Wi-Fi 5

Dual Band | 2x2:2
Outdoor Access Point

ion4

ion4_2

Carrier Grade

Managed Wi-Fi Solutions

- Captive Portal + AAA
- Voucher Management
- Web Self-care
- Policy Control
- Wi-Fi Network & Performance Analytics
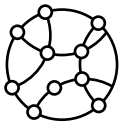- Configurable User Journey/Survey
- Footfall Analytics

Cloud Management

Ease Of Management

- Centralized control
- Troubleshoot on the move
- Network analytics

Scalable Platform

- Create & Expand
- Robust & scalable application

Ubiquitous Secure Connectivity

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 no limitation on the number of Agent nodes (or Mesh satellites) connected with each other or the Mesh root, the mesh network becomes highly scalable. Mesh limits the need for ethernet cabling to one or just a few cables. It is designed to eliminate wireless dropouts, stuttering videos, slow download speeds, poor signal and Wi-Fi dead zones.
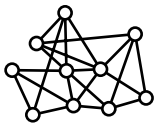
Self-healing Mesh

In case of a mesh node failure, the surrounding nodes automatically re-connect and resume service without downtime. Nodes identify the best next hop and connect with it automatically.

Band Steering

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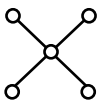
MIMO

Multiple Input and Multiple Output: This multiplies capacity by simultaneously transmitting & receiving from multiple devices.

Ease of Installation

Access Points can be mounted on walls & poles. Freedom of movement of Access Points even after installation in both horizontal and vertical axis for quick and easy alignment.

Outdoor Access Point

Our Wi-Fi 5 outdoor access points come packed with a plethora of features. They come with high performance antennas that ensure that there are no dead zones, while their IP67 rated bodies are ready for all weather conditions and are built to last.

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	Supports full 2.4 GHz & 5 GHz ISM frequency bands
Peak Throughput	Upto 1.27 Gbps (867 Mbps for 5 GHz and 400 Mbps for 2.4 GHz)
Max Transmit Power	27 dBm for 2.4 GHz , 27 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 upto 256 QAM
User Support	128 on 5 GHz and 64 on 2.4 GHz
Power	IEEE 802.3af PoE
Max Power Consumption	12 W (approx..)
Interface	1x10/100/1000BASE-T Ethernet
Antenna	Integrated directional antennas with 90° beamwidth
Antenna gain	8 dBi for 2.4 GHz and 5 GHz (ion4) 14 dBi for 2.4 GHz and 5 GHz (ion4_2)

SECURITY & FEATURES

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, Hidden SSID in beacons, MAC address authentication, X.509 digital certificates, Support for locally-significant certificates using Public Key Infrastructure (PKI)
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 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

PHYSICAL & ENVIRONMENTAL

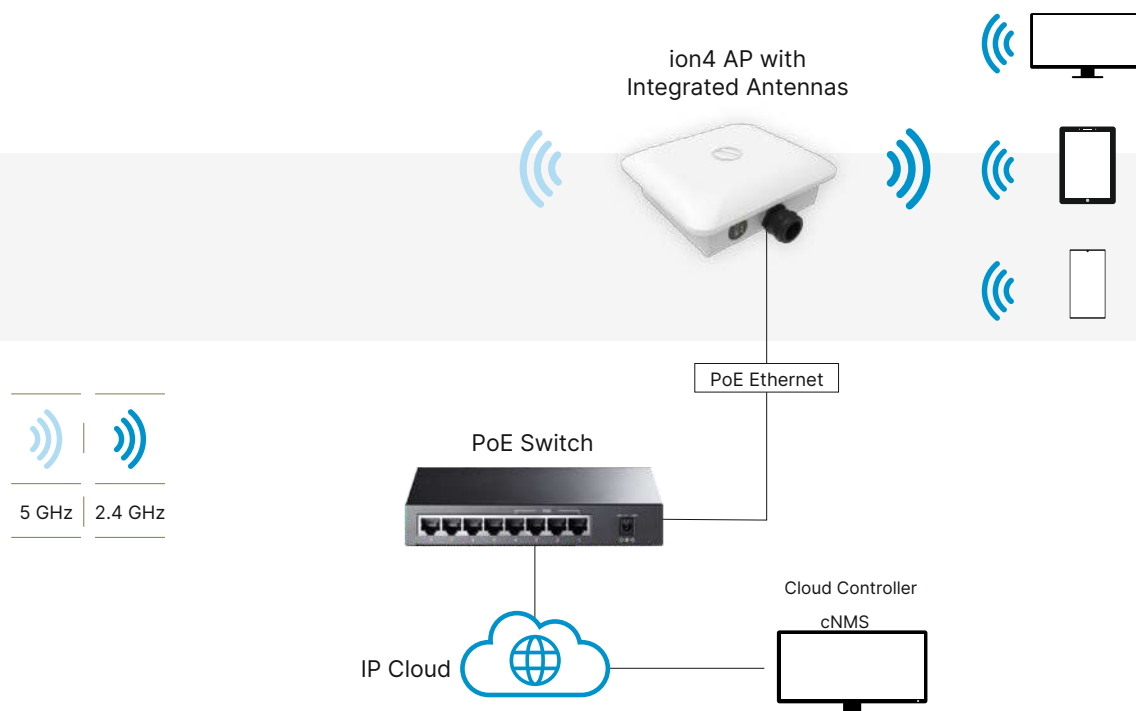|	
Enclosure	Two-piece enclosure with UV protected ABS + PC top and bottom body, and an aluminium heat sink at bottom
Dimensions	185 X 170 X 65 mm (7.28 x 6.69 x 2.56 in) (ion4) 370X215X86 mm (14.56X8.46X3.38 in) (ion4_2)
Weight	0.75 kg (ion4) 1.5 kg (ion4_2)
Mounting	Pole and wall mounting Turning Angle: 140° H & 60° V Weight: 185 grams
Visual Indicators	RF and Power LEDs
OperatingTemperature	-15º C to 60º C
Operating Humidity	5 to 95% (non-condensing)
Wind Sustainability	150 km/hour (sustained winds)
Certifications	FCC Class A, CE, Wi-Fi Certified Passpoint 2.0
Outdoor Ingress Protection Rating	IP67

SAFETY & OTHER COMPLIANCES

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

TARGET APPLICATIONS

ion4 AP with Integrated Antennas

PoE Ethernet

PoE Switch

5 GHz | 2.4 GHz

IP Cloud

Cloud Controller
cNMS

ORDERING INFORMATION

MODEL NUMBER	PRODUCT DESCRIPTION
ion4	IO Wi-Fi 5 Dual Band 2x2:2 Outdoor Access Point with Integrated Antenna (8 dBi)
ion4_2	IO Wi-Fi 5 Dual Band 2x2:2 Outdoor Access Point with Integrated Antenna (14dBi)

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