

# **Key Specifications**

- Full featured Wi-Fi 6, 6 Stream AP
- 4x4:4 5GHz Radio + 2x2:2 2.4 GHz Radio
- Up to 0.6 Gbps throughput for 2.4 GHz radio
- Up to 2.4 Gbps throughput for 5 GHz radio
- · Additional 2x2 dual band radio for dedicated RF and WIPS scanning
- Integrated omnidirectional antennas
- 20/40/80/160 MHz channel width support
- 2x2.5 Gbps Ethernet ports
- · Support for UL/DL MU-MIMO
- · Support for UL/DL OFDMA
- PoE++ support
- · PoE+ support
- · Wall and ceiling mounting options
- · Integrated BLE

# **Key Features**

- · Distributed Data Plane architecture
- Zero-touch deployment through automatic cloud activation and configuration
- · Cloud or on premises management plane options
- Operating modes for dedicated access, dedicated security or dual mode
- Support for up to 8 distinct SSIDs per radio
- · Integrated firewall, traffic shaping, QoS and BYOD controls per SSID
- Dynamic RF optimization through smart steering, band steering and optimal channel selection
- · Application visibility through layer 7 deep packet inspection
- · Automated device access logging
- Patented Marker Packets<sup>TM</sup> technology for rogue AP detection and classification
- Wired VLAN monitoring for "No-WiFi" zone enforcement
- Third party analytics integration with realtime data transfer
- Versatile 3rd radio for WIPS, Scanning and **Client Connectivity Tests**
- · Self-healing wireless mesh networking

#### **Aesthetic Design and High Performance**

Arista C-250 is an enterprise-grade, 12 stream Wi-Fi 6 AP with dual concurrent 5 GHz and 2.4 GHz band radios supporting 8 stream 802.11a/n/ac/ax, 4 stream 802.11b/g/n/ax and data rates of up to 4.8 Gbps and 1.4 Gbps, respectively.

#### C-250 Capabilities

C-250 provides Gen 2 Wi-Fi 6 performance improvements to deliver higher capacity and more efficient use of the available spectrum. It provides industry leading user experience and throughput in high density environments. Uplink/ Downlink OFDMA channelization allocates bandwidth more efficiently across client devices to provide a better user experience. The ability to serve multiple clients simultaneously through UL/DL MU-MIMO further improves system capacity and user experience. With support for eight spatial streams in 5GHz, the C250 delivers truly unprecedented throughput and client capacity. C-250 is ideal for critical, high-density networks serving a high volume of diverse clients and applications. Common deployment scenarios include large schools, large remote offices, auditoriums, meeting rooms, and enterprise campuses.

#### Arista CloudVision® Managed Wi-Fi

The C-250 is an Arista CloudVision Wi-Fi managed platform. Available as a cloud service or on prem management platform, CloudVision Wi-Fi leverages a purpose built cloud architecture delivering cloud grade analytics and automation to enterprise Wi-Fi networks. CloudVision ensures high reliability, scalability, security and cost effectiveness.

#### Versatile, multipurpose 3rd Radio

C-250 comes with a versatile multipurpose 2x2:2 dual band 802.11ac third radio that provides:

- Industry leading, continuous WIPS and spectrum analysis
- Better RRM decisions from continuous spectral visibility
- Network availability and performance assurance by On-demand and scheduled client connectivity test



Arista C-250



#### Access

C-250 provides Wi-Fi networks that require less time and resources to deploy and maintain compared to traditional devices, resulting in significa t cost savings.

- · Plug and play provisioning using either Cloud or On-premise deployments Arista Access Points take less than two minutes to activate and configure after connecting to the cloud
- Support for up to eight individual SSIDs per radio providing maximum flexibility in network design
- · Network controls like NAT, Firewall and QoS implemented at the Access Point, ensuring faster and more reliable networks
- Continuous scanning of all 2.4 GHz and 5 GHz channels by a dedicated 2x2 third radio provides a dynamic, 360 degree view of the RF environment to assist in RF optimization and client handling
- Network availability and performance assurance using the third radio as a client to conduct on-demand and scheduled connectivity and performance tests
- · Smart steering addresses sticky client issues by automatically pushing clients with low data rates to a better access point
- · Band steering manages channel occupancy, pushing clients to the 5 GHz channel for optimal throughput
- Smart load balancing distributes load evenly across neighbouring APs to optimize the use of network resources
- · Arista Wi-Fi's distributed data plane architecture continues to serve users and secure the network even if connection with the management plane is interrupted
- Interference avoidance from LTE/3G small/macro cells in commonly used TDD/FDD frequency bands

#### Security

C-250 offers complete visibility and control of the wireless airspace ensuring network integrity while actively protecting users without manual intervention.

- C-250 is equipped with industry leading fully integrated wireless intrusion prevention capabilities
- · Multifunction third radio provides uninterrupted spectrum scanning or client emulation for always on security coverage alongside dedicated 2.4G/5G client radios.
- Arista's patented Marker Packets<sup>™</sup> help accurately detect rogue access points on any network while minimizing false positives
- · Third radio used as a dedicated security sensor for 24x7x365 scanning and automated over-the-air (OTA) prevention
- Deterministic rogue AP detection and prevention by monitoring all WiFi and non-WiFi VLANs.
- · Over-the-air and on-the-wire prevention techniques assure automatic and reliable threat prevention to keep unauthorized clients and rogue APs off the network without impacting authorized connections.
- Access Points autonomously scan for wireless threats and enforce security policy even if disconnected from the cloud management
- VLAN monitoring enables a virtual connection to non-WiFi networks for complete network rogue detection and prevention

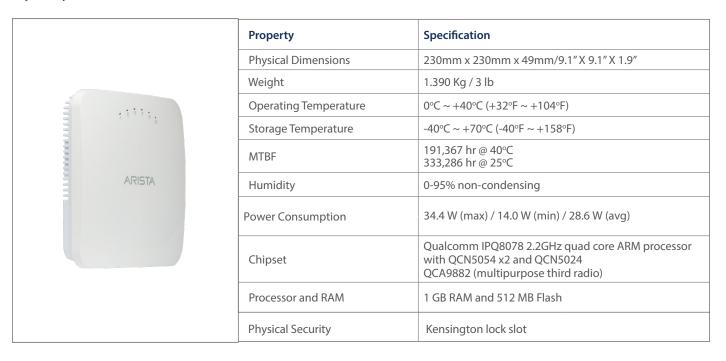
#### **Analytics**

The C-250 collects telemetry on connected and unconnected WiFi clients and supports immersive guest network experiences that help Arista's customers develop and reinforce the relationship with their end customers.

- · Reports of customer footfall, demographic, loyalty and other analytics provide insightful and actionable information.
- · Supports proximity marketing programs that trigger when certain devices are present, which includes automatic messaging vis MMS in-browser notific tions and real time notific tions sent to 3rd party systems that alert to the presence of enrolled devices.



#### **Physical Specifications**



	Port	Description	Connector Type	Speed/Protocol
LAN 1	Power	12V DC 3.3 A	5.5 mm overall di- ameter / 2.1 mm center pin hole	N/A
Power	LAN1	2.5 GbE,PoE++ compliant, MACsec capable*	RJ-45	100M/1G/2.5G Ethernet Recommended cabling - CAT6
	LAN2	2.5 GbE, PoE++ compliant, MACsec capable*	RJ-45	100M/1G/2.5G Ethernet Recommended cabling - CAT6
Console USB Reset	Console	Establish 'config shell' terminal session via serial connection	RJ-45	<ul> <li>RS 232 Serial (115200 bits per second)</li> <li>Data bits:8; Stop bits: 1</li> <li>Parity: None</li> <li>Flow Control: None</li> </ul>
	USB	USB 2.0 port	USB Type-A	Future use
	Reset	Reset to factory default settings port	Pin hole push button	Hold down and power cycle the device to reset

<sup>\*</sup> MACsec capabilities will be activated via a future software update.



#### **Operational Specifications**

Input Power	12V DC (5.5mm overall diameter/2.1mm center pin hole) PoE++ power • Full function PoE+ • USB off • Max EIRP¹ of 28.5 dBm at 5GHz, 25.5 dBm at 2.4GHz
Number of Radios	2 access radios; one 4x4:4 2.4GHz and one 8x8:8 5GHz radio for simultaneous dual band access.  1 multi-function 2x2 radio for continuous WIPS and client connectivity tests
Max Clients Supported	768 (256 clients on 2.4 GHz radio, 512 clients on 5 GHz radio)
MU-MIMO	8X8 on 5GHz radio and 4X4 on 2.4GHz radio
Number of Spatial Streams	8 for 5GHz radios, 4 for 2.4 GHz radio, 2 for multipurpose radio
Maximum EIRP	32.5dBm on 5GHz radio (max) and 28.5dBm on 2.4GHz radio (max) <sup>1</sup>
80+80MHz Non-Contiguous Channel Bonding	No
Bandwidth Agility	Yes
Small Cells Interference Mitigation (picocells, femtocells, microcells)	Yes
Frequency Bands <sup>2</sup>	2.4-2.4835 GHz, 4.9-5.0GHz, 5.15-5.25 GHz; (UNII-1), 5.25-5.35 GHz, 5.47-5.6 GHz, 5.650-5.725 GHz (UNII-2), 5.725-5.85 GHz (UNII-3)
Dynamic Frequency Selection	Supported in compliance to all latest amendments from FCC, CE, IC, CB, TELEC, KCC regarding certifications.

## **WiFi Specifications**

IEEE 802.11a/n/ac/ax			
Frequency Band	Scanning	Transı	mission
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
5GHz Band	4.92 ~ 5.08 GHz 5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.47~ 5.725 GHz 5.725~ 5.825 GHz	5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.725~ 5.825 GHz	5.15 ~ 5.25 GHz 5.25 ~ 5.35 GHz 5.47~ 5.725 GHz
Dynamic Frequency Selection	DFS and DFS2		
Modulation Type	OFDM / OFDMA		
Peak Data Rates	Up to 4.8 Gbps		
Antenna	Integrated modular high efficie	y PIFA antenna x8 (peak gain: (	6.1 dBi)

 $<sup>^1</sup>_{\rm 2}$  Max EIRP will be restricted to Country/Regulatory domain limits  $^2$  The frequency ranges are restricted to Country/Regulatory domain limits

IEEE 802.11b/g/n/ax			
	Scanning	Transmission	
Frequency Band	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
2.4GHz Band	2400 ~ 2483.5 MHz	2400 ~ 2473.5 MHz	2400 ~ 2483.5 MHz
Modulation Type	DSSS / OFDM / OFDMA		
Peak Data Rates	Up to 1.1Gbps		
Antenna	Integrated modular high efficie	y PIFA antenna x4 (peak gain	n:4.92 dBi)

## **Receive Sensitivity**

5GHz

Mode	Rate	Sensitivity (dBm)
000.44	6 Mbps	-92
802.11a	54 MBps	-75
11- LIT20	MCS 0	-93
11n_HT20	MCS 7	-75
11 - LIT40	MCS 0	-90
11n_HT40	MCS 7	-73
11ac VHT20	MCS 0	-95
11ac_VHT20	MCS 8	-70
11ac VHT40	MCS 0	-90
11ac_VHT40	MCS 9	-68
11ac_VHT80	MCS 0	-87
TTAC_VETTOU	MCS 9	-63
11ax_HE20	MCS 0	-93
TTAX_TTL20	MCS 11	-64
11ax_HE40	MCS 0	-91
	MCS 11	-62
11ax_HE80	MCS 0	-87
ΓΙαΧ_ΠΕΟυ	MCS 11	-59

## 2.4GHz

Mode	Rate	Sensitivity (dBm)
002.11	1 Mbps	-98
802.11b	11 Mbps	-90
002.11~	6 Mbps	-93
802.11g	54 MBps	-77
11° HT20	MCS 0	-95
11n_HT20	MCS 7	-76
11° UT40	MCS 0	-91
11n_HT40	MCS 7	-73
11ac VHT20	MCS 0	-95
11ac_VHT20	MCS 8	-72
11ac VHT40	MCS 0	-91
11ac_VHT40	MCS 9	-70
11ax_HE20	MCS 0	-94
	MCS 11	-65
11ax_HE40	MCS 0	-91
I IUA_IILTO	MCS 11	-63



## **Maximum EIRP**

5GHz

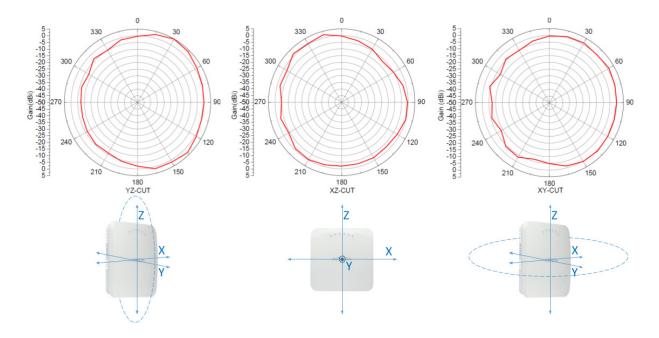
Mode	Rate	Power (dBm)
802.11a	6 ~ 18 Mbps	32.5
	24 ~ 54 Mbps	31.5
002.11 LIT20	MCS 0 ~ 4	32.5
802.11n_HT20	MCS 5 ~ 7	31.5
002.11	MCS 0 ~ 4	32.5
802.11n_VHT40	MCS 5 ~ 7	30.5
	MCS 0 ~ 4	32.5
802.11ac_VHT20	MCS 5 ~ 7	31.5
	MCS 8 ~ 9	30.5
	MCS 0 ~ 4	32.5
802.11ac_VHT40	MCS 5 ~ 7	30.5
	MCS 8 ~ 9	29.5
	MCS 0 ~ 4	32.5
802.11ac_VHT80	MCS 5 ~ 7	29.5
	MCS 8 ~ 9	28.5
	MCS 0 ~ 4	32.5
802.11ax HE20	MCS 5 ~ 7	31.5
002.11dx_HE20	MCS 8 ~ 9	30.5
	MCS 10- 11	27.5
	MCS 0 ~ 4	32.5
002 11 UE40	MCS 5 ~ 7	30.5
802.11ax_HE40	MCS 8 ~ 9	28.5
	MCS 10- 11	27.5
	MCS 0 ~ 4	32.5
002.11 UE00	MCS 5 ~ 7	29.5
802.11ax_HE80	MCS 8 ~ 9	28.5
	MCS 10 ~ 11	25.5

#### 2.4GHz

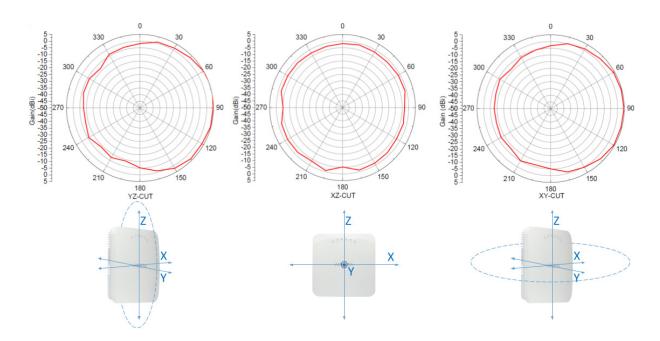
Mode	Rate	Power (dBm)
802.11b	1 ~ 11 Mbps	28.5
002.11	6 ~ 18 Mbps	28.5
802.11g	24 ~ 54 Mbps	26.5
002 11 m LIT20	MCS 0 ~ 4	28.5
802.11n_HT20	MCS 5 ~ 7	26.5
802.11n_HT40	MCS 0 ~ 4	27.5
	MCS 5 ~ 7	25.5
	MCS 0 ~ 4	28.5
902 11 av. HE20	MCS 5 ~ 7	26.5
802.11ax_HE20	MCS 8 ~ 9	25.5
	MCS 10 ~ 11	21.5
	MCS 0 ~ 4	27.5
802.11ax_HE40	MCS 5 ~ 7	25.5
	MCS 8 ~ 9	25.5
	MCS 10 ~ 11	22.5

## **Radiation Patterns**

## 2.4GHz - Peak Gain: 4.92dBi



5GHz - Peak Gain: 6.1dBi



## **Regulatory Specifications RF and Electromagnetic**

Country	Certification
USA	FCC Part 15.247, 15.407
Canada	IC
Europe	CE EN300.328, EN301.893 Countries covered under Europe certific tion: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands ,Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

<sup>\*</sup>For complete country certification records, please visit the site: https://www.arista.com/en/support/product-certificate

## Safety

Country	Certification
USA	UL 60950 UL 2043
Canada	cUL 60950
European Union (EU)	EN 60950, RoHS

## **Ordering Information Access Point**

Part Number	Description
AP-C250-SS-5Y	C-250 AP with 5 years bundled Cognitive Cloud SW subscription
AP-C250-SS-3Y	C-250 AP with 3 years bundled Cognitive Cloud SW subscription
AP-C250	C-250 8x8 tri radio 802.11ax (WiFi 6) access point with internal antennas

## **Mounting Options**

Part Number	Description
MNT-AP-24MM	AP mount kit for Prelude (24mm, 15/16") T-grid rails
MNT-AP-15MM	AP mount kit for Suprafine (15mm, 9/16") T-grid rails
MNT-AP-INTSIL	AP mount kit for Interlude and Silhouette T-grid rails
MNT-AP-FLAT-14CM	AP mount kit for flat surface installation (wall, hard ceiling)

#### **Power**

Part Number	Description
PWR-AP-W4	Universal AC power supply for C-250, 12VDC, 3.3A

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