# INDOOR ACCESS POINT QN-I-210







Up to 1.7 Gbps Data Rate



1 GbE Connectivity



2.4 GHz - 2x2, 5 GHz - 2x2



MU-MIMO With OFDMA



3 Years Warranty

In areas with a medium population density, the demand for wireless infrastructure is frequently high due to consistent data-intensive applications and content usage. Users in these areas expect dependable and robust connectivity. QN-I-210 effectively fulfils these needs without incurring excessive expenses.

## **PRODUCT OVERVIEW**

The QN-I-210 represents a cutting-edge Wi-Fi 6 access point designed to cater to the escalating mobility demands of modern organizations. With an impressive maximum data rate of up to 1.7 Gbps, this device boasts lightning-fast data transfer speeds. This access point provides the fast, secure, dependable and uninterrupted performance essential for enterprises of all sizes.

Leveraging simultaneous dual-band, 802.11ax wireless networking solutions, the QN-I-210 harnesses the power of OFDMA technology to deliver remarkably efficient high-speed connectivity, expansive coverage and uninterrupted performance in densely populated environments.

Managed by Quantum Rudder, the QN-I-210-PLUS includes anti-theft features designed to protect assets from unauthorized usage.

# **KEY FEATURES**

## **Exceptional Wi-Fi performance**

Utilizing cutting-edge Wi-Fi 6 (802.11ax) technology for performance enhancement and interference mitigation, it provides extended coverage and an unmatched user experience.

#### Mesh technology

Effortlessly establish a self-organizing and self-repairing mesh network using Mesh technology, significantly reducing the need for costly wiring and complex setups.

#### **Economical enterprise-level solution**

The QN-I-210 provides an exceptional price-to-performance ratio by delivering an extended range at a budget-friendly cost.

#### Three years warranty

Three years limited liability manufacturer's warranty from the date of activation of the device.

The access point features include support for 1024 QAM, BSS coloring, Target Wake Time, Spatial Reuse which collectively contribute to a more efficient, faster and reliable wireless network, catering to the growing demands of high-bandwidth applications and providing an enhanced user experience.



Wi-Fi			
Wi-Fi Standards	5 GHz	IEEE 802.11a/n/ac/ax	
WI-FI Standards	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		
		802.11ax@ 80 MHz:1201 Mbps	
		802.11ax@ 40 MHz: 573.5 Mbps	
	5 GHz	802.11ax@ 20 MHz: 286.8 Mbps	
		802.11ac@ 80 MHz: 1083.3 Mbps	
		802.11ac@ 40 MHz: 500 Mbps	
Maximum Data Rates		802.11ac@ 20 MHz: 240.5 Mbps	
		802.11ax@ 40 MHz: 573.5Mbps	
		802.11ax@ 20 MHz: 286.8 Mbps	
	2.4 GHz	802.11n@ 40 MHz: 500 Mbps	
		802.11a/g@ 20 MHz: 54 Mbps	
		802.11b@ 20 MHz: 11 Mbps	
Maximum Receiver	5 GHz	-98 dBm	
Sensitivity	2.4 GHz	-93 dBm	
	5 GHz	36-64, 100-144, 149-165 (UNII-1, UNII-2, UNII-2e, UNII-3	
Supported Channels		compliant) (As per country regulations)	
Supported Chamileis	2.4 GHz	1-13 (As per country regulations)	
	Dynamic frequency sel	Dynamic frequency selection (DFS) optimizes the use of available RF spectrum	
	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)	
<b>Channel Bands</b>	5 GHZ	(As per country regulations)	
	2.4 GHz	2.4-2.484GHz (ISM) (As per country regulations)	
	802.11ax	BPSK, QPSK, 16-QAM, 64-QAM, 256- QAM, 1024-QAM	
	802.11ac	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM	
Modulation Schemes	802.11a/g/n	BPSK, QPSK, 16-QAM, 64-QAM	
	802.11b	BPSK, QPSK, CCK	
Radio Chains and	2x2:2	Streams in 5GHz-OFDMA with MU-MIMO	
Spatial Streams	2x2:2	Streams in 2.4GHz- OFDMA with MU-MIMO	
	802.11n	20/40 (HT) MHz	
Channel Size	802.11ac	20/40/80 (VHT) MHz	
	802.11ax	20/40/80 (HE) MHz	
	WPA3-AES personal, Enhanced open (OWE)		
	WPA3-Enterprise (802.1x/EAP-TLS, EAP-TTLS)		
Wireless Security	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,		
	, -,		



	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		
	Methods	Captive portal, QN-Secure+, 802.1x (Radius)	
User Authentication	Directory	QIM, Microsoft active directory, LDAP, G suite, Oauth	
	Mode	Via Controller /Access points	
	IEEE 802.11k (Assisted R	Coaming)	
	IEEE 802.11v (BSS Trans	ition Management)	
	IEEE 802.11r (Fast BSS 1	Fransition (FT))	
Roaming	Pairwise Master Key (PM	MK) caching	
	Opportunistic key caching		
	Seamless roaming for captive portal users		
	Auto / Manual channel selection		
Channel / Tx Power	Speedy channel for RF optimization		
Management	Channel switch for RF optimization		
	ATP-Automatic Transmit Power management		
Radio Resource	Airbender RF	Dedicated mode	
Monitoring	monitoring	Concurrent overlay mode	
	Band steering		
Client Management	Band balancing		
	Airtime fairness		
Guest Management	WISPr – Captive portal,	HotSpot 2.0	
	Customized Template	Yes (User define, Theme based)	
Native Guest Portal	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	
	Force DHCP		
	URL & Application filtering / Whitelisting		
	Full Client Isolation, Deny inter-user bridging, Deny intra-VLAN traffic		
Access Control List	Bandwidth Restriction per SSID/User		
Access Control List	OS restriction		
	L2 (MAC) filtering		
	L3 (IP) / L4 (Port) filtering		
	MAX clients per radio		



	Internet freeze per SSID/User		
	Session control		
	Random MAC Detection		
	Wireless (singlehop / multihop)		
Meshing	Wired		
	DTIM interval		
	OFDM Only (Disables 802.11b)		
	BSS Rate and management rate		
Radio Management	UAPSD (Power save)		
	Inactivity timeout		
	Radio mode control		
	RTS/CTS Threshold		
Natural Managanan	IEEE 802.11d/h (DFS) support		
Network Management	LLDP discovery, SFlow		
	Proxy ARP		
	DHCP options 43, 60 and 82		
	Port forwarding in router mode		
Administration	WLAN scheduling		
	Internet speed test		
	Schedule reboot		
	CoA (Change of Authorization)		
Radius Integration	MAC Authentication		
	Dynamic VLAN		
	Target wake time		
	BSS colouring		
Wi-Fi 6 Features	Spatial reuse		
	Orthogonal frequency division multiple access (OFDMA)		
	Preamble puncturing		
	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		
Advance Features	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			
Rogue AP	Rogue SSID		
	MAC Spoofing		
	SSID Spoofing		
	Honeypot / Evil twin attack		



NIPS Port scar  Diagnostics Network Diagnostics  RF Diagnostics PCAP ca  Networking Ethernet WAN  Ad-Hoc of Ad-Hoc o	aceroute, Nslookup, Internet speed, Host discovery, Port connectivity, ARP		
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Network Diagnostics  RF Diagnostics  Ping, Trascanner  PCAP ca  Networking  Ethernet WAN  WAN (DE	apture		
RF Diagnostics PCAP ca Networking Ethernet WAN WAN (DE	apture		
Networking Ethernet WAN WAN (DE			
Ethernet WAN WAN (DI			
Protocols Static Pl	HCP/Static/PPPoE)		
Static, N	IP v2, OSPF v2		
<b>Tunneling</b> GRE, IPS	Sec, Wire guard, OVPN		
Multi-WAN Yes, Auto	o-Failover		
<b>DHCP Server</b> 4 Scope,	4 Scope, DHCP lease, DHCP MAC reservation, DNS proxy		
WAN Security Ethernet	Ethernet port block management		
PPP Interface PPPoE, L	PPPoE, L2TP, L2TP with IPSec		
<b>DNS</b> Static, Ca	Static, Caching, Dynamic DNS		
<b>NAT</b> Masquera	Masquerade (SNAT), Port forwarding (DNAT)		
VI AN SUPPORT	1 per BSSID or dynamic per user based on RADIUS),		
Port-bas	Port-based (Tagged, untagged)		
Supported Features	arch, ALG Control		
	UPnP, DMZ Host, Adblock		
Quality of Service			
Auto QoS, 802.11e,			
Manual QoS (DSCP based, Voice, Vid	deo, BE and BK)		
WMM			
802.1p			
WiFi Calling			
DiffServ			
Performance & Capacity			
Peak PHY Rates 5 GHz	1201 Mbps (802.11ax)		
2.4 GH:			
	Up to 256 clients per access point		
	Up to 16 per access point (8 per Radio)		
RF			
Maximum Aggregate Transmit Power  5 GHz	,		
(Adjusted as per country			
regulations)	Iz 25 dBm		



Performance & Capacity			
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	5 GHz	26 dBm	
country regulations)	2.4 GHz	28 dBm	
Power			
Detino	802.3 af PoE (Class 0) /at PoE+(Fully functional with all components)		
Rating	12V DC 2A - Fully functional with all components		
Physical Interfaces			
Ethernet	WAN: 1 x 10/100/1000 Base-T ethernet, Auto-MDIX, RJ-45 with 802.3at PoE		
Ethernet	LAN: 1 x 10/100/1000 B	ase-T ethernet, Auto-MDIX, RJ45	
	802.3az Energy Efficien	t Ethernet (EEE)	
Buttons	Restart/Reset		
Kensington Security Slot	Available		
LED indicators	Quick Setup, Cloud / Standalone		
Management			
	Standalone, Local (web UI), SSH (CLI)		
	Quantum Rudder (Controller based)		
Device Management	Quantum Rudder (On-premises VM)		
200100 Management	Quantum Rudder appliances (RR-200, RR-300, RR400)		
	Through NMS using SNMP MIBs		
	Local device web manag	gement	
Device / System monitoring	SNMP v1, v2c, v3, Syslog		
NTP Server Configuration	Supported		
Traffic Manitoring	Traffic Monitoring  URL Logs (Syslog)  IPDR Logs (IPFix , Netflow v9)		
Traffic Monitoring			
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 NM	1S	



Environmental		
Operating Temperature	-20°C (-4F) ~ +65°C (+149F)	
Humidity	5% ~ 100% non-condensing	
Standard	Plenum-rated (UL2043)	
Physical		
Dimensions	18.5 cm (L), 18.5 cm (W), 3.3 cm (H)	
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		
Certifications	Parameter	Standards
Regulatory (USA)	FCC	
	BIS	
	IPv6 Ready	
Regulatory (IN)	ETA (WPC)	NABL 2.4, NABL 5
	MTCTE (ER)	EMI/EMC (IEC / EN-61000* & CISPR 32), Safety (IS-13252 & IEC-60950), Radio, Technical (IPv4 & IPv6)
<b>Environmental Compliances</b>	CE, RoHS	

# **ORDERING INFORMATION**

Part Code	Description	
	Quantum Networks QN-I-210 dual-band 802.11ax indoor wireless access point,	
QN-I-210	2x2:2 streams, 2x1G Base-T Ethernet ports, 802.3 af/at PoE support. includes	
GN-1-210	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.	