## Product Highlights

### AWE-5510

- 50 Gbps Encrypted / 100 Gbps Aggregate Throughput
- 16x 10G Ethernet ports (SFP+)
- 4x NIM Expansion Slots

### AWE-5310

- 5 Gbps Encrypted / 30 Gbps Aggregate Throughput
- 4x 1/2.5G/10G (RJ45) Ethernet ports (2x Port FTW)
- 4x 1/10G (SFP+) Ethernet ports
- 2x NIM Expansion Slots

### Segmentation and Overlay

- 802.1Q VLANs
- IPv4 VRFs
- VXLAN
- EVPN

### Traffic and Flow Monitoring

- IPFIX
- FlowTracker to inventory devices and monitor conversations

### Enterprise WAN Resilience

- N+1 redundant power/cooling
- Dynamic Path Selection load balancing
- ISSU for software upgrades and hitless patching
- AutoVPN

### Arista Extensible Operating System (EOS®)

- Single binary image
- Fine-grained truly modular network OS
- Stateful Fault Containment (SFC)
- Stateful Fault Repair (SFR)
- Full access to Linux shell and tools
- Extensible platform - bash, python, C++ , GO, OpenConfig

## Overview

The new Arista 5000 Series of WAN Platforms, powered by Arista EOS, offer high-performance control and data-plane scaling fit-to-purpose for enterprise-class WAN edge and aggregation requirements.

*Arista 5000 Series Routers*

The Arista 5000 Series supporting 1/10/100 GbE interfaces and flexible network modules can handle throughput of 30 Gbps to 100 Gbps for aggregate traffic. Encrypted throughput supported is 5 Gbps to over 50 Gbps of aggregate bidirectional AES256 encrypted traffic with high VRF and tunnel scale.

This level of performance makes it suitable for various use cases, making it an ideal choice for scenarios where robust network aggregation and interconnectivity are critical.

The Arista 5000 Series sets the standard for aggregation and critical site interconnect with multiple use cases such as:

- **Enterprise Class Routing System**– Physical, Virtual, and Cloud: all identical EOS software and consistent capabilities. Redundant Power and Cooling.
- **Aggregation and High-Performance Edge Routing** – The Arista 5500 WAN System, supporting up to 50 Gbps of encrypted traffic or 100 Gbps unencrypted traffic, is ideal for data center, campus, high-performance edge, and physical transit hub architectures.
- **Flexible Edge Routing** – The Arista 5300 WAN System is suited for high-volume edge connectivity and transitioning WAN locations to multi-carrier, 5 G, and high-speed Internet connectivity with performance rates of up to 5Gbps of encrypted traffic or 30 Gbps of unencrypted traffic.
- **Dual-Modality -** Devices can be traditional federated routers AND automatically provisioned SD-WAN devices.

## Arista EOS

The Arista 5000 series runs the same Arista EOS software as all Arista products, simplifying network administration. Arista EOS is a modular switch operating system with a unique state sharing architecture that cleanly separates switch state from protocol processing and application logic. Built on top of a standard Linux kernel, all EOS processes run in their own protected memory space and exchange state through an in-memory database. This multi-process state sharing architecture provides the foundation for in-service-software updates and self-healing resiliency.

With Arista EOS, advanced monitoring and automation capabilities such as Zero Touch Provisioning, VMTracer and Linux based tools can be run natively on the switch.

The CloudVision Pathfinder Service delivers the following key capabilities:

**WAN Fabric -** Secure Encrypted Transport

To provide secure encrypted transport over the end-to-end network, a WAN fabric is built between the routing platforms deployed at each customer location - across data center, campus, branch, and cloud. The WAN fabric is essentially a secure overlay network, built and maintained by Dynamic Path Selection (DPS), Inband Network Telemetry (INT), and Automated Virtual Private Network (Auto-VPN).


*CloudVision Pathfinder*

**Adaptive Virtual Topology -** Application-Aware Routing

Arista Adaptive Virtual Topology (AVT) is a network abstraction construct on top of the WAN Fabric that allows customers to put applications into groups, applying different network policies including:

- Application Group Policy: DPI (Deep Packet Inspection) based or 5-tuple based
- Network Topology Policy: hub-spoke, full mesh, regional full mesh
- Traffic Engineering Policy: based on WAN links, Cloud Transit, network performance, and cost
- Internet Exit Policy: local internet exit, remote internet exit through a firewall, internet exit through a cloud security provider
- QoS Policy: classification, queuing, shaping

**CloudVision Pathfinder Service with Transit Hubs -** Traffic Engineering

The CloudVision Pathfinder Service combined with Transit Hubs to provide a holistic traffic engineering approach to improving the end-to-end enterprise application experience. Arista Pathfinder Service includes a managed Path Computation Engine that oversees all the routing platforms within an enterprise and the network performance of all links, computing the best possible path for every application. This could be a direct path between two sites or a multi-hop path that goes through a transit hub point.

Transit Hubs are physical or virtual WAN routing systems deployed in carrier-neutral and cloud-adjacent facilities with dense telecommunications interconnection. Arista has partnered with Equinix to allow enterprise customers to deploy Transit Hubs using CloudEOS on Equinix Network Edge and Bare Metal Cloud Platforms and leveraging the Equinix Fabric backbone network to deliver a superior experience for enterprise applications.

- Fast access to the public cloud providers via Equinix 27+ global metros
- End-to-end encryption from the data center, campus, and branch to the cloud
- Improving site-to-site connectivity using Equinix Fabric with Arista Pathfinder Service
- Flexible deployment with Equinix Network Edge and Bare Metal Cloud

**Service Onboarding**

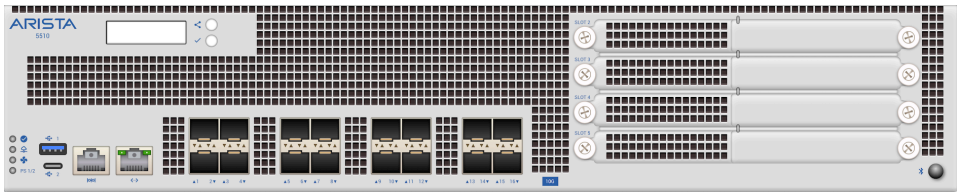
Seamlessly enabling enterprise network services like firewalls, IPS, IDS, observability tools and many more are a key priority for IT teams. The Arista CV Pathfinder solution allows customers to connect the Arista WAN Fabric to any internal and external services and define an AVT policy to route traffic to wherever the service resides.

## CloudVision

CloudVision is Arista's management plane solution for simplifying network operations. Built on a modern state-streaming architecture, CloudVision is a multi-function software platform that enables a suite of capabilities for automated provisioning, change control, continuous compliance, real-time telemetry, predictive analytics and 3rd party management plane orchestration. As a multi-domain solution, CloudVision is a single management platform across data center, campus, WiFi, multi-cloud, and routing interconnect use-cases. The same CloudVision software is offered as an on-prem appliance (virtual or physical) as well as CloudVision as-a-Service, which is a Arista-managed SaaS solution.

## System Overview

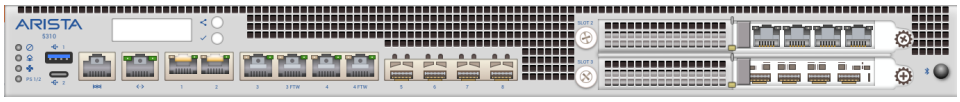
### Arista AWE-5510



Provides:

- 50 Gbps Encrypted / 100 Gbps Aggregate Throughput
- 16x 10G Ethernet ports (SFP+)
- 4x NIM Expansion Slots

### Arista AWE-5310



Provides:

- 5 Gbps Encrypted / 30 Gbps Aggregate Throughput
- 4x 1/2.5G/10G (RJ45) Ethernet ports (2x Port FTW)
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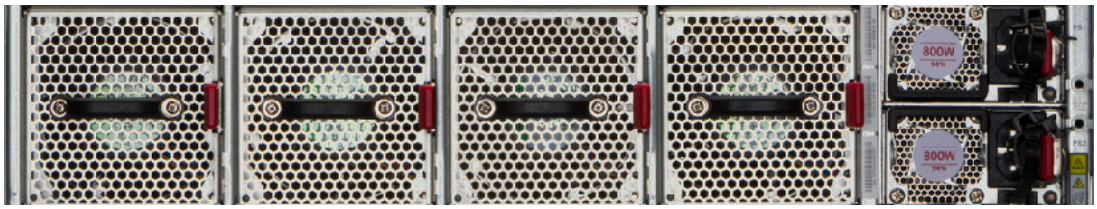
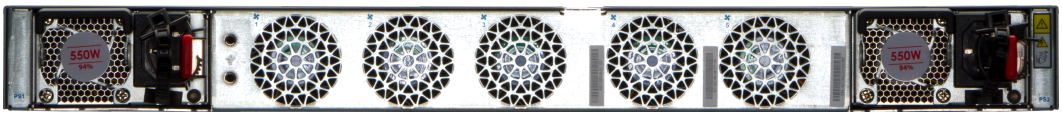
- 2x NIM Expansion Slots

## Power supplies and Fans

Enterprise WAN series routers support n+1 redundant power supplies. The AWE-5000 Series ship with two power supplies by default. The AWE-5310 series router has built in fans. The AWE-5510 ships with four hot-swap field replaceable fans.




*AWE-5510 Rear (front to rear airflow)*




*AWE-5310 Rear (front to rear airflow)*

## Layer 3 Features

- Routing Protocols: OSPFv2, BGPv4, IS-IS, and RIPv2
- Dynamic Path Selection
- In-band Path Telemetry
- Equal-Cost Multi-Path Routing (ECMP)
- Virtual Router Redundancy Protocol (VRRP)
- Route Reflector (BGP RR AF IPv4)
- Network Address Translation (NAT)
- Generic Routing Encapsulation (GRE)
- Bidirectional Forwarding Detection (BFD)
- 802.1AB Link Layer Discovery Protocol
- Quality of Service (QoS)
- DHCP Server

## Security Features

- AutoVPN
- IPSec VPNs
- Ingress/Egress ACLs using L3, L4 fields
- ACL Logging and Counters
- Role Based Access Control (RBAC)
- TACACS+, RADIUS Auth., Authorization and Accounting

## VXLAN Features

- VXLAN Routing
- BGP L3 EVPN (Type 5) v4

## Advanced Monitoring and Provisioning

- Zero Touch Provisioning (ZTP)
- Integrated packet capture/analysis (tcpdump/libpcap)
- GREenSPAN (GRE SPAN)
- IPFIX

## Extensibility

- Advanced Event Management (AEM)
- CLI Scheduler
- Event Manager
- Event Monitor
- Linux Tools
- Bash shell access and scripting
- RPM support
- DevOps/NetOps Tool Support
- CloudVision
- Ansible/Chef/Puppet/Salt
- ServiceNow
- Programmatic access to network-wide state
- Python, C++, Go

## SNMP MIBs

- RFC 4750 OSPF-MIB
- RFC 4273 BGP4-MIB
- RFC 3635 EtherLike-MIB
- RFC 3418 SNMPv2-MIB
- RFC 2864 IF-INVERTED-STACK-MIB
- RFC 2863 IF-MIB
- RFC 2790 HOST-RESOURCES-MIB
- RFC 2096 IP-FORWARD-MIB
- RFC 2013 UDP-MIB
- RFC 2012 TCP-MIB
- RFC 2011 IP-MIB
- RFC 6353 SNMP-TLS-TM-MIB
- RFC 5591 SNMP-TSM-MIB
- VRRPV2-MIB
- RFC 2787 VRRPv2MIB
- LLDP-MIB
- LLDP-EXT-DOT1/3-MIB
- HOST-RESOURCES-MIB
- ENTITY-STATE-MIB
- ENTITY-MIB
- ARISTA-VRF-MIB
- ARISTA-SW-IP-FORWARD-MIB
- ARISTA-SNMP-TRANSPORTS-MIB
- ARISTA-SMI-MIB
- ARISTA-QUEUE-MIB
- ARISTA-PRODUCTS-MIB
- ARISTA-PFC-MIB
- ARISTA-IF-MIB
- ARISTA-DAEMON-MIB
- ARISTA-CONFIG-MAN-MIB
- ARISTA-CONFIG-COPY-MIB
- ARISTA-BGPV4V2-MIB
- ARISTA-ACL-MIB
- User configurable custom OIDs

# SNMP TRAPs

- Authentication Failure trap, linkUp, LinkDown, coldStart, nsNotifyRestart, entConfigChange, entStateOperEnabled, entStateOperDisabled, VRRP, OSPF, and BGP supported.
- Additional event traps and log messages can be generated through AEM and eAPI scripting.

## Network Management

- CloudVision
- Configuration session commit and rollback
- 100/1000 Management Port
- RS-232 Serial Console Port
- USB A & C Port
- SNMP v1, v2, v3
- Telnet and SSHv2
- Syslog
- AAA
- Industry Standard CLI
- Beacon LED for system identification
- System Logging
- Environment monitoring
- Maintenance mode

## Extensibility

- Linux Tools
  - Bash shell access and scripting
  - RPM support
  - Custom kernel modules
- Programmatic access to system state
  - Python
  - C++
  - Go

## Specifications

| Feature/Model | AWE-5310 | AWE-5510 |
|---|---|---|
| Ports | 4 RJ45<br>4 1/10G SFP+ | 16 1/10G SFP+ |
| NIM Slots (OCP3.0) | 2 | 4 |
| Encrypted Throughput (iMix, Aggregate) / UnEncrypted | 5 Gbps / 30 Gbps | 50 Gbps / 100 Gbps |
| CPU | 8 core -x86 | 20 core -x86 |
| System Memory | 32GB | 64GB |
| System Flash | 256GB | 256GB |
| USB Ports | 2 | |
| Console Ports | 1 | |
| 100M/1G Management port | 1 | |
| Bluetooth Antenna | 1 | |
| Airflow | Front to Rear | |
| Power (Max) | 550W | 800W |
| Size (WxHxD) | 17.32” x 1.71” x 16.93”<br>(44 x 4.35 x 43cm) | 17.32” x 3.47” x 20.47”<br>(44 x 8.8 x 52cm) |
| Weight | 20.5 bs (9.3kg) | 29.98 lbs (13.6 kg) |
| Fans: | Fixed<br>(4 + 1) | AWE-5500-A-FAN<br>(3 + 1) |
| Maximum Power Supply | 2 | 2 |
| Power Supply | AWE-5300-550-A-PS | AWE-5500-800-A-PS |
| EOS License Group | LIC-WANx-ENCR<br>SS-CV-WANx-1M<br>SS-CVS-WANx-1M | |
| Minimum EOS | 4.29.2F | 4.29.2F |

## Arista Optics and Cables

The Arista AWE-5000 Series supports a wide range of 1G, 10G, 25G and 100G pluggable optics and cables in the SFP ports. For details about the different optical modules and the minimum EOS Software release required for each of the supported optical modules, visit **https://www.arista.com/en/products/transceivers-cables**

### Supported Optics and Cables

**AWE-5510**

| | |
|---|---|
| Ports 0/1-0/8 (10G) | 10GBASE-CR<br>10GBASE-AOC<br>10GBASE-SR<br>10GBASE-LR |
| Ports 0/1-0/8 (1G) | 1GbE SX/LX |
| Ports 0/9-0/16 NAC (10G) | 110GBASE-CR<br>10GBASE-AOC<br>10GBASE-SRL<br>10GBASE-SR<br>10GBASE-LRL<br>10GBASE-LR<br>10GBASE-ER<br>10GBASE-ZR<br>10GBASE-DWDM<br>SFP-10G-T |
| Ports 0/9-0/16 NAC (10G) | 110GBASE-CR<br>10GBASE-AOC<br>10GBASE-SRL<br>10GBASE-SR<br>10GBASE-LRL<br>10GBASE-LR<br>10GBASE-ER<br>10GBASE-ZR<br>10GBASE-DWDM<br>SFP-10G-T |

### Supported Optics and Cables

**AWE-5310**

| | |
|---|---|
| Ports 0/1-0/4 (10G) | RJ45 |
| Ports 0/5-0/8 Inline Encryption (10G) | 10GBASE-CR<br>10GBASE-AOC<br>10GBASE-SRL<br>10GBASE-SR<br>10GBASE-LRL<br>10GBASE-LR<br>10GBASE-ER<br>10GBASE-ZR<br>10GBASE-DWDM<br>SFP-10G-T |
| 0/5-0/8 Inline Encryption (1G) | 1GbE SX/LX |

## Environmental Characteristics

| | |
|---|---|
| Operating Temperature | 0 to 40C (32 to 104F) |
| Storage Temperature | -40 to 70C (-40 to 158F) |
| Relative Humidity | 5 to 95%<br>(non-condensing) |
| Operating Altitude | 0 to 10,000 ft, (0-3,000m) |
| Measured sound (ISO 7779) declared (ISO 9296) at 50% & 100% power | Lwa (dB) 57.59/68.17 (1RU) |

## Emissions and Safety Compliance

| | |
|---|---|
| EMC Emissions<br>Immunity | FCC Part15, subpart B (Class A)<br>ICES-003: 2020 Issue 07<br>EN 301 489-1<br>EN 301 489-17<br>EN55032<br>EN 300 386<br>EN 61000-3-2:2014<br>EN IEC 61000-3-2<br>EN 61000-3-3:2013, VCCI-CISPR32<br>AS/NZS CISPR32<br>EN55035 |
| Radio | FCC 15.247<br>RSS-247<br>EN 300 328<br>EN 62479 |
| Bluetooth | BCQ |
| Safety | UL 62368-1, 3rd Edition<br>CAN/CSA C22.2 No. 62368-1-19<br>EN 62368-1:2014+A11:2017<br>IEC 62368-1:2014 |
| Certifications | BSMI, NCC (Taiwan)<br>CE (European Union)<br>KCC (South Korea)<br>NRTL (North America<br>RCM (Australia / New Zealand)<br>UKCA (United Kingdom)<br>VCCI (Japan) |
| European Union Directives | Directive 2014/53/EU<br>Directive 2014/35/EU<br>Directive 2014/30/EU<br>Directive 2012/19/EU WEEE<br>Directive 2011/65/EU RoHS<br>Directive 2015/863/EU |

## Power Supply Specifications

| Power Supply | AWE-5300-550-A-PS | AWE-5500-800-A-PS |
|---|---|---|
| Output Power | 550W | 800W |
| Input Voltage | 100-240AC | 100-240AC |
| Input Current | 8 - 4A | 10 - 5A |
| Input Frequency | 50-60Hz | 50-60Hz |
| Input Connector | IEC-320-C16 | IEC-320-C16 |
| Efficiency | 80+ Platinum | 80+ Platinum |

| Product Number | Product Description |
|---|---|
| AWE-5310-2F-FLX | Arista 5310, Router up to 5Gbps IPSec encrypted throughput, 1RU, 4x RJ45 Ports (w/2x Port Fail to Wire) 4x 10G Port SFP+, Two expansion slots, Two Replaceable 550 watt power supplies, Fixed Fans, Front to Rear Airflow. Including FLX License. |
| AWE-5510-2F-FLX | Arista 5510, Router, up to 50Gbps IPSec encrypted throughput, 2 RU, 8x SFP+ 10G, 8x SFP+ 10G Enhanced, Four expansion slots, Two Replaceable 800 watt power supplies, Replaceable Fans, Front to Rear Airflow. Including FLX License. |
| AWE-5300-550-A-PS | AWE-5300 Spare 550 Watt Power Supply |
| AWE-5500-800-A-PS | AWE-5500 Spare 800 Watt Power Supply |
| AWE-5500-A-FAN | AWE-5500 Spare Fan |
| LIC-WAN2-ENCR | Encryption License for Arista WAN platform Band 2, IPsec |
| LIC-WAN4-ENCR | Encryption License for Arista WAN platform Band 4, IPsec |
| SS-CV-WAN2-1M | CloudVision SW Subscription License for 1-Month for Arista WAN platform Band 2. Delivered via download only. |
| SS-CV-WAN4-1M | CloudVision SW Subscription License for 1-Month for Arista WAN platform Band 4. Delivered via download only |
| SS-CVS-WAN2-1M | CloudVision as-a-Service Subscription License for 1-Month for Arista WAN platform Band 2 |
| SS-CVS-WAN4-1M | CloudVision as-a-Service Subscription License for 1-Month for Arista WAN platform Band 4 |
| SVC-AWE-5310-2F-1M-2H | 1-Month A-Care 24x7x2 Software & Hardware Replacement for AWE-5310-2F |
| SVC-AWE-5310-2F-1M-4H | 1-Month A-Care 24x7x4 Software & Hardware Replacement for AWE-5310-2F |
| SSVC-AWE-5310-2F-1M-NB | 1 Month A-Care Software & NBD Hardware Replacement/Same Day Ship for AWE-5310 |
| SVC-AWE-5510-2F-1M-2H | 1-Month A-Care 24x7x2 Software & Hardware Replacement for AWE-5510-2F |
| SVC-AWE-5510-2F-1M-4H | 1-Month A-Care 24x7x4 Software & Hardware Replacement for AWE-5510-2F |
| SVC-AWE-5510-2F-1M-NB | 1 Month A-Care Software & NBD Hardware Replacement/Same Day Ship for AWE-5510 |
| KIT-7010-4POST | Spare 4-post rack mount kit |
| KIT-7010-2POST | Spare 2-post rack mount kit |

| Product Number | Product Description |
|---|---|
| CAB-C15-AUS | Power Cord, Australia, C15 to AS/NZS 3112, 8 Feet (2.5m) |
| CAB-C14-C15 | Power Cord C15 to C14 (2m) |
| CAB-C15-EUR | Power Cord, Europe, C15 to CEE 7/7, 8 Feet (2.5m) |
| CAB-C15-IT | Power Cord, Italy, C15 to CEI 23-16, 8 Feet (2.5m) |
| CAB-C15-UK | Power Cord, United Kingdom, C15 to BS 1363/A, 8 Feet (2.5m) |
| CAB-C15-NA | Power Cord, North America, C15 to NEMA 5-15P, 8 Feet (2.5m) |
| CAB-C15-JPN | Power Cord, JAPAN, C15 to NEMA5-15P, 12A/125V, 1.25mm2, 1.8M, PSE |
| CAB-C15-ISR | Power Cord, Israel, C15-SI32, 10A/250V, 1.00mm2, 2.5M |
| CAB-C15-CHN | Power Cord, China, C15-GB2099, 10A/250V, 1.00mm2, 2.5M, CCC |
| CAB-C15-BRZ | Power Cord, Brazil, C15-NBR14136, 10A/250V, 1.00mm2, 2.5M |
| CAB-C15-SWZ | Power Cord, Swiss, C15-SEV1011, 10A/250V, 1.00mm2, 2.5M |
| CAB-C15-ARG | Power Cord, Argentina, C15-IRAM2073, 10A/250V, 1.00mm2, 2.5M |

## Warranty

The Arista AWE-5000 Routers come with a one-year limited hardware warranty, which covers parts, repair, or replacement with a 10 business day turnaround after the unit is received.

## Service and Support

Support services including next business day and 4-hour advance hardware replacement are available. For service depot locations, please see: http://www.arista.com/en/service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