INDOOR ACCESS POINT
QN-I-470

Up to 2.9 Gbps
Data Rate

2.5 GbE
Connectivity

2.4 GHz - 2x2,
5 GHz – 4x4

MU-MIMO
With OFDMA

3 Years
Warranty

To meet the escalating demand for greater Wi-Fi capacity across diverse environments such as offices, classrooms and retail spaces, the QN-I-470 Access Point stands out with state-of-the-art Wi-Fi 6 (802.11ax) technology. This advanced technology not only provides increased capacity but also offers expanded coverage and superior performance, particularly in dense and challenging network environments.

PRODUCT OVERVIEW

Crafted as a mid-range dual-band, dual-concurrent access point. This device accommodates six spatial streams (4x4:4 in 5GHz, 2x2:2 in 2.4GHz), delivering impressive peak data rates of up to 2.9 Gbps.

OFDMA technology ensures exceptionally efficient high-speed connectivity, outstanding coverage and seamless performance in densely populated areas such as railway stations, hospitals, malls, public spaces and universities.

KEY FEATURES

Exceptional Wi-Fi performance
Packed with the latest advancements in high-efficiency 11ax technology, the QN-I-470 Access Point supports key Wi-Fi 6 features such as OFDMA, Target Wake Time, BSS coloring and spatial reuse. Elevate Wi-Fi performance substantially by reducing interference and expanding coverage through the utilization of a range of directional antennas.

Increased device capacity
Accommodate more devices simultaneously with six MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios, thereby improving overall device performance.

Build next generation guest Wi-Fi networks
Design and implement advanced guest Wi-Fi networks for the next-generation, featuring cutting-edge customer service hotspots equipped with integrated splash portals and BLE Beacons.

Theft prevention functionality
Incorporate theft prevention measures by implementing a robust access point locking mechanism. Ensure that access points remain exclusive to their designated networks until properly decommissioned from the existing network. This security feature will safeguard against unauthorized deployment in other networks, enhancing overall network integrity.

Versatile management options
Experience versatility in management, offering a range of options such as cloud-based management, or operations without a dedicated controller.

QN-I-470 Wi-Fi 6 access point certified by Wi-Fi Alliance under Wi-Fi certified 6.

Wi-Fi		
Wi-Fi Standards	5 GHz	IEEE 802.11a/n/ac/ax
	2.4 GHz	IEEE 802.11b/g/n/ax
Operating Mode	Access point, Router, Mesh mode	
Networking Mode	IPv4, IPv6, IPv4v6 (Dual-stack), Gateway mode (NAT), Bridge mode	
Maximum Data Rates	5 GHz	802.11ax@ 160 MHz: 2402 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: 2166.7 Mbps
		802.11ac@ 40 MHz: 1000 Mbps
		802.11ac@ 20 MHz: 481.8 Mbps
	2.4 GHz	802.11ax@ 40 MHz: 573.5 Mbps
		802.11ax@ 20 MHz: 286.8 Mbps
		802.11n@ 40 MHz: 500 Mbps
		802.11a/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	802.11ax	BPSK, QPSK, 16-QAM, 64-QAM, 256- QAM, 1024-QAM
	802.11ac	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
	802.11n	BPSK, QPSK, 16-QAM, 64-QAM, 1024-QAM
	802.11b/g	BPSK, QPSK, CCK
Radio Chains and Spatial Streams	4x4:4	Streams in 5GHz-OFDMA with MU-MIMO
	2x2:2	Streams in 2.4GHz- OFDMA 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
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
Radius Integration	CoA (Change of Authorization)
	MAC Authentication
	Dynamic VLAN
Administration	WLAN scheduling
	Internet speed test
	Schedule reboot
Wi-Fi6 Features	Target wake time
	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 and 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	
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 (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	5 GHz	2402 Mbps (802.11ax)
	2.4 GHz	573.5 Mbps (802.11ax)
Client Capacity	Up to 1024 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	26 dBm
Antenna Type		Built-in integrated antenna for both radios and BLE
Antenna Gain (Max)	5 GHz	7.6 dBi
	2.4 GHz	5.5 dBi
	BLE	5.5 dBi
EIRP (Adjusted as per country regulations)	5 GHz	30.6 dBm
	2.4 GHz	31.5 dBm
Power		
Rating	802.3 af PoE / at PoE+ (Class 4) (Fully functional with all components)	
	12V DC 2A - 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 10/100/1000/2.5G N Base -T ethernet, Auto MDIX, RJ-45 with 802.3at PoE	
	802.3bz specifications, 802.3az Energy Efficient Ethernet (EEE)	
Console	1 x RJ-45 Ethernet	
USB	1 x USB 2.0 port / USB 3.0 (On selected variant)	
Buttons	Restart/Reset	
LED Indicators	Power, 2.4 GHz, 5 GHz, Uplink	
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	
Environmental	
Operating Temperature	0°C (32°F) to 55°C (131°F)
Humidity	Up to 95%, non-condensing
Standard	Plenum-rated (UL2043)
Physical	
Dimensions	19.5 cm (L) x 20.1 cm (W) x 3.98 cm (H)
Weight	0.7 kg (1.54 lbs)
Mounting Kit	Suspended ceiling mount, Ceiling mount, Wall mount
Firmware Management	
Cloud-managed firmware update	
Scheduled firmware and security update	
Firmware upgrade via Access Point local GUI	

Certification and Compliances		
	Parameter	**Standards**
Regulatory (USA)	FCC	
Regulatory (IN)	BIS	IS-13252, IEC-60950
	IEC-60215	
	MTCTE (ER)	EMI/EMC (IEC / EN-61000* & CISPR 32), Safety (IS-13252 & IEC-60950), Radio, Technical (IPv4 & IPv6)
	IPv6 Ready	
	ETA (WPC)	NABL 2.4, NABL 5
Industry Association	Wi-Fi Alliance – WI-Fi6 Certified	
Environmental	CE, RoHS	
Dry Heat, Cold, Thermal Cyclic, Damp Heat	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-14, IEC 60068-2-30	

ORDERING INFORMATION

Part Code	Description
QN-I-470	Quantum Networks QN-I-470 dual-band 802.11ax indoor wireless access point, 4x4:4 streams in 5 GHz and 2x2:2 streams in 2.4GHz, 2x1/2.5G Base-T Ethernet ports, onboard BLE support, 802.3 af/at PoE support. includes 3-year limited liability manufacturer's warranty for the access point. Does not include PoE injector or power adaptor. Does not include cloud controller license.