



Threat Protection for Enterprise-class Deployments

- VPN:
 - ICSA-certified IPsec VPN
 - SSL VPN
 - L2TP VPN
- Anti-Virus:
 - ICSA-certified ZyXEL Anti-Virus
 - Kaspersky Anti-Virus
- IDP
- Scalable UTM/VPN Performance
- IM/P2P Management
- Anti-Spam
- User-aware Configuration
- Bandwidth Management
- Redundant Power Module



Unified Security Gateway

**ZyWALL
USG 2000**

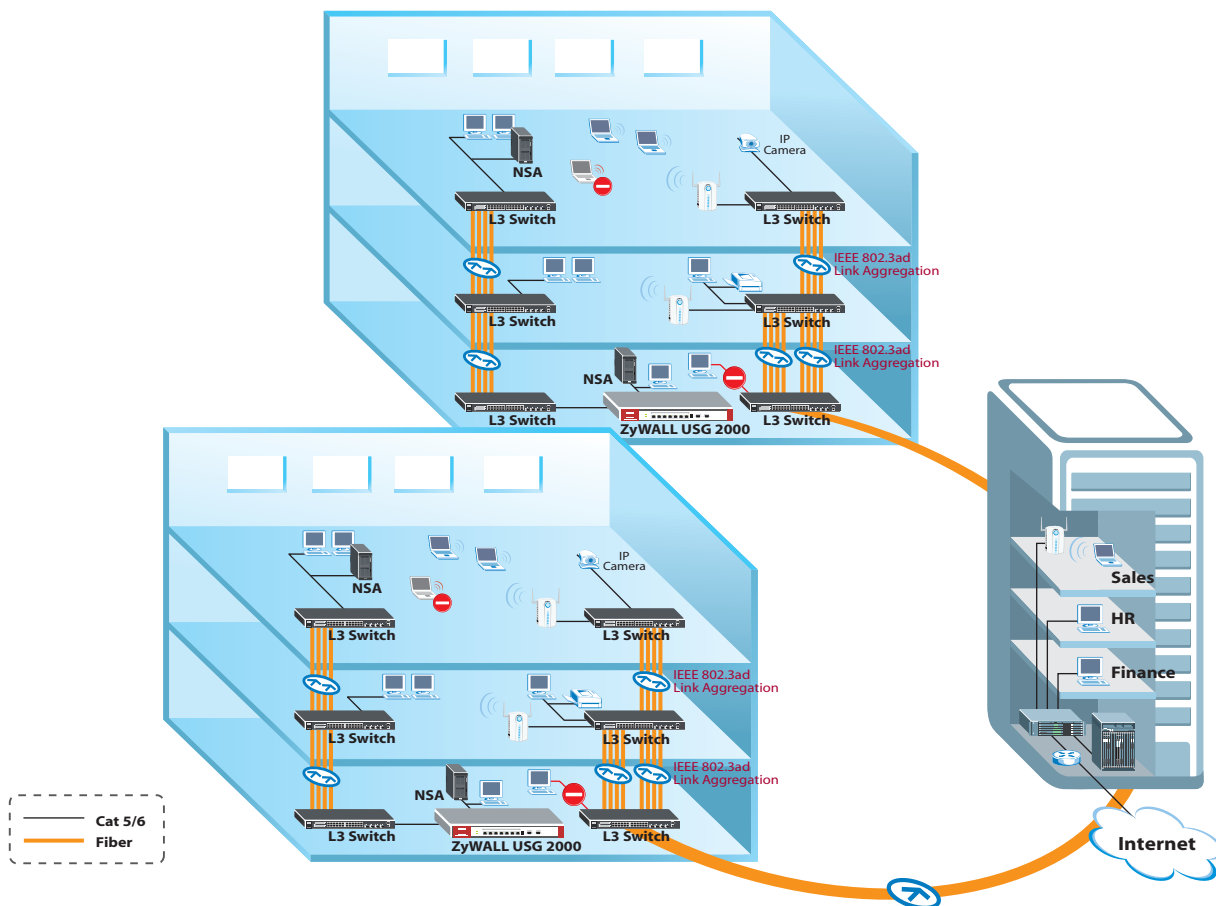
The ZyWALL USG 2000 is an ultra high performance, deep packet inspection security platform for enterprises. It incorporates a firewall, IDP, content filtering, anti-virus, anti-spam, and VPN in one box. This multi-layered security safeguards your business's customer and company records, intellectual property, and critical resources from external and internal threats.

Benefits

- High performance VPN concentrator - using IPsec VPN to secure connections in between headquarters, branch offices, partners. Road warriors and telecommuters can use SSL or L2TP VPN to securely access the company network without having to install VPN software.
- The ICSA-certified, stateful inspection firewall protects the network and vital Internet services like e-mail, Web browsing, servers, and file transfers.
- For protection against viruses and spyware, choose the ICSA-certified ZyXEL Anti-Virus or one powered by Kaspersky Labs.
- Scalable UTM and/or VPN performance by adding SEM* (Security Extension Module).
- The Application Patrol controls who can use what IM and P2P applications like MSN and BitTorrent, and even who can use specific features within an application.
- The Intrusion Detection and Prevention (IDP) engine protects your network from intrusions such as Trojans and worms.
- The anti-spam feature can tag or discard unsolicited commercial or junk e-mail.
- User-aware configuration lets you control access to applications or resources and apply security scans by user or user group.
- Bandwidth management lets you prioritize and limit traffic so time-sensitive applications like VoIP and video conferencing work properly.
- High availability features such as device HA, redundant power module, and multiple ISP links in a single WAN trunk - guarantees non-stop operation for mission-critical applications.

*: Sold separately.

Safeguards Departmental Networks



Features

ICSA-certified Firewall

- Zone-Based Access Control List
- Security Zones
- Stateful Packet Inspection
- DoS/DDoS Protection
- User-Aware Policy Enforcement
- ALG Supports Custom Ports

Intrusion Detection and Prevention

- In-line Mode (Routing/Bridge)
- Zone-Based IDP Inspection
- Customizable Protection Profile
- Signature-based Deep Packet Inspection
- Automatic Signature Updates**
- Custom Signatures
- Traffic Anomaly Detection and Protection
- Flooding Detection and Protection
- Protocol Anomaly Detection and Protection: HTTP/ICMP/TCP/UDP

Anti-Virus

- ICSA-Certified ZyXEL Anti-Virus or Kaspersky Anti-Virus
- Stream-Based Anti-Virus engine
- Covers Top Active Viruses in the Wild List
- Scans HTTP/FTP/SMTP/POP3/IMAP4
- Automatic Signature Updates**
- No File Size Limitation
- Blacklist/Whitelist Support

Hybrid VPN

ICSA-certified IPSec VPN

- Encryption: AES/3DES/DES
- Authentication: SHA-1/MD5
- Key Management: Manual Key/IKE
- Perfect Forward Secrecy: DH Group 1/2/5
- NAT over IPSec VPN
- Dead peer Detection/Relay Detection

- PKI (X.509) Certificate Support
- Certificate Enrollment (CMP/SCEP)
- Xauth Authentication
- L2TP over IPSec Support

SSL VPN

- Clientless Secure Remote Access (Reverse Proxy Mode)
- SecuExtender (Full Tunnel Mode)
- Unified Policy Enforcement
- Supports Two-factor Authentication
- Customizable User Portal

Application Patrol

- IM/P2P Granular Access Control
- Apply Schedules, Bandwidth Management
- User-Aware
- IM/P2P Up-to-Date Support (via IDP signatures update)**
- Real-Time Statistical Reports

Bandwidth Management

- Bandwidth Priority
- Policy-Based Traffic Shaping
- Maximum/Guaranteed Bandwidth
- Bandwidth Borrowing

Anti-Spam

- Zone to Zone Protection
- Transparently intercept mail via SMTP/POP3 protocols
- Blacklist/Whitelist support
- Support DNSBL checking
- Statistics report

High Availability

- Device HA (Active-Passive Mode)
- Device Failure Detection
- Link Monitoring
- Auto-Sync Configurations
- Multiple WAN Load Balancing
- VPN HA (Redundant Remote VPN Gateways)

Content Filtering

- URL Blocking, Keyword Blocking
- Exempt List (Blacklist and Whitelist)
- Blocks Java Applet, Cookies and Active X
- Dynamic URL Filtering Database (Powered by BlueCoat)**

User Licenses

- Unlimited

Networking

- Routing Mode/Bridge Mode/Mixed Mode
- Layer 2 Port Grouping
- Ethernet/PPPoE/PPTP
- Tagged VLAN (802.1Q)
- Virtual Interface (Alias Interface)
- Policy-Based Routing (User-Aware)
- Policy-Based NAT (SNAT/DNAT)
- RIP v1/v2
- OSPF
- IP Multicasting (IGMP v1/v2)
- DHCP Client/Server/Relay
- Built-in DNS Server
- Dynamic DNS

Authentication

- Internal User Database
- Microsoft Windows Active Directory
- External LDAP/RADIUS User Database
- ZyWALL OTP (One Time Password)*
- Forced User Authentication (Transparent Authentication)

System Management

- Role-Based Administration
- Multiple Administrator Login
- Multi-Lingual Web GUI (HTTPS/HTTP)
- Out-of-band Management (AUX)
- Object-Based Configuration
- Command Line Interface (Console/Web Console/SSH/TELNET)
- Comprehensive Local Logging
- Syslog (send to up to 4 servers)
- E-mail Alert (send to up to 2 servers)
- SNMP v2c (MIB-II)
- Real-Time Traffic Monitoring
- System Configuration Rollback
- Text-Based Configuration File
- Firmware upgrade via FTP/FTP-TLS/Web GUI
- Built-in Daily Report
- Advanced Reporting (Vantage Report)
- Centralized Network Management (Vantage CNM Manageable)

*: Sold separately.

**:. Requires a valid subscription.

Specifications

Standards Compliance

- HSF (Hazardous Substance Free): RoHS and WEEE
- EMC: FCC Part 15 Class A, CE-EMC Class A, C-Tick Class A, VCCI Class A
- Safety: CSA International (ANS/UL60950-1, CSA60950-1, EN60950-1, IEC60950-1)

Performance and Capacity

- SPI Firewall Throughput: 2 Gbps
- IPSec VPN (AES) Throughput: up to 500 Mbps
- Max. Concurrent NAT Sessions: 1,000,000
- Max. IPSec VPN Tunnels: up to 2,000
- Max. SSL VPN Tunnels: up to 750
- New Session Rate: 20,000 (sessions/sec)

Hardware Specifications

- Memory: 2 GB RAM/256 MB Flash
- Interfaces: 6 10/100/1000BASE-T RJ-45 interfaces and 2 Dual-Personality GbE interfaces (RJ-45 or SFP open slot)
- Console: 1 D-Sub 9-pin Female (RS232C)
- AUX: 1 D-Sub 9-pin Male (RS232C)
- LED: PWR1, PWR2, SYS, AUX, CARD, HDD
- Power Switch
- Reset Pinhole
- Buzzer Reset Button
- SEM Slot: 1 (Security Extension Module)
- Card Slot: 1 (CardBus)
- USB*: 2 (USB Host, 2.0)
- HDD Slot*: 1 (SATA, 2.5")

*: These hardware accessories will be supported in future firmware release

Physical Specifications

- 19-inch, 2-RU (rack-mount kit included)
- Dimensions: 430 (W) x 487 (D) x 89 (H) mm
- Weight: 10.5 kg

Power Requirements

- Input Voltage: 100-240 V, 50-60 Hz, 3-6 A
- Power Rating: 200 W

Environmental Specifications

- Operating Temperature: 0°C ~ 40°C/32°F ~ 104°F
- Storage Temperature: -30°C ~ 60°C/-22°F ~ 140°F
- Humidity: 5% ~ 90% (non-condensing)

Certifications

- ICSA Certified Firewall
- ICSA Certified IPSec VPN
- ICSA Certified Anti-Virus

Accessories (sold separately)

Security Extension Module

Specifications Summary

Model Name	UTM Performance	VPN Performance	Max. IPSec VPN Tunnels	Max SSL VPN Users
SEM-DUAL	400 Mbps	500 Mbps	2,000	750
SEM-UTM	400 Mbps	100 Mbps	1,000	250
SEM-VPN	100 Mbps	500 Mbps	2,000	750

SEM-DUAL:

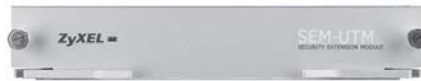


For customers require full security features both VPN and UTM threat protections. The SEM-DUAL unleashes full horse power of the ZyWALL USG 2000 platform with mighty VPN and UTM performance.

- SecuASIC CIP-3001 for UTM Acceleration (Anti-Virus and IDP)
- Advanced VPN Crypto to Boost up VPN Performance
- UTM Performance: up to 400 Mbps (HTTP, large packet)
- VPN Performance: up to 500 Mbps (IPSec, large packet)
- Simultaneous IPSec VPN Tunnels: Up to 2,000 IPSec VPN Tunnels
- Simultaneous SSL VPN Users: Up to 750* SSL VPN Users

*: SSL VPN user license sold separately; 5 included.

SEM-UTM:



For customers who is seeking for threat protection and requiring L7 security inspection against massive traffic. The SEM-UTM is engineered to deliver mighty UTM performance: robust 400 Mbps throughput with both Anti-Virus and IDP security features turned on.

- SecuASIC CIP-3001 for UTM Acceleration (Anti-Virus and IDP)
- UTM Performance: up to 400 Mbps (HTTP, large packet)

SEM-VPN:



For customers in need of intensive VPN applications to build up mighty VPN concentrator in central site while requires highest level of redundancy. Specialized in VPN applications, the SEM-VPN accelerates VPN performance.

- Advanced VPN Crypto to Boost up VPN Performance
- VPN Performance: up to 500 Mbps (IPSec, large packet)
- Simultaneous IPSec VPN Tunnels: Up to 2,000 IPSec VPN Tunnels
- Simultaneous SSL VPN Users: Up to 750* SSL VPN Users

*: SSL VPN user license sold separately; 5 included.

Physical Specifications

- SEM Status LED
- Dimensions: 199.2 (W) x 212 (D) x 36.3 (H) mm
- Weight: 410 g

Environmental Specifications

- Operating temperature: 0°C ~ 40°C/32°F ~ 104°F
- Storage temperature: -30°C ~ 60°C/-22°F ~ 140°F
- Humidity: 5% ~ 90% (non-condensing)

Transceiver

Model Name	Optical Receiver Sensitivity	Wavelength	Connector	Transmission Distance vs. Fiber Cable Specification			Operational Ranges	
				62.5um Multi-Mode Fiber	50um Multi-Mode Fiber	9/10um Single-Mode Fiber	Supply Voltage	Max Current
SFP-SX	-17 dBm	850 nm	LC	220 m	550 m	-	3.15 ~ 3.45 V	300 mA
SFP-LX-10	-20 dBm	1310 nm	LC	550 m	550 m	10 km	3.15 ~ 3.45 V	300 mA
SFP-LHX1310-40	-23 dBm	1310 nm	LC	-	-	40 km	3.15 ~ 3.45 V	300 mA
SFP-ZX-80	-24 dBm	1550 nm	LC	-	-	80 km	3.15 ~ 3.45 V	300 mA



ZyXEL is a top-ranked green enterprise whose care for the environment is internationally recognized. ZyXEL products use toxin-free, energy-efficient and easily-recyclable materials.

For more product information, visit us on the web at www.ZyXEL.com



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