

# 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		
<b>Wi-Fi Standards</b>	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
<b>Operating Mode</b>	Access point, Router, Mesh mode	
<b>Networking Mode</b>	IPv4, IPv6, IPv4v6 (Dual-stack), Gateway mode (NAT), Bridge mode	
<b>Maximum Data Rates</b>	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		
<b>Maximum Receiver Sensitivity</b>	6 GHz	-95 dBm
	5 GHz	-98 dBm
	2.4 GHz	-93 dBm
<b>Supported Channels</b>	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
<b>Channel Bands</b>	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)
<b>Modulation Schemes</b>	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
<b>Radio Chains and Spatial Streams</b>	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
<b>Channel Size</b>	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
<b>Wireless Security</b>	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		
<b>External DB Support</b>	Radius, Active directory, LDAP, TACACS+	
<b>Web Authentication</b>	QN-Secure+, RADIUS, Active directory, LDAP	
<b>User Authentication</b>	Methods	Captive portal, QN-Secure+, 802.1x (Radius)
	Directory	QIM, Microsoft active directory, LDAP, Gsuite, Oauth
	Mode	Via Controller /Access points
<b>Roaming</b>	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	
<b>Channel / Tx Power Management</b>	Auto / Manual channel selection	
	Speedy channel for RF optimization	
	Channel switch for RF optimization	
	ATP-Automatic Transmit Power management	
<b>Client Management</b>	Band steering	
	Band balancing	
	Airtime fairness	
<b>Guest Management</b>	WISPr – Captive portal, HotSpot 2.0	
<b>Native Guest Portal</b>	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
<b>Diagnostics</b>	Ping, Traceroute, Nslookup, Internet speed, Host discovery, Port connectivity, PCAP capture (Wired and Wireless), ARP scanner	
<b>Access Control List</b>	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	
<b>Meshing</b>	Wireless (singlehop / multihop)	
	Wired	
<b>WDS</b>	Point to Point	
	Point to MultiPoint	
<b>Radio Management</b>	DTIM interval	
	OFDM Only (Disables 802.11b)	
	BSS Rate and management rate	
	UAPSD (Power save)	
	Inactivity timeout	
	Radio mode control	
	RTS/CTS Threshold	
<b>Network Management</b>	IEEE 802.11d/h (DFS) support	
	LLDP discovery	

	Proxy ARP
	DHCP options 43, 60 and 82
	Port forwarding in router mode
<b>Administration</b>	WLAN scheduling
	Internet speed test
	Schedule reboot
<b>Radius Integration</b>	CoA (Change of Authorization)
	MAC Authentication
	Dynamic VLAN
<b>Wi-Fi7/6 Features</b>	Target wake time
	Multi-Link Operation
	BSS colouring
	Spatial reuse
	Orthogonal frequency division multiple access (OFDMA)
	Preamble puncturing
<b>Advance Features</b>	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
<b>HawkEye – Rogue AP/WIDS / WIPS / NIPS</b>	
<b>Rogue AP</b>	Rogue SSID
	MAC Spoofing
	SSID Spoofing
	Honeypot / Evil twin attack
	Null Probe request attack
<b>WIDS</b>	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
<b>WIDS/WIPS</b>	Deauth attack
	Disassoc attack

	Omerta attack	
	Password guessing attack	
	Ad-Hoc connection	
<b>NIPS</b>	Dos attack, DDos attack	
	Port scanning	
<b>Diagnostics</b>		
<b>Network Diagnostics</b>	Ping, Traceroute, Nslookup, Internet speed, Host discovery, Port connectivity, ARP scanner	
<b>RF Diagnostics</b>	PCAP capture, Spectrum Analysis, Spectrum Channel metric, Spectrum FFT Duty cycle, WiFi Analyzer, Airbender	
<b>Networking</b>		
<b>SFP/Ethernet WAN</b>	WAN (DHCP/Static/PPPoE)	
<b>USB WAN</b>	USB dongle (3G/4G), Mobile tethering (USB)	
<b>Protocols</b>	Static, RIP v2, OSPF v2	
<b>Tunneling</b>	GRE, IPSec, Wire guard, OVPN	
<b>Multi WAN</b>	Yes, Auto Failover	
<b>DHCP Server</b>	4 Scope, DHCP lease, DHCP MAC reservation, DNS proxy	
<b>WAN Security</b>	Ethernet / USB port block management	
<b>PPP Interface</b>	PPPoE, L2TP, L2TP with IPSec	
<b>DNS</b>	Static, Caching, Dynamic DNS	
<b>NAT</b>	Masquerade (SNAT), Port forwarding (DNAT)	
<b>VLAN Support</b>	802.1Q (1 per BSSID), Port-based (Tagged, untagged)	
<b>IoT</b>	Supported (With BLE)	
<b>IGMP</b>	IGMP v2	
	IGMP Snooping	
<b>Supported Features</b>	Safe Search, ALG Control	
	UPNP, DMZ Host, Adblock	
<b>Quality of Service</b>		
Auto QoS, 802.11e,		
Manual QoS (DSCP based, Voice, Video, BE and BK)		
WMM, 802.1p		
WiFi Calling		
DiffServ		
DSCP Tagging		
<b>Performance &amp; Capacity</b>		
<b>Peak PHY Rates</b>	6 GHz	11529 Mbps (802.11be)
	5 GHz	5765 Mbps (802.11be)
	2.4 GHz	1376 Mbps (802.11be)
<b>Client Capacity</b>	Up to 1536 clients per Access point	
<b>SSID</b>	Up to 48 per access point (16 per Radio for 2.4 & 5 GHz, 8 per Radio for 6 GHz)	

RF		
<b>Maximum Aggregate Transmit Power (Adjusted as per country regulations)</b>	6 GHz	22 dBm
	5 GHz	23 dBm
	2.4 GHz	24 dBm
<b>Antenna Type</b>	Built-in integrated antenna for both radios and BLE	
<b>Antenna Gain (Max)</b>	6 GHz	4 dBi
	5 GHz	4 dBi
	2.4 GHz	4 dBi
	BLE	4 dBi
<b>EIRP (Adjusted as per country regulations)</b>	6 GHz	26 dBm
	5 GHz	27 dBm
	2.4 GHz	28 dBm
Power		
<b>Rating</b>	802.3 at PoE+ / bt PoE++ (Class 6) (Fully functional with all components)	
	54V DC2.0 1A - Fully functional with all components	
Physical Interfaces		
<b>Ethernet</b>	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)	
<b>SFP</b>	WAN/LAN: 1 x 10G Base-X (SX / LX) SFP+ port	
<b>USB</b>	1 x USB 2.0	
<b>Buttons</b>	Restart/Reset	
<b>LED Indicators</b>	WAN, LAN, SFP+	
Management		
<b>Device Management</b>	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	
<b>Device /System Monitoring</b>	SNMP v1, v2c, v3, Syslog	
<b>NTP Server Configuration</b>	Supported	
<b>Traffic Monitoring</b>	Application Statistics	
	IPDR Logs ( IPFix , Netflow v9)	
	URL Logs (Syslog)	
<b>Controller DR (Disaster Recovery)</b>	Supported	

Device Security	
<b>Certificate</b>	Locally-significant certificates using PKI
<b>Controller Communication</b>	Encrypted
<b>Port Access</b>	802.1x RADIUS supplicant
Application Integration	
PM WANI,	
NMS Integration - ZABBIX, PRTG Monitor, Open NMS	
SIEM Integration - Splunk, IBM QRadar (Syslog format)	
Environmental	
<b>Operating Temperature</b>	-10°C (14°F) to 55°C (131°F)
<b>Humidity</b>	Up to 95%, non-condensing
<b>Standard</b>	Plenum-rated (UL2043)
Physical	
<b>Dimensions</b>	22 cm (L) x 22 cm (W) x 4.2 cm (H)
<b>Weight</b>	1.2 kg (2.65 lbs)
<b>Mounting Kit</b>	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
<b>Regulatory (IN)</b>	IPv6 Ready	
	ETA (WPC)	NABL 2.4, NABL 5

## ORDERING INFORMATION

<b>QN-I-740</b>	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.
-----------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------