

## ACCESS POINT

**NV-AP7**

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.

## TECHNICAL SPECIFICATIONS

Model	NV-AP7																																																	
Hardware Configuration																																																		
Main Chip	IPQ5312+QCN6422+QCA8081+QCA8337																																																	
Memory	512MB DDR4																																																	
Flash	Nand 128MB																																																	
2.4G Frequency	2.4GHz~2.484GHz																																																	
5G Frequency	5.150GHz~5.825GHz																																																	
Wireless Technology	2.4GHz Band: IEEE 802.11 b/g/n/ax/be, theoretical maximum data rate up to 688Mbps 5GHz Band: IEEE 802.11 a/n/ac/ax/be, theoretical maximum data rate up to 2882Mbps																																																	
Dual Band Antenna	2.4GHz: 2x4dBi 5GHz: 2x4dBi																																																	
2.4G TX Power	<table border="1"> <thead> <tr> <th>Standard</th> <th>Data Rate / MCS</th> <th>Typical TX Power</th> <th>Data Rate / MCS</th> <th>Minimum TX Power</th> </tr> </thead> <tbody> <tr> <td>802.11b</td> <td>11M</td> <td>24±2dBm</td> <td>1M</td> <td>24±2dBm</td> </tr> <tr> <td>802.11g</td> <td>54M</td> <td>23±2dBm</td> <td>6M</td> <td>24±2dBm</td> </tr> <tr> <td>802.11n HT20</td> <td>MCS7</td> <td>22±2dBm</td> <td>MCS0</td> <td>24±2dBm</td> </tr> <tr> <td>802.11n HT40</td> <td>MCS7</td> <td>22±2dBm</td> <td>MCS0</td> <td>24±2dBm</td> </tr> <tr> <td>802.11ax HE20</td> <td>MCS11</td> <td>20±2dBm</td> <td>MCS0</td> <td>24±2dBm</td> </tr> <tr> <td>802.11ax HE40</td> <td>MCS11</td> <td>20±2dBm</td> <td>MCS0</td> <td>24±2dBm</td> </tr> <tr> <td>802.11be EHT20</td> <td>MCS13</td> <td>20±2dBm</td> <td>MCS0</td> <td>24±2dBm</td> </tr> <tr> <td>802.11be EHT40</td> <td>MCS13</td> <td>20±2dBm</td> <td>MCS0</td> <td>24±2dBm</td> </tr> </tbody> </table>	Standard	Data Rate / MCS	Typical TX Power	Data Rate / MCS	Minimum TX Power	802.11b	11M	24±2dBm	1M	24±2dBm	802.11g	54M	23±2dBm	6M	24±2dBm	802.11n HT20	MCS7	22±2dBm	MCS0	24±2dBm	802.11n HT40	MCS7	22±2dBm	MCS0	24±2dBm	802.11ax HE20	MCS11	20±2dBm	MCS0	24±2dBm	802.11ax HE40	MCS11	20±2dBm	MCS0	24±2dBm	802.11be EHT20	MCS13	20±2dBm	MCS0	24±2dBm	802.11be EHT40	MCS13	20±2dBm	MCS0	24±2dBm				
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## 5G TX Power

Standard	Data Rate / MCS	Typical TX Power	Data Rate / MCS	Minimum TX Power
802.11a	54M	21±2dBm	6M	23±2dBm
802.11n HT20	MCS7	20±2dBm	MCS0	23±2dBm
802.11n HT40	MCS7	20±2dBm	MCS0	23±2dBm
802.11ac VHT20	MCS7	19±2dBm	MCS0	23±2dBm
802.11ac VHT40	MCS7	19±2dBm	MCS0	23±2dBm
802.11ac VHT80	MCS9	19±2dBm	MCS0	23±2dBm
802.11ax HE20	MCS11	18±2dBm	MCS0	23±2dBm
802.11ax HE40	MCS11	18±2dBm	MCS0	23±2dBm
802.11ax HE80	MCS11	18±2dBm	MCS0	23±2dBm
802.11ax HE160	MCS11	18±2dBm	MCS0	23±2dBm
802.11be EHT20	MCS13	18±2dBm	MCS0	23±2dBm
802.11be EHT40	MCS13	18±2dBm	MCS0	23±2dBm
802.11be EHT80	MCS13	18±2dBm	MCS0	23±2dBm
802.11be EHT160	MCS13	18±2dBm	MCS0	23±2dBm
802.11be EHT240	MCS13	18±2dBm	MCS0	23±2dBm

2.4G Receiving Sensitivity

Standard	Data Rate / MCS	Typical RX Power	Data Rate / MCS	Minimum RX Power
802.11b	11M	-89dBm	1M	-95dBm
802.11g	54M	-75dBm	6M	-92dBm
802.11n HT20	MCS7	-72dBm	MCS0	-88dBm
802.11n HT40	MCS7	-70dBm	MCS0	-86dBm
802.11ax HE20	MCS11	-62dBm	MCS0	-88dBm
802.11ax HE40	MCS11	-60dBm	MCS0	-86dBm
802.11be EHT20	MCS13	-60dBm	MCS0	-86dBm
802.11be EHT40	MCS13	-60dBm	MCS0	-86dBm



5G Receiving Sensitivity	Standard	Data Rate / MCS	Typical RX Power	Data Rate / MCS	Minimum RX Power
	802.11a	54M	-75dBm	6M	-92dBm
	802.11n HT20	MCS7	-72dBm	MCS0	-88dBm
	802.11n HT40	MCS7	-70dBm	MCS0	-86dBm
	802.11ac VHT20	MCS7	-65dBm	MCS0	-88dBm
	802.11ac VHT40	MCS7	-62dBm	MCS0	-86dBm
	802.11ac VHT80	MCS9	-60dBm	MCS0	-84dBm
	802.11ax HE20	MCS11	-60dBm	MCS0	-90dBm
	802.11ax HE40	MCS11	-58dBm	MCS0	-88dBm
	802.11ax HE80	MCS11	-54dBm	MCS0	-84dBm
	802.11ax HE160	MCS11	-54dBm	MCS0	-82dBm
	802.11be EHT20	MCS13	-54dBm	MCS0	-86dBm
	802.11be EHT40	MCS13	-52dBm	MCS0	-84dBm
	802.11be EHT80	MCS13	-50dBm	MCS0	-82dBm
	802.11be EHT160	MCS13	-48dBm	MCS0	-80dBm
	802.11be EHT240	MCS13	-48dBm	MCS0	-80dBm
	2.4G EVM	802.11b: -10 dB; 802.11g: ≤-25 dB; 802.11n: ≤-28dB; 802.11ax: ≤-35 dB; 802.11be: ≤-38 dB			
5G EVM	802.11a: ≤-25 dB; 802.11n: ≤-28 dB; 802.11ac: ≤-32 dB; 802.11ax: ≤-35 dB; 802.11be: ≤-38 dB				
ppm	±20ppm				
WAN Interface	1*10/100/1000/2500Mbps, support 48V POE				
LAN Interface	1*10/100/1000Mbps				
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				
One-Key Reset	Press & Hold 6-10s Factory Reset				

Power	POE 802.3at / DC12V2A
Max Power Consumption	<24W
Weight	1.6kg
Operating/Storage Temperature	-20°C~55°C / -40°C~70°C
Operating/Storage Humidity	10%~90%(non-condensing) / 5%~95%(non-condensing)
Dimensions	304mm × 181mm × 88mm
ESD	Air +/-8K, Contact +/-6K
Surge protection	line to ground 2K, line to line 1K
Certification	CCC; CE mark, commercial; CE/LVD EN60950; FCC Part 15 Class B; RoHS
WiFi Specification	
Working Mode	<p>Gateway Mode: The device connects to the WAN port and accesses the Internet via static IP, DHCP, or PPPoE.</p> <p>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.</p> <p>AP Mode: The device provides wireless coverage for clients and devices, connecting via Ethernet to a router to access the WAN.</p>
Wireless Functions	<p>Multiple SSID functions: 2.4GHz: 4; 5.8GHz: 4.</p> <p>Support Watchdog/Reboot Scheduling</p> <p>Support SSID hidden</p> <p>Support seamless roaming</p> <p>Support 5G Prior for a faster Ethernet.</p> <p>Support unicode characters supported</p> <p>Wireless Security: Open, WPA, WPA2PSK_TKIPAES, WAP2_EAP, WPA3</p> <p>Support MAC filter</p> <p>Support Wi-Fi time on/off to save energy</p> <p>Support client isolation to improve the wireless stability</p> <p>Support RF power adjustable, adjust the RF power based on environment.</p>
Networking Function	<p>VLAN settings</p> <p>Support gateway mode</p>
Device Management	<p>Back-up the configuration</p> <p>Restore the configuration</p> <p>Reset to factory default</p> <p>Reboot the device: including time reboot or reboot immediately</p>
Software Functions	
Capacity	128 Users Maximum
Management mode	English/Chinese WEB remote management
Status	System/Wireless/Real-time traffic
Network	DHCP/Static IP/PPPOE
Wireless	Wireless switch, SSID, encryption, Password, Wireless multimedia, Isolation, Hidden
System	Device name, system upgrade, configuration restore, backup configuration, factory reset, reboot device.

## DIMENSIONS & SCHEMATIC

