# QuickSpecs

#### **Overview**

### Arista 7050X3 Series 10/25/40/50/100G Data Center Switches

Hewlett Packard Enterprise 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.

Arista 7050X3 are members of the Arista 7050X series and key components of the Arista portfolio of data center switches. The adoption of high-performance servers using virtualization and containers with increasingly higher bandwidth is accelerating the need for dense 25GbE and 100GbE switching in both the leaf and spine tiers of modern networks.

Arista 7050X3 series are flexible data center switches in compact and energy efficient form factors with wirespeed Layer 2 and Layer 3 features combined with low latency and comprehensive and consistent features for software-driven cloud networking.

Combining high-density and industry-leading power efficiency with typical power consumption under 7W per 100GbE port, the 7050CX3-32S is ideal for both leaf and collapsed spine tiers with airflow choices for back to front or front to back.

Featuring nonblocking high-density 25G ports and 100G ports without any oversubscription, the 7050SX3-48YC12 delivers both high performance and flexibility in a compact 1RU form factor with latency from 800 ns and a fully shared packet buffer of up to 32 MB with dynamic thresholds and superior burst absorption.

With support for a flexible combination of speeds including 10G, 25G, 40G, 50G and 100G and combined with Arista EOS, Arista 7050X3 delivers the features for Big Data, cloud, virtualized, and traditional network designs and accommodates the myriad different applications and east—west traffic patterns found in modern data centers.

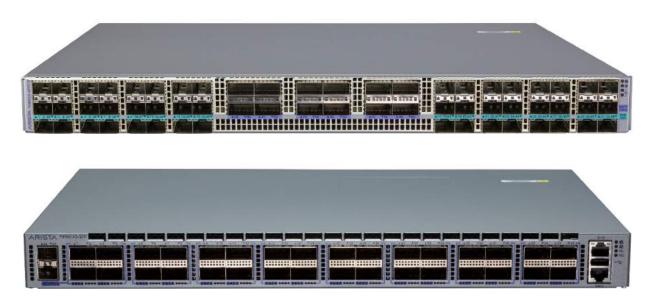


Figure 1. Arista 7050X3 Series Switches: 7050SX3-48YC12 and 7050CX3-32S



## **Product Highlights**

#### **Performance**

- 7050CX3-32S: 32x QSFP100
- 7050SX3-48YC12: 48x SFP25 and 12x QSFP100
- Flexible 40G and 100G support
- Quad 10GbE and 25GbE support
- Up to 128x 10G, 25G, or 64x 50G
- Up to 6.4 Tbps
- Up to 2 billion packets per second
- Wirespeed L2 and L3 forwarding
- Latency from 800 ns

#### **Data Center Optimized Design**

- 32 QSFP100 ports in 1RU with under 7W per port typical
- Over 94% efficient power supplies
- 1+1 redundant and hot-swappable power
- N+1 redundant and hot-swappable fans
- Data-center optimized airflow
- Tool less rails for simple installation

#### **Cloud Networking Ready**

- VXLAN and VM Tracer
- OpenFlow, DirectFlow, and eAPI
- 288K MAC entries
- 384K IPv4 routes
- 168K IPv4 host routes
- 32 MB integrated smart buffer with dynamic buffer allocation

#### **Resilient Control Plane**

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

#### Advanced provisioning and monitoring

- CloudVision
- Zero touch provisioning (ZTP)
- Arista Latency Analyzer (LANZ) for microburst detection
- Arista Data Analyzer (DANZ)

#### Advanced Mirroring for visibility

- sFlow
- Self-configure and recover from USB
- Traffic-aware Equal Cost Multi Path (ECMP) and Unequal Cost Multi Path (UCMP)

#### **Arista EOS**

The Arista 7050X3 series runs the same Arista EOS software as all Arista products, simplifying network administration. Arista EOS is a modular switch operating system with a unique state-sharing architecture that cleanly separates switch state from protocol processing and application logic. Built on top of a standard Linux kernel, all EOS processes run in their own protected memory space and exchange state through an in-memory database. This multiprocess state-sharing architecture provides the foundation for in-service-software updates and self-healing resiliency.

With Arista EOS, advanced monitoring and automation capabilities such as ZTP, VM Tracer and Linux-based tools can be run natively on the switch with the powerful x86 CPU subsystem.

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#### **Model Overview**

The Arista 7050X3 series come in different configurations. Each delivers high performance combined with feature rich Layer 2 and Layer 3 forwarding, suited for both top-of-rack leaf or fixed configuration spines.

The **7050CX3-32S** is a 1RU system with 32 100G QSFP ports offering wirespeed throughput of up to 6.4 Tbps. Each QSFP port supports a choice of five speeds with flexible configuration between 100GbE, 40GbE, 4 x 10GbE, 4 x 25GbE, or 2 x 50GbE modes for up to 128 ports of 10GbE, 25GbE, or 50GbE. All ports can operate in any supported mode without limitation, allowing easy migration from lower speeds and the flexibility for leaf or spine deployment.

The Arista **7050SX3-48YC12** is a 1RU system with 48 ports of 25G SFP and 12 ports of 100G QSFP with an overall throughput of 4.8 Tbps. The high-density SFP ports allow choices of 1/10/25G speeds and the QSFP ports allow for a choice of five speeds including 100GbE, 40GbE, 4 x 10GbE, 4 x 25GbE, or 2 x 50GbE with a wide choice of transceivers and cables. The QSFP ports can operate in any mode enabling a wide choice of combinations for both leaf and spine deployment. With low latency and no oversubscription, the switch is optimized for high-performance server and storage deployments.

## **Dynamic Buffer Allocation**

In cut-through mode, the Arista 7050X3 switches forward packets with a consistent low latency of 800 ns. Upon congestion, the packets are buffered in an intelligent fully shared packet memory that has a total size of 32 MB for superior burst absorption. Unlike other architectures that have fixed per-port packet memory, the 7050X3 series use dynamic thresholds to allocate packet memory based on traffic class, queue depth, and quality of service (QoS) 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.



Figure 2. Arista 7050CX3-32S: 32x 100GbE QSFP100 ports, 2 SFP+ ports



**Figure 3.** Arista 7050SX3-48YC12: 48x 25GbE SFPand 12x 100QSFP ports

## **Arista Extensible Operating System**

- Single binary image for all products
- Fine-grained truly modular network OS
- Stateful Fault Containment (SFC)
- Stateful Fault Repair (SFR)
- Full access to Linux® shell and tools
- Extensible platform: Bash, Python, C++

## High availability

The Arista 7050X3 Series Switches are designed for high availability from both software and hardware perspective. Key high availability features include

- 1+1 hot-swappable power supplies and four N+1 hot-swap fans
- Color-coded PSUs and fans
- Live software patching
- Self-healing software with SFR
- Smart System Upgrade (SSU) and Accelerated Software Update (ASU)
- Multi-Chassis Link Aggregation (MLAG) for active/active L2 multipathing
- 128-way ECMP routing for load balancing and redundancy

#### **SSU**

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

## **Software Driven Cloud Networking**

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 (SDN) 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 system administrators.

## 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 far as 128-way without significant changes to the architecture.

The Arista 7050X3 includes enhancements 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 leafspine designs
- ECMP and 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 multispeed 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 multiport mirroring to detect microburst congestion and provide network wide visibility and monitoring
- Hitless speed changes from 10G to 100G to eliminate downtime when implementing speed changes

### **Unified Forwarding Table**

Cloud network scalability is directly impacted by the size of 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 7050X3 leverage a common Unified Forwarding Table (UFT) for the L2 MAC, L3 Routing, L3 Host and IP Multicast forwarding entries, which can be partitioned per entry type. The ideal size of each partition varies depending on the network deployment scenario. The flexibility of the UFT coupled with the range of predefined configuration profiles available on the 7050X3 ensures optimal resource allocation for all network topologies and network virtualization technologies.

## **Enhanced features for high-performance networks**

The Arista 7050X3 delivers a suite of advanced traffic control and monitoring features to improve the agility of modern high-performance environments, with solutions for data monitoring 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.

#### 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

Simplifying the overall operations, advanced event management (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 encapsulation technologies such as VXLAN. The 7050X3 builds on the valuable tools already provided by the Arista VM Tracer suite to integrate directly into encapsulated environments. Offering a wirespeed 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 LANZ is an integrated feature of EOS. LANZ provides precise real-time monitoring of microburst 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.

### **Precision timing (IEEE 1588)**

Arista's hardware-derived Precision Time Protocol (PTP) solution provides a robust mechanism for accurate in-band time distribution in high-performance environments. The system clock can be synchronized using IEEE 1588 PTP.

## Dynamic Load Balancing<sup>1</sup>

Traditional hash-based load balancing algorithms can result in link and path allocations with short-term imbalances and underutilization of aggregate capacity. This is aggravated further in modern data centers with high traffic loads, varied flow duration, mixed packet sizes, and microbursts. Dynamic Load Balancing (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 throughout with enhanced load distribution while offering the user an open implementation.

## Programmable pipeline

The Arista 7050X3 series supports an enhanced architecture with smarter programmable packet pipeline, which allows the addition of new protocols, encapsulation, and tunneling features to 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 UFTs, the programmable pipeline increases the flexibility of the platform allowing for broad use cases and ensures continued investment protection.

#### Network Address Translation 1

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

<sup>1</sup>Not currently supported in EOS

#### Arista 7050X3 Series features

#### **Layer 2 Features**

- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree Protocol
- Rapid Per VLAN Spanning Tree (RPVST+)
- 4096 VLANs
- Q-in-Q
- IEEE 802.3ad Link Aggregation/LACP
  - 64 ports/channel

- 64 groups per system
- MLAG
  - 64 ports per MLAG
- Custom LAG Hashing
- Resilient LAG Hashing
- IEEE 802.1AB Link Layer Discovery Protocol
- IEEE 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 ECMP routing
- 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 (PBR)
- Unicast Reverse Path Forwarding (uRPF)
- RAIL
- NAT4
  - Source/Destination NAT
  - Source/Grop Multicast NAT

#### **Advanced Monitoring and Provisioning**

- ZTP
- SSU\*
- 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 active sessions)
  - L2/3/4 Filtering on mirror sessions
  - Port Channel source and destination
  - Mirror to CPU\*
- AEM suite
  - CLI Scheduler
  - Event Manager
  - Event Monitor
  - Linux tools
- Integrated packet capture/analysis with TCPDump
- RFC 3176 sFlow
- Restore and configure from USB
- Blue Beacon LED for system identification
- SDN
  - OpenFlow 1.0\*
  - OpenFlow 1.3\*
  - Arista DirectFlow

- eAPI
- OpenStack® Neutron support
- IEEE 1588 PTP (transparent clock and boundary clock)9

#### Virtualization support

- VXLAN Gateway (draft-mahalingam-dutt-dcops-vxlan-01)\*
- VXLAN Tunnel Endpoint\*
- VXLAN Routing\*
- VXLAN Bridging\*
- VM Tracer VMware® Integration
  - VMware vSphere® support
  - VM Auto Discovery
  - VM Adaptive Segmentation
  - VM Host View

#### Security features

- PDP
- Service ACLs
- DHCP Relay/Snooping
- TACACS+
- RADIUS

#### **QoS features**

- Up to eight queues per port
- 802.1p-based classification
- DSCP-based classification and remarking
- Explicit Congestion Notification (ECN)-7060X only
- QoS interface trust (COS/DSCP)
- Strict priority queueing
- Weighted round robin (WRR) scheduling
- Per-Priority Flow Control (PFC)
- Data Center Bridging Extensions (DCBXs)
- 802.1Qaz Enhanced Transmission Selection (ETS)\*
- ACL-based DSCP Marking
- ACL-based Policing
- Per port MMU configuration
- Policing/Shaping
- Rate limiting

## Network management

- CloudVision
- 10/100/1000 management port
- RS-232 serial console port
- USB port
- SNMPv1, 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

- IEEE 802.1D Bridging and Spanning Tree
- IEEE 802.1p QOS/COS
- IEEE 802.1Q VLAN Tagging
- IEEE 802.1w Rapid Spanning Tree
- IEEE 802.1s Multiple Spanning Tree Protocol
- IEEE 802.1AB Link Layer Discovery Protocol
- IEEE 802.3ad Link Aggregation with LACP
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3z Gigabit Ethernet
- IEEE 802.3ae 10GbE
- IEEE 802.3by 25GbE
- IEEE 802.3ba 40GbE and 100GbE
- RFC 2460 IPv6 specification
- RFC 4861 Neighbor Discovery for IPv6
- RFC 4862 IPv6 Stateless Address Auto-configuration
- RFC 4443 Internet Control Message Protocol v6 (ICMPv6) for IPv6 specification

#### SNMP MIBs\*\*

- RFC 3635 EtherLike-MIB
- RFC 3418 SNMPv2-MIB
- RFC 2863 IF-MIB
- RFC 2864 IF-INVERTED-STACK-MIB
- RFC 4292 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

<sup>\*\*</sup> See EOS release notes for latest supported MIBs

Table sizes	
STP instances	64 (MST)/510 (RPVST+)
IGMP groups	288K, with 16K unique groups
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	N/A
IPv6 LPM routes-Unicast (any prefix length)	2K-40K	2K	4K	6K	8K

<sup>\*</sup> Not currently supported in EOS

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## Configuration

## Ordering information

Switch	Arista SKU	HPE SKU
Arista 7050X3 32QSFP28 Front-to-Back AC Switch	DCS-7050CX3-32S-F	JQ401A
Arista 7050X3 32QSFP28 Back-to-Front AC Switch	DCS-7050CX3-32S-R	JQ402A
Arista 7050X3 48SFP28 12QSFP28 Front-to-Back AC Switch	DCS-7050SX3-48YC12-F	JQ399A
Arista 7050X3 32QSFP28 Front-to-Back AC Switch	DCS-7050CX3-32S-F	JQ401A

Optional Components	Arista SKU	HPE SKU
Arista 500W Back-to-Front DC Power Supply	PWR-500-DC-R	JH599A
Arista 500W Front-to-Back DC Power Supply	PWR-500-DC-F	JH597A
Arista 500W Back-to-Front AC Power Supply	PWR-500AC-R	JH883A
Arista 500W Front-to-Back AC Power Supply	PWR-500AC-F	JH882A
Arista 2 Post 1RU Rack Mount Kit	KIT-2POST-1U-NT	JH863A
Arista 4 Post Rack Mount Kit	KIT-4POST-NT	JH864A
Arista 7001 1RU Accessory Kit	KIT-7001	JH866A
Arista 7280R 1RU High Speed Back-to-Front Fan Module	FAN-7000H-R	JQ117A
Arista 7280R 1RU High Speed Front-to-Back Fan Module	FAN-7000H-F	JQ116A
Arista Enhanced L3 Software 10G Fix-2 E-LTU	LIC-FIX-2-E	JH606AAE
Arista Provisioning Software 10G Fix-2 E-LTU	LIC-FIX-2-Z	JH608AAE
Arista Virtualization Software 10G Fix-2 E-LTU	LIC-FIX-2-V	JH609AAE

Service	Arista SKU	HPE SKU
Arista A-Care 7050CX3-32S 2H Software 1 Month Support E-LTU	SVC-7050CX3-32S-1M-2H	JQ384AAE
Arista A-Care 7050CX3-32S 4H Software 1 Month Support E-LTU	SVC-7050CX3-32S-1M-4H	JQ383AAE
Arista A-Care 7050CX3-32S NBD Software 1 Month Support E-LTU	SVC-7050CX3-32S-1M-NB	JQ382AAE
Arista A-Care 7050SX3-48S 2H Software 1 Month Support E-LTU	SVC-7050SX3-48YC12-1M-2H	JQ381AAE
Arista A-Care 7050SX3-48S 4H Software 1 Month Support E-LTU	SVC-7050SX3-48YC12-1M-4H	JQ380AAE
Arista A-Care 7050SX3-48S NBD Software 1 Month Support E-LTU	SVC-7050SX3-48YC12-1M-NB	JQ379AAE

## Arista 7050X3 Series technical specifications

Model	7050CX3-32S	7050SX3-48YC12
Ports	32x QSFP100	48x SFP25
	2x SFP+	12x QSFP100
Max. 100GbE ports	32	12
Max. 50GbE ports	64	24
Max. 40GbE ports	32	12
Max. 25GbE ports	128	96
Max. 10GbE ports	128	96
Max. 1GbE ports	2	N/A
Throughput*	6.4 Tbps	4.8 Tbps
Packets/second*	2 Bpps	2 Bpps
Latency*	800 ns	800 ns
CPU	Dual core x86	Dual core x86
System memory	8 GB	8 GB
Flash storage memory	8 GB	8 GB
Packet buffer memory	32 MB (dynamic buffer allocation)	32 MB (dynamic buffer allocation)
10/100/1000 mgmt. ports	1	1
RS-232 serial ports	1 (RJ-45)	1 (RJ-45)
USB ports	1	1
Hot-swap power supplies	2 (1+1 redundant)	2 (1+1 redundant)
Hot-swappable fans	4 (N+1 redundant)	4 (N+1 redundant)
Reversible airflow option	Yes	No
Typical/max. power draw**	206W/314W	170W/325W
Rack units	1RU	1RU
Size (w x h x d)	19 x 1.75 x 16 inches (48.3 x 4.4 x 40.64 cm)	19 x 1.75 x 7.5 inches (48.3 x 4.4 x 44.6 cm)
Weight	20 lb	20.3 lb
Power supplies	500W AC	500W AC
. one. sapplies	500W DC	500W DC
EOS feature licenses	LIC-FIX-2	LIC-FIX-2
Minimum EOS	4.20.4	4.20.4

<sup>\*</sup> Performance rated over operation with average packets larger than 200 bytes

<sup>\*\*</sup> Typical power consumption measured at 25C ambient with 50% load

## Standards compliance

EMC	Emissions: FCC, EN 55022, EN 61000-3-2, EN 61000-3-3 or EN 61000-3-11, EN 61000-3-12 (as applicable) Immunity: EN 55024 Emissions and immunity: EN 300 386
Safety	UL/CSA 60950-1, EN 60950-1, IEC 60950-1
	CB scheme with all country differences
Certifications	NRTL (North America)
	European Union (EU)
	BSMI (Taiwan)
	C-Tick (Australia)
	CCC (PRC)
	MSIP (Republic of 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°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 to 3000 m)

## **Power Supply Specifications**

Power supply model	PWR-500AC	PWR-500-DC
Input Voltage	100-240V AC	40-72V DC
Typical Input Current	6.3 - 2.3A	13.1 - 7.3A
		11A at -48V
Input Frequency	50/60Hz	DC
Input Connector	IEC 320-C13	AWG #16-#12
Efficiency (Typical)	93% Platinum	90%
Compatibility	7050CX3-32S	7050CX3-32S
	7050SX3-48YC12	7050SX3-48YC12

## Supported optics and cables

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

100GbE	100G QSFP ports
100GBASE-SR4	70 m OM3/100 m OM4 parallel MMF
100GBASE-SWDM4	70 m OM3/100 m OM4 duplex MMF
100GBASE-SRBD	70 m OM3/100 m OM4 Duplex MMF
100GBASE-LR4	10 km SM duplex
100GBASE-LRL4	2 km SM duplex
100GBASE-CWDM4	2 km SM duplex
100GBASE-PSM4	500 m SM parallel
100GBASE-AOC	3 m to 30 m
100GBASE-ERL4	40 km SM duplex
100GBASE-CR4	QSFP to QSFP: 1 m to 5 m
25GBASE-CR	QSFP to SFP25: 1 m to 3 m length
100GBASE-SR4	70 m OM3/100 m OM4 parallel MMF
100GBASE-SWDM4	70 m OM3/100 m OM4 duplex MMF
100GBASE-SRBD	70 m OM3/100 m OM4 Duplex MMF

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

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

## Service and Support

HPE Pointnext full portfolio of Consulting Services as well as Support Services is available. The support services include HPE Installation and Startup Services, HPE Next Business Day Exchange, HPE Next Business Day Onsite and 24x7 Onsite parts, engineer, and 4-hour committed response as well as HPE Datacenter Care and HPE GreenLake Flex Capacity (Arista A-Care Services can also be purchased. Learn more at http://www.arista.com). For service depot locations, please see:

http://www.arista.com/en/service

### Warranty

Arista 7050X3 switches come with a 1-year limited hardware warranty that covers parts, repair, or replacement with a 10-business-day turnaround after the unit is received. Learn more at <a href="http://www.arista.com">http://www.arista.com</a>

## Headquarters

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### **Support**

For more information:

http://www.hpe.com/us/en/services.html

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## **Summary of Changes**

Date	Version History	Action	Description of Change
04-Jun-2018	Version 1	Created	Document creation.





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