



Best WLAN Experience for Serious Business —Ultimate Solution for Converged Networks

Benefits

Zero-Delay, Secure and Seamless Mobility

The NXC-8160 Wireless LAN Controller is the central component of ZyXEL's unique "Interference-Free" architecture, while the NWA-8500 802.11a/g Ultra-thin Wireless Business Access Point is a high-performance dual 802.11a/b/g Wireless Access Point that interoperates with the NXC-8160.

The unique solution enables the signals on the same channel to be transmitted through every access point in the system without the co-channel interference that plagues other WLAN solutions. Clients only need to associate with the controller once in order to move within the channel blanket without experiencing inter-AP handoffs. As a result, different WLAN security settings will have no impact on its speed; that is, the zero-delay roaming functionalities can retain its outstanding "always-connected" performance even with the most sophisticated encryption and authentication mechanisms applied.

Simply put, the solution provides the flexibility, performance and simplicity required by enterprises to support data, video and voice (VoWLAN) applications in ubiquitous WLAN deployments. The 8-port controller can be used individually or in combination with multiple controllers to meet the needs of crowded enterprise environments of any size or kind.

No Cell Planning Needed

ZyXEL's Unique Interference-Free Channel Blanket architecture requires no RF cell planning, and it allows ubiquitous placement of thin APs wherever convenient. Consequently, the cost of deploying and owning an enterprise-class WLAN can be dramatically reduced.

Powerful and Scalable

It is no doubt that the NXC-8160 Business Wireless LAN Controller is the most sophisticated WLAN infrastructure that tremendously improves WLAN service quality, while Zero-Delay roaming provides the best VoWLAN user experience. The NXC-8160 is an 8-port WLAN controller but not limited to 8 ports; its centralized configuration allows you to use a single management interface to manage multiple NXC-8160 on networks of a larger scale.

- Groundbreaking Channel Blanket Architecture
- Zero-delay Roaming
- Zero-footprint AP
- Supports up to 8 NWA-8500
- Auto Failover and Centralized Configuration



NWA-8500
802.11a/g Ultra-thin
Wireless Business
Access Point

NXC-8160
Business Wireless LAN
Controller

Wi-Fi Collaboration Uplink Diversity

ZyXEL's Wi-Fi Collaboration technology overcomes the difficulties of using RF on data networks in a unique way. With multiple thin APs placed on the same channel and the centralized Wireless Controller making intelligent decisions, a ZyXEL WLAN can provide uplink diversity for client transmissions to enable higher tolerance to RF instabilities and to offer inherent redundancy in the AP coverage.

Plug-and-Play Thin AP Installation

The NXC-8160 supports up to 8 NWA-8500 units, and the ultra-thin plug-and-play AP does not need any configuration in the installation process. With simplicity like this, the NXC-8160 and NWA-8500 can effectively minimize the installation and maintenance efforts involved.

Specifications

NXC-8160

System Specifications

Standard Compliance

- Ethernet:
 - IEEE 802.3
 - IEEE 802.3u
 - IEEE 802.3af

Performance

- Wired Data Rates: 10/100 Mbps Auto-sensing (full-duplexing switch)
- Wireless Data Rates:
 - IEEE 802.11b (auto-fallback):
 - CCK: 11/5.5 Mbps
 - DQPSK: 2 Mbps
 - DBPSK: 1 Mbps
 - IEEE 802.11g (auto-fallback):
 - QAM64: 54/48 Mbps
 - QAM16: 36/24 Mbps
 - QPSK: 18/12 Mbps
 - BPSK: 9/6 Mbps

Security

- Management:
 - HTTPS (SSL)
 - Secure Telnet (SSH)
- WLAN Security:
 - 128 bit WEP data encryption
 - 802.1x Authentication with TLS/TTLS/PEAP
 - WPA support

Hardware Specifications

- 1 Port LAN 10/100 Base-T Full Duplex
- 8 Port WLAN 10/100 Base-T Full Duplex
- Power over Ethernet: Yes
- Power supply: 100 ~ 240 V/2 A Max 50/60 Hz

Physical Specifications

- Dimensions: 242.5 (W) x 443.5 (D) x 44.5 (H) mm
- Weight: 3.0 kg

Environmental Specifications

- Operational temperature: 0°C ~ 50°C
- Operational humidity: 20% ~ 95% (non-condensing)
- Storage temperature: -30°C ~ 60°C
- Storage humidity: 20% ~ 95% (non-condensing)

NWA-8500

System Specifications

Standard Compliance

- Ethernet:
 - IEEE 802.3
 - IEEE 802.3u
 - IEEE 802.3af
- Wireless: IEEE 802.11a/b/g

Radio

- Modulation Type:
 - 11b: DBPSK, DQPSK, CCK
 - 11a/g: DPSK, QPSK, 16QAM, 64QAM
- Frequency Band:
 - USA: 2.412 to 2.462 GHz; 5.15 to 5.25, 5.725 to 5.825 GHz
 - ETSI: 2.412 to 2.472 GHz; 5.15 to 5.725 GHz
 - Taiwan: 2.412 to 2.462; 5.25 to 5.35, 5.725 to 5.825 GHz
- Coverage Range:
 - IEEE 802.11g:
 - Indoor: up to 100 m
 - Outdoor: up to 400 m
 - IEEE 802.11a:
 - Indoor: up to 80 m
 - Outdoor: up to 200 m
- Antenna: 4 dual band Antenna with full antenna diversity

Performance

- Wired Data Rates: 10/100 Mbps Auto-sensing (full-duplexing switch)
- Wireless Data Rates:
 - IEEE 802.11b (auto-fallback):
 - CCK: 11/5.5 Mbps
 - DQPSK: 2 Mbps
 - DBPSK: 1 Mbps
 - IEEE 802.11g (auto-fallback):
 - QAM64: 54/48 Mbps
 - QAM16: 36/24 Mbps
 - QPSK: 18/12 Mbps
 - BPSK: 9/6 Mbps

Hardware Specifications

- 1 Port LAN 10/100 Base-T Full Duplex
- 2 Port 802.11a/b/g WLAN Radio Interface
- Power over Ethernet: Yes
- Power supply: 48 VDC (PoE)

Physical Specifications

- Dimensions: 138.5 (W) x 198.5 (D) x 47.5 (H) mm
- Weight: 420 g

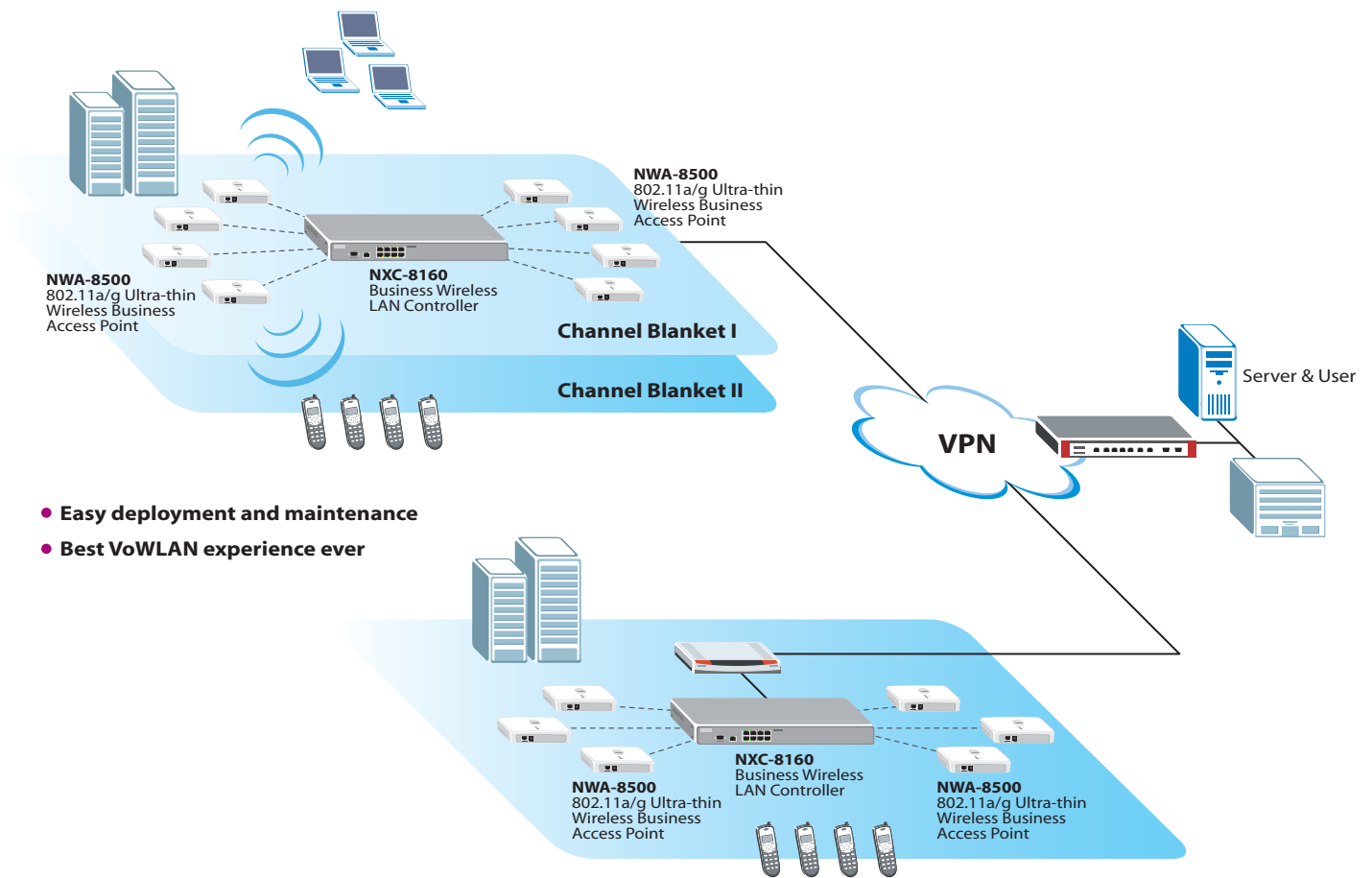
Environmental Specifications

- Operational temperature: 0°C ~ 50°C
- Operational humidity: 20% ~ 95% (non-condensing)
- Storage temperature: -30°C ~ 60°C
- Storage humidity: 20% ~ 95% (non-condensing)

Certification

- CE/FCC/DGT

Application Diagram





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



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