# INDOOR ACCESS POINT QQ-IW-235

















# **PRODUCT OVERVIEW**

Introducing the QQ-IW-235 dual-band Wi-Fi 6 Access Point from Quantum Networks, engineered to elevate your connectivity to new heights. Featuring cutting-edge Wi-Fi 6 technology, this Access Point delivers lightning-fast speeds of up to 3 Gbps, perfect for both educational and business needs. Tailored for small to medium-sized residences, it guarantees seamless performance and reliability.

Enter the Quantum era with the QQ-IW-235 Access Point, accommodating both modern and legacy Wi-Fi devices. Experience the convenience of easy wall mount and seamless monitoring via the user-friendly Rudder Lite\* cloud controller. With WPA3 security, it offers robust cyber threat protection for all connected devices while streamlining online time management across your network, promoting healthier digital habits. Quantum Networks' QQ-IW-235 marks a significant advancement in connectivity.

# **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.

#### **ISP Compatibility**

Works seamlessly with most ISPs flexible connections like PPPoE, DHCP, Static etc.

#### Wi-Fi 6 Advancements

Faster speeds reduced lag and increased capacity with Wi-Fi 6 technology.

#### **Ultra-Fast Smart Roaming**

Rapid roaming within the 5 GHz band for uninterrupted connectivity.

# **Enhanced Security**

Latest WPA3 security protocol for improved protection against cyber security threats.

# Easy, User-Friendly Setup

Quick setup in minutes.

### Two years warranty

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



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	
Networking Mode	IPv4, Gateway mode(NAT), Bridge mode	
Maximum Data Rates	5 GHz	802.11ax@ 160 MHz: 2402 Mbps
		802.11ax@ 80 MHz: 2402 Mbps
		802.11ax@ 40 MHz: 1147.1 Mbps
		802.11ax@ 20 MHz: 573.5 Mbps
		802.11ac@ 80 MHz: 2166.7 Mbps
		802.11ac@ 40 MHz: 1000 Mbps
		802.11ac@ 20 MHz: 481.8 Mbps
	2.4 GHz	802.11ax@ 40 MHz: 573.5 Mbps
		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	5 GHz	-98 dBm
Sensitivity	2.4 GHz	-93 dBm
Supported Channels	5 GHz	36-64, 100-144, 149-165 (UNII-1, UNII-2, UNII-2e, UNII-3
Supported Chamileis	3 01 12	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	2x2:2	Streams in 5GHz-OFDMA with MU-MIMO
Streams	2x2:2	Streams in 2.4GHz- OFDMA with MU-MIMO
Channel Size	802.11n	20/40 (HT) MHz
	802.11ac	20/40/80/160 (VHT) MHz
	802.11ax	20/40/80/160 (HE) MHz
Wireless Security	WPA3-AES	
	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)	
	802.11i, 802.11 w MFP (Management Frame Protection)	
	Hide SSID in beacons	



Roaming	IEEE 802.11k (Assisted Roaming)		
	IEEE 802.11v (BSS Transition Management)		
	IEEE 802.11r (Fast BSS Transition (FT))		
Channel / Tx Power	Auto / Manual channel selection		
Management	ATP-Automatic Transmit Power management		
Client Management	Band steering		
Diagnostics	Ping, Traceroute, Nslookup, Internet speed, Host discovery, Port connectivity		
Access Control List	Bandwidth Restriction per SSID		
	L2 (MAC) filtering		
	MAX clients per radio		
Wi-Fi 6 Features	Target wake time		
	BSS colouring		
	Spatial reuse		
	Orthogonal frequency division multiple access (OFDMA)		
	Preamble puncturing		
Networking			
Ethernet WAN	WAN (DHCP/Sta	atic/PPPoE)	
DHCP Server	DHCP lease, DHCP MAC reservation		
NAT	Masquerade (SNAT), Port forwarding (DNAT)		
VLAN Support	802.1Q (1 per BSSID), Port-based (Tagged, untagged)		
Performance & Capacity	/		
Peak PHY Rates	5 GHz	2402 Mbps (802.11ax)	
	2.4 GHz	573.5 Mbps (802.11ax)	
Client Capacity	Up to 64 clients per access point		
SSID	Up to 8 per access point		
RF			
Maximum Aggregate	5 GHz	21 dBm	
Transmit Power	2.4 GHz	23 dBm	
(Adjusted as per country regulations)			
Antenna Type		Built-in integrated antenna for both radios	
Antenna Gain (Max)	5 GHz	3 dBi	
Antenna Gain (Max)	2.4 GHz	3 dBi	
EIRP	5 GHz	24 dBm	
	2.4 GHz	26 dBm	
Power			
Rating	802.3 af PoE /at	802.3 af PoE /at PoE+(Class 4) (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		
	802.3az Energy Efficient Ethernet (EEE)		
Buttons	Restart/Reset		
LED indicators	Quick Setup, Cloud / Standalone		
Management			
Device Management	Standalone, Local (web UI), SSH (CLI)		
	Quantum Rudder Lite*		
Environmental			
Operating Temperature	-20°C (-4F) ~ +55°C (+131F)		
Humidity	5% ~ 100% Non-Condensing		
Standard	Plenum-rated (UL2043)		
Physical			
Dimensions	8.5 cm (L), 8.5 cm (W), 4.5 cm (H)		
Firmware Management			
Cloud-managed firmware update*			
Firmware upgrade via Access Point local GUI			

# **ORDERING INFORMATION**

Part Code	Description
	Quantum QQ-IW-235 dual-band 802.11ax indoor wireless wall mount access point, 2 x
QQ-IW-235	2:2 streams, 2x1G Base-T Ethernet port, 802.3af/at PoE support. Comes with a two-
	year limited liability manufacturer's warranty for the access point.

<sup>\*</sup> QQ-IW-235 Access Point functions as a standalone access point. To manage it with Rudder Lite, a separate license for Rudder Lite must be acquired.