



Quick Start Guide
ion4e
Access Point

ANYWHERE EVERYWHERE



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Introduction

Thank you for purchasing our ion4e Access Point. ion4e is a cloud-managed 2x2:2 MU-MIMO Wi-Fi 5 certified Access Point that raises the bar for wireless performance and efficiency.

Packaging Content



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ion4e Specifications

Peak Throughput(aggregate)	Upto 1.27 Gbps (867 Mbps for 5 GHz and 400 Mbps for 2.4 GHz)
Wi-Fi Standard Support	802.11a/b/g/n/ac/ac Wave 2
Interface	1 X 10/100/1000 BASE-T Ethernet
Radio Mode	2x2 MU-MIMO with 2 spatial streams
Mesh Support	Self-creating, Self-healing Mesh
Maximum number of SSID (per radio)	16
Maximum User Support	128 on 5 GHz & 64 on 2.4 GHz
Power Supply	IEEE 802.3af PoE
Power Consumption (Max)	12 W (approx.)
Max Transmit Power	23 dBm for 2.4 GHz , 27 dBm for 5 GHz (will depend on country-specific guidelines)
Antenna Type	Option for external antenna
Management	Standalone (via GUI) or through on-premise based solution or cloud-based
Enclosure Dimensions	189 x 170 x 71 mm or 7.44 x 6.69 x 2.79 inches
Weight	0.75 kg
Operating Temperature	-15°C to 60°C
Certifications	FCC Class A, CE, Passpoint 2.0, IP67, RoHS 3.0

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Product Overview

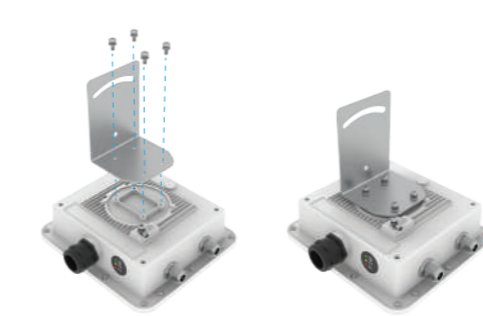


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Mounting of ion4e Access Point

The ion4e can be mounted on a pole or to a wall. Perform the following steps for appropriate installation.

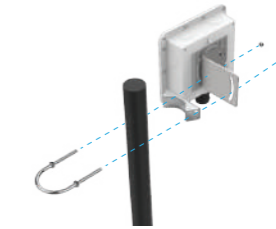
1. Align L Plate with the holes at the back of Access Point
2. Use the provided screws to fix the plate onto the Access Point. The mounting bracket is fixed onto the mounting holes on the Access Point



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Pole Mount

1. Align the bracket mounted Access Point with pole holder & U-Bolt
2. Pass the U-Bolt through the cuts of pole holder & mounting bracket. Secure it in place with the screws.



3. Access Point has the freedom of movement along with the vertical & horizontal axis



Note: The pole mounting is designed for poles of diameter 40 mm to 60 mm. For mountings on larger size poles upto 140 mm, contact at iosales@hfcl.com

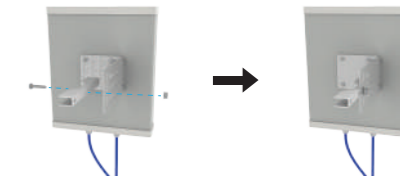
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Attaching External Antennas

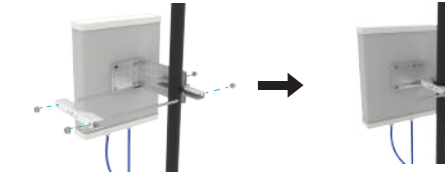
Sector Antenna

Attach the sector antenna to expand coverage to 60, 90 or 120 degrees.

1. Secure the wall mount bracket on the back of the sector antenna



2. Align the bracket mounted sector antenna with the pole clamp

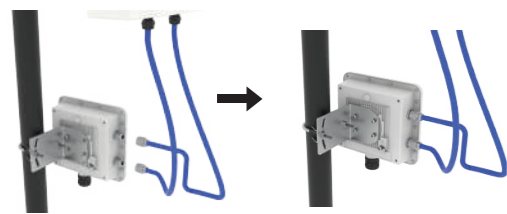


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3. This type of mounting enables vertical and horizontal movement by loosening few of the bolts as shown below

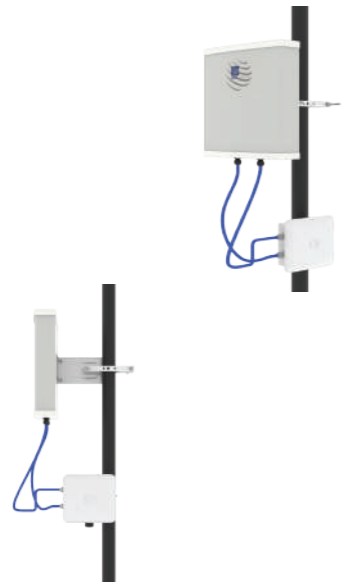


4. Attach one end of the RF Cables to the sector antenna & the other end on the N type connectors of the Access Point



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5. The final view is as shown below



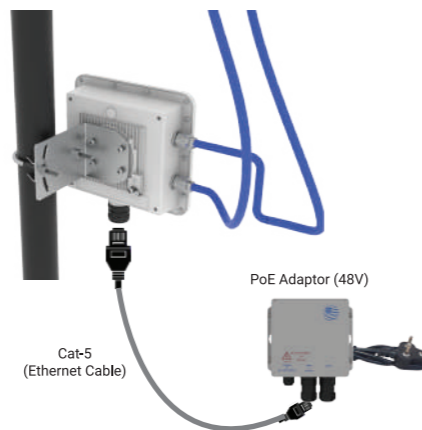
WARNING: HFCL is not held liable for any damages incurred during the process.

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Getting the ion4e Online

Step 1: Power up

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



Note: Plug and Adaptor will vary by country/ region

Power up using PoE Adaptor

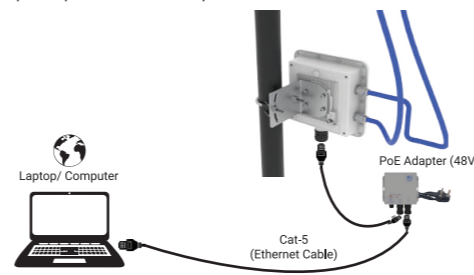
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Step 2: Connect to the network

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 ethernet cable to the data port on PoE adapter
3. Connect ion4e PoE supported ethernet port to PoE adapter power port. Device will be powered on

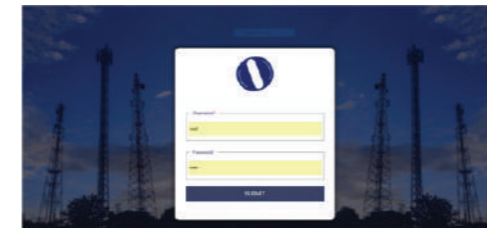


4. Configure the computer with a same domain static IP 192.168.1.X and a subnet mask of 255.255.255.0 (X is from 2 to 255)
5. Open the web browser and enter the Access Point static IP address in the address bar: 192.168.1.1

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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 steps mentioned below and connect the Access Point to a network :

1. Power-up the AP through PoE adapter or PoE switch
2. Connect the AP to DHCP network and Internet
3. Login to HFCL IO cloud controller (cNMS) cnms.ionetworks.in with credentials provided
4. Refer our website io.hfcl.com for detailed information to configure AP through cNMS

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Step 3: Check the LED status



LED Color	Status
Power LED Green	Green color notifies the user that the device is powered ON
2.4 GHz Status LED	Solid yellow color notifies the user that the 2.4 GHz radio is active and blinks while data is being transmitted on 2.4 GHz radio
5 GHz Status LED	Solid red color notifies the user that the 5 GHz radio is active and blinks while data is being transmitted on 5 GHz radio

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Safety Precautions

Observe the following safety precautions to avoid damage to the ion4e 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
- Make sure the earthing wire is connected properly to the earthing points

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