Key Specifications

- Full featured Wi-Fi 6[1], 12 Stream AP

- 8x8:8 5GHz Radio + 4x4:4 2.4 GHz Radio

- Up to 1.4 Gbps throughput for 2.4 GHz radio

- Up to 4.8 Gbps throughput for 5 GHz radio

- Additional 2x2 dual band radio for dedicated RF and WIPS scanning

- Integrated BLE 4.1

- Integrated antennas

- 20/40/80/80+80 MHz channel width support

- 2x 2.5 Gigabit Ethernet ports

- Support for UL/DL MU-MIMO*

- Support for UL/DL OFDMA*

- 802.3bt PoE support

- 802.3at support with reduced function

- Wall and ceiling mounting options

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 Packettm technology for rogue AP detection and classification

- Wired VLAN monitoring for "No-WiFi" zone enforcement

- Third party analytics integration with real-time data transfer

- Self-healing wireless mesh networking

- Versatile 3rd radio for WIPS, Spectrum Analysis, Scanning and Client Connectivity Tests

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

*Supported in a future software release

[1] 802.11ax is also called Wi-Fi 6

Access

C-250 provides Wi-Fi networks that require less time and resources to deploy and maintain compared to traditional devices, resulting in significant 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

Security

C-250 offers complete visibility and control of the wireless airspace ensuring network integrity while actively protecting users without manual intervention.
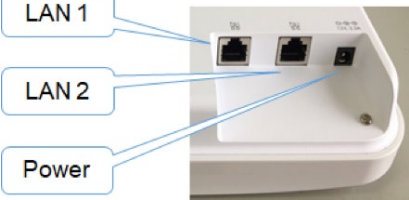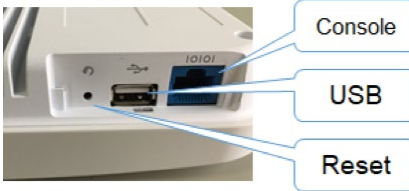
- C-250 is equipped with industry leading fully integrated wireless intrusion prevention capabilities

- Multifunction third radio provides uninterrupted spectrum scanning or client simulation for always on security coverage alongside dedicated 2.4G/5G client radios.

- Arista's patented Marker PacketsTM 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 plane

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 notifications and real time notifications sent to 3rd party systems that alert to the presence of enrolled devices.

Property	Specification	
Physical Dimensions	230mm x 230mm x 45mm/9.1" X 9.1" X 1.77"	
Weight	1.361kg /3 lb	
Operating Temperature	0ºC ~ +40ºC (+32ºF ~ +104ºF)	
Storage Temperature	-40ºC ~ +70ºC (-40ºF ~ +158ºF)	
Humidity	0-95% non-condensing	
Max power consumption	33.79W (802.3bt)	24.69W (802.3at**)
	33.79W (DC plug)	TBD (idle)
Chipset	Qualcomm IPQ8078 2.2GHz quad core ARM processor with QCN5054 x2 and QCN5024 QCA9882 (multipurpose third radio)	
Processor and RAM	1 GB RAM and 512 MB Flash	

Port	Description	Connector Type	Speed/Protocol
Power	12V DC	5.5 mm overall diameter / 2.1 mm center pin hole	N/A
LAN1	2.5 Gigabit Ethernet with 802.3bt compliant PoE	RJ-45	100/1000 Mbps / 2.5 Gbps Ethernet
LAN2	2.5 Gigabit Ethernet with 802.3bt compliant PoE	RJ-45	100/1000 Mbps / 2.5 Gbps Ethernet
Console	Establish 'config shell' terminal session via serial connection	RJ-45	• RS 232 Serial (115200 bits per second) • Data bits:8; Stop bits: 1 • Parity: None • Flow Control: None
USB	USB 2.0 port	USB	• Future use
Reset	USB 2.0 Reset to factory default settings port	Pin hole push button	Hold down and power cycle the device to reset

**AP will operate 4x4 on 5 GHz when powered by an 802.3at source.*

Operational Specifications

Input Power	12V DC (5.5mm overall diameter/2.1mm center pin hole) 802.3bt PoE 802.3at PoE (5 GHz radio limited to 4x4 operation and USB disabled)
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 radio for continuous WIPS, spectrum analysis and client connectivity tests
Max Clients Supported	1024 (512 clients per radio) (dependent upon use cases)
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
RF Transmit Power	26dBm on 5GHz radio (max) and 23dBm on 2.4Ghz radio (max); Actual power for Tx will depend on Country Regulatory Domain
80+80MHz Non-Contiguous Channel Bonding	Yes (limited to 4x4 operation)
Simultaneous MU-MIMO Clients	64 (TBD)*
Users in a MU-MIMO group with a 2x2 client	4+2 (TBD)*
Bandwidth Agility	Yes
Small Cells Interference Mitigation (pico-cells, femtocells, microcells)	Yes
Frequency Bands	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.

Supported in a future software release

WiFi Specifications

IEEE 802.11a/n/ac/ax			
Frequency Band	Scanning	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
	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 efficiency PIFA antenna x8 (peak gain: 6.1 dBi)		

IEEE 802.11b/g/n/ax			
Frequency Band	Scanning	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
2.5 GHz Band	2400 ~ 2483.5 MHz	2400 ~ 2473.5 MHz	2400 ~ 2483.5 MHz
Modulation Type	DSSS / OFDM / OFDMA		
Peak Data Rates	Up to 1.4Gbps		
Antenna	Integrated modular high efficiency PIFA antenna x4 (peak gain:4.92 dBi)		

Receive Sensitivity

5 Ghz

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

2.5 Ghz

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

Aggregate Transmit Power

5 Ghz

Mode	Rate	Power (dBm)
802.11a	6 ~ 18 Mbps	26
	24 ~ 54 Mbps	25
802.11n_HT20	MCS 0 ~ 4	26
	MCS 5 ~ 7	25
802.11n_VHT40	MCS 0 ~ 4	26
	MCS 5 ~ 7	24
802.11ac_VHT20	MCS 0 ~ 4	26
	MCS 5 ~ 7	25
	MCS 8 ~ 9	24
802.11ac_VHT40	MCS 0 ~ 4	26
	MCS 5 ~ 7	24
	MCS 8 ~ 9	23
802.11ac_HT80	MCS 0 ~ 4	26
	MCS 5 ~ 7	23
	MCS 8 ~ 9	22
802.11ax_HE20	MCS 0 ~ 4	26
	MCS 5 ~ 7	25
	MCS 8 ~ 9	25
	MCS 10- 11	21
802.11ax_HE40	MCS 0 ~ 4	26
	MCS 5 ~ 7	24
	MCS 8 ~ 9	23
	MCS 10- 11	21
802.11ax_HE40	MCS 0 ~ 4	26
	MCS 5 ~ 7	23
	MCS 8 ~ 9	21
	MCS 10 ~ 11	19

2.5 Ghz

Mode	Rate	Power (dBm)
802.11b	1 ~ 11 Mbps	23
802.11g	6 ~ 18 Mbps	23
	24 ~ 54 Mbps	21
802.11n_HT20	MCS 0 ~ 4	23
	MCS 5 ~ 7	21
802.11n_HT40	MCS 0 ~ 4	22
	MCS 5 ~ 7	20
802.11ax_HE20	MCS 0 ~ 4	23
	MCS 5 ~ 7	21
	MCS 8 ~ 9	20
	MCS 10 ~ 11	16
802.11ax_HE40	MCS 0 ~ 4	22
	MCS 5 ~ 7	20
	MCS 8 ~ 9	20
	MCS 10 ~ 11	17

Radiation Patterns

2.4 GHz - Peak Gain: 4.92dBi
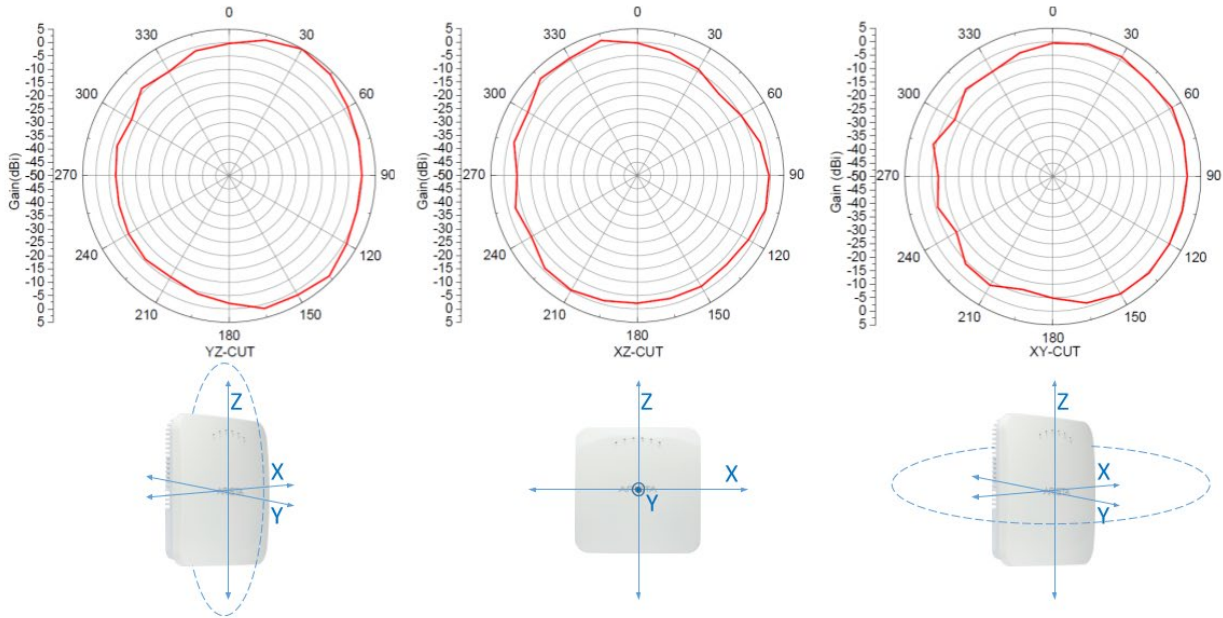
5 GHz - Peak Gain: 6.1dBi
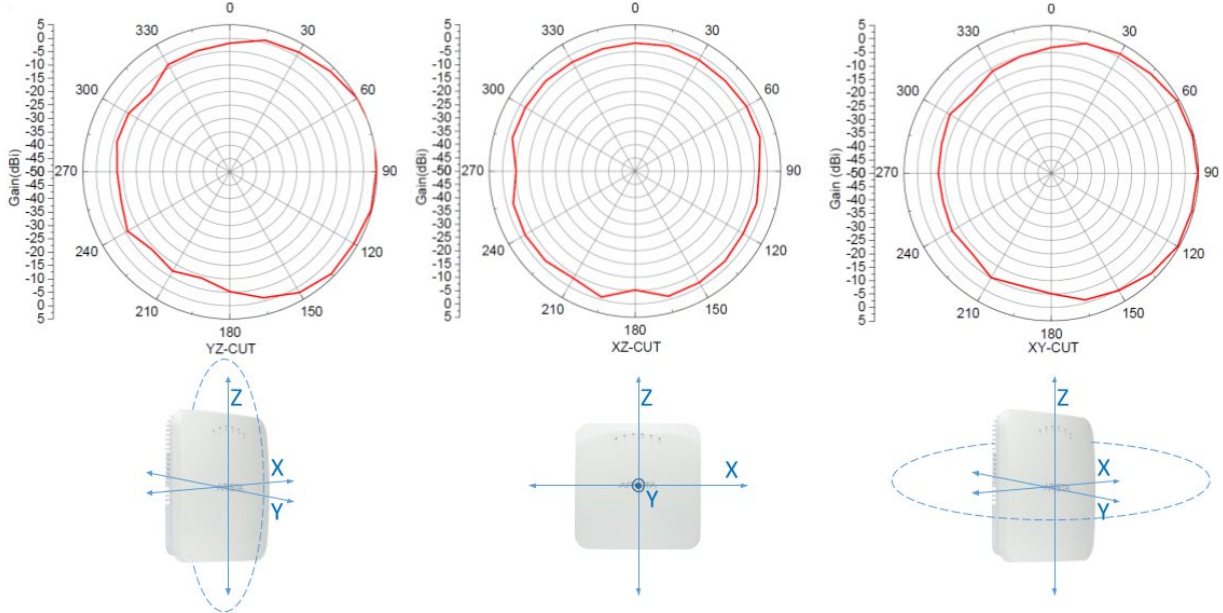
Regulatory Specifications

RF and Electromagnetic

Country	Certification
USA	FCC Part 15.247, 15.407
Canada	IC
Europe	CE EN300.328, EN301.893 Countries covered under Europe certification: 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.

Safety

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

Ordering Information Access Point

Access Point

Part Number	Description
OEM-AP-C250	C-250 8x8 tri radio 802.11ax (WiFi 6) access point with internal antennas and dual 2.5GbE interface
AP-C250-SS-5Y	C-250 AP with 5 years bundled Cognitive Cloud SW subscription
AP-C250-SS-7Y	C-250 AP with 7 years bundled Cognitive Cloud SW subscription

Mounting Options

Part Number	Description
OEM-MNT-AP-24MM	AP mount kit for Interlude (15/16",24mm) T-grid rails for C-100, C-110, C-120, C-130 & C-250
OEM-MNT-AP-15MM	AP mount kit for Suprafine (9/16",15mm) T-grid rails for C-100, C-110, C-120, C-130 & C-250
OEM-MNT-AP-INTSIL	AP mount kit for Interlude and Silhouette T-grid rails for C-100, C-110, C-120, C-130 & C-250
OEM-MNT-C110-FLAT	AP mount kit for flat surface installation (wall, hard ceiling) for C-110 & C-250

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