



## ZyWALL VPN100 VPN Firewall

### Advanced VPN Firewall with an option to run SD-WAN

ZyWALL VPN100 supports the new Nebula SD-WAN, a cost effective solution to optimize WAN's service quality. Under NebulaFlex, ZyWALL VPN100 can run in Nebula SD-WAN mode or standalone gateway mode. Nebula SD-WAN features easy deployment, centralized monitoring, great agility, and higher throughput with lowered cost.

ZyWALL VPN100 complies with GDPR regulations and features a robust VPN gateway with the ability to access enterprise information across the corporate sites and connect business partners, cloud providers as well as telecommuters.

### Nebula SD-WAN Benefits

#### Higher throughput. Lower cost. Great agility.

Nebula SD-WAN features advanced WAN technology that boost throughput performance. Get better service quality without investing towards extra bandwidth. It's quick to install, includes remote management, and can be centralized with monitoring for better operation flexibility.

Learn more about Nebula SD-WAN at <http://zyxel.com/SD-WAN>



Nebula SD-WAN for optimal WAN service



Easy setup tunnel to Amazon Virtual Private Cloud (VPC)



Facebook WiFi, Intelligence social media authentication



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



One-year free Content Filtering and Geo Enforcer services



Device HA Pro dedicated heartbeat port ensures smart handover



Hotspot management for authentication, access control and billing



myZyxel



OneSecurity

## VPN Firewall Benefits

### Non-stop service

The ZyWALL VPN100 delivers high-performance network security to help businesses satisfy the demand for always-on communications. For mission critical deployments, the ZyWALL VPN series provides active-passive device High-Availability (HA) service to support device or connection failover.

### High secure VPN applications

The Zyxel ZyWALL VPN100 provides comprehensive types of VPN connection for your business and supports Amazon Virtual Private Cloud (AWS VPC) for nowadays VPN environment. Moreover, the business grade ZyWALL VPN family equipped with IPSec VPN Hardware engine for high efficiency VPN tunnel and VPN load balance/failover with stronger VPN algorithm (IKEv2 & SHA-2) that ensure the VPN reliability and security for business communications.

### One-year free security services

The ZyWALL VPN100 with Content Filtering prevents users from accessing malicious or malware sites or inappropriate content such as violent or porn related. With the Geo Enforcer, IP addresses can be mapped to geographical locations to block hacker probing from specific countries or to prevent users from visiting certain data sources. These could help small and medium business to stay away from web threats or social networking sites that could potentially decrease productivity.

### Multi-WAN load balancing/failover

The ZyWALL VPN100 features multi-WAN load balancing/failover and a comprehensive mobile broadband USB modem support list for WAN backup operations. The ZyWALL VPN100 also supports IPSec load balancing and failover, providing additional resilience for mission-critical VPN failover with VTI Interface deployments.

### Comprehensive connectivity

Today's business requires a solution that provides secure connectivity and easy access management, and it also requires uninterrupted connection to the business needs of the device.

### AP controller

The ZyWALL VPN100 combining AP Controller technology enables users to manage APs from a centralized user interface. Businesses can deploy or expand a managed WiFi network with minimal effort.

### Hotspot management

Zyxel's hotspot management services include billing systems, walled gardens, multiple authentication options, third-party community logins and user agreements, providing site owners with all the functional solutions for managing all network hotspots from one place.

### Facebook WiFi

The ZyWALL VPN100 integrates with Facebook WiFi to help small shops, stores and restaurants not only provide customers with easy Internet connectivity, but also increase the popularity of your business on Facebook.

## ZyWALL VPN Firewall Quick Finder



Model	ZyWALL VPN50	ZyWALL VPN100	ZyWALL VPN300
Description	SB	SMB	SMB
Firewall Throughput (Mbps)	800	2,000	2,600
Max. Concurrent Sessions	400,000	800,000	2,000,000
VPN throughput (Mbps)	150	500	1,000
Max. Concurrent IPSec VPN Tunnels	50	100	300
Content Filtering	1 year free	1 year free	1 year free
Gen Enforcer Service	1 year free	1 year free	1 year free
Amazon VPC	Yes	Yes	Yes
L2TP over IPSec VPN Client	Yes	Yes	Yes
Device HA Pro	-	Yes	Yes
Hotspot Management	-	Yes	Yes
Facebook WiFi	Yes	Yes	Yes

## Subscription Services

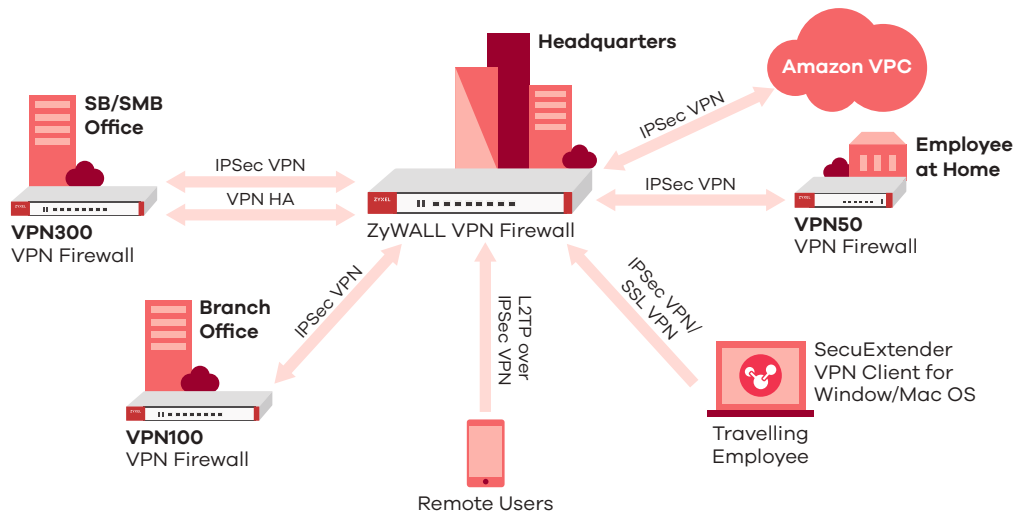
The ZyWALL VPN100 provides a complete feature set to perfectly fit different business requirements as well as to enable the maximum performance for security, hotspot, and connectivity. Comprehensive network modularity also empowers IT professionals to customize the system to meet their individual needs.



## Key Applications

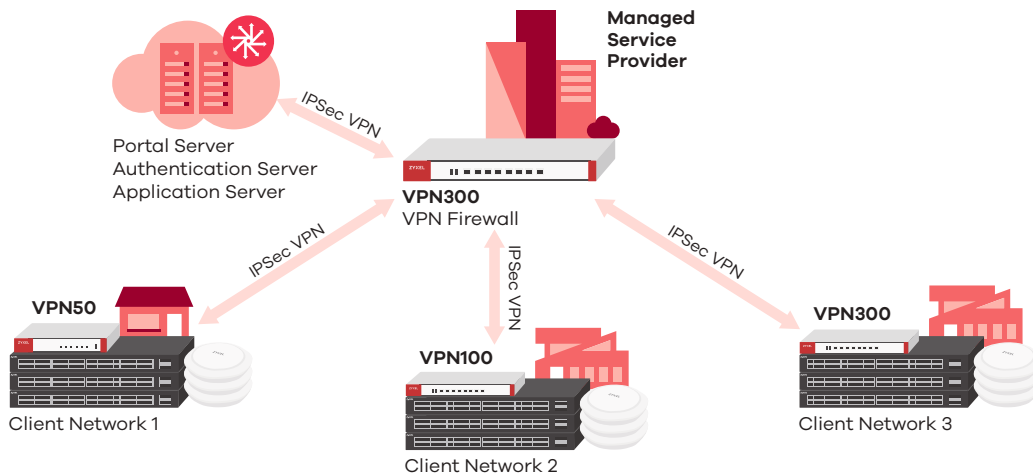
### VPN application

- High-speed, high-security communications between local servers, remote devices and cloud-hosted applications with deployments of the ZyWALL VPN100.
- 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 for secured access to leverage the benefits of cloud-base and to expend on premise networks that extend into the cloud center.



### Managed application services

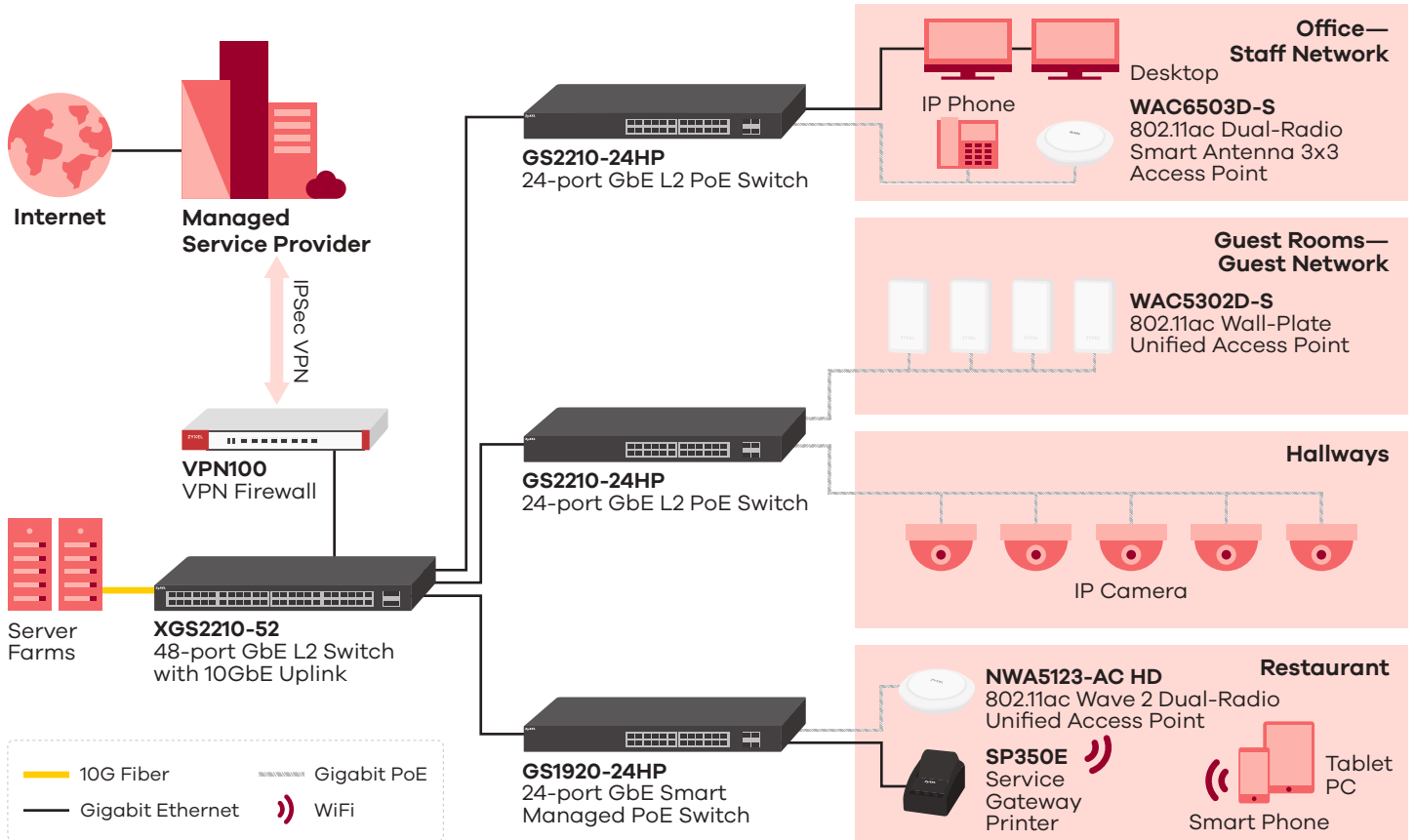
- Branch offices, small and medium business as well as IT administrators can deploy ZyWALL VPN100 to establish VPN connections among managed services providers (MSPs) that improve services levels, minimize end-user service downtime and relieve network maintenance efforts.
- Retailers and chain stores such as healthcare, banking and branch offices can deploy ZyWALL VPN100 over secure connections (IPsec VPN) for business transactions.



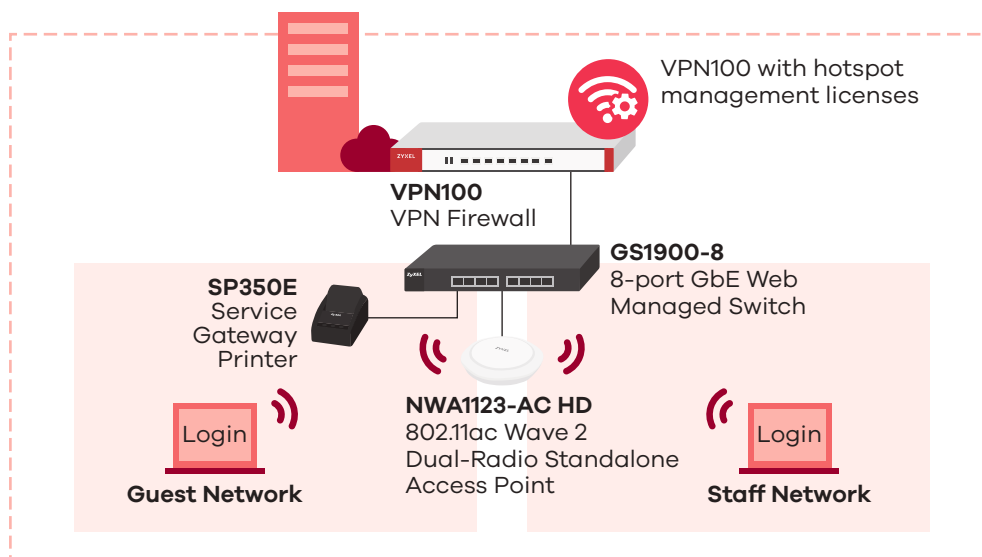
## Connectivity for hospitality services

- The ZyWALL VPN100 with managed AP provides Hospitality businesses and SMB with a range of network access privileges such as free, paid access or social login.
- Hospitality businesses can deploy ZyWALL VPN100 with Hotspot Management features that provide secure network services such as advanced billing for flexible free and tiered WiFi services while retaining the Internet usage record to comply with local regulations.




### Business Scenario 1: 3-4 star Hotels with Hotspot & managed APs



### Business Scenario 2: hotspot management for shops and hostels



# Specifications

Model	ZyWALL VPN50	ZyWALL VPN100	ZyWALL VPN300	
Product photo				
<b>Hardware Specifications</b>				
Interfaces	4 x LAN/DMZ, 1 x WAN, 1 x SFP	4 x LAN/DMZ, 2 x WAN, 1 x SFP	7 x GbE (Configurable), 1 x SFP	
USB3.0 ports	1	2	2	
Console port	Yes (RJ-45)	Yes (DB9)	Yes (DB9)	
Rack-mountable	-	Yes	Yes	
<b>System Capacity &amp; Performance<sup>1</sup></b>				
SPI firewall throughput (Mbps) <sup>2</sup>	800	2,000	2,600	
VPN throughput (Mbps) <sup>3</sup>	150	500	1,000	
Max. TCP concurrent sessions <sup>4</sup>	400,000	800,000	2,000,000	
Max. concurrent IPSec VPN tunnels <sup>5</sup>	50	100	300	
Concurrent SSL VPN users (default/max.) <sup>6</sup>	10/50	30/200	50/300	
VLAN interface	8	16	64	
Concurrent device logins (default/max.) <sup>6,7</sup>	64	200/300	500/800	
<b>WLAN Management</b>				
Managed AP number (default/max.) <sup>6</sup>	4/36	4/68	4/132	
<b>Key Features</b>				
DPI Firewall	Yes	Yes	Yes	
VPN	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	IKEv2, IPSec, SSL, L2TP/IPSec	
SSL (HTTPS) Inspection	-	Yes	Yes	
Content Filtering <sup>6,8</sup>	1 year free	1 year free	1 year free	
Geo Enforcer <sup>6</sup>	1 year free	1 year free	1 year free	
EZ Mode	Yes	-	-	
Hotspot Management <sup>6</sup>	-	Yes	Yes	
Ticket printer support <sup>9</sup> / Support Q'ty (max.)	-	Yes (SP350E)/10	Yes (SP350E)/10	
Amazon VPC	Yes	Yes	Yes	
Facebook WiFi	Yes	Yes	Yes	
Device HA Pro	-	Yes	Yes	
<b>Power Requirements</b>				
Power input	12 V DC, 2.0 A max.	12 V DC, 2.5 A max.	12 V DC, 4.17 A max.	
Max. power consumption (watt)	12	13.3	24.1	
Heat dissipation (BTU/hr)	40.92	45.38	82.23	
<b>Physical Specifications</b>				
Item	Dimensions (WxDxH) (mm/in.)	216 x 143 x 33/ 8.50 x 5.63 x 1.30	272 x 187 x 36/ 10.7 x 7.36 x 1.42	300 x 188 x 44/ 16.93 x 7.4 x 1.73
	Weight (kg/lb.)	0.88/1.94	1.4/3.09	1.65/3.64
Packing	Dimensions (WxDxH) (mm/in.)	276 x 185 x 98/ 10.87 x 7.28 x 3.86	427 x 247 x 73/ 16.81 x 9.72 x 2.87	351 x 152 x 245/ 13.82 x 5.98 x 9.65
	Weight (kg/lb.)	1.41/3.11	2.23 (W/ bracket) 2.42 (W/ bracket)	2.83/6.24
Included accessories	<ul style="list-style-type: none"> <li>Power adapter</li> <li>RJ-45—RS-232 cable for console connection</li> </ul>	<ul style="list-style-type: none"> <li>Power adapter</li> <li>Rack mounting kit (optional, by regions)</li> </ul>	<ul style="list-style-type: none"> <li>Power adapter</li> <li>Power cord</li> <li>Rack mounting kit</li> </ul>	

Model		ZyWALL VPN50	ZyWALL VPN100	ZyWALL VPN300
<b>Environmental Specifications</b>				
<b>Operating environment</b>	<b>Temperature</b>	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
	<b>Humidity</b>	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
<b>Storage environment</b>	<b>Temperature</b>	-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
	<b>Humidity</b>	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
<b>MTBF (hr)</b>		44,000	529,688.2	529,688.2
<b>Certifications</b>				
<b>EMC</b>		FCC Part 15 (Class B), IC, CE EMC (Class B), RCM, BSMI	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
<b>Safety</b>		BSMI, UL	LVD (EN60950-1), BSMI	LVD (EN60950-1), BSMI

\*: This matrix with firmware ZLD4.30 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: SafeSearch function in Content Filtering need to enable SSL inspection firstly and not for small business models.

\*9: With Hotspot Management license support

## Features Set

### Software Features

#### Firewall

- ICSA-certified corporate 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

#### 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

#### 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
- 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
- Support iOS L2TP/IKE/IKEv2 VPN Client provision

#### 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

#### SSL VPN

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

#### 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**

- Support AP controller version 3.00
- Wireless L2 isolation
- Supports auto AP FW update
- Scheduled WiFi service
- Dynamic Channel Selection (DCS)
- Client steering for 5 GHz 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

#### **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
- Advanced reporting (Vantage Report)

#### **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**

- 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
- Billing Replenish

#### **Subscription Services**

- Content Filtering
- Geo Enforcer
- HotSpot Management
- Managed APs
- Device HA Pro

#### **USB**

- Firmware upgrade
- Log for data retention
- Support 3G/LTE

#### **Support**

- Nebula SD-WAN (<http://zyxel.com/SD-WAN>)
- ZyWALL VPN100 (<http://zyxel.com/VPN100>)
- Zyxel Biz Forum (<https://businessforum.zyxel.com/categories/security>)

## Licenses

### Security

Product	Content Filtering	Geo Enforcer
ZyWALL VPN50	1 year/2 years	1 year
ZyWALL VPN100	1 year/2 years	1 year
ZyWALL VPN300	1 year/2 years	1 year

Note: Support Content Filtering and Geo Enforcer 1 year free license.

### VPN Service

Product	SSL VPN Tunnels	SecuExtender SSL VPN Client*1	SecuExtender IPsec VPN Client
ZyWALL VPN50	Add 5/10 tunnels	Add 1/5/10 clients	For 1/5/10/50 clients
ZyWALL VPN100	Add 5/10/50 tunnels	Add 1/5/10 clients	For 1/5/10/50 clients
ZyWALL VPN300	Add 5/10/50 tunnels	Add 1/5/10 clients	For 1/5/10/50 clients

\*1: Support OS: MAC OS 10.7 or later

### Connectivity Solution

Product	Managed APs	Concurrent Device Upgrade	Hotspot Management
ZyWALL VPN50	Add 2/4/8 APs	-	-
ZyWALL VPN100	Add 2/4/8/64 APs	Add 100 nodes	1 year/One-Time
ZyWALL VPN300	Add 2/4/8/64 APs	Add 100/300 nodes	1 year/One-Time

## Access Point Compatibility List

Product	Unified AP	Unified Pro AP
<b>Models</b>	<ul style="list-style-type: none"> <li>NWA5121-NI</li> <li>NWA5121-N</li> <li>NWA5123-NI</li> <li>NWA5301-NJ</li> </ul>	<ul style="list-style-type: none"> <li>NWA5123-AC</li> <li>WAC5302D-S</li> <li>Forward Compatible APs*</li> </ul>
		<ul style="list-style-type: none"> <li>WAC6502D-E</li> <li>WAC6502D-S</li> <li>WAC6503D-S</li> </ul>
		<ul style="list-style-type: none"> <li>WAC6553D-E</li> <li>WAC6103D-I</li> <li>Forward Compatible APs*</li> </ul>
<b>Functions</b>		
<b>Central management</b>	Yes	Yes
<b>Auto provisioning</b>	Yes	Yes
<b>Data forwarding</b>	Local bridge	Local bridge/Data tunnel
<b>ZyMesh</b>	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.

## Accessories

### SecuExtender Software

Product	Description	Supported OS
<b>IPsec VPN Client*</b>	IPsec VPN client software for the ZyWALL and USG Series with Easy VPN for zero configuration remote access	<ul style="list-style-type: none"> <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> </ul>
		<ul style="list-style-type: none"> <li>Windows 7 (32/64-bit)</li> <li>Windows 8 (32/64-bit)</li> <li>Windows 10 (32/64-bit)</li> </ul>
<b>SSL VPN Client*</b>	Secured VPN connection between PC/MAC and ZyWALL Firewall	<ul style="list-style-type: none"> <li>Windows XP</li> <li>Windows 7 (32/64-bit)</li> <li>Windows 8/8.1 (32/64-bit)</li> </ul>
		<ul style="list-style-type: none"> <li>Windows 10 (32/64-bit)</li> <li>MAC OS 10.7 or later</li> </ul>

\*: 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 Model			
<b>SP350E</b>	<ul style="list-style-type: none"> <li>Buttons: 3</li> <li>Paper roll width: 58 (+0/-1) mm</li> <li>Interface: 10/100 Mbps RJ-45 port</li> <li>Power input: 12V DC, 5A max.</li> <li>Item dimensions (WxDxH): 176 x 111 x 114 mm (6.93" x 4.37" x 4.49")</li> <li>Item weight: 0.8 kg (1.76 lb.)</li> </ul>	<ul style="list-style-type: none"> <li>VPN100</li> <li>VPN300</li> </ul>	<ul style="list-style-type: none"> <li>USG110</li> <li>USG210</li> <li>USG310</li> <li>USG1100</li> <li>USG1900</li> <li>USG2200-VPN</li> </ul>	<ul style="list-style-type: none"> <li>ZyWALL 110</li> <li>ZyWALL 310</li> <li>ZyWALL 1100</li> </ul>	<ul style="list-style-type: none"> <li>UAG2100</li> <li>UAG4100</li> </ul>



Note: Hotspot management licenses required

## Transceivers (Optional)

Model	Speed	Connector	Wavelength	Max. Distance	DDMI
<b>SFP-1000T</b>	Gigabit	RJ-45	-	100 m (109 yd)	-
<b>SFP-LX-10-D</b>	Gigabit	LC	1310 nm	10 km (10936 yd)	Yes
<b>SFP-SX-D</b>	Gigabit	LC	850 nm	550 m (601 yd)	Yes

For more product information, visit us on the web at [www.zyxel.com](http://www.zyxel.com)

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