ACCESS POINT

NV-AP7

Device overview

NV-AP7 is a professional access point designed for reliable operation in modern network infrastructure. Indoor Wi-Fi 7 Access Point (2.4GHz / 5GHz) Key Features: • The latest Wi-Fi 7 (802.11be) standard with a combined throughput of up to 3600 Mbps. • Support for advanced MLO (Multi-Link Operation) technology and 4096-QAM modulation. • Ultra-efficient network interface: 2.5 Gigabit WAN Port and 1 Gigabit LAN Port. • Powerful hardware foundation (512MB RAM DDR4, Qualcomm chipset) supporting up to 128 simultaneous users. The NV-AP7 is an uncompromising ceiling-mount access point designed for the most demanding business environments. Utilizing the revolutionary Wi-Fi 7 standard, the device guarantees gigabit data transfer speeds without delays, making it an ideal solution for modern offices, hotels, schools, and conference centers. Thanks to Multi-Link Operation (MLO) technology and 4096-QAM modulation, the unit offers unprecedented connection stability even in highly congested areas. Equipped with a 2.5G WAN port and flexible power options (including PoE+ 802.3at), the access point seamlessly integrates with modern network infrastructure, offering full AC controller management and reliable operation under the highest loads. Key operating parameters include wireless capability: Wi-Fi 7 (802.11be); power input: 12V DC / PoE+; management: Cloud Managed.

Key features

- Wireless connectivity: Wi-Fi 7 (802.11be).
- Interfaces and performance: PoE ports: 1x 1Gbps (PoE-in); RJ45 uplink: -; SFP/SFP+ ports: -; WAN interface: 1*10/100/1000/2500Mbps, support 48V POE; LAN interface: 1*10/100/1000Mbps; bandwidth: 5400 Mbps.
- Power parameters: power method: 12V DC / PoE+; power consumption: < 20W; PoE budget: -.
- Hardware platform: chipset: IPQ5312 + QCN6422 + QCA8081 + QCA8337; RAM: 512MB DDR4; Flash memory: 128MB NAND.
- System functions: operating modes: Gateway Mode: The device connects to the WAN port and accesses the Internet via static IP, DHCP, or PPPoE.; Repeater Mode: In this mode, the device extends an existing wireless network to other clients or devices. It can also connect via Ethernet to another router to access the WAN.; AP Mode: The device provides wireless coverage for clients and devices, connecting via Ethernet to a router to access the WAN.; wireless functions: Multiple SSID functions: 2.4GHz: 4; 5.8GHz: 4.; Support Watchdog/Reboot Scheduling; Support SSID hidden; Support seamless roaming; Support 5G Prior for a faster Ethernet.; Support unicode characters supported; Wireless Security: Open, WPA, WPA2PSK_TKIPAES, WAP2_EAP, WPA3; Support MAC filter; Support Wi-Fi time on/off to save energy; Support client isolation to improve

the wireless stability; Support RF power adjustable, adjust the RF power based on environment.; network functions: VLAN settings; Support gateway mode; device management: Back-up the configuration; Restore the configuration; Reset to factory default; Reboot the device: including time reboot or reboot immediately; system options: Nazwa urządzenia, Aktualizacja systemu, Przywracanie konfiguracji, Kopia zapasowa konfiguracji, Przywrócenie ustawień fabrycznych, Restart urządzenia..

- Environmental and mechanical parameters: dimensions: 304mm × 181mm × 88mm; enclosure: Indoor Ceiling; LED indicators: Front Panel-Red/Green/Blue Power On: Red ON → System Start → Green ON & Red OFF → Wi-Fi Active Thin AP-AC disconnected: Red ON & Green OFF & Blue ON AP Locator: Blue Flashes (1 time/second), Red & Green OFF; operating/storage temperature: 20°C~55°C / -40°C~70°C; humidity: 10%~90%(non-condensing) / 5%~95%(non-condensing); ESD protection: Air +/-8K, Contact +/-6K; surge protection: line to ground 2K, line to line 1K.
- Additional features: MLO, 4K-QAM, MU-MIMO.

Recommended use

The model is suitable for building Wi-Fi coverage in offices, service points, hotels, commercial facilities, warehouses, and outdoor deployments where stable coverage and centralized management are important.

Installation and startup

1. Before installation, verify the power method, cabling plan, and installation site with respect to ventilation, temperature, and humidity.
2. Mount the device in its target location while maintaining access to ports, the reset button, and safe cable routing paths.
3. Connect network cables to the required WAN, LAN, uplink, SFP, or PoE interfaces according to the network design and the role of connected endpoints.
4. Apply power according to the specification and wait until the device finishes booting and LED indicators stabilize.
5. Log in to the management interface and configure the essential parameters: IP addressing, operating mode, wireless settings, VLANs, security, and firmware update if available.

Configuration

- Replace default credentials and apply a strong administrator password.
- Assign a clear device name and configure IP settings in line with the network plan.
- Select the proper operating mode for the deployment: Gateway Mode: The device connects to the WAN port and accesses the Internet via static IP, DHCP, or PPPoE.; Repeater Mode: In this mode, the device extends an existing wireless network to other clients or devices. It can also connect via Ethernet to another router to access the WAN.; AP Mode: The device provides wireless coverage for clients and devices, connecting via Ethernet to a router to access the WAN..
- Configure wireless services and security policies: Multiple SSID functions: 2.4GHz: 4; 5.8GHz: 4.; Support Watchdog/Reboot Scheduling; Support SSID hidden; Support seamless roaming; Support 5G Prior for a faster Ethernet.; Support unicode characters supported; Wireless Security: Open,

WPA, WPA2PSK_TKIPAES, WAP2_EAP, WPA3; Support MAC filter; Support Wi-Fi time on/off to save energy; Support client isolation to improve the wireless stability; Support RF power adjustable, adjust the RF power based on environment..

- Enable the required network features: VLAN settings; Support gateway mode.
- Use the available administration options: Back-up the configuration; Restore the configuration; Reset to factory default; Reboot the device: including time reboot or reboot immediately.
- System configuration options include: Nazwa urządzenia, Aktualizacja systemu, Przywracanie konfiguracji, Kopia zapasowa konfiguracji, Przywrócenie ustawień fabrycznych, Restart urządzenia..

Operation and safety

- Do not connect the device to a power source that does not match the specification.
- Use verified cabling, especially in PoE installations and on long cable runs.
- Observe the environmental specification for temperature: 20°C~55°C / -40°C~70°C.
- Observe the humidity limits: 10%~90%(non-condensing) / 5%~95%(non-condensing).
- Consider the electrical protection level: ESD Air +/-8K, Contact +/-6K.
- Consider surge protection requirements: line to ground 2K, line to line 1K.
- Back up the configuration before reset, reboot scheduling, or firmware maintenance to reduce recovery time.