

# **Key Specifications**

- 2x2 MU-MIMO with two spatial streams per radio
- · Third 2x2 MIMO radio for dedicated RF and WIPS scanning
- 802.11ac Wave 2 support
- Up to 300 Mbps for 2.4 GHz radio
- Up to 867 Mbps for 5 GHz radio
- · Six integrated omnidirectional antennas
- 20/40/80 MHz channel width support
- Integrated Bluetooth Low Energy (BLE)
- 2x Gigabit Ethernet port
- Full Operational Capacity with 802.3at PoE+

# **Key Features**

- 100% controller-free
- · Zero-touch deployment through automatic cloud activation and configuration
- Cloud-defined operating modes for dedicated access, dedicated security or dual-mode
- Support for up to eight distinct SSIDs per radio
- · Integrated layer 2 and application firewall, per-user bandwidth controls, and QoS per SSID
- · Dynamic RF optimization through smart steering, band steering and optimal channel selection
- Automated device access logging
- · Non-WiFi VLAN monitoring for extended rogue access point detection
- · Third party analytics integration for real-time data transfer
- · Self-healing wireless mesh networking

#### Top Performance at the Best Price

Arista C-110 is an enterprise-grade 2x2 MU-MIMO tri-radio 802.11ac access point with dual concurrent 5 GHz and 2.4 GHz radios supporting 802.11a/n/ac Wave 2, 802.11b/g/n, two spatial streams, and data rates of up to 876 Mbps and 300 Mbps, respectively. It also contains a third 2x2 MIMO 802.11ac radio for dedicated multifunction scanning and a fourth 2.4 GHz Bluetooth Low Energy (BLE) radio.

#### Why Choose the C-110?

The C-110 provides best value among high-performing, modern access points designed for cost-conscious organizations. Built using the latest 802.11ac Wave 2 chipsets, the C-110 is perfect for medium density environments looking for the high performance and advanced features of current access points without the high cost. Common deployment scenarios include small and medium schools, distributed remote offices, small meeting rooms, and enterprise campuses. The C-110 provides access to advanced access point features like role-based firewalls and application visibility without the high cost typically associated with Wave 2 devices. The C-110 is also a perfect fit for organizations in need of future-ready dedicated security sensors.

#### iBeacon Bluetooth Low Energy Support

The Arista C-110 supports the iBeacon Bluetooth Low Energy (BLE) standard. BLE is used for proximity based services on mobile devices via an application ecosystem. C-110 can be configured to advertise a unique identifier through iBeacon at a periodic interval.

#### Arista Cloud Managed WiFi

The Arista C-110 is an Arista Cloud managed platform and leverages a purpose built cloud architecture to produce enterprise-grade wireless networks for every application required, ensuring high reliability through an approach that is automated, scalable, secure and cost effective.

#### What Really Matters

The future of WiFi requires intelligent, self-reliant access points that support highperforming, highly reliable networks without the need for antiquated controllers. This approach removes the complexity, instability and high costs associated with enterprise WiFi today.



Arista C-110

#### Access

The C-110 creates WiFi networks that require less time and resources to deploy and maintain compared to traditional devices, resulting in significant cost savings.

- · 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 allows for maximum flexibility in network design
- Network controls like NAT, Firewall and QoS occur at the access point level, ensuring faster and more reliable networks
- Persistent scanning of all 802.11 channels through background scanning increases insight and data to assist in RF optimization and client handling
- Smart steering addresses sticky client issues by automatically pushing clients with low speeds to closer access points
- · Band steering manages channel occupancy, pushing clients to the 5GHz channel for optimal throughput
- · Access points continue to broadcast and support wireless networks even if their connection with the cloud is interrupted

#### Security

The C-110 offers complete visibility and control of the wireless airspace that keeps the integrity of the network in check and actively protects users without manual intervention.

- Every Arista access point is equipped with the industry's only fully integrated wireless intrusion prevention capabilities
- · Runs complete spectrum scans while simultaneously serving wireless clients through background scanning
- Arista's patented Marker Packets<sup>TM</sup> are used to accurately detect access points on any network with the fewest false positives in the industry
- VLAN monitoring enables a virtual connection to non-WiFi networks for complete network rogue detection and prevention
- Automatic prevention combines over-the-wire and over-the-air techniques to keep unauthorized clients off network and authorized clients on it
- · Access points continue to scan for wireless threats and enforce security policy even if their connection with the cloud is interrupted

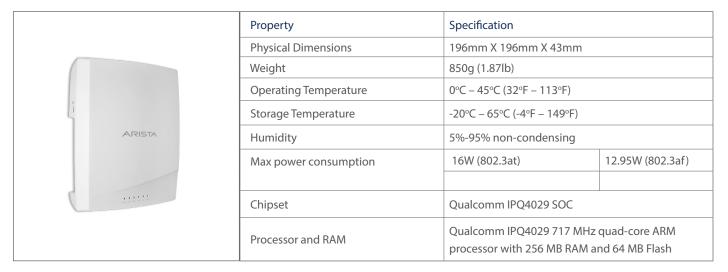
#### Engagement

The C-110 collects massive amounts of data and supports immersive guest network experiences that develop and reinforce the relationship between them and the brand.

- · Persistent scanning of all 802.11 channels results in a comprehensive list of active wireless clients across the enterprise
- · Choice statistics like location, duration, distance from access point and time of day are stored locally for every active wireless client
- Statistics such as session duration, total data transfer up and down, data rate, smart device type and top-level domain are stored locally for every active connection
- · Real-time notifications sent to third party systems that alert to the presence of enrolled devices
- Enables proximity marketing programs that trigger when certain devices are present
- · Triggers automatic messaging via MMS, in-browser notifications, and more



# **Physical Specifications**



	Port	Description	Connector Type	Speed/Protocol
POWER   1940   1940   1940   1940   1940	Reset	Reset to factory default settings	Pin hole push button	Hold down and power cycle the device to reset
LAN1 LAN2 (PoE)	Power	12V DC	3.5mm overall diameter/1.35mm center pin/hole	N/A
	LAN2	Gigabit Ethernet port that can be used for wired extension for an SSID.	RJ-45	10/100/1000 Mbps Gigabit Ethernet
	LAN1/ PoE	Gigabit Ethernet port used to connect to the wired LAN and communicate with the Arista Cloud or Server. This port can also be used to power the device using the 802.3at (PoE+)/ 802.3af (PoE) standard.	RJ-45	10/100/1000 Mbps Gigabit Ethernet 802.3af/at Class 0 PoE/PoE+ PoE input voltage: 48V If using PoE (802.3af):  USB port and LAN2 port disabled 2.4 GHz radio - 1x1 mode with 15 dBm transmit power  5 GHz radio - 2x2 mode with 15 dBm transmitpower (12 dBm per chain)  Scanning radio - 1x1 mode with 12 dBm transmit power



# **Operational Specifications**

Operational Specifications	
Input Power	12V DC/1.5A (3.5mm overall diameter/1.35mm center pin/hole)/802.3at (PoE+)/ 802.3af (PoE)
Number of Radios	3 WiFi Radios: One 2.4 GHz and 5 GHz radio each for simultaneous dual band client access. A third dual-band radio dedicated to non-access smart scanning; WIPS, RF optimization, Remote Troubleshooting, and network assurance functions.  1 BLE Radio: A fourth Bluetooth Low Energy radio for proximity based services on mobile devices via an application ecosystem.
Max Clients Supported	512 clients per radio (dependent upon use cases)
MIMO	2x2 for 2.4/5GHz Radios
Number of Spatial Streams	2 for 2.4/5GHz Radios
RF Transmit Power	20 dBm per radio chain (max); Actual power for Tx will depend on Country Regulatory Domain
Simultaneous MU-MIMO Clients	Two 1x1 MU-MIMO clients
Users in a MU-MIMO group with a 2x2 client	1
Bandwidth Agility	Yes
Frequency Bands	2.4-2.4835 GHz, 4.9-5.0 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, CB, TELEC, KCC regarding certifications.



# Frequency, Modulation, and Data Rates

	IEEE 80.	2.11b/g/n	
	Scanning	Transn	nission
Frequency Band	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
	2400 ~ 2483.5 MHz	2400 ~ 2473.5 MHz	2400 ~ 2483.5 MHz
Modulation Type	DSSS, OFDM	DSSS, OFDM	
Peak Data Rates	Up to 300 Mbps (MCS 0-15)	Up to 300 Mbps (MCS 0-15)	
Antenna	Integrated modular high efficiency	Integrated modular high efficiency PIFA antenna x4 (peak gain: 6.0 dBi)	

	IEEE 802.1	1a/n/ac	
Frequency Band	Scanning	Transmi	ission
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)
	4.92 ~ 5.08 GHz		
	5.15 ~ 5.25 GHz	5.15 ~ 5.25 GHz	5.15 ~ 5.25 GHz
	5.25 ~ 5.35 GHz	5.25 ~ 5.35 GHz	5.25 ~ 5.35 GHz
	5.47 ~ 5.725 GHz	5.725 ~ 5.825 GHz	5.47 ~ 5.725 GHz
	5.725 ~ 5.825 GHz		
Dynamic Frequency Selection	DFS and DFS2		
Modulation Type	OFDM		
Peak Data Rates	Up to 867 Mbps (MCS 0-15)		
Antenna	Integrated modular high efficiency PIFA antenna x4 (peak gain: 6.5 dBi)		



# Maximum Aggregate Transmit Power For 2.4 GHz

MCS Index	Transmit Power(dBm)		
802.11b			
1 Mbps -11 Mbps	21		
802.11g			
6 Mbps -48 Mbps	21		
54 Mbps	20		
802.11n HT20	802.11n HT20		
MCS 0,1,2,3,4,5	21		
MCS 6	20		
MCS 7	19		
802.11n HT40			
MCS 0,1,2,3,4,5	21		
MCS 6	20		
MCS 7	19		

#### Country-Wise Max Transmit Powers (dBm)

Countries	2.4 GHz	5 GHz
Australia	20	23
Canada	30	23
India	20	20
Israel	20	20
Japan	20	20
UAE	20	17
USA	20	23

#### For 5 GHz

MCS Index	Transmit Power(dBm)	
802.11a		
6 Mbps - 48 Mbps	21	
54 Mbps	20	
802.11n	HT20	
MCS 0,1,2,3,4,5	21	
MCS 6, 7	20	
802.11n	HT40	
MCS 0,1,2,3,4,5	21	
MCS 6	20	
MCS 7	19	
802.11n	VHT20	
MCS 0,1,2,3,4,5	21	
MCS 6, 7	20	
MCS 8	19	
802.11n	VHT40	
MCS 0,1,2,3,4,5	21	
MCS 6, 7	20	
MCS 8	18	
MCS 9	17	
802.11ac VHT80		
MCS 0,1,2,3,4,5,6,7	19	
MCS 8	18	
MCS 9	17	

#### Note:

The actual transmit power will be the lowest of:

- Value specified in the Device Template
- Maximum value allowed in the regulatory domain
- Maximum power supported by the radio



# Receive Sensitivity For 5GHz

MCS Index	Receive Sensitivity
802.11a (legacy)	
6Mbps	-91
36Mbps	-78
48Mbps	-75
54Mbps	-73
802.11n HT20 (legacy)	
MCS 0,8	-91
MCS 1,9	-88
MCS 2,10	-85
MCS 3,11	-81
MCS 4,12	-77
MCS 5,13	-74
MCS 6,14	-72
MCS 7,15	-71
802.11n HT40	
MCS 0,8	-87
MCS 1,9	-85
MCS 2 ,10	-82
MCS 3,11	-78
MCS 4,12	-74
MCS 5,13	-70
MCS 6,14	-69
MCS 7,15	-68
802.11ac 256QAM VHT8	0
MCS 0	-84
MCS 1	-82
MCS 2	-79
MCS 3	-75
MCS 4	-71
MCS 5	-67
MCS 6	-66
MCS 7	-65
MCS 8	-60
MCS 9	-58

# For 2.4GHz

MCS Index	Receive Sensitivity
802.11b	
Mbps	-94
11Mbps	-86
802.11g	
6Mbps	-90
24Mbps	-81
36Mbps	-78
48Mbps	-74
54Mbps	-73
802.11n HT20	
MCS 0,8	-90
MCS 1,9	-87
MCS 2,10	-84
MCS 3,11	-80
MCS 4,12	-77
MCS 5,13	-73
MCS 6,14	-71
MCS 7,15	-69
802.11n HT40	
MCS 0,8	-86
MCS 1,9	-84
MCS 2,10	-81
MCS 3,11	-77
MCS 4,12	-74
MCS 5,13	-70
MCS 6,14	-68
MCS 7,15	-66



#### **Receive Sensitivity**

### For 2.4 GHz

MCS Index	Receive Sensitivity (dBm)
802.11g	
6 Mbps	-94
24 Mbps	-86
36 Mbps	-83
48 Mbps	-78
54 Mbps	-77
	802.11n HT20
MCS 0, 8	-93
MCS 1,9	-90
MCS 2,10	-88
MCS 3,11	-84
MCS 4.12	-81
MCS 5,13	-77
MCS 6,14	-74
MCS 7, 15	-73
	802.11n HT40
MCS 0, 8	-90
MCS 1,9	-87
MCS 2,10	-85
MCS 3,11	-81
MCS 4,12	-78
MCS 5,13	-74
MCS 6,14	-73
MCS 7, 15	-71

#### For 5 GHz

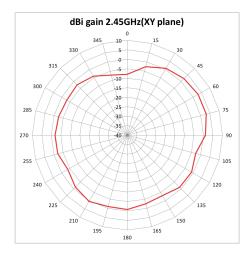
MCS Index	Receive Sensitivity (dBm)
802.11a	
6 Mbps	-93
24 Mbps	-85
36 Mbps	-82
48 Mbps	-77
54 Mbps	-76
	802.11n HT20
MCS 0, 8	-92
MCS 1,9	-89
MCS 2,10	-86
MCS 3,11	-83
MCS 4,12	-80
MCS 5,13	-76
MCS 6,14	-74
MCS 7	-72
	802.11n HT40
MCS 0, 8	-89
MCS 1,9	-86
MCS 2,10	-83
MCS 3,11	-80
MCS 4,12	-77
MCS 5,13	-73
MCS 6,14	-72
MCS 7, 15	-70

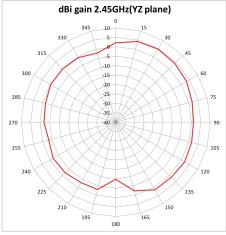
For 5 GHz

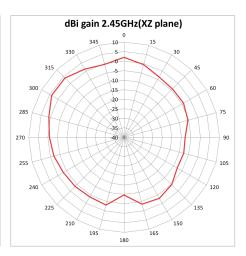
MCS Index	Receive Sensitivity (dBm)
	802.11n VHT20
MCS 0	-91
MCS 1	-88
MCS 2	-86
MCS 3	-83
MCS 4	-80
MCS 5	-75
MCS 6	-74
MCS 7	-72
MCS 8	-68
	802.11n VHT40
MCS 9	-64
	802.11n VHT80
MCS 0	-86
MCS 1	-83
MCS 2	-81
MCS 3	-78
MCS 4	-74
MCS 5	-70
MCS 6	-69
MCS 7	-67
MCS 8	-63
MCS 9	-61

#### **Internal Antenna Radiation Patterns**

#### 2 GHz Antenna 1

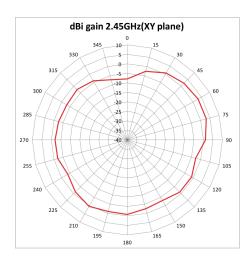


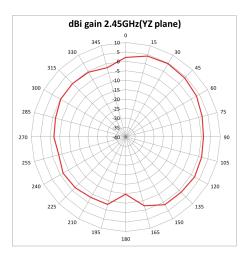


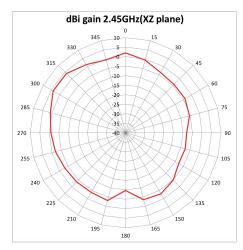




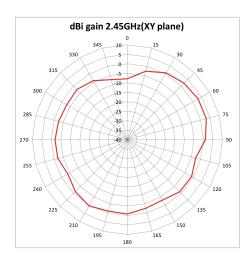
#### 2 GHz Antenna 2

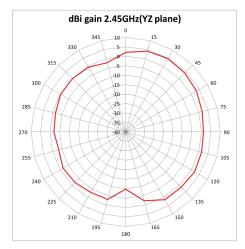


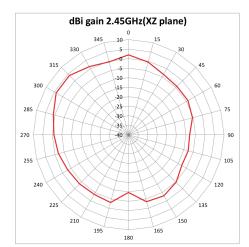




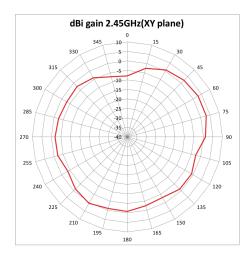
#### 5 GHz Antenna 1

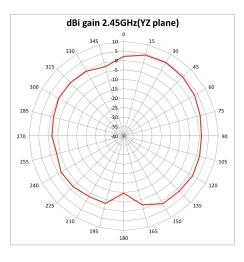


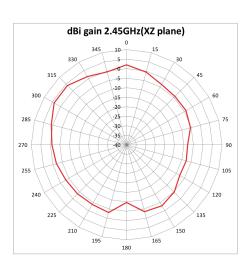




## 5 GHz Antenna 2







# **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, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Iceland, Luxembourg, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Slovakia, Slovenia, Switzerland, The Czech Republic, UK.

# Safety

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



## Ordering Information

#### **Access Point**

Part Number	Description
C-110-CLDP-xYR	C110 2x2:2 dual radio 802.11ac wave-2 access point with internal antennas and "X" Year
	enterprise cloud subscription and support

#### **Power Options**

Part Number	Description
PI-PLUS	One port 802.3at PoE+ injector for C120, C130, W68, C110
	PS-C110-UN
	C-110 AC power supply

#### **Mounting Options**

Part Number	Description
C120-MNT-15-16	AP mount kit for Interlude (15/16",24mm) T-grid rails for C-100, C-110, C-120, C-130
C120-MNT-9-16	AP mount kit for Suprafine (9/16",15mm) T-grid rails for C-100, C-110, C-120, C-130
C120-MNT-INTSIL	AP mount kit for Interlude and Silhouette T-grid rails for C-100, C-110, C-120, C-130
C110-MNT-FLAT	AP mount kit for flat surface installation (wall, hard ceiling) for C-110

# Headquarters

5453 Great America Parkway Santa Clara, California 95054 408-547-5500

# Support

support@arista.com 408-547-5502 866-476-0000

# Sales

sales@arista.com 408-547-5501 866-497-0000

www.arista.com

