## Data Sheet

## **Key Specifications**

- Full featured Wi-Fi 7, 12 Stream AP
- Three 4x4:4 access radios (6 GHz, 5 GHz & 2.4 GHz)
- Full support for Wi-Fi 7 on all three access radios
- Up to 160 MHz channel width support for 5 GHz and 320 MHz for 6 GHz operation
- 2x2 tri-band multi-function radio for security, network assurance, spectrum analysis, packet capture, locationing and troubleshooting
- Up to 1.4 Gbps throughput for 2.4 GHz radio, up to 5.76 Gbps throughput for 5 GHz and 11.5 Gbps for 6 GHz radios.
- 6 RP-SMA external connectors to support a variety of external antenna choices
- 2x10 Gigabit Ethernet PoE ++ ports
- PoE++ for full functionality and PoE+ with reduced functionality
- · Wall and ceiling mounting options
- HADM, BLE, OpenThread, Matter, ZigBee capable loT radio
- WPA3/OWE capable
- In-built L1+L5 GNSS module
- Support for 802.11az Fine Time Measurement
- TPM for secure storage

## **Key Features**

- Distributed Control Plane and Flexible Data Plane
- 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
- AI/ML driven diagnostics, troubleshooting and remediation recommendations
- Integrated firewall, traffic shaping, QoS and BYOD controls per SSID
- Dynamic RF optimization through smart steering, band steering and power control
- 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

## High capacity, High performance and Investment protection

Arista C-460E is a high-end Wi-Fi 7 enterprise grade access point with external antennas featuring concurrent 6GHz, 5GHz and 2.4GHz 4 stream 802.11be operation, integrated IoT support, integrated GNSS and an additional multifunction, tri-band radio to provide security, network assurance and AI/ML driven troubleshooting.

## C-460E Capabilities

C-460E Wi-Fi 7 access point provides the highest capacity, best spectrum utilization and flexibility to deliver industry leading user experience in high density environments that require best performance and security. Utilizing the latest W-Fi 7 technologies - Multi-link operation, Preamble Puncturing, Multiple Resource Units, Uplink/ Downlink OFDMA, Uplink/Downlink MU-MIMO coupled with 4 spatial streams in all operating bands, the C-460E delivers truly unmatched performance even in the most challenging environments. C-460E is ideal for critical, high-density networks serving a high volume of diverse clients and applications. Common deployment scenarios include large enterprises with national and international locations, university campuses and large

## Arista CloudVision® Managed Wi-Fi

The C-460E is an Arista CloudVision Cognitive Unified Edge (CV-CUE) managed platform. Available as a cloud service or on-premises management platform, CV-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, multifunction Radio

C-460E includes a multi-function, 2x2:2 tri-band 802.11ax 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



## Access

C-460E is a building block of a self-driving Wi-Fi network, powering AI/ML based continued adaptations, saving time and resources resulting in significant cost savings and increased satisfaction.

- Plug and play provisioning using either Cloud or On-premises deployments Arista Access Points take less than two minutes to activate
  and configure after connecting to the cloud
- Network controls like NAT, Firewall and QoS implemented at the Access Point, ensuring faster and more reliable networks
- Continuous scanning of all 2.4GHz, 5GHz and 6GHz channels by a dedicated 2x2 multi-function radio provides a dynamic, 360-degree view of the RF environment to assist in RF optimization and client connectivity tests
- Network availability and performance assurance using the multi-function third radio as a client to conduct on-demand and scheduled connectivity and performance tests
- · Smart steering addresses sticky client issues by automatically nudging clients with low data rates to a better access point
- Band steering manages channel occupancy, nudging clients to the 5GHz and 6GHz channels for optimal throughput
- Smart load balancing distributes load evenly across neighboring APs to optimize the use of network resources
- · Arista Wi-Fi's flexible data plane architecture continues to serve users even if connection with the management plane is interrupted
- Interference avoidance from 5G/LTE/3G small/macro cells in commonly used TDD/FDD frequency bands

### Security

C-460E offers complete visibility and control of the wireless airspace ensuring network integrity while actively protecting users without manual intervention.

- · C-460E is equipped with industry leading fully integrated wireless intrusion prevention capabilities
- Multi-function radio provides uninterrupted spectrum scanning or client emulation for always on security coverage alongside dedicated 2.4GHz, 5GHz and 6GHz access radios
- Arista's patented Marker PacketsTM help accurately detect rogue access points on any network while minimizing false positives
- Multifunction radio used as a security sensor for 24x7x365 scanning and automated over-the-air (OTA) prevention
- · Deterministic rogue AP detection and prevention by monitoring all Wi-Fi and non-Wi-Fi VLANs
- OTA 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-Wi-Fi networks for complete network rogue detection and prevention

## Analytics

C-460E provides real-time telemetry by granular state steaming and Cognitive Analytics provides correlation analysis and trend analysis using predictive algorithms across wireless and wired networks. Compliance and Risk analysis is supported by continuous assessment and report of deviations.

Data Sheet

## **Physical Specifications**

			Property	Specification
			Physical Dimensions	240mm x 240mm x 45.5mm/9.45" X 9.45" X 1.79"
-			Weight	1.78 Kg/3.92 lb
			Operating Temperature	0°C ~ +45°C (+32°F ~ +113°F)
-	ARISTA	-	Storage Temperature	-40°C ~ +70°C (-40°F ~ +158°F)
			MTBF	676276 hours @25°C 318589 hours @50°C
			Humidity	5-95% non-condensing
	Wi-Fi 7		Power consumption	41.8 W (max)
			RAM and Flash	3 GB RAM and 8GB eMMC Flash
			Physical security	Kensington lock slot

	Port	Description	Connector Type	Speed/Protocol
	Power	12V DC, 4 A	5.5mm overall diameter / 2.1mm center pin hole	N/A
	LAN1	10 GbE, PoE++ compliant, MACsec capable*	RJ-45	100M/1G/2.5G/5G/10G Ethernet Recommended cabling - CAT6A
LAN1 LAN2 Power	LAN2	10 GbE, PoE++compliant, MACsec capable*	RJ-45	100M/1G/2.5G/5G/10G Ethernet Recommended cabling - CAT6A
	Console	Establish 'config shell' terminal session via serial connection	RJ-45	RS232 Serial (115200 bps) Data bits:8; Stop bits: 1 Parity: None Flow Control: None
	USB	USB 2.0 port	USB Type-A	Future use
Console USB Reset	Reset	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.



Data Sheet

### **Operational Specifications**

Input Power	This is an 802.3bt Class 6 device. PoE++ and 12V DC, 4 A (5.5mm overall diameter/2.1mm center pin hole) • Full function • Max EIRP <sup>1</sup> of 34 dBm on 6GHz and 5GHz, 29 dBm on 2.4GHz PoE+ • USB off • All bands limited to 2x2 operation • Tx power reduced by 6dB for all radios Hitless PoE failover between the two ethernet ports
Number of Radios	3 access radios; 4x4:4 2.4GHz, 4x4:4 5GHz and 4x4:4 6GHz radio for simultaneous tri-band access. 1 multi-function 2x2 radio for continuous WIPS and client connectivity tests 1 IoT radio 1 GNSS radio
Max Clients Supported	1280 (256 clients on 2.4 GHz radio, 512 clients on 5 GHz radio and 512 clients on 6 GHz radio)
Number of Spatial Streams	4 each per access radio, 2 for multi-function radio
Maximum EIRP	34 dBm on 6GHz and 5GHz radio, 29 dBm on 2.4GHz radio (max) <sup>1</sup>
80+80MHz Non-Contiguous Channel Bonding	No
Bandwidth Agility	No
3G/4G Macro and Small Cells Interference Mitigation	Yes
Frequency Bands <sup>2</sup>	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), 5.925 GHz – 6.425 GHz (UNII-5), 6.525 GHz – 6.875 GHz (UNII-7).
Dynamic Frequency Selection	Supported in compliance to all latest amendments from FCC, CE, IC, CB, TELEC, KCC regarding certifications.

<sup>1</sup> Max EIRP will be restricted to Country/Regulatory domain limits. Max EIRP values are computed assuming external omni antenna gains of 6 dBi for 6 GHz and 5 GHz bands, 4 dBi for 2.4 GHz band.

<sup>2</sup>The frequency ranges are restricted to Country/Regulatory domain limits

## **Wi-Fi Specifications**

IEEE 802.11ax/be				
	Scanning	Transmission		
Frequency Band	All regions	USA & Canada (FCC/IC)	Europe (ETSI)	
6GHz	5.925 GHz – 6.425 GHz 6.425 GHz - 6.525 GHz 6.525 GHz – 6.875 GHz 6.875GHz - 7.125 GHz	5.925 GHz – 6.425 GHz 6.525 GHz – 6.875 GHz	5.925 GHz – 6.425 GHz	
Modulation Type	OFDM / OFDMA	OFDM / OFDMA		
Peak Data Rate	11.5 Gbps	11.5 Gbps		

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IEEE 802.11a/n/ac/ax/be				
Frequency Band	Scanning	Transmission		
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)	
5GHz	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	
Peak Data Rate	5.76 Gbps	5.76 Gbps		
Modulation Type	DSSS / OFDM / OFDMA			

IEEE 802.11b/g/n/ax/be				
From Long L	Scanning	Transmission		
Frequency Band	All regions	USA & Canada (FCC/IC)	Europe (ETSI)	
2.4GHz	2.4 – 2.4835 GHz	2.4 – 2.4735 GHz	2.4 – 2.4835 GHz	
Modulation Type	DSSS / OFDM / OFDMA			
Peak Data Rate	1.4 Gbps			

For 5GHz

## Data Sheet

## **Receive Sensitivity**

## For 6GHz

Mode	Rate	Sensitivity (dBm)
	MCS 0	-93
802.11ax_HE20	MCS 11	-63
002 11 ov UE 40	MCS 0	-90
802.11ax_HE40	MCS 11	-60
802.11ax HE80	MCS 0	-87
002.11ax_11200	MCS 11	-57
902 11av HE160	MCS 0	-85
802.11ax_HE160	MCS 11	-55
802.11be EHT20	MCS 0	-92
802.11be_EH120	MCS 13	-57
802.11be EHT40	MCS 0	-90
602.11De_EH140	MCS 13	-55
802.11be EHT80	MCS 0	-87
002.1100_00100	MCS 13	-53
902 11bo EUT160	MCS 0	-85
802.11be_EHT160	MCS 13	-52
802.11be EHT320	MCS 0	-82
002.11DC_L111320	MCS 13	-52

Mode	Rate	Sensitivity (dBm)
802.11a	6 Mbps	-93
002.110	54 Mbps	-75
	MCS 0	-93
802.11n_HT20	MCS 7	-75
	MCS 0	-91
802.11n_HT40	MCS 7	-72
	MCS 0	-94
802.11ac_VHT20	MCS 8	-71
	MCS 0	-90
802.11ac_VHT40	MCS 9	-67
	MCS 0	-88
802.11ac_VHT80	MCS 9	-63
	MCS 0	-94
802.11ax_HE20	MCS 11	-64
	MCS 0	-90
802.11ax_HE40	MCS 11	-61
002 11av UE00	MCS 0	-88
802. 11ax_HE80	MCS 11	-58
000 11-00 115100	MCS 0	-86
802.11ax_HE160	MCS 11	-56
902 11bo EUT20	MCS 0	-93
802.11be_EHT20	MCS 13	-53
802.11be_EHT40	MCS 0	-90
002.11DC_L11140	MCS 13	-56
802.11be_EHT80	MCS 0	-88
COLLING_LINOU	MCS 13	-54
902 11bo EUT160	MCS 0	-86

802.11be\_EHT160

MCS 13

-53

## For 2.4GHz

Mode	Rate	Sensitivity (dBm)
802.11b	1 Mbps	-98
802.110	11 Mbps	-90
802.11g	6 Mbps	-95
602.11g	54 Mbps	-77
802.11n_HT20	MCS 0	-95
002.1111_H120	MCS 7	-76
802.11n HT40	MCS 0	-92
002.1111_11140	MCS 7	-74
802.11ac_VHT20	MCS 0	-95
002.11aC_VH120	MCS 8	-72
	MCS 0	-92
802.11ac_VHT40	MCS 9	-69
802.11ax HE20	MCS 0	-95
002.11dX_HE20	MCS 11	-65
002 11 ov UE 40	MCS 0	-92
802.11ax_HE40	MCS 11	-63
202 11bo EUT20	MCS 0	-94
802.11be_EHT20	MCS 13	-59
202 11bo EUT40	MCS 0	-92
802.11be_EHT40	MCS 13	-58

## Data Sheet

### **Maximum EIRP**

## For 5GHz (with 6dBi external antenna gain)

Mode	Rate	Power (dBm)
802.11a	6 Mbps	34
	54 Mbps	31
	MCS 0	34
802.11n_HT20	MCS 7	31
000.11	MCS 0	34
802.11n_HT40	MCS 7	31
000.11	MCS 0	34
802.11ac_VHT20	MCS 8	31
000.11	MCS 0	34
802.11ac_VHT40	MCS 9	31
	MCS 0	34
802.11ac_VHT80	MCS 9	31
000.44	MCS 0	34
802.11ax_HE20	MCS 11	31
	MCS 0	34
802.11ax_HE40	MCS 11	31
000.11	MCS 0	34
802.11ax_HE80	MCS 11	31
	MCS 0	34
802.11ax_HE160	MCS 11	31
	MCS 0	34
802.11be_EHT20	MCS 13	30
	MCS 0	34
802.11be_EHT40	MCS 13	30
	MCS 0	34
802.11be_EHT80	MCS 13	30
802.11be_EHT160	MCS 0	34

### For 6GHz (with 6dBi external antenna gain)

Mode	Rate	Power (dBm)
002 11 ov UE20	MCS 0	34
802.11ax_HE20	MCS 11	30
902 11av HE40	MCS 0	34
802.11ax_HE40	MCS 11	30
902 11av HE90	MCS 0	34
802.11ax_HE80	MCS 11	30
902 11av HE160	MCS 0	34
802.11ax_HE160	MCS 11	30
802.11be EHT20	MCS 0	34
ouz.iibe_enizu	MCS 13	29
802.11be EHT40	MCS 0	34
002.11De_EH140	MCS 13	29
902 11bo EUT90	MCS 0	34
802.11be_EHT80	MCS 13	29
902 11bo EUT160	MCS 0	34
802.11be_EHT160	MCS 13	29
902 11bo EUT220	MCS 0	30
802.11be_EHT320	MCS 13	27

## For 2.4GHz (with 4 dBi external antenna gain)

Mode	Rate	Power (dBm)
802.11b	1 Mbps	29
802.110	11 Mbps	29
902 11 a	6 Mbps	29
802.11g	54 Mbps	26
802.11n HT20	MCS 0	29
802.111 <u></u> -1120	MCS 7	26
902 11p UT40	MCS 0	29
802.11n_HT40	MCS 7	26
802.11ax HE20	MCS 0	29
602.118X_HE20	MCS 8	24
802.11ax HE40	MCS 0	29
602.118X_HE40	MCS 9	24
902 11ha EUT20	MCS 0	29
802.11be_EHT20	MCS 13	22
802.11be_EHT40	MCS 0	29
002.11DC_L11140	MCS 13	22



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### **Regulatory Specifications**

#### **RF and Electromagnetic Compatibility (EMC)**

Country	Certification
USA	FCC Part 15.247, Part 15.407, Part 15, Subpart B
Canada	RSS-102, RSS-247, RSS-248, ICES-003
Europe	EN 300 328, EN 300 440, EN 301 893, EN 62311, EN 50385, EN 50665, EN 301 489-1, EN 301 489-17, EN 301 489-3, EN 301 489-19, EN 55032, EN 55035, EN 303 413, EN 303 687, CISPR 32, CISPR 35 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	UL62368-1, 3rd Edition; CAN/CSA C22.2 No 62368-1:19, UL 2043
European Union (EU)	IEC/EN 62368-1 2nd edition
Taiwan	CNS 15598-1, RoHS
International	IEC 62368-1: 2018

## **Ordering Information**

### **Access Point**

Part Number	Description
AP-C460E	C-460E tri-band 4x4 Wi-Fi 7 access point with internal antennas
AP-C460E-SS-5Y	C-460E AP with 5 years bundled Cognitive Cloud SW subscription
AP-C460E-SS-3Y	C-460E 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-W5	Universal AC power supply, 12V DC, 4 A

### **External Antennas**

For details of compatible antennas, see Antenna Selection Guide

## 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

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