IN-ROOM ACCESS POINT
QN-H-725



The QN-H-725 introduces a new era in in-room connectivity with one of the first Wi-Fi 7 (802.11be) access points, designed specifically for in-room deployments across hospitality, student housing and residential spaces.

PRODUCT OVERVIEW

With a real-world data rate of up to 3.6 Gbps, the QN-H-725 supports latency-sensitive applications like UHD video streaming, virtual/augmented reality and real-time social gaming. The device includes a 2.5 Gbps Ethernet port, eliminating backhaul bottlenecks and fully unlocking Wi-Fi 7's potential.

Smoothly managed through the Quantum Rudder, each access point includes a three-year limited liability warranty from the date of activation, along with asset protection via built-in theft prevention.

Up to 3.6 Gbps
Data Rate

2.5 GbE
Connectivity

2.4 GHz - 2x2,
5 GHz – 2x2

MU-MIMO
With OFDMA

3 Years
Warranty

KEY FEATURES

Next-Gen Wi-Fi 7 Performance

Built on the latest 802.11be (Wi-Fi 7) standard, it delivers exceptional speed and responsiveness with support for up to 160 MHz channel widths, Multi-Link Operation (MLO), and 4K QAM, making it the ideal choice for bandwidth-intensive hospitality and enterprise in-room environments.

High-Capacity Dual-Band Design

Equipped with dual radios and 2x2:2 MU-MIMO on both 2.4 GHz and 5 GHz bands, it ensures stable, simultaneous connectivity for multiple users and devices—perfect for modern connected spaces.

Seamless Mesh Networking

Leverages advanced Wi-Fi 7 capabilities to enable high-speed, self-healing mesh connectivity for in-room deployments. Ensures continuous coverage, optimal backhaul performance using Multi-Link Operation (MLO), and intelligent path selection for seamless roaming and low-latency user experiences.

Cloud-Ready Management

Easily managed via Quantum Rudder for cloud or on-premises control, offering zero-touch provisioning, bulk firmware upgrades, and simplified scaling across large properties or chains.

Security & Deployment Efficiency

Advanced wireless security with WPA3 and Dynamic PSK, combined with OFDMA and PoE pass-through ports, supports both secure access and easy connectivity for in-room devices like IP phones, TVs, or IoT sensors without additional cabling.

KEY SPECIFICATIONS

Wi-Fi		
Wi-Fi Standards	5 GHz	IEEE 802.11a/n/ac/ax/be
	2.4 GHz	IEEE 802.11b/g/n/ax/be
Operating Mode	Access point, Router, Mesh mode	
Networking Mode	IPv4, IPv6, IPv4v6 (Dual-stack), Gateway mode (NAT), Bridge mode	
Maximum Data Rates	5 GHz	802.11be@ 160 MHz: 2882 Mbps
		802.11be@ 80 MHz: 1441 Mbps
		802.11be@ 40 MHz: 688 Mbps
		802.11ax@ 160 MHz: 2402 Mbps
		802.11ax@ 80 MHz: 1201 Mbps
		802.11ax@ 40 MHz: 573.5 Mbps
		802.11ax@ 20 MHz: 286.8 Mbps
		802.11ac@ 80 MHz: 1083.3 Mbps
		802.11ac@ 40 MHz: 500 Mbps
		802.11ac@ 20 MHz: 240.5 Mbps
	2.4 GHz	802.11be@ 40 MHz: 688 Mbps
		802.11be@ 20 MHz: 344 Mbps
		802.11ax@ 40 MHz: 573.5 Mbps
		802.11ax@ 20 MHz: 286.8 Mbps
		802.11n@ 40 MHz: 500 Mbps
		802.11b/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) (As per country regulations)
	2.4 GHz	2.4-2.484GHz (ISM) (As per country regulations)
Modulation Schemes	802.11be	BPSK, QPSK, 16-QAM, 64-QAM, 256- QAM, 1024-QAM, 4096-QAM
	802.11ax	BPSK, QPSK, 16-QAM, 64-QAM, 256- QAM, 1024-QAM, 4096-QAM
	802.11ac	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
	802.11n	BPSK, QPSK, 16-QAM, 64-QAM,1024-QAM, 4096-QAM
	802.11b/g	BPSK, QPSK, CCK
Radio Chains and Spatial Streams	2x2:2	Streams in 5GHz-OFDMA (802.11ax/be) and OFDM (802.11ac) with MU-MIMO
	2x2:2	Streams in 2.4GHz- OFDM (802.11a/g/n) and DSSS (802.11b) with MU-MIMO

Channel Size	802.11n	20/40 (HT) MHz
	802.11ac	20/40/80 (VHT) MHz
	802.11ax	20/40/80/160 (HE) MHz
	802.11be	20/40/80/160 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,	
	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, TACACS+	
Web Authentication	QN-Secure+, RADIUS, Active directory, LDAP	
User Authentication	Methods	Captive portal, QN-Secure+, 802.1x (Radius)
	Directory	QIM, Microsoft active directory, LDAP, Gsuite, 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, HotSpot 2.0	
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

Access Control List	Force DHCP	
	URL & Application filtering / Whitelisting	
	Full Client Isolation, Deny inter user bridging, Deny intra VLAN traffic	
	Bandwidth Restriction per SSID/per User	
	OS restriction	
	L2 (MAC) filtering	
	L3 (IP) / L4 (Port) filtering	
	MAX clients per radio	
	Internet freeze per SSID / user	
	Session control	
	Random MAC Detection	
Meshing	Wireless (singlehop / multihop)	
	Wired	
WDS	Point to Point	
	Point to MultiPoint	
Radio Management	DTIM interval	
	OFDM Only (Disables 802.11b)	
	BSS Rate and management rate	
	UAPSD (Power save)	
	Inactivity timeout	
	Radio mode control	
	RTS/CTS Threshold	
Network Management	IEEE 802.11d/h (DFS) support	
	LLDP discovery, SFlow	
	Proxy ARP	
	DHCP options 43, 60 and 82	
	Port forwarding in router mode	
Administration	WLAN scheduling	
	Internet speed test	
	Schedule reboot	
Radius Integration	CoA (Change of Authorization)	
	MAC Authentication	
	Dynamic VLAN	
Wi-Fi7/6 Features	Multi-Link Operation (MLO)	BSS colouring
	Beacon Protection	Spatial reuse
	Multi-RU	Preamble puncturing
	Target wake time	Orthogonal frequency division multiple access (OFDMA)

Advance Features	Advanced Cellular Coexistence (ACC) minimizes interference from cellular networks
	Cyclic delay/shift diversity (CDD/CSD) to enable the use of multiple transmit antennas
	Short guard interval for 20-MHz, 40-MHz, 80-MHz, 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
HawkEye – Rogue/WIDS / WIPS / NIPS	
Rogue AP	Rogue SSID
	MAC Spoofing
	SSID Spoofing
	Honeypot / Evil twin attack
	Null Probe request attack
WIDS	RTS/CTS Abuse attack
	Auth attack
	Assoc attack
	Fata jack tool attack
	Man in the Middle attack
	DHCP snooping server detection
	AP flood attack
	Block ACK DoS attack
	Power saves frame attack
	Malformed frame-Auth/Assoc attack
WIDS/WIPS	Deauth attack
	Disassoc attack
	Omerta attack
	Password guessing attack
	Ad-Hoc connection
NIPS	Dos attack
	DDos attack
	Port scanning
Diagnostics	
Network Diagnostics	Ping, Traceroute, Nslookup, Internet speed, Host discovery, Port connectivity, ARP scanner
RF Diagnostics	PCAP capture, Spectrum Analysis, Spectrum Channel metric, Spectrum FFT Duty cycle, WiFi Analyzer, Airbender

Networking		
SFP/Ethernet WAN	WAN (DHCP/Static/PPPoE)	
USB WAN	USB dongle (3G/4G), Mobile tethering (USB)	
Protocols	Static, RIP v2, OSPF v2	
Tunneling	GRE, IPSec, Wire guard, OVPN	
Multi WAN	Yes, Auto Failover	
DHCP Server	4 Scope, DHCP lease, DHCP MAC reservation, DNS proxy	
WAN Security	Ethernet / USB port block management	
PPP Interface	PPPoE, L2TP, L2TP with IPSec	
DNS	Static, Caching, Dynamic DNS	
NAT	Masquerade (SNAT), Port forwarding (DNAT)	
VLAN Support	802.1Q (1 per BSSID), Port-based (Tagged, untagged)	
IoT	Supported	
IGMP	IGMP v2	
	IGMP Snooping	
Supported Features	Safe Search, ALG Control	
	UPNP, DMZ Host, Adblock	
Quality of Service		
Auto QoS, 802.11e,		
Manual QoS (DSCP based, Voice, Video, BE and BK)		
WMM, 802.1p		
WiFi Calling		
DiffServ		
DSCP Tagging		
Performance & Capacity		
Peak PHY Rates	5 GHz	2882 Mbps (802.11be)
	2.4 GHz	688 Mbps (802.11be)
Client Capacity	Up to 384 clients per Access point	
SSID	Up to 32 per access point (16 per Radio)	
RF		
Maximum Aggregate Transmit Power (Adjusted as per country regulations)	5 GHz	23 dBm
	2.4 GHz	24 dBm
Antenna Type	Built-in integrated antenna for both radios	
Antenna Gain (Max)	5 GHz	3.3 dBi
	2.4 GHz	3 dBi
EIRP (Adjusted as per country regulations)	5 GHz	26.3 dBm
	2.4 GHz	27 dBm
Rating	802.3 at PoE+ (Class 4) (Fully functional with all components)	
	48V DC2.0 0.5A - Fully functional with all components	

Physical Interfaces	
Ethernet	WAN: 1 x 10/100/1000/2.5G N Base -T ethernet, Auto MDIX, RJ-45 with 802.3at PoE
	LAN: 3 x 10/100/1000 Base -T ethernet, Auto MDIX, RJ-45
	PoE out/LAN: 1 x 10/100/1000 Base-T Ethernet, Auto-MDIX, RJ-45, Supports 802.3af PoE out while the system is powered by 802.3at
	802.3bz specifications, 802.3az Energy Efficient Ethernet (EEE)
	Pass-Thru (Input and Output): 2 x RJ45 based Ethernet
Console	1 x RJ-45 Ethernet
USB	1 x USB 2.0
Buttons	Restart/Reset
LED Indicators	SYS, 2.4 GHz, 5 GHz, WAN, LAN
Management	
Device Management	Standalone, Local (web UI), SSH (CLI)
	Quantum Rudder (Controller based)
	Quantum Rudder (On-premises VM)
	Quantum Rudder appliances (RR-200, RR-300, RR400)
	Through NMS using SNMP MIBs
	Local device web management
Device /System Monitoring	SNMP v1, v2c, v3, Syslog
NTP Server Configuration	Supported
Traffic Monitoring	Application Statistics
	IPDR Logs (IPFix ,Netflow v9)
	URL Logs (Syslog)
Controller DR (Disaster Recovery)	Supported
Device Security	
Certificate	Locally-significant certificates using PKI
Controller Communication	Encrypted
Port Access	802.1x RADIUS supplicant
Application Integration	
PM WANI,	
NMS Integration - ZABBIX, PRTG Monitor, Open NMS	
SIEM Integration- Splunk, IBM QRaadar (Syslog format)	
Environmental	
Operating Temperature	-10°C (14°F) to 55°C (131°F)
Humidity	Up to 95%, non-condensing
Standard	Plenum-rated (UL2043)
Physical	
Dimensions	16 cm (L) x 8.6 cm (W) x 2.9 cm (H)
Weight	0.26 kg (0.57 lbs)

Mounting Kit	Ceiling Mount, Wall mount
Firmware Management	
Cloud-managed firmware update	
Scheduled firmware and security update	
Firmware upgrade via Access Point local GUI	

ORDERING INFORMATION

QN-H-725	The Quantum Networks QN-H-725 is a dual-band 802.11be in-room wireless access point with 2x2:2 streams in the 5 GHz, and 2.4 GHz bands. It features 1x2.5G N Base-T Ethernet port, 4x1G Base-T Ethernet ports, 2xPassthru ports and 802.3at PoE+ support. The access point includes a 3-year limited liability manufacturer's warranty. Does not include PoE injector or power adaptor. Does not include cloud controller license.