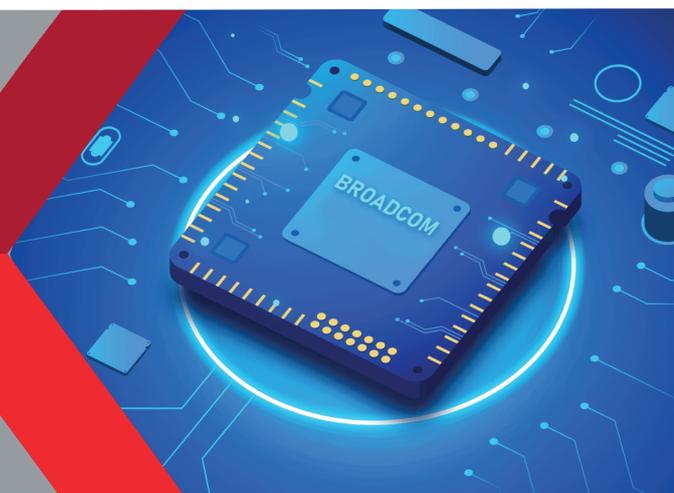


Wireless Controller NX-WC3740X



OVERVIEW

The NX-WC3740X wireless AC is an enterprise-class wireless network controller that provides a secure, resilient, and highly scalable wireless solution at an unmatched total cost of ownership (TCO). Cutting-edge technology from Nodexon VAC helps to enhance service availability and maintain business continuity. The Nodexon NX-WC3740X also uses a Virtual AP deployment technique to provide a cost-effective means of offering highly protected Guest WiFi. Due to RF interference, client mix, sharing of restricted wireless spectrum, and other factors, typical high-density WiFi environments have reduced wireless network performance. With Nodexon's industry-leading features like Pre-AX, CorrectLink, and AirReorder, you can automatically address the majority of high-density WiFi deployment issues.

PPSK is also one of the new built-in security features supplied by Nodexon NX-WC3740X wireless AC for small and medium businesses, allowing for secure yet simple employee authentication.

FEATURES HIGHLIGHTS

- › WiFi deployment validation by smartphone APP, MOHO
- › Up to 2,560 APs and 80K Clients are possible.
- › Intelligent Identification of Smart Devices
- › Power Redundancy Support
- › Seamless Roaming Experience
- › High - availability Virtual AC Technology
- › High-density WiFi Optimization with Pre-AX, CorrectLink, and AirReorder
- › AI Wireless Optimization Cloud Services (Free Service)
- › PPSK Enterprise Authentication



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PRODUCT FEATURES

HIGH-DENSITY WIFI EXPERIENCE

Pre-AX, Minimizes Co-channel & Other Interferences

Pre-AX is a feature of 802.11ax technology that allows you to fine-tune the RSSI threshold dynamically to optimize the available spectrum and send more data. According to each client, each AP optimizes the RF channel and power.

CorrectLink, Improves Traffic Load Balancing & Client Roaming

CorrectLink technology is designed to analyse the latency, jitter and the signal strength of each client. It also correlates with additional information like wireless channel utilization and throughput to optimize the best user experience for wireless client.

AirReorder, Smart Airtime Scheduling Technology

The basic idea behind AirReorder is to assign each terminal an equal time period so that RF resources are distributed fairly. This prevents clients with lower data rates from degrading overall network performance by consuming the restricted shared media.

AI Wireless Optimization

With the introduction of the Nodexon Cloud AI Engine, all Nodexon Enterprise APs will receive a lifetime free service for cloud WiFi optimization. Not only can Nodexon Cloud manage APs, but it also integrates with Nodexon's hardware Wireless Access Controller (AC) on site, making WiFi maintenance and support easier.

Virtual AP Technology

Providing Guest WiFi to visitors is becoming a requirement in most businesses. However, whether intentionally or unintentionally, guest WiFi might provide another access point for network infiltration. The Nodexon AP Virtualization technology divides a real AP into numerous virtual APs that can handle various functions. Various VAPs can connect to the isolated AC to guarantee that only authorized users have access to the appropriate resource.

Virtual AC Technology

Nodexon Network AC Virtualization technology allows you to virtualize numerous air conditioners into a single logical air conditioner, regardless of whether they are module or appliance-based. It can handle up to 8 hardware AC members in a single high-availability cluster. Regardless of the number of AC in the cluster, the AP license is shared from the licensing pool. Its high availability feature assures that no company is affected if one of the AC units fails. WiFi services were instantly restarted in backup AC once the failover procedure was totally automated and completed in milliseconds.



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Outstanding Scalability and Power Redundancy

Another model worth mentioning is the NX-WS6516. Up to two extension modules may be used with the controller, which has four 1000BASE-T/1000BASE-X combination ports (WNM-4GE-S) and two 10GBASE-X ports (WNM-2XS-S). For further robustness, the NX-WC6516 supports up to two power modules.

Centralized or Distributed Intelligent Switching

Without changing the existing network architecture, the Wireless Controller Series may be installed at Layer 2 or Layer 3. Forming an integrated switching architecture with the APs, the controllers handle all the AP data interchange management with ease. The Wireless Controller Series overcomes traffic bottlenecks that alternatives in the market have struggled with, thanks to its industry-leading local forwarding technology.

The wired network's local forwarding technology allows for large-scale, delay-sensitive, and real-time data delivery. The high throughput of 802.11ac and 802.11ax relieves the controller of a significant amount of traffic.

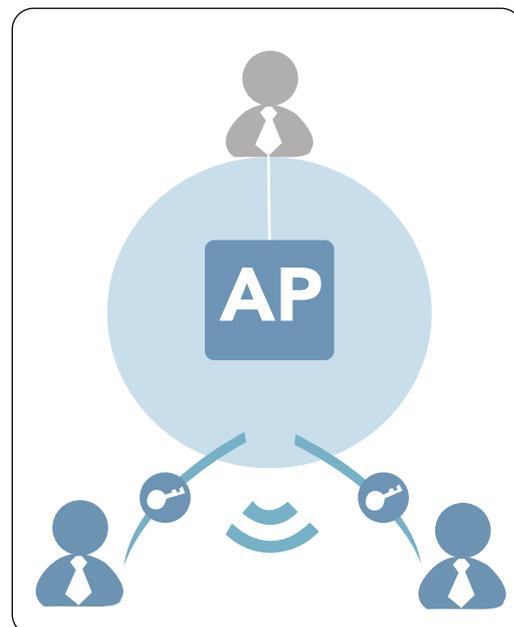
Intuitive Web Management

The Wireless Controller Series has a web management interface that simplifies wireless configuration and gives you a bird's-eye view of your whole network. The controllers use the AC web interface to handle not only the APs, but also the AP users. The functionality allows users to regulate their bandwidth and network access. As a result, network administrators can design, manage, and maintain their networks.

Exclusive PPSK Authentication

Traditional Pre-shared keys (PSK) are shared by all users on a WLAN, giving it potential risk of PSK leak-out. Nodexon Per-user PSK (PPSK) is an easy setup wireless authentication method with enterprise-class security level. Individual credentials can be established and withdrawn. Each PPSK can also be associated with a specific user or machine. You can profit from PPSK in the following ways:

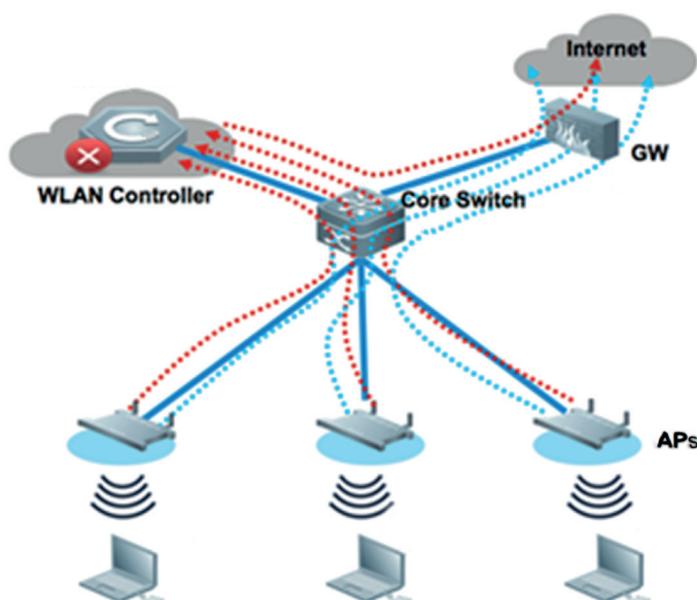
- High security is achieved by utilizing unique passwords for each user and device at each SSID.
- Simple deployment, allows for batch account creation.
- Ease of use and offers the same experience as WPA/ WPA2-PSK
- Out-of-box feature in AC controller
- No additional AAA required



Wireless Controller NX-WC3740X

Remote Intelligent Perception Technology (RIPT)

Packets received by the AP must be sent to the controller in the conventional network design, where FIT APs are centrally controlled by a wireless controller. Forwarded. When the wireless controller fails, the APs stop working correctly, leading the entire network to fail. Nodexon's most recent RIPT offers a full disaster recovery solution and allows the Wireless Controller Series to apply intelligent link perception. When a defective controller is discovered, the APs instantly transition to intelligent mode to continue data forwarding, maintaining the wireless network's high availability and keeping wireless users connected at all times.



How To Ensure Network Reliability When AC Hot Standby Is Not Deployed

- > AP Will Switch To Local Forwarding Automatically When Connection To Wlan Controller Is Detected Un-reachable
- > AP Will Unhidden A Pre-configured Disaster Ssid (With Local Psk Or Open Authentication)
- > When The Wireless Controller Connection Is Resumed, The Disaster Ssid Should Be Hidden And Disabled Again



Wireless Controller NX-WC3740X



TECHNICAL SPECIFICATIONS

SPECIFICATIONS	NX-WC3740X	
Dimensions (WxDxH)	44 × 440 × 435 mm (1.73 × 17.32 × 17.13 in)	
Weight	9kg (installed with dual power supplies)	
Throughput	20Gbps	
Port	Fixed: 8 × GE ports 8 × SFP ports 1 × OOBM port 2 × USB ports Expandable to: 8 × GE ports 2 × SFP+ ports	
Power supplies	Pluggable power supply, 1 + 1 redundant backup, supporting AC or DC (power supply needs to be configured separately)	
Max power consumption	36 to 107 W	
Safety Compliance	UL 60950-1 CAN/CSA C22.2 No 60950-1 IEC 60950-1 EN 60950-1/A11 AS/NZS 60950 EN 60825-1 EN 60825-2 EN60601-1-2 FDA 21 CFR Subchapter J	
Maximum AP	1536 Expandable to 2048	
802.11MAC	802.11 Protocols	✓
	Multi-SSID (Per RF)	16
	SSID hiding	✓
	11G protection	✓
	11n only	✓
	Use number limit	Supported: SSID based, per RF based
	Keep-alive	✓
	Idle	✓
	Multi-country code assignment	✓
	Wireless user isolation	Supported: VLAN based wireless users 2-layer isolation SSID based wireless user 2-layer isolation
	20MHz/40MHz auto-switch in 40MHz mode	✓
	Local forwarding	✓
CAPWAP	Auto AP serial number entry	✓
	AC discovery (DHCP option43, DNS)	✓
	IPv6 tunnel	✓
	Clock synchronization	✓
	Jumbo frame forwarding	✓
	Assign basic AP network parameter through AC	Supported: Static IP, VLAN, connected AC address
	L2/L3 connection between AP & AC	✓
	NAT traversal between AP and AC	✓



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TECHNICAL SPECIFICATIONS

SPECIFICATIONS	NX-WC3740X	
GW features	NAT	✓
	PPPoE	✓
	DDNS	✓
	IPSEC VPN	✓
	SSL VPN	✓
	GRE	✓
QoS	Priority mapping	✓
	L2-L4 packet filtering and traffic classification	✓
	Rate limit	Supported with granularity of 8Kbps
	802.11e/WMM	✓
	Access control based on user profile	✓
	Intelligent bandwidth limit (equal bandwidth share algorithm)	✓
	Intelligent bandwidth limit (user specific)	✓
	Intelligent bandwidth guarantee	Supported: Free flow for packets coming from every SSID When traffic is not congested, and guarantee a minimum bandwidth for each SSID when traffic is congested
	QoS Optimization for SVP phone	✓
	CAC(Call Admission Control)	Supported: based on user number/bandwidth
	End-to-end QoS	✓
AP upload speed limit	✓	
RF Management	Country code lock	✓
	Static channel and power configuration	✓
	Auto transmission rate adjustment	✓
	Coverage hole detection and correction	✓
	Load balancing	Supported: based on traffic, user & frequency (dual-frequency supported)
	Intelligent load balancing	✓
	AP load balancing group	Supported: auto-discovery and flexible setting
IP protoco	IPv4 protocol	✓
	Native IPv6	✓
	IPv6 SAVI	✓
	IPv6 Portal	✓
	DHCP Server (IPv4, IPv6)	✓



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TECHNICAL SPECIFICATIONS

SPECIFICATIONS	NX-WC3740X	
Multicast	MLD Snooping	✓
	IGMP Snooping	✓
	Multicast group	256
Management and deployment	Network management	WEB, SNMP v1/v2/v3, RMON and more
	Network deployment	WEB, CLI, Telnet, FTP and more
WLAN Application	RF Ping	✓
	Remote probe analysis	✓
	Wireless Intelligent Application Aware (WIAA)	Supported/ Stateful Inspection Firewall
	RealTime Spectrum Guard (RTSG)	✓
	Packet forwarding fairness adjustment	✓
	Access based traffic shaping	✓
	802.11n packet forwarding suppression	✓
	RF interface transmission rate adjustment algorithm	✓
	Drop wireless packet with weak signal	✓
	Co-AP channel sharing	✓
	Co-AP channel reuse	✓
	Disable user access with weak signal	✓
	Disable multicast packet caching	✓
Status blink(limited to some AP)	✓	

USA

Tel +1-877-6774040
 info@nodexon.com
 70 East Sunrise Highway Valley Stream,
 NY 11581, New York

EUROPE

Tel +44-20-37695558
 uk@nodexon.com
 4th Floor, 18 St. Cross Street,
 London, EC1N 8UN

MIDDLE EAST

Tel +971 4 556 1557
 mena@nodexon.com
 Boulevard Plaza Tower One, Level 3,
 Downtown Dubai, United Arab Emirates

