INDOOR ACCESS POINT QN-I-210 PLUS

QUANTUM® NETWORKS

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-PLUS effectively fulfils these needs without incurring excessive expenses.

PRODUCT OVERVIEW

The QN-I-210-PLUS 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 / 3* 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-PLUS 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.

Up to 1.7 Gbps / 3* Gbps Data Rate

1 GbE Connectivity

2.4 GHz - 2x2, 5 GHz - 2x2

MU-MIMO With OFDMA

3 Years Warranty

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.

Theft prevention functionality
Access Point is locked for deployment in any other network until decommissioned from the existing network.

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

The device supports high EIRP with 5dBi antenna gain.

The access point features include support for 1024 QAM, BSS coloring, Target Wake Time, Spatial Reuse, 160 MHz channel bandwidth, 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
	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: 2400 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	802.11ax@ 40 MHz: 573.5Mbps
		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 (U-NII-1, U-NII-2A , U-NII-2C , 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)
	2.4 GHz	2.4-2.484GHz (ISM)
Modulation Schemes	802.11ax	BPSK, QPSK, 16-QAM, 64-QAM, 256- QAM, 1024-QAM
	802.11ac	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
	802.11a/g/n	BPSK, QPSK, 16-QAM, 64-QAM
	802.11b	BPSK, QPSK, CCK
Radio Chains and Spatial Streams	2x2:2	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,	

* Applicable only to QN-I-210-PLUS.HW2

Wireless Security	802.11 w MFP(Management Frame Protection)	
	MAC-based authentication	
	Captive portal based authentication	
	802.11i	
	Quantum Secure	
	Hide SSID in beacons	
WIPS/WIDS for Various Attack Signatures	Rogue Station Detection	
	Deauth attack detection, RTS and CTS abuse attack detection	
	Assoc attack detection, Fata jack tool detection	
	DHCP snooping server detection, Honeypot / Evil Twin attacks detection	
	Misconfigured AP detection	
	SSH Brute force attacks detection, Man in the middle attacks detection	
	Port scanning detection, Ad-Hoc connection detection, Password guessing attacks detection	
External DB Support	Radius, Active directory, LDAP	
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	
Radio Resource Monitoring	Airbender RF monitoring	Dedicated mode
		Concurrent overlay mode
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

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
	Full Client Isolation, Deny inter-user bridging, Deny intra-VLAN traffic
	Bandwidth Restriction per SSID/User
	OS restriction
	L2 (MAC) filtering
	L3 (IP) / L4 (Port) filtering
	MAX clients per radio
	Internet freeze per SSID/User
Meshing	Wireless (singlehop / multihop)
	Wired
Radio Management	DTIM interval
	OFDM Only (Disables 802.11b)
	BSS Rate and management rate
	UAPSD (Power save)
	Inactivity timeout
Network Management	IEEE 802.11d/h (DFS) support
	LLDP discovery ,SFlow
	Proxy ARP
	DHCP options 60 and 82
	Port forwarding in router mode
Administration	WLAN scheduling
	Internet speed test
	Schedule reboot
Wi-Fi 6 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

Networking		
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 or dynamic per user based on RADIUS), Port-based (Tagged, untagged)	
Quality of Service		
Auto-QoS, 802.11e,		
Manual QoS (DSCP based, Voice, Video, BE and BK)		
WMM		
802.1p		
Performance & Capacity		
Peak PHY Rates	5 GHz	1201 Mbps (802.11ax) / *2400 Mbps (802.11ax)
	2.4 GHz	573.5 Mbps (802.11ax)
Client Capacity	Up to 256 clients per access point	
SSID	Up to 16 per access point (8 per Radio)	
RF		
Maximum Aggregate Transmit Power	5 GHz	25 dBm (Adjusted as per country regulations)
	2.4 GHz	25 dBm (Adjusted as per country regulations)
Antenna Type		Built-in integrated antenna for both radios
Antenna Gain (Max)	5 GHz	5 dBi
	2.4 GHz	5 dBi
EIRP	5 GHz	30 dBm
	2.4 GHz	30 dBm
Power		
Rating	802.3 af PoE(Class 0) /at PoE+(Fully functional with all components)	
	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	
	LAN: 1 x 10/100/1000 Base-T Ethernet, Auto-MDIX, RJ45	
	802.3az Energy Efficient Ethernet (EEE)	
Buttons	Restart/Reset	
Kensington Security Slot	Available	
LED indicators	Quick Setup , Cloud / Standalone	

* Applicable only to QN-I-210-PLUS.HW2

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
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	-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	
Certifications	
Regulatory	FCC
	BIS
	ETA
	TEC
Environmental	CE,
	RoHS

ORDERING INFORMATION

Part Code	Description
QN-I-210-PLUS	Quantum QN-I-210-Plus dual-band 802.11ax indoor wireless access point, 2x2:2 streams, 2x1G Base-T ports, 802.3af/at PoE support. Comes with a three-year limited liability manufacturer's warranty for the access point.