



**Wi-Fi 5**  
**Dual Band | 4x4:4**  
**Outdoor Access Point**  
**ion8e**

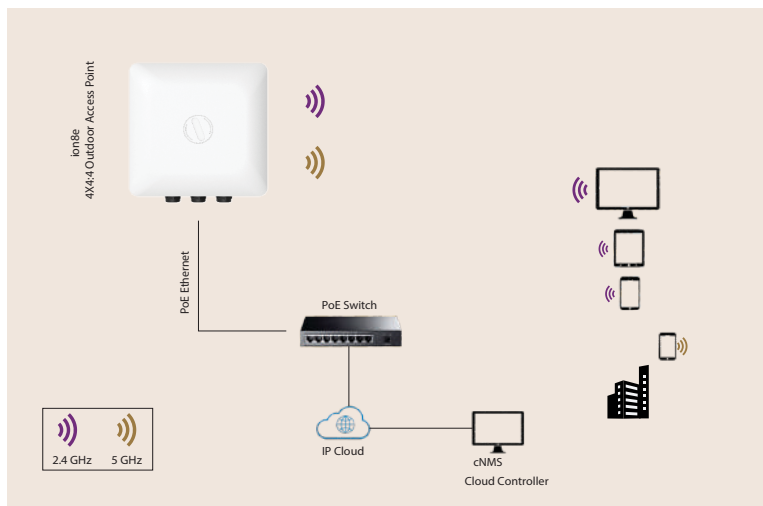


**ion8e**

- IO carrier-grade Indoor Access Point is uniquely designed for high performance, next generation networks based on 802.11ac Wave 2 technology with integrated 2.4 and 5 GHz 4×4:4 MU-MIMO radios
- The Outdoor Access Point provides speeds upto 1733 Mbps on 5 GHz and upto 800 Mbps on the 2.4 GHz band
- The Gigabit Ethernet port with 802.3at support allows powering the device with PoE switches
- The provision of N-type connectors in ion8e model supports a variety of external antennas to be utilized based on the specific applications.
- The IP67 standard rated enclosure, integrated surge protection and sturdy mounting bracket helps to ensure continuous operation in the harshest of weather conditions.

**Best Performance - All the Way**

- Simultaneous data transmission to multiple devices
- Maximized data throughput
- Improved network efficiency
- Up link and down link performance improvement
- Advanced location and indoor way finding
- Proximity based push notification capabilities
- Ability for businesses to leverage mobility context to develop applications that deliver enhanced user experience and increase the value of wireless networks for organizations



# Unmatched Performance



## Mesh Coverage

The entire Wi-Fi network functions on 802.11s Mesh Technology. One or more Access Point can act as the controller (or Mesh root). With unlimited number of Agent nodes (or Mesh satellites) connected with each other or the Mesh root, the mesh network becomes highly scalable.



## Band Steering

In highly congested environments, the Access Point automatically moves dual band client devices onto the wider 5GHz band for faster connections.



## MIMO

Multiple Input and Multiple Output: Dual band concurrent operation in 2.4GHz and 5GHz bands and multiplies capacity by simultaneous transmission to multiple devices making this one of the fastest indoor Access Point options available in the market.



## Easy Installation

Configurable in both thick and thin modes. Implying, these APs can be easily configured and managed as standalone or using iCon Cloud or server based cNMS solution.



## External Antenna

Extend coverage with our wide range of external antennas to cover distant areas without having the need to deploy more Wi-Fi Access Points.

# Technical Specifications

## Wireless

<b>Wi-Fi Standards</b>	802.11a/b/g/n/ac/ac Wave 2
<b>Radio Mode</b>	4x4 MU-MIMO with 4 spatial streams
<b>Radio Frequency Band</b>	Supports full 2.4 GHz & 5 GHz ISM frequency bands, with DFS optimization
<b>Peak Throughput</b>	Up to 2.5 Gbps (1733 Mbps for 5 GHz and 800 Mbps for 2.4 GHz)
<b>Max Transmit Power</b>	27 dBm for 2.4 GHz , 27 dBm for 5 GHz (will depend on country-specific guidelines)
<b>Receiver Sensitivity</b>	-97 dBm (for MCS 0)
<b>Channel Size</b>	20/40/80/80+80/160 MHz
<b>Modulation Schemes</b>	Supports up to 256 QAM
<b>User Support</b>	128 on 5 GHz and 64 on 2.4 GHz
<b>Processor</b>	Qualcomm IPQ8065 SOC
<b>Power</b>	IEEE 802.3at PoE/POE+
<b>Max Power Consumption</b>	20 W
<b>Interface</b>	<ul style="list-style-type: none"> <li>1 X 10/100/1000BASE-T Ethernet</li> <li>1 X Combo port (1 X 1000 Base X Optical Ethernet SFP or 10/100/1000BASE-T Ethernet)</li> </ul>
<b>Antenna</b>	Option for external antenna

## High level features

- WAN Protocols: Static IPv4/v6, DHCP client v4/v6
- Band Steering
- Load Balancing
- Channel Bonding
- WDS and MESH Support
- Auto Channel Selection
- Intelligent RF control plane for self-healing and self-optimization
- Ability to simultaneously serve clients and monitor RF environment
- Radio Resource Management for power and channel
- Management: Standalone (via mobile app or GUI) or through
- appliance-based WLC and EMS or cloud-based
- 16 SSID per Radio
- 802.11w- Protected Management Frames (PMF) support
- Bandwidth Shaping per SSID
- QOS 802.11e WMM
- Maximal ratio combining (MRC) and beamforming support
- 802.11r- fast roaming and fast handover
- VoIP support
- Advance Power Save (U-APSD)
- Inbuilt GPS: GNSS-1 (GPS + GLONASS) (Optional)





## Security

- WPA-Personal, WPA2-Personal, WPA2-Enterprise, EAP Type (EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, EAP-AKA, EAP-AKA Prime, EAP-FAST), Protected Management Frames
- VPN pass-through
- IP Security (IPSec), PPTP, IP-Filtering
- Layer 2 Tunneling Protocol (L2TP/LWAP/AMQPS/GRE)
- Flexible guest access with device isolation
- Captive portal and guest accounts
- Rogue Access Point detection and prevention (WIDS & WIPS) Hidden SSID in beacons
- MAC address authentication
- X.509 digital certificates
- Support for locally-significant certificates using Public Key Infrastructure (PKI)

## Physical & Environmental

<b>Enclosure</b>	Two-piece enclosure with UV protected ABS + PC top body and an aluminium bottom body
<b>Dimensions</b>	260 X 262 X 84.6 mm or 10.24 x 10.32 x 3.33 inches
<b>Weight</b>	2.3 kg
<b>Mounting</b>	Pole and wall mounting, with turning angle of 1 40° H & 60° V, and weight of 0.86 kg
<b>Visual Indicators</b>	RF and Power LEDs
<b>Operating Temperature</b>	-15°C to 60° C
<b>Operating Humidity</b>	5 to 95% (non-condensing)
<b>Wind Sustainability</b>	150 km/hr (sustained winds)
<b>Outdoor Ingress Protection Rating</b>	IP67
<b>Certifications</b>	FCC Class B, CE, Wi-Fi Certified Passpoint 2.0

## Safety

- Safety Protection as per IEC 60950 and IEC 60215
- Electrostatic Discharge Immunity as per IEC 61000-4-2, Contact L2 and Air Discharge, L3 Level
- DC Surge Immunity as per IEC 61000-4-5
- Level 2 (power port + signal port)
- Electrical Fast Transient/Burst Immunity as per IEC 61000-4-4, Level 2 Radiated susceptibility as per IEC 61000-4-3 Level 2
- Conducted Susceptibility as per IEC 61000-4-6, Level 2
- Bump and vibration as per QM333

## Other Compliances

- Radiated Emission as per CISPR 22 Class A
- Conducted Emission as per CISPR 22 Class A (power port + signal port)
- Voltage Variation: AC- as per IEC 61000-4-11 and DC- as per IEC 61000-4-29

## Order Information

### MODEL NUMBER

ion8e

### PRODUCT DESCRIPTION

IO Wi-Fi 4x4 Outdoor Access Point with N-conn for External Antenna



Email: [iosupport@hfcl.com](mailto:iosupport@hfcl.com)  
 Website: [www.hfcl.com](http://www.hfcl.com) | [www.io.hfcl.com](http://www.io.hfcl.com)  
 Office: 8, Commercial Complex, Masjid Moth Greater Kailash II,  
 New Delhi 110048