

## Product Highlights

### Performance

- Over 50 Terabits per second fabric capacity
- Up to 38 billion packets per second
- Up to 6.4 Terabit per second per line card
- Wire speed L2 and L3 forwarding
- 256 wire-speed 40GbE and 100GbE ports
- Quad 10GbE or 25GbE mode support
- Latency below 2usec

### High Availability

- 1+1 Supervisor redundancy
- N+N Grid redundant power system
- N+1 Fan module redundancy
- Redundant fabric modules

### Cloud Networking Ready

- VXLAN and VM Tracer
- OpenFlow, DirectFlow and eAPI
- 16MB Dynamic Buffer per port group

### Advanced Provisioning & Monitoring

- CloudVision
- Zero Touch Provisioning (ZTP)
- LANZ for microburst detection
- sFlow
- Self-configure and recover from USB
- Advanced Event Monitoring

### Resilient Control Plane

- Quad-core Hyper-threaded x86 CPU
- 16GB DRAM / 4GB Flash
- Dual Supervisor modules
- User applications can run in a VM

### Data Center Class Design

- 8RU and 13RU chassis options
- Front-to-back airflow for optimized cooling
- Under 17W per 100GbE port typical power for lower cost of ownership
- High Density 100GbE and 40GbE
- Quad 10GbE and 25GbE on QSFP100 ports

### Arista Extensible Operating System

- Single binary image for all products
- 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++

## Overview

The Arista 7320X Series modular switches deliver over 50Tbps of switching with up to 256 wire speed 100GbE ports. The 7320X Series are part of the Arista portfolio of data center switches and increase availability, flexibility and scalability supporting both leaf and spine and Spline™ applications. The 7320X systems share feature consistency and a common architecture with the Arista 7300X, 7060X and 7260X Series in two modular systems, a 4-slot and 8-slot, that support comprehensive features for network monitoring, precision timing and network virtualization to deliver scalable high performance for software defined cloud networking.

Increased adoption of high performance servers and applications requiring higher bandwidth is driving adoption of 25 Gigabit Ethernet switching in combination with 100Gigabit Ethernet. The 7320X Series support high density 100GbE in combination with wire speed layer 2/3/4 performance. Each 100GbE interface supports a choice of 10GbE, 25GbE, 40GbE, 50GbE and 100GbE speeds allowing customers to seamlessly transition data centers from existing 10GbE and 40GbE architectures to 25GbE and 100GbE in open leaf and spine networks with the capacity that meets the need for scale-out of virtualized networks, with east-west traffic patterns.

With front-to-rear airflow, redundant and hot swappable supervisor, power, fabric and cooling modules the system is purpose built for data centers. The 7320X Series is energy efficient with typical power consumption of under 17 Watts per 100GbE port for a fully loaded system. These attributes make the Arista 7320X Series an ideal platform for building reliable, low latency, resilient and scalable data center networks. Combined with Arista EOS the 7320X Series delivers advanced features for cloud, big data, virtualized and traditional designs.



*Arista 7320X Series 100GbE Modular Data Center Switches*

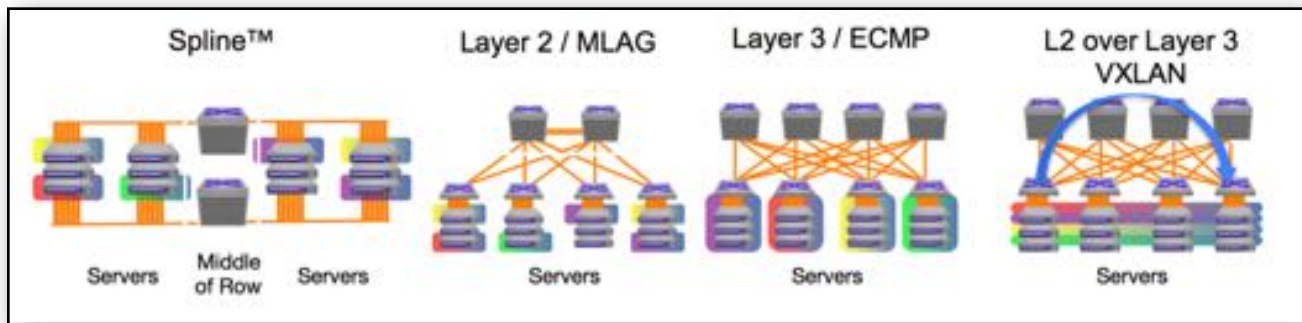
## Arista EOS

All Arista products including the 7320X Series runs the same Arista EOS software binary image simplifying network administration with a single standard across all switches. 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 together with stateful switchover without the loss of data plane forwarding.

Arista EOS enables advanced monitoring and automation capabilities such as Zero Touch Provisioning, LANZ, VM Tracer and Linux based tools to be run natively on the switch.

## Scaling Data Center Performance

The Arista 7320X Series delivers wire speed switching at layer 2 and layer 3 to enable dramatically faster and simpler network designs for data centers that lowers network capital and operational expenses. When used in conjunction with Arista 1G, 10G and 40G leaf switches and Arista's Multi-Chassis Link Aggregation (MLAG) technology, a pair of 7320X Switches can support over 48,000 Servers with a leaf and spine active/active L2 network topology. A spine of 16 7320X at Layer 3 scales the network up to over 100K 10G Servers in a fully non-blocking, low-latency, two-stage network that provides predictable and consistent application performance. The flexibility of the L2 and L3 multi-path design options combined with support for open standards provides maximum flexibility, scalability and network wide virtualization. Arista EOS advanced features provides control, and visibility with single point of management.



*Arista Leaf-Spine Two-Tier and Spline One-Tier Network Architectures*

## Software Driven Cloud Networks

Arista Software Driven Cloud Networking (SDCN), combines the principles that have made cloud computing the unstoppable force that it is: automation, self service provisioning, and linear scaling of both performance and economics coupled with the trend in Software Defined Networking that delivers: network virtualization, custom programmability, simplified architectures, and lower capital expenditure. This combination creates a best-in-class software foundation for maximizing the value of the network to both the enterprise and service provider data center. A new architecture for the most mission-critical location within the IT infrastructure that simplifies management and provisioning, speeds up service delivery, lowers costs and creates opportunities for competitive differentiation, while putting control and visibility back in the hands of the network and systems administrators.

### The Four Pillars of Arista's Software Defined Cloud Networking:

- Universal Cloud Network - scalable standards based MLAG at Layer 2, ECMP for Layer 3 and VXLAN for most flexibility
- Cloud Control - Standards based EOS with AEM, ZTP/ZTR, LANZ and DANZ, together with Automated Monitoring
- Network Wide Virtualization - Multi-vendor API Support with eAPI, VXLAN and NSX, Microsoft OMI and Openstack OVSDB
- Network Applications and Automated Management - Networks applications; single point of network wide state with CloudVision and open partner integration

## Dynamic Buffer Allocation

In cut-through mode, the Arista 7320X series switches forward packets with a latency of less than 2 usec. Upon congestion, the packets are buffered in shared packet memory that has a total size of 16 Mbytes. Unlike other architectures that have fixed per-port packet memory, the 7320X Series use Dynamic Buffer Allocation (DBA) to allocate packet memory to a single port for lossless forwarding.

## Maximum Flexibility for Scale Out Network Designs

Scale out network designs enable solutions to start small and evolve over time. A simple two-way design can grow as wide as 64-way without significant changes to the architecture. The 7300X Series include enhancements that allow for flexible scale-out designs:

- 128-way ECMP and 64-way MLAG to provide scalable designs and balance traffic evenly across large scale 2 tier leaf-spine designs
- Flexible allocation of L2 and L3 forwarding table resources for more design choice
- Wide choice of interface types with multi-speed support on the QSFP100 interfaces combined with a wide range of optics and cables
- VXLAN routing, bridging and gateway for physical to virtualization communication to enable next generation data center designs
- DANZ, sFlow, and multi-port mirroring to detect micro-burst congestion and provide network wide visibility and monitoring
- Investment protection for current and evolving requirements with support for 10GbE, 25GbE, 40GbE and 100GbE

### Enhanced Features for High Performance Networks

The Arista 7320X Series delivers a suite of advanced traffic control and monitoring features to improve the agility of modern high performance environments, with solutions for data monitoring, precise timing and next-generation virtualization.

### Smart System Upgrade

Smart System Upgrade (SSU) is a network application designed to address one of the most complicated and challenging tasks facing data center administrators - network infrastructure maintenance. Changes to the underlying network infrastructure can affect large numbers of devices and cause significant outages. SSU provides a fully customizable suite of features that tightly couples data center infrastructure to technology partners allowing for intelligent insertion and removal, programmable updates to software releases and open integration with application and infrastructure elements.

### Precise Data Analysis

Arista Latency Analyzer (LANZ) is an integrated feature of EOS. LANZ provides precise real-time monitoring of micro-burst and congestion events before they impact applications, with the ability to identify the sources and capture affected traffic for analysis.

### Virtualization

Supporting next-generation virtualized data centers requires tight integration with orchestration tools and emerging encapsulation technologies such as VXLAN. The 7320X Series builds on the valuable tools already provided by the Arista VM Tracer suite to integrate directly into encapsulated environments. Offering a wire-speed gateway between VXLAN and traditional L2/3 environments, the 7320X Series makes integration of non-VXLAN aware devices including servers, firewalls and load-balancers seamless and provides the ability to leverage VXLAN as a standards based L2 extension technology for non-MPLS environments.

### Advanced Event Management (AEM)

Simplifying the overall operations, AEM provides the tools to customize alerts and actions. AEM is a powerful and flexible set of tools to automate tasks and customize the behavior of EOS and the operation of the overall data center switching infrastructure. AEM allows operators to fully utilize the intelligence within EOS to respond to real-time events, automate routine tasks, and automate actions based on changing network conditions.

### Unified Forwarding Table

Cloud network scalability is directly impacted by the size of a switches forwarding tables. In many systems a 'one size fits all' approach is adopted using discrete fixed size tables for each of the common types of forwarding entry. The Arista 7320X leverages a common Unified Forwarding Table (UFT) for the L2 MAC, L3 Routing, L3 Host and IP Multicast forwarding entries, which can be partitioned per entry type. The ideal size of each partition varies depending on the network deployment scenario. The flexibility of the UFT coupled with the range of pre-defined configuration profiles available on the 7320X ensures optimal resource allocation for all network topologies and network virtualization technologies. Algorithmic Longest Prefix Match (ALPM) allows for the shared UFT to be expanded to contain up to 128K longest prefix match (LPM) route entries.

### Designed for High Availability and Manageability

The Arista 7320X Series are designed for continuous operations with system wide monitoring of both hardware and software components, simple serviceability and provisioning to prevent single points of failure. The hardware supports high-availability with hot-swap of all components with redundant supervisors, power supplies, fabric and cooling modules. Fabric redundancy provides deterministic degradation and integrated fan systems for dynamic temperature control combined with N+1 redundancy. Each of the 7320X Series offers power redundancy that supports both power-source and power-supply redundancy.

The Arista EOS software enabled stateful failover (\*) between the dual redundant supervisors as well as self-healing stateful fault containment (SFC), stateful fault repair (SFR) and live patching through in-service-software updates to help ensure continuous service. The Arista 7320X lowers total cost of ownership as it is designed to be efficient with power per port as low as 17W per 100GbE port which combined with front to rear cooling produces the most reliable, dense and power efficient modular switch.

### CloudVision

CloudVision is a network-wide approach for workload orchestration and workflow automation as a turnkey solution for Cloud Networking. CloudVision extends the EOS publish subscribe architectural approach across the network for state, topology, monitoring and visibility. This enables enterprises to move to cloud-class automation without needing any significant internal development.

\* Not currently supported in EOS

### 7320X Architecture

The 7320X Series architecture is designed around an internal Clos with line cards and fabric modules fully interconnected to deliver a low latency fully non-blocking system. Each line card has self contained switch modules and interconnect via the vertical fabric modules for over 50 Tbps of switching capacity. Dual redundant supervisor modules provide centralized control plane and management functionality.

### 7300 Chassis - 8-slot and 4-slot

The Arista 7300 chassis provides room for two supervisor modules, four or eight line card modules, multiple power supply modules, and four fabric modules. The 7304 chassis fits into 8 rack units while the 7308 chassis fits into 13U of a standard data center rack. Supervisor and line card modules plug in from the front, as do power supply modules, while the fabric and fan modules are inserted from the rear.

The midplane is completely passive with orthogonal connectors that provide direct connectivity between each of the fabric and line card modules. The system is optimized for data center deployments with front-to-rear airflow and can be installed in both standard 4-post and 2-post rack or cabinets without special modifications.



*Arista 7300X Series Chassis*

### System Cooling

The Arista 7320X Series supports front to rear cooling that is optimized for modern data center and co-location facilities. Cool air is drawn into the system through the front over the line cards, supervisor modules and power supplies. Warm air is exhausted at the rear through the fabric modules by fan modules that are integrated into the fabric cards. The system controls the fans speeds to dynamically adjust to the ambient air temperature and internal temperature sensors built into all system elements to ensure optimum cooling.

### Line Card Modules

The 7320X Series line cards deliver up to 4.7 Billion packets per second of forwarding with a single stage architecture that provides fair access to all ports. Each line card contains up to 32MB of packet memory that ensures up to 4MB for any single port for lossless forwarding. Line cards connect to all fabric modules in a non-blocking full mesh and leverage flow based load balancing to improve fabric efficiency. Fabric and line card connections are optimized to allow individual flows of up to 100 Gigabit per second

The Arista 7320X Series can be populated with up to eight high density 100GbE line cards. For environments requiring the highest performance combined with interface flexibility the 7320X line cards support five speed choices on each port. Each port can be configured for quad 10GbE or 25GbE, dual 50GbE or single 40GbE and 100GbE. Speed changes and breakout modes are enabled independently of the other ports on the line card. Additionally a wide range of both copper and fiber optics for all speeds are available with full support for industry standard connections. Each 7320X line card supports wire speed layer 2 and 3 forwarding and support for a wide range of L2 and L3 features.



*Arista 7320X Series 32 port 100GbE Line Card*

#### 32 port QSFP100 100GbE line card for 10G/25G/40G/50G/100G

- 32 100GbE or 40GbE ports with 4x 10GbE or 4x25GbE on any port
- QSFP100 and QSFP+ optics and breakout cables
- Choice of Copper, Multimode and Single-mode connections
- Parallel cables and optics for quad breakout compatibility
- 4.7 Billion pps wire speed performance
- Under 10W per 100G port
- Supported in both 4 and 8 Slot 7320X systems
- LEDs to indicate port status and mode



## Supervisor Module

The supervisor module for the 7300X and 7320X series runs Arista Extensible Operating System (EOS) and handles all control plane and management functions of the system. One supervisor module is needed to run the system and a second can be added for 1+1 redundancy. Each supervisor module takes up only a half slot resulting in very efficient use of space and a higher density design. The quad-core x86 CPU with 16GB of DRAM and an optional solid state drive (SSD) provides the control plane performance needed to run an advanced data center switch scaling to over 2,000 physical ports and thousands of virtual ports. Supervisor modules have dedicated connections to all fabric modules and line cards for communication and monitoring.

A pulse per second clock input port enables synchronizing with an external source to improve the accuracy of network timing and monitoring tools. The supervisor module features an auxiliary console port, 2 Ethernet management interfaces and a pair of USB ports for attaching external storage to install images, copy logs or support external connections. A series of status LEDs provide summary information for the system, power supplies, line cards, fabrics and fan modules.



*Arista 7300X Series Supervisor Module*

## Fabric and Fan Module

At the heart of the 7320X series is the fabric. It interconnects all line cards in a non-blocking architecture irrespective of the traffic pattern providing a full 6.4 Tbps of forwarding to each line card slot. Each line card connects to the fabric with multiple links and flows are spread across these paths to efficiently utilize the available fabric capacity. The four fabric modules are always active-active, providing high availability and can be hot-swapped with graceful performance degradation.

The fabric modules for the two chassis are different based on the size of the chassis and each accommodates a set of individual hot-swap high speed fan modules which provides redundancy for cooling. Each high speed fan module can be independently replaced without any impact of the system. The high speed fan modules are common to many of the 7000 Series 2RU switches providing simpler maintenance and sparing across modular and fixed products.



*Arista 7320X Series Fabric and Fan Modules*

## Power Supply Modules

The 7320 series switches are equipped with a choice of 3000W AC or 2700W DC power supplies. The power supplies provide load sharing, support grid redundancy and are hot-swappable to eliminate downtime when replacing power supplies. A maximum of 4 power supplies are used on the 7304 and up to 6 power supplies on the 7308. System are fully redundant with just two power supplies depending on the configuration and adding more power supplies provides increased power capacity.

The AC power supplies are Titanium climate saver rated and have an efficiency of over 94% across typical loading with a single stage conversion to the internal DC voltage. The DC power supplies require inputs at -48V DC to deliver up to 2700W. The 7320X Series uses multiple small power supplies which allows for incremental provisioning and smaller input circuits. Variable power supply fan speeds ensure power supply efficiency is optimized and reduces noise in data center environments.



*Arista 7320X Series AC and DC Power Supplies*

## Layer 2 Features

- 802.1w Rapid Spanning Tree
- 802.1s Multiple Spanning Tree Protocol
- Rapid Per VLAN Spanning Tree (RPVST+)
- 4096 VLANs
- Q-in-Q
- 802.3ad Link Aggregation/LACP
  - 64 ports/channel
  - 1024 groups per system
- Multi-Chassis Link Aggregation (MLAG)
  - 64 ports per MLAG
- Custom LAG Hashing
- Resilient LAG Hashing
- 802.1AB Link Layer Discovery Protocol
- 802.3x Flow Control
- Jumbo Frames (9216 Bytes)
- IGMP v1/v2/v3 snooping
- Storm Control

## Layer 3 Features

- Routing Protocols: OSPF, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2
- 128-way Equal Cost Multipath Routing (ECMP)
- Resilient ECMP Routes
- VRF
- BFD
- Route Maps
- IGMP v2/v3
- PIM-SM / PIM-SSM
- Anycast RP (RFC 4610)
- VRRP
- Virtual ARP (VARP)
- Policy Based Routing (DirectFlow)
- uRPF
- RAIL

## Advanced Monitoring and Provisioning

- Zero Touch Provisioning (ZTP)
- Smart System Upgrade
- Latency Analyzer and Microburst Detection (LANZ)
  - Configurable Congestion Notification (CLI, Syslog)
  - Streaming Events (GPB Encoded)
  - Capture/Mirror of congested traffic
- Advanced Monitoring and Aggregation
  - Port Mirroring 4 to 128 (4 active sessions per ASIC)
  - L2/3/4 Filtering on Mirror Sessions
  - Mirror to EOS/SSD\*
- Advanced Event Management suite (AEM)
  - CLI Scheduler
  - Event Manager
  - Event Monitor
  - Linux tools

- Optional SSD for logging and data capture
- Integrated packet capture/analysis with TCPDump
- RFC 3176 sFlow
- Restore & configure from USB
- Blue Beacon LED for system identification
- Software Defined Networking (SDN)
  - Openflow 1.0 \*
  - Arista DirectFlow
  - eAPI
  - OpenStack Neutron Support
- IEEE 1588 PTP (Transparent Clock and Boundary Clock) \*

## Virtualization Support

- VXLAN Bridging and Routing
- VM Tracer VMware Integration
  - VMware vSphere support
  - VM Auto Discovery
  - VM Adaptive Segmentation
  - VM Host View

## Security Features

- IPv4 / IPv6 Ingress & Egress ACLs using L2, L3, L4 fields
- MAC ACLs
- ACL Drop Logging
- ACL Counters
- Control Plane Protection (CPP)
- PDP
- Service ACLs
- DHCP Relay / Snooping
- MAC Security
- TACACS+
- RADIUS

## Quality of Service (QoS) Features

- Up to 8 queues per port
- 802.1p based classification
- DSCP based classification and remarking \*
- Explicit Congestion Notification (ECN)
- QoS interface trust (COS / DSCP)
- Strict priority queueing
- Weighted Round Robin (WRR) Scheduling \*
- Per-Priority Flow Control (PFC)
- Data Center Bridging Extensions (DCBX)
- 802.1Qaz Enhanced Transmissions Selection (ETS) \*
- ACL based DSCP Marking \*
- ACL based Policing \*
- Policing/Shaping
- Rate limiting
- Audio Video Bridging (AVB) \*

\* Not currently supported in EOS

## Network Management

- CloudVision
- 10/100/1000 Management Port
- RS-232 Serial Console Port
- USB Port
- SNMP v1, v2, v3
- Management over IPv6
- Telnet and SSHv2
- Syslog
- AAA
- Industry Standard CLI

## Extensibility

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

## Standards Compliance

- 802.1D Bridging and Spanning Tree
- 802.1p QOS/COS
- 802.1Q VLAN Tagging
- 802.1w Rapid Spanning Tree
- 802.1s Multiple Spanning Tree Protocol
- 802.1AB Link Layer Discovery Protocol
- 802.3ad Link Aggregation with LACP
- 802.3ab 1000BASE-T
- 802.3z Gigabit Ethernet
- 802.3ae 10 Gigabit Ethernet
- 802.3ba 40 and 100 Gigabit Ethernet
- RFC 2460 Internet Protocol, Version 6 (IPv6) Specification
- RFC 4861 Neighbor Discovery for IP Version 6 (IPv6)
- RFC 4862 IPv6 Stateless Address Autoconfiguration
- RFC 4443 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification

## SNMP MIBs

- RFC 3635 EtherLike-MIB
- RFC 3418 SNMPv2-MIB
- RFC 2863 IF-MIB
- RFC 2864 IF-INVERTED-STACK-MIB
- RFC 2096 IP-FORWARD-MIB
- RFC 4363 Q-BRIDGE-MIB
- RFC 4188 BRIDGE-MIB
- RFC 2013 UDP-MIB
- RFC 2012 TCP-MIB
- RFC 2011 IP-MIB
- RFC 2790 HOST-RESOURCES-MIB
- RFC 3636 MAU-MIB

- RMON-MIB
- RMON2-MIB
- HC-RMON-MIB
- LLDP-MIB
- LLDP-EXT-DOT1-MIB
- LLDP-EXT-DOT3-MIB
- ENTITY-MIB
- ENTITY-SENSOR-MIB
- ENTITY-STATE-MIB
- ARISTA-ACL-MIB
- ARISTA-QUEUE-MIB
- RFC 4273 BGP4-MIB
- RFC 4750 OSPF-MIB
- ARISTA-CONFIG-MAN-MIB
- ARISTA-REDUNDANCY-MIB
- RFC 2787 VRRPv2MIB
- MSDP-MIB
- PIM-MIB
- IGMP-MIB
- IPMROUTE-STD-MIB
- SNMP Authentication Failure trap
- ENTITY-SENSOR-MIB support for DOM (Digital Optical Monitoring)
- User configurable custom OIDs

See EOS release notes for latest supported MIBs

### Table Sizes

|               |                             |  |  |  |  |
|---------------|-----------------------------|--|--|--|--|
| STP Instances | 64 (MST)/510 (RPVST+)       |  |  |  |  |
| IGMP Groups   | 136K, with 8K unique groups |  |  |  |  |
| ACLs          | 8K                          |  |  |  |  |
| Egress ACLs   | 1K                          |  |  |  |  |
| ECMP          | 128-way, 1K groups          |  |  |  |  |

| UFT Mode - 2 is default | 0    | 1    | 2          | 3    | 4  |
|-------------------------|------|------|------------|------|----|
| MAC Addresses           | 136K | 104K | <b>72K</b> | 40K  | 8K |
| IPv4 Host Routes        | 8K   | 40K  | <b>72K</b> | 104K | 8K |
| IPv4 Multicast (S,G)    | 4K   | 20K  | <b>36K</b> | 52K  | 4K |
| IPv6 Host Routes        | 4K   | 20K  | <b>36K</b> | 52K  | 4K |

| LPM Table Mode                                  | ALPM | 1   | 2   | 3   | 4   |
|-------------------------------------------------|------|-----|-----|-----|-----|
| IPv4 LPM Routes                                 | 128K | 16K | 16K | 16K | 16K |
| IPv6 LPM Routes - Unicast (prefix length <= 64) | 84K  | 6K  | 4K  | 2K  | -   |
| IPv6 LPM Routes - Unicast (any prefix length)   | 20K  | 1K  | 2K  | 3K  | 4K  |

Maximum values dependent on shared resources in some cases  
 \* Not currently supported in EOS

| Chassis                                 | DCS-7308                                        | DCS-7304                                        |
|-----------------------------------------|-------------------------------------------------|-------------------------------------------------|
| Supervisor slots                        | 2                                               | 2                                               |
| Linecard Slots                          | 8                                               | 4                                               |
| Fabric Module Slots                     | 4                                               | 4                                               |
| Power Supply Slots                      | 6                                               | 4                                               |
| Fan Modules                             | 16                                              | 8                                               |
| Physical Dimensions (HxWxD)             | 22.53" x 17.36" x 23.74" (57.2 x 44.1 x 60.3cm) | 13.86" x 17.36" x 23.74" (35.2 x 44.1 x 60.3cm) |
| Rack Space                              | 13RU                                            | 8RU                                             |
| Weight (Chassis only)                   | 110 lbs (49.9 kg)                               | 78 lbs (35.3 kg)                                |
| Weight (Fully configured system)        | 299 lbs (135.6 kg)                              | 188.4 lbs (85.45 kg)                            |
| Maximum 10GbE Port Density              | 1,024 Ports                                     | 512 Ports                                       |
| Maximum 25GbE Port Density              | 1,024 Ports                                     | 512 Ports                                       |
| Maximum 40GbE Port Density              | 256 Ports                                       | 128 Ports                                       |
| Maximum 100GbE Port Density             | 256 Ports                                       | 128 Ports                                       |
| Maximum Throughput / Packets per Second | 50 Tbps / 38 Bpps                               | 25 Tbps / 19 Bpps                               |
| Maximum Power Consumption               | 6000W                                           | 3000W                                           |
| Fabric Module                           | DCS-7328X-FM                                    | DCS-7324X-FM                                    |
| Redundancy                              | Graceful Degradation                            | Graceful Degradation                            |
| Physical Dimensions (HxWxD)             | 17.3" x 3.7" x 11.8" (43.9 x 9.4 x 30cm)        | 11.80" x 3.70" x 10.27" (30x 9.4 x 26.1cm)      |
| Weight                                  | 19.6 lbs (8.9 kg)                               | 11.6 lbs (5.3 kg)                               |
| Typical Power (Maximum)                 | 380W (577W)                                     | 191W (288W)                                     |
| Chassis Support                         | DCS-7308                                        | DCS-7304                                        |

| Linecard Module             | DCS-7320X-32C-LC                             | Supervisor Module           | DCS-7300-SUP                                |
|-----------------------------|----------------------------------------------|-----------------------------|---------------------------------------------|
| Ports                       | 32 QSFP100 (40G/100G)                        | Processor                   | 2.6GHz, Quad Core, x86, 64-bit              |
| Max 10GbE                   | 128 (via splitter cables)                    | System Memory               | 16 GB                                       |
| Max 25GbE                   | 128 (via splitter cables)                    | Flash Storage Memory        | 4 GB                                        |
| Max 40GbE                   | 32                                           | RS-232 Serial Ports         | One (RJ-45)                                 |
| Max 100GbE                  | 32                                           | 100/1000 Management Ports   | Two (RJ-45)                                 |
| Port Buffer                 | 32MB                                         | USB 2.0 Interface           | Two                                         |
| Weight                      | 11 lbs (5 kg)                                | SSD Storage                 | 100 GB Optional                             |
| Typical (Maximum) Power *   | 286W (428W)                                  | Weight                      | 4.2 lbs (1.9 kg)                            |
| Physical Dimensions (WxHxD) | 17.11" x 1.73" x 11.83" (43.5 x 4.4 x 30 cm) | Typical Power (Maximum)     | 65W (80W)                                   |
| Chassis Support             | DCS-7308 and DCS-7304                        | Physical Dimensions (WxHxD) | 8.24" x 1.73" x 11.84" (21 x 4.4 x 30.1 cm) |
|                             |                                              | Chassis Support             | DCS-7308 and DCS-7304                       |

\* Typical power consumption measured at 25C ambient with 50% load on all ports

\* Line card stated power is measured with optics and value shown with optics removed.



## Supported Optics and Cables

| Interface Type | QSFP+ / 40GbE ports               |
|----------------|-----------------------------------|
| 10GBASE-CR     | 0.5m-5m QSFP+ to 4x SFP+          |
| 40GBASE-CR4    | 0.5m to 5m QSFP+ to QSFP+         |
| 40GBASE-AOC    | 3m to 100m                        |
| 40GBASE-UNIV   | 150m (OM3) /150m (OM4) /500m (SM) |
| 40GBASE-SRBD   | 100m (OM3) /150m (OM4)            |
| 40GBASE-SR4    | 100m (OM3) /150m (OM4)            |
| 40GBASE-XSR4   | 300m (OM3) /450m (OM4)            |
| 40GBASE-PLRL4  | 1km (1km 4x10G LR/LRL)            |
| 40GBASE-LRL4   | 1km                               |
| 40GBASE-PLR4   | 10km (10km 4x10G LR/LRL)          |
| 40GBASE-LR4    | 10km                              |
| 40GBASE-ER4    | 40km                              |

## Power Supply Specifications

| Model                   | 3000W AC<br>Titanium                         | 3000W DC        |
|-------------------------|----------------------------------------------|-----------------|
| Model Numbers           | PWR-3KT-AC-BLUE                              | PWR-3K-DC-BLUE  |
| Input Voltage           | 200 - 240V, 16A<br>(20A North America)       | -48-60V DC, 80A |
| Input Frequency         | 50/60 Hz, single phase<br>AC                 | DC              |
| Output Power            | 3000W                                        | 3000W           |
| Input Connector         | IEC 320 C19                                  | AWG #4-3        |
| Efficiency<br>(Typical) | Over 94% Titanium                            | 90%             |
| Size (WxHxD)            | 2.75" x 4.13" x 11.65" (7.0 x 10.5 x 29.6cm) |                 |
| Weight                  | 5.5 lbs (2.49 kg)                            |                 |
| Chassis Support         | DCS-7308 and DCS-7304                        |                 |

## Supported Optics and Cables

| Interface Type | QSFP100 / 100GbE ports          |
|----------------|---------------------------------|
| 100GBASE-CR4   | Yes (various lengths)           |
| 100GBASE-AOC   | 1m to 30m                       |
| 100GBASE-SR4   | 70m OM3 / 100m OM4 Parallel MMF |
| 100GBASE-SWDM4 | 70m OM3 / 100m OM4 Duplex MMF   |
| 100GBASE-SRBD  | 70m OM3 / 100m OM4 Duplex MMF   |
| 100GBASE-LRL4  | 1km SM Duplex                   |
| 100GBASE-LR4   | 10km SM Duplex                  |
| 100GBASE-PSM4  | 500m SM Parallel                |
| 100GBASE-CWDM4 | 2km SM duplex                   |
| 100GBASE-ERL4  | 40km SM Duplex                  |
| 25GBASE-CR     | 1m to 3m lengths                |

## Standards Compliance

|                           |                                                                                                                                                           |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMC                       | Emissions: FCC, EN55022, EN61000-3-2, EN61000-3-3 or EN61000-3-11, EN61000-3-12 (as applicable)<br>Immunity: EN55024<br>Emissions and Immunity: EN300 386 |
| Safety                    | UL/CSA 60950-1, EN 60950-1, IEC 60950-1<br>CB Scheme with all country differences                                                                         |
| Certifications            | North America (NRTL)<br>European Union (EU)<br>BSMI (Taiwan)<br>C-Tick (Australia)<br>CCC (PRC)<br>MSIP (Korea)<br>EAC (Customs Union)<br>VCCI (Japan)    |
| European Union Directives | 2006/95/EC Low Voltage Directive<br>2004/108/EC EMC Directive<br>2011/65/EU RoHS Directive<br>2012/19/EU WEEE Directive                                   |

## Environmental Characteristics

|                       |                            |
|-----------------------|----------------------------|
| Operating Temperature | 0 to 40°C (32 to 104°F)    |
| Storage Temperature   | -25 to 70°C (-13 to 158°F) |
| Relative Humidity     | 5 to 95%                   |
| Operating Altitude    | 0 to 10,000 ft, (0-3,000m) |

| Product Number                 | Product Description                                                                                             |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------|
| DCS-7328X-BND-F                | Arista 7328X chassis bundle. Includes 7308 chassis, 4x3kW PS, 4x 7328X Fabrics/fans, 1x Supervisor (F-R)        |
| DCS-7328X-BND-D-F              | Arista 7328X chassis bundle. Includes 7308 chassis, 4x3kW PS, 4x 7328X Fabrics/fans, 1x Supervisor & SSD (F-R)  |
| DCS-7324X-BND-F                | Arista 7324X chassis bundle. Includes 7304 chassis, 2x3kW PS, 4x 7324X Fabrics/fans, 1x Supervisor (F-R)        |
| DCS-7324X-BND-D-F              | Arista 7324X chassis bundle. Includes 7304 chassis, 2x3kW PS, 4x 7324X Fabrics/ fans, 1x Supervisor & SSD (F-R) |
| DCS-7328X-BND-DC-F             | Arista 7328X chassis bundle. Includes 7308 chassis, 4xDC PS, 4x 7328X Fabrics/fans, 1x Supervisor (F-R)         |
| DCS-7324X-BND-DC-F             | Arista 7324X chassis bundle. Includes 7304 chassis, 2xDC PS, 4x 7324X Fabrics/fans, 1x Supervisor (F-R)         |
| DCS-7300-SUP                   | Supervisor module for 7300 Series chassis                                                                       |
| DCS-7300-SUP-D                 | Supervisor module for 7300 Series chassis, with SSD                                                             |
| DCS-7320X-32C-LC               | Arista 7320X-32C linecard for 7320X Series, 32 port 100GbE QSFP (Spare)                                         |
| Optional Components and Spares |                                                                                                                 |
| DCS-7308-CH                    | Arista 7308 empty chassis, 2 supervisor slots, 8 linecard slots, 4 fabric module slots                          |
| DCS-7304-CH                    | Arista 7304 empty chassis, 2 supervisor slots, 4 linecard slots, 4 fabric module slots                          |
| DCS-7328X-FM-F                 | 7320X Fabric (integrated fans) module for 7308 chassis, required for slots 1-4. Front-to-rear air               |
| DCS-7324X-FM-F                 | 7320X Fabric (integrated fans) module for 7304 chassis, required for slots 1-4. Front-to-rear air               |
| DCS-7300-LCVR                  | Blank cover for 7300 linecard slot                                                                              |
| DCS-7300-SCVR                  | Blank cover for 7300 supervisor slot                                                                            |
| DCS-7300-PCVR                  | Blank cover for 7300 power supply slot                                                                          |
| KIT-7308                       | Spare accessory kit for Arista 7308 switches                                                                    |
| KIT-7304                       | Spare accessory kit for Arista 7304 switches                                                                    |
| KIT-7308-MMR                   | Spare Mid Mount Rack Brackets for 7308 switches                                                                 |
| KIT-7304-MMR                   | Spare Mid Mount Rack Brackets for 7304 switches                                                                 |
| KIT-7308-4PR                   | Spare 4 Post Rack Mount Brackets for 7304 and 7308 switches                                                     |
| FAN-7002H-F                    | Spare high speed fan module for Arista 7320X and 7260CX switches (front to rear airflow)                        |
| PWR-3KT-AC-BLUE                | Spare 3kW Titanium AC Power Supply for 7300 series (blue handle)                                                |
| PWR-3K-DC-BLUE                 | Spare 3kW DC Power Supply for 7300 series (blue handle)                                                         |
| LIC-MOD-1-E                    | Enhanced Software License for Arista 4-Slot Modular Switches (OSPF, BGP, ISIS, PIM)                             |
| LIC-MOD-2-E                    | Enhanced Software License for Arista 8 Slot Modular Switches (OSPF, BGP, ISIS, PIM)                             |
| LIC-MOD-1-V                    | Virtualization license for Arista 4-Slot Modular Switches (VM Tracer and VXLAN)                                 |
| LIC-MOD-2-V                    | Virtualization license for Arista 8 Slot Modular Switches (VM Tracer and VXLAN)                                 |

### Optional Components and Spares

|                 |                                                                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| LIC-MOD-1-V2    | EOS Extensions, Security and Partner Integration license for Arista Modular switches - 4 slots                                              |
| LIC-MOD-2-V2    | EOS Extensions, Security and Partner Integration license for Arista Modular switches - 8 slots                                              |
| LIC-MOD-1-Z     | Monitoring & provisioning license for Arista 4-Slot Modular Switches (ZTP, LANZ, API, TapAgg)                                               |
| LIC-MOD-2-Z     | Monitoring & provisioning license for Arista 8 Slot Modular Switches (ZTP, LANZ, API, TapAgg)                                               |
| LIC-MOD-1-FLX-L | FLX-Lite License for Arista 4-Slot Modular - Full Routing Up to 256K Routes, EVPN, VXLAN, SR, base MPLS LSR (no TE or link/node protection) |
| LIC-MOD-2-FLX-L | FLX-Lite License for Arista 8-Slot Modular - Full Routing Up to 256K Routes, EVPN, VXLAN, SR, base MPLS LSR (no TE or link/node protection) |

## Warranty

The Arista 7320X Series switches come with a one-year limited hardware warranty, which covers parts, repair, or replacement with a 10 business day turn-around 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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