INDOOR ACCESS POINT
QN-I-220

The demand for resilient wireless infrastructure is on the rise. Whether working from a small office or accessing a public hotspot, users increasingly expect access to high-bandwidth applications and content, just as they would in other locations. QN-I-220 is the optimal choice to meet the specified requirements.

PRODUCT OVERVIEW

The QN-I-220 ensures a wireless networking technology that offers concurrent dual-band, consistent and dependable 802.11ac wave 2. MU-MIMO technology delivers lightning-fast speeds and exceptional coverage, resulting in exceptional user experiences.

The QN-I-220 is the ideal choice for low-density enterprise and hotspot settings, including small and medium-sized businesses, retail establishments, restaurants, and multi-tenant small offices and branch offices.

The 802.11ac wave 2 Wi-Fi access point integrates exclusive technologies distinctive to the Quantum Wi-Fi portfolio. Every access point includes a manufacturer's warranty covering three years from the activation date, as well as theft protection features to safeguard assets against unauthorized use.

Up to 1.2 Gbps
Data Rate

MU-MIMO

2x2,
AC Wave2

2.4 GHz 5 GHz

Dual-Band
Dual-Concurrent

3 Years
Warranty

KEY FEATURES

Economical Enterprise Performance.
The QN-I-220 offers exceptional performance, an extended range and all at a budget-friendly cost.

Exceptional Wi-Fi performance.
Design to deliver outstanding Wi-Fi performance for demanding voice and video applications.

Automate the attainment of maximum data throughput.
Independently identifying the least congested channels guarantees consistent attainment of the highest data transfer rates supported by the available frequency spectrum.

Build advanced guest Wi-Fi networks for the future.
Implement customer service hotspots of the next-generation, complete with an integrated splash portal and Beacons via USB.

Diverse Management Alternatives.
Administer the QN-I-220 via Rudder cloud-based management or in a controller-free manner.

The QN-I-220 offers easy and effortless installation and mounting, making it the perfect choice for rapid and convenient setup in enterprise deployments.

Wi-Fi		
Wi-Fi Standards	5 GHz	IEEE 802.11a/n/ac
	2.4 GHz	IEEE 802.11b/g/n
Operating Mode	Access point, Router, Mesh mode	
Networking Mode	IPv4, IPv6, IPv4v6 (Dual stack), Gateway mode(NAT), Bridge mode	
Maximum Data Rates	5 GHz	802.11ac@ 80 MHz:866.7 Mbps
		802.11ac@ 40 MHz:400 Mbps
		802.11ac@ 20 MHz:173.3 Mbps
	2.4 GHz	802.11n@ 40 MHz: 300 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	5.15-5.25GHz (U-NII-1), 5.25-5.35GHz (U-NII-2A), 5.47-5.725GHz (U-NII-2C), 5.725-5.85GHz (U-NII-3) (As per country regulations)
	2.4 GHz	2.4-2.484GHz (ISM) (As per country regulations)
Modulation Schemes	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- MU-MIMO
	2x2:2	Streams in 2.4GHz- MU-MIMO
Channel Size	802.11n	20/40 (HT) MHz
	802.11ac	20/40/80 (VHT) 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
	Authentication Method
	Guest Profile Support
Access Control List	Force DHCP
	URL & Application filtering /Whitelisting
	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
	Session control
	Random MAC Detection
Meshing	Wireless (singlehop / multihop)
	Wired
WDS	Point to Point
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
Administration	WLAN scheduling, Schedule reboot
	Internet speed test
Radius Integration	CoA (Change of Authorization)
	MAC Authentication
	Dynamic VLAN
HawkEye – Rogue/WIDS / WIPS	
Rogue AP	Rogue SSID
	MAC Spoofing
	SSID Spoofing
	Honeypot / Evil twin attack
	Null Probe request attack
WIDS/WIPS	Password guessing attack
	Ad-Hoc connection
Diagnostics	
Network Diagnostics	Ping, Traceroute, Nslookup, Internet speed, Host discovery, Port connectivity, ARP scanner
RF Diagnostics	PCAP capture, Airbender
Networking	
Ethernet WAN	WAN (DHCP/Static/PPPoE)
USB WAN	USB dongle (3G/4G), Mobile tethering (USB)
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
DNS	Static, Caching
NAT	Masquerade (SNAT), Port forwarding (DNAT)
VLAN Support	802.1Q (1 per BSSID or dynamic per user-based on RADIUS), Port-based (Tagged, untagged)
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		
Performance & Capacity		
Peak PHY Rates	5 GHz - 866.7 Mbps	
	2.4 GHz - 300 Mbps	
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	26 dBm (Adjusted as per country regulations)
	2.4 GHz	27 dBm (Adjusted as per country regulations)
Antenna Type		Internal Omni-directional antennas
Antenna Gain (Max)	5 GHz	3 dBi
	2.4 GHz	3 dBi
EIRP	5 GHz	29 dBm
	2.4 GHz	30 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 Base-T Ethernet, Auto-MDIX, RJ-45 with 802.3at PoE	
	LAN: 2 x 10/100/1000 Base-T Ethernet, Auto-MDIX, RJ-45	
Buttons	Restart/Reset	
USB	1 x USB 2.0	
LED indicators	Quick Setup, Cloud / Standalone	
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	URL Logs (Syslog)	
	IPDR Logs (IPFix , Netflow v9)	
Controller DR (Disaster Recovery)	Supported	
Device Security		
Certificate	Locally-significant certificates using PKI	
Controller Communication	Encrypted	

Application Integration		
PM WANI,		
NMS Integration - ZABBIX, PRTG Monitor, Open NMS		
Environmental		
Operating Temperature	-20°C (-4F) ~ +55°C (+131F)	
Humidity	10% ~ 90% non-condensing	
Standard	Plenum-rated (UL2043)	
Physical		
Dimensions	19.5cm(L), 19.5cm(W), 3.5cm(H)	
Weight	0.547kg (1.20 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		
Certifications	**Parameter**	**Standards**
Regulatory (USA)	FCC	
Regulatory (IN)	BIS	
	IPv6 Ready	
	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)
Environmental Compliances	CE, RoHS	

ORDERING INFORMATION

Part Code	Description
QN-I-220	Quantum Networks QN-I-220 dual-band 802.11ac wave2 indoor wireless access point, 2x2:2 streams, 3x1G Base-T Ethernet ports, 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.