Product Highlights

Performance

- Over 20 Terabits per second fabric capacity
- Up to 15 billion packets per second
- Up to 2.56 Terabit per second per line card
- Wire speed L2 and L3 forwarding
- 1,024 wire-speed 10GbE ports
- 256 wire-speed 40GbE ports
- 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
- 12MB 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-back or back-to-front reversible airflow for optimized cooling
- Under 3W per 10GbE port typical power for lower cost of ownership
- Dense 10GbE and 40GbE

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 switches. The 7300 Series with 7300X Series line cards increase flexibility and scalability for data center switches supporting both leaf and spine and Spline™ applications for collapsed end of row and aggregation. The 7300X systems share a common architecture with the Arista 7050X and 7250X Series and offer a choice of two modular systems, a 4-slot and 8-slot that support advanced features for network monitoring, precision timing and network virtualization to deliver scalable high performance for software defined cloud networking.

Increased adoption of 10 Gigabit Ethernet servers and applications requiring higher bandwidth is driving rapid adoption of 10 and 40 Gigabit Ethernet switching. The 7300 Series support a choice of high density line cards in combination with wire speed layer 2/3/4 performance that provides a flexible combination of 100M, 1G, 10G and 40G switching to design large leaf and spine networks for scale-out of east-west traffic patterns with low latency and power efficiency.

With reversible front-to-rear or rear-to-front airflow, redundant and hot swappable supervisor, power, fabric and cooling modules the system is purpose built for data centers. The 7300 Series is energy efficient with typical power consumption of under 3 watts per 10GbE port for a fully loaded chassis. All of these attributes make the Arista 7300 Series an ideal platform for building reliable, low latency, resilient and scalable data center networks. Combined with Arista EOS the 7300 Series delivers advanced features for big data, cloud, virtualized and traditional designs.

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.
Scaling Data Center Performance
The Arista 7300X 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 and 10G leaf switches and Arista’s Multi-Chassis Link Aggregation (MLAG) technology, a pair of 7300X Switches can support over 12,000 Servers with a leaf and spine active/active L2 network topology. A combination of 16 7300X in a spine at Layer 3 scales the network up to over 16K 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.

Software Defined Cloud Networks
Arista Software Defined 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 AEM, ZTP/ZTR, LANZ and DANZ
- Network Wide Virtualization - Multi-vendor API Support with eAPI, VXLAN and NSX, and other encapsulation techniques
- Network Applications and Automated Management - Network applications; single point of management and open - Openflow, Openstack, OpenVirtualSwitch and OVSDB

Dynamic Buffer Allocation
In cut-through mode, the Arista 7300X 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 12 Mbytes. Unlike other architectures that have fixed per-port packet memory, the 7300X Series use Dynamic Buffer Allocation (DBA) to allocate up to 6MB of 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:
- 64-way ECMP and 64-way MLAG to provide scalable designs and balance traffic evenly across large scale 2 tier leaf-spine designs
- Flow based FDLB architecture to balance large flows and dynamic packet buffering to absorb congestion from microbursts
- Flexible allocation of L2 and L3 forwarding table resources for more design choice
- Wide choice of dense 10GbE and 40GbE modules with broad range of optics and cables for multi-speed flexibility
- 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
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.

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.

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 7300 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 7300 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 7300X 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 7300X 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 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 reversible 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 3W per 10GbE port which combined with reversible cooling to for both leaf and spine data center deployment produces the most reliable, dense and power efficient modular switch.

* Not currently supported in EOS
7300X 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 20 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 and rear to front airflow options.

Line Card Modules

Wire-speed line cards deliver up to 1.92 Billion packets per second of forwarding with a single stage architecture that delivers provides fair access to all ports. Line cards contains up to 24MB of packet memory that ensures up to 6MB for any single port for lossless forwarding. 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 both copper and fiber options is available addressing dense 1G/10G and 10G/40G with full support for industry standard connections and comprehensive layer 2 and 3 features for flexible deployment choice.

32 port QSFP+ 40G line card for 10G/40G
- 32 40GbE or 128 10GbE ports with QSFP+ optics and breakout cables
- Choice of Copper, Multimode and Single-mode with 40G and 10G options
- 1.92Bpps and under 12W per 40G port

48 port SFP+ for 1/10GbE and 4 port 40GbE QSFP+
- 64 10G ports per line card or 48 1/10GbE ports and flexible 10G/40G
- Four QSFP+ ports allow choice of 4 x 40GbE or 16 x 10GbE
- 960Mpps and under 3W per 10G port

48 port 10GBASE-T for 100M/1G/10GbE and 4 port 40GbE QSFP+
- Up to 64 10G ports per line card or
- 48 100/1G/10GbE ports and 4 ports of 10/40G
- Four QSFP+ ports allow choice of 4 x 40GbE or 16 x 10GbE
- 960Mpps and under 5W per 10G port
### 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.

### 7300 Fabric and Fan Module

At the heart of the 7300 series is the fabric. It interconnects all line cards in a non-blocking architecture irrespective of the traffic pattern providing a full 2.56 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 and reverse airflow and provide redundant cooling. Each fan module can be independently replaced without any impact of the system.

### 7300 Power Supply Module

The 7300 series switches are equipped with a choice of reversible 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.
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
- RAIL

Layer 3 Features
- Routing Protocols: OSPF, OSPFv3, BGP, MP-BGP, IS-IS, and RIPv2
- 64-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
- Selective Route Download

Advanced Monitoring and Provisioning
- Zero Touch Provisioning (ZTP)
- 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

Virtualization Support
- VXLAN Routing and Bridging
- 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
- 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
  - 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 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 VRRPv2-MIB
- 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

<table>
<thead>
<tr>
<th>STP Instances</th>
<th>64 (MST)/510 (RPVST+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGMP Groups</td>
<td>288K, with 8K unique groups</td>
</tr>
<tr>
<td>ACLs</td>
<td>4K to 128K</td>
</tr>
<tr>
<td>Egress ACLs</td>
<td>1K to 16K</td>
</tr>
<tr>
<td>ECMP</td>
<td>64-way, 1K groups</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Base Mode</th>
<th>UFT Modes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC Addresses</td>
<td>32K</td>
</tr>
<tr>
<td>IPv4 Hosts</td>
<td>32K</td>
</tr>
<tr>
<td>IPv4 Routes - Unicast</td>
<td>16K</td>
</tr>
<tr>
<td>IPv4 Routes - Multicast</td>
<td>16K</td>
</tr>
<tr>
<td>IPv6 Hosts</td>
<td>16K</td>
</tr>
<tr>
<td>IPv6 Routes - Unicast</td>
<td>8K /64, 4K /128</td>
</tr>
<tr>
<td>IPv6 Routes - Multicast</td>
<td>4K</td>
</tr>
</tbody>
</table>

Maximum values dependent on shared resources in some cases

* Not currently supported in EOS
## Chassis

<table>
<thead>
<tr>
<th></th>
<th>DCS-7308</th>
<th>DCS-7304</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor slots</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Linecard Slots</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Fabric Module Slots</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Power Supply Slots</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Fan Modules</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Physical Dimensions (HxWxD)</td>
<td>22.53” x 17.36” x 23.74” (57.2 x 44.1 x 60.3cm)</td>
<td>13.86” x 17.36” x 23.74” (35.2 x 44.1 x 60.3cm)</td>
</tr>
<tr>
<td>Rack Space</td>
<td>13RU</td>
<td>8RU</td>
</tr>
<tr>
<td>Weight (Chassis only)</td>
<td>110 lbs (49.9 kg)</td>
<td>78 lbs (35.3 kg)</td>
</tr>
<tr>
<td>Weight (Fully configured system)</td>
<td>299 lbs (135.6 kg)</td>
<td>188.4 lbs (85.45 kg)</td>
</tr>
<tr>
<td>Maximum 10GbE Port Density</td>
<td>1,024 Ports</td>
<td>512 Ports</td>
</tr>
<tr>
<td>Maximum 40GbE Port Density</td>
<td>256 Ports</td>
<td>128 Ports</td>
</tr>
<tr>
<td>Maximum Throughput / Packets per Second</td>
<td>20 Tbps / 15 Bpps</td>
<td>10 Tbps / 7.5 Bpps</td>
</tr>
<tr>
<td>Maximum Power Consumption</td>
<td>6000W</td>
<td>3000W</td>
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</table>

## Fabric Module

<table>
<thead>
<tr>
<th></th>
<th>DCS-7308X-FM</th>
<th>DCS-7304X-FM</th>
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<tbody>
<tr>
<td>Redundancy</td>
<td>Graceful Degradation</td>
<td>Graceful Degradation</td>
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<tr>
<td>Physical Dimensions (HxWxD)</td>
<td>17.3” x 3.7” x 11.8” (43.9 x 9.4 x 30cm)</td>
<td>11.80” x 3.70” x 10.27” (30 x 9.4 x 26.1cm)</td>
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<tr>
<td>Weight</td>
<td>17.3 lbs (7.8 kg)</td>
<td>10.2 lbs (4.6 kg)</td>
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<tr>
<td>Typical Power (Maximum)</td>
<td>195W (343W)</td>
<td>97.5W (172W)</td>
</tr>
<tr>
<td>Chassis Support</td>
<td>DCS-7308</td>
<td>DCS-7304</td>
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## Linecard Module

<table>
<thead>
<tr>
<th></th>
<th>DCS-7300X-32Q-LC</th>
<th>DCS-7300X-64S-LC</th>
<th>DCS-7300X-64T-LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ports</td>
<td>32 QSFP+ (10G/40G)</td>
<td>48 SFP+ &amp; 4 QSFP+</td>
<td>48 10GBASE-T &amp; 4 QSFP+</td>
</tr>
<tr>
<td>Max 10GbE</td>
<td>128 (via splitter cables)</td>
<td>64 (16 via splitter cables)</td>
<td>64 (16 via splitter cables)</td>
</tr>
<tr>
<td>Max 40GbE</td>
<td>32</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Port Buffer</td>
<td>24MB</td>
<td>12MB</td>
<td>12MB</td>
</tr>
<tr>
<td>Weight</td>
<td>10.2 lbs (4.6 kg)</td>
<td>9.6 lbs (4.35kg)</td>
<td>10.2 lbs (4.6kg)</td>
</tr>
<tr>
<td>Typical (Maximum) Power *</td>
<td>219W (372W)</td>
<td>166W (232W)</td>
<td>290W (430W)</td>
</tr>
<tr>
<td>Physical Dimensions (WxHxD)</td>
<td>11.83” x 17.11” x 1.73” (30 x 43.5 x 4.4 cm)</td>
<td></td>
<td></td>
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<tr>
<td>Chassis Support</td>
<td>DCS-7316, DCS-7308 and DCS-7304</td>
<td></td>
<td></td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Feature</th>
<th>DCS-7300-SUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>2.6GHz, Quad Core, x86, 64-bit</td>
</tr>
<tr>
<td>System Memory</td>
<td>16 GB</td>
</tr>
<tr>
<td>Flash Storage Memory</td>
<td>4 GB</td>
</tr>
<tr>
<td>RS-232 Serial Ports</td>
<td>One (RJ-45)</td>
</tr>
<tr>
<td>100/1000 Management Ports</td>
<td>Two (RJ-45)</td>
</tr>
<tr>
<td>USB 2.0 Interface</td>
<td>Two</td>
</tr>
<tr>
<td>SSD Storage</td>
<td>100 GB Optional</td>
</tr>
<tr>
<td>Physical Dimensions (WxHxD)</td>
<td>1.73” x 8.24” x 11.84” (4.4 x 21 x 30.1 cm)</td>
</tr>
<tr>
<td>Weight</td>
<td>4.2 lbs (1.9 kg)</td>
</tr>
<tr>
<td>Typical Power (Maximum)</td>
<td>65W (80W)</td>
</tr>
<tr>
<td>Chassis Support</td>
<td>DCS-7316, DCS-7308 and DCS-7304</td>
</tr>
</tbody>
</table>

### Standards Compliance

| EMC | Emissions: FCC, EN55022, EN61000-3-2, EN61000-3-3 or EN61000-3-11, EN61000-3-12 (as applicable)  
Immunity: EN55022  
Emissions and Immunity: EN300 386 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>UL/CSA 60950-1, EN 60950-1, IEC 60950-1 CB Scheme with all country differences</td>
</tr>
</tbody>
</table>
| 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 |

### Supported Optics and Cables

<table>
<thead>
<tr>
<th>Interface Type</th>
<th>SFP+ ports</th>
<th>QSFP+ ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>40GBASE-CR4</td>
<td>-</td>
<td>0.5m-7m QSFP+ to QSFP+</td>
</tr>
<tr>
<td>40GBASE-AOC</td>
<td>-</td>
<td>3m to 100m</td>
</tr>
</tbody>
</table>
| 40GBASE-UNIV   | -          | 150m (OM3) / 150m (OM4)  
500m (SM) |
| 40GBASE-SRBD   | -          | 100m (OM3) /150m (OM4) |
| 40GBASE-SR4    | -          | 100m (OM3) /150m (OM4) |
| 40GBASE-XSR4   | -          | 300m (OM3) /400m (OM4) |
| 40GBASE-PLRL4  | -          | 1km (1km 4x10G LR/LRL) |
| 40GBASE-LRL4   | -          | 10km (10km 4x10G LR/LRL) |
| 40GBASE-LR4    | -          | 10km |
| 40GBASE-ER4    | -          | 40km |
| 10GBASE-CR     | SFP+ to SFP+: 0.5m-5m  
0.5m-5m QSFP+ to 4 x SFP+ |
| 10GBASE-AOC    | SFP+ to SFP+: 3m-30m |
| 10BASE-SRL     | 100m |
| 10BASE-SR      | 300m |
| 10BASE-LRL     | 1km |
| 10BASE-LR      | 10km |
| 10BASE-ER      | 40km |
| 10BASE-ZR      | 80km |
| 10BASE-DWDM    | 80km |
| 100Mb TX, 1Gbe SX/LX/TX | Yes |

### Environmental Characteristics

<table>
<thead>
<tr>
<th>Environment</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>0 to 40°C (32 to 104°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-25 to 70°C (-13 to 158°F)</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5 to 95%</td>
</tr>
<tr>
<td>Operating Altitude</td>
<td>0 to 10,000 ft, (0-3,000m)</td>
</tr>
</tbody>
</table>
### Power Supply Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>3000W AC Platinum</th>
<th>3000W AC Titanium</th>
<th>3000W DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Numbers</td>
<td>PWR-3K-AC-F</td>
<td>PWR-3KT-AC-BLUE</td>
<td>PWR-3K-DC-BLUE</td>
</tr>
<tr>
<td></td>
<td>PWR-3K-AC-R</td>
<td>PWR-3K-DC-RED</td>
<td></td>
</tr>
<tr>
<td>Input Voltage</td>
<td>200 - 240V, 16A (20A North America)</td>
<td>-48-60V DC, 80A</td>
<td></td>
</tr>
<tr>
<td>Input Frequency</td>
<td>50/60 Hz, single phase AC</td>
<td>DC</td>
<td></td>
</tr>
<tr>
<td>Output Power</td>
<td>3000W (2550W in reverse)</td>
<td>3000W</td>
<td>3000W</td>
</tr>
<tr>
<td>Input Connector</td>
<td>IEC 320 C19</td>
<td>IEC 320 C19</td>
<td>AWG #4-3</td>
</tr>
<tr>
<td>Efficiency (Typical)</td>
<td>Over 93% Platinum</td>
<td>Over 94% Titanium</td>
<td>90%</td>
</tr>
<tr>
<td>Size (WxHxD)</td>
<td>2.75&quot; x 4.13&quot; x 11.65&quot; (7.0 x 10.5 x 29.6cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>5.5 lbs (2.49 kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chassis Support</td>
<td>DCS-7316, DCS-7308 and DCS-7304</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Product Number | Product Description
--- | ---
DCS-7308X-BND-F | Arista 7308X chassis bundle. Includes 7308 chassis, 4 x 3000W PS, 4 Fabric modules with fans, 1x Supervisor (F-R)
DCS-7308X-BND-D-F | Arista 7308X chassis bundle. Includes 7308 chassis, 4 x 3000W PS, 4 Fabric modules with fans, 1x Supervisor with SSD (F-R)
DCS-7308X-BND-R | Arista 7308X chassis bundle. Includes 7308 chassis, 4 x 3000W PS, 4 Fabric modules with fans, 1x Supervisor (R-F)
DCS-7308X-BND-D-R | Arista 7308X chassis bundle. Includes 7308 chassis, 4 x 3000W PS, 4 Fabric modules with fans, 1x Supervisor with SSD (R-F)
DCS-7308XT-BND-F | Arista 7308X chassis bundle. Includes 7308 chassis, 4x3kW Titanium PS, 4xFabrics/fans, 1x Supervisor (F-R)
DCS-7308XT-BND-D-F | Arista 7308X chassis bundle. Includes 7308 chassis, 4x3kW Titanium PS, 4xFabrics/fans, 1x Supervisor & SSD (F-R)
DCS-7304X-BND-F | Arista 7304X chassis bundle. Includes 7304 chassis, 2 x 3000W PS, 4 Fabric modules with fans, 1x Supervisor (F-R)
DCS-7304X-BND-D-F | Arista 7304X chassis bundle. Includes 7304 chassis, 2 x 3000W PS, 4 Fabric modules with fans, 1x Supervisor with SSD (F-R)
DCS-7304X-BND-R | Arista 7304X chassis bundle. Includes 7304 chassis, 2 x 3000W PS, 4 Fabric modules with fans, 1x Supervisor (R-F)
DCS-7304X-BND-D-R | Arista 7304X chassis bundle. Includes 7304 chassis, 2 x 3000W PS, 4 Fabric modules with fans, 1x Supervisor with SSD (R-F)
DCS-7304XT-BND-F | Arista 7304X chassis bundle. Includes 7304 chassis, 2x3KW Titanium PS, 4xFabrics/fans, 1x Supervisor (F-R)
DCS-7304XT-BND-D-F | Arista 7304X chassis bundle. Includes 7304 chassis, 2x3KW Titanium PS, 4xFabrics/ fans, 1xSupervisor & SSD (F-R)
DCS-7304X-BND2-DC-F | Arista 7304X chassis bundle. Includes 7304 chassis, 2x3K DC PS, 4xFabrics/fans, 1x Supervisor (F-R)
DCS-7304X-BND2-DC-D-F | Arista 7304X chassis bundle. Includes 7304 chassis, 2x3K DC PS, 4xFabrics/fans, 1x Supervisor & SSD (F-R)
DCS-7304X-BND2-DC-R | Arista 7304X chassis bundle. Includes 7304 chassis, 2x3K DC PS, 4xFabrics/fans, 1x Supervisor (R-F)
DCS-7304X-BND2-DC-D-R | Arista 7304X chassis bundle. Includes 7304 chassis, 2x3K DC PS, 4xFabrics/fans, 1x Supervisor with SSD (R-F)
DCS-7308X-BND2-DC-F | Arista 7308X chassis bundle. Includes 7308 chassis, 4x3K DC PS, 4 Fabrics/fans, 1x Supervisor (F-R)
DCS-7308X-BND2-DC-D-F | Arista 7308X chassis bundle. Includes 7308 chassis, 4x3K DC PS, 4 Fabrics/fans, 1x Supervisor & SSD (F-R)
DCS-7308X-BND2-DC-R | Arista 7308X chassis bundle. Includes 7308 chassis, 4x3K DC PS, 4 Fabrics/fans, 1x Supervisor (R-F)
DCS-7308X-BND2-DC-D-R | Arista 7308X chassis bundle. Includes 7308 chassis, 4x3K DC PS, 4 Fabrics/fans, 1x Supervisor with SSD (R-F)
<table>
<thead>
<tr>
<th>Product Number</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCS-7300-SUP</td>
<td>Supervisor module for 7300 Series chassis</td>
</tr>
<tr>
<td>DCS-7300-SUP-D</td>
<td>Supervisor module for 7300 Series chassis, with SSD</td>
</tr>
<tr>
<td>DCS-7300X-64S-LC</td>
<td>Arista 7300X-64S linecard for 7300X Series, 48 port 10GbE SFP+ and 4 port 40GbE QSFP+ (spare)</td>
</tr>
<tr>
<td>DCS-7300X-64T-LC</td>
<td>Arista 7300X-64T linecard for 7300X Series, 48 port 10GBASE-T and 4 port 40GbE QSFP+ (spare)</td>
</tr>
<tr>
<td>DCS-7300X-32Q-LC</td>
<td>Arista 7300X-32Q linecard for 7300X Series, 32 port 40GbE QSFP+ (spare)</td>
</tr>
</tbody>
</table>

**Optional Components and Spares**

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCS-7308-CH</td>
<td>Arista 7308 empty chassis, 2 supervisor slots, 8 linecard slots, 4 fabric module slots</td>
</tr>
<tr>
<td>DCS-7304-CH</td>
<td>Arista 7304 empty chassis, 2 supervisor slots, 4 linecard slots, 4 fabric module slots</td>
</tr>
<tr>
<td>DCS-7308X-FM-F</td>
<td>Fabric-X (integrated fans) module for 7308 chassis, required for slots 1-4. Front-to-rear air</td>
</tr>
<tr>
<td>DCS-7308X-FM-R</td>
<td>Fabric-X (integrated fans) module for 7308 chassis, required for slots 1-4. Rear-to-front air</td>
</tr>
<tr>
<td>DCS-7304X-FM-F</td>
<td>Fabric-X (integrated fans) module for 7304 chassis, required for slots 1-4. Front-to-rear air</td>
</tr>
<tr>
<td>DCS-7304X-FM-R</td>
<td>Fabric-X (integrated fans) module for 7304 chassis, required for slots 1-4. Rear-to-front air</td>
</tr>
<tr>
<td>DCS-7300-LCVR</td>
<td>Blank cover for 7300 linecard slot</td>
</tr>
<tr>
<td>DCS-7300-SCVR</td>
<td>Blank cover for 7300 supervisor slot</td>
</tr>
<tr>
<td>DCS-7300-PCVR</td>
<td>Blank cover for 7300 power supply slot</td>
</tr>
<tr>
<td>KIT-7308</td>
<td>Spare accessory kit for Arista 7308 switches</td>
</tr>
<tr>
<td>KIT-7304</td>
<td>Spare accessory kit for Arista 7304 switches</td>
</tr>
<tr>
<td>KIT-7308-MMR</td>
<td>Spare Mid Mount Rack Brackets for 7308 switches</td>
</tr>
<tr>
<td>KIT-7304-MMR</td>
<td>Spare Mid Mount Rack Brackets for 7304 switches</td>
</tr>
<tr>
<td>KIT-7308-4PR</td>
<td>Spare 4 Post Rack Mount Brackets for 7304 and 7308 switches</td>
</tr>
<tr>
<td>FAN-7002-F</td>
<td>Spare fan module for Arista 7250 / 7050, 7280R 2RU and 7300 switches (front to rear airflow)</td>
</tr>
<tr>
<td>FAN-7002-R</td>
<td>Spare fan module for Arista 7250 / 7050, 7280R 2RU and 7300 switches (rear to front airflow)</td>
</tr>
<tr>
<td>PWR-3K-AC-R</td>
<td>Spare 3kW AC Power Supply for 7300 series (rear-to-front airflow switch)</td>
</tr>
<tr>
<td>PWR-3KT-AC-F</td>
<td>Spare 3kW Titanium AC Power Supply for 7300 series (front-to-rear airflow switch)</td>
</tr>
<tr>
<td>PWR-3K-DC-RED</td>
<td>Spare 3kW DC Power Supply for 7300 and 7500N series (red handle)</td>
</tr>
<tr>
<td>PWR-3K-DC-BLUE</td>
<td>Spare 3kW DC Power Supply for 7300 series (blue handle)</td>
</tr>
<tr>
<td>LIC-MOD-1-E</td>
<td>Enhanced Software License for Arista 4-Slot Modular Switches (OSPF, BGP, ISIS, PIM)</td>
</tr>
<tr>
<td>LIC-MOD-2-E</td>
<td>Enhanced Software License for Arista 8 Slot Modular Switches (OSPF, BGP, ISIS, PIM)</td>
</tr>
<tr>
<td>LIC-MOD-1-V</td>
<td>Virtualization license for Arista 4-Slot Modular Switches (VM Tracer and VXLAN)</td>
</tr>
<tr>
<td>LIC-MOD-2-V</td>
<td>Virtualization license for Arista 8 Slot Modular Switches (VM Tracer and VXLAN)</td>
</tr>
<tr>
<td>LIC-MOD-1-Z</td>
<td>Monitoring &amp; provisioning license for Arista 4-Slot Modular Switches (ZTP, LANZ, API, TapAgg)</td>
</tr>
<tr>
<td>LIC-MOD-2-Z</td>
<td>Monitoring &amp; provisioning license for Arista 8 Slot Modular Switches (ZTP, LANZ, API, TapAgg)</td>
</tr>
<tr>
<td>LIC-MOD-1-FLX-L</td>
<td>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)</td>
</tr>
<tr>
<td>LIC-MOD-2-FLX-L</td>
<td>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)</td>
</tr>
</tbody>
</table>
Warranty
The Arista 7300 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