ARISTA C-230

Tri radio, 4X4 5GHz - 2X2 2.4GHz - 2x2 Dual-band scan radio Wi-Fi 6 access point

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
- 5 Gigabit + 1 Gigabit Ethernet ports
- Support for UL/DL MU-MIMO
- Support for UL/DL OFDMA
- 802.3at 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™ technology for rogue AP detection and classification
- Wired VLAN monitoring for "No-WiFi" zone enforcement
- Third party analytics integration with real-time data transfer
- Versatile 3rd radio for WIPS, Scanning and Client Connectivity Tests
- Self-healing wireless mesh networking

Aesthetic Design and High Performance

Arista C-230 is an enterprise-grade, 6 stream Wi-Fi 6 AP with dual concurrent 5 GHz and 2.4 GHz band radios supporting 4 stream 802.11 a/n/ac/ax, 2 stream 802.11 b/g/n/ax and data rates of up to 2.4 Gbps and 0.6 Gbps, respectively. It also has a 2.4GHz Bluetooth Low Energy (BLE) radio.

C-230 Capabilities

C-230 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.

C-230 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-230 is an Arista CloudVision CUE managed platform. Available as a cloud service or on prem management platform, CloudVision CUE 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-230 comes with a versatile multipurpose 2x2:2 dual band 802.11ac third radio that provides:

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

Arista C-230

Access

C-230 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

- Interference avoidance from LTE/3G small/macro cells in commonly used TDD/FDD frequency bands

Security

C-230 offers complete visibility and control of the wireless airspace ensuring network integrity while actively protecting users without manual intervention.

- C-230 is equipped with industry leading fully integrated wireless intrusion prevention capabilities

- TPM dedicated secure cryptoprocessor for authentication and attestation

- 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™ 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

- VLAN monitoring enables a virtual connection to non-WiFi networks for complete network rogue detection and prevention

Analytics

The C-230 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.

Physical Specifications

Property	Specification
Physical Dimensions	205mm x 205mm x 45.8mm/8.1" X 8.1" X 1.8"
Weight	1kg / 2.2 lb
Operating Temperature	0°C ~ +40°C (+32°F ~ +104°F)
Storage Temperature	-25°C ~ +70°C (-13°F ~ +158°F)
MTBF	343,175 hr @ 40°C 641,425 hr @ 25°C
Humidity	0-95% non-condensing
Power consumption	25.5 W (max) / 11.8 W (min) / 22.8 W (avg)
Cryptoprocessor	Trusted Platform module (TPM)
Processor and RAM	1 GB RAM and 512 MB Flash
Physical Security	Kensington lock slot

Port	Description	Connector Type	Speed/Protocol
Power	12V DC	5.5 mm overall diameter / 2.1 mm center pin hole	N/A
LAN1	5 GbE, 802.3at compliant PoE, MACsec capable*	RJ-45	100M/1G/2.5G/5G Ethernet
LAN2	1 GbE	RJ-45	100M/1G 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 Type-A	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

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) 802.3at PoE - Full function 802.3af power – Reduced Function (No USB; Both 5GHz & 2.4GHz limited to 2x2 operation; Tx power reduced by 6dB for both radios)
Number of Radios	2 access radios; one 2x2:2 2.4GHz and one 4x4:4 5GHz radio for simultaneous dual band access. 1 multi-function 2x2 radio for continuous WIPS and client connectivity tests
Max Clients Supported	1024 - 512 clients per radio (dependent upon use cases)
MU-MIMO	4X4 on 5GHz radio and 2X2 on 2.4GHz radio
Number of Spatial Streams	4 for 5GHz radios, 2 for 2.4GHz radio, 2 for multipurpose radio
RF Transmit Power[1]	29dBm on 5GHz radio (max) and 26dBm on 2.4GHz radio (max)[2]
80+80MHz Non-Contiguous Channel Bonding	Yes
Bandwidth Agility	Yes
3G/4G Macro and Small Cells Interference Mitigation	Yes
Frequency Bands	2.4-2.4835 GHz, 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, TELEC, KCC, NCC and ANZ regarding certifications.

WiFi Specifications

IEEE 802.11a/n/ac/ax			
Frequency Band	Scanning	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
5GHz Band	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 2.4 Gbps		
Antenna	Integrated modular high efficiency PIFA antenna x4 (peak gain: 3.9 dBi)		

[1] Total conducted output power across all Tx chains.

[2] Actual power for Tx will depend on Country Regulatory Domain

IEEE 802.11b/g/n/ax			
Frequency Band	Scanning	Transmission	
	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 0.6 Gbps		
Antenna	Integrated modular high efficiency PIFA antenna x2 (peak gain: 3 dBi)		

Receive Sensitivity

5GHz

Mode	Rate	Sensitivity (dBm)
802.11a	6 Mbps	-93
	54 Mbps	-76
11n_HT20	MCS 0	-94
	MCS 7	-76
11n_HT40	MCS 0	-91
	MCS 7	-73
11ac_VHT20	MCS 0	-94
	MCS 8	-72
11ac_VHT40	MCS 0	-91
	MCS 9	-68
11ac_VHT80	MCS 0	-88
	MCS 9	-65
11ax_HE20	MCS 0	-94
	MCS 11	-65
11ax_HE40	MCS 0	-91
	MCS 11	-62
11ax_HE80	MCS 0	-88
	MCS 11	-59

2.4GHz

Mode	Rate	Sensitivity (dBm)
802.11b	1 Mbps	-98
	11 Mbps	-90
802.11g	6 Mbps	-93
	54 Mbps	-77
11n_HT20	MCS 0	-94
	MCS 7	-76
11n_HT40	MCS 0	-91
	MCS 7	-73
11ax_HE20	MCS 0	-94
	MCS 11	-65
11ax_HE40	MCS 0	-91
	MCS 11	-62

Aggregate Transmit Power

5GHz

Mode	Rate	Power (dBm)
802.11a	6 ~ 18 Mbps	29
	24 ~ 54 Mbps	29
802.11n_HT20	MCS 0 ~ 4	29
	MCS 5 ~ 7	29
802.11n_HT40	MCS 0 ~ 4	29
	MCS 5 ~ 7	29
802.11ac_VHT20	MCS 0 ~ 4	29
	MCS 5 ~ 7	29
	MCS 8 ~ 9	29
802.11ac_VHT40	MCS 0 ~ 4	29
	MCS 5 ~ 7	29
	MCS 8 ~ 9	28
802.11ac_VHT80	MCS 0 ~ 4	29
	MCS 5 ~ 7	29
	MCS 8 ~ 9	28
802.11ax_HE20	MCS 0 ~ 4	29
	MCS 5 ~ 7	29
	MCS 8 ~ 9	29
	MCS 10- 11	28
802.11ax_HE40	MCS 0 ~ 4	29
	MCS 5 ~ 7	29
	MCS 8 ~ 9	28
	MCS 10- 11	28
802.11ax_HE80	MCS 0 ~ 4	29
	MCS 5 ~ 7	28
	MCS 8 ~ 9	28
	MCS 10 ~ 11	28

2.4GHz

Mode	Rate	Power (dBm)
802.11b	1 ~ 11 Mbps	26
802.11g	6 ~ 18 Mbps	26
	24 ~ 54 Mbps	26
802.11n_HT20	MCS 0 ~ 4	26
	MCS 5 ~ 7	26
802.11n_HT40	MCS 0 ~ 4	26
	MCS 5 ~ 7	26
802.11ax_HE20	MCS 0 ~ 4	26
	MCS 5 ~ 7	24
	MCS 8 ~ 9	24
	MCS 10 ~ 11	24
802.11ax_HE40	MCS 0 ~ 4	26
	MCS 5 ~ 7	24
	MCS 8 ~ 9	23
	MCS 10 ~ 11	23

Radiation Patterns

2.4GHz - Peak Gain: 3dBi

YZ-CUT

XZ-CUT

XY-CUT
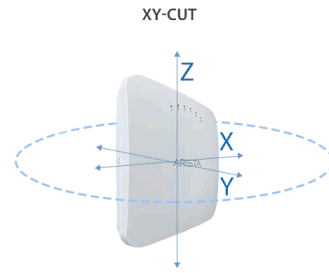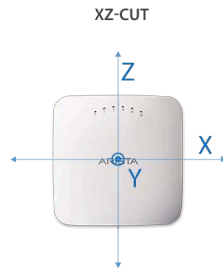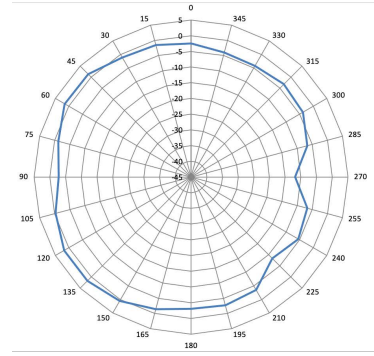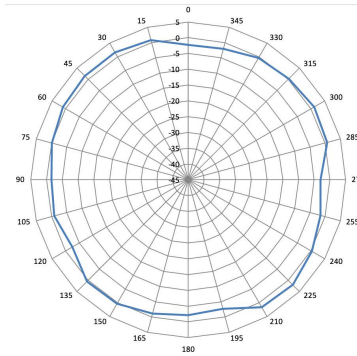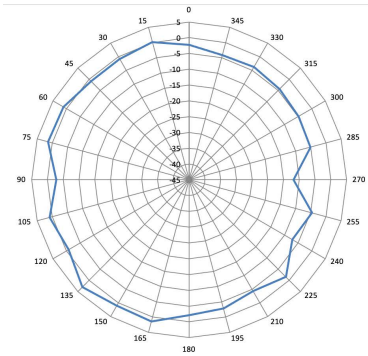
5GHz - Peak Gain: 3.9dBi

YZ-CUT

XZ-CUT

XY-CUT
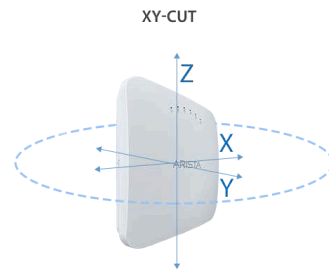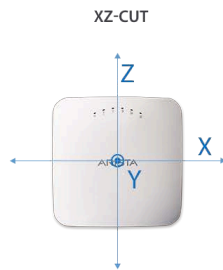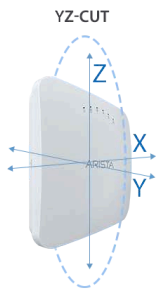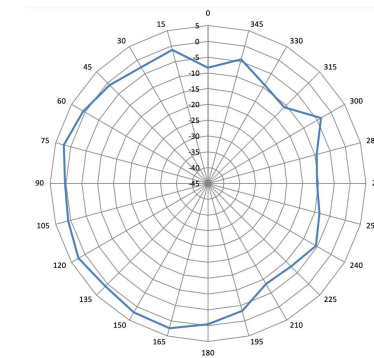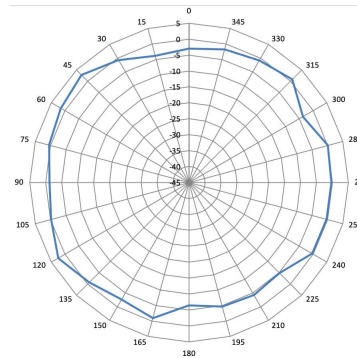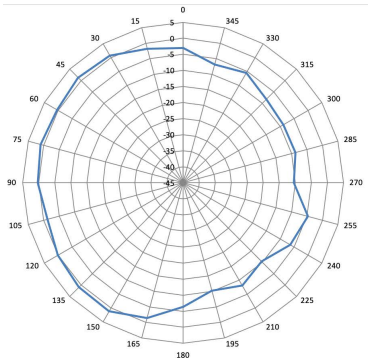
Regulatory Specifications RF and Electromagnetic Compatibility (EMC)   Data Sheet

Country	Certification
USA	FCC Part 15.247, 15.407, 15B
Canada	ICES-003, RSS-247, RSS-102
Europe	EN 300 328, EN 300 440, EN 301 893, EN 301 489 , EN 55024, EN 55032, EN 55035 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.

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

Safety & Environmental

Country	Certification
USA, Canada	UL/cUL 62368, UL 2043
European Union (EU)	EN 62368, RoHS
China	GB/T 26125 RoHS
Taiwan	CNS 14336, CNS 15663 RoHS

Ordering Information

Access Point

Part Number	Description
AP-C230	C-230 4x4 tri radio 802.11ax (WiFi 6) access point with internal antennas
AP-C230-SS-5Y	C-230 AP with 5 years bundled Cognitive Cloud SW subscription
AP-C230-SS-3Y	C-230 AP with 3 years bundled Cognitive Cloud SW subscription

Mounting Options

For details of mounting options, see the Access Points Mounting Brackets Guide

Power

Part Number	Description
PWR-AP-W4	Universal AC power supply for C-230, 12VDC, 3.3A
PWR-AP-PLUS-NA	One port 802.3at PoE+ injector for use with all Access Point models. Includes USA power cord. Not for outdoor use.

MHz MEGA HERTZ

Provided by: Mega Hertz | 800-883-8839 | info@go2mhz.com | www.go2mhz.com
https://www.go2mhz.com/product/wi-fi-6-access-point/

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