

**Model: QN-H-220**

**Firmware: 5.2.1.B1**

**Month of Release: January, 2021**

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## Devices Supported

Quantum Networks: QN-H-220 (Standalone & Cloud Controlled)

*\* Features may vary depending on the operation mode of Access Point.*

## Important Notices

- Firewall rules - Allow cc.qntmnet.com and reports.qntmnet.com in the destination field.
- Obtaining Firmware - Latest stable firmware is available here:  
<https://www.qntmnet.com/resource-library/#firmware>
- While upgrading firmware in Access Point, please make sure power supply should not be interrupted. This may corrupt firmware in Access Point. It is advisable to use power source from UPS.
- Device (s) may reboot post firmware upgrade. The activity is not advised during peak hours or in critical production network.

## New Features

### Internetworking Features

Sr.	Internetworking Features	Description
1	Quantum Identity Manager (QIM)	It is the central user identity manager for all Quantum Networks applications and services.
2	User-Based Bandwidth Management	Restriction on bandwidth Per SSID / Per User (Per-user bandwidth restriction will override SSID bandwidth restriction parameter).
3	OS-based WLAN Management	Allow or Deny wireless clients based on specific OS / Device type. Either OS Policy or Access Control List can be enabled at a time.
4	Whitelist in Hotspot	Whitelisted devices are allowed access without authentication in Hotspot / Guest / Quantum Secure+
5	Bypass Apple CNA in Hotspot / Guest	Some Apple® iOS and OS X® clients include a feature called Captive Network Assistant (CNA), which allows clients to connect to an open captive portal WLAN without displaying the login page. With CNA bypass enabled, captive portal (web-based authentication) login must be performed by opening a browser to any unauthenticated page (HTTP) to get redirected to the login page.

### Radio Resource Management Features

Sr.	RRM Features	Description
1	ChannelSwitch	Access Points will scan over the air interference (of co-channel, adjacent, noise floor) every day at the scheduled time and allocate the most reliable channel to Access Point for the best performance. By default this feature is disabled. <b>Caution:</b> 802.11h un-supported client device will frequently disconnect and reconnect when Access Point will change the channel.
2	SpeedyChannel	Access Points will frequently scan over the air interference (of co-channel, adjacent, noise floor) and allocate the most reliable channel to Access Point for the best performance. By default, this feature is disabled. <b>Caution:</b> 802.11h un-supported client device will frequently disconnect and reconnect when AP will change the channel.
3	Airtime Fairness	Airtime Fairness helps to share fair airtime among all connected devices with Access Point. It primarily focuses on scheduling fairness for transmission of traffic from Access Point and efficient Wi-Fi bandwidth utilization
4	802.11e with WMM, QoS, and Frame Aggregation	Frame aggregation is a feature of IEEE 802.11e. This standard increases wireless throughput by sending two or more data frames in a single transmission.
5	802.11w MFP	IEEE 802.11w standard, Management Frame Protection increases the security by providing data confidentiality of management frames.
6	802.11h for Channel Switch Announcement (CSA)	Channel Switch Announcement (CSA), as defined by IEEE 802.11h, enables an AP to announce that it is switching to a new channel before it begins transmitting on that channel. This allows the clients, who support CSA, the transition to the new channel with minimal downtime.

## Enhancement

Sr.	Enhancement
1	Increased Coverage and Reliability of Access Points
2	Client Isolation (per SSID and per Access Point)
3	QN Secure + : OS Filtration, Bulk Upload
4	QoS - Quality of Service. It refers to the capability of a network to provide better service and performance to specific network traffic.
5	TAC Support: Hotspot, Guest, Secure and Secure+

## Report an Issue

If you are facing any difficulty in firmware upgradation or need technical assistance, contact [support@qntmnet.com](mailto:support@qntmnet.com) or call 18001231163.