

# Wi-Fi 5 Dual Band | 4x4:4 Indoor Access Point ion8i

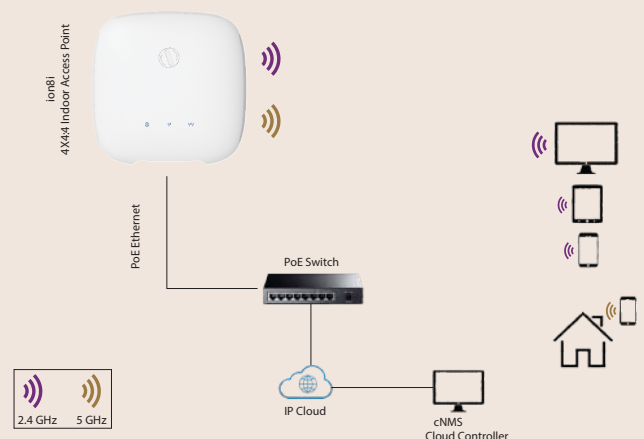


ion8i

- 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 4x4:4 MU-MIMO radios
- The Indoor Access Point provides throughput of up to 1733 Mbps on 5 GHz and up to 800 Mbps on the 2.4 GHz band
- The Gigabit Ethernet port with 802.3at support allows powering the device with PoE switches

## 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.



## Antenna

Antenna gain: 4 dBi for 2.4 GHz, 4.5 dBi for 5 GHz

# 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>	Upto 2.53 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 upto 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>Power Adaptor</b>	+12V DC Power Adaptor
<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> <li>DC Power Jack</li> </ul>
<b>Antenna</b>	Integrated Omnidirectional Antennas
<b>Antenna Gain</b>	4 dBi for 2.4 GHz, 4.5 dBi for 5 GHz

## 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
- Management: Standalone (via mobile app or GUI) or through appliance-based WLC and EMS or cloud-based
- 16 SSID per Radio
- QOS 802.11e WMM
- 802.11r- fast roaming and fast handover
- Bandwidth Shaping per SSID
- Maximal ratio combining (MRC) and beamforming support
- 802.11w- Protected Management Frames (PMF) support
- Advance Power Save (U-APSD)
- VoIP support



## 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)

## 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
- Bump and vibration as per QM333
- 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

## Physical & Environmental

<b>Enclosure</b>	Two-piece enclosure with ABS top and bottom body
<b>Dimensions</b>	230 X 227.2 X 50.6 mm or 9.06 X 8.94 X 2 inches
<b>Weight</b>	0.65 kg
<b>Mounting</b>	Tabletop, wall and ceiling mounting
<b>Visual Indicators</b>	RF and Power LEDs
<b>Operating Temperature</b>	-15°C to 50° C
<b>Certifications</b>	FCC Class B, CE, Wi-Fi Certified Passpoint 2.0

## Other Compliances

- Radiated Emission as per CISPR 22 Class B
- Conducted Emission as per CISPR 22 Class B (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	PRODUCT DESCRIPTION
ion8i	IO Wi-Fi 4x4 Indoor Access Point with Integrated 4 dBi Omni Antenna