



















Wireless LAN
Quick Sales Guide



Wireless LAN Quick Finder

Segment		Model
Small Business	<ul style="list-style-type: none"> • Web Managed • SNMP Management 	<ul style="list-style-type: none"> • Extended Range • 2.4 GHz Support NWA1100 
		<ul style="list-style-type: none"> • 802.11n Generation of PoE AP • GbE Interface Support NWA1100-N 
		<ul style="list-style-type: none"> • Compact AP for Easy Massive Installation • 802.11n Support NWA1300-NJ 
Small- to Medium-Sized Business	<ul style="list-style-type: none"> • Centralised WLAN Management • Hybrid AP: Controller/Managed AP/ Standalone AP 	<ul style="list-style-type: none"> • 2.4/5 GHz Support • Single Radio NWA-3160 
		<ul style="list-style-type: none"> • Extended Range • 2.4 GHz Support NWA-3163 
		<ul style="list-style-type: none"> • 802.11n Support in 2.4/5 GHz • Single Radio NWA-3166 
		<ul style="list-style-type: none"> • Dual Radio Support for Concurrent 2.4 and 5 GHz NWA-3500 
		<ul style="list-style-type: none"> • Dual Radio Support for Concurrent 2.4 and 5 GHz • Outdoor Coverage NWA3550 
		<ul style="list-style-type: none"> • 802.11n Support in 2.4/5 GHz • Single Radio • GbE Interface NWA3160-N 
		<ul style="list-style-type: none"> • 802.11n Support for Dual Radio Concurrent 2.4 and 5 GHz • GbE Interface NWA3560-N 
Medium-Sized Business to Enterprise	<ul style="list-style-type: none"> • Centralised WLAN Management • User/Application Management 	<ul style="list-style-type: none"> • Wireless LAN Controller NXC5200 
		<ul style="list-style-type: none"> • Managed AP — Single Radio 2.4/5 GHz Support NWA5160N 
		<ul style="list-style-type: none"> • Managed AP — Dual Radio Concurrent 2.4 and 5 GHz Support NWA5560-N 
		<ul style="list-style-type: none"> • Managed AP — Dual Radio Concurrent 2.4 and 5 GHz Support • Outdoor Coverage NWA5550-N 
Hospitality	Hotspot Gateway	N4100 
	Service Gateway	VSG-1200 V2 

Key Features

Model	Description	Key Features
NWA1100	Web-Managed AP	<ul style="list-style-type: none"> • Easy deployment via multiple operating modes and IEEE 802.3af PoE support • Certified WPA/WPA2 support for strict network protection • Comprehensive management solutions that effortlessly merge into the existing network administration system • Environmental friendly through IEEE 802.11az Energy Efficient Ethernet and WMM Power Saving features (NWA1100-N) • Multiple 4 SSIDs benefit different service levels (NWA1100-N)
NWA1100-N	Web-Managed AP	
NWA1300-NJ	Web-Managed AP	<ul style="list-style-type: none"> • 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 — 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	<ul style="list-style-type: none"> • 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-3163	Hybrid AP	
NWA-3166	Hybrid AP	
NWA-3500	Hybrid AP	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • High bandwidth & superior performance with IEEE 802.11n standard support • The 3-in-1 solution: a WLAN controller, a standalone AP or a managed AP • Brand new centralized graphic management interface for up to 24 WLAN APs • Back-up redundancy supported to provide reliable connection service (Device HA) • Secured tunnels for communication between controller and managed AP to prevent leaking of configurations
NWA3560-N	Hybrid AP	
NWA3550-N	Hybrid AP	
NXC5200	Wireless LAN Controller	<ul style="list-style-type: none"> • Higher-bandwidth, superior performance with full range of 802.11n Access Points (NWA5160N, NWA5560-N, and NWA5550-N Managed APs) • Manage up to 240 APs with granular access control • Centralized WLAN management on both configurations and data • Flexibility supporting both distributed and tunneled data forwarding • Comprehensive guest network management with auto guest account generator and Web authentication support
NWA5160N	Managed AP	
NWA5560-N	Managed AP	
NWA5550-N	Managed AP	
N4100	Hotspot Gateway	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	NXC5200/NWA5000-N Series				NWA3000-N Series		
	NXC5200	NWA5160N	NWA5560-N	NWA5550-N	NWA3160-N	NWA3560-N	NWA3550-N
Product Description	Wireless LAN Controller	802.11 a/b/g/n Managed Access Point	802.11 a/b/g/n Dual-Radio Managed Access Point	802.11 a/b/g/n Dual-Radio Outdoor Managed Access Point	802.11 a/b/g/n Business Access Point	802.11 a/b/g/n Dual-Radio Business Access Point	802.11 a/b/g/n Dual-Radio Outdoor Business Access Point
Basic Design							
Wireless Frequency	-	2.4/5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4/5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
Radio	-	1	2	2	1	2	2
High Power (option)*1	-	-	-	-	-	-	-
Number of Antenna	-	3 embedded	4 external dipole	4 N-type connectors ²	2 external dipole	4 external dipole	4 N-type connectors ²
LAN & WAN							
Number of 10/100M LAN	-	-	-	-	-	-	-
Number of 10/100/1000M LAN	Default: 4 Expansion: 4	1	1	1	1	1	1
PoE	-	Yes	Yes	Proprietary	Yes	Yes	Proprietary
PoE Power Draw	-	12 W	14 W	28 W	11 W	14 W	28 W
WLAN Features							
WLAN Maximum Net Throughput	-	Up to 120 Mbps	Up to 140 Mbps	Up to 140 Mbps	Up to 120 Mbps	Up to 140 Mbps	Up to 140 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
Web Authentication	Yes	-	-	-	-	-	-
MAC Filtering	Yes	-	-	-	Yes	Yes	Yes
Layer-2 Isolation	-	-	-	-	-	-	-
RADIUS Authentication	Yes	-	-	-	Yes	Yes	Yes
Microsoft AD Authentication	Yes	-	-	-	-	-	-
LDAP Authentication	Yes	-	-	-	-	-	-
Embedded RADIUS Server	Yes	-	-	-	Yes	Yes	Yes
Rogue AP Detection	Yes	-	-	-	Yes	Yes	Yes
Rogue AP Containment	Yes	-	-	-	Yes	Yes	Yes
Intrusion Detection & Prevention	Yes	-	-	-	-	-	-
Anti-Virus	Yes	-	-	-	-	-	-
Firewall	Yes	-	-	-	-	-	-
Network							
VLANs	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DHCP Client	Yes	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	Yes
WMM Power Save	Yes	Yes	Yes	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	Yes
CLI with SSH	Yes	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	Yes	-
MTBF	5 years	5 years	5 years	5 years	5 years	5 years	5 years
Heat dissipation (BTU/hr)	610.75	27.3	47.77	95.54	37.53	47.77	95.54
Physical Specifications							
Dimensions (WxDxH)(mm/in.)	431 x 520 x 44/ 16.96 x 20.47 x 1.73	218 x 174 x 54/ 8.58 x 6.85 x 2.12	218 x 174 x 54/ 8.58 x 6.85 x 2.12	257 x 257 x 51/ 10.12 x 10.12 x 2.01	198 x 138 x 45/ 7.80 x 5.43 x 1.77	198 x 138 x 45/ 7.80 x 5.43 x 1.77	257 x 257 x 51/ 10.12 x 10.12 x 2.01
Weight (g/lb.)	12,000/26.46	766/1.69	805/1.77	1,360/3.01	439/0.97	462/1.02	1,360/3.01


*1: Factory configuration of output power varies according to regional regulatory rules.

*2: Antenna is not embedded and various external antennas are separately sold.

Model	NWA3000 Series					NWA1300-N Series	NWA1100 Series	
	NWA-3160	NWA-3163	NWA-3166	NWA-3500	NWA3550	NWA1300-NJ	NWA1100	NWA1100-N
Product Description	802.11 a/g Business Access Point	802.11 b/g Business Access Point	802.11 a/b/g/n Business Access Point	802.11 a/b/g Dual-Radio Business Access Point	802.11 a/b/g Dual-Radio Outdoor Business Access Point	802.11 b/g/n In-wall PoE Access Point	802.11 b/g PoE Access Point	802.11 b/g/n PoE Access Point
Basic Design								
Wireless Frequency	2.4/5 GHz	2.4 GHz	2.4/5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 GHz	2.4 GHz	2.4 GHz
Radio	1	1	1	2	2	1	1	1
High Power (option)*1	-	Yes	-	-	-	-	Yes	-
Number of Antenna	2	2	3 embedded	2 external dipole	2 N-type Connectors ²	1 embedded	2	2T2R MIMO
LAN & WAN								
Number of 10/100M LAN	1	1	1	1	1	1	1	-
Number of 10/100/1000M LAN	-	-	-	-	-	-	-	1
PoE	Yes	Yes	Yes	Yes	Proprietary	Yes	Yes	Yes
PoE Power Draw	6.5 W	6.9 W	7.4 W	7.3 W	16.2 W	7.2 W	7.2 W	10 W
WLAN Features								
WLAN Maximum Net Throughput	Up to 33 Mbps	Up to 33 Mbps	Up to 120 Mbps	Up to 33 Mbps	Up to 33 Mbps	Up to 90 Mbps	Up to 25 Mbps	Up to 110 Mbps
WMM (Wi-Fi Certified)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WEP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-PSK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WPA/WPA2-Enterprise	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Security								
IEEE 802.1X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Web Authentication	-	-	-	-	-	-	-	-
MAC Filtering	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
Layer-2 Isolation	Yes	Yes	Yes	Yes	Yes	-	-	-
RADIUS Authentication	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
Microsoft AD Authentication	-	-	-	-	-	-	-	-
LDAP Authentication	-	-	-	-	-	-	-	-
Embedded RADIUS Server	Yes	Yes	Yes	Yes	Yes	-	-	-
Rogue AP Detection	Yes	Yes	Yes	Yes	Yes	-	-	-
Rogue AP Containment	-	-	-	-	-	-	-	-
Intrusion Detection & Prevention	-	-	-	-	-	-	-	-
Anti-Virus	-	-	-	-	-	-	-	-
Firewall	-	-	-	-	-	-	-	-
Network								
VLANs	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes
DHCP Client	Yes	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	Yes
WMM Power Save	-	-	-	-	-	-	-	Yes
DiffServ Marking	-	-	-	-	-	-	-	-
WLAN Management								
Controller Mode	Yes	Yes	Yes	Yes	Yes	-	-	-
Standalone AP Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Managed AP Mode	Yes	Yes	Yes	Yes	Yes	-	-	-
CLI with SSH	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
Web UI with SSL	Yes	Yes	Yes	Yes	Yes	-	-	-
SNMP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Multi-level Administration Roles	-	-	-	-	-	-	-	-
Others								
Plenum Rating	Yes	Yes	Yes	-	-	-	-	-
MTBF	5 years	5 years	5 years	5 years	5 years	5 years	5 years	5 years
Heat dissipation (BTU/hr)	22.18	23.54	25.25	24.91	55.27	24.57	24.57	34.12
Physical Specifications								
Dimensions (WxDxH)(mm/in.)	138 x 198 x 47/ 5.43 x 7.80 x 0.15	138 x 198 x 47/ 5.43 x 7.80 x 0.15	138 x 198 x 47/ 5.43 x 7.80 x 0.15	212 x 138 x 52/ 4.80 x 5.43 x 2.05	256 x 246 x 82/ 10.08 x 9.69 x 2.04	87 x 87 x 55.5/ 3.43 x 3.43 x 2.19	152 x 92 x 45/ 5.98 x 3.62 x 1.77	152 x 92 x 45/ 5.98 x 3.62 x 1.77
Weight (g/lb.)	420/0.93	420/0.93	420/0.93	420/0.93	2,000/4.41	122/0.27	180/0.40	200/0.44



Product at a Glance

Model Name	Wireless Hotspot/Service Gateway Series	
	VSG-1200 V2	N4100
Main Design		
Wireless Technology	-	802.11 b/g/n
Number of 10/100M LAN/Switch	1	4
WAN	1	1
WLAN Features (N4100 only)		
Number of Antenna	-	2T3R MIMO
Maximum Throughput	-	Up to 90 Mbps
WEP	-	Yes
WPA/WPA2-PSK	-	Yes
WPA/WPA2-Enterprise	-	Yes
Other Features		
Built-in Authentication	Yes	Yes
RADIUS Authentication Support	Yes	Yes
IP Plug and Play	Yes	Yes
Layer-2 Isolation	Yes	Yes
Customization Log-in Page	Yes	Yes
Max. Concurrent User	250	100 (upgradable to 200)
PMS Integration	Yes	-
SP300E Service Gateway Printer	 <ul style="list-style-type: none"> - 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
					
Space	Indoor	Outdoor	Outdoor	Outdoor	Outdoor
Frequency Band (MHz)	2400 ~ 2500	2400 ~ 2500	2400 ~ 2500	2400 ~ 2500	2400 ~ 2500
Gain	6 dBi	8 dBi	9 dBi (peak)	14 dBi	18 dBi
VSWR	1.5:1 Max	2.0:1 Max	1.5:1 Max	1.5:1 Max	1.5:1 Max
Polarisation	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical
HPBW/ Horizontal	 70°	 360°	 65°	 30°	 15°
HPBW/ Vertical	 70°	 15°	 60°	 30°	 15°
Connector	RP SMA plug	N type jack	N type jack	N type jack	N type jack
Temperature	0°C to 40°C/ 32°F to 104°F	-40°C to 80°C/ -40°F to 176°F	-40°C to 80°C/ -40°F to 176°F	-40°C to 80°C/ -40°F to 176°F	-40°C to 80°C/ -40°F to 176°F
Weight (g/lb.)	110/0.24	337/0.74	107/0.24	407/0.90	1,600/3.53
Dimensions (mm/in.)	118 x 86 x 76/ 4.65 x 3.39 x 2.99	f 19 x 25	114 x 114 x 40/ 4.49 x 4.49 x 1.57	200 x 200 x 50/ 7.87 x 7.87 x 1.97	360 x 360 x 16/ 14.17 x 14.17 x 0.63

Model	ANT2206		ANT2105		ANT3108	ANT3218
						
Space	Indoor		Outdoor		Outdoor	Outdoor
Frequency Band (MHz)	2400 ~ 2500	4900 ~ 5875	2400 ~ 2483	5150 ~ 5875	4900 ~ 5875	4900 ~ 5875
Gain	6 dBi	8 dBi	4.5 dBi	7 dBi	8 dBi	18 dBi
VSWR	2.0:1 Max	2.0:1 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
HPBW/ Horizontal	 65°	 50°	 360°	 360°	 360°	 15.5°
HPBW/ Vertical	 75°	 50°	 30°	 15°	 20°	 15.5°
Connector	RP SMA plug		N type male		N type female	N type female
Temperature	-10°C to 55°C/14°F to 131°F		-10°C to 70°C/14°F to 158°F		-40°C to 80°C/ -40°F to 176°F	-40°C to 80°C/ -40°F to 176°F
Weight (g/lb.)	110/0.24		70/0.15		206/0.46	640/1.41
Dimensions (mm/in.)	76 x 86 x 118/2.99 x 3.39 x 4.65		f 22 x 183		f 20 x 260	210 x 210 x 73/ 8.27 x 8.27 x 2.87

Cable

Product	LMR 200-N	LMR 400-N	EXT-300
			
Description	RP-SMA plug to N-plug Cable length: 3 m, 9 m	N-plug to N-plug Cable length: 1 m, 9 m	Jumper Cable & Surge Arrestor

Others

Product	Ceiling Mounting Kit
	
Description	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	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	E-iCard 12 AP NXC5200 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	E-iCard 1 YR IDP NXC5200 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	E-iCard 1 YR ZyXEL AV NXC5200 E-iCard 2 YR ZyXEL AV NXC5200 E-iCard 1 YR Kaspersky AV NXC5200 E-iCard 2 YR Kaspersky AV NXC5200

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