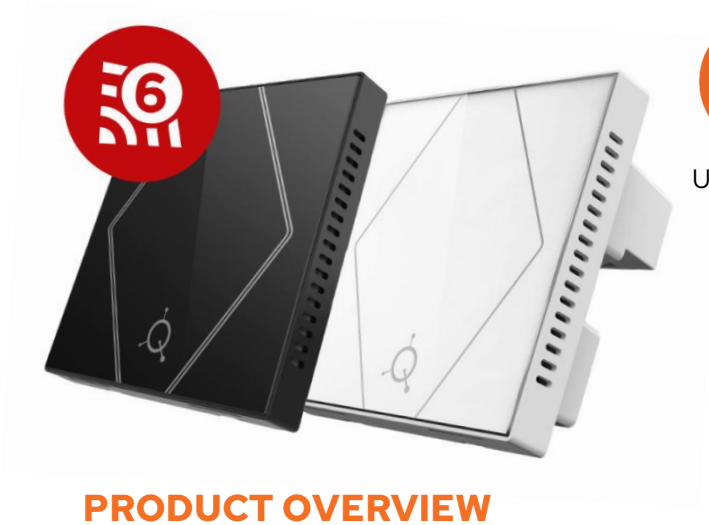
INROOM ACCESS POINT
QN-H-240



Up to 3 Gbps Data Rate

1G Connectivity

2.4 GHz - 2x2, 5 GHz - 2x2

MU-MIMO With OFDMA

3 Years Warranty

PRODUCT OVERVIEW

Introducing the QN-H-240 Room Access Point, a dual-band Wi-Fi 6 solution from Quantum Networks, designed to transform connectivity in educational and business spaces. With speeds of up to 3 Gbps, it delivers exceptional performance for modern networking needs.

Ideal for small to medium-sized rooms for hotels or residences, the QN-H-240 ensures seamless, high-speed internet access. It is perfect for supporting both modern and legacy devices, making it a versatile choice for diverse setups. Enjoy effortless wall mounting and simple remote monitoring via Quantum Rudder. Step into the Quantum era with the QN-H-240 Room Access Point with WPA3 security, a game-changer in connectivity from Quantum Networks.

KEY FEATURES

Loaded with Cutting-Edge 802.11ax Technology

The QN-H-240 dual-band Wi-Fi 6 Access Point, featuring advanced 802.11ax technology, combines compact design and small form factor, making it a perfect fit for small to medium-sized hotel and residences. Equipped with WPA3 security, it ensures a secure and reliable network.

Exceptional Wi-Fi Performance

Designed with a wall-mountable and space-saving form factor, the QN-H-240 offers seamless Wi-Fi 6 performance with 160 MHz channel support. It delivers speeds of up to 3 Gbps, ideal for educational institutions, businesses, and residential setups, providing reliable connectivity to meet modern networking demands.

Comprehensive All-in-One Solution

The QN-H-240 supports both modern and legacy devices, making it a versatile, future-ready solution for diverse networking needs. Its dual-band 2.4/5 GHz radios and dual MU-MIMO spatial streams ensure exceptional performance, whether for business-critical applications or residential users.

Diverse Service Support

The QN-H-240 excels in environments requiring high device density, offering simultaneous connections without compromising speed or reliability. Perfect for educational institutions, businesses, and hospitality markets, it is tailored to meet the growing demand for efficient and compact wireless solutions.

Step into the Quantum era with the QN-H-240, a cutting-edge, small-form-factor Wi-Fi 6 access point.

TECHNICAL SPECIFICATIONS

Wi-Fi		
Wi-Fi Standards	5 GHz	IEEE 802.11a/n/ac/ax
	2.4 GHz	IEEE 802.11b/g/n/ax
Operating Mode	Access point	
Networking Mode	Bridge mode	
Maximum Data Rates	5 GHz	802.11ax@ 160 MHz: 2402 Mbps
		802.11ax@ 80 MHz: 2402 Mbps
		802.11ax@ 40 MHz: 1147.1 Mbps
		802.11ax@ 20 MHz: 573.5 Mbps
		802.11ac@ 80 MHz: 2166.7 Mbps
		802.11ac@ 40 MHz: 1000 Mbps
		802.11ac@ 20 MHz: 481.8 Mbps
	2.4 GHz	802.11ax@ 40 MHz: 573.5 Mbps
		802.11ax@ 20 MHz: 286.8 Mbps
		802.11n@ 40 MHz: 500 Mbps
		802.11a/g@ 20 MHz: 54 Mbps
		802.11b@ 20 MHz: 11 Mbps
Maximum Receiver Sensitivity	5 GHz	-98 dBm
	2.4 GHz	-93 dBm
Supported Channels	5 GHz	36-64, 100-144, 149-165 (UNII-1, UNII-2, UNII-2e, UNII-3 compliant) (As per country regulations)
	2.4 GHz	1-13 (As per country regulations)
	Dynamic frequency selection (DFS) optimizes the use of available RF spectrum	
Channel Bands	5 GHz	5.15-5.25 GHz (U-NII-1), 5.25-5.35 GHz (U-NII-2A), 5.47-5.725 GHz (U-NII-2C), 5.725-5.85 GHz (U-NII-3)
	2.4 GHz	2.4-2.484GHz (ISM)
Modulation Schemes	802.11ax	BPSK, QPSK, 16-QAM, 64-QAM, 256- QAM, 1024-QAM
	802.11ac	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
	802.11a/g/n	BPSK, QPSK, 16-QAM, 64-QAM
	802.11b	BPSK, QPSK, CCK
Radio Chains and Spatial Streams	2x2:2	Streams in 5GHz-OFDMA with MU-MIMO
	2x2:2	Streams in 2.4GHz- OFDMA with MU-MIMO
Channel Size	802.11n	20/40 (HT) MHz
	802.11ac	20/40/80/160 (VHT) MHz
	802.11ax	20/40/80/160 (HE) MHz
Wireless Security	WPA3-AES personal, Enhanced open (OWE)	
	WPA3-Enterprise (802.1x/EAP-TLS, EAP-TTLS)	
	WPA3-WPA2 Mixed-AES personal, Open	
	WPA2-TKIP/AES personal, Open	
	WPA2-Enterprise (802.1x/EAP-PEAP, EAP-TLS, EAP-TTLS)	
	WPA personal, WPA Mixed-Enterprise (802.1x/EAP-PEAP)	
	WEP-64, WEP-128	

Wireless Security	802.11 w MFP (Management Frame Protection)	
	MAC-based authentication	
	Captive portal-based authentication	
	802.11i	
	Quantum Secure	
	Hide SSID in beacons	
External DB Support	Radius, Active directory, LDAP	
Web Authentication	QN-Secure+, RADIUS, Active directory, LDAP	
User Authentication	Methods	Captive portal, QN-Secure+, 802.1x (Radius)
	Directory	QIM, Microsoft active directory, LDAP, G suite, Oauth
	Mode	Via Controller /Access points
Roaming	IEEE 802.11k (Assisted Roaming)	
	IEEE 802.11v (BSS Transition Management)	
	IEEE 802.11r (Fast BSS Transition (FT))	
	Pairwise Master Key (PMK) caching	
	Opportunistic key caching	
	Seamless roaming for captive portal users	
Channel / Tx Power Management	Auto / Manual channel selection	
	Speedy channel for RF optimization	
	Channel switch for RF optimization	
	ATP-Automatic Transmit Power management	
Client Management	Band steering	
	Band balancing	
	Airtime fairness	
Guest Management	WISPr – Captive portal	
Native Guest Portal	Customized Template	Yes (User define, Theme based)
	Authentication Method	Click-through, Access code, Self-sign-up (SMS, Email), Sponsor based (Domain-based, Individual Email ID based)
	Guest Profile Support	Pass validity, Bandwidth restriction, Quota based
Diagnostics	Ping, Traceroute, Nslookup, Host discovery, Port connectivity	
Access Control List	URL filtering	
	Full Client Isolation, Deny inter-user bridging, Deny intra-VLAN traffic	
	Bandwidth Restriction per SSID/User	
	OS restriction	
	L2 (MAC) filtering	
	L3 (IP) / L4 (Port) filtering	
	MAX clients per radio	
	Internet freeze per SSID/User	
Radio Management	DTIM interval	
	OFDM Only (Disables 802.11b)	

	BSS Rate and management rate	
	UAPSD (Power save)	
	Inactivity timeout	
Network Management	IEEE 802.11d/h (DFS) support	
	LLDP discovery	
	Proxy ARP	
	DHCP options 60 and 82	
	Port forwarding in router mode	
Administration	WLAN scheduling	
	Schedule reboot	
Wi-Fi 6 Features	Target wake time	
	BSS colouring	
	Spatial reuse	
	Orthogonal frequency division multiple access (OFDMA)	
Advance Features	Short guard interval for 20-MHz, 40-MHz, 80-MHz and 160-MHz	
	Space-time block coding (STBC) for increased range and improved reception	
	Low-density parity check (LDPC) for high-efficiency error correction and increased throughput	
	Transmit beam-forming (TxBF) for increased signal reliability and range	
Networking		
Ethernet WAN	WAN (DHCP/Static/PPPoE)	
Tunneling	IPSec	
Multi-WAN	Yes, Auto-Failover	
DHCP Server	4 Scope, DHCP lease, DHCP MAC reservation, DNS proxy	
WAN Security	Ethernet port block management	
PPP Interface	PPPoE	
DNS	Static, Caching	
NAT	Masquerade (SNAT), Port forwarding (DNAT)	
VLAN Support	802.1Q (1 per BSSID), Port-based (Tagged, untagged)	
Quality of Service		
Auto-QoS, 802.11e,		
Manual QoS (DSCP based, Voice, Video, BE and BK)		
WMM, 802.1p		
Performance & Capacity		
Peak PHY Rates	5 GHz	2402 Mbps (802.11ax)
	2.4 GHz	573.5 Mbps (802.11ax)
Client Capacity	Up to 96 clients per access point	
SSID	Up to 16 per access point	
RF		
	5 GHz	21 dBm

Maximum Aggregate Transmit Power (Adjusted as per country regulations)	2.4 GHz	23 dBm
Antenna Type		Built-in integrated antenna for both radios
Antenna Gain (Max)	5 GHz	3 dBi
Antenna Gain (Max)	2.4 GHz	3 dBi
EIRP	5 GHz	24 dBm
	2.4 GHz	26 dBm
Power		
Rating	802.3 af PoE /at PoE+(Class 4) (Fully functional with all components)	
Physical Interfaces		
Ethernet	WAN: 1 x 10/100/1000 Base-T ethernet, Auto-MDIX, RJ-45 with 802.3at PoE	
	LAN: 1 x 10/100/1000 Base-T ethernet	
	802.3az Energy Efficient Ethernet (EEE)	
Buttons	Restart/Reset	
LED indicators	Quick Setup, Cloud / Standalone	
Management		
Device Management	Standalone, Local (web UI), SSH (CLI)	
	Quantum Rudder	
Environmental		
Operating Temperature	-20°C (-4F) ~ +55°C (+131F)	
Humidity	5% ~ 95% non-condensing	
Standard	Plenum-rated (UL2043)	
Physical		
Dimensions	8.5 cm (L), 8.5 cm (W), 4.5 cm (H)	
Firmware Management		
Cloud-managed firmware update		
Firmware upgrade via Access Point local GUI		

ORDERING INFORMATION

Part Code	Description
QN-H-240	Quantum Networks QN-H-240 Dual-Band 802.11ax Wall Plate Wireless Access Point, 2X2:2 Streams, 1 X 1G Base-T Port (One 802.3af/at PoE In) & 1 X 1G Base-T Port (accessible behind the faceplate). Includes 3 Year Online Activation Warranty. Does not include PoE injector or power adaptor. Does not include cloud controller license.