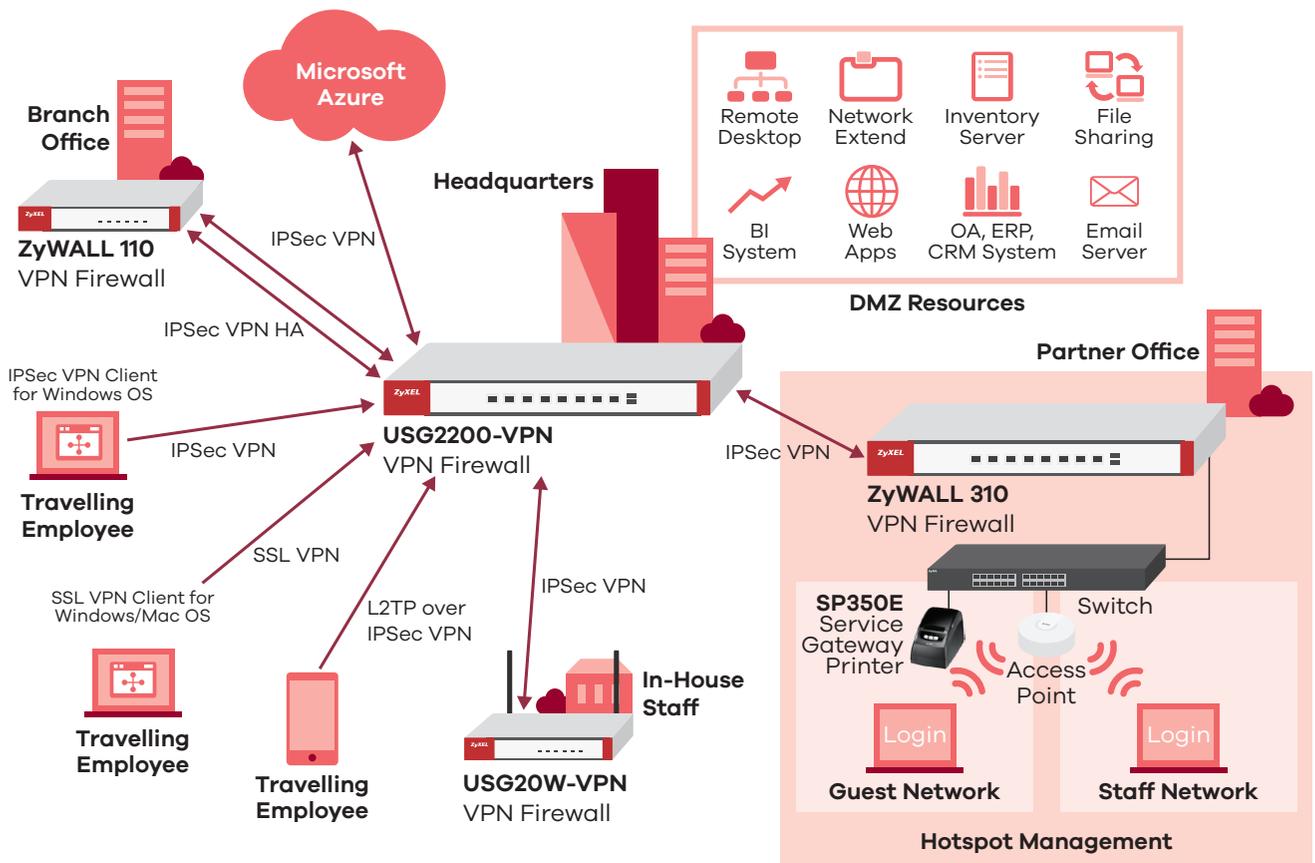
Key Applications

VPN application

- Branch offices, partners and home users can deploy Zyxel USGs/ZyWALLs for site-to-site IPSec VPN connections
- Branch offices/In-house staff 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

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)

Specifications

Model	USG2200-VPN
Product photo	VPN Firewall

Hardware Specifications

10/100/1000 Mbps RJ-45 ports	12 (configurable), 4x SFP (configurable), 2 x 10G Combo
USB ports	2
Console port	Yes (DB9)
Rack-mountable	Yes

System Capacity & Performance[*1]

SPI firewall throughput (Mbps)[*2]	12,000
VPN throughput (Mbps)[*3]	1,800
Concurrent Devices (default/max.)[*4]	2000/5000
Max. TCP concurrent sessions[*5]	1,500,000
Max. concurrent IPsec VPN tunnels[*6]	3,000
Concurrent SSL VPN user no. (default/max.)[*7]	250/1000
Customizable zones	Yes
IPv6 support	Yes
VLAN interface	128

WLAN Management

AP controller (APC) Support	Yes
Managed AP number (default/max.)[*8]	2/258

Key Software Features

Firewall	Yes
Virtual private network (VPN)	Yes (IPSec, SSL, L2TP over IPSec)
Bandwidth Management	Yes
Logging and Monitoring	Yes
SSL (HTTPS) inspection	Yes
Unified Security Policy	Yes (while supporting Content Filtering 2.0 & Anti-Spam)
Cloud Helper	Yes

Licenses Features

Anti-Spam	Yes
Content Filtering (CF2.0)[*9]	Yes
Device HA Pro	Yes
Hotspot Management	Yes

Power Requirements

Power input	2 x AC-DC Redundant Power Supply, 110-240 VAC, 50/60Hz, 2.5A
Max. power consumption (watt)	400 (200 x 2)
Heat dissipation (BTU/hr)	406.045

Physical Specifications

Item	Dimensions (WxDxH)(mm/in.)	438.5 x 500 x 89/17.26 x 19.69 x 3.50
	Weight (kg/lb.)	12.45/27.45
Packing	Dimensions (WxDxH)(mm/in.)	795 x 600 x 215/31.30 x 23.62 x 8.46
	Weight (kg/lb.)	18.12 (with DUT)/39.95
Included accessories		• Power cord x 2 • Rack mounting (slide) kit

Model	USG2200-VPN
Environmental Specifications	

Operating	Temperature	0°C to 40°C/32°F to 104°F
	Humidify	10% to 90% (non-condensing)
Storage	Temperature	–30°C to 70°C/-22°F to 158°F
	Humidify	10% to 90% (non-condensing)
MTBF(hr)		280,490

Certifications	
EMC	FCC Part 15 (Class A), IC, CE EMC(Class A), RCM, BSMI
Safety	LVD (EN60950-1), BSMI

Note:
*: This matrix with firmware ZLD 4.25 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: With Zyxel Device Upgrade License, this is the recommend maximum number of concurrent logged-in devices.
*5: Maximum sessions measured using the industry standard IXIA IxLoad testing tool.
*6: Maximum sessions measured while UTM disabled using the industry standard IXIA 1xLoad testing tool.
*7: With Zyxel SSL VPN License, this is the recommend maximum number of concurrent VPN users.
*8: With Zyxel AP Controller License, this is the recommend maximum AP capacity of concurrent users.
*9: SafeSearch function in CF2.0 need to enable SSL Inspection firstly and not for small business models.

Features Set

Software Features

Firewall
- ICSA-certified firewall
- 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
- RPS-enabled for desirable performance in chaotic environments

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
- Content Filtering 2.0
- Anti-Spam

IPSec VPN
- Encryption: AES (256-bit), 3DES and DES
- Supports generating SHA2 Certificate
- 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
- IPSec NAT traversal
- Dead peer detection and relay detection
- PKI (X.509) certificate

SSL VPN
- HTTP, FTP, SMTP, POP3 and IMAP4 protocol support
- Automatic signature updates
- No file size limitation
- Supports Windows and Mac OS X
- Supports full tunnel mode
- Supports 2-step authentication
- Customizable user portal

SSL Inspection
- Certificate Trust Chain validation
- Support both inbound and outbound inspection
- Support Content Filtering 2.0
- Support TLS 1.0/1.1/1.2
- Visible bypass list

Unified Security Policy
- Unified policy management interface
- Supported UTM features: Anti-Spam, Content Filtering 2.0, firewall (ACL)
- 3-tier configuration: object-based, profile-based, policy-based
- Policy criteria: zone, source and destination IP address, user, time

WLAN Management
- Support AP controller version 1.97
- Supports auto AP FW update
- 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

Hotspot Management
- Integrated account generator, Web-based authentication portal and billing system
- Supports external RADIUS servers
- Per account bandwidth management
- User agreement login
- SP350E Service Gateway Printer enables oneclick 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

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

Zyxel One Network

- ZON Utility
  - IP configuration
  - Web GUI access
  - Firmware upgrade
  - Password configuration
  - Location and System support

- VPN concentrator
- Simple wizard support
- VPN auto-reconnection
- VPN High Availability (HA): load-balancing and failover
- L2TP over IPSec
- GRE and GRE over IPSec
- NAT over IPSec
- Zyxel VPN client provisioning

Authentication

- Local 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

System Management

- Role-based administration
- Authentication: SHA-2 (512-bit), SHA-1 and MD5
- Multiple administrator logins
- Multi-lingual Web GUI (HTTPS and HTTP)
- Command line interface (console, Web console, SSH and telnet)
- Cloud CNM SecuManager*

*Cloud CNM SecuManager management service requires license purchase. For more details please refer to web site

- SNMP v1, v2c, v3
- System configuration rollback

- Firmware upgrade via FTP, FTP-TLS and Web GUI
- Dual firmware images
- Supports Cloud Helper portal page
- RADIUS authentication
- Wi-Fi Multimedia (WMM) wireless QoS
- CAPWAP discovery protocol

Mobile Broadband

- WAN connection failover via 3G and 4G* USB modems
- Auto fallback when primary WAN recovers

* For specific models supporting the 3G and 4G dongles on the list, please refer to the Zyxel product page at 3G dongle document.

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
- Instant handover
- NAT/Firewall/VPN Sessions synchronization

Optional Security Services

- Content Filtering 2.0
- Anti-Spam

Logging/Monitoring

- Comprehensive local logging
- Syslog (to up to 4 servers)
- Email alerts (to up to 2 servers)
- Real-time traffic monitoring
- Built-in daily report
- Advanced reporting with Vantage Report

Services

VPN

Product	SSL VPN Tunnels	SSL VPN Client*1	IPSec VPN Client
USG2200-VPN	Add 5/10/50 tunnels	For 1/5/10 client(s)	For 1/5/10/50 client(s)

*1: Support OS: MAC OS 10.7 or later

Security

Product	Content Filtering 2.0	Anti-Spam
USG2200-VPN	1/2 year(s)	1/2 year(s)

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. USG2200-VPN provides Content Filtering 2.0 and Anti-Spam services with 30-day trial.

Connectivity & Vertical Solution

Product	Concurrent Device Upgrade	Hotspot Management	Managed APs	Device HA Pro
USG2200-VPN	100/300/1000 nodes	1 year/One-Time	Add 4/8 APs	One-Time

Access Point Compatibility List

Series	NWA5120 Series	NWA5000 Series	NWA3000-N Series	WAC6500 Series
	Unified Access Point	Managed Access Point	Unified Pro Access Point	Unified Pro Access Point
Models	NWA5121-NI NWA5121-N NWA5123-NI NWA5301-NJ NWA5123-AC	NWA5160N NWA5560-N NWA5550-N	NWA3160-N NWA3560-N NWA3550-N	WAC6503D-S WAC6502D-S WAC6502D-E WAC6553D-E WAC6103D-I
Functions				
Central management	Yes	Yes	Yes	Yes
Auto provisioning	Yes	Yes	Yes	Yes
Data forwarding	Local bridge	Local bridge	Local bridge	Local bridge

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 device and USG/ZyWALL Series with lite setup for Windows and MAC OS	• Windows XP • Windows 7 (32/64-bit) • Windows 8/8.1 (32/64-bit) • Windows 10 (32/64-bit) • 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 can be downloaded from official Zyxel website. It does not require a license key to activate the application.

Service Gateway Printer

Model	Feature
SP350E	• 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.)

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Your Networking Ally

Datasheet USG2200-VPN

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