

### Overview

#### Arista 7160 Data Center Switch Series

HPE and Arista share a common vision around the need to deliver secure hybrid IT solutions and experiences built on industry-leading software-defined infrastructure—helping customers to operate their workloads with speed and agility to grow their business. This partnership will provide our customers with proven networking solutions that are superior to legacy alternatives and that complement HPE compute, storage, virtualization, and cloud offerings.

The Arista 7160 Series modular switches deliver over 50Tbps of switching with up to 256 wire speed 100GbE ports. The 7160 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.

The Arista 7160 series are key components of the Arista 7000 series portfolio of data center switches. Highly dynamic cloud data center networks continue to evolve with the introduction of new protocols and server technologies such as containers bringing with them ever-increasing bandwidth demands, accelerating the need for dense 25 and 100 Gigabit Ethernet switching in both leaf and spine tiers of modern networks. The Arista 7160 series are purpose-built fixed configuration 10/25GbE and 100GbE systems built for the highest-performance environments, and to meet the needs of the largest-scale data centers. They combine scalable L2 and L3 resources and high density with a highly programmable and customizable switch architecture. Simple software updates allow reconfiguration of packet parsing, lookups, traffic scheduling, packet modification, and traffic monitoring without reengineering of the switch.

The 7160 series can be deployed in a range of open networking solutions including large scale layer 2 and layer 3 cloud designs, overlay networks, virtualized or traditional enterprise data center networks.

The 7160 series are available in a range of models with a choice of 10GBASE-T and 25GbE SFP with 40/100GbE QSFP uplinks and a 40/100GbE system that offers up to 32 ports of wire speed 100GbE in a 1RU system. The wide range of interfaces and density choice provides deployment flexibility.

25GbE interfaces with SFP and 100GbE with QSFP on the 7160 series enables flexible choices of port speed providing unparalleled flexibility and the ability to seamlessly transition data centers to the next generation of Ethernet performance. The 7160 series provide industry leading power efficiency with airflow choices for back to front, or front to back. Combined with Arista EOS the 7160 series delivers advanced features for cloud, big data, virtualized and traditional designs.



Arista 7160 series of data center switches

#### Product Highlights

## Overview

### Performance

- 7160-32CQ: 32 x 100GbE
- 7160-48YC6: 48 x 25GbE and 6 x 100GbE
- 7160-48TC6: 48 x 10GBASE-T and 6 x 100GbE
- Up to 32 wire-speed 100GbE ports
- Up to 6.4 terabits per second
- Up to 2.4 billion packets per second
- Wire speed L2 and L3 forwarding

### Cloud-networking ready

- Arista AlgoMatch™
- 128K MAC addresses
- 64K IPv4 and 32K IPv6 host routes
- Over 500K IPv4 routes
- 48K access list entries

### Data Center Optimized Design

- Fully shared 24 MB packet buffer
- Programmable pipeline for application specific encapsulation
- Adaptable forwarding tables with custom profiles
- Over 94% efficient power supplies
- 1+1 redundant & hot-swappable power
- N+1 redundant & hot-swappable fans
- Front-to-rear or rear-to-front cooling
- Tool-less rails for simple installation

### Resilient control plane

- High-performance x86 CPU
- 8GB DRAM
- 4GB flash
- User applications can run in a VM

### Virtualization and provisioning

- CloudVision
- VXLAN routing for next generation DC
- LANZ for burst and flow monitoring
- VM Tracer
- Zero-touch provisioning (ZTP)
- Advanced Event Monitoring
- sFlow® (RFC3176)
- Hierarchical time-stamping and PTP

### Arista Extensible Operating System

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

## Arista Extensible Operating System (EOS)

All Arista products, including the 7160 series, run the same Arista EOS software, 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..

## 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.

## Overview

### 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 network virtualization flexibility
- Non-blocking leaf-spine for 10K–100K hosts

#### Cloud control

- Standards-based EOS with AEM, ZTP/ZTR, LANZ, and DANZ
- Automated Monitoring for visibility and telemetry

#### Network-wide virtualization

- Multi-vendor API support with eAPI
- Support for VMware® and NSX with VXLAN and VM Tracer
- Support for Microsoft® OMI and OpenStack® OVSDDB

#### Network applications and automated management

- Single point of network-wide state with Arista CloudVision
- Networked applications for workload mobility, smart systems rollback, and upgrades and workflow telemetry
- Open Partner integration

### Scaling data center performance

The Arista 7160 series deliver switching capacity that enables dramatically faster and simpler network designs for data centers and lowers both capital and operational expenses. The Arista 7000 series of fixed and modular systems with a single consistent EOS allows for flexible selections at all tiers of the network and deployment scenarios including layer 2 MLAG, layer 3 ECMP, VXLAN overlay, and internet route scale.

Arista's Multi-Chassis Link Aggregation (MLAG) technology supports a leaf-and-spine active/active L2 network topology. An Equal Cost Multi-Path (ECMP) design at Layer 3 scales the network 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 that scales to hundreds of thousands of hosts in a single two-tier design. Both designs support overlay networks via VXLAN and can integrate with standards-based overlay controller solutions.

### AlgoMatch

AlgoMatch™ is a unique Arista innovation for modern cloud networks, combining both software and hardware to enable more flexible and scalable solutions for access control, policy-based forwarding, and network telemetry. By combining general purpose memory with advanced software algorithms, AlgoMatch delivers higher scale, performance, and efficiency with lower power and is more cost-effective than traditional solutions. AlgoMatch provides a more efficient packet-matching algorithm that in turn enables flow matching for access control, policy, and visibility. The net benefits are a high-performance policy engine with both increased functionality and scale in a cost and power efficient solution.

- AlgoMatch enables IPv4 and IPv6 access control at the same scale
- L4 rule ranges are programmed efficiently without expansion or reduced capacity
- Multiple actions can be performed on a single packet or flow
- User defined filters allow flexible packet classification based on offsets for custom actions
- Supports rich policy with consistent semantics that would exhaust classical resources

### Enhanced features for high-performance cloud networks

The Arista 7160 series delivers a suite of advanced traffic control and monitoring features to improve the agility of modern high performance environments, with solutions for automation, 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.

## Overview

Arista offers solutions for a variety of approaches to cloud-like network automation. Addressing the needs of the largest public cloud environments as well as applying those lessons learned in the turnkey CloudVision automation offering.

### 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 significant internal development.

### Arista Event Management (AEM)

Advanced Event Management (AEM), a sub-system of Arista EOS, is a powerful and flexible tool to automate tasks and customize the behavior of EOS and the operation of the overall data center switching infrastructure. Simplifying the overall operations, AEM provides the tools to customize alerts and actions. 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.

### Flexible profiles

Network scalability is directly impacted by a switch's forwarding tables. The 7160 series provide flexibility in how memory resources are allocated among the different tables and features. A forwarding profile is a pre-defined allocation of the forwarding table resources to assign specific table sizes. Forwarding profiles allow the available resources to be optimally allocated for specific features or a set of features for a given use case. This allows for deployment of the 7160 series across multiple use cases, each configured with a different forwarding profile to suit the unique requirements.

### Programmable pipeline

The 7160 series programmable packet pipeline allows the addition of new protocols, encapsulation, and tunneling features to the packet processor through simple software upgrades without changes to the underlying hardware. This allows for rapid testing and deployment, avoiding costly replacements or major upgrades. A recent example of a new encapsulation in the data center environment is VXLAN, which required new silicon technology, delaying customer deployments and innovation.

### Virtualization

Supporting next-generation virtualized data centers requires tight integration with orchestration tools and emerging encapsulation technologies such as VXLAN. The 7160 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 7160 series makes for seamless integration of non-VXLAN aware devices—including servers, firewalls, and load balancers—and provides the ability to leverage VXLAN as a standards-based L2 extension technology for non-MPLS environments.

### Maximum network design flexibility

- Scalable designs with up to a 128-way ECMP provide flexibility and balance traffic evenly across the largest leaf-spine designs
- MLAG designs effective at almost any layer
- of the network and maximize cross-sectional bandwidth with fast failover times measured in hundreds of milliseconds for link failures
- VXLAN gateway, bridging, and routing with VMTracer features to enable next generation data center designs
- Wide choice of interfaces with broad support for flexible 10GbE, 25GbE, or
- 50GbE modes
- Support for standards-based IEEE 25GbE with mix-and-match support for both 10G and 25G for simple and cost-effective migration
- AlgoMatch to match business intent to network policy for flow matching, access control, and telemetry
- Flexible forwarding profiles for optimal allocation of L2 and L3 forwarding table resources in multiple use cases
- EOS tools for network-wide visibility and monitoring to detect traffic bursts, monitor latency and congestion, and allow capacity planning to improve application performance and availability

## Overview

### 7160-48TC6: 48 port 10GbE BASE-T and 6 port 100G QSFP

- Easy migration from 1000 Mb to 1G/10G using a familiar RJ45 connection
- Six 100G QSFP ports allow choice of 6x 100GbE, 24x 25GbE, 6x 40GbE, or 24x 10GbE
- 5 speeds for flexible 10GbE, 25GbE, 40GbE, 50GbE, and 100GbE with optics or cables
- 2.16 Tbps of wire speed performance with 24 MB of buffer



### 7160-48YC6: 48 port 25G SFP and 6 port 100G QSFP

- Offer 48 wire speed 10/25G ports with 6 100G ports for up to 72 total 25G or 10G ports
- Easy migration from 1/10G to 1/10/25G using a familiar SFP connection
- Six 100G QSFP ports allow choice of 6x 100GbE, 24x 25GbE, 6x 40GbE, or 24x 10GbE
- 5 speeds for flexible 10GbE, 25GbE, 40GbE, 50GbE, and 100GbE with optics or cables
- 3.6 Tbps of wire speed performance with 24 MB of buffer



### 7160-32CQ: 32 port 100G QSFP

- Offers a choice of port combinations with 40G and 100G QSFP optics and cables
- Flexible interface combinations—32x 100G/40G, 128x 25/10G, 64x 50G
- 100G QSFP ports for 5 speeds for flexible 10GbE, 25GbE, 40GbE, 50GbE, and 100GbE
- 6.4 Tbps of wire speed performance with 24 MB of buffer



Arista 7160 series flexible combinations



7160-48YC6 and 7160-48TC6 rear view: front to rear



Hot-swappable fan modules

## Overview



Hot-swappable power supplies

### System overview

The 7160 series deliver unprecedented levels of programmability, flexible forwarding profiles, and a fully shared packet buffer in a choice of high-density interfaces as shown below to seamlessly evolve to the next generation of Ethernet speeds.

The Arista 7160 series lowers total cost of ownership as they are designed to be efficient with power per port as low as 10W per 100GbE port which combined with front to rear cooling to optimize the data center environment produces the most reliable, dense and power efficient 100GbE fixed configuration switch.

### 7160 series advanced traffic manager and fully shared buffer

The 7160 series each incorporate an advanced traffic manager with 24MB of packet buffer that is fully shared across all ports. Unlike other architectures that have fixed per-port packet memory or buffers arranged in multiple slices the 7160 series buffer is dynamically allocated across all ports with the ability to adjust in real time to the demands of bursty applications, mixed speeds and congestion. Extensive support for Active Queue Management mechanisms such as WRED, DCTCP and ECN ensure that high priority flows and lossless storage traffic are handled equally well with the ability to absorb large bursts with extensive counters for visibility and accounting.

### 7160 series high availability

The Arista 7160 series switches were designed for continuous operations with system wide monitoring of both hardware and software components, simple serviceability and provisioning to prevent single points of failure. Key high availability features include:

- 1+1 hot-swappable power supplies and four hot-swappable fans that provide dynamic temperature control combined with N+1 redundancy
- Color-coded PSUs and fans that deliver platinum-level power efficiency
- Live software patching
- Self-healing software with stateful fault repair (SFR)
- Smart System Upgrade (SSU) and Accelerated Software Update (ASU)\*

## Features and Benefits

### 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
  - 128 groups per system
- Multi-Chassis Link Aggregation (MLAG )
  - Uses IEEE 802.3ad LACP
  - 128 ports per MLAG
- 802.1Q VLANs/Trunking

### Extensibility

- Linux Tools
  - Bash shell access and scripting
  - RPM support
  - Custom kernel modules
- Software-defined networking (SDN)
  - eAPI
  - OpenStack Neutron support
- Programmatic access to system state
  - Python – Chef
  - Puppet
  - C++
  - eAPI
  - GO

## Overview

- 802.1AB Link Layer Discovery Protocol
- 802.3x Flow Control
- Jumbo Frames (9216 Bytes)
- IGMP v1/v2/v3 snooping
- Storm Control\*
- 802.1 AVB\*
- SMPTE-2059-2\*

### Layer 3 Features

- Static routes
- Routing protocols: OSPF, OSPFv3, BGP, MPBGP, IS-IS, and RIPv2
- 128-way Equal-Cost Multipath Routing (ECMP)
- VRF
- Bi-Directional Forwarding Detection (BFD)
- Unicast Reverse Path Forwarding (uRPF)\*
- VRRP
- Virtual ARP (VARP)
- Policy Based Routing (PBR)\*
- Route maps

### Multicast

- IGMP v2/v3
- Protocol-Independent Multicast (PIM-SM/PIM-SSM)
- PIM-Bidir\*
- Anycast RP (RFC 4610)
- Multicast Source Discovery Protocol (MSDP)

### Advanced Monitoring and Provisioning

- Latency Analyzer and Microburst Detection (LANZ)
  - Configurable Congestion Notification (CLI, Syslog)\*
  - Streaming Events (GPB Encoded)\*
  - Capture/Mirror of congested traffic\*
- Zero-touch provisioning (ZTP)
- Advanced Mirroring
  - Port mirroring (16 sessions)
  - Enhanced Remote Port Mirroring
  - SPAN/TAP M:N Aggregation\*
  - L2/3/4 filtering\*
- Advanced Event Management suite (AEM)
  - CLI Scheduler
  - Event Manager
  - Event Monitor
  - Linux tools
- Integrated packet capture/analysis with TCPDump
- Restore and configure from USB

- OpenConfig
- OpenStack Neutron plug-in support
- 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
- 802.3x Flow Control
- 802.3ab 1000BASE-T

### Table Sizes

- 802.3z Gigabit Ethernet
- 802.3ae 10 Gigabit Ethernet
- 802.3by 25 Gigabit Ethernet
- 802.3ba 40 Gigabit Ethernet
- 802.3ba 100 Gigabit Ethernet
- RFC 2460 Internet Protocol, Version 6 (IPv6) Specification
- RFC 2461 Neighbor Discovery for IP Version 6 (IPv6)
- RFC 2462 IPv6 Stateless Address Autoconfiguration
- RFC 2463 Internet Control Message Protocol (ICMPv6) for the Internet Protocol Version 6 (IPv6) Specification
- IEEE 1588-2008 Precision Time Protocol

### 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

## Overview

- RFC 3176 sFlow
- Optional SSD for logging and data capture
- IEEE 1588 PTP\*

### Virtualization Support

- VXLAN Gateway (draft-mahlingam-dutt-dcops-vxlan-01)
- VXLAN Tunnel Endpoint
- VXLAN Bridging
- VXLAN Routing (VRF, MLAG)\*
- VM Tracer VMware Integration

### Security Features

- ACLs using L2, L3, L4 fields
- ACL logging and counters
- Atomic ACL Hitless restart
- Control Plane Protection (CPP)
- DHCP Relay
- MAC Security
- TACACS+
- RADIUS
- ARP trapping and rate limiting

### Quality of Service (QoS) Features

- Up to 8 queues per port
- Strict priority queueing
- 802.1p-based classification
- DSCP-based classification and remarking\*
- Egress shaping/Weighted Round Robin (WRR)
- Policing/Shaping
- Rate limiting\*
- Explicit Congestion Notification (ECN) marking
- 802.1Qbb Per-Priority Flow Control (PFC)
- 802.1Qaz Enhanced Transmission Selection (ETS)\*
- Data Center Bridging Extensions (DCBX)

### Network Management

- CloudVision
- Configuration rollback and commit
- 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
- Beacon LED for system identification
- System Logging
- Environment monitoring

- 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

<b>STP instances</b>	64 (MST)/510 (RPVST+)
<b>IGMP groups</b>	128K
<b>Ingress ACLs</b>	48K
<b>ECMP</b>	128-way
<b>MAC addresses</b>	128K
<b>IPv4 host routes</b>	64K
<b>IPv4 Multicast (S,G)</b>	32K
<b>IPv6 host routes</b>	32K
<b>IPv4 routes—unicast</b>	128K
<b>IPv6 Routes—unicast</b>	64K

Note: Maximum values dependent on shared resources in some cases



## Overview

\* Not currently supported in EOS

## Configuration

## Ordering Information

Switch	Arista SKU	HPE SKU
Arista 7160 32QSFP28 Front-to-Back AC Switch	DCS-7160-32CQ-F	JH945A
Arista 7160 32QSFP28 Back-to-Front AC Switch	DCS-7160-32CQ-R	JH946A
Arista 7160 48SFP25 6QSFP28 Front-to-Back AC Switch	DCS-7160-48YC6-F	JH947A
Arista 7160 48SFP25 6QSFP28 Back-to-Front AC Switch	DCS-7160-48YC6-R	JH948A
Arista 7160 48XGT 6QSFP28 Front-to-Back AC Switch	DCS-7160-48TC6-F	JH949A
Arista 7160 48XGT 6QSFP28 Back-to-Front AC Switch	DCS-7160-48TC6-R	JH950A

### Optional Components

Arista 7000 Front-to-Back Fan Module	FAN-7000-F	JH856A
Arista 7000 Back-to-Front Fan Module	FAN-7000-R	JH857A
Arista 7001 1RU Accessory Kit	KIT-7001	JH866A
Arista 2 Post 1RU Rack Mount Kit	KIT-2POST-1U-NT	JH863A
Arista 4 Post Rack Mount Kit	KIT-4POST-NT	JH864A
Arista 500W Front-to-Back AC Power Supply	PWR-500AC-F	JH882A
Arista 500W Back-to-Front AC Power Supply	PWR-500AC-R	JH883A
Arista 500W Front-to-Back DC Power Supply	PWR-500-DC-F	JH597A
Arista 500W Back-to-Front DC Power Supply	PWR-500-DC-R	JH599A
Arista Enhanced L3 Software 10G Fix-2 License	LIC-FIX-2-E	JH606A
Arista Virtualization Software 10G Fix-2 License	LIC-FIX-2-V	JH609A
Arista Provisioning Software 10G Fix-2 License	LIC-FIX-2-Z	JH608A

### Service

Arista A-Care 7160-36 NBD Software 1 Month Support LTU	SVC-7160-32CQ-1M-NB	JH911A
Arista A-Care 7160-36 4H Software 1 Month Support LTU	SVC-7160-32CQ-1M-4H	JH912A
Arista A-Care 7160-36 2H Software 1 Month Support LTU	SVC-7160-32CQ-1M-2H	JH913A
Arista A-Care 7160-48S NBD Software 1 Month Support LTU	SVC-7160-48YC6-1M-NB	JH914A
Arista A-Care 7160-48S 4H Software 1 Month Support LTU	SVC-7160-48YC6-1M-4H	JH915A
Arista A-Care 7160-48S 2H Software 1 Month Support LTU	SVC-7160-48YC6-1M-2H	JH916A
Arista A-Care 7160-48T NBD Software 1 Month Support LTU	SVC-7160-48TC6-1M-NB	JH917A
Arista A-Care 7160-48T 4H Software 1 Month Support LTU	SVC-7160-48TC6-1M-4H	JH918A
Arista A-Care 7160-48T 2H Software 1 Month Support LTU	SVC-7160-48TC6-1M-2H	JH919A

### Warranty, service, and support

The Arista 7060X and 7260X switches come with a one-year limited hardware warranty that covers parts, repair, or replacement with a 10-business-day turnaround after the unit is received.

All technical, hardware, and software support for Arista products is provided directly by Arista and not HPE. Consult the Arista Customer Support page for contact information: [arista.com/en/support/customer-support](http://arista.com/en/support/customer-support).

Services may be purchased from HPE or Arista to extend your support coverage and software upgrades. Support will be provided by Arista for these services. For details on Arista warranty and support, see: [arista.com/assets/data/pdf/Warranty.pdf](http://arista.com/assets/data/pdf/Warranty.pdf).

## Technical Specifications

### Technical Specifications

Model comparison	7160-32CQ	7160-48YC6	7160-48TC6
<b>Ports</b>	32 x 100G QSFP	48 x 25G SFP 6 x 100G QSFP	48 x 10G-T 6 x 100G QSFP
<b>Max 100GbE ports</b>	32	6	6
<b>Max 50GbE ports</b>	64	12	12
<b>Max 40GbE ports</b>	32	6	6
<b>Max 25GbE ports</b>	128	72	24
<b>Max 10GbE ports</b>	128	72	72
<b>Throughput</b>	6.4 Tbps	3.6 Tbps	2.16 Tbps
<b>Packets/second</b>	2.4 Bpps (1.2 Bpps)	2.4 Bpps (1.2 Bpps)	2.4 Bpps (1.2 Bpps)
<b>Latency</b>	From 2us	From 2us	From 3us
<b>CPU</b>	Quad-core x86	Quad-core x86	Quad-core x86
<b>System memory</b>	8 GB	8 GB	8 GB
<b>Flash storage memory</b>	4 GB	4 GB	4 GB
<b>Packet buffer memory</b>	24 MB fully shared	24 MB fully shared	24 MB fully shared
<b>100/1000 mgmt ports</b>	1	1	1
<b>RS-232 serial ports</b>	1 (RJ-45)	1 (RJ-45)	1 (RJ-45)
<b>USB ports</b>	1	2	2
<b>Hot-swappable power supplies</b>	2 (1+1 redundant)	2 (1+1 redundant)	2 (1+1 redundant)
<b>Hot-swappable fans</b>	4 (N+1 redundant)	4 (N+1 redundant)	4 (N+1 redundant)
<b>Rack units</b>	1U	1U	1U
<b>Reversible airflow option</b>	Yes	Yes	Yes
<b>Size (WxHxD)</b>	19 in. x 1.75 in. x 16 in. (48.3 cm x 4.4 cm x 40.6 cm)	19 in. x 1.75 in. x 16 in. (48.3 cm x 4.4 cm x 40.6 cm)	19 in. x 1.75 in. x 16 in. (48.3 cm x 4.4 cm x 40.6 cm)
<b>Typical/max power draw</b>	310W/465W	168W/382W	408W/482W
<b>Weight</b>	19.2 lb (8.7 kg)	19.24 lb (8.7 kg)	20.42 lb (9.3 kg)
<b>Power supplies</b>	500W AC 500W DC	500W AC 500W DC	500W AC 500W DC
<b>Reversible airflow option</b>	Yes	Yes	Yes
<b>EOS Feature Licenses</b>	LIC-FIX-2 (E, V, Z)	LIC-FIX-2 (E, V, Z)	LIC-FIX-2 (E, V, Z)

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

### Supported optics and cables

## Technical Specifications

Interface type	40G QSFP ports
<b>10GBASE-CR</b>	0.5 m–5 m QSFP+ to 4x SFP+
<b>40GBASE-CR4</b>	QSFP+ to QSFP+: 0.5 m–5 m
<b>40GBASE-AOC</b>	3 m–100 m
<b>40GBASE-UNIV</b>	150 m (OM3)/150 m (OM4), 500 m (SM)
<b>40GBASE-SRBD</b>	100 m (OM3) /150 m (OM4)
<b>40GBASE-SR4</b>	100 m (OM3)/150 m (OM4)
<b>40GBASE-XSR4</b>	300 m (OM3)/400 m (OM4)
<b>40GBASE-PLRL4</b>	1 km (1 km 4 x 10G LR/LRL)
<b>40GBASE-PLR4</b>	10 km (10 km 4 x 10G LR/LRL)
<b>40GBASE-LRL4</b>	1 km
<b>40GBASE-LR4</b>	10 km
<b>40GBASE-ER4</b>	40 km
Interface type	SFP+ ports
<b>10GBASE-CR</b>	SFP+ to SFP+: 0.5 m–5 m
<b>10GBASE-AOC</b>	SFP+ to SFP+: 3 m–30 m
<b>10GBASE-SRL</b>	100 m
<b>10GBASE-SR</b>	300 m
<b>10GBASE-LRL</b>	1 km
<b>10GBASE-LR</b>	10 km
<b>10GBASE-ER</b>	40 km
<b>10GBASE-ZR</b>	80 km
<b>10GBASE-DWDM</b>	80 km
<b>100Mb TX, 1GbE SX/LX/TX</b>	Yes
100GbE	100G QSFP ports
<b>100GBASE-SR4</b>	70 m OM3/100 m OM4 Parallel MMF
<b>100GBASE-LR4</b>	10 km SM duplex
<b>100GBASE-LRL4</b>	2 km SM duplex
<b>100GBASE-CWDM4</b>	2 km SM duplex
<b>100GBASE-AOC</b>	3 m to 30 m
<b>100GBASE-CR4</b>	QSFP to QSFP: 1 m to 5 m
<b>25GBASE-CR</b>	QSFP to SFP25: 1 m to 3 m lengths

## Technical Specifications

Interface type	25G SFP ports
<b>25GBASE-CR</b>	SFP25 to SFP25: 1 m–3 m
<b>25GBASE-AOC</b>	SFP+ to SFP+: 3 m–30 m
<b>25GBASE-DAC</b>	SFP+ to SFP+: 1 m - 5 m
<b>25GBASE-SR</b>	300 m
<b>25GBASE-LR</b>	10 km

### Power supply specifications

Power Supply	PWR-500AC	PWR-500-DC
<b>Input Voltage</b>	100-240AC	40-72V DC
<b>Typical Input Current</b>	6.3–2.3A	13.1–7.3A
<b>Input Frequency</b>	50/60 Hz	DC
<b>Input Connector</b>	IEC 320-C13	AWG #16-#12
<b>Efficiency (Typical)</b>	93% platinum	90%
<b>Compatibility</b>	7160 series	7160 series

### Standards compliance

<b>EMC</b>	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
<b>Safety</b>	UL/CSA 60950-1, EN 60950-1, IEC 60950-1 CB Scheme with all country differences
<b>Certifications</b>	North America (NRTL) European Union (EU) BSMI (Taiwan) C-Tick (Australia) C cc (PRC) MSIP (Korea) EAC (Customs Union) V cci (Japan)
<b>European Union Directives</b>	2006/95/EC Low Voltage Directive 2004/108/EC EMC Directive 2011/65/EU RoHS Directive 2012/19/EU WEEE Directive

### Environmental characteristics

---

## Technical Specifications

---

**Operating temperature** 0°C to 40°C (32°F to 104°F)

---

**Storage temperature** -40°C to 70°C (-40°F to 158°F)

---

**Relative humidity** 5% to 95%

---

**Operating altitude** 0 to 10,000 ft (0-3000 m)

---

---

## Summary of Changes

Date	Version History	Action	Description of Change
08-May-2017	From Version 2 to 3	Changed	Configuration and Technical Specifications updated
15-Mar-2017	From Version 1 to 2	Changed	Error fixed on configuration section
10-Mar-2017	Version 1	Created	Document creation.



**Sign up for updates**



**Hewlett Packard  
Enterprise**

© Copyright 2017 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

To learn more, visit: <http://www.hpe.com/networking>

a00003587 – 15882 - Worldwide – V3 – 08-May-2017