

Canopus

Designed to deliver best-in-class performance



Ray's Canopus offers flexible deployment options for Operators and Enterprise networks, that need reliable industrial-grade coverage for mobile, outdoor clients (smartphones, tablets, and laptops) and wireless backhaul. Ideal for SMEs that require high performance outdoor Wi-Fi coverage at cost-efficient value, the Ray Canopus Access Points offer the latest IEEE 802.11ac Wave 2 radio standard in a solid and sturdy design.

Designed to deliver best-in-class performance Canopus access point deliver Ray's premium services in a sleek and compact enclosure. Build bespoke hardware based on your specific requirements for mounting and access. Our cloud-driven approach allows us to extend this flexibility by requiring zero

on-site configuration. Eliminate challenges of earlier cloud solutions and simplify operations to deliver a smart scalable solution while ensuring advanced functionality. Ray can be entirely managed on the cloud thereby eliminating the cost of deploying on-site hardware or skilled IT personnel at customer sites.

An intelligent design helps Ray detect and optimize for speed, so that you can prepare for next-generation technology today. Deliver industry-leading capacity, reliability, and coverage in high-density outdoor environments while simplifying network management using the most advanced features and intuitive controls. Revolutionize your business operations with Ray.

BENEFITS

Coverage Capacity

Ensure superfast connections even with additional devices with high performance Wave 2 Wi-Fi with SFP and 2 gigabit Ethernet ports.

Deliver Performance

Present exceptional performance, remarkable speed and unparalleled flexibility in offerings with Ray by utilizing over 4,000 directional antenna patterns.

Efficient Management

Our cloud-driven modern solutions automate planning, provisioning and service activation across the network without a controller.

Optimal Throughput

Ray automatically detects the least congested channels and utilizes it for best performance ensuring the highest throughput the band can afford

Equip More Devices

Simultaneously use multiple devices at blazing fast speeds with Ray using its four MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios.

Manage Additional Devices

Easily manage the boom of extra devices that form the IoT system owing to separate frequency bands.

Beyond Wi-Fi

Make Ray a powerful tool for determining your business strategy by gaining valuable user information and easily interpreting insights

SPECIFICATIONS

WI-FI	
Wi-Fi Standards	<ul style="list-style-type: none"> IEEE 802.11a/b/g/n/ac Wave 2
Supported Rates	<ul style="list-style-type: none"> 802.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS = 1 to 2 for VHT20/40/80) 802.11n: 6.5 Mbps to 300Mbps (MCS0 to MCS15) 802.11a/g: 54, 48, 36, 24, 18, 12, 9, 6Mbps 802.11b: 11, 5.5, 2 and 1 Mbps
Supported Channels	<ul style="list-style-type: none"> 2.4GHz: 1-13 5GHz: 36-64, 100-144, 149-165
MIMO	<ul style="list-style-type: none"> 2x2 SU-MIMO 2x2 MU-MIMO
Spatial Streams	<ul style="list-style-type: none"> 2 SU-MIMO 2 MU-MIMO
Radio Chains and Streams	<ul style="list-style-type: none"> 2x2:2
Channelization	<ul style="list-style-type: none"> 20, 40, 80MHz
Security	<ul style="list-style-type: none"> WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i, DynamicPSK WIPS/WIDS
Other Wi-Fi Features	<ul style="list-style-type: none"> WMM, Power Save, Tx Beamforming, LDPC, STBC, 802.11r/k/v Hotspot Hotspot 2.0 Captive Portal WISPr

PHYSICAL INTERFACES	
Ethernet	<ul style="list-style-type: none"> 2 x 1GbE ports, RJ-45, PoE in on one port

PHYSICAL CHARACTERISTICS	
Physical Size	<ul style="list-style-type: none"> 198 x 198 mm
Mounting	<ul style="list-style-type: none"> Wall, Drop ceiling, Desk
Environment	<ul style="list-style-type: none"> Operating Temperature: -20~55 °C Limit Working Temperature: -30~70 °C Storage Temperature: -40~70 °C Humidity: 5%~95% non-condensing

POWER	
Power consumption	<ul style="list-style-type: none"> 48V PoE<30W

PERFORMANCE AND CAPACITY	
Peak PHY Rates	<ul style="list-style-type: none"> 2.4GHz: 300Mbps 5GHz: 867Mbps
Client Capacity	<ul style="list-style-type: none"> Up to 512 clients per AP
SSID	<ul style="list-style-type: none"> Up to 31 per AP

NETWORKING	
Mesh	<ul style="list-style-type: none"> Wi-Fi SON (Self-Organizing Network)
IP	<ul style="list-style-type: none"> IPv4, IPv6
VLAN	<ul style="list-style-type: none"> 802.1Q (1 per BSSID or dynamic per use based on RADIUS) VLAN Pooling Port-based
802.1x	<ul style="list-style-type: none"> Authenticator & Supplicant
Tunnel	<ul style="list-style-type: none"> L2TP, GRE
Policy Management Tools	<ul style="list-style-type: none"> Application Recognition and Control Access Control Lists Device Fingerprinting Rate Limiting Time based Policy Device based Policy Application based Policy
IoT Capable	<ul style="list-style-type: none"> Yes

RF	
Antenna Type	<ul style="list-style-type: none"> Adaptive antenna that provides up to 64 unique antenna patterns per band
Antenna Gain (max)	<ul style="list-style-type: none"> Up to 5dBi
Peak Transmit Power (aggregate across MIMO chains)	<ul style="list-style-type: none"> 2.4GHz: 26dBm 5GHz: 25dBm
Minimum Receive Sensitivity	<ul style="list-style-type: none"> -101dBm (2.4GHz) -96dBm (5GHz)
Frequency Bands	<ul style="list-style-type: none"> ISM (2.4-2.484GHz) U-NII-1 (5.15-5.25GHz) U-NII-2A (5.25-5.35GHz) U-NII-2C (5.47-5.725GHz) U-NII-3 (5.725-5.85GHz)

RAY RADIO MANAGEMENT	
Wi-Fi Channel Management	<ul style="list-style-type: none"> Background Scan Based
Client Density Management	<ul style="list-style-type: none"> Adaptive Band Balancing Client Load Balancing Airtime Fairness Airtime-based WLAN Prioritization
Quality of Service	<ul style="list-style-type: none"> QoS-based scheduling Directed Multicast L2/L3/L4 ACLs
Mobility	<ul style="list-style-type: none"> 802.11r
Diagnostic Tools	<ul style="list-style-type: none"> PCAP