

Product Description



- IO 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 2×2:2 MU-MIMO radios
- The Indoor Access Point provides throughput of up to 867 Mbps on 5 GHz and up to 400 Mbps on the 2.4 GHz band
- It provides simultaneous data transmission to multiple devices, maximizes data throughput, improves network efficiency as well as uplink and downlink performance
- It provides advanced location and indoor wayfinding, proximity-based push notification capabilities as well as enables businesses to leverage mobility context to develop applications that will deliver an enhanced user experience and increase the value of the wireless network for organizations

Target Applications







Higher Throughput

A dual-band radio offering peak data rates up to 1.27 Gbps. It comes with integrated omnidirectional high gain antennas for 360 degree coverage.



Data Protection

It is equipped with an array of business-class security features such as WPA2-Personal, WPA2-Enterprise, WPA3-Personal, WPA3-Enterprise and Captive Portal Authentication. Rogue AP detection and prevention helps administrators identify authorized Access Points across the network, while MAC address filtering provides an additional layer of protection.



Fast Roaming

In addition to the IEEE standards, ion4i_w is also Wi-Fi Alliance certified for Passpoint 3.0. This improves the user experience by offering mobile data offloading and streamlined, enterprise-class device provisioning and credential management for enterprise and other private networks.



Network Segmentation

Ion4i_w supports 8 SSID per radio and 16 combined, which gives the flexibility to segment your network as per the usage. This allows you to create guest user accounts, which can be firewalled from the rest of the network, enhancing the security since these users are prohibited from gaining access to sensitive data.



Antenna

TX Power ~ 25 dBm with 2x5 dBi dual band integrated omnidirectional antennas



Wireless	
Wi-Fi Standards	802.11a/b/g/n/ac/ac Wave 2
Radio Mode	2×2 MU MIMO with 2 spatial streams
Radio Frequency Band	Supported frequency bands with DFS optimization(country-specific restrictions apply): - 2.4000 GHz to 2.4835 GHz - 5.150 GHz to 5.250 GHz - 5.250 GHz to 5.350 GHz - 5.470 GHz to 5.725 GHz - 5.725 GHz to 5.875 GHz
Peak Throughput	Upto 1.27 Gbps (867 Mbps for 5 GHz and 400Mbps for 2.4 GHz)
Max Transmit Power	25dBm for 2.4 GHz, 25 dBm for 5 GHz (will depend on country-specific guidelines)
Receiver Sensitivity	- 97 dBm (for MCS 0)
Channel Size	20/40/80 MHz
Modulation Schemes	Supports up to 256 QAM
User Support	128 on 5 GHz and 64 on 2.4 GHz
Processor	Qualcomm IPQ4019 SOC
Power	+12V DC Power Adaptor
Max Power Consumption	Approx. 11.5 W
Interface	1 X 10/100/1000BASE-T Ethernet
Antenna	Integrated Omnidirectional Antennas
Antenna Gain	5 dBi for 5Ghz , 5 dBi for 2.4 Ghz

High Level Features

WAN Protocols: Static IPv4/v6, DHCP client v4/v6

Band Steering, Load Balancing, Channel Bonding

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 GUI) or through appliance based WLC and EMS or cloud based

8 SSID per radio and 16 combined

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

802.11i, 802.1x / EAP, Hidden, WIPS, WEP, WPA-PSK, WPA-Enterprise, WPA2-PSK, WPA2-EAP, WPA2-PSK-Mixed, WPA2-Enterprise, WPA3-Personal and WPA3-Enterprise, WPA3-SAE, MAC, Radius based, EAP Type (EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAPMSCHAPv2, EAP-SIM), Protected Management Frames

VPN pass through

IP Security, (IPSec), PPTP, IP Filtering

Layer 2 Tunnelling Protocol (L2TP/LWAP/CAPWAP/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).

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

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

Physical & Environmental

Enclosure	Two piece enclosure with PC top and bottom body
Dimensions	180 X 180 X 50 mm
Weight	370 grams
Mounting	Table top, wall and ceiling mounting
Visual Indicators	Single Colour Status LEDs
Operating Temperature	0 to 50° C
Certifications	FCC Class B, CE, RoHS3.0, Wi-Fi Certified Passpoint 3.0, WPA 3

Order Information

Model Number ion4i_w

Product Description IO Wi-Fi 5 Dual Band 2x2:2 Indoor Access Point with Integrated Antenna (5 dBi)



Email: iosupport@hfcl.com
Website: hfcl.com | io.hfcl.com

Office: 8, Commercial Complex, Masjid Moth, Greater Kailash II, New Delhi 110048