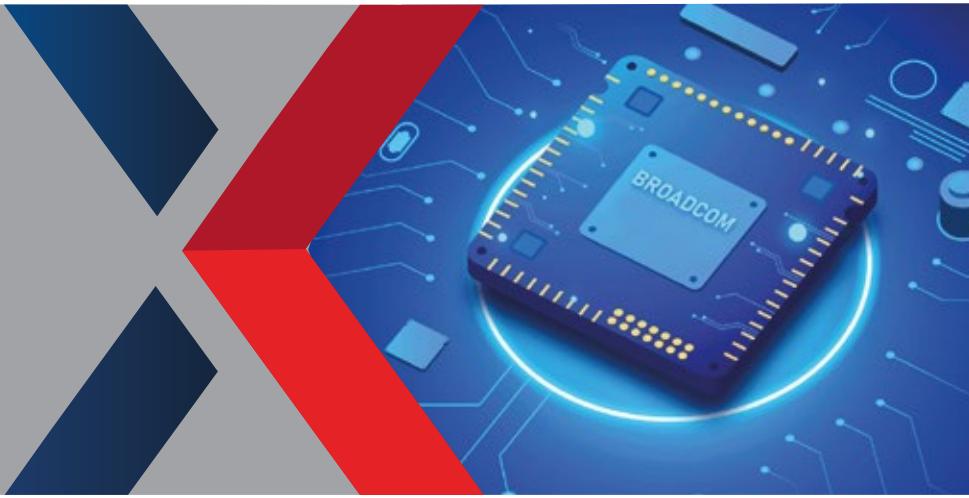


Outdoor Access Point Switch NX-AP8620-6



OVERVIEW

The NX-AP8620-6 is a high-performance Wi-Fi 6 (802.11ax) enterprise outdoor AP with an IP68 rating that's built to withstand the elements. Concurrent dual-band with up to 2.4Gbps access rate, four spatial streams, and a built-in directional antenna are all features of this device. Switching between FAT/FIT mode, offers 1 SFP port and 1 10/100/1000M port with PoE/ local power supply is supported, Taking the wireless network security, RF control, mobile access, QoS, seamless roaming and other important factors into account. Teaming up with Nodexon NX-WS Wireless Controller Series/Cloud AC, the APs offer Wi-Fi user data forwarding, advanced security and access control with ease.

The NX-AP8620-6 enclosure has an IP68 protection rating, making it appropriate for use in both indoor and outdoor situations. With its built-in directional antenna, it can provide Wi-Fi coverage in the great majority of situations.

FEATURES HIGHLIGHTS

- Mobility Management: Customers of the NX-MACC-Base private cloud or the Nodexone Public Cloud can download a free mobile app
- 1024 Maximum Client Connections
- Smart Built-In Directional Antenna
- Outstanding Environmental Adaptability (IP68, -40-65°C, Surge Protection upto 9kV)
- Ensure High Definition (HD) IPTV Application - Gigabit LAN ports can link up to 4 HD TVs.
- 2.4Gbps Dual Band Design with Concurrent
- Hybrid management: from a single AP to thousands of APs, including appliance, private cloud, and public cloud deployment choices.



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PRODUCT FEATURES

WI-FI 6 (802.11AX) TECHNOLOGY

The Dual-Radio Dual-Band

The NX-AP8620-6 uses an 802.11ax dual-band dual-radio architecture with up to four spatial streams and a built-in directional antenna. The first radio enables transitioning to 5G with up to 1.2Gbps access rate and delivers up to 0.575Gbps access rate at 2.4G. At 5G, the second radio provides up to 1.2 Gbps access rate. The AP has a maximum wireless access rate of 2.4 Gigabits per second. It is advised to use 2.4G + 5G, which provides a 1.775Gbps access rate.

OFDMA High-density User Access

The NX-AP8620-6 supports 802.11ax OFDMA, which divides the WLAN channel into many smaller subchannels, each used by one or more users. By planning ahead of time. Multiple users can receive and send packets over the internet at the same time. User rivalry and back-off can be decreased by reducing the AP. Network latency is being reduced, and network efficiency is being improved.

Intelligent Local Forwarding Employing

The NX-AP8620-6 overcomes wireless controllers' traffic bottleneck limitations. The data forwarding mode for the NX-AP8620-6 may be configured freely using the Nodexon Wireless Controller Series. The AP also determines whether data is sent to the wired network via the wireless controller based on the SSID or user VLAN, or is delivered directly to the wired network for data exchange. Local forwarding technology may identify and transfer delay-sensitive data that requires real-time transmission over the wired network, reducing traffic load on wireless controllers and allowing the 802.11n and 802.11ac network to better fulfill its high traffic transmission needs.

QoS Policies

NX-AP8620-6 supports a wide range of quality-of-service policies WLAN/AP/STA-based bandwidth restrictions, for example, are available, as well as Wi-Fi multimedia (WMM), which establishes various priority for various types of service data. The NX-AP8620-6 ensures the seamless functioning of multi-media applications by ensuring timely and quantitative audio and video transmission. The NX AP5680-W6's multicast to unicast technology eliminates visual lag caused by packet loss or excessive latency in wireless networks, and greatly improves the user experience of multicast video services in wireless networks.

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Cloud Services

Public Cloud: With integrated captive portal, authentication (such as PPSK for workers, Facebook, voucher, account, etc.) and reporting capabilities, Nodexon Cloud services is aimed at the SME market. SME clients can deploy and control their networks at their fingertips with the Nodexon Cloud Mobile App (free download).

Hybrid Cloud: Targeted for enterprise offices and campuses with single or many sites and high-density AP deployment, Nodexon NX-AP8620-6 wireless controller (on-premises) plus Cloud Management (optional). The controller appliances are placed at the customer's location and have fully integrated wireless administration and authentication capabilities, with each cluster supporting up to 5000 APs. Optionally, the cloud management platform can provide value-added services such as centralized device configuration and monitoring, AI radio (RF) optimization, reporting, and more.

Private Cloud: CISP/MSP, government, or multi-national business (MNC) with many client sites and a need for invoicing, portal, and security system integration. Not just for wireless access points, but also switches and gateway devices, the NX-MACC enables unified device management.

COMPREHENSIVE SECURITY POLICIES

User Data Encryption

The NX-AP8620-6 provides complete data security protection using encryption methods such as WEP, TKIP, and AES, ensuring the wireless network's data transfer security.

RF Security

The NX-AP8620-6 enables RF probe scanning method can identify illegal access points or other sources of RF interference.

ARP Spoofing Protection

The ARP detection function successfully suppresses ARP gateway spoofing and ARP host spoofing in the network, ensuring that users may access the Internet normally. The ARP rate limit function allows you to set a restriction on the number of ARP packets sent per second in order to prevent malicious scanning programs from performing ARP flooding.

Multiple Easy-to-use Authentication Modes

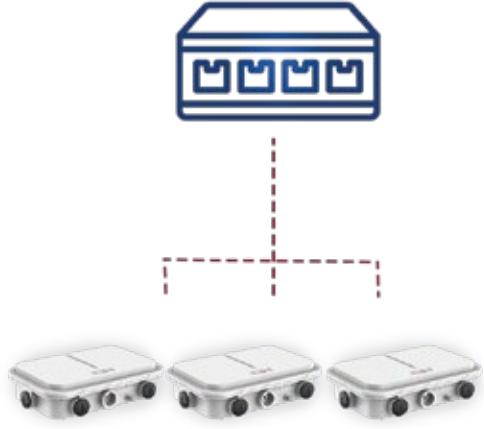
Guest Hotspot, 802.1x, voucher/access code, user account, and social authentication are just a few of the authentication methods supported by the NX-AP8620-6 outdoor access point. It offers a set of control rules in terms of user access, authorisation, equipment compliance check, network behavior monitoring, network attack prevention, and so on, all in accordance with standard network access control. For authenticated users, all of these control tools provide strong network security.

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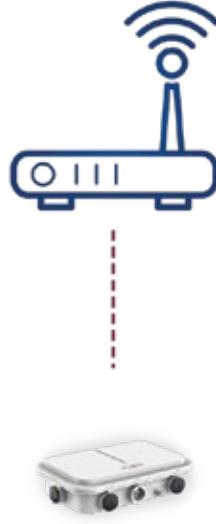


HYBRID MANAGEMENT

HARDWARE CONTROLLER



STANDALONE



PRIVATE/CLOUD MANAGEMENT



HIGH AVAILABILITY DESIGN

Authentication Offload and Acceleration

Cloud management of the captive portal and account and voucher authentication is possible, but all security policy and enforcement will be handled locally at the EG security gateway. It not only speeds up overall authentication processing, but it also provides extra service availability protection in the event that the Cloud or WLAN Controller is unavailable, ensuring that all authentication services remain operational.

Remote Intelligent Perception Technology

Packets received by the AP are sent to the controller before being forwarded under the conventional network design, where FIT APs are centrally controlled by a wireless controller. When the controller fails, the APs stop working correctly, leading the entire network to fail. Once the faulty controller is detected, the APs will quickly switch to the intelligent mode to continue data forwarding, ensuring the high availability of the wireless network and keeping wireless users always online.

Outdoor Access Point Switch NX-AP8620-6



EASY INSTALLATION & DEPLOYMENT

Easily Mountable Kit

For easy deployment optimization, an adjustable mount-kit is included by default. The APs may be readily adjusted (total in 60 degrees) to fit a variety of circumstances.

Flexible Gigabit Uplink Options

The NX-AP8620-6 outdoor access point has a 10/100/1000Base-T Ethernet uplink port, which eliminates the LAN port as a wireless access bottleneck, as well as a 1000M SFP port, which adapts to wired networking structures under various user situations. For optimal network deployment, the SFP Base-X port takes on the data transmission duty.

High Availability Design

Switching between Bluetooth serial port and iBeacon is supported by the device. If the default configuration is Bluetooth serial port, when the equipment fails, the administrator can handle the device from a mobile phone without having to climb up the pole.

Mobile Monitoring and Optimizing

Nodexon is committed to providing customers with a more simple networking experience by launching a free mobile app (called Nodexon Cloud) for unified device lifecycle management, which includes provisioning, monitoring, configurations, and optimization for Nodexon access points, switches, and security gateways.

Outdoor Access Point Switch NX-AP8620-6



TECHNICAL SPECIFICATIONS

SPECIFICATIONS	NX-AP8620-6
Radio	Dual-radio dual-band
Protocol	Concurrent 802.11ax and 802.11a/b/g/n/ac BLE 5.0
Operating Bands	802.11b/g/n/ac/ax: 2.4G ~ 2.4835GHz - 802.11a/n/ac/ax: 5G: 5.150~5.350GHz, 5.725~5.850GHz (Note: the operating bands varies according to different countries)
Spatial Streams	4 spatial streams, MU-MIMO
Max Throughput	Up to 0.575Gbps@2.4G - Up to 1.2Gbps@5G - Up to 2.4Gbps per AP - 2.4G+5G is recommended with 1.775Gbps access rate
Modulation	OFDM: BPSK@6/9Mbps, QPSK@12/18Mbps, 16-QAM@24Mbps, 64-QAM@48/54Mbps DSSS: DBPSK@1Mbps, DQPSK@2Mbps and CCK@5.5/11Mbps MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM and 256QAM OFDM: BPSK@6/9Mbps, QPSK@12/18Mbps, 16-QAM@24Mbps 64-QAM@48/54Mbps, DSSS: DBPSK@1Mbps, DQPSK@2Mbps and CCK@5.5/11Mbps MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM
Receiver Sensitivity	11b: -91dBm(1Mbps), -88dBm(5Mbps), -85dBm(11Mbps) 11a/g: -89dBm(6Mbps), -80dBm(24Mbps), -76dBm(36Mbps) -71dBm(54Mbps), 11n: -83dBm@MCS0, -65dBm@MCS7, -83dBm@MCS8, -65dBm@MCS15 11ac HT20: -83dBm(MCS0), -57dBm(MCS9), 11ac HT40: -79dBm(MCS0), -57dBm(MCS9) 11ac HT80: -76dBm(MCS0), -51dBm(MCS9), 11ax HT80: -76dBm(MCS0), -49dBm(MCS11)
Transmit Power	28dBm
Adjustable Power	1dBm
Management Port	1 Console Port
Service Ports	Front: 4 10/100/1000Mbps Ethernet ports Rear: 1 10/100/1000Mbps uplink port
Antenna	Built-in directional antenna
Antenna Loba Orientation	Internal Directional: 60 degrees total
Antenna Gain	9dBi
Dimensions	251mm × 168mm × 64mm (without mounting bracket)
Wi-Fi Alliance	Wi-Fi CERTIFIED™ a, b, g, n, ac Wi-Fi CERTIFIED 6™ WPA3™ Enterprise, Personal - Wi-Fi Enhanced Open™ Wi-Fi Agile Multiband™ WMM®
Weight	<1.5kg
Bluetooth	Support switching between Bluetooth serial port and iBeacon
Power Supply	Support PoE (802.3af / 802.3at) Support 44 ~ 57V DC power supply
Power Consumption	<12.95W

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TECHNICAL SPECIFICATIONS

SPECIFICATIONS	NX-AP8620-6
Installation Mode	Wall/pole-mount installation
IP Rating	IP68
Surge Protection	Common mode +/-9kV
EMC Standard	EN301 489, EN55032, EN55035
Health Standard	EN 62311
Radio Standard	EN300 328, EN301 893
Safety Standard	GB4943, EN/IEC 60950-1
Temperature	Operating Temperature: -40~65°C Storage Temperature: -40~85°C
Operating Humidity	0% to 100% (non-condensing)
Storage Humidity	0% to 100% (non-condensing)
Maximum clients per AP	1024
SSID capacity	Up to 32
SSID hiding	Support
Remote Intelligent Perception Technology (RIPT)	Support
STA Control	SSID/radio-based
Bandwidth control	STA/SSID/AP-based speed control
Configuring the authentication mode, encryption mechanism and VLAN attributes for each SSID	Support
Smart Device Recognition	Support
QR code authentication	Support
SMS authentication	Support
PEAP authentication	Support
Data frame filtering	Whitelist, static/dynamic blacklist
User isolation	Support
NFPP	Support
WSID	Support

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TECHNICAL SPECIFICATIONS

SPECIFICATIONS	NX-AP8620-6
Intelligent load balancing based on the number of users or traffic	Support
Data encryption	WPA (TKIP), WPA-PSK, WPA2 (AES), WEP (64 / 128-bit)
WeChat authentication	Support
Dynamic ACL assignment	Support
RADIUS	Support
CPU Protection Policy (CPP)	Support
IPv4 address	Static IP address or DHCP
Rogue AP detection and countermeasure	Support
IPv6 address	IPv6 terminal access authentication, ICMPv6
Supported wireless LAN controllers	Nodexon WS Series Wireless Controller Nodexon MACC-Base Software Controller Nodexon Cloud (Public Cloud)
Management Protocol	Telnet, SSH, TFTP, Web
SNMP	SNMPV1,V2c,V3
FAT/FIT/MACC mode switching	Factory default firmware supports FAT (standalone) or FIT mode (WS controller) or MACC mode (Nodexon MACC-Base or Nodexon Cloud) management
Syslog / Debug	Support

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