

INROOM ACCESS POINT

QN-H-220



Wi-Fi has become an essential amenity as users bring an increasing number of devices into hotel rooms, conference rooms, and classrooms.

PRODUCT OVERVIEW

The Quantum QN-H-220 is meticulously crafted for individual room installations, serving as an 802.11ac Wave 2 Wi-Fi access point. This device boasts a compact, inconspicuous design that prioritizes security and easy mounting.

The QN-H-220 offers a concurrent dual-band solution for 802.11ac Wave 2 wireless networking. With MU-MIMO technology, it delivers impressive speed alongside extensive coverage. Managed by Quantum Rudder.

KEY FEATURES

Loaded with cutting-edge Wave 2 technologies

QN-H-220 encompasses all the latest advancements of an ac wave 2 access point, including channel bonding, MU-MIMO and more.

Exceptional Wi-Fi capabilities

Designed to deliver exceptional Wi-Fi performance, even in medium-density environments with demanding voice and video applications. Enhances coverage, boosts capacity and ensures seamless performance in such settings.

Establish advanced guest Wi-Fi networks for the next-generation

Implement cutting-edge customer service hotspots featuring integrated splash portals and beacons via USB.

Stunning performance

Extends coverage, connects more devices simultaneously with dual MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios.

Security against unauthorized use

The access point remains locked for deployment in any other network until decommissioned from the existing network.

Three-year warranty coverage

Benefit from a three-year limited liability manufacturer's warranty starting from the date of device activation.



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 (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	5.15-5.25GHz (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 5 GHz- MU-MIMO
	2x2:2	Streams in 2.4 GHz- 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 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
	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
Administration	WLAN scheduling
	Internet speed test
	Schedule reboot
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 128 clients per access point	
SSID	Up to 16 per access point (8 per Radio)	
RF		
Maximum Aggregate Transmit Power (Adjusted as per country regulations)	5 GHz	24 dBm
	2.4 GHz	26 dBm
Antenna Type		Internal Omni-directional antennas
Antenna Gain (Max)	5 GHz	3 dBi
	2.4 GHz	3 dBi
EIRP (Adjusted as per country regulations)	5 GHz	27 dBm
	2.4 GHz	29 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: 2 x 10/100/1000 Base-T Ethernet, Auto-MDIX, RJ-45	
	PoE Out/LAN: 1 x 10/100/1000 Base-T Ethernet, Auto-MDIX, RJ-45	
	Pass-Thru (Input and Output): 2 x RJ45 based Ethernet	
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	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	−20°C (-4F) ~ +55°C (+131F)	
Humidity	10% ~ 90% non-condensing	
Standard	Plenum-rated (UL2043)	
Physical		
Dimensions	15cm(L), 8.6cm(W), 2.5cm(H)	
Weight	184g (0.40 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	
	MTCTE (ER)	EMI/EMC (IEC / EN-61000* & CISPR 32), Safety (IS-13252 & IEC-60950), Radio, Technical (IPv4 & IPv6)
	ETA (WPC)	NABL 2.4, NABL 5
Environmental Compliances	CE, RoHS	

ORDERING INFORMATION

Part Code	Description
QN-H-220	Quantum Networks QN-H-220 dual-band 802.11ac wave2 in room wireless access point, 2x2:2 streams, 4x1G Base-T Ethernet ports, 2x2 passthru 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.