ZyXEL

Wireless LAN
Quick Sales Guide

Wireless LAN Quick Finder

Segment			Model
Small Business	• Web Managed • SNMP Management	• Extended Range • 2.4 GHz Support	NWA1100
		• 802.11n Generation of PoE AP • GbE Interface Support	NWA1100-N
		• Compact AP for Easy Massive Installation • 802.11n Support • GbE Interface	NWA1300-NJ
Small- to Medium-Sized Business	• Centralised WLAN Management • Hybrid AP: Controller/ Managed AP/ Standalone AP	• 2.4/5 GHz Support • Single Radio	NWA-3160
		• Extended Range • 2.4 GHz Support	NWA-3163
		• 802.11n Support in 2.4/5 GHz • Single Radio	NWA-3166
		• Dual Radio Support for Concurrent 2.4 and 5 GHz	NWA-3500
		• Dual Radio Support for Concurrent 2.4 and 5 GHz • Outdoor Coverage	NWA3550
		• 802.11n Support in 2.4/5 GHz • Single Radio • GbE Interface	NWA3160-N
		• 802.11n Support for Concurrent 2.4 and 5 GHz • Dual Radio Support • GbE Interface	NWA3560-N
Medium-Sized Business to Enterprise	• Centralised WLAN Management • User/Application Management	Wireless LAN Controller	NXC5200
		Managed AP — Single Radio 2.4/5 GHz Support	NWA5160N
		Managed AP — Dual Radio Concurrent 2.4 and 5 GHz Support	NWA5560-N
Hospitality		Hotspot Gateway	G-4100 v2
		Hotspot Gateway	N4100
		Service Gateway	VSG-1200 V2

Key Features

Model	Description	Key Features
NWA1100	Web-Managed AP	• Extended range (802.11b/g) • High-power design to extend Wi-Fi coverage • WEP/WPA/WPA2 support to ensure complete network protection • Various management interfaces are provided to merge the device into existing business networks
NWA1100-N	Web-Managed AP	• High bandwidth & superior performance with IEEE 802.11n standard support • Ethernet interface equipped with IEEE 802.3af PoE for easy deployment and GbE interface for better efficiency • IEEE 8023.az support to meet the energy saving trend • Featuring multiple 4 BSSIDs for user group management
NWA1300-NJ	Web-Managed AP	• Wide bandwidth & superior performance with IEEE 802.11n standard support • Compact size for embedding into wall boxes to provide outstanding wireless coverage • Multiple access interface in a box — Gigabit Ethernet, Wi-Fi and Phone • Eliminating interference and dead spots in hospitality environments • Featuring Auto-discovery and provisioning for quick installation and configuration
NWA-3160	Hybrid AP	
NWA-3163	Hybrid AP	• WLAN controller, managed AP and standalone AP: 3-in-one configurable Hybrid AP • Centralized management for up to 24 access points • Secured tunnel for communication between controller and managed AP • Dynamic channel selection • Back-up redundancy for controller AP • Plenum rating
NWA-3166	Hybrid AP	
NWA-3500	Hybrid AP	• Configurable concurrent 2.4 and 5 GHz support • IP-66 certified for outdoor coverage (NWA3550) • WLAN controller, managed AP and standalone AP: 3-in-one configurable Hybrid AP • Centralized management for up to 24 access points • Secured tunnel for communication between controller and managed AP • Dynamic channel selection • Back-up redundancy for controller AP
NWA3550	Hybrid AP	
NWA3160-N	Hybrid AP	• High bandwidth & superior performance with IEEE 802.11n standard support • The 3-in-1 solution as a WLAN controller, a stand alone AP or as a managed access point • Centralized management for up to 24 access points • Dynamic channel selection and PoE support to help in large scale deployment • Featured with embedded RADIUS server to protect the investment
NWA3560-N	Hybrid AP	
NXC5200	Wireless LAN Controller	• Manage up to 240 APs with granular access control • Central WLAN management on both configurations and data • Flexibility supporting both distributed and tunneled data forwarding • Strongest standards-based wireless security — WPA/WPA2 and AES encryption • Built-in firewall • Built-in wireless intrusion detection and prevention as well as Anti-Virus • Web authentication support for guest networks (captive portal)
NWA5160N	Managed AP	
NWA5560-N	Managed AP	
G-4100 v2	Hotspot Gateway	• 802.11g • Integrated hotspot services • Scalable user authentication and accounting • Rich networking features • Customized login page, advertisement URL links and "walled garden" features
N4100	Hotspot Gateway	• The first 802.11n hotspot AAA gateway in market • Unique ticket printer integration for user's easy connection • IP Plug & Play for zero configuration • Various authentication bases including RADIUS server, local user, and pop3 • License-based concurrent user upgrade support
VSG-1200 V2	Service Gateway	• PMS interface integration • RADIUS authentication/accounting • Time-based billing (billing by minute, hour, day, week, etc.) • SSL secure user login process • VPN pass through (IPSec/PPTP/L2TP)

Wireless LAN Feature Matrix

Model	NWA1100	NWA1100-N	NWA1300-NJ	NWA-3160	NWA3160-N	NWA-3163	NWA-3166
Product Description	802.11b/g 1000 Series PoE AP	Wireless N 1000 Series PoE AP	Wireless N 1000 Series In-wall AP	802.11a/g 3000 Series Business AP	Wireless N 3000 Series Business AP	802.11b/g 3000 Series Business AP	Wireless N 3000 Series Business AP
Basic Design							
Wireless Frequency	2.4 GHz	2.4 GHz	2.4/5 GHz	2.4/5 GHz	2.4/5 GHz	2.4 GHz	2.4/5 GHz
Radio	-	1	1	1	1	1	1
High Power (option)[1]	Yes	-	-	-	-	Yes	-
Number of Antenna	2	2T2R MIMO	2T2R MIMO	2	2T2R MIMO	2	2T3R MIMO
LAN & WAN							
Number of 10/100M LAN	1	-	1	1	-	1	1
Number of 10/100/1000M LAN	-	1	-	-	1	-	-
PoE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PoE Power Draw	7.2 W	10 W	7 W	6.5 W	11 W	6.9 W	7.4 W
WLAN Features							
WLAN Maximum Net Throughput	Up to 25 Mbps	Up to 110 Mbps	Up to 110 Mbps	Up to 33 Mbps	Up to 120 Mbps	Up to 33 Mbps	Up to 120 Mbps
WMM (Wi-Fi Certified)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WEP	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-PSK	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-Enterprise	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Security							
IEEE 802.1x	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Web Authentication	-	-	-	-	-	-	-
MAC Filtering	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Layer-2 Isolation	-	-	-	Yes	-	Yes	Yes
RADIUS Authentication	Yes	Yes	-	Yes	Yes	Yes	Yes
Mocrosoft AD Authentication	-	-	-	-	-	-	-
LDAP Athetication	-	-	-	-	-	-	-
Embedded RADIUS Server	-	-	-	Yes	Yes	Yes	Yes
Rogue AP Detection	-	-	-	Yes	Yes	Yes	Yes
Rogue AP Containment	-	-	-	-	Yes	-	-
Intrusion Detection & Prevention	-	-	-	-	-	-	-
Anti-Virus	-	-	-	-	-	-	-
Firewall	-	-	-	-	-	-	-
Network							
VLANs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DHCP Client	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DHCP Relay, Server	-	-	-	-	-	-	-
NAT	-	-	-	-	-	-	-
Policy & Static Routing	-	-	-	-	-	-	-
Access Control							
Policy Setting Per User	-	-	-	-	-	-	-
Policy Setting Per SSID	-	-	-	-	-	-	-
Customizable Web Login Page	-	-	-	-	-	-	-
QoS							
WMM	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WMM Power Save	-	-	-	-	Yes	-	-
DiffServ Marking	-	-	-	-	-	-	-
WLAN Management							
Controller Mode	-	-	-	Yes	Yes	Yes	Yes
Standalone AP Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Managed AP Mode	-	-	-	Yes	Yes	Yes	Yes
CLI with SSH	Yes	Yes	-	Yes	Yes	Yes	Yes
Web UI with SSL	-	-	-	Yes	Yes	Yes	Yes
SNMP	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Multi-level Administration Roles	-	-	-	-	-	-	-
Others							
Plenum Rating	-	-	-	Yes	Yes	Yes	Yes

Model	NWA-3500	NWA3560-N	NWA3550	NWA5160N	NWA5560-N	NXC5200
Product Description	802.11a/g 3000 Series Dual-Radio Business AP	Wireless N 3000 Series Dual-Radio Business AP	802.11a/g 3000 Series Outdoor Business AP	Wireless N 5000 Series Managed AP	Wireless N 5000 Series Dual-Radio Managed AP	Wireless LAN Controller
Basic Design						
Wireless Technology	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4/5 GHz	2.4 and 5 GHz	-
Radio	2	2	2	1	2	-
High Power (option)[1]	-	-	-	-	-	-
Number of Antenna	2	2T2R MIMO	2 N-type Connectors[2]	2T3R MIMO	2T2R MIMO	-
LAN & WAN						
Number of 10/100M LAN	1	-	1	-	-	-
Number of 10/100/1000M LAN	-	1	-	1	1	Default 4; Expansion 4
PoE	Yes	Yes	Yes	Yes	Yes	-
PoE Power Draw	7.3 W	14 W	16.2 W	8 W	14 W	-
WLAN Features						
WLAN Maximum Net Throughput	Up to 33 Mbps	Up to 120 Mbps	Up to 33 Mbps	Up to 120 Mbps	Up to 120 Mbps	-
WMM (Wi-Fi Certified)	Yes	Yes	Yes	Yes	Yes	Yes
WEP	Yes	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-PSK	Yes	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-Enterprise	Yes	Yes	Yes	Yes	Yes	Yes
Security						
IEEE 802.1x	Yes	Yes	Yes	-	-	Yes
Web Authentication	-	-	-	-	-	Yes
MAC Filtering	Yes	Yes	Yes	-	-	Yes
Layer-2 Isolation	Yes	-	Yes	-	-	-
RADIUS Authentication	Yes	Yes	Yes	-	-	Yes
Mocrosoft AD Authentication	-	-	-	-	-	Yes
LDAP Athetication	-	-	-	-	-	Yes
Embedded RADIUS Server	Yes	Yes	Yes	-	-	Yes
Rogue AP Detection	Yes	Yes	Yes	-	-	Yes
Rogue AP Containment	-	Yes	-	-	-	Yes
Intrusion Detection & Prevention	-	-	-	-	-	Yes
Anti-Virus	-	-	-	-	-	Yes
Firewall	-	-	-	-	-	Yes
Network						
VLANs	Yes	Yes	Yes	Yes	Yes	Yes
DHCP Client	Yes	Yes	Yes	Yes	Yes	Yes
DHCP Relay, Server	-	-	-	-	-	Yes
NAT	-	-	-	-	-	Yes
Policy & Static Routing	-	-	-	-	-	Yes
Access Control						
Policy Setting Per User	-	-	-	-	-	Yes
Policy Setting Per SSID	-	-	-	-	-	Yes
Customizable Web Login Page	-	-	-	-	-	Yes
QoS						
WMM	Yes	Yes	Yes	Yes	Yes	Yes
WMM Power Save	-	Yes	-	Yes	Yes	Yes
DiffServ Marking	-	-	-	-	-	Yes
WLAN Management						
Controller Mode	Yes	Yes	Yes	-	-	Yes
Standalone AP Mode	Yes	Yes	Yes	-	-	-
Managed AP Mode	Yes	Yes	Yes	Yes	Yes	-
CLI with SSH	Yes	Yes	Yes	Yes	Yes	Yes
Web UI with SSL	Yes	Yes	Yes	-	-	Yes
SNMP	Yes	Yes	Yes	-	-	Yes
Multi-level Administration Roles	-	-	-	-	-	Yes
Others						
Plenum Rating	-	Yes	-	Yes	Yes	-

*1: Factory configuration of output power varies according to regional regulatory rules.
*2: Antenna is not embedded and various external antennas are separately sold.

Product at a Glance

Model Name	Wireless Service Gateway Series		
	VSG-1200 V2	G-4100 v2	N4100
Main Design			
Wireless Technology	-	802.11g	802.11g/n
Number of 10/100M LAN/Switch	1	4	4
WAN	1	1	1
PoE	-	Yes	-
PoE Power Draw	-	6 W	-
WLAN Features (G-4100 v2 and N4100 only)			
Number of Antenna	-	2	2T3R MIMO
Maximum Throughput	-	22 ~ 24 Mbps	110 Mbps
WEP	-	Yes	Yes
WPA/WPA2-PSK	-	Yes	Yes
WPA/WPA2-Enterprise	-	Yes	Yes
Other Features			
Built-in Authentication	Yes	Yes	Yes
RADIUS Authentication Support	Yes	Yes	Yes
IP Plug-and-play	Yes	Yes	Yes
Layer-2 Isolation	Yes	Yes	Yes
Customization Log-in Page	Yes	Yes	Yes
Max. Concurrent User	250	100	100 (upgradable to 200)
PMS Integration	Yes	-	-
Ticket Printer — SP300E	- Button x 3 - Input: 5 V DC, 2.5 A - Paper Width: 58 (+0/-1) mm - Paper length (max.): 50 meters - Support 802.3af Power over Ethernet		

Glossary

CAPWAP
Control And Provisioning of Wireless Access Points (CAPWAP) is an Internet Engineering Task Force (IETF) protocol allowing multiple wireless access points to be managed by a single controller access point.

Hybrid AP
Hybrid Wireless Access Point is a wireless access point technology capable of making wireless AP to switch between different roles within Autonomous Architecture and Centralized Architecture. With Hybrid AP technology, one single wireless access point can act as a Stand Alone AP (Fat AP), a Thin AP (Managed AP) or even an Access Controller (AC)

WMM
Wi-Fi MultiMedia (WMM) is a part of the IEEE 802.11e QoS enhancement to the Wi-Fi standard that ensures quality of service for multimedia applications in wireless networks.

WEP
WEP (Wired Equivalent Privacy) encrypts data transmitted between wired and wireless networks to keep the transmission private.

WPA
WPA (Wi-Fi Protected Access) encrypts data transmitted between wired and wireless networks to keep the transmission private.

WPA2
WPA2 (IEEE 802.11i) is a wireless security standard that defines stronger encryption, authentication and key management than WPA.

Accessories

Antenna

Model	EXT-106	EXT-108	EXT-109	EXT-114	EXT-118	ANT2206		ANT3108	ANT3218
Space	Indoor	Outdoor	Outdoor	Outdoor	Outdoor	Indoor		Outdoor	Outdoor
Frequency Band (MHz)	2400 ~ 2500	2400 ~ 2500	2400 ~ 2500	2400 ~ 2500	2400 ~ 2500	2400 ~ 2500	4900 ~ 5875	4900 ~ 5875	4900 ~ 5875
Gain	6 dBi	8 dBi	9 dBi (peak)	14 dBi	18 dBi	6 dBi	8 dBi	8 dBi	18 dBi
VSWR	1.5:1 Max	2.0:1 Max	1.5:1 Max	1.5:1 Max	1.5:1 Max	2.0:1 Max	2.0:1 Max	2.0:1 Max	2.0:1 Max
Polarisation	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical
HPBW/ Horizontal	70°	360°	65°	30°	15°	65°	50°	360°	15.5°
HPBW/ Vertical	70°	15°	60°	30°	15°	75°	50°	20°	15.5°
Connector	RP SMA	N type jack	N type jack	N type female	N type female	RP SMA		N type female	N type jack
Temperature	0°C to 40°C	-40°C to 80°C	-40°C to 80°C	-40°C to 80°C	-40°C to 80°C	-10°C to 55°C		-40°C to 80°C	-40°C to 80°C
Weight	110 g	337 g	107 g	407 g	1.6 kg	110 g		206 g	640 g
Dimensions (mm)	118 x 86 x 76	f 19 x 250	114 x 114 x 40	200 x 200 x 50	360 x 360 x 16	76 x 86 x 118		f 20 x 260	210 x 210 x 73

Cable

Product	LMR 200-N	LMR 400-N	EXT-300
Specifications	RP-SMA plug to N-plug	N-plug to N-plug	Jumper Cable & Surge Arrestor

Others

Product	Ceiling Mounting Kit
Specifications	For NWA-3160, NWA-3163, NWA-3166, NWA3160-N, NWA3560-N, NWA5160N, NWA5560-N

Wireless LAN 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/E-iCard 100 USER N4100
Managed AP Scalability The NXC5200 Managed AP License is a service that enables the flexibility to increase the number of 5000 Series WLAN APs in service. The maximum number of managed APs supported is 240.	NXC5200	iCard/E-iCard 12 AP NXC5200 iCard/E-iCard 48 AP NXC5200
Intrusion Detection and Prevention (IDP) The NXC5200 Intrusion Detection/Prevention service is an easy-to-manage, signature-based feature that mitigates threats from the ever-evolving attacks and exploits.	NXC5200	iCard/E-iCard 1 YR IDP NXC5200 iCard/E-iCard 2 YR IDP NXC5200
Anti-Virus (AV) The NXC5200 Anti-Virus service is an easy-to-manage, signature-based feature that stops virus/spyware from entering your network.	NXC5200	iCard/E-iCard 1 YR ZyXEL AV NXC5200 iCard/E-iCard 2 YR ZyXEL AV NXC5200 iCard/E-iCard 1 YR Kaspersky AV NXC5200 iCard/E-iCard 2 YR Kaspersky AV NXC5200