



ACCESS POINT

NV-AP7

EAN: 5904708319837

Indoor Wi-Fi 7 Access Point (2.4GHz / 5GHz)

Key Features

- Support for radio standards in the 2.4GHz (IEEE 802.11 b/g/n/ax/be) and 5GHz (IEEE 802.11 a/n/ac/ax/be) bands
- Operation in three working modes: Gateway Mode, Repeater Mode, and AP Mode
- Network interfaces including one 1*10/100/1000/2500Mbps WAN port with 48V POE support and one 1*10/100/1000Mbps LAN port
- Support for a maximum of 128 concurrent users
- Advanced wireless functions including seamless roaming, multiple SSID, and comprehensive Wi-Fi security protocols.

The Nivica NV-AP7 is based on a hardware configuration featuring the main chip IPQ5312+QCN6422+QCA8081+QCA8337, 512MB DDR4 memory, and 128MB Nand Flash.

The device operates within the frequency ranges of 2.4GHz~2.484GHz and 5.150GHz~5.825GHz, utilizing 2x4dBi Dual Band antenna configurations for both bands.

It ensures stable wireless transmission with a maximum theoretical data rate of up to 688Mbps on the 2.4GHz band and up to 2882Mbps on the 5GHz band while maintaining strict transmission power and receiving sensitivity parameters.

The device is equipped with a physical 1*10/100/1000/2500Mbps WAN port supporting 48V POE power and a 1*10/100/1000Mbps LAN port.

The NV-AP7 supports up to 128 simultaneous users, offering functions such as seamless roaming, SSID hiding, client isolation, and 5G Prior.

Thanks to its versatile working modes – Gateway, Repeater, and AP – the access point flexibly adapts to network architectures, enabling the configuration of up to 4 SSIDs for the 2.4GHz band and 4 SSIDs for the 5.8GHz band.

Device management is handled via WEB remote management interface, which allows for monitoring system status, wireless status, and real-time traffic, as well as performing configuration backups and restores.

The NV-AP7 can be powered via POE 802.3at or DC 12V2A, with a maximum power consumption of less than 24W. The enclosure, measuring 304mm × 181mm × 88mm and weighing 1.6kg, is designed for operation in temperatures ranging from -20°C to 55°C and humidity levels from 10% to 90% (non-condensing).



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	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

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	<table><tr><th>Standard</th><th>Data Rate / MCS</th><th>Typical RX Power</th><th>Data Rate / MCS</th><th>Minimum RX Power</th></tr><tr><td>802.11a</td><td>54M</td><td>-75dBm</td><td>6M</td><td>-92dBm</td></tr><tr><td>802.11n HT20</td><td>MCS7</td><td>-72dBm</td><td>MCS0</td><td>-88dBm</td></tr><tr><td>802.11n HT40</td><td>MCS7</td><td>-70dBm</td><td>MCS0</td><td>-86dBm</td></tr><tr><td>802.11ac VHT20</td><td>MCS7</td><td>-65dBm</td><td>MCS0</td><td>-88dBm</td></tr><tr><td>802.11ac VHT40</td><td>MCS7</td><td>-62dBm</td><td>MCS0</td><td>-86dBm</td></tr><tr><td>802.11ac VHT80</td><td>MCS9</td><td>-60dBm</td><td>MCS0</td><td>-84dBm</td></tr><tr><td>802.11ax HE20</td><td>MCS11</td><td>-60dBm</td><td>MCS0</td><td>-90dBm</td></tr><tr><td>802.11ax HE40</td><td>MCS11</td><td>-58dBm</td><td>MCS0</td><td>-88dBm</td></tr><tr><td>802.11ax HE80</td><td>MCS11</td><td>-54dBm</td><td>MCS0</td><td>-84dBm</td></tr><tr><td>802.11ax HE160</td><td>MCS11</td><td>-54dBm</td><td>MCS0</td><td>-82dBm</td></tr><tr><td>802.11be EHT20</td><td>MCS13</td><td>-54dBm</td><td>MCS0</td><td>-86dBm</td></tr><tr><td>802.11be EHT40</td><td>MCS13</td><td>-52dBm</td><td>MCS0</td><td>-84dBm</td></tr><tr><td>802.11be EHT80</td><td>MCS13</td><td>-50dBm</td><td>MCS0</td><td>-82dBm</td></tr><tr><td>802.11be EHT160</td><td>MCS13</td><td>-48dBm</td><td>MCS0</td><td>-80dBm</td></tr><tr><td>802.11be EHT240</td><td>MCS13</td><td>-48dBm</td><td>MCS0</td><td>-80dBm</td></tr></table>	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
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2.4G EVM	802.11b: -10 dB; 802.11g: ≤-25 dB; 802.11n: ≤-28dB; 802.11ax: ≤-35 dB; 802.11be: ≤-38 dB																																																																																
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WAN Interface	1*10/100/1000/2500Mbps, support 48V POE																																																																																
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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	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.
Networking Function	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
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

