



# **Key Features**

- 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, billing profiles
- High performance standards based solution
  - IEEE 802.11b/g support (G-4100 v2)
  - IEEE 802.11b/g/n support (N4100)
- RADIUS Client, walled garden, 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 + Optional license up to 200 users
  - VSG-1200 V2 up to 250 users

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

Installing the latest 11n technology truly offers enhanced connectivity required within the business, which in turn enables users a connection to the Internet for all of the latest wireless devices including laptops, notebooks, PDA's, gaming devices and WiFi mobile handsets. The ZyXEL N4100 not only offers this flexible connectivity but also offers increased performance and featuring 3 Transmitter x 3 Radio MIMO technology.

The ZyXEL N4100 is the latest WLAN Hotspot Gateway from an established world leader in Internet hotspot solutions. The 11n-capable N4100 gateway 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 connections.

In addition to the newly launched N4100, the ZyXEL Hotspot/Service Gateway Series is complete with two other products, the WLAN Hotspot Gateway and Vantage Service Gateway, to meet various needs.

#### **Benefits**

#### Standards based high performance wireless connectivity

In the high pressure always Internet connected environment of today, people travel more and more and need to stay connected to family, friends and their offices with a multitude of different wireless mobile devices such as laptops, netbooks, smart phones and game consoles. This change in attitude has driven the need for more bandwidth and higher density in Internet wireless solutions offered by hospitality businesses and WiFi service providers for public use. The ZyXEL N4100 Wireless LAN Hotspot Gateway has been optimised to deliver flexible connectivity for WiFi devices through standards based 11n wireless radio frequency technology.

The new 11n WiFi standard offers a peak rate data throughput of up to 300 Mbps, providing approximately five times the bandwidth compared to standard 11b/g WiFi devices. The N4100 also offers 3 Transmit 3 Receive MIMO antenna technology and further 11n features to provide more flexible and better coverage within the business location. With these advantages, the ZyXEL N4100 Hotspot Gateway offers many benefits to users wishing to deploy and use Internet services.

Enterprise Wireless LAN Hotspot/Service Gateway Series



# Enterprise Wireless LAN Hotspot/Service Gateway Series

#### Simple operation for delivering Internet access

To enable easy configuration and usage the ZyXEL Hotspot/Service Gateway Series can be used with the optional SP300E ticket 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 simply by pushing a button on the SP300E which then 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 which 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 business more opportunity to attract and retain customers while delivering new revenue opportunity. 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 USG 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. The Hotspot/Service Gateway Series is the best choice for business owners who intend to provide public Internet access.

#### Secure Internet gateway with scalable simultaneous wireless connections

The ZyXEL Hotspot/Service Gateway range can be installed either as a standalone device connected directly to a broadband router as an all in one Internet wireless Internet hotspot solution or as part of a larger network. This flexibility provides the business with a fully authenticating, authorising and administration device to allow the control of Internet Wireless users. This functionality enables the business to define the policy as to how users can be offered either secure free Internet access or can deploy a simple charging methodology. The range starts with the G-4100 v2 offering B/G wireless and up to 100 simultaneous connections. The introduction of the N4100 extends the wireless technology to B/G/N for better coverage capability, while supporting 100 simultaneous users as standard and 200 users by using the optional license. The final product in the ZyXEL Hotspot/Service Gateway range is the VSG-1200 V2. The VSG-1200 V2 is a rack mountable service gateway which is deployed within larger networks and can support 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 opportunites 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.

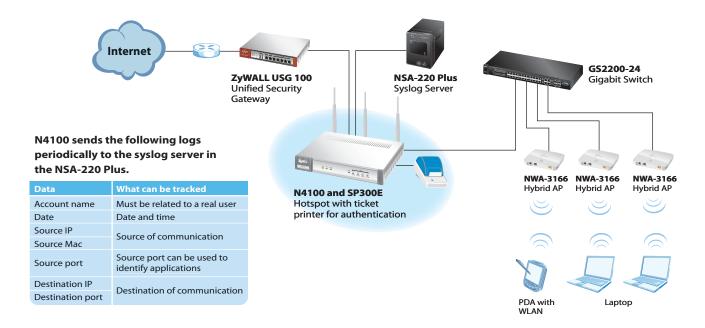
 $<sup>{}^*\</sup>textit{The implementation of the directive varies dependant on the local definition by the EU member country.}$ 



# **Key Applications**

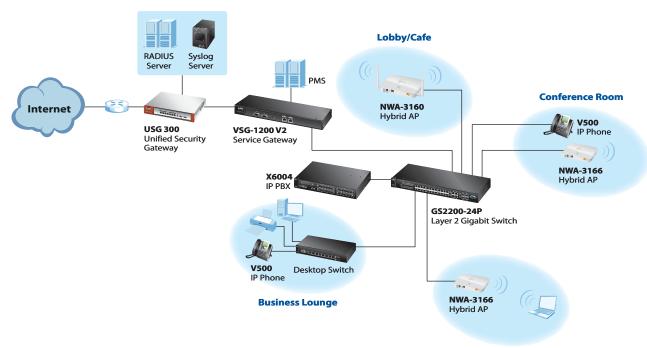
#### **Basic—Internet services**

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 or 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.



**Guest Room (Wireless LAN)** 



# **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 Name	Hotspot/Service Gateway Series		
	G-4100 v2	N4100	VSG-1200 V2
Product Picture		The same of the sa	
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 on	ly)		
Number of Antenna	2	3Tx3R MIMO	-
Maximum Throughput	22 ~ 24 Mbps	150 Mbps	-
Range	Open space: 100 ~ 300 m Indoors: 35 ~ 100 m	Open space: 100 ~ 300 m Indoors: 35 ~ 100 m	-
WEP Data Encryption	Yes (64/128)	Yes (64/128)	-
WPA Data Encryption (WiFi Certified)	Yes (TKIP)	Yes (TKIP)	-
WPA2 Data Encryption (WiFi Certified)	Yes (AES)	Yes (AES)	-
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
Environmental Specification			
Operating Temperature	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temperature	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Operating Humidity	10% to 90%, (non-condensing)	10% to 95%, (non-condensing)	10% to 95%, (non-condensing)
Physical Feature			
Dimensions (W) x (D) x (H) mm	213 x 139 x 52	222 x 146 x 35	440 x 116 x 44
Weight	508 g	565 g	1.7 kg
Certifications	FCC, VCCI, CE, R&TTE, CSA,	FCC, CE, C-Tick, NCC,	FCC/VCCI/CSA/CE/RoHS/WEEE
	C-Tick, RoHS, WEEE	RoHS, WEEE	FCC/VCCI/C3A/CE/KOH3/WEEE



# **Features**

Madal Nama	C 4100 v2	N4100	VSC 1200V2
Model Name	G-4100 v2	N4100	VSG-1200 V2
Software Max. Concurrent Users	100	100 (Ungrado to 200)	250
Max. Session	8192	100 (Upgrade to 200) 16384	16384
Throughput		Max. 85 Mbps	Max. 72 Mbps
Max. VPN Tunnel (NAT Pool)	Max. 78 Mbps	wax. 65 wups	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	res (Allow disable)	res (Allow disable)	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	ies	ies	ies
Web-Based Authentication	Yes	Yes	Yes
RADIUS Client/AAA	Yes	Yes	Yes
WISPr Smart Client Support	Yes	Yes	Yes
RADIUS Authentication Method	res PAP/CHAP	PAP/CHAP	PAP/CHAP
RADIUS VSA Support	FAF/CHAP	FAF/CHAP	Yes
• • • • • • • • • • • • • • • • • • • •	Yes	Yes	Yes
Secondary RADIUS Server RADIUS Time to Finish/Accumulation	Yes	Yes	Yes
		Yes (512 Dynamic accounts)	Yes (1024 Static + Dynamic accounts)
Internal Accounting	Yes (512 Dynamic accounts)		
Internal Billing (Time to finish)	Yes Yes	Yes Yes	Yes Yes
Internal Billing (Time to finish)	Yes	Yes	Yes
Internal Billing (Accumulation)		Yes	Yes
Customizable Billing Plan	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/ SecurePay/Paypal)	Yes (Authorize.net/iValidate.net/ Secure Pay/WorldPay/Paypal)	Yes (Authorize.net/iValidate.net/ WorldPay/Paypal)
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
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# **Enterprise Wireless LAN Hotspot/Service Gateway Series**

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
<b>Customize Information Window</b>	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
Ticket Printer— SP300E	<ul> <li>Button x 3</li> <li>Input: 5 V DC, 2.5 A</li> <li>Pager width: 58 (+0/-1) mm</li> <li>Pager length (Max.): 50 meters</li> <li>Support 802.3af Power over Ethernet</li> </ul>

# 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	iCard 100 User N4100/E-iCard 100 User N4100



