INDOOR ACCESS POINT
QN-I-720

QUANTUM®
N E T W O R K S

The Quantum Networks QN-I-720 Wi-Fi 7 indoor access point delivers multigigabit speeds, robust security, and resilient connectivity for high-density environments. With enhanced speed, capacity, and ultra-low latency, Wi-Fi 7 transforms streaming, gaming, and IoT experiences—ideal for hospitality, education, MDUs, public venues, and service providers.

Up to 9.3 Gbps Data Rate

5 GbE Connectivity

2.4 GHz - 2x2, 5 GHz – 2x2, 6 GHz – 2x2

MU-MIMO With OFDMA

3 Years Warranty

PRODUCT OVERVIEW

The QN-I-720 Wi-Fi 7 (802.11be) indoor access point features a 2x2 MU-MIMO configuration, multi-link operation (MLO) for channel aggregation and 4K QAM for higher throughput and lower latency. It unlocks the 6 GHz band, more than doubling the available capacity, making it an advanced connectivity solution tailored for high-performance environments and modern, high-traffic demands.

KEY FEATURES

Wi-Fi 7 Standard
The QN-I-720 provides extensive coverage across the 2.4 GHz, 5 GHz, and 6 GHz bands, achieving a maximum tri-band aggregate data rate of 9.3 Gbps. It also offers 5 GbE connectivity to ensure business continuity for mission-critical applications.

Extend the Benefits of Wi-Fi 7
The QN-I-720 access point, based on the 802.11be standard, provides efficiency and security enhancements on the 6 GHz band. It fully supports Wi-Fi 7 features like OFDMA and BSS Coloring and introduces new capabilities such as wide 320 MHz bandwidth channels, multi-link operation (MLO) for channel aggregation and failover and 4096 QAM (4K QAM) for higher peak data rates.

Unified Security Center for Wireless and Wired Network Protection
Quantum Hawkeye streamlines wireless security through automated device categorization using proprietary intelligence. It defends against rogue access points, Wi-Fi DoS attacks, and other threats—ensuring strong protection across wired and wireless networks, while boosting core network security to help administrators detect and mitigate risks with confidence.

Versatile management options
Experience versatile management with options including Quantum Rudder (controller-based, on-premises VM, RR-200/300/400 appliances), SNMP-based NMS, and local web management.

Theft prevention functionality
Ensure robust theft prevention with secure access point locking, restricting use to designated networks until proper decommissioning.

The Wi-Fi 7 QN-I-720 Access Point comes IPv6-ready for future-proof network compatibility.

www.qntmnet.com

KEY SPECIFICATIONS

Wi-Fi		
Wi-Fi Standards	6 GHz	IEEE 802.11a/n/ac/ax/be
	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	6 GHz	802.11be@ 320 MHz: 5765 Mbps
		802.11be@ 160 MHz: 2882 Mbps
		802.11be@ 80 MHz: 1441 Mbps
		802.11be@ 40 MHz: 688 Mbps
		802.11be@ 20 MHz: 344 Mbps
	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	6 GHz	-95 dBm
	5 GHz	-98 dBm
	2.4 GHz	-93 dBm
Supported Channels	6 GHz	1-29, 33-61, 65-93, 97-125, 129-157, 161-189, 193-233 (UNII-1, UNII-2A, UNII-2C, UNII-3, UNII-4, UNII-5, UNII-6, UNII-7, UNII-8 compliant) (As per country regulations)
	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	6 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) 5.925–6.425 GHz(U-NII-5), 6.425–6.525 GHz(U-NII-6), 6.525–6.875 GHz(U-NII-7), 6.875–7.125 GHz(U-NII-8)

		(As per country regulations)
	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 6GHz-OFDMA with MU-MIMO
	2x2:2	Streams in 5GHz-OFDMA (802.11ax) 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	20/40/80/160/320 (EHT) 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

	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	Target wake time
	Multi-Link Operation
	BSS colouring
	Spatial reuse
	Orthogonal frequency division multiple access (OFDMA)
	Preamble puncturing
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 and 320-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 AP/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)
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 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 (With BLE)
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	6 GHz	5765 Mbps (802.11be)
	5 GHz	2882 Mbps (802.11be)
	2.4 GHz	688 Mbps (802.11be)
Client Capacity	Up to 1536 clients per Access point	
SSID	Up to 48 per access point (16 per Radio for 2.4 & 5 GHz, 8 per Radio for 6 GHz)	

RF		
Maximum Aggregate Transmit Power (Adjusted as per country regulations)	6 GHz	24 dBm
	5 GHz	25 dBm
	2.4 GHz	26 dBm
Antenna Type	Built-in integrated antenna for both radios and BLE	
Antenna Gain (Max)	6 GHz	5 dBi
	5 GHz	6 dBi
	2.4 GHz	6 dBi
	BLE	3.7 dBi
EIRP (Adjusted as per country regulations)	6 GHz	29 dBm
	5 GHz	31 dBm
	2.4 GHz	32 dBm
Power		
Rating	802.3 at PoE+ (Class 4) (Fully functional with all components)	
	USB PD3.0 in 15-20V DC 2A - Fully functional with all components	
Physical Interfaces		
Ethernet	WAN: 1 x 10/100/1000/2.5/5G 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)	
Console	1 x Serial Console	
Kensington Security Slot	Available	
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	
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	0°C (32°F) to 55°C (131°F)
Humidity	Up to 95%, non-condensing
Standard	Plenum-rated (UL2043)

Physical	
Dimensions	17.9 cm (L) x 19.5 cm (W) x 3.5 cm (H)
Weight	0.907 kg (1.99 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	

Certifications and Compliances		
	Parameter	Standards
Regulatory (IN)	IPv6 Ready	
	ETA (WPC)	NABL 2.4, NABL 5

ORDERING INFORMATION

QN-I-720	The Quantum Networks QN-I-720 is a tri-band 802.11be indoor wireless access point with 2x2:2 streams in the 6 GHz, 5 GHz, and 2.4 GHz bands. It features 1x1/2.5/5G N Base-T Ethernet port, 1x1G Base-T Ethernet port, onboard BLE support, 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.

Rev.4.2