



- Comprehensive wireless Internet access solution
- “Zero Configuration” IP Plug and Play
- Unique ticket printer for easy service and accounting
- Web-based user authentication, account monitoring and billing profiles
- High-performance standards-compliant solution
 - IEEE 802.11b/g support (G-4100 v2)
 - IEEE 802.11b/g/n support (N4100)
- RADIUS Client, walled garden as well as advertising URL links and forwarding to portal
- User activities logged with session trace for auditing
- Comprehensive range of gateways providing Internet connectivity from 1 to 250 users
 - G-4100 v2 up to 100 users
 - N4100 up to 100 users
 - N4100 with optional license up to 200 users
 - VSG-1200 V2 up to 250 users

**G-4100 v2/
N4100/
VSG-1200 V2**
**Hotspot/Service
Gateway Series**

A Complete Hospitality Solution with Wireless LAN, Internet Access and Billing System

The introduction of the ZyXEL N4100 802.11b/g/n Hotspot Gateway gives hospitality businesses the opportunity to deploy full Internet services needed to create new revenue streams, and to retain and attract customers. As an addition to the ZyXEL range of Hotspot/Service Gateways, the ZyXEL N4100 WLAN Hotspot Gateway provides a fully flexible solution supporting the IEEE 802.11b/g/n wireless standards.

The latest 11n technology truly offers enhanced connectivity required by businesses, which in turn enables users to enjoy Internet connections for all latest wireless devices including laptops, notebooks, PDAs, gaming devices and Wi-Fi mobile handsets. The ZyXEL N4100 not only offers flexible connectivity but also increased performance with the “2 Transmit, 3 Receive” MIMO antenna technology.

The ZyXEL N4100 is the latest Hotspot Gateway from the established world leader in Internet Hotspot solutions. The 11n-capable N4100 is designed to work as an access controller for service providers and hospitality businesses to deliver Internet services with its own unique, built-in billing system. It is an ideal solution for hotels, coffee shops, airports and conference facilities to offer instant high-speed Internet connection.

In addition to the newly launched N4100, the ZyXEL Hotspot/Service Gateway Series is complete with two other products: the G-4100 v2 802.11b/g Hotspot Gateway and VSG-1200 V2 Service Gateway to meet various needs.

Benefits

Standard-based high-performance wireless connectivity

In today's business environments demanding always-on Internet connectivity, people travel more and need to stay connected with family, friends and offices via many wireless mobile devices such as laptops, netbooks, smart phones and even game consoles. This change has driven the need for more bandwidth and higher density in Internet wireless solutions offered by hospitality businesses and Wi-Fi service providers for public use. The ZyXEL N4100 Hotspot Gateway has been optimised to deliver flexible connectivity for Wi-Fi devices through the standard-based 11n RF wireless technology.

The new 11n Wi-Fi standard offers a peak data throughput of up to 300 Mbps, providing approximately five times the bandwidth compared to standard 11b/g Wi-Fi devices. The N4100 also offers the “2 Transmit, 3 Receive” MIMO antenna technology and advanced 11n features to provide more flexibility and better coverage within the business location. With these advantages, the ZyXEL N4100 Hotspot Gateway offers many benefits to users in need to deploy and use Internet services.

Simple operation for delivering Internet access

To enable easy configuration and operation, the ZyXEL Hotspot/Service Gateway Series can be used with the optional SP300E Service Gateway Printer. With this combination, business owners can easily enable their staff to operate the gateway solution to give end users the information they need to access the Internet. This is achieved by simply pushing a button on the SP300E, and then it automatically prints the Internet access information. This removes the need in smaller deployments for a dedicated PC to manage the authentication and billing within the business. In larger business environments, the ZyXEL Hotspot/Service Gateway Series can support up to ten SP300E printers installed in different locations around the premises. This provides an ideal solution that can scale as the business expands and where greater Internet coverage is required.

Plug-and-play connectivity

Users who want to access a business Hotspot are usually faced with various technical issues to establish connectivity and need information such as IP configurations, static IP, DHCP clients, etc. The ZyXEL Hotspot/Service Gateway Series is equipped with IP Plug and Play technology so that users do not need to change their existing IP and other network configurations to connect to the Internet. The access is fast, easy and trouble free thus increasing usage and encouraging more users to use the service. This offers the hospitality businesses more opportunity to attract and retain customers while delivering new revenue streams. In addition, the ZyXEL Hotspot/Service Gateway Series can be configured to interact within an existing network and can be installed in different modes such as a gateway, DNS, proxy as well as dynamic and static IP address assignments. This eliminates the need and associated costs of hiring dedicated IT staff.

Strict security and regulatory compliance*

The "EU Data Retention Directive", which is Directive 2006/24/EC of the European Parliament and of the Council of 15 March 2006, stipulates the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amends Directive 2002/58/EC. It requires business owners of places where Internet services are provided to keep several elements of the user data for a certain period of time. ZyXEL is aware of the difficulties of business owners to deploy a service and meet the requirements. The ZyXEL Hotspot/Service Gateway Series is a core part of the solution when installed along with a ZyXEL network attached storage device and ZyWALL Unified Security Gateway to enable businesses to meet the expectations of the directive. This is achieved by ensuring that session traces are logged and user activities are kept for government audit if required. ZyXEL's Hotspot/Service Gateway Series is the right choice for business owners who intend to provide regulation-compliant public Internet access.

**The implementation of the directive varies dependant on the local definition by the EU member country.*

Secure Internet gateway with scalable simultaneous wireless connections

The ZyXEL Hotspot/Service Gateway Series can be installed either as a standalone device connected directly to a broadband router to be an all-in-one Internet wireless Hotspot solution, or just as part of a larger network. This flexibility provides businesses with a device of full authentication, authorization and administration capability to control the wireless users. This functionality enables businesses to define the policy about how users can be offered secure Internet access either for free or for a fee through a simple charging mechanism. The Series starts with the G-4100 v2 offering 802.11b/g wireless and up to 100 simultaneous connections. The introduction of the N4100 extends the wireless technology to 802.11b/g/n for better coverage while supporting 100 simultaneous users as standard and 200 users through an optional license. The last product in the Series is the VSG-1200 V2, a rack-mount service gateway designed for larger networks and supports up to 250 simultaneous users.

What are the Benefits for Hospitality Businesses?

Create customer loyalty

Experiencing secure, always-on and easy-to-use connectivity is a good way to make customers feel way to increase customer satisfaction.

Increase revenue opportunities

A well-designed broadband Internet access solution offers an extensive range of marketing and revenue enhancing opportunities such as:

- In-room revenue
- Meeting room revenue
- Online advertising income
- E-commerce
- Special services such as VoIP, printing online, Video on Demand (VoD), etc.

Increase occupancy

A complete, easy-to-use broadband internet infrastructure attracts more customers, increases occupancy rates and enhances perception of the hotel brand.

Offer robust security and regulatory compliance

The solution allows authorised users onto the network and keeps data private as it travels through the airwaves. It keeps security threats at bay and enables business to comply with EU Directives.

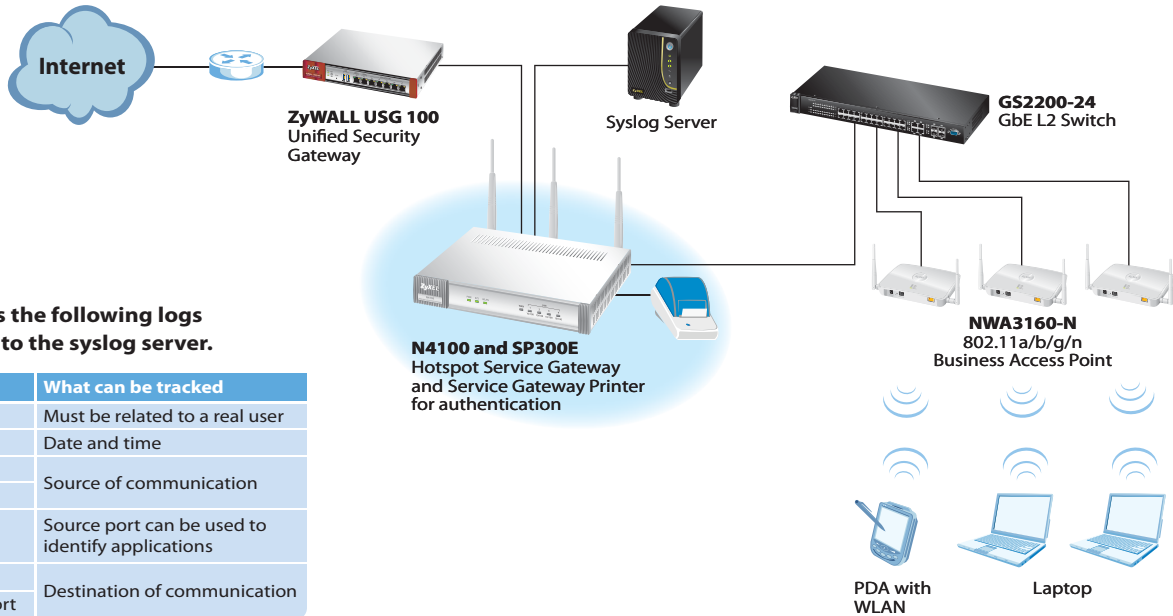
Improve ROI

Through feature-rich products, operational simplicity, and flexible architecture, ZyXEL hospitality solutions can help to improve profits and protect investments.

Key Applications

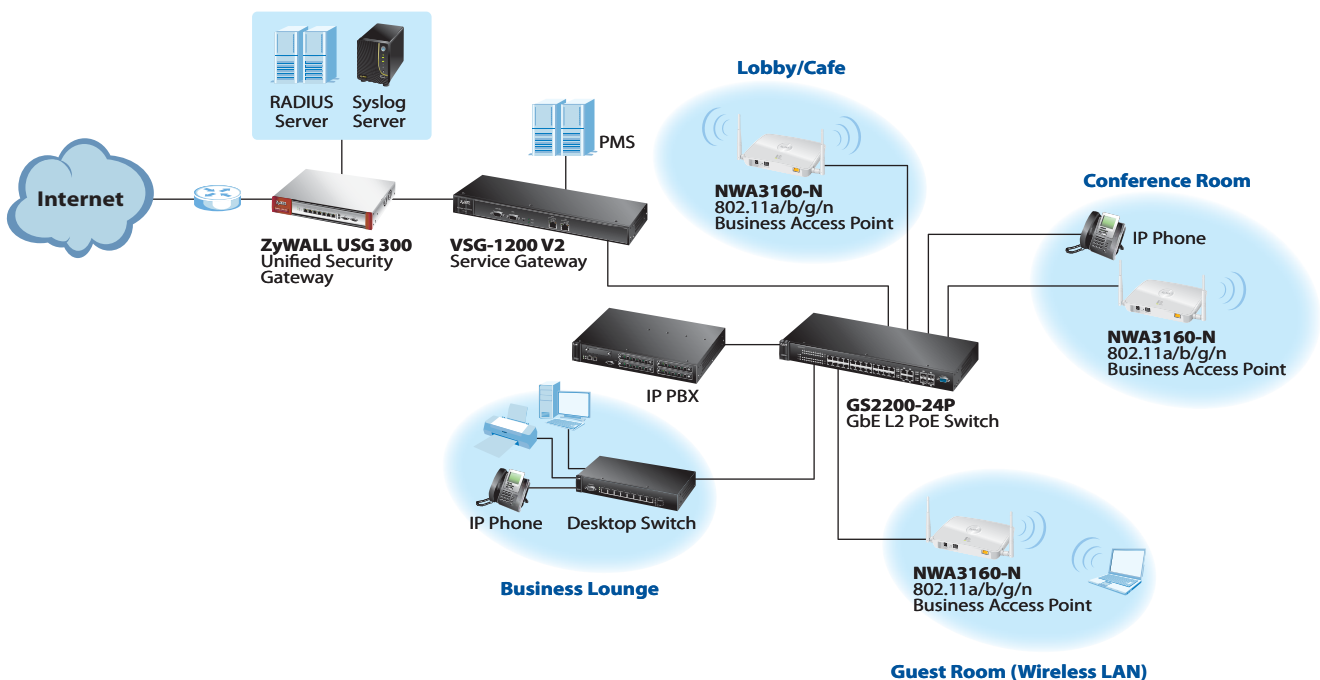
Basic—Internet services

The application includes the operations of G-4100 v2/N4100 and SP300E to offer basic Internet access, in which laptop and desktop computers can be connected wirelessly over a range of 23-100 M. The G-4100 v2/N4100 also offers billing and authentication functions to the connection.



Professional—complete solution

This application provides a complete solution for excellent Internet services in all areas, including a billing system and possibilities for logging user data; in addition, it also provides a connection to the hotel PMS system.



Specifications

The ZyXEL Hotspot/Service Gateway Series includes two parts: WLAN Hotspot Gateway and Vantage Service Gateway to meet various needs.

WLAN Hotspot Gateway

The ZyXEL WLAN Hotspot Gateway consists of two models: G-4100 v2 and N4100. The G-4100 v2 and N4100 are all-in-one Hotspot gateways providing a fully flexible solution with support for the IEEE 802.11b/g/n (G-4100 v2 supports 802.11g while N4100 supports 802.11n) wireless standards. They are designed to work as access controllers for service providers/Hotspot operators and hospitality businesses to deliver Hotspot services.

Vantage Service Gateway

The VSG-1200 V2 Vantage Service Gateway is a freestanding or rack-mountable service gateway with a built-in authentication server to provide access to the Internet for large hospitality facilities.


Model	G-4100 v2	N4100	VSG-1200 V2
Product Name	802.11b/g Hotspot Gateway 	802.11b/g/n Hotspot Gateway 	Service Gateway 
Main Design			
Wireless Technology	802.11b/g	802.11b/g/n	-
Number of 10/100M LAN/Switch	4	4	1
WAN	1	1	1
Auto MDI-MDIX	Yes	Yes	Yes
RS-232 Interface	-	-	2 (Console/PMS/Manufacture)
Account Generator Printer	SP300E (Ethernet)	SP300E (Ethernet)	SP300E (Ethernet)
No. of SP300E Ticket Printers	10	10	10
Reset Factory Default Button	Yes	Yes	Yes
PoE	Yes	-	-
PoE Power Draw	6 W	-	-
WLAN Features (G-4100 v2 and N4100)			
Number of Antenna	2	2Tx3R MIMO	-
Maximum Throughput	22 ~ 24 Mbps	150 Mbps	-
Range	Open space: 100 ~ 300 m (328 ~ 984 ft.) Indoors: 35 ~ 100 m (115 ~ 328 ft.)	Open space: 100 ~ 300 m (328 ~ 984 ft.) Indoors: 35 ~ 100 m (115 ~ 328 ft.)	-
WEP Data Encryption	Yes (64/128)	Yes (64/128)	-
WPA Data Encryption (Wi-Fi Certified)	Yes (TKIP)	Yes (TKIP)	-
WPA2 Data Encryption (Wi-Fi Certified)	Yes (AES)	Yes (AES)	-
Certifications			
	FCC, VCCI, CE, R&TTE, CSA, C-Tick, RoHS, WEEE	FCC, CE, C-Tick, NCC, RoHS, WEEE	FCC, VCCI, CSA, CE, RoHS, WEEE
Power Requirement			
Power supply	External Power Adapter Input: 100-240 V AC, 50/60 Hz, 0.35 A Output: 5 V, 2 A	External Power Adapter Input: 100-240 V AC, 50/60 Hz, 0.5 A Output: 12 V, 1.5 A	100-220 V AC, 50/60 Hz
Physical Specifications			
Dimensions (WxDxH)(mm/in.)	213 x 139 x 52/8.39 x 5.47 x 2.05	222 x 146 x 35/8.74 x 5.75 x 1.38	440 x 116 x 44/17.32 x 4.57 x 1.73
Weight (g/lb.)	508/1.12	565/1.25	1,700/3.75
Environmental Specifications			
Operating temperature	0°C to 50°C/32°F to 122°F	0°C to 50°C/32°F to 122°F	0°C to 50°C/32°F to 122°F
Storage temperature	-20°C to 60°C/-4°F to 140°F	-20°C to 60°C/-4°F to 140°F	-20°C to 60°C/-4°F to 140°F
Operating humidity	10% to 90% (Non-condensing)	10% to 95% (Non-condensing)	10% to 95% (Non-condensing)

Features

Model Name	G-4100 v2	N4100	VSG-1200 V2
Software			
Max. Concurrent Users	100	100 (Upgrade to 200)	250
Max. Session	8192	16384	16384
Throughput	Max. 78 Mbps	Max. 85 Mbps	Max. 72 Mbps
Max. VPN Tunnel (NAT Pool)	-	-	400
IP Plug & Play (iPnP)	Yes (Allow disable)	Yes (Allow disable)	Yes (Allow disable)
NAT	Yes (Allow disable)	Yes (Allow disable)	Yes (Allow disable)
Static Route	-	-	Yes
DHCP Server	Yes (Pool=253)	Yes (Pool=253)	Yes (Pool=512)
DHCP Relay	Yes	Yes	Yes
HTTP Proxy Support	Yes	Yes	Yes
SMTP Redirection	Yes	Yes	Yes
WAN Client	Static/DHCP/PPPoE/PPTP	Static/DHCP/PPPoE/PPTP	Static/DHCP/PPPoE/PPTP
NTP Support	Yes	Yes	Yes
AAA Billing			
Web-Based Authentication	Yes	Yes	Yes
RADIUS Client/AAA	Yes	Yes	Yes
WISPr Smart Client Support	Yes	Yes	Yes
RADIUS Authentication Method	PAP/CHAP	PAP/CHAP	PAP/CHAP
RADIUS VSA Support	-	-	Yes
Secondary RADIUS Server	Yes	Yes	Yes
RADIUS Time to Finish/Accumulation	Yes	Yes	Yes
Internal Accounting	Yes (512 Dynamic accounts)	Yes (512 Dynamic accounts)	Yes (1024 Static + Dynamic accounts)
Internal Billing	Yes	Yes	Yes
Internal Billing (Time to finish)	Yes	Yes	Yes
Internal Billing (Accumulation)	Yes	Yes	Yes
Customizable Billing Plan	Yes	Yes	Yes
PMS Support	-	-	Yes (Micros Fidelio/Spectrum MK II/ Marriott/Proprietary)
Account Operator	Yes (Dynamic only)	Yes (Dynamic only)	Yes (Static + Dynamic)
Credit Card Billing Support	Yes (Authorize.net/iValidate.net/ Paypal)	Yes (Authorize.net/iValidate.net/ Secure Pay/WorldPay/ Paypal)	Yes (Authorize.net/iValidate.net/ WorldPay/ Paypal/Secure Pay/Ogone)
User Agreement Login	Yes	Yes	Yes
Output Bill to Thermal Printer	Yes	Yes	Yes
Security			
Layer 2 Isolation	Yes	Yes	Yes
Port-based VLAN Reading	Yes	-	Yes
VPN Pass Through	Yes (IPsec ESP Tunnel Mode/PPTP)	Yes (IPsec ESP Tunnel Mode/PPTP)	Yes (IPsec ESP Tunnel Mode/PPTP)
SSL Administration	Yes	Yes	Yes
SSL Login Page	Yes	Yes	Yes
Customize SSL Certificate	Yes	Yes	Yes
Session Limit	Yes	Yes	Yes
Secure Remote (PPTP Client)	Yes	Yes	Yes
802.1x Support	Yes	Yes	-
Management			
Administrator Access	WAN/LAN	WAN/LAN	WAN/LAN
SSL Management Page	Yes	Yes	Yes
Secure Administrator IP Address	Yes	Yes	Yes
Email Log	Yes	Yes	Yes
Syslog	Yes	Yes	Yes
SNMP	Yes (Read only)	Yes (Read only)	Yes (Read only)
Private MIBs	Yes	Yes	Yes
Passthrough Address	Yes (IP/MAC/URL)	Yes (IP/MAC/URL)	Yes (IP/MAC/URL)
LAN Device Management	Yes	Yes	Yes
Scheduled Firmware Upgrade	Yes	Yes	Yes
Secure Remote (PPTP VPN Client)	Yes	Yes	Yes
Backup/Restore Configuration	Yes	Yes	Yes

Model Name	G-4100 v2	N4100	VSG-1200 V2
Others			
Advertisement Link	Yes	Yes	Yes
Walled Garden	Yes	Yes	Yes
Login Page Redirect	Yes	Yes	Yes
Portal Page	Yes	Yes	Yes
Customize Login Page	Yes	Yes	Yes
Customize Information Window	Yes	Yes	Yes
Customize User Agreement Page	Yes	Yes	Yes
Session List	Yes	Yes	Yes
Account List	Yes	Yes	Yes
Billing Logs	Yes (Max. 5000)	Yes (Max. 5000)	Yes (Max. 5000)
DHCP Client List	Yes	Yes	Yes
PMS Logs	-	-	Yes
Bandwidth Management	Fair Share	Fair Share	Fair Share/Billing Profile/RADIUS VSA
URL/IP Filtering	Yes	Yes	Yes
DDNS	Yes	Yes	Yes
Session Trace	Yes	Yes	Yes
NAT Pool	Yes	Yes	Yes
Port Location Mapping	-	-	Yes (512)
Private LAN	-	-	Yes
LAN Share	Yes	Yes	-
MAC Filtering	Yes	Yes	Yes
Ping Command	Yes	Yes	Yes

Accessories

Model	Features
SP300E Service Gateway Printer 	<ul style="list-style-type: none"> • Button x 3 • Input: 5 V DC, 2.5 A • Pager width: 58 (+0/-1) mm • Pager length (Max.): 50 m (164 ft.) • Support 802.3af Power over Ethernet • Item dimensions (WxDxH): 109 x 155 x 105 mm (4.29" x 6.10" x 4.13") • Item weight: 500 g (1.11 lb.)

License

Feature	For	Please Order
Concurrent User Scalability The N4100 User Scalability License is a service that increases the number concurrent users to as many as 200	N4100	E-iCard 100 User N4100

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

