Key Specifications

- Up to 400 Mbps for 2.4 GHz radio
- Up to 867 Mbps on 5 GHz radio
- 802.11 ac Wave 2 support.
- 2x2 MIMO with two spatial streams per radio
- Max 120 clients per radio; dependent upon use-cases
- Industrial grade, IP67 compliant exterior to withstand outdoor weather conditions
- Four N-Type external connectors to support a variety of external antenna choices
- 20/40/80 MHz channel width support
- 2x Gigabit Ethernet port
- Full operational capacity with 802.3at PoE+
- · Vertical wall or pole mounting support
- · WMM compliant
- · 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 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

Cost Effective Outdoor Wi-Fi

The Arista O-105E is a ruggedized enteprise-grade 2x2 MIMO 802.11ac/af outdoor access point with dual concurrent 5 GHz and 2.4 GHz band radios supporting 802.11a/n/ac, 802.11b/g/n, two spatial streams, and data rates of up to 867 Mbps and 400 Mbps, respectively and a third 2.4 GHz Bluetooth Low Energy (BLE) radio..

Why Choose the O-105E

The O-105E is ideal for delivering high performance in harsh or outdoor environments such as schools and universities, outdoor sections of hotel and enterprise campuses, warehouses, manufacturing yards, stadiums and sports arenas, malls, public hotspots, and other municipal WiFi deployments.

It can also be used to cost-effectively extend the range of WiFi access in areas where it is not practical to rollout Ethernet cables, and to implement point-to-point or backhaul mesh WiFi links to interconnect buildings or campuses, while simultaneously providing WiFi access to users.

iBeacon Bluetooth Low Energy Support

The Arista O-105E supports the iBeacon Bluetooth Low Energy (BLE) standard. BLE is used for proximity based services on mobile devices via an application ecosystem. O-105E can be configured to advertise a unique identifier through iBeacons at a periodic interval

Arista Cloud Managed WiFi

The O-105E is managed by the Arista Cloud managed platform which enables a complete workflow for wireless access, security and engagement. It leverages a purpose-built cloud architecture to produce enterprise-grade wireless networks for every application required, and ensures 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 high-performing, highly reliable networks without the need of antiquated controllers. This approach removes the complexity, instability and high costs associated to enterprise WiFi today.



Arista O-105E

O-105E

Data Sheet

Access

The O-105E creates WiFi 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
- 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

The O-105E 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.

- O-105E is equipped with industry leading fully integrated wireless intrusion prevention capabilities
- Arista's patented Marker PacketsTM help accurately detect rogue access points on any network while minimizing false positives
- 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 roque 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 O-105E collects massive amounts of data and supports immersive guest network experiences that develops and reinforces the relationship between them and the brand.

- · 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	213.9 mm x 213.9 mm x 67.5 mm/8.4" X 8.4" X 2.7"
Weight	1.785kg / 3.9lb
Operating Temperature	-40C to 65C (-40F to 149F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
MTBF	1,959,509 @ 25 °C 546,083 @ 65 °C
Humidity	5% to 95% non-condensing
Max power consumption	19 W (max) / 11 W (min) / 16 W (avg)
Chipset	Qualcomm QCA-IPQ4029+QCA8075
Processor RAM	Qualcomm QCA IPQ4029-1-583MSP with 512MB RAM and 128MB Flash

	Port	Description	Connector Type	Speed/Protocol
Sofice Control of the	LAN1/ PoE	Gigabit Ethernet port that enables the device to connect to the wired LAN and communicate with the AristaCloud or Server. This port is also used to power the device using the 802.3at Power over Ethernet Plus (PoE+) standard.	IP67 rated weatherproof RJ-45	10/100/1000 Mbps Gigabit Ethernet 802.3at PoE+
V LAN2 V LAN1 (POB	LAN2	Gigabit Ethernet port that can be used for wired extension of an SSID	IP67 rated weatherproof RJ-45	10/100/1000 Mbps Gigabit Ethernet
	Reset	Reset to factory default settings	Push button	Hold down a power cycle the device to reset

Wi-Fi Specifications Frequency, Modulation, and Data Rates

IEEE 802.11b/g/n			
Scanning Transmission		ssion	
Frequency Band	All regions	USA & Canada	Europe
		(FCC/IC)	(ETSI)
	2412-2472 MHz	2412-2462 MHz	2412-2472 MHz
Modulation Type	DSSS, OFDM		
Data Rates	Up to 400 Mbps (MCS 0-23) with au	Up to 400 Mbps (MCS 0-23) with automatic rate adaptation	

IEEE 802.11a/n/ac				
Frequency Band	Scanning	Tran	Transmission	
	All regions	USA & Canada (FCC/IC)	Europe (ETSI)	
	5.15 MHz ~ 5.85 MHz	5.15 ~ 5.85 GHz	5.15~5.72 MHz	
Dynamic Frequency Selection	DFS and DFS2			
Modulation Type	OFDM			
Data Rates	Up to 867 Mbps (MCS 0-9) with automatic rate adaptation			

Maximum Power Values	
Maximum Aggregate Transmit Power	27 dBm
Minimum Receive Sensitivity	-93 dBm

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

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

Security

Access Point Mode:

- WPA/WPA2 (802.11i) with TKIP or AES-CCMP encryption and PSK or 802.1x authentication
- Integrated WIPS background wireless scanning and Rogue AP prevention

WIPS Sensor mode:

• Dedicated dual-band WIPS scanning for complete 24/7 protection from wireless threats

Regulatory Specifications

RF and Electromagnetic

Country	Certification
USA	FCC
Canada	IC
Europe	CE EN 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.

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

Safety

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

Ordering Information

Access Point

Part Number	Description
AP-O105E-SS-5Y	O-105E 2x2:2 dual radio 802.11ac Wave-2 outdoor access point with N-type external anten-
	na connectors and 5 year Cognitive Cloud SW Subscription. Antennas not included
AP-O105E-SS-3Y	O-105E 2x2:2 dual radio 802.11ac Wave-2 outdoor access point with N-type external anten-
	na connectors and 3 year Cognitive Cloud SW Subscription. Antennas not included
AP-O105E	O-105E 2x2:2 dual radio 802.11ac Wave-2 outdoor access point with N-type external anten-
	na connectors

External Antennas

For details of compatible antennas, see Antenna Selection Guide.



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