

INDOOR ACCESS POINT

QN-I-740



The **QN-I-740** is a premium enterprise-grade Wi-Fi 7 (802.11be) indoor access point designed for high-performance environments. It supports tri-band 4-stream operation across 6 GHz, 5 GHz, and 2.4 GHz bands, delivering an impressive aggregate data rate of over 18.7 Gbps. Advanced technologies such as Multi-Link Operation (MLO), 4K QAM, Preamble Puncturing, Uplink/Downlink OFDMA, and MU-MIMO ensure exceptional throughput, low latency, and optimized spectrum utilization.

PRODUCT OVERVIEW

By unlocking the 6 GHz band, the QN-I-740 more than doubles the available capacity compared to previous generations. This makes it an ideal solution for high-density deployments in large enterprises, university campuses, and healthcare facilities—where reliable, high-speed connectivity is critical to supporting modern, high-traffic demands.

KEY FEATURES

Wi-Fi 7 Standard

The QN-I-740 provides extensive coverage across 2.4 GHz, 5 GHz and 6 GHz, achieving a maximum tri-band aggregate data rate of 18.7 Gbps. It also offers 10 GbE connectivity along with 10G SFP+ port that ensure business continuity for mission-critical applications.

Extend the Benefits of Wi-Fi 7

The QN-I-740 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 automates wireless device categorization and safeguards against rogue APs, Wi-Fi DoS attacks, and more—ensuring end-to-end protection while strengthening core network security for smarter risk management.

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

Secure your network with robust theft prevention. Lock access points to their assigned networks, preventing unauthorized use elsewhere. Even if stolen, they remain unusable until properly decommissioned—protecting network integrity at all times.



Up to 18.7 Gbps
Data Rate



10G SFP+
Connectivity



2.4 GHz - 4x4,
5 GHz - 4x4,
6 GHz - 4x4



MU-MIMO
With OFDMA



3 Years
Warranty

The Wi-Fi 7 QN-I-740 Access Point comes IPv6-ready for future-proof network compatibility.

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: 11529 Mbps
		802.11be@ 160 MHz: 5765 Mbps
		802.11be@ 80 MHz: 2882 Mbps
		802.11be@ 40 MHz: 1376.5 Mbps
		802.11be@ 20 MHz: 688 Mbps
	5 GHz	802.11be@ 160 MHz: 5765 Mbps
		802.11be@ 80 MHz: 2882 Mbps
		802.11be@ 40 MHz: 1376.5 Mbps
		802.11ax@ 160 MHz: 4804 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: 2166.6 Mbps
	802.11ac@ 40 MHz: 1000 Mbps	
	802.11ac@ 20 MHz: 481.1 Mbps	
	2.4 GHz	802.11be@ 40 MHz: 1376.5 Mbps
		802.11be@ 20 MHz: 688 Mbps
		802.11ax@ 40 MHz: 1147 Mbps
802.11ax@ 20 MHz: 573.5 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	4x4:4	Streams in 6GHz-OFDMA with MU-MIMO
	4x4:4	Streams in 5GHz-OFDMA (802.11ax) and OFDM (802.11ac) with MU-MIMO
	4x4:4	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, 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, HotSpot 2.0	
Native Guest Portal	Customized Template	Yes (User-defined, 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, Internet speed, Host discovery, Port connectivity, PCAP capture (Wired and Wireless), ARP scanner	
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	Multi-Link Operation (MLO)	Target wake time
	Multiple BSSID (MBSSID)	BSS colouring
	Reduced Neighbor Report (RNR)	Spatial reuse
	Beacon Protection	Preamble puncturing
	Multi-RU	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 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)	
USB WAN	USB dongle (3G/4G), Mobile tethering (USB)	
Protocols	Static, RIP v2, OSPF v2	
Tunneling	GRE, IPSec, WireGuard, 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 Capable	Integrated BLE	
	(Zigbee, Matter & Thread support)*	
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	11529 Mbps (802.11be)
	5 GHz	5765 Mbps (802.11be)
	2.4 GHz	1376 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	22 dBm
	5 GHz	23 dBm
	2.4 GHz	24 dBm

Antenna Type	Built-in integrated antenna for both radios and BLE	
Antenna Gain (Max)	6 GHz	4 dBi
	5 GHz	4 dBi
	2.4 GHz	4 dBi
	BLE	4 dBi
EIRP (Adjusted as per country regulations)	6 GHz	26 dBm
	5 GHz	27 dBm
	2.4 GHz	28 dBm
Power		
Rating	802.3 at PoE+ / bt PoE++ (Class 6) (Fully functional with all components)	
	54V DC2.0 1A - Fully functional with all components	
Physical Interfaces		
Ethernet	WAN: 1 x 10/100/1000/2.5/5/10G N Base -T ethernet, Auto MDIX, RJ-45 with 802.3bt PoE	
	LAN: 1 x 10/100/1000/2.5G N Base-T Ethernet, Auto MDIX, RJ-45	
	802.3bz specifications, 802.3az Energy Efficient Ethernet (EEE)	
SFP	WAN/LAN: 1 x 10G Base-X (SX / LX) SFP+ port	
USB	1 x USB 2.0	
Buttons	Restart/Reset	
LED Indicators	WAN, LAN, SFP+	
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 QRadar (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	22 cm (L) x 22 cm (W) x 4.2 cm (H)
Weight	1.2 kg (2.65 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-740	The Quantum Networks QN-I-740 is a tri-band 802.11be indoor wireless access point with 4x4:4 streams in the 6 GHz, 5 GHz, and 2.4 GHz bands. It features 1x1/2.5/5/10G N Base-T Ethernet port, 1x1/2.5G N Base-T Ethernet port, 1x10G Base-X SFP+ port, onboard BLE support, and 802.3at/bt PoE+/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.
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**Expected in future software release*