



QUANTUM[®]
ACCESS UNLIMITED

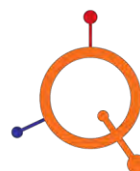
Quick Setup Guide

Model: QN-I-470



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This Quick Setup Guide provides step-by-step instructions on how to set up Quantum Networks Access Point. After completing the steps described in this Guide, you will be able to install the Access Point (AP) on site and provide wireless network access to users.

Glossary

Feature	Description
Management Mode	<p>Standalone: In this mode, each device is configured and managed individually. It can be useful in scenarios with few devices or sites with limited internet access.</p> <p>Cloud Controlled: In this mode, devices are configured and managed from a central controller hosted in the cloud. It offers many more set of features as compared to Standalone mode.</p>
Operation Mode	<p>Bridge: In this mode, device connects to a network over ethernet cable and extends the coverage over wireless.</p> <p>Router: In this mode, device connects to Internet Service Provider directly using DHCP / Static IP / PPPoE protocols and share Internet access over wired or wireless network to users.</p>
Quantum RUDDER	<p>Quantum RUDDER is a cloud hosted controller which can be used to configure, manage & monitor devices associated with it. It can be accessed from https://cc.qntmnet.com</p>



Before You Begin

Your Quantum Networks' Access Point can work in "**Standalone Mode**" or can be managed by "**Cloud Controller**".

To manage Access Point by "**Cloud Controller**", please follow step 5 first and then step 1. For "**Standalone Mode**", continue with step 1.

Package Contents

- Access Point
- Quick Setup Guide

Prerequisites

- Internet access
- Desktop / Laptop / Handheld device
- 802.3af / 802.3at PoE Switch / PoE Injector

Connect Access Point

- After unpacking Access Point, connect it to internet source
- Plug in Ethernet cable of Access Point
- Power on Access Point by using 802.3af / 802.3at PoE Switch / PoE Injector

Note: Access Point must have internet access during initial setup for the first time to activate the device, warranty and support.



Step 1 - Basic Setup

- Connect WAN port of the Access Point to network with internet access.
- You should see a new wireless network with SSID QN_XX:XX (where XX:XX are last four digits of Access Point MAC Address).
- Connect to QN_XX:XX SSID and browse Access Point's default IP "169.254.1.1". You should be greeted with welcome message.



Figure 1

Step 2 - Check Device Info / Change Firmware

Click **Device Info** to view information about device **MAC Address**, **Serial Number** and **Current Firmware**.



Figure 2



- Click **Change Firmware** to update firmware if required. Select the firmware file from respective location and update.



Figure 3

Step 3 - Setting Up Device IP Address

- Click Start Configuration (Refer Figure1).
- Configure IPv4 by selecting required option DHCP, Static or PPPoE and click Next.



Figure 4



Management Mode

Quantum Networks' Access Point can be configured in two modes:

Standalone

Independent management of each Access Point

Cloud Controlled

Centralized management of Access Points using Quantum RUDDER

Step 4 - Access Point Quick Setup in Standalone Mode

- Select “**Management Mode**” as “**Standalone**”, if each Access Point is to be configured and managed individually. Define username and password for the device and click “**Next**”.
- User can select Access Point Operation Mode as **Bridge** or **Router**.

Bridge

- i. Select option **Bridge** and click **Next**.
- ii. Configure **WLAN** (SSID) parameters and click **Next**.



The screenshot shows the Quantum Networks configuration interface. At the top, there is the Quantum logo and the text "QUANTUM ACCESS UNLIMITED". Below this, there is a "Configuration" section. The "WLAN" section is active, showing fields for "Country", "Timezone", "WLAN Name", "SSID", and "Passphrase". Each field has a corresponding input area. At the bottom of the form, there are "Prev" and "Next" navigation buttons.

Figure 5

Parameter	Value
Country	Select country
Timezone	Select timezone
WLAN Name	Define name for the network
SSID	Define visible wireless network name
Passphrase	Configure passphrase for SSID



- iii. Review the Configuration Summary. Click **Reconfigure** if any changes are required or click **Finish** to complete the configuration.



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Configuration Summary

Device Details	
Serial No.	121173090056
Management Mode	Standalone
Operation Mode	Bridge

WAN Settings	
Protocol	Static IP
IP Address	192.168.25.6
Subnet Mask	255.255.255.0
Gateway	192.168.25.1
Primary DNS	192.168.25.1
Secondary DNS	172.16.0.1

WLAN Settings	
SSID	QUANTUM
Radio	2.4 GHz, 5 GHz
Passphrase	*****

User Details	
Username	admin
Password	*****

[Reconfigure](#) [Finish](#)

Figure 6



Router

- i. Select option **Router** and click **Next**.
- ii. Configure **WLAN** (SSID) and **Local subnet** parameters and click **Next**.




The screenshot shows the Quantum Configuration interface. At the top, there is the Quantum logo and the text 'QUANTUM ACCESS UNLIMITED' and 'Configuration'. Below this, the 'WLAN' section includes fields for 'Country' (set to 'XXXXX'), 'Timezone' (set to 'XXXXX'), 'WLAN Name' (set to 'QUANTUM'), 'SSID' (set to 'QUANTUM'), and 'Password' (represented by dots). The 'Local Subnet' section includes fields for 'IP Address' (set to '192.168.1.1') and 'Subnet Mask' (set to '255.255.255.0'). At the bottom, there are 'Prev' and 'Next' navigation buttons.

Figure 7

Parameter	Value
WLAN	
Country	Select country
Timezone	Select timezone
WLAN Name	Define name for the network
SSID	Define visible wireless network name
Password	Configure passphrase for SSID
Local Subnet	
IP Address	LAN IP address. This IP address can be used for accessing this Access Point
Subnet Mask	LAN Subnet mask



- iii. Review the Configuration Summary. Click **Reconfigure** if any changes are required or click **Finish** to complete the configuration.



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Configuration Summary

Device Details

Serial No.	121173000056
Management Mode	Standalone
Operation Mode	Router

WAN Settings

Protocol	Static IP
IP Address	192.168.25.6
Subnet Mask	255.255.255.0
Gateway	192.168.25.1
Primary DNS	192.168.25.1
Secondary DNS	172.16.0.1

Local Subnet

Name	LAN
IP	192.168.1.1
Subnet	255.255.255.0

WLAN Details

SSID	TEST
Radio	2.4 GHz, 5 GHz
Passphrase	*****

User Details

Username	admin
Password	*****

[Reconfigure](#) [Finish](#)

Figure 8

Click **Reconfigure** if any changes required or click **Finish** to complete the Configuration.



Step 5 - Access Point Quick Setup in Cloud Controlled Mode

- Select “**Management Mode**” as “**Cloud Controlled**”, enter Quantum RUDDER login credentials and click “**NEXT**”. (If you do not have an account on Quantum RUDDER, please refer Step 6)
- Select Cloud Controller site, where Access Point’s needs to be added and click “**Next**”.
- User can select Access Point’s Operation Mode as **Bridge** or **Router**.

Bridge

- I. Select Operation Mode as **Bridge** and click **Next**.
 - a. The device would import settings and redirect to **Configuration Summary**.



The screenshot shows the 'Configuration Summary' page for a Quantum device. It is divided into two main sections: 'Device Details' and 'Network Details'. At the bottom, there are 'Reconfigure' and 'Finish' buttons.

Device Details	
Serial No.	121173000056
Model	GN-06-5000
Management Mode	Cloud
Operation Mode	Bridge
Cloud	Test
Site	Site 1

Network Details	
Protocol	Static IP
IP Address	192.168.25.6
Subnet	255.255.255.0
Gateway	192.168.25.1
Primary DNS	192.168.25.1
Secondary DNS	172.16.0.1

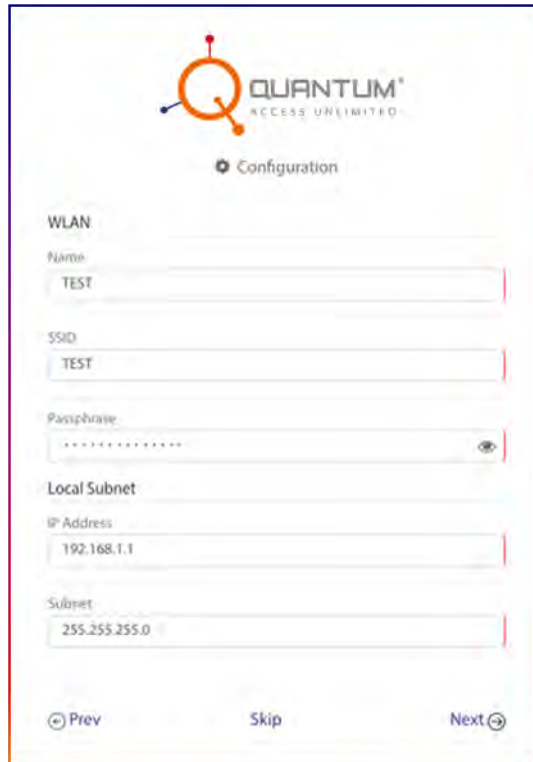
Figure 9

- II. Click **Reconfigure** if any changes required or click **Finish** to complete the Configuration.



Router

- I. Select Operation Mode as a **Router** and click **Next**.
- II. Configure **WLAN** (SSID) and **Local subnet** parameters and click **Next**.



The screenshot shows the Quantum configuration interface. At the top, there is the Quantum logo and the text "QUANTUM ACCESS UNLIMITED". Below that, a "Configuration" section is active. The "WLAN" section includes fields for "Name" (TEST), "SSID" (TEST), and "Passphrase" (masked with dots). The "Local Subnet" section includes fields for "IP Address" (192.168.1.1) and "Subnet" (255.255.255.0). At the bottom, there are three buttons: "Prev", "Skip", and "Next".

Figure 10

Parameter	Value
WLAN	
Name	Define wireless network name
SSID	Define visible wireless network name
Passphrase	Configure passphrase for SSID
Local Subnet	
IP Address	LAN IP address. This IP address can be used for accessing this Access Point
Subnet Mask	LAN Subnet mask

Note: If you do not want to create **WLAN** (SSID)/**LAN** now, click **Skip** option. It will redirect to **Configuration Summary**.





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☑ Configuration Summary

Device Details	
Serial No.	12100000XXXX
Model	QW-X-XXXX
Management Mode	Cloud
Operation Mode	Router
Cloud	Yes
Site	Site 1

WAN Settings	
Protocol	Static IP
IP Address	192.168.25.6
Subnet	255.255.255.0
Gateway	192.168.25.1
Primary DNS	192.168.25.1
Secondary DNS	172.16.0.1

Local Network	
Name	Default
IP	192.168.1.1
Subnet	255.255.255.0

WiFi Details	
SSID	TEST
Radio	2.4 GHz/5 GHz
Encryption	WPA2
Algorithm	AES
Password	••••••••

⏪ Reconfigure Finish ⏩


Figure 11

Review the Configuration Summary. Click **Reconfigure** if any changes are required or click **Finish** to complete the configuration.



Step 6 – Create New Account on Quantum RUDDER

- Browse <https://cc.qntmnet.com>.
- Click “**Create New Account**” to sign up for a new account.



The screenshot shows the registration page for Quantum RUDDER Cloud Controller. At the top, the logo reads "QUANTUM RUDDER Cloud Controller". Below the logo is a "Sign up" button with a lock icon. The registration form includes the following fields:

- Administrator:** Two input fields for "First Name" and "Last Name".
- Email:** A single input field.
- Phone:** A single input field.
- Country:** A dropdown menu currently showing "India".
- Password:** An input field with a toggle icon to show/hide the password.
- Confirm Password:** An input field with a toggle icon to show/hide the password.

At the bottom of the form is a large blue "Register" button and a "Login" link.

Figure 12

- Follow the steps as guided on screen for Registration.
- Verify Quantum RUDDER account from registered email id.
- Your Account on Quantum RUDDER (Quantum Networks' Cloud Controller) is now ready to use.



Reset Access Point to Factory Defaults

- Power on the Access Point
- Push the reset button on back panel and hold it for 10 seconds.
- Access Point would restart with factory defaults

Access Point Default Login Detail

User Name: As Defined while creating account

Password: Auto Generated

Password will be sent to registered email on Quantum RUDDER.

If you encounter problems while installing or using this product, please browse www.qntmnet.com for:

- Direct contact to the support center.
- Frequently Asked Questions (FAQ)
- Download area for the latest software, user documentation and product updates.



FCC Statement

FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible. This device is restricted for indoor use.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 24 cm between the radiator and your body.

Professional Installation Instructions

1. Installation personnel

This product is designed for specific applications and should be installed by qualified personnel who have knowledge of RF and its related regulations. A general user shall not attempt to install or modify the equipment configuration.

2. Installation location

To meet regulatory RF exposure requirements, this product shall be installed at a location where, during normal operations, the radiating antenna is at least 24 cm away from any nearby persons.

3. External antenna

Use only the antennas which have been approved by the applicant. Using non-approved antenna(s) is prohibited and may produce unwanted spurious or excessive RF transmitting power which may lead to a violation of FCC limits.

4. Installation procedure

Please refer to this equipment's user manual for the procedure details.

5. Warning

The installation position must be carefully selected so that the final output power does not exceed the limit set forth in relevant regulations. Violation of output power regulations could lead to serious federal penalties.



CE Statement

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 24 cm between the radiator and your body.

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

All operational modes:

2.4GHz: 802.11b, 802.11g, 802.11n(HT20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ax(HE20), 802.11ax(HE40)

5 GHz: 802.11a, 802.11n (HT20), 802.11n (HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80), 802.11ax(HE20), 802.11ax(HE40),802.11ax(HE80)

BLE 2.4GHz: 802.15.1

The frequency and maximum transmitted power limit in EU are listed as below:

2412-2472MHz: 20 dBm

5150-5350MHz: 23 dBm

5500-5700MHz: 30 dBm



AT	BE	BG	CH	CY	CZ
DE	DK	EE	EL	ES	FI
FR	HR	HU	IE	IS	IT
LI	LT	LU	LV	MT	NL
NO	PL	PT	RO	SE	SI
SK	TR	UK			

The abbreviations of the countries, as prescribed in above table, where any restrictions on putting into service or any requirements for authorization of use exist.

CE Mark Declaration of Conformance for EMI and Safety (EEC)

This information technology equipment is in compliance with the Directive 2014/53/EU and Directive 2014/35/EU.

The Declaration of Conformity (DoC) can be obtained from www.qntmnet.com > downloads.

