OUTDOOR ACCESS POINT
QN-O-710



The QN-O-710 Next-Gen Outdoor Access Point delivers high-speed, low-latency Wi-Fi in wide, high-traffic areas. Designed for modern outdoor connectivity, it's an ideal pick for campuses, smart cities, resorts, stadiums, and industrial zones. Whether it's enabling smooth guest access in hotel lawns, supporting remote learning outdoors, or powering surveillance networks, the QN-O-710 is built for consistently reliable performance.

Up to 3.5 Gbps
Data Rate

2.5 GbE
Connectivity

2.4 GHz - 2x2,
5 GHz – 2x2

MU-MIMO
With OFDMA

1 Year
Warranty

PRODUCT OVERVIEW

Powered by Wi-Fi 7 with dual-band 2x2:2 MU-MIMO, the QN-O-710 supports advanced features like Multi-Link Operation (MLO), enabling simultaneous data transmission across both 2.4 GHz and 5 GHz bands. This ensures efficient client distribution and spectrum utilization, especially in dense environments. Integrated HawkEye security further empowers the system by actively detecting and mitigating wireless threats to maintain a secure network environment.

With support for 160 MHz channel width, OFDMA, and 4096-QAM, the QN-O-710 delivers exceptional data throughput and reduced latency, even across large open spaces. Its robust outdoor design ensures uniform wireless coverage in public areas and facility exteriors while simplifying large-scale deployments without compromising on performance or reliability.

KEY FEATURES

Wi-Fi 7 Outdoor Optimization
Built on 802.11be (Wi-Fi 7) with 160 MHz channels, 4096-QAM, and MLO to deliver ultra-fast, low-latency wireless in large outdoor spaces.

Dual-Band 2x2:2 MU-MIMO Architecture
Supports multiple users concurrently on both 2.4 GHz and 5 GHz, ensuring stable and efficient connectivity in high-density, open-air environments.

HawkEye Wireless Security Suite
Protects the network by detecting and mitigating rogue APs, spoofing attacks, deauthentication floods, DoS threats, and port scans in real time.

Seamless Centralized Management
Integrates with Quantum Rudder for unified cloud or on-premise control, featuring zero-touch provisioning and firmware updates for streamlined deployment.

Scalable for Multi-Site Outdoor Networks
Ideal for stadiums, campuses, smart cities, and industrial sites—designed to simplify and secure outdoor network rollouts at scale.

KEY SPECIFICATIONS

Wi-Fi		
Wi-Fi Standards	5 GHz	IEEE 802.11a/n/ac/ax/be
	2.4 GHz	IEEE 802.11b/g/n/ax/be
Operating Mode	Access point, Router, Mesh mode	
Networking Mode	IPv4, IPv6, IPv4v6 (Dual-stack), Gateway mode (NAT), Bridge mode	
Maximum Data Rates	5 GHz	802.11be@ 160 MHz: 2882 Mbps
		802.11be@ 80 MHz: 1441 Mbps
		802.11be@ 40 MHz: 688 Mbps
		802.11ax@ 160 MHz: 2402 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	802.11be@ 40 MHz: 688 Mbps
		802.11be@ 20 MHz: 344 Mbps
		802.11ax@ 40 MHz: 573.5 Mbps
		802.11ax@ 20 MHz: 286.8 Mbps
		802.11n@ 40 MHz: 500 Mbps
		802.11b/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	802.11be	BPSK, QPSK, 16-QAM, 64-QAM, 256- QAM, 1024-QAM, 4096-QAM
	802.11ax	BPSK, QPSK, 16-QAM, 64-QAM, 256- QAM, 1024-QAM, 4096-QAM
	802.11ac	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
	802.11n	BPSK, QPSK, 16-QAM, 64-QAM,1024-QAM, 4096-QAM
	802.11b/g	BPSK, QPSK, CCK
Radio Chains and Spatial Streams	2x2:2	Streams in 5GHz-OFDMA (802.11ax/be) and OFDM (802.11ac) with MU-MIMO
	2x2:2	Streams in 2.4GHz- OFDM (802.11a/g/n) and DSSS (802.11b) 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
	802.11be	20/40/80/160 (EHT) 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-defined, 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	
Administration	WLAN scheduling	
	Internet speed test	
	Schedule reboot	
Radius Integration	CoA (Change of Authorization)	
	MAC Authentication	
	Dynamic VLAN	
Wi-Fi7/6 Features	Multi-Link Operation (MLO)	BSS colouring
	Beacon Protection	Spatial reuse
	Multi-RU	Preamble puncturing
	Target wake time	Orthogonal frequency division multiple access (OFDMA)

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, 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						
SFP/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					
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					
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	2882 Mbps (802.11be)				
	2.4 GHz	688 Mbps (802.11be)				
Client Capacity	Up to 512 clients per Access point					
SSID	Up to 32 per access point (16 per Radio)					
RF		**QN-O-710**	**QN-O-710-N**			
			QN-ANT-5-5DB/ QN-ANT-2-5DB	QN-ANT-5-8DB/ QN-ANT-2-8DB	QN-ANT-5-12DB/ QN-ANT-2-12DB	QN-ANT-5-15DB/ QN-ANT-2-15DB
Maximum Aggregate Transmit Power (Adjusted as per country regulations)	5 GHz	25 dBm	25 dBm	23 dBm	23 dBm	23 dBm
	2.4 GHz	26 dBm	26 dBm	24 dBm	24 dBm	24 dBm
Antenna Gain (Max)	5 GHz	4 dBi	5 dBi	8 dBi	12 dBi	15 dBi
	2.4 GHz	4 dBi	5 dBi	8 dBi	12 dBi	15 dBi
EIRP (Adjusted as per country regulations)	5 GHz		30 dBm	31 dBm	35 dBm	38 dBm
	2.4 GHz		31 dBm	32 dBm	36 dBm	39 dBm
Rating	802.3 at PoE+ (Class 4) (Fully functional with all components)					
Antenna Type	Built-in integrated antenna for both radios.		External antenna connectors			

Physical Interfaces	
Ethernet	WAN: 1 x 10/100/1000/2.5G N Base-T ethernet, Auto MDIX, RJ-45 with 802.3at
	802.3bz specifications, 802.3az Energy Efficient Ethernet (EEE)
Buttons	Restart/Reset
LED Indicators	Power, 2.4 GHz, 5 GHz, Standalone/Cloud
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	
SIEM Integration- Splunk, IBM QRadar (Syslog format)	
Environmental	
Operating Temperature	-40°C (40°F) ~ to 70°C (+158°F)
Humidity	5% ~ 100% non-condensing
Wind Resistance	160 kmph for sustained wind, 250 kmph for wind gusts
Standard	IP67

Physical	
Dimensions	23.9cm(L), 19.5cm(W), 8.3cm(H)
Weight	1575 g (3.47 lbs)
Mounting kit	Pole mount
Firmware Management	
Cloud-managed firmware update	
Scheduled firmware and security update	
Firmware upgrade via Access Point local GUI	

ORDERING INFORMATION

Part Code	Description
QN-O-710	The Quantum Networks QN-O-710 is a dual-band 802.11be outdoor wireless access point, supporting 2x2:2 streams on both 5 GHz and 2.4 GHz bands. It features a 1x2.5G N-Base-T Ethernet port with PoE support. Includes 1-year limited liability manufacturer's warranty start from date of activation for the access point. Does not include PoE injector or power adaptor. Does not include cloud controller license.
QN-O-710-N	The Quantum Networks QN-O-710-N connectorized dual-band 802.11be outdoor wireless access point, supporting 2x2:2 streams on both 5 GHz and 2.4 GHz bands. It features a 1x2.5G N-Base-T Ethernet port with PoE support. Includes 1-year limited liability manufacturer's warranty start from date of activation for the access point. Does not include PoE injector or power adaptor. Does not include cloud controller license.
Accessories Part Codes *	**Description**
QN-ANT-25-14DB	Dual Band (2.4 GHz and 5 GHz) External outdoor antenna with N-Connector, Gain: 14dBi, 30-degree
QN-ANT-25-17DB	Dual Band (2.4 GHz and 5 GHz) External outdoor antenna with N-Connector, Gain: 17dBi, 90-degree
QN-O-WMK	L-shaped wall mounting bracket

*The external antenna connection cable (LMR400 N Male to N Male) is not included in the device packaging and must be purchased separately as per requirement.