

Product Highlights

Performance

- Over 50 Terabits per second fabric capacity
- Up to 32 billion packets per second
- Up to 6.4 Terabit per second per line card
- Wire speed L2 and L3 forwarding
- 1,024 wire-speed 25/10GbE ports
- 256 wire-speed 100GbE ports
- Latency below 2.5usec

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
- 32MB Dynamic Buffer per port group

Advanced Provisioning & Monitoring

- CloudVision
- Zero Touch Provisioning (ZTP)
- LANZ for microburst detection
- DANZ Advanced Mirroring for visibility
- 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-rear airflow for datacenter optimized cooling
- Under 1.7W per 10Gb of performance for lower cost of ownership
- Dense 25GbE and 100GbE

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 7300 Series modular switches are part of the Arista portfolio of data center and campus switches. The 7300 Series, with the third generation 7300X3 Series line cards, increase the scalability and performance of the 7300X Series supporting leaf / spine and Spline™ applications for collapsed data center tiers, and campus roles.

Modern campus and data center challenges demand simplified architectures, consistent operational experience, reduced complexity and higher performance. The 7300X3 Series systems share a common architecture with the Arista 7050X3 Series and offer a choice of two modular systems, a 4-slot and 8-slot. They support advanced features for extensive automation and programmability, network monitoring, precision timing and network virtualization to deliver secure high performance for an open, software driven approach to cloud networking.

The 7300X3 Series line cards support wire speed layer 2/3/4 performance that provides a flexible combination of 10G, 25G, 40G, 50G and 100G switching to design large networks for scale-out of east-west traffic patterns with low latency and power efficiency.

With optimized airflow, redundant and hot swappable supervisor, fabric, power and cooling the system is purpose built for modern networks. The 7300X3 Series is energy efficient with variable speed fans and redundant cooling. All of these attributes make the Arista 7300X3 Series an ideal platform for building high performance, open, resilient and scalable networks. Combined with Arista EOS the 7300X3 Series delivers advanced features for big data, cloud, virtualized and traditional designs.



Arista 7300X3 Series Modular Data Center Switches

Arista EOS

All Arista products including the 7300 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.

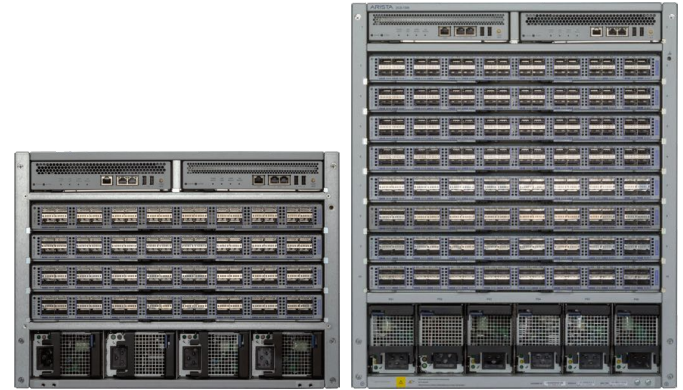
7300X3 Architecture

The 7300X 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 and provides control plane connectivity to each of the fabric and line card modules. The system is optimized for data center deployments with front-to-rear airflow.



Arista 7300X3 Series

Line Card Modules

Wire-speed line cards deliver up to 4 Billion packets per second of forwarding with a single stage architecture that delivers provides fair access to all ports. Line cards contains up to 32MB of packet memory for superior burst absorption. Each line card connects to all fabric modules in a non-blocking full mesh and leverages flow based dynamic load balancing to improve the fabric efficiency by reducing the probability of hash polarization.

The Arista 7300 Series can be populated with any combination of line cards. For environments requiring the highest performance combined with scalability a range of interface options is available addressing dense 1G/10G/25G and 40G/100G with full support for industry standard connections and comprehensive layer 2 and 3 features for flexible deployment choice.



32 port 100G QSFP line card

- Offers 32 wirespeed 100G ports with QSFP100 optics
- 5 speeds for flexible 10GbE, 25GbE, 40GbE, 50GbE and 100GbE with optics or cables
- 4Bpps and under 1.7W per 10Gb of performance

7300 Supervisor Module

The supervisor modules for the 7300 series run Arista Extensible Operating System (EOS) and handle 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 stateful 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 SSD provides the control plane performance needed to run an advanced data center switch scaling to over 1,000 physical ports and thousands of virtual ports. A pulse per second clock input port enables synchronizing with an external source to improve the accuracy of network timing and monitoring tools.



Arista 7300X Series Supervisor

7300X3 Fabric and Fan Module

At the heart of the 7300X3 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 module. Each line card module connects to the fabric with multiple links and flows are spread across these paths to efficiently utilize the available fabric capacity. The 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 accommodate a set of individual hot-swap fan modules. The fan modules support forward airflow and provide redundant cooling. Each fan module can be independently replaced without any impact of the system.



Arista 7300X3 Series Fabrics with Fans

7300 Power Supply Module

The 7300 series switches are equipped with a choice of F-B airflow direction 3000W AC or 3000W 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.

The AC power supplies are highly efficient in both platinum or titanium climate saver rated options and have an efficiency of over 93% with single stage conversion to the internal DC voltage. The DC power supplies require inputs at-48V DC to deliver up to 3000W. The 7300 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 7300X Series Fans



Arista 7300 Series Power Supplies

Designed for High Availability and Manageability

The Arista 7300 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 7300 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 7300 lowers total cost of ownership as it is designed to be efficient with power per port as low as 1.7W per 10Gb of performance which combined with data center optimized cooling for both leaf and spine data center deployment produces the most reliable, dense and power efficient modular switch.

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.

Smart System Upgrade *

Smart System Upgrade 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.

Scaling Data Center Performance

The Arista 7300X3 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 leaf switches and Arista's Multi-Chassis Link Aggregation (MLAG) technology, a pair of 7300X3 Switches can support over 12K 25G servers with a leaf and spine active/active L2 network topology. A combination of 16 7300X3 in a spine at Layer 3 scales the network up to over 16K 25G 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.

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 128-way without significant changes to the architecture. The 7300X3 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
- Equal and Unequal Cost Multi-Pathing (UCMP) for flexible traffic balancing in large scale multi-tier topologies
- Custom hash algorithms for efficient hashing, persistent hashing and custom lookups for tunneled protocols
- Flexible allocation of L2 and L3 forwarding table resources for more design choice
- Wide choice of dense 10G/25G/40G/50G/100G interfaces for multi-speed flexibility
- Support for standards based IEEE 25GbE for simple and cost effective migration from 10G and 40G to 25G and 100G
- VXLAN routing, bridging and gateway capability for physical to virtualization communication in next generation data center designs
- DANZ, sFlow and multi-port mirroring to detect micro-burst congestion and provide network wide visibility and monitoring
- Hitless speed changes from 10G to 100G to eliminate down-time when implementing speed changes

Enhanced Features for High Performance Networks

The Arista 7300X 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.

Automating the data center enables customers to dynamically provision computing resources in the most efficient manner while also meeting business needs by maintaining service level agreements (SLAs). Arista EOS automates complex IT workflows and simplifies network operations while reducing or even eliminating downtime. Arista EOS rich automation capabilities not only reduce the human error element in network operations but also enable IT operators to make the network work the way they want.

Dynamic Buffer Allocation

In cut-through mode, the Arista 7300X series switches forward packets with a latency of less than 2.5 usec. Upon congestion, the packets are buffered in an intelligent fully shared packet memory that has a total size of 32MB for superior burst absorption. Unlike other architectures that have fixed per-port packet memory, the 7300X3 series use dynamic thresholds to allocate packet memory based on traffic class, queue depth and quality of service policy ensuring a fair allocation to all ports of both lossy and lossless classes. Buffer utilization, occupancy and thresholds are all visible with Arista LANZ and can be exported to monitoring tools to identify hotspots and measure latency at the device and end to end.

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 7300X3 leverages a common Unified Forwarding Table 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 7300X3 ensures optimal resource allocation for all network topologies and network virtualization technologies.

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.

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.

Virtualization

Supporting next-generation virtualized data centers requires tight integration with orchestration tools and emerging encapsulation technologies such as VXLAN. The 7300X3 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, they make integration of non-VXLAN aware devices including servers, firewalls and load-balancers seamless and provide the ability to leverage VXLAN as a standards based L2 extension technology for non-MPLS environments.

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. Advanced analytics are provided with features like buffer monitoring with configurable thresholds, in-band path and latency monitoring, event driven trace packets and granular time stamping.

Dynamic Load Balancing *

Traditional hash-based load balancing algorithms can result in link and path allocations with short term imbalances and under utilization of aggregate capacity. This is aggravated further in modern data centers with high traffic loads, varied flow duration, mixed packet sizes and micro-bursts. DLB enhancements to load balancing consider the real time load on links and dynamically assign new and existing flows to the best link. When imbalances are detected active flows and new flows are allocated to the least loaded paths to reduce the possibility of drops. Supported with any combination of ECMP and LAG/MLAG, DLB delivers higher throughput with enhanced load distribution while offering the user an open implementation.

Flexible Pipeline

The Arista 7050X3 series support an enhanced forwarding architecture with smarter and flexible packet pipeline which allows the addition of new capabilities to the data plane of the packet processor through software upgrades without changes or replacement of the underlying hardware. This allows for rapid testing and deployment avoiding costly replacements or major upgrades. Together with flexible resource allocation provided by the Unified Forwarding Tables (UFT), the programmable pipeline increases the flexibility of the platform allowing for broad use cases and ensures continued investment protection.

Network Address Translation *

The Arista 7050X3 series support static and dynamic address translation at line rate and introducing no additional latency when the mappings are set up. High performance environments can take advantage of NAT to resolve addressing challenges such as masking internal addresses and translating overlapping ranges resulting in simpler network topologies without performance penalty.

* Not currently supported in EOS

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
- Audio Video Bridging (AVB) *

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
- Network Address Translation *
 - Source/Destination NAT
 - Source/Group Multicast NAT
- Selective Route Download

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 CPU *
- Advanced Event Management suite (AEM)
 - CLI Scheduler

- Event Manager
- Event Monitor
- Linux tools
- 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 *
 - Openflow 1.3 *
 - 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 and 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

* 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
 - 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
- 802.3by 25 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	288K, with 16K unique groups
ACLs	2K
Egress ACLs	2K
ECMP	128-way, 1K groups

UFT Mode - 2 is default	0	1	2	3	4
MAC Addresses	288K	224K	160K	96K	32K
IPv4 Host Routes	16K	80K	144K	168K	16K
IPv4 Multicast (S,G)	8K	40K	72K	104K	8K
IPv6 Host Routes	8K	40K	72K	104K	8K

LPM Table Mode	ALPM*	1	2	3	4
IPv4 LPM Routes	384K	32K	32K	32K	32K
IPv6 LPM Routes - Unicast (prefix length <= 64)	0-192K	12K	8K	4K	-
IPv6 LPM Routes - Unicast (any prefix length)	2K-40K	2K	4K	6K	8K

* 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)	292 lbs (132.5 kg)	185 lbs (84 kg)
Maximum 10GbE Port Density	1,024 Ports	512 Ports
Maximum 25GbE Port Density	1,024 Ports	512 Ports
Maximum 50GbE Port Density	512 Ports	256 Ports
Maximum 40GbE Port Density	256 Ports	128 Ports
Maximum 100GbE Port Density	256 Ports	128 Ports
Maximum Throughput / Packets per Second	51.2 Tbps / 32 Bpps	25.6 Tbps / 16 Bpps
Maximum Power Consumption	6500W	3400W

Fabric Module	DCS-7308X3-FM	DCS-7304X3-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	17.3 lbs (7.8 kg)	10.3 lbs (4.7 kg)
Typical Power (Maximum)	195W (343W)	97.5W (172W)
Chassis Support	DCS-7308X	DCS-7304X

Linecard Module	DCS-7300X3-32C-LC	DCS-7300X3-48YC4-LC
Ports	32 QSFP100 (100G/40G)	48 SFP25 & 4 QSFP100
Max 25GbE/10GbE	128 (via splitter cables)	64 (16 via splitter cables)
Max 100GbE/40GbE	32	4
Port Buffer	64MB	32MB
Weight	11 lbs (5 kg)	9.6 lbs (4.35kg)
Typical (Maximum) Power *	219W (372W)	TBD
Physical Dimensions (WxHxD)	11.83" x 17.11" x 1.73" (30 x 43.5 x 4.4 cm)	
Minimum EOS	4.21.1F	TBD
Chassis Support	DCS-7308X3 and DCS-7304X3	

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

Supervisor Module DCS-7300-SUP

Processor	2.6GHz, Quad Core, x86, 64-bit
System Memory	16 GB
Flash Storage Memory	4 GB
RS-232 Serial Ports	One (RJ-45)
100/1000 Management Ports	Two (RJ-45)
USB 2.0 Interface	Two
SSD Storage	100 GB Optional
Physical Dimensions (WxHxD)	1.73" x 8.24" x 11.84" (4.4 x 21 x 30.1cm)
Weight	4.2 lbs (1.9 kg)
Typical Power (Maximum)	65W (80W)
Chassis Support	DCS-7308 and DCS-7304

Standards Compliance

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

Power Supply Specifications

Model	3000W AC Titanium	3000W DC
Model Numbers	PWR-3KT-AC-BLUE	PWR-3K-DC-BLUE
Input Voltage	200 - 240V, 16A (20A North America)	-48-60V DC, 80A
Input Frequency	50/60 Hz, single phase AC	DC
Output Power	3000W	3000W
Input Connector	IEC 320 C19	AWG #4-3
Efficiency (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

40GbE	40G QSFP ports
10GBASE-CR	0.5m-5m QSFP+ to 4x SFP+ (see note 1)
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
100GbE	100G QSFP ports
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-LR4	10km SM Duplex
100GBASE-LRL4	2km SM Duplex
100GBASE-CWDM4	2km SM duplex
100GBASE-PSM4	500m SM Parallel
100GBASE-AOC	1m to 30m
100GBASE-ERL4	40km SM Duplex
100GBASE-CR4	QSFP to QSFP: 1m to 5m
25GBASE-CR	QSFP to SFP25: 1m to 3m lengths

10GbE

10GbE	SFP+ ports
10GBASE-CR	SFP+ to SFP+: 0.5m-5m
10GBASE-AOC	SFP+ to SFP+: 3m-30m
10GBASE-SRL	100m
10GBASE-SR	300m
10GBASE-LRL	1km
10GBASE-LR	10km
10GBASE-ER	40km
10GBASE-ZR	80km
10GBASE-DWDM	80km
1GbE SX/LX/TX	Yes

25GbE

25GbE	25G SFP Ports
25GBASE-CR	SFP25 to SFP25: 1m-5m
25GBASE-AOC	SFP+ to SFP+: 3m-30m
25GBASE-SR	70m
25GBASE-LR	10km

Product Number	Product Description
DCS-7308X3-BND-F	Arista 7308X3 chassis bundle. Includes 7308 chassis, 4x3KW PS, 4x 7300X3 Fabrics/fans, 1x Supervisor (F-R)
DCS-7308X3-BND-D-F	Arista 7308X3 chassis bundle. Includes 7308 chassis, 4x3KW PS, 4x 7300X3 Fabrics/fans, 1x Supervisor & SSD (F-R)
DCS-7308X3-BND-DC-F	Arista 7308X3 chassis bundle. Includes 7308 chassis, 4xDC PS, 4x 7300X3 Fabrics/fans, 1x Supervisor (F-R)
DCS-7304X3-BND-F	Arista 7304X3 chassis bundle. Includes 7304 chassis, 2x3KW PS, 4x 7300X3 Fabrics/fans, 1x Supervisor (F-R)
DCS-7304X3-BND-D-F	Arista 7304X3 chassis bundle. Includes 7304 chassis, 2x3KW PS, 4x 7300X3 Fabrics/fans, 1x Supervisor & SSD (F-R)
DCS-7304X3-BND-DC-F	Arista 7304X3 chassis bundle. Includes 7304 chassis, 2xDC PS, 4x 7300X3 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-7300X3-32C-LC	Arista 7300X3 32-port 100GbE QSFP linecard for 7300X3 Series (Spare)
DCS-7300X3-48YC4-LC	Arista 7300X3 48-port 25GbE SFP & 4 port 100GbE QSFP linecard for 7300X3 Series (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-7308X3-FM-F	7300X3 Fabric (integrated fans) module for 7308 chassis, required for slots 1-4. Front-to-rear air
DCS-7304X3-FM-F	7300X3 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-7002-F	Spare fan module for Arista 7250 / 7050, 7280R 2RU and 7300 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 Modular Switches - 4 slots (OSPF, BGP, PIM)
LIC-MOD-2-E	Enhanced Software License for Arista Modular Switches - 8 slots (OSPF, BGP, PIM)
LIC-MOD-1-V	Virtualization license for Arista Modular switches - 4 slots (VMTracer and VXLAN)
LIC-MOD-2-V	Virtualization license for Arista Modular switches - 8 slots (VMTracer and VXLAN)
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

Optional Components and Spares

LIC-MOD-1-Z	Monitoring & provisioning license for Arista Modular switches - 4 slots (ZTP, LANZ, API, TapAgg)
LIC-MOD-2-Z	Monitoring & provisioning license for Arista Modular switches - 8 slots (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 7300X3 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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