IN-ROOM ACCESS POINT
QN-H-705

The QN-H-705 is a Wi-Fi 7 (802.11be) in-wall access point designed for hospitality, student housing, serviced apartments, and residential environments. It delivers high-speed, reliable wireless connectivity with simplified deployment and centralized management.

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

PRODUCT OVERVIEW

Advanced technologies such as OFDMA, BSS Coloring, and 4096-QAM (4K QAM) improve network efficiency, reduce interference, and deliver faster wireless performance for modern applications.

Its compact in-wall design provides both wired and wireless connectivity while blending seamlessly into room interiors. Integrated cloud management enables easy provisioning, monitoring, and ongoing network operations.

KEY FEATURES

Enterprise-Grade Wi-Fi 7 Performance

Built on the latest Wi-Fi 7 (802.11be) standard, delivering enhanced wireless performance, higher throughput, lower latency, and improved network efficiency for modern connectivity demands.

Advanced Wireless Optimization

Supports OFDMA, BSS Coloring, and 4096-QAM (4K QAM) to maximize spectrum utilization, reduce interference, and achieve higher data rates.

Intelligent Client Experience

Features Target Wake Time (TWT) and Beacon Protection to improve device efficiency, enhance security, and optimize battery life for connected devices.

Compact In-Wall Design with Wired Access

Purpose-built for in-room deployments, combining high-performance wireless connectivity with integrated Ethernet ports for IP phones, smart TVs, IPTV systems, and workstations.

Centralized Cloud Management

Managed through the Quantum Rudder platform, enabling simplified provisioning, monitoring, troubleshooting, firmware upgrades, analytics, and policy enforcement from a single dashboard.

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	
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	
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	
	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	Beacon Protection	Target wake time
	Multi-RU	BSS colouring
	Preamble puncturing	Spatial reuse
	Orthogonal frequency division multiple access (OFDMA)	
Advance Features	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	

Diagnostics		
Network Diagnostics	Ping, Traceroute, Nslookup, Internet speed, Host discovery, Port connectivity, ARP scanner	
Networking		
Ethernet WAN	WAN (DHCP/Static/PPPoE)	
DHCP Server	4 Scope, DHCP lease, DHCP MAC reservation, DNS proxy	
WAN Security	Ethernet port block management	
PPP Interface	PPPoE	
DNS	Static, Caching, Dynamic DNS	
NAT	Masquerade (SNAT), Port forwarding (DNAT)	
VLAN Support	802.1Q (1 per BSSID), Port-based (Tagged, untagged)	
IGMP	IGMP v2	
	IGMP Snooping	
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 256 clients per Access point	
SSID	Up to 16 per access point (16 per Radio)	
RF		
Maximum Aggregate Transmit Power (Adjusted as per country regulations)	5 GHz	22 dBm
	2.4 GHz	23 dBm
Antenna Type	Built-in integrated antenna for both radios	
Antenna Gain (Max)	5 GHz	3 dBi
	2.4 GHz	3 dBi
EIRP (Adjusted as per country regulations)	5 GHz	25 dBm
	2.4 GHz	26 dBm
Rating	802.3 at PoE+ (Class 4) (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: 1 x 10/100/1000 Base -T ethernet, Auto MDIX, RJ-45	
	802.3bz specifications, 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 (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
Device Security	
Certificate	Locally-significant certificates using PKI
Controller Communication	Encrypted
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 40°C (104°F)
Humidity	Up to 95%, non-condensing
Standard	Plenum-Rated (UL2043)
Physical	
Dimensions	8.6 cm (L) x 8.6 cm (W) x 4.3 cm (H)
Weight	0.22 kg (0.48 lbs)
Mounting Kit	Wall mount
Firmware Management	
Cloud-managed firmware update	
Scheduled firmware and security update	
Firmware upgrade via Access Point local GUI	

ORDERING INFORMATION

QN-H-705	The Quantum Networks QN-H-705 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 & 1x1G Base-T Ethernet ports. 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.