



by **HFCL**



**Quick Start Guide**  
**ion4x\_w**  
**Access Point**

# Introduction

Thank you for choosing ion4x\_w Wireless Access point with 2x2:2 Multi-User MIMO and 802.11ax Wave 2 compliance.

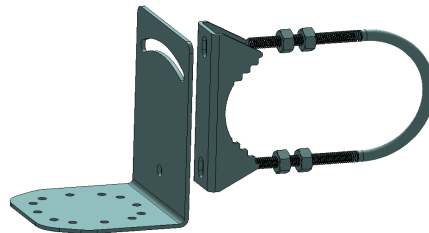
# Packaging Content



Ion4x\_w  
Access point  
(Qty:1)



Quick Start Guide  
( Qty :1)



L - Clamp (Qty:1)

## ion4x\_w Specification

Peak throughput ( aggregate )	Approx 2.1Gbps ( 2401 Mbps for 5GHz and 573 Mbps for 2.4 GHz )
Wi-Fi Standard Support	802.11a/b/g/n/ac/ax
Interface	10/100/1000/2500BASE-T Ethernet
Radio Mode	2x2 MU-MIMO with 2 spatial streams
Mesh Support	Self-creating , Self -healing Mesh
maximum number of SSID (per radio)	4 SSID per radio and 8 combined
Maximum User Support	128 on 5GHz and 128 on GHz
Power supply	IEEE 802.3at PoE
Power Consumption (Max)	18 W ( approx )
Max Transmit Power	25 dBm for 2.4 GHz , 24 dBm for 5GHz ( will depend on country-specific guidelines )
Antenna Type	Integrated metal Patch antennas
Antenna Gain	8 dBi gain for 2.4GHz and 9 dBi gain for 5GHz
Management	Standalone ( via GUI ) or through on premise based solution or cloud-based.
Enclosure Dimensions	320 x 215 x 66mm ( 12.49 x 8.46 x 2.59 )
Weight	Approx 1.1 Kg
Operating Temperature	0°C to 55°C
Certifications	FCC Class B, CE,RoHS 3.0,Passpoint 3.0, WPA3,IP67

# Product Overview

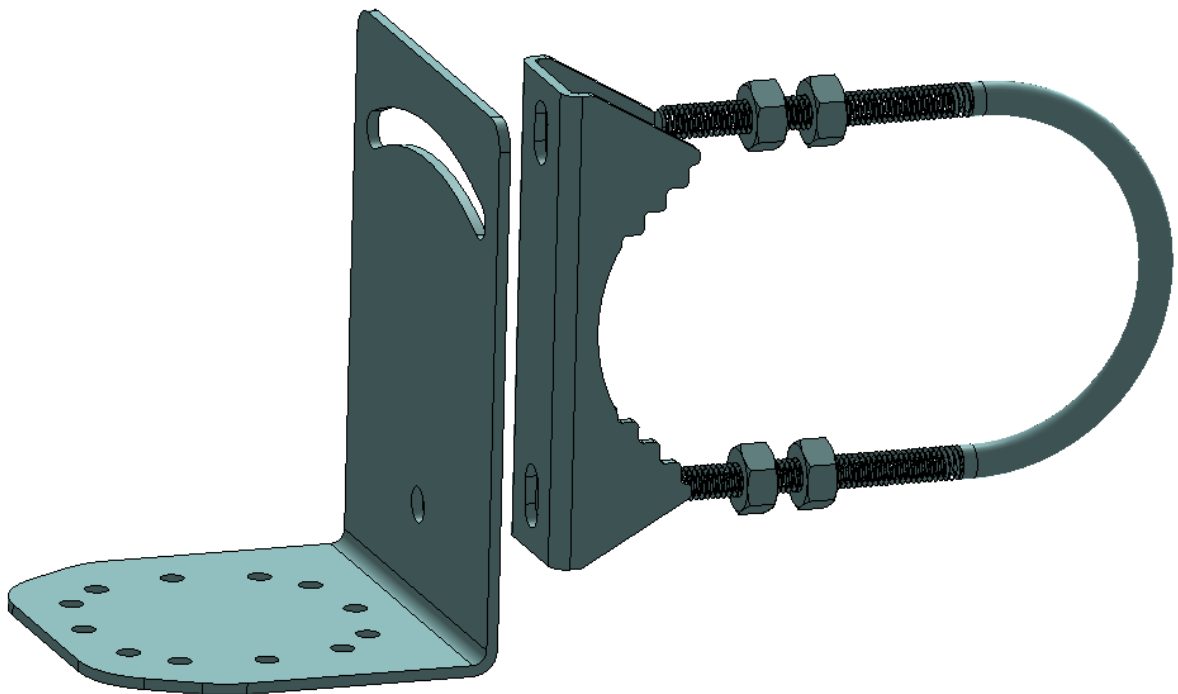


## Mounting of ion4x\_w Access point

The ion4x\_w can be mounted on a pole. Perform the following steps for appropriate installation.

### Pole Mount

1. 2x2 outdoor AP has four holes on its back side for the attachment of the mounting bracket, as shown in figure. The mounting bracket is designed in such a way that the AP can be mounted on the wall as well as on the pole with the help of its attaching parts. It provides the freedom of movement to the AP even after the mounting.



2. Align the bracket mounted AP with pole holder and U-bolt. Pass the U-bolt through the cuts of the pole holder and mounting bracket. Tighten it in place with attaching nuts as shown in the given figure.

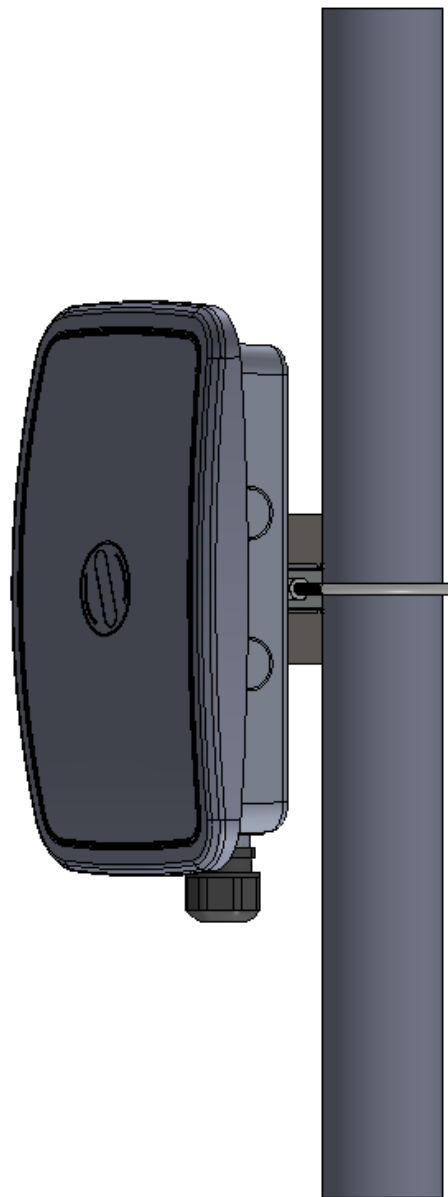
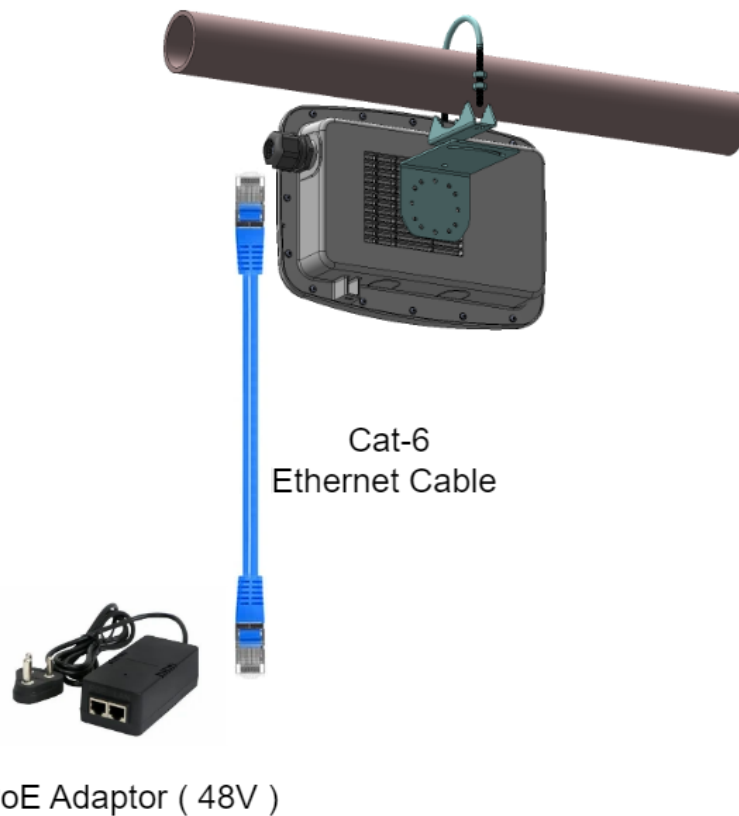


Figure : Final alignment of 2x2 outdoor AP and mounting bracket

# Getting the ion4x\_w Online

## Step 1: power up

The Access Point can be powered up using PoE adaptor ( 48V ) as shown below:



Note: Power Plug and adaptor will vary by country / region

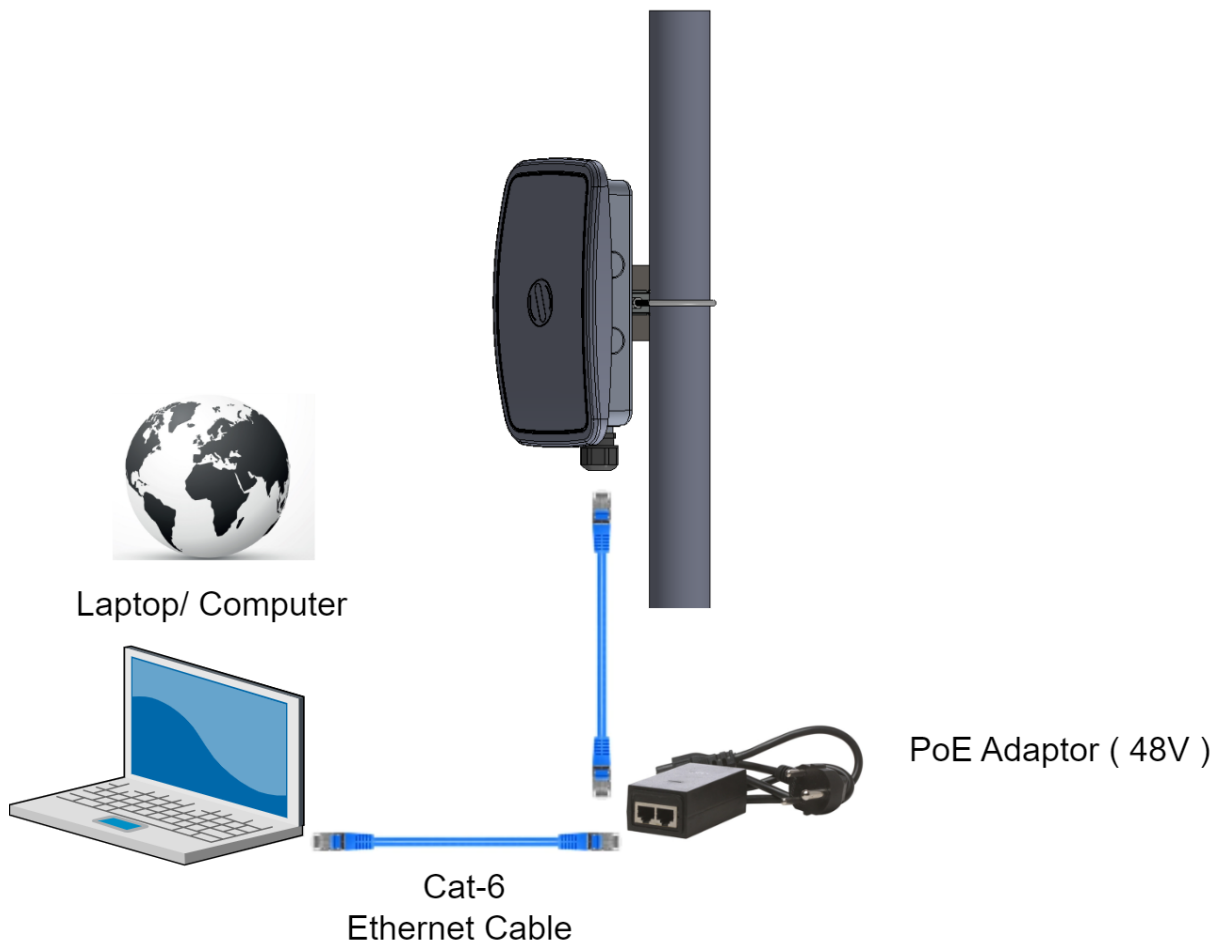
----- Power up using PoE Adaptor -----

## Step 2: Connect to the network

### Section 1: Standalone AP

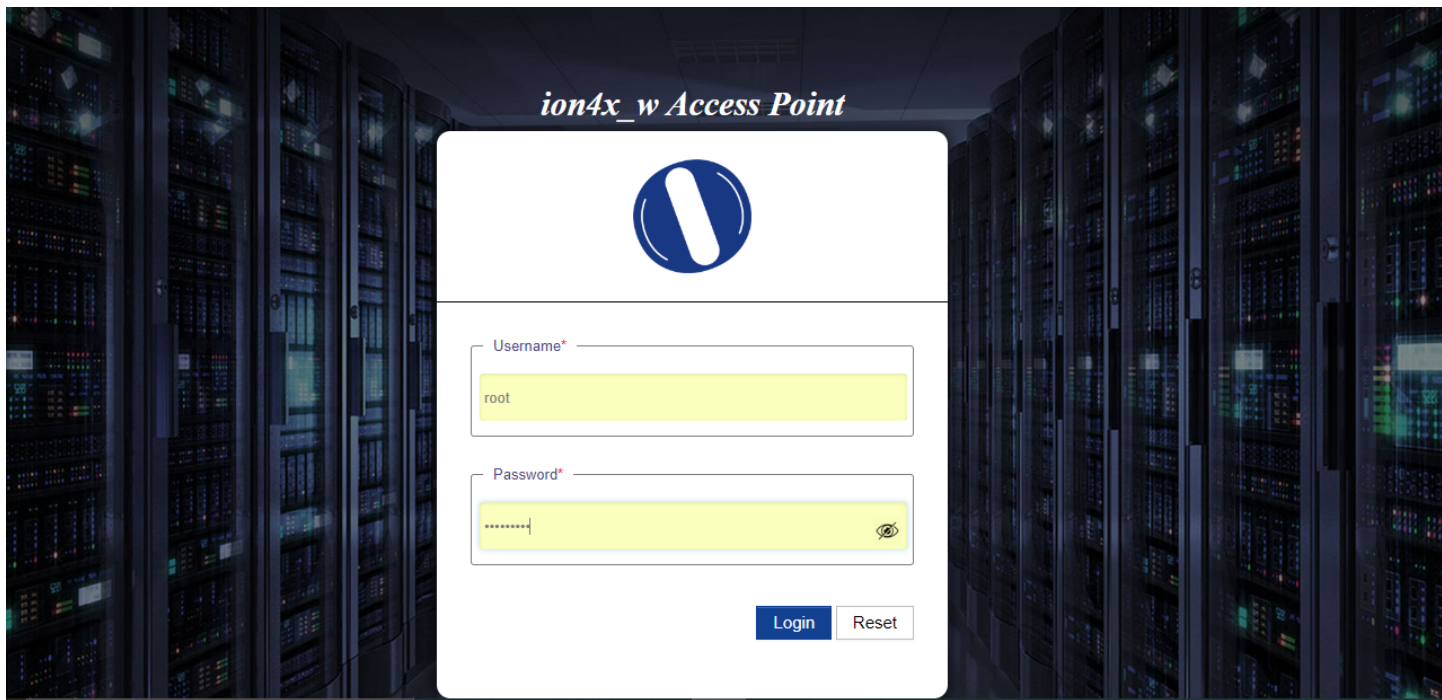
Follow the steps mentioned below and connect the access point to a network:

1. Connect an ethernet cable to the computer.
2. Connect the other end of the ethernet cable to the data port on the PoE adaptor.
3. Connect ion4x\_w PoE supported ethernet port to PoE adaptor Power port. Device will be powered on.





4. Configure the computer with a same domain static IP 192.168.1.X  
And a subnet mask of 255.255.255.0 ( X is from 2 to 255)
5. Open the web browser and enter the Access Point static IP address  
in the address bar: 192.168.1.1
6. A login screen will appear.
7. Enter the default login credential details:  
User - root, Password-hfcl!@ion



## Section 2: Controller Managed AP

Follow the step mentioned to connect Access Point to a network:

1. Connect an Ethernet cable to the computer.
2. Power-up the AP through PoE adaptor or PoE switch,
3. Connect the AP to DHCP network and internet.
4. Login to HFCL IO cloud controller (cNMS) [iocloud.hfcl.com](http://iocloud.hfcl.com) with credentials provided.







4a. To get cNMS login credential, please send request email to [iosupport@hfcl.com](mailto:iosupport@hfcl.com) with below details

Customer Name	Customer email address	Customer address	Customer contact number	Distributor/ Retailer Name	No. of AP Purchased	Country

5. Add AP group under configuration
6. Add APs in the AP group
7. Create SSID in the AP Group.
8. Refer our website [io.hfcl.com](http://io.hfcl.com) for detailed information to configure AP through cNMs.

# Safety Precautions

Observe the following safety precautions to avoid damage to the ion4x\_w Access Point:

-  Do not power the device during installation
-  Keep away from high voltage cables
-  Do not power off the unit in the middle of an upgrade process
-  The gland should be ground facing all the time
-  Do not open the enclosure
-  Fasten the device tightly

Federal Communication Commission Certified:

This equipment is 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.

These 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 these 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:

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

FCC Caution:

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. These equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

These devices comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. These devices may not cause harmful interference
2. These devices must accept any interference received, including interference that may cause undesired operation