

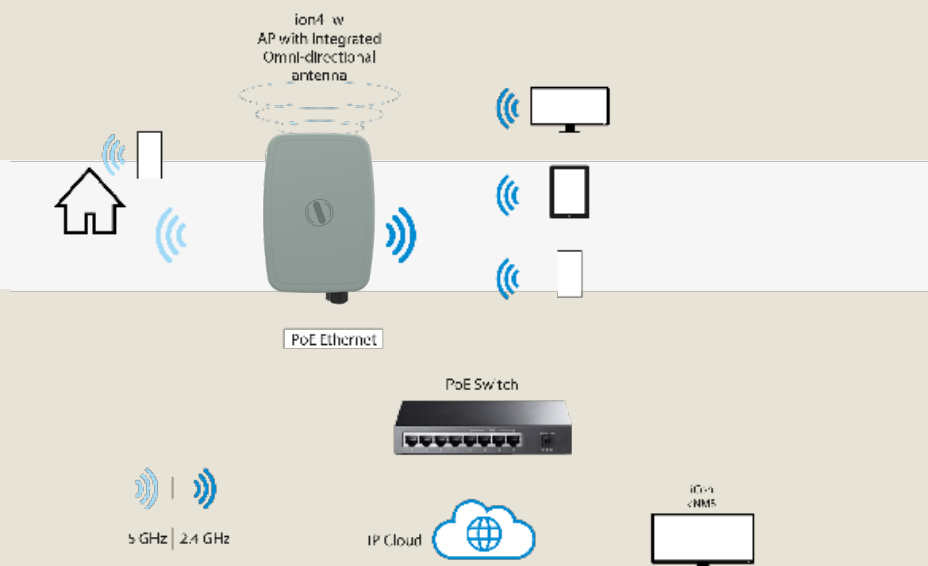
Wi-Fi 5 2x2 Outdoor Access Point ion4_w

Product Description



- IO Next-Gen 2x2 Access Point is designed for outdoor use cases and provides a simple, cost-effective and high-performance network which is based on Qualcomm IPQ4019 chipset. AP supports 802.11ac Wave 2 with 2x2:2 MU-MIMO. It has concurrent dual-band radios and supports up to 867 Mbps on 5 GHz and 400 Mbps on 2.4 GHz
- The ruggedized APs provide excellent coverage and performance which truly makes it a Next Generation Wireless Access Point
- Its cost effective design supports connectivity of up to 150 meters with integrated antenna
- The two-piece enclosure with UV protected PC top and bottom body provides years of durability without hampering the enclosure

Target Applications



Unmatched Performance



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, ion4_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

ion4_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 2x9 dBi dual-band integrated omnidirectional antennas

Technical Specifications

Wireless

| | |
|------------------------------|---|
| Wi-Fi Standards | 802.11a/b/g/n/ac/ac Wave 2 |
| Radio Mode | 2x2 MU-MIMO with 2 spatial streams |
| Radio Frequency Band | Supported frequency bands with DFS optimization (country-specific restrictions apply): <ul style="list-style-type: none">- 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 | 25 dBm 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 | IEEE 802.3af PoE |
| Max Power Consumption | 11.5 W |
| Interface | 1 X 10/100/1000BASE-T Ethernet |
| Antenna | Integrated Omnidirectional Antennas |
| Antenna Gain | 9 dBi for 5GHz , 6 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

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 A (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 UV protected PC top and bottom body |
| Dimensions | 290×200×90 mm |
| Weight | 550 Grams |
| Mounting | Pole and wall mounting |
| Visual Indicators | Ethernet Link and Status LED Integrated with RJ45 |
| Outdoor Ingress Protection Rating | IP 67 |
| Operating Humidity | 5 to 95% (non-condensing) |
| Operating Temperature | 0°C to 55° C |
| Wind Sustainability | 150 km/hour (sustained winds) |
| Certifications | FCC Class B, CE, RoHS3.0, Wi-Fi Certified Passpoint 3.0, WPA 3 |

Order Information

| Model Number | Product Description |
|--------------|---|
| ion4_w | IO Wi-Fi 5 Dual Band 2×2:2 Outdoor Access Point with Integrated Antenna(9 dBi) [with non-LTE band reject filter] |
| ion4_w2 | IO Wi-Fi 5 Dual Band 2×2:2 Outdoor Access Point with Integrated Antenna(9 dBi) [with LTE band reject filter] |



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