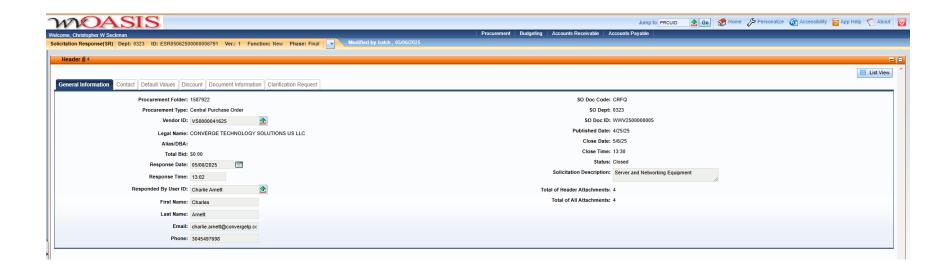


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

### State of West Virginia Solicitation Response

Proc Folder: 1587922

Solicitation Description: Server and Networking Equipment

Proc Type: Central Purchase Order

 Solicitation Closes
 Solicitation Response
 Version

 2025-05-06 13:30
 SR 0323 ESR050625000000006791
 1

**VENDOR** 

VS0000041625

CONVERGE TECHNOLOGY SOLUTIONS US LLC

Solicitation Number: CRFQ 0323 WWV2500000005

Total Bid: 0 Response Date: 2025-05-06 Response Time: 13:02:37

Comments:

FOR INFORMATION CONTACT THE BUYER

Brandon L Barr 304-558-2652 brandon.l.barr@wv.gov

Vendor Signature X

FEIN# DATE

All offers subject to all terms and conditions contained in this solicitation

 Date Printed:
 May 7, 2025
 Page: 1
 FORM ID: WV-PRC-SR-001 2020/05

	Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
Server and Networking Equipment 0.00000 LS 387000.000000 0.00	1	Server and Networking Equipment	0.00000	LS	387000.000000	0.00

Comm Code	Manufacturer	Specification	Model #	
43222600				

#### **Commodity Line Comments:**

#### **Extended Description:**

Please see Exhibit A pricing page

 Date Printed:
 May 7, 2025
 Page: 2
 FORM ID: WV-PRC-SR-001 2020/05



Department of Administration **Purchasing Division** 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

#### State of West Virginia **Centralized Request for Quote** Info Technology

Proc Folder:

1587922

Doc Description: Server and Networking Equipment

**Reason for Modification:** 

**Proc Type:** 

Central Purchase Order

Version Date Issued **Solicitation Closes** Solicitation No 0323

2025-04-10

2025-05-06 13:30 CRFQ

WWV2500000005

**BID RECEIVING LOCATION** 

**BID CLERK** 

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

**VENDOR** 

**Vendor Customer Code:** 

Vendor Name: Converge Technology Solutions US, LLC

Address: 130

Street: Technology Parkway

City: Peachtree Corners

State: GA

Country: US

Zip: 30092

**Principal Contact:** 

**Vendor Contact Phone:** 

Extension:

FOR INFORMATION CONTACT THE BUYER

Brandon L Barr 304-558-2652

brandon.l.barr@wv.gov

Vendor Signature X

-DocuSigned by: Karen Smallwood

FEIN# 82-2782457

**DATE** 5/5/2025

All offers subject to all terms and conditions contained in this solicitation

Date Printed: Apr 10, 2025

Page: 1

FORM ID: WV-PRC-CRFQ-002 2020/05

#### ADDITIONAL INFORMATION

The West Virginia Purchasing Division is soliciting bids on behalf of WorkForce West Virginia, herein referred to as the "Agency" to establish a contract for a qualified vendor to provide Server and Networking Equipment per the attached documentation.

INVOICE TO		SHIP TO			
WORKFORCE WEST VIRGINIA		WORKFORCE WEST VIRGINIA			
1900 KANAWHA BLVD, EAST		1900 KANAWHA BLVD E			
BLDG 3, 3RD FLOOR, SU 300	ITE	BLDG 3, 8TH FLOOR			
CHARLESTON WV		CHARLESTON WV			
US		US	US		

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	<b>Total Price</b>
1	Server and Networking Equipment	0.00000	LS	\$387,000	

Model #	Specification	Manufacturer	Comm Code
			43222600
			43222600

#### **Extended Description:**

Please see Exhibit A pricing page

#### SCHEDULE OF EVENTS

<u>Line</u>	<u>Event</u>	Event Date	
1	Questions due by April 24th	2025-04-24	

### ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CRFQ WWV25\*05

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addend	lui	11 13	umbers Receivea:			
(Check	the	bo	x next to each addendum rec	eive	1)	
I	[X	<b>^</b> ]	Addendum No. 1	[	]	Addendum No. 6
ļ		]	Addendum No. 2	I	]	Addendum No. 7
ĺ	[	]	Addendum No. 3	[	]	Addendum No. 8
	Γ	1	Addendum No. 4	Γ	1	Addendum No. 9

Addendum No. 5

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

[ ] Addendum No. 10

Company

Company

Authorized Signature

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012

#### **Exhibit A - Pricing Page (REVISED)**

#### **Server and Networking Equipment**

Item #	Description	Unit of Measure	Quantity *	Unit Price	Extended Amount
3.1.1	Servers for Virtual Hosts	Each	6	\$36,000.00	\$216,000.00
3.1.2	Servers for Al	Each	1	\$100,000.00	\$100,000.00
3.1.3	Switches for Storage Network	Each	2	\$28,000.00	\$56,000.00
3.1.4	Switches for Host Network	Each	2	\$7,500.00	\$15,000.00
			Overall To		\$387,000.00

Vendor must complete the Price Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified. A no bid will result in Vendor's bid being disqualified.

Chatles J. Arhot
304 549-7698

Chatles athether converge top. com

#### HPE ProLiant DL385 Gen 11

Qty	Product #	Product Description
6	P53921-B21	HPE ProLiant DL385 Gen11 8SFF Configure-to-order Server
6	P53921-B21ABA	HPE ProLiant DL385 Gen11 8SFF Configure-to-order Server U.S English Localization
12	P53701-B21	AMD EPYC 9354 3.25GHz 32-core 280W Processor for HPE
12	P53701-B21 0D1	Factory Integrated
72	P66676-B21	HPE 96GB (1x96GB) Dual Rank x4 DDR5-4800 CAS-46-45-45 EC8 Registered Smart Memory Kit
72	P66676-B21 0D1	Factory Integrated
12	P55083-B21	HPE ProLiant DL385 Gen11 8SFF Tri-Mode U.3 x4 BC Backplane Kit
12	P55083-B21 0D1	Factory Integrated
48	P64846-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD
48	P64846-B21 0D1	Factory Integrated
12	P64844-B21	HPE 1.92TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD
12	P64844-B21 0D1	Factory Integrated
6	P26253-B21	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE
6	P26253-B21 0D1	Factory Integrated
12	P10115-B21	Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE
12	P10115-B21 0D1	Factory Integrated
12	P38997-B21	HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit
12	P38997-B21 0D1	Factory Integrated
6	BD505A	HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features
6	BD505A 0D1	Factory Integrated
6	S1A05A	HPE Compute Cloud Management Server FIO Enablement
6	P57853-B21	HPE ProLiant DL385 Gen11 8SFF x4 NVMe Box 3 Direct Attach Cable Kit
6	P57853-B21 0D1	Factory Integrated
6	P57854-B21	HPE ProLiant DL385 Gen11 8SFF x4 NVMe Box 2 Direct Attach Cable Kit
6	P57854-B21 0D1	Factory Integrated
6	P57886-B21	HPE ProLiant DL385 Gen11 2U Standard/Performance FIO Air Baffle Kit
36	P58465-B21	HPE ProLiant DL3X5 Gen11 2U Performance Fan Kit
36	P58465-B21 0D1	Factory Integrated
6	P50400-B21	HPE Gen11 2U Bezel Kit
6	P50400-B21 0D1	Factory Integrated
6	P35876-B21	HPE CE Mark Removal FIO Enablement Kit
6	P52351-B21	HPE DL3XX Gen11 Easy Install Rail 2 Kit
6	P52351-B21 0D1	Factory Integrated
6	P57845-B21	HPE ProLiant DL385 Gen11 SFF Backplane Power Cable Kit
6	P57845-B21 0D1	Factory Integrated
12	P58459-B21	HPE ProLiant DL3X5 Gen11 2U Performance Heat Sink Kit
12	P58459-B21 0D1	Factory Integrated
6	P59756-B21	HPE ProLiant DL385 Gen11 16NVMe U.3 2P Balanced FIO Bundle Kit
6	R7A12AAE	HPE Compute Ops Management Standard 5-year Upfront ProLiant SaaS
1	HU4B2A5	HPE 5Y Tech Care Basic Service
6	HU4B2A5 R2M	HPE iLO Advanced Non Blade Support
6	HU4B2A500DH	HPE ProLiant DL385 Gen11 Support

#### Al Server HPE ProLiant DL385 Gen 11

Qty	Product #	Product Description
1	P54198-B21	HPE ProLiant DL385 Gen11 GPU Configure-to-order Server
1	P54198-B21ABA	HPE DL385 Gen11 GPU CTO Svr
2	P72660-B21	AMD EPYC 9135 3.65GHz 16-core 200W Processor for HPE
2	P72660-B21 0D1	Factory Integrated
12	P64987-B21	HPE 96GB (1x96GB) Dual Rank x4 DDR5-6400 CAS-46-45-45 EC8 Registered Smart Memory Kit
12	P64987-B21 0D1	Factory Integrated
1	P57867-B21	HPE ProLiant DL3X5 Gen11 GPU 8SFF U.3 FIO Backplane Kit
4	P64846-B21	HPE 3.84TB NVMe Gen4 Mainstream Performance Read Intensive SFF BC U.3 Static V2 Multi Vendor SSD
4	P64846-B21 0D1	Factory Integrated
1	P26253-B21	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE
1	P26253-B21 0D1	Factory Integrated
2	P10115-B21	Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE
2	P10115-B21 0D1	Factory Integrated
2	S2D86C	NVIDIA H100 NVL 94GB PCIe Accelerator for HPE
2	S2D86C 0D1	Factory Integrated
4	P44712-B21	HPE 1800W-2200W Flex Slot Titanium Hot Plug Power Supply Kit
4	P44712-B21 0D1	Factory Integrated
1	BD505A	HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features
1	BD505A 0D1	Factory Integrated
1	S1A05A	HPE Compute Cloud Management Server FIO Enablement
1	P55094-B21	HPE ProLiant DL385 Gen11 4 Double Wide GPU FIO Enablement Kit
1	P80743-B21	HPE ProLiant DL385 Gen11 16-pin GPU Power Cable v2 Kit
1	P80743-B21 0D1	Factory Integrated
1	P57886-B21	HPE ProLiant DL385 Gen11 2U Standard/Performance FIO Air Baffle Kit
6	P58465-B21	HPE ProLiant DL3X5 Gen11 2U Performance Fan Kit
6	P58465-B21 0D1	Factory Integrated
1	P52345-B21	HPE Ball Bearing Rail 8 Kit
1	P52345-B21 0D1	Factory Integrated
1	P57888-B21	HPE ProLiant DL385 Gen11 Power Distribution Board Kit
1	P57888-B21 0D1	Factory Integrated
2	P58459-B21	HPE ProLiant DL3X5 Gen11 2U Performance Heat Sink Kit
2	P58459-B21 0D1	Factory Integrated
1	R7A12AAE	HPE Compute Ops Management Standard 5-year Upfront ProLiant SaaS
1	HU4B2A5	HPE 5Y Tech Care Basic Service
1	HU4B2A5 R2M	HPE iLO Advanced Non Blade Support
1	HU4B2A500DH	HPE ProLiant DL385 Gen11 Support

### **Switches**

Qty	Product #	Product Description
2	JL700C	HPE Aruba Networking CX 8360-32Y4C v2 32p 25G SFP/+/28 4 Sec 4p 100G QSFP+/28 FB 3 Fans 2 AC Bdl
2	JL700C ABA	HPE Aruba Networking 8360-32Y4C v2 32p 25G SFP28 4Sec 4p 100G QSFP28 FB 3 Fans 2AC Bundle US en
2	JL664A	HPE Aruba Networking CX 6300M 24-port 1GbE and 4-port SFP56 Switch
4	JL085A	HPE Aruba Networking X371 12VDC 250W 100-240VAC Power Supply
4	JL085A ABA	HPE Aruba Networking X371 12VDC 250W 100-240VAC Power Supply US en
1	H8A01A5	HPE 5Y Foundational Care NBD Exch
2	H8A01A3 Z5A	HPE Aruba Networking 6300M 24 Support
2	H8A01A300B9	HPE Aruba Networking 8360 32Y4C Support

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Charlie Arnett, Account Executive
(Address) 165 Barr Street, Lexington, KY 40507
(Phone Number) / (Fax Number) _ 859-554-3270
(email address)charlie.arnett@convergetp.com
WEIGHTION AND GEOMATHING D

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Converge Technology Solutions US, LLC	
(Companysigned by: Laren Smallwood	
(Signature Authorized Representative)	
Karen Smallwood, Director, Contracts And Contract Governance	
(Printed Name and Title of Authorized Representative) (Date)	
(Phone Number) (Fax Number)	
ksmallwood@convergetp.com	
(Email Address)	

Revised 8/24/2023



### **HPE ProLiant DL385 Gen11**



#### What's new

- Powered by the 4th & 5th Generation AMD EPYC<sup>™</sup> 9004 & 9005 Series Processors with 5nm technology that supports up to 160 cores at 400W, 1152 MB L3 Cache, and 24 DIMMs for DDR5 memory up to 6400 MT/s.
- 12 DIMM channels per processor for up to 6 TB total DDR5 memory with increased memory bandwidth and performance, and lower power requirements.
- Advanced data transfer rates and higher network speeds from the PCle Gen5 serial expansion bus, with up to 2x16 PCle Gen5 and two OCP slots
- Includes HPE Integrated Lights-Out 6 (iLO 6) server management software that enables you to securely configure, monitor, and update your HPE ProLiant Gen11 servers seamlessly from anywhere.
- Supports hot-pluggable, high-availability RAID M.2 boot options.
- PCle Gen5 EDSFF support and up to 8x single-wide and 4x double-wide GPU

#### **Overview**

Are you looking for an accelerator-optimized performance solution to run your AI or Big Data analytics workloads?

The HPE ProLiant DL385 Gen11 server is a 2U 2P solution that delivers exceptional compute performance, upgraded high-speed data transfer rate and memory depth at 2P compute capability. Powered by 4th & 5th Generation AMD EPYC™ 9004 & 9005 Series Processors with up to 160 cores, increased memory bandwidth and capacity, high-speed PCle Gen5 I/O, enhanced GPU support, and EDSFF storage, the HPE ProLiant DL385 Gen11 server is a superb accelerator-optimized 2U 2P solution.

Enhanced security features with the silicon root of trust from HPE are built into the firmware, creating a digital fingerprint for the AMD Secure Processor to validate safe operation prior to boot.

HPE ProLiant DL385 Gen11 server is an excellent choice for compute and data storage demanding workloads requiring increased core count, and storage and I/O scalability.

#### **Features**

### Intuitive Cloud Operating Experience: Simple, Self-service, and Automated

HPE ProLiant DL385 Gen11 servers are engineered for your hybrid world. The HPE ProLiant Gen11 servers simplify the way you control your business's compute—from edge to cloud—with a cloud operating experience.

Data sheet Page 2

support.

Transform business operations and pivot your team from reactive to proactive with global visibility and insight through a self-service console.

Automate tasks for efficiency in deployment and instant scalability for seamless, simplified support and lifecycle management, reducing tasks and shortening maintenance windows.

These experiences are engineered and built into all HPE ProLiant Gen11 servers, whether purchased as physical servers or consumed as-a-service using HPE GreenLake as your compute and storage demands grow.

Simplify and secure server management from edge to cloud with HPE Compute Ops Management. HPE Compute Ops Management is an as-a-service compute management experience that delivers greater simplicity, agility, and speed across your entire compute landscape, globally.

### Trusted Security by Design: Uncompromising, Fundamental, and Protected

The HPE ProLiant DL385 Gen11 server is tied into the silicon root of trust and the AMD Secure Processor, a dedicated security processor embedded in the AMD EPYC system on a chip (SoC), to manage secure boot, memory encryption, and secure virtualization.

HPE ProLiant Gen11 servers use the silicon root of trust to anchor the firmware of an HPE ASIC, creating an immutable fingerprint for the AMD Secure Processor that must be matched exactly before the server will boot. This verifies that malicious code is contained, and healthy servers are protected.

HPE ProLiant Gen11 servers continuously protect healthy servers at the edge by providing rapid detection of security-compromised servers, even to the point of not allowing them to boot if it identifies and contains malicious code, with IDevID certificates installed by default.

HPE ProLiant Gen11 servers provide automated recovery from a security event, including restoration of validated firmware, and facilitating recovery of the operating system, application, data connections, and providing a fast path to bring a server back online and into normal operations.

From silicon to software, from factory to cloud, and from generation to generation, HPE ProLiant Gen11 is engineered with a fundamental security approach to defend against increasingly complex threats through an uncompromising commitment to constant security advancements that are built into our DNA.

### Customized Performance for your Workloads: Accelerated, Open, and Efficient

Advanced data transfer rates and higher network speeds from the PCle Gen5 serial expansion bus, with up to 8x16 PCle Gen5 and two OCP slots, improve I/O throughput and reduce latency.

Increased memory bandwidth and performance, and lower power requirements with 12 DIMM channels per processor for up to 6 TB total DDR5 memory.

Provide real-time operational feedback on server performance plus recommendations for fine-tuning BIOS settings to customize for changing business needs.

**Data sheet** Page 3

Technical specifications	HPE ProLiant DL385 Gen11
Processor type	AMD
Processor family	4th & 5th Generation AMD EPYC™ Processors
Processor core available	Up to 160, depending on the processor
Processor cache	64 MB, 128 MB, 256 MB, 384 MB, 512MB or 1152 MB L3 cache, depending on processor model
Processor number	Up to 2
Processor speed	5.0 GHz maximum, depending on the processor
Maximum memory	6.0 TB with 256 GB DDR5
Memory slots	24
Memory type	HPE DDR5 Smart Memory
Memory protection features	ECC
Drive supported	Up to 12 LFF SAS/SATA with 4 LFF mid drive optional, 4 LFF rear drive Up to 24 SFF SAS/SATA/NVMe with 8 SFF mid drive optional and 2 SFF rear drive optional Up to 48 SFF SAS/SATA with dual front drive cages Up to 36 EDSFF
Infrastructure management	HPE iLO Standard with Intelligent Provisioning (embedded), HPE OneView Standard (requires download) HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, HPE OneView Advanced (require licenses) and HPE Compute Ops Management
Power supply type	2 Flexible Slot power supplies maximum, depending on model
Expansion slots	8 maximum, for detailed descriptions refer to the QuickSpecs
Network controller	Choice of optional OCP plus standup, depending on model
Storage controller	HPE Tri-Mode Controllers, refer to the QuickSpecs for more detail
System fan features	6 fans included
Form factor	2U Rack
Warranty	3/3/3: Server Warranty includes three years of parts, three years of labor, and three years of on-site support coverage. Additional information regarding worldwide limited warranty and technical support is available at: <a href="https://support.hpe.com/hpsc/wc/public/home">https://support.hpe.com/hpsc/wc/public/home</a> . Additional HPE support and service coverage for your product can be purchased locally. For information on availability of service upgrades and the cost for these service upgrades, refer to the HPE website at <a href="https://www.hpe.com/support">https://www.hpe.com/support</a> .



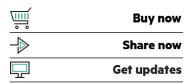
Data sheet Page 4

For additional technical information, available models and options, please reference the QuickSpecs

Make the right purchase decision. Contact our presales specialists.

#### Find a partner







#### **HPE Services**

No matter where you are in your transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From strategy and planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

#### **Advisory & Professional services**

Experts can help you map out your path to hybrid cloud and optimize your operations.

#### **Managed services**

HPE runs your IT operations, giving you unified control, so can focus on innovation.

#### **Support services**

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources.

- HPE Complete Care Service: a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.
- HPE Tech Care Service: the operational service experience for HPE products. The service provides access to product specific experts, an Al driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.
- HPE Multivendor Services: Single point of accountability for managing on-site
  hardware and software support for multivendor products. HPE experts help manage
  your IT across technologies and platforms for HPE and non-HPE technologies, acting
  as the single point of contact for your IT operational needs.

#### **Lifecycle Services**

Address your specific IT deployment project needs with tailored project management and deployment services.

#### **HPE Education Services**

Training and certification designed for IT and business professionals across all industries. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options

**Defective Media Retention** is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

#### **HPE GreenLake**

HPE GreenLake edge-to-cloud platform is HPE's market-leading as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model, on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please explore them here.

Visit HPE.com

© Copyright 2025 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.

Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

AMD EPYC™ is a trademark of Advanced Micro Devices, Inc. All third-party marks are property of their respective owners. Image may differ from the actual product. PSN1014689137CZEN, May, 2025.



#### **DATA SHEET**

## ARUBA CX 8360 SWITCH SERIES

High Performance Enterprise Campus and Data Center Switch

#### **PRODUCT OVERVIEW**

The Aruba CX 8360 Switch Series offers a flexible and innovative approach to addressing the application, security, and scalability demands of the mobile, cloud, and IoT era. These switches serve the needs of the next-generation core and aggregation layer of campuses, as well as virtual and highly dynamic data center environments. They provide up to 2.4Tbps of capacity, with line-rate Gigabit Ethernet interfaces including 1Gbps, 10Gbps, 25Gbps, 40Gbps, and 100Gbps.

The 8360 series includes industry-leading line rate ports with 1/10/25GbE (SFP/SFP+/SFP28) and 40/100 GbE (QSFP+/QSFP28) connectivity in a compact 1U form factor. 4x10Gbps and 4x25Gbps break out from 40/100G ports offer advanced flexibility in connectivity and aggregation. These switches deliver a fantastic investment for customers wanting to migrate from older 1GbE/10GbE to faster 25GbE, or from 10GbE/40GbE uplinks to 100GbE ports.

In addition, the 32 x 25G port 8360 models support low-density MACsec ports and enable secured connectivity at 10GbE and 25GbE over unsecured domains.

#### **PRODUCT DIFFERENTIATORS**

The Aruba CX 8360 switch series is based on ArubaOS-CX, a modern, database-driven operating system that automates and simplifies many critical and complex tasks. The enhanced capabilities of ArubaOS-CX provide a unique set of differentiators for campus and data center switching.

### Modular Architecture with native cloud-native ArubaOS-CX

ArubaOS-CX is built on a modular Linux architecture with OVSDB, providing the following unique capabilities:

- Safe and powerful access to all state at all times allows unique visibility and analytics capabilities
- REST APIs and Python scripting provide fine-grained microservices architecture enabling full integration with other workflow systems and services



#### **KEY FEATURES**

- High-performance 2.4Tbps and 1,145 Mpps
- Intelligent monitoring and visibility with Aruba Network Analytics Engine
- High availability with industry-leading VSX redundancy, and redundant power supplies and fans
- Designed for core/aggregation in the campus or Top of Rack or End of Row in data center environments
- MACsec secured connectivity over untrusted domains
- ArubaOS-CX automation and programmability using built-in REST APIs and Python scripts
- Advanced Layer 2/3 feature set includes BGP, OSPF, VRF, and IPv6
- Compact 1U switch with 1/10/25GbE and 40/100GbE connectivity
- Continual state synchronization provides superior fault tolerance and high availability
- All software processes communicate with the database rather than with each other, ensuring high stability with minimal inter-process communication

#### **Aruba Network Analytics Engine**

ArubaOS-CX includes Aruba's Network Analytics Engine (NAE) for advanced telemetry and automation. The NAE framework is an industry-first monitoring and troubleshooting system, providing greatly improved network operations. NAE uniquely provides the ability to monitor and easily troubleshoot network health and congestion issues. The Time Series Database (TSDB) may be used to store configuration and operational state.

Customers can use data from the TSDB to write software modules to troubleshoot problems. This data may also be used to analyze trends, identify anomalies, and predict future capacity requirements.

#### **Aruba Virtual Switching Extension**

The ability of ArubaOS-CX to maintain synchronous state across dual control planes allows a unique high availability solution called Aruba Virtual Switching Extension (VSX). VSX is delivered through redundancy gained by deploying two chassis with an inter-switch link, with each chassis maintaining its independent control.

Designed using the best features of existing HA technologies such as Multichassis Link Aggregation (MC-LAG) and Virtual Switching Framework (VSF), Aruba VSX enables a distributed architecture that is highly available during upgrades or control plane events.

#### **PRODUCT CAPABILITIES**

#### Performance

#### High-speed fully distributed architecture

Provides up to 2.4Tbps for bidirectional switching and 1,145 Mpps for forwarding to meet the demands of bandwidth-intensive applications today and in the future

#### Scalable system design

Provides investment protection to support future technologies and higher-speed connectivity

#### Connectivity

#### Variety of port density options

Five different base models, each sold in two versions: a portto-power airflow bundle, and a power-to-port airflow bundle:

- 12 ports of 40GbE/100GbE (QSFP+/QSFP28)
- 16 ports of 1GbE/10GbE/25GbE (SFP/SFP+/SFP28)
  - + 2 ports of 40GbE/100GbE (QSFP+/QSFP28)
- 28 ports of 1GbE/10GbE/25GbE (SFP/SFP+/SFP28)
  - + 4 10GbE/25GbE (SFP+/SFP28) with MACsec
  - + 4 ports of 40GbE/100GbE (QSFP+/QSFP28)
- 24 ports of 1GbE/10GbE (SFP/SFP+)
  - + 2 ports of 40GbE/100GbE (QSFP+/QSFP28)
- 48 ports of 100M/1GbE/10GbE (10GBASE-T)
  - + 4 ports of 40GbE/100GbE (QSFP+/QSFP28)

MACsec support is on selected ports (see above model descriptions).

All QSFP ports (QSFP+/QSFP28), except those on the 48x1G/10GBASE-T model, support optional 4x10G/4x25G break out capability.

There is 10GBASE-T transceiver support on the SFP+/SFP28 ports.

There is 1Gbps transceiver support, including 1GBASE-T, on non-MACsec SFP+/ SFP28 ports.

#### **Jumbo frames**

Allows high-performance backups and disaster-recovery systems; provides a maximum frame size of 9K bytes

#### **Unsupported Transceiver Mode (UTM)**

- Allows users to insert and enable unsupported 1G and 10G transceivers and cables
- No warranty nor support for the transceiver/cable when

#### Loopback

Supports internal loopback testing for maintenance purposes and increased availability; loopback detection protects against incorrect cabling or network configurations and can be enabled on a per-port or per-VLAN basis for added flexibility

#### Packet storm protection

Protects against unknown broadcast, multicast, or unicast storms with user-defined thresholds

#### Quality of Service (QoS)

#### Strict priority (SP) queuing and Deficit Weighted Round Robin (DWRR)

Enables congestion avoidance

#### RDMA Over Converged Ethernet (RoCEv2)

RDMA over Converged Ethernet version 2 (RoCEv2) is an internet layer protocol, which means that RoCEv2 packets can be routed. RoCEv2 allows direct memory access over the network and relies on the Link-Layer Flow-Control IEEE 802.10bb (Priority-based Flow Control, PFC) to provide a lossless fabric. RoCEv2 Congestion Management (RCM) uses ECN (Explicit Congestion Notification) to signal the congestion to the destination and use the congestion notification to reduce the rate of injection and increase the injection rate when the extent of congestion decreases.

#### Data Center Bridging (DCB)

Supports lossless Ethernet networking standard Priority Flow Control (PFC), Enhanced Transmission Service (ETS) and DCB Exchange Protocol (DCBX) to eliminate packet loss due to aueue overflow 2

#### **Explicit Congestion Notification (ECN)**

Marks packets rather than drops them, enabling the receiver to indicate the congestion to the sender, which in turn can reduce its transmission rate as if it detected a dropped packet.

#### Resiliency and high availability

#### Redundant and load-sharing fans and power supplies

Increases total performance and power availability while providing hitless, stateful failover

#### Hot swappable power supply and fan modules

Allows replacement of accessory modules without any operational impact on other modules nor the switch operations

#### Separate data and control paths

Separates control from services and keeps service processing isolated; increases security and performance

#### Aruba Virtual Switching Extension (VSX)

VSX enables a distributed and redundant architecture by deploying two switches with each switch, maintaining independent control yet staying synchronized during upgrades or failover. Also supports upgrades during live operation

#### Virtual Router Redundancy Protocol (VRRP)

VRRP allows a group of switches to dynamically back each other up to create highly available routed environments

#### Bidirectional Forward Detection (BFD)

- Enable sub-second failure detection for rapid routing protocol rebalancing
- · Enabled for both BGP IPv4 and IPv6

#### Ethernet Ring Protection Switching (ERPS)

Supports rapid protection and recovery in a ring topology.

#### **Unidirectional Link Detection (UDLD)**

Monitors link connectivity and shuts down ports at both ends if unidirectional traffic is detected, preventing loops in STP-based networks

#### IEEE 802.3ad LACP

Supports up to 52 LAGs, with up to 16 members per LAG (32 for a VSX pair), with a user-selectable L1- 4 hashing algorithm

#### Management

In addition to the Aruba CX Mobile App, Aruba NetEdit and Aruba Network Analytics Engine, the 8360 series offers the following:

#### **REST API interface**

Built-in, programmable and easy-to-use

#### Management interface control

Enables or disables each of the following interfaces depending on security preferences: console port or reset button

#### Industry-standard CLI with a hierarchical structure

Reduces training time and expenses, and increases productivity in multivendor installations

#### Management security

Restricts access to critical configuration commands; offers multiple privilege levels with password protection; ACLs provide SNMP access; local and remote Syslog capabilities allow logging of all access

#### **IPSLA**

- Monitors the network for degradation of various services, including voice.
- Monitoring is enabled via the NAE for history and for immediate automated gathering of additional information when anomalies are detected

#### SNMP v2c/v3

Provides SNMP read and trap support of industry standard Management Information Base (MIB), and private extensions

#### sFlow® (RFC 3176)

Provides scalable ASIC-based wire-speed network monitoring and accounting with no impact on network performance; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes

#### Remote monitoring (RMON)

Uses standard SNMP to monitor essential network functions and supports events, alarms, history, and statistics groups as well as a private alarm extension group

#### **TFTP and SFTP support**

- Offers different mechanisms for configuration updates; trivial FTP (TFTP) allows bidirectional transfers over a TCP/ IP network
- Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security

#### Debug and sampler utility

Supports ping and traceroute for IPv4 and IPv6

#### Network Time Protocol (NTP)

- Synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clock-dependent devices within the network
- · Can serve as the NTP server in a customer network

#### IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

Advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications

#### **Dual flash images**

Provides independent primary and secondary operating system files for backup while upgrading

#### Multiple configuration files

Stores files easily to the flash image

#### Layer 2 Switching

#### VLAN

Supports up to 4,094 port-based or IEEE 802.1Q-based VLANs

#### **VLAN Translation**

Remaps VLANs during transit across a core network

#### Bridge Protocol Data Unit (BPDU) tunneling

Transmits STP BPDUs transparently, allowing correct tree calculations across service providers, WANs, or MANs

#### Port mirroring

Duplicates port traffic (ingress and egress) to a local or remote monitoring port; supports 4 mirroring groups, with an unlimited number of ports per group

#### STP

Supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

#### Rapid Per-VLAN spanning tree plus (RPVST+)

Allows each VLAN to build a separate spanning tree to improve link bandwidth usage in network environments with multiple VLANs

#### Internet Group Management Protocol (IGMP)

Controls and manages the flooding of multicast packets in a Layer 2 network

#### Static VXLAN

Allows operators to manually connect two or more VXLAN tunnel endpoints (VTEP)

#### Dynamic VXLAN with BGP-EVPN

Deep segmentation for Spine/Leaf data center networks or Layer 3 campus designs with centralized gateway and symmetric Integrated Routing and Bridging (IRB) based distributed gateways VXLAN tunnels

#### IPv4 Multicast in VXLAN/EVPN Overlay

Enable PIM-SM/IGMP snooping in the VXLAN Overlay

#### IPv6 VXLAN/EVPN Overlay Support

Enables IPv6 traffic over the VXLAN overlay

#### VXLAN distributed anycast gateway

Addressing mechanism that enables the use of the same gateway IP addresses across all the leaf switches part of a VXLAN network

#### VXLAN ARP/ND suppression

Allows minimization of ARP and ND traffic flooding within individual VXLAN segments, thus optimizing the VXLAN network

#### Layer 3 Services

#### Address Resolution Protocol (ARP)

- Determines the MAC address of another IP host in the same subnet; supports static ARPs
- Gratuitous ARP allows detection of duplicate IP addresses
- Proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network

#### **IP Directed Broadcast**

Supports directed broadcast on configured network subnets

#### Dynamic Host Configuration Protocol (DHCP)

- DHCP services are offered within a client network to simplify network management
- · DHCP Relay enables DHCP operation across subnets

#### **DHCP Server**

Supports DHCP services (for IPv4 and IPv6) in customer networks

#### Domain Name System (DNS)

Provides a distributed database that translates domain names and IP addresses, which simplifies network design; supports client and server

#### Layer 3 Routing

#### Static IPv4 routing

Provides simple manually configured IPv4 routing

#### Open shortest path first (OSPF)

Delivers faster convergence; uses link-state routing Interior Gateway Protocol (IGP), which supports ECMP, NSSA, and MD5 authentication for increased security and graceful restart for faster failure recovery

#### Border Gateway Protocol 4 (BGP-4)

Delivers an implementation of the Exterior Gateway Protocol (EGP) utilizing path vectors; uses TCP for enhanced reliability for the route discovery process; reduces bandwidth consumption by advertising only incremental updates; supports extensive policies for increased flexibility; scales to very large networks

#### Routing Information Protocol version 2 (RIPv2)

Easy to configure routing protocol for small networks relying on User Datagram Protocol (UDP)

#### Routing Information Protocol Next Generation (RIPng)

Extension of RIPv2 for support of IPv6 networking

#### Multiprotocol BGP (MP-BGP) with IPv6 Address Family

Enables sharing of IPv6 routes using BGP and connections to BGP peers using IPv6

#### Policy Based Routing (PBR)

Enables use of a classifier to select traffic that can be forwarded based on policy set by the network administrator

#### 6in4 tunnels

Supports the tunneling of IPv6 traffic in an IPv4 network

#### IP performance optimization

Provides a set of tools to improve the performance of IPv4 networks; includes directed broadcasts, customization of TCP parameters, support of ICMP error packets, and extensive display capabilities

#### Static IPv6 routing

Provides simple manually configured IPv6 routing

#### **Dual IP stack**

Maintains separate stacks for IPv4 and IPv6 to ease the transition from an IPv4-only network to an IPv6-only network design

#### OSPFv3

Provides OSPF support for IPv6

#### Equal-Cost Multipath (ECMP)

Enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth

#### **Generic Routing Encapsulation (GRE)**

Enables tunneling traffic from site to site over a Layer 3 path

#### Security

#### **TAA Compliance**

The Aruba CX 8360 with AOS-CX, a TAA compliant product, uses FIPS 140-2 validated cryptography for protection of sensitive information

#### Access control list (ACL) Features

- Supports powerful ACLs for both IPv4 and IPv6. Supports creation of object groups representing sets of devices like IP addresses. For instance, IT management devices could be grouped in this way
- ACLs can also protect control plane services such as SSH, SNMP, NTP or web servers

#### **Enrollment over Secure Transport (EST)**

Enables secure certificate enrollment, allowing for easier enterprise management of PKI.

#### Remote Authentication Dial-In User Service (RADIUS)

Eases security access administration by using a password authentication server

### Terminal Access Controller Access-Control System (TACACS+)

Delivers an authentication tool using TCP with encryption of the full authentication request, providing additional security

#### RadSec

Enable RADIUS authentication and accounting data to be passed safely and reliably across insecure networks such as the internet

#### Management access security

- AOS-CX provides for both on-box as well as off-box authentication for administrative access. RADIUS or TACACS+ can be used to provide encrypted user authentication
- Additionally, TACACS+ can also provide user authorization services

#### Secure shell (SSHv2)

Uses external servers to securely log in to a remote device; with authentication and encryption, it protects against IP spoofing and plain-text password interception; increases the security of Secure FTP (SFTP) transfers

#### MACsec

High level encryption from AES128 and AES256 with 2SAK as well as 4SAK mode of Static Key provisioning enabling secure communication for all traffic on Ethernet links

#### Multicast

#### Internet Group Management Protocol (IGMP)

Enables establishing multicast group memberships in IPv4 networks; supports IGMPv1, v2, and v3

#### Multicast Listener Discovery (MLD)

Enables discovery of IPv6 multicast listeners; supports MLDv1 and v2

#### Anycast RP

Two or more RPs configured with same /32 Host IP address on loopback interfaces. All the downstream routers will be configured to point to Anycast RP address for multicast routes. Device will automatically select the closest RP for each source and receiver. If equal costs routes exist, the process of registering the sources will be shared equally by all the RPs in the network.

#### Multicast Service Delivery Protocol (MSDP)

Efficiently routes multicast traffic through core networks

#### **MSDP Mesh Groups**

MSDP used for Anycast RP is an intradomain feature that provides redundancy and load-sharing capabilities. When MSDP mesh groups are used, SA messages are not flooded to other mesh group peers. When an MSDP peer in a group receives an SA message from another MSDP peer in the group, it assumes that this SA message was sent to all the other MSDP peers in the group. It also eliminates RPF checks on arriving SA messages. With MSDP mesh group configured, SA messages are always accepted from mesh group peer.

#### PIM-Dense Mode

Floods multicast traffic to every corner of the network (push-model). Method is for delivering data to receivers without receivers requesting the data. Can be efficient in certain deployments in which there are active receivers on every subnet in the network. Branches without downstream receivers are pruned from the forwarding trees.

#### FastLeave (FL) and Forced-FastLeave (FFL)

FL and FFL for IGMP/MLD speeds up the process of blocking unnecessary Multicast traffic to a switch port that is connected to end nodes for IGMP. They help to eliminate the CPU overhead of having to generate an IGMP/MLD Group-Specific Query message.

#### Network Load Balancer (NLB)

Supported for server applications

#### **IGMP/MLD Snooping**

Prevent flooding of multicast traffic to non-listening ports

#### Protocol Independent Multicast (PIM)

Protocol Independent Multicast for IPv4 and IPv6 supports one-to-many and many-to-many media casting use cases such as IPTV over IPv4 and IPv6 networks. Support for PIM Sparse Mode (PIM-SM, IPv4 and IPv6)

#### Additional information

#### Green initiative support

Provides support for RoHS (EN 50581:2012) regulations

#### Customer first, customer last support

When your network is important to your business, then your business needs the backing of Aruba Support Services. Partner with Aruba product experts to increase your team productivity, keep pace with technology advances, software releases, and obtain break-fix support.

Foundation Care for Aruba support services include priority access to Aruba Technical Assistance Center(TAC) engineers 24x7x365, flexible hardware and onsite support options, and total coverage for Aruba products. Aruba switches with assigned Aruba Central subscriptions benefit with option for additional hardware support only.

Aruba Pro Care adds fast access to senior Aruba TAC engineers, who are assigned as a single point of contact for case management, reducing the time spent addressing and resolving issues.

For complete details on Foundation Care and Aruba Pro Care, please visit: https://www.arubanetworks.com/supportservices/

#### Warranty, services and support

#### Limited Lifetime Warranty

See https://www.arubanetworks.com/support-services/ product-warranties/ for warranty and support information included with your product purchase.

For **Software Releases and Documentation**, refer to https://asp.arubanetworks.com/downloads

For **support and services** information, visit https://www.arubanetworks.com/support-services/arubacare/

For **global services** information, see https://www.arubanetworks.com/services/

SPECIFICATIONS				
	Aruba 8360-32Y4C MACsec Port-to- Power 3 Fans, 2 Power Supplies [JL700A]	Aruba 8360-32Y4C MACsec Power-to- Port 3 Fans, 2 Power Supplies [JL701A]	Aruba 8360-16Y2C Port-to-Power 3 Fans, 2 Power Supplies [JL702A]	Aruba 8360-16Y2C Power-to-Port 3 Fans 2 Power Supplies [JL703A]
I/O ports and slots				
	28 ports of 1GbE/10GbE/2 4 ports of 10GbE/25GbE (S 4 ports of 40GbE/1000 (optional 1GBASE-T SFP, 100 and 4x10G/25G breakd	SFP+/SFP28) with MACsec GbE (QSFP+/QSFP28) GBASE-T SFP+ transceivers	2 ports of 40GbE/10 (optional 1GBASE-T S transceivers and 4x10	E/25GbE (SFP/SFP+/SFP28 10GbE (QSFP+/QSFP28) FP and 10GBASE-T SFP+ 10G/25G breakout cables ported)
Additional ports and slots				
Power Supplies		2 field-replaceable and hot	-swappable power supplies	1.
Fans		3 field-replaceable ar	nd hot-swappable fans <sup>2</sup>	
Management	RJ-4	5 serial and USB-C console;	RJ-45 Ethernet port; USB-Ty	rpe A
Physical characteristics				
Physical Dimensions (HxWxD)	1.73in x 17.4in x 16.0in 44.0mm x 442.5mm x 406.4			
Full configuration weight	18.05 lb 17.00 lb (estim.) 8.19 kg 7.71 kg (estim.)			
Memory and Processor				
CPU	1.8 GHz 4-core 64-bit			
Memory, Drive and Flash	16GB RAM, 32GB Flash/Storage			
Packet Buffer	32MB			
Performance				
Switching Capacity	2.4TI	bps	1.2	?Tbps
MAC Address Table Size		212	2,992	
IPv4 Host Table		145	5,780	
IPv6 Host Table		145	5,780	
IPv4 Unicast Routes		606	5,977	
IPv6 Unicast Routes		630	),784	
Maximum Number of Access Control List (ACL) Entries Ingress		IPv4 65,536, IPv6 ′	16,384, MAC 65,536	
Maximum Number of Access Control List (ACL) Entries Egress	IPv4 8,192, IPv6 2,048, MAC 8,192			
Maximum VLANs		4,1	094	
IGMP Groups		7,	000	
MLD Groups		7,	000	
IPv4 Multicast Routes		7,000		
IPv6 Multicast Routes		7.	000	

<sup>&</sup>lt;sup>1</sup> Bundles include the 2 power supplies (2xJL600A in JL700A & JL702A and 2xJL712A in JL701A & JL703A)

 $<sup>^2</sup>$  Bundles include the 3 fans (3xJL714A in JL700A & JL702A and 3xJL715A in JL701A & JL703A)

	Aruba 8360-32Y4C MACsec Port-to- Power 3 Fans, 2 Power Supplies [JL700A]	Aruba 8360-32Y4C MACsec Power-to- Port 3 Fans, 2 Power Supplies [JL701A]	Aruba 8360-16Y2C Port-to-Power 3 Fans, 2 Power Supplies [JL702A]	Aruba 8360-16Y2C Power-to-Port 3 Fans, 2 Power Supplies [JL703A]
Environment				
Operating Temperature <sup>3</sup>	32°F to 113°F (0°C to 45°C) up to 5000 ft	32°F to 104°F (0°C to 40°C) up to 5000 ft	32°F to 113°F (0°C to 45°C) up to 5000 ft	32°F to 104°F (0°C to 40°C) up to 5000 ft
Operating Relative Humidity	15% to 95% relative humidity at 113°F (45°C), non-condensing	15% to 95% relative humidity at 104°F (40°C), non-condensing	15% to 95% relative humidity at 113°F (45°C), non-condensing	15% to 95% relative humidity at 104°F (40°C), non-condensing
Non-Operating Temperature		-40°C to 70°C (-40°F to 158	8°F) up to 4.6km (15,000 ft.)	
Non-Operating/Storage Relative Humidity		15% to 95% at 149°F (	(65°C) non-condensing	
Maximum Operating Altitude	Up to 10,000ft (3.048Km)			
Maximum Non-Operating Altitude	Up to 15,000ft (4.6Km)			
Primary Airflow		Power-to-Port (PwrToPrt)	or Port-to-Power (PrtToPwr)	
BTU/hr	1,450	1,450	1,109	1,109
Acoustics <sup>4</sup>	$L_{wAd} = 6.3 \text{ Bel}$ $L_{pAm}$ (Bystander) = 45.4 dB	$L_{wAd} = 6.4 \text{ Bel}$ $L_{pAm}$ (Bystander) = 45.8 dB	$L_{WAd} = 6.0 \text{ Bel}$ $L_{pAm}$ (Bystander) = 42.8 dB	L <sub>wad</sub> = 6.8 Bel L <sub>pAm</sub> (Bystander) = 49.5 dE
Electrical Characteristics				
Frequency		47-6	53 Hz	
AC Voltage Current			00-127VAC 00-240VAC	
Power Consumption		425W 120W		325W 110W
Regulatory				
Compliance	Products comply with	CE Markings according to di	rectives 2014/30/EU (EMC) ar	nd 2014/35/EU (Safety)
RoHS	EN 50581:2012			
Safety				
EU	• EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 • EN62368-1, Ed.2:2014			
North America	• UL60950-1, CSA 22.2 No 60950-1			
Worldwide	• IEC60950-1:2005 Ed.2 + Am 1:2009 + A2:2013 • IEC 62368-1:2014			

<sup>&</sup>lt;sup>3</sup>Derate -1°C for every 1000 ft from 5000 ft to 10000 ft regardless of airflow direction

<sup>&</sup>lt;sup>4</sup>Acoustics measured in 23°C semi-anechoic chamber with a loading of 30% traffic on all ports. Measured in accordance with ISO 7779. Declared in accordance with ISO 9296. Values presented are the Declared A-Weighted Sound Power Level (LWAd) and the mean Bystander A-Weighted Sound Pressure Level (LPAm).

SPECIFICATIONS				
	Aruba 8360-32Y4C MACsec Port-to- Power 3 Fans, 2 Power Supplies [JL700A]	Aruba 8360-32Y4C MACsec Power-to- Port 3 Fans, 2 Power Supplies [JL701A]	Aruba 8360-16Y2C Port-to-Power 3 Fans, 2 Power Supplies [JL702A]	Aruba 8360-16Y2C Power-to-Port 3 Fans, 2 Power Supplies [JL703A]
EMC				
	• EN 55024:2010+A2016/CISPR24:2015 • EN55032:2015/CISPR 32, Class A • EN55035:2017/CISPR 35 • EN61000-3-2:2014, Class A • EN61000-3-3:2013 • FCC CFR 47 Part 15:2010, Class A • ICES-003, Class A • VCCI Class A • CNS 13438			
Laser				
Transceivers	<ul> <li>EN60825-1:2014 / IEC 60825-1: 2014 Class 1</li> <li>Class 1 Laser Products / Laser Klasse 1</li> </ul>			
Mounting				
		d 19-inch rack or other equip options available <sup>5</sup> ; air duct a		

<sup>&</sup>lt;sup>5</sup> Rack mounting kit must be ordered separately

SPECIFICATIONS					
	Aruba 8360-48XT4C Port-to-Power 3 Fans 2 Power Supplies [JL706A]	, Aruba 8360-48XT4C Power-to-Port 3 Fans, 2 Power Supplies [JL707A]			
I/O ports and slots					
		of 100M/1GbE/10GBASE-T			
Additional ports and slots	4 ports of 4	0GbE/100GbE (QSFP+/QSFP28)			
Power Supplies	2 field-replaceable	e and hot-swappable power supplies <sup>6</sup>			
Fans		ceable and hot-swappable fans <sup>7</sup>			
Management		console; RJ-45 Ethernet port; USB-Type A			
Physical characteristics	Ty 13 Serial and 655 C	console, by 13 Ethernet port, OSB Type /			
Physical Dimensions (HxWxD)		73in x 17.4in x 16.0in m x 442.5mm x 406.4mm			
Full configuration weight		18.85 lb. 8.55 kg			
Memory and Processor					
CPU	1	.8 GHz 4-core 64-bit			
Memory, Drive and Flash	16GB RAM, 32GB Flash/Storage				
Packet Buffer	32MB				
Performance					
Switching Capacity		1.76Tbps			
MAC Address Table Size	212,992				
IPv4 Host Table		145,780			
IPv6 Host Table		145,780			
IPv4 Unicast Routes		606,977			
IPv6 Unicast Routes		630,784			
Maximum Number of Access Control List (ACL) Entries Ingress	IPv4 65,5	36, IPv6 16,384, MAC 65,536			
Maximum Number of Access Control List (ACL) Entries Egress	IPv4 8,192, IPv6 2,048, MAC 8,192				
Maximum VLANs		4,094			
IGMP Groups		7,000			
MLD Groups		7,000			
IPv4 Multicast Routes		7,000			
IPv6 Multicast Routes		7,000			

<sup>&</sup>lt;sup>6</sup>Bundles include the 2 power supplies (2xJL600A in JL706A and 2xJL712A in JL707A)

<sup>&</sup>lt;sup>7</sup>Bundles JL706A and JL707A include the 3 fans (3xJL714A in JL706A and 3xJL715A in JL707A and JL710A)

	Aruba 8360-48XT4C Port-to-Power 3 Fans, 2 Power Supplies [JL706A]	Aruba 8360-48XT4C Power-to-Port 3 Fans, 2 Power Supplies [JL707A]		
Environment				
Operating Temperature <sup>8</sup>	32°F to 113°F (0°C to 45°C) up to 5000 ft	32°F to 104°F (0°C to 40°C) up to 5000 ft		
Operating Relative Humidity	15% to 95% relative humidity at 113°F (45°C), non-condensing	15% to 95% relative humidity at 104°F (40°C), non-condensing		
Non-Operating Temperature	-40°C to 70°C (-40°F to 1	58°F) up to 4.6km (15,000 ft.)		
Non-Operating/Storage Relative Humidity	15% to 95% at 149°	F (65°C) non-condensing		
Maximum Operating Altitude	Up to 10,0	000ft (3.048Km)		
Maximum Non-Operating Altitude	Up to 15,	,000ft (4.6Km)		
Primary Airflow	Port-to-Power (PrtToPwr)	Power-to-Port (PwrToPrt)		
BTU/hr	1,706	1,706		
Acoustics <sup>9</sup>	L <sub>WAd</sub> = 6.7 Bel L <sub>pAm</sub> (Bystander) = 48.7 dB	L <sub>Md</sub> = 6.5 Bel L <sub>nAm</sub> (Bystander) = 47.6 dB		
Electrical Characteristics				
Frequency	47	7-63 Hz		
AC Voltage Current		100-127VAC 200-240VAC		
Power Consumption		x: 500W e: 120W		
Regulatory				
Compliance	Products comply with CE Markings according to	directives 2014/30/EU (EMC) and 2014/35/EU (Safety)		
RoHS	EN 50	0581:2012		
Safety				
EU		9 + A1:2010 + A12:2011 + A2:2013 8-1, Ed.2:2014		
North America	<ul> <li>UL/CUL 69050-1: 2nd Edition</li> <li>UL/CUL 63268-1:2014</li> <li>UL60950-1, CSA 22.2 No 60950-1</li> </ul>			
Worldwide	• IEC60950-1:2005 Ed.2 + Am 1:2009 + A2:2013 • IEC 62368-1:2014			

<sup>\*</sup>Derate -1°C for every 1000 ft from 5000 ft to 10000 ft regardless of airflow direction

<sup>&</sup>lt;sup>9</sup> Acoustics measured in 23°C semi-anechoic chamber with a loading of 30% traffic on all ports. Measured in accordance with ISO 7779. Declared in accordance with ISO 9296. Values presented are the Declared A-Weighted Sound Power Level (LWAd) and the mean Bystander A-Weighted Sound Pressure Level (LPAm).

SPECIFICATIONS				
	Aruba 8360-48XT4C Port-to-Power 3 Fans, 2 Power Supplies [JL706A]	Aruba 8360-48XT4C Power-to-Port 3 Fans, 2 Power Supplies [JL707A]		
EMC				
	• EN 55024:2010+A2016/CISPR24:2015 • EN55032:2015/CISPR 32, Class A • EN55035:2017/CISPR 35 • EN61000-3-2:2014, Class A • EN61000-3-3:2013 • FCC CFR 47 Part 15:2010, Class A • ICES-003, Class A • VCCI Class A • CNS 13438			
Laser				
Transceivers	<ul> <li>EN60825-1:2014 / IEC 60825-1: 2014 Class 1</li> <li>Class 1 Laser Products / Laser Klasse 1</li> </ul>			
Mounting				
		quipment cabinet; horizontal surface mounting only; 2-p ct available for 4-post deployments and sold separately		

SPECIFICATIONS				
	Aruba 8360-12C Port-to-Power 3 Fans, 2 Power Supplies [JL708A]	Aruba 8360-12C Power-to-Port 3 Fans, 2 Power Supplies [JL709A]	Aruba 8360-24XF2C Port-to-Power 3 Fans, 2 Power Supplies [JL710A]	Aruba 8360-24XF2C Power-to-Port 3 Fans 2 Power Supplies [JL711A]
I/O ports and slots				
		00GbE (QSFP+/QSFP28) eakout cables supported)	2 ports of 40GbE/10 (optional 1GBASE-T St transceivers and 4x10	E/10GbE (SFP/SFP+) 0GbE (QSFP+/QSFP28) FP and 10GBASE-T SFP+ 0G/25G breakout cables ported)
Additional ports and slots				
Power Supplies		2 field-replaceable and hot	-swappable power supplies1	1
Fans		3 field-replaceable an	d hot-swappable fans <sup>12</sup>	
Management	RJ-	-45 serial and USB-C console;	RJ-45 Ethernet port; USB-Ty	rpe A
Physical characteristics				
Physical Dimensions (HxWxD)			7.4in x 16.0in 5mm x 406.4mm	
Full configuration weight		65 lb )1 kg		7.8 lb 07 kg
Memory and Processor				
CPU	1.8 GHz 4-core 64-bit			
Memory, Drive and Flash	16GB RAM, 32GB Flash/Storage			
Packet Buffer	32MB			
Performance				
Switching Capacity	2.4	Tbps	880	)Gbps
MAC Address Table Size		212	2,992	
IPv4 Host Table		145	5,780	
IPv6 Host Table		145	5,780	
IPv4 Unicast Routes		606	5,977	
IPv6 Unicast Routes		630	),784	
Maximum Number of Access Control List (ACL) Entries Ingress		IPv4 65,536, IPv6 <sup>2</sup>	16,384, MAC 65,536	
Maximum Number of Access Control List (ACL) Entries Egress	IPv4 8,192, IPv6 2,048, MAC 8,192			
Maximum VLANs		4,	094	
IGMP Groups		7,	000	
MLD Groups		7,	000	
IPv4 Multicast Routes		7,000		
IPv6 Multicast Routes		7,	000	

 $<sup>^{11}</sup>$  Bundles include the 2 power supplies (2xJL600A in JL708A & JL710A and 2xJL712A in JL709A & JL711A)

<sup>&</sup>lt;sup>12</sup> Bundles include the 3 fans (3xJL714A in JL708A & JL710A and 3xJL715A in JL709A & JL710A)

	Aruba 8360-12C Port-to-Power 3 Fans, 2 Power Supplies [JL708A]	Aruba 8360-12C Power-to-Port 3 Fans, 2 Power Supplies [JL709A]	Aruba 8360-24XF2C Port to Power 3 Fans, 2 Power Supplies [JL710A]	Aruba 8360-24XF2C Power-to-Port 3 Fans, 2 Power Supplies [JL711A]
Environment				
Operating Temperature <sup>13</sup>	32°F to 113°F (0°C to 45°C) up to 5000 ft	32°F to 104°F (0°C to 40°C) up to 5000 ft	32°F to 113°F (0°C to 45°C) up to 5000 ft	32°F to 104°F (0°C to 40°C) up to 5000 ft
Operating Relative Humidity	15% to 95% relative humidity at 113°F (45°C), non-condensing	15% to 95% relative humidity at 104°F (40°C), non-condensing	15% to 95% relative humidity at 113°F (45°C), non-condensing	15% to 95% relative humidity at 104°F (40°C), non-condensing
Non-Operating Temperature		-40°C to 70°C (-40°F to 158	8°F) up to 4.6km (15,000 ft.)	
Non-Operating/Storage Relative Humidity		15% to 95% at 149°F (	(65°C) non-condensing	
Maximum Operating Altitude	Up to 10,000ft (3.048Km)			
Maximum Non-Operating Altitude	Up to 15,000ft (4.6Km)			
Primary Airflow	Port-to-Power (PrtToPwr)	Power-to-Port (PwrToPrt)	Port-to-Power (PrtToPwr)	Power-to-Port (PwrToPrt)
BTU/hr	1,280	1,280	1,280	1,280
Acoustics <sup>14</sup>	$L_{WAd} = 6.3 \text{ Bel}$ $L_{pAm}$ (Bystander) = 46.7 dB	$L_{wAd} = 6.2 \text{ Bel}$ $L_{pAm}$ (Bystander) = 45.3 dB	$L_{wAd} = 6.0 \text{ Bel}$ $L_{pAm}$ (Bystander) = 42.6 dB	L <sub>wad</sub> = 6.2 Bel L <sub>pAm</sub> (Bystander) = 44.4 dB
Electrical Characteristics				
Frequency		47-6	53 Hz	
AC Voltage Current			00-127VAC 00-240VAC	
Power Consumption		375W 120W		375W 120W
Regulatory				
Compliance	Products comply with	CE Markings according to dir	rectives 2014/30/EU (EMC) ar	nd 2014/35/EU (Safety)
RoHS		EN 505	81:2012	
Safety				
EU	• EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 • EN62368-1, Ed.2:2014			
North America	<ul> <li>UL/CUL 69050-1: 2nd Edition</li> <li>UL/CUL 63268-1:2014</li> <li>UL60950-1, CSA 22.2 No 60950-1</li> </ul>			
Worldwide	• IEC60950-1:2005 Ed.2 + Am 1:2009 + A2:2013 • IEC 62368-1:2014			

<sup>&</sup>lt;sup>13</sup> Derate -1°C for every 1000 ft from 5000 ft to 10000 ft regardless of airflow direction

<sup>&</sup>lt;sup>14</sup> Acoustics measured in 23°C semi-anechoic chamber with a loading of 30% traffic on all ports. Measured in accordance with ISO 7779. Declared in accordance with ISO 9296. Values presented are the Declared A-Weighted Sound Power Level (LWAd) and the mean Bystander A-Weighted Sound Pressure Level (LPAm).

SPECIFICATIONS						
	Aruba 8360-12C Port-to-Power 3 Fans, 2 Power Supplies [JL708A]	Aruba 8360-12C Power-to-Port 3 Fans, 2 Power Supplies [JL709A]	Aruba 8360-24XF2C Port-to-Power 3 Fans, 2 Power Supplies [JL710A]	Aruba 8360-24XF2C Power-to-Port 3 Fans, 2 Power Supplies [JL711A]		
EMC						
	• EN 55024:2010+A2016/CISPR24:2015 • EN55032:2015/CISPR 32, Class A • EN55035/CISPR 35 • EN61000-3-2:2014, Class A • EN61000-3-3:2013 • FCC CFR 47 Part 15:2010, Class A • ICES-003, Class A • VCCI Class A • CNS 13438					
Laser						
Transceivers		<ul> <li>EN60825-1:2014 / IEC 60825-1: 2014 Class 1</li> <li>Class 1 Laser Products / Laser Klasse 1</li> </ul>				
Mounting						
			Mounts in an EIA standard 19-inch rack or other equipment cabinet; horizontal surface mounting only; 2-post and 4-post mounting options available; 15 air duct available for 4-post deployments and sold separately			

#### STANDARDS AND PROTOCOLS

The following standards and protocols are supported.

- · CPU DoS Protection
- IEEE 802.1AB-2009
- IEEE 802.1AE MACSEC
- IEEE 802.1AEbn-2011 GCM-AES-256 Cipher Suite
- IEEE 802.1AEbw-2013 Extended Packet Numbering
- IEEE 802.1ak-2007
- IEEE 802.1AX-2008 Link Aggregation
- IEEE 802.1p Priority
- IEEE 802.1p Traffic Class Expediting and Dynamic Multicast Filtering
- IEEE 802.10 VLANs
- IEEE 802.1s Multiple Spanning Trees
- · IEEE 802.1t-2001
- IEEE 802.1v VLAN classification by Protocol and Port
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3ae 10-Gigabit Ethernet
- IEEE 802.3an 10-GBASE-T-2006
- IEEE 802.3ba 40 and 100 Gigabit Ethernet Architecture
- IEEE 802.3by 25 Gigabit Ethernet-2016
- IEEE 802.3cc 25 Gigabit Ethernet-2017
- IEEE 802.3x Flow Control
- IEEE 802.3z 1000BASE-X
- IEEE 802.3z Gigabit Ethernet
- RFC 1215 Convention for defining traps for use with the SNMP
- RFC 1256 ICMP Router Discovery Messages
- RFC 1350 TFTP Protocol (revision 2)
- RFC 1393 Traceroute Using an IP Option
- · RFC 1403 BGP OSPF Interaction
- RFC 1519 CIDR
- · RFC 1583 OSPF Version 2
- RFC 1591 Domain Name System Structure and Delegation
- RFC 1657 Definitions of Managed Objects for BGP-4 using SMIv2
- RFC 1757 Remote Network Monitoring Management Information Base
- RFC 1772 Application of the Border Gateway Protocol in the Internet
- RFC 1812 Requirements for IP Version 4 Router
- RFC 1918 Address Allocation for Private Internet
- RFC 1981 Path MTU Discovery for IP version 6
- RFC 1997 BGP Communities Attribute
- RFC 1998 An Application of the BGP Community Attribute in Multi-home Routing

- RFC 2131 DHCP
- RFC 2131 DHCP Options and BOOTP Vendor Extensions
- RFC 2236 IGMP
- · RFC 2328 OSPF Version 2
- RFC 2375 IPv6 Multicast Address Assignments
- RFC 2385 Protection of BGP Sessions via the TCP MD5 Signature Option
- RFC 2401 Security Architecture for the Internet Protocol
- · RFC 2402 IP Authentication Header
- RFC 2406 IP Encapsulating Security Payload (ESP)
- · RFC 2439 BGP Route Flap Damping
- RFC 2460 Internet Protocol, Version 6 (IPv6) Specification
- RFC 2464 Transmission of IPv6 over Ethernet Networks
- RFC 2545 Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing
- RFC 2576 Coexistence between SNMP V1, V2, V3)
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- · RFC 2711 IPv6 Router Alert Option
- RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol
- · RFC 2918 Route Refresh Capability for BGP-4
- RFC 2934 Protocol Independent Multicast MIB for IPv4
- · RFC 3019 MLDv1 MIB
- RFC 3056 Connection of IPv6 Domains via IPv4 Clouds
- RFC 3065 Autonomous System Confederation for BGP
- RFC 3101 OSPF Not-so-stubby-area option
- · RFC 3137 OSPF Stub Router Advertisement
- RFC 3176 InMon Corporation's sFlow: A Method for Monitoring Traffic in Switched and Routed Networks
- RFC 3376 IGMPv3
- RFC 3416 (SNMP Protocol Operations v2)
- RFC 3417 (SNMP Transport Mappings)
- RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
- RFC 3484 Default Address Selection for IPv6
- RFC 3509 Alternative Implementations of OSPF Area Border Routers
- RFC 3623 Graceful OSPF Restart
- RFC 3768 VRRP
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- · RFC 3973 PIM Dense Mode
- RFC 4022 MIB for TCP
- · RFC 4113 MIB for UDP
- RFC 4213 Basic Transition Mechanisms for IPv6 Hosts and Routers
- RFC 4251 The Secure Shell (SSH) Protocol

- RFC 4252 SSHv6 Authentication
- RFC 4253 SSHv6 Transport Layer
- RFC 4254 SSHv6 Connection
- RFC 4271 A Border Gateway Protocol 4 (BGP-4)
- RFC 4273 Definitions of Managed Objects for BGP-4
- RFC 4291 IP Version 6 Addressing Architecture
- · RFC 4292 IP Forwarding Table MIB
- RFC 4293 Management Information Base for the Internet Protocol (IP)
- RFC 4360 BGP Extended Communities Attribute
- RFC 4419 Key Exchange for SSH
- RFC 4443 ICMPv6
- RFC 4456 BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP)
- RFC 4486 Subcodes for BGP Cease Notification Message
- · RFC 4541 IGMP & MLD Snooping Switch
- RFC 4552 Authentication/Confidentiality for OSPFv3
- RFC 4601 PIM Sparse Mode
- · RFC 4724 Graceful Restart Mechanism for BGP
- RFC 4750 OSPFv2 MIB [partial support no Set MIB]
- · RFC 4760 Multiprotocol Extensions for BGP-4
- RFC 4861 IPv6 Neighbor Discovery
- RFC 4862 IPv6 Stateless Address Auto-configuration
- · RFC 4940 IANA Considerations for OSPF
- RFC 5065 Autonomous System Confederation for BGP
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
- RFC 5187 OSPFv3 Graceful Restart
- RFC 5340 OSPFv3 for IPv6
- RFC 53492 Capabilities Advertisement with BGP-4
- RFC 5424 Syslog Protocol
- RFC 5519 Multicast Group Membership Discovery MIB (MLDv2 only)
- RFC 5701 IPv6 Address Specific BGP Extended Community Attribute
- RFC 5722 Handling of Overlapping IPv6 Fragments
- RFC 5798 VRRP (exclude Accept Mode and sub-sec timer)
- RFC 5880 Bidirectional Forwarding Detection
- RFC 6987 OSPF Stub Router Advertisement
- RFC 7047 The Open vSwitch Database Management Protocol
- RFC 7059 A Comparison of IPv6-overoIPv4 Tunnel Mechanisms

- RFC 7313 Enhanced Route Refresh Capability for BGP-4
- RFC 768 User Datagram Protocol
- RFC 783 TFTP Protocol (revision 2)
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 813 Window and Acknowledgement Strategy in TCP
- RFC 815 IP datagram reassembly algorithms
- RFC 8201 Path MTU Discovery for IP version 6
- RFC 826 ARP
- RFC 879 TCP maximum segment size and related topics
- RFC 896 Congestion control in IP/TCP internetworks
- · RFC 917 Internet subnets
- RFC 919 Broadcasting Internet Datagrams
- RFC 922 Broadcasting Internet Datagrams in the Presence of Subnets (IP\_BROAD)
- RFC 925 Multi-LAN address resolution

#### **ARUBA CX 8360 SWITCHES AND ACCESSORIES**

#### Aruba CX 8360 Bundles<sup>16</sup>

- JL700A Aruba 8360-32Y4C Bundle includes: 32 x 25Gb SFP ports & 4 x 100Gb QSFP ports MACsec switch, 3 Port-to-Power Fans and 2 Port-to-Power Power Units
- JL701A Aruba 8360-32Y4C Bundle includes: 32 x 25Gb SFP ports & 4 x 100Gb QSFP ports MACsec switch<sup>15</sup>, 3 Powerto-Port Fans and 2 Power-to-Port Power Units
- JL702A Aruba 8360-16Y2C Bundle includes: 16 x 25Gb SFP ports & 2 x 100Gb QSFP ports switch<sup>18</sup>, 3 Port-to-Power Fans and 2 Port-to-Power Power Units
- JL703A Aruba 8360-16Y2C Bundle includes: 16 x 25Gb SFP ports & 2 x 100Gb QSFP ports switch<sup>16</sup>, 3 Power-to-Port Fans and 2 Power-to-Port Power Units
- JL706A Aruba 8360-48XT4C Bundle includes: 48 x 10GBase-T ports & 4 x 100Gb QSFP ports switch<sup>19</sup>, 3 Port-to-Power Fans and 2 Port-to-Power Power Units
- JL707A Aruba 8360-48XT4C Bundle includes: 48 x 10GBase-T ports & 4 x 100Gb QSFP ports switch<sup>18</sup>, 3 Power-to-Port Fans and 2 Power-to-Port Power Units
- JL708A Aruba 8325-12C Bundle includes: 12 x 100Gb QSFP ports switch<sup>20</sup>, 3 Port-to-Power Fans and 2 Port-to-Power Power Units

<sup>&</sup>lt;sup>16</sup> Bundles include Aruba 8360 switches fully equipped with redundant fan and power supply unit accessories; Rack mounting accessories are not included and shall be ordered separately

<sup>&</sup>lt;sup>17</sup> JL700A and JL701A include the 8360-32Y4C base switch [JL717A] that is not sold individually

<sup>18</sup> JL702A and JL703A include the 8360-16Y2C base switch [JL718A] that is not sold individually

<sup>&</sup>lt;sup>19</sup> JL706A and JL707A include the 8360-48Y6C base switch [JL720A] that is not sold individually

- JL709A Aruba 8325-12C Bundle includes: 12 x 100Gb QSFP ports switch<sup>19</sup>, 3 Power-to-Port Fans and 2 Power-to-Port Power Units
- JL710A Aruba 8360-24XF2C Bundle includes: 24 x 10Gb SFP ports & 2 x 100Gb QSFP ports switch<sup>21</sup>, 3 Port-to-Power Fans and 2 Port-to-Power Power Units
- JL711A Aruba 8360-24XF2C Bundle includes: 24 x 10Gb SFP ports & 2 x 100Gb QSFP ports switch<sup>20</sup>, 3 Power-to-Port Fans and 2 Power-to-Port Power Units

#### **Power supply**

- JL600A Aruba 8360 550W Port-to-Power 100-240VAC Power Supply
- JL712A Aruba 8360 550W Power-to-Port 100-240VAC Power Supply

#### Accessories

- · JL714A Aruba 8360 Port-to-Power Fan
- JL715A Aruba 8360 Power-to-Port Fan

#### Mounting kit (required when ordering a bundle)

- · JL602A Aruba X412 1U Universal 2-post RM Kit
- J9583B Aruba X414 1U Universal 4-post RM Kit

#### Air duct

 JL716A 4-post Air Duct kit (4-post rack mount kit sold separately)

#### Console Cable

Aruba X2C2 RJ45 to DB9 Console Cable (JL448A)

#### Transceivers<sup>22, 24</sup>

- Aruba 1G SFP LC SX 500m MMF XCVR (J4858D)
- Aruba 1G SFP LC SX 500m MMF TAA XCVR (JL745A)
- Aruba 1G SFP LC LX 10km SMF XCVR (J4859D)
- · Aruba 1G SFP LC LX 10km SMF TAA XCVR (JL746A)
- Aruba 1G SFP LC LH 70km SMF XCVR (J4860D)
- Aruba 1G SFP RJ45 T 100m Cat5e XCVR (J8177D)
- Aruba 1G SFP RJ45 T 100m Cat5e TAA XCVR (JL747A)
- Aruba 10G SFP+ LC SR 300m MMF XCVR (J9150D)
- Aruba 10G SFP+ LC SR 300m MMF TAA XCVR (JL748A)
- Aruba 10G SFP+ LC LR 10km SMF XCVR (J9151E)

- Aruba 10G SFP+ LC LR 10km SMF TAA XCVR (JL749A)
- Aruba 10G SFP+ LC ER 40km SMF XCVR (J9153D)
- Aruba 10GBASE-T SFP+ RJ45 30m Cat6A XCVR (JL563A)
- · Aruba 10G SFP+ to SFP+ 1m DAC Cable (J9281D)
- Aruba 10G SFP+ to SFP+ 3m DAC Cable (J9283D)
- HPE (Compute) BLc 10G SFP+ 3m Direct Attach Cable (487655-B21)
- HPE (Compute) BLc 10G SFP+ 5m Direct Attach Cable (537963-B21)
- Aruba 25G SFP28 LC SR 100m MMF Transceiver (JL484A)
- Aruba 25G SFP28 LC eSR 400m MMF Transceiver (JL485A)
- Aruba 25G SFP28 LC LR 10km SMF Transceiver (IL486A)
- Aruba 25G SFP28 to SFP28 0.65m Direct Attach Copper Cable (JL487A)
- Aruba 25G SFP28 to SFP28 3m Direct Attach Copper Cable (JL488A)
- Aruba 25G SFP28 to SFP28 5m Direct Attach Copper Cable (JL4849)
- HPE (Compute) 25G SFP28 to SFP28 3m Direct Attach Cable (844477-B21)
- HPE (Compute) 25G SFP28 to SFP28 5m Direct Attach Cable (844480-B21)
- Aruba 25G SFP28 to SFP28 3m Active Optical Cable (R0M44A)
- Aruba 25G SFP28 to SFP28 7m Active Optical Cable (R0M45A)
- Aruba 25G SFP28 to SFP28 15m Active Optical Cable (ROZ21A)
- Aruba 40G QSFP+ LC BiDi 150m MMF XCVR (JL308A)
- HPE X142 40G QSFP+ MPO SR4 Transceiver (JH231A)
- HPE X142 40G QSFP+ MPO eSR4 300M XCVR (JH233A)
- HPE X142 40G QSFP+ LC LR4 SM Transceiver (JH232A)
- · Aruba 40G QSFP+ LC ER4 40km SMF XCVR (Q9G82A)
- HPE X242 40G QSFP+ to QSFP+ 1m DAC Cable (JH234A)
- HPE X242 40G QSFP+ to QSFP+ 3m DAC Cable (JH235A)

<sup>&</sup>lt;sup>20</sup> JL708A and JL709A include the 8360-12C base switch [JL721A] that is not sold individually

 $<sup>^{\</sup>rm 21}$  JL710A and JL711A include the 8360-24XF2C base switch [JL722A] that is not sold individually

<sup>&</sup>lt;sup>22</sup> 8360 Series Switches do not support the use of 10G LRM technology, nor 7M 10G DAC lengths

<sup>&</sup>lt;sup>23</sup> Breakout cable not supported on 8360 48XT4C models JL706A/JL707A (no support for split ports)

<sup>&</sup>lt;sup>24</sup> Consult the ArubaOS-Switch and AOS-CX Transceiver Guide in the Aruba Support Portal for the minimum required software releases to support these transceivers. Guide also provides certain limitations for specific transceivers for use on switch models.

- HPE X242 40G QSFP+ to QSFP+ 5m DAC Cable (JH236A)
- HPE (Compute) QSFP+ to 4xSFP+ 3m Breakout Direct Attach Cable (721064-B21)
- HPE (Compute) HPE BLc QSFP+ to 4x10G SFP+ AOC 15m Opt (721076-B21)
- Aruba 100G QSFP28 MPO SR4 MMF Transceiver (JL309A)
- Aruba 100G QSFP28 LC LR4 SMF Transceiver (JL310A)
- Aruba 100G QSFP28-QSFP28 1m Direct Attach Copper Cable (R0Z25A)
- Aruba 100G QSFP28-QSFP28 3m Direct Attach Copper Cable (JL307A)
- Aruba 100G QSFP28-QSFP28 5m Direct Attach Copper Cable (R0Z26A)
- Aruba 100G QSFP28 to QSFP28 7m AOC (R0Z27A)
- Aruba 100G QSFP28 to QSFP28 15m AOC (R0Z28A)
- · Aruba 100G QSFP28 to QSFP28 30m AOC (R0Z29A)
- HPE (Compute) QSFP28 to 4x25G SFP28 7m AOC (845420-B21)
- HPE (Compute) QSFP28 to 4x25G SFP28 15m AOC (845424-B21)
- HPE (Compute) QSFP28 to 4xSFP28 3m Breakout Direct Attach Cable (845416-B21)<sup>23</sup>

#### **Aruba Central Foundation Licenses**

- Aruba Central 8xxx Switch Foundation 1 year Subscription E-STU (R3K03AAE)
- Aruba Central 8xxx Switch Foundation 3 year Subscription E-STU (R3K04AAE)
- Aruba Central 8xxx Switch Foundation 5 year Subscription E-STU (R3K05AAE)
- Aruba Central 8xxx Switch Foundation 7 year Subscription E-STU (R3K06AAE)
- Aruba Central 8xxx Switch Foundation 10 year Subscription E-STU (R3K07AAE)
- Aruba Central On-Premises 8xxx Switch Foundation 1 year Subscription E-STU (R6U88AAE)
- Aruba Central On-Premises 8xxx Switch Foundation 3 year Subscription E-STU (R6U89AAE)
- Aruba Central On-Premises 8xxx Switch Foundation 5 year

- Subscription E-STU (R6U90AAE)
- Aruba Central On-Premises 8xxx Switch Foundation 7 year Subscription E-STU (R6U91AAE)
- Aruba Central On-Premises 8xxx Switch Foundation 10 year Subscription E-STU (R6U92AAE)

For details and complete listing of Aruba Central licensing options, please refer to the Aruba Central Data Sheet.

#### Support

- JL700A: 4 Hour Onsite 3 Year (HU7U7E)
- JL701A: 4 Hour Onsite 3 Year (HU7U7E)
- JL702A: 4 Hour Onsite 3 Year (HU7U7E)
- JL703A: 4 Hour Onsite 3 Year (HU7U7E)
- JL706A: 4 Hour Onsite 3 Year (HU7U7E)
- JL707A: 4 Hour Onsite 3 Year (HU7U7E)
- JL708A: 4 Hour Onsite 3 Year (HU7U7E)
- JL709A: 4 Hour Onsite 3 Year (HU7V9E)
- JL710A: 4 Hour Onsite 3 Year (HU7U7E)
- JL711A: 4 Hour Onsite 3 Year (HU7U7E)

For Aruba Central hardware only support, 24x7 TAC support, and many other support options, go to Support Services Central SKU lookup tool.



© Copyright 2021 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.

DS\_ArubaCX8360SwitchSeries\_RVK\_070721 a50002121enw



## **HPE Aruba Networking** CX 6300 Switch Series



#### **Key benefits**

- Stackable Layer 3 switches with BGP, EVPN, VXLAN, VRF, and OSPF with robust security and
- · High performance up to 1760 Gbps switching capacity, up to 1310 MPPS of throughput and up to 400 Gbps stacking bandwidth
- Compact 1U switches with full density HPE Smart Rate (1G/2.5G/5G/10GbE) multi-gigabit, up to 90W PoE (Class 8) and 10G LRM SFP+ available on select models

# VSF stacking not supported on 1G ports.

#### **Product overview**

The HPE Aruba Networking CX 6300 Switch Series is a modern, flexible, and intelligent family of stackable switches ideal for enterprise network access, aggregation. core, and data center top of rack (ToR) deployments. Created for game-changing operational efficiency with built-in security and resiliency, the 6300 switches provide the foundation for high-performance networks supporting IoT, mobile and cloud applications.

Built from the ground up with a combination of cutting-edge hardware, software and analytics and automation tools, the stackable 6300 switches are part of the HPE Aruba Networking CX switching portfolio, designed for today's enterprise campus, branch, and data center networks.

By combining a modern, fully programmable OS with the HPE Aruba Networking Network Analytics Engine, the 6300 switches provide industry leading monitoring and troubleshooting capabilities for the access

A powerful HPE Aruba Networking Gen7 ASIC architecture delivers performance and robust feature support with flexible programmability for tomorrow's applications. The HPE Aruba Networking Virtual Stacking Framework (VSF) allows for stacking of up to 10 switches, providing scale and simplified management. This flexible series has built-in wirespeed 1/10/25/50GbE<sup>1</sup> and 40/100GbE uplinks and supports high density IEEE 802.3bt high power PoE. HPE Smart Rate multi-gigabit Ethernet paves the way for high speed access points and IoT devices by delivering fast connectivity and high power PoE using existing cabling.



<sup>1 50</sup>G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and SOX44A switch models, which requires QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only.

#### Key benefits (continued)

- Power-to-port switch bundle with back-to-front airflow ideal for data center 1GbE ToR and OOBM deployments
- Three stackable, high-performance Layer 2-only CX 6300L access switches with HPE Smart Rate Multi-Gigabit and MACsec encryption
- Built-in high speed 1/10/25/40/50/100GbE uplinks<sup>1</sup>
- 50GbE connectivity with QSFP to SFP56 DAC and 50G DACs<sup>1</sup>
- Intelligent monitoring, visibility, and remediation with HPE Aruba Networking Network Analytics Engine
- Manage via single pane of glass with HPE Aruba Networking Central across wired, wireless, and WAN
- HPE Aruba Networking Switch Multi-Edit Software support for automated configuration and verification
- HPE Aruba Networking Dynamic Segmentation enables secure and simple access for users and IoT

Modular models offer redundancy and PoE customization with hot-swappable power supplies and fans. Back-to-front airflow available in switch bundle for hot-cold aisle top-of-rack (TOR) and out-of-band-management (OOBM) data center deployments.

Dynamic Segmentation extends HPE Aruba Networking's Foundational wireless role-based policy capability to HPE Aruba Networking wired switches. This means that the same security, user experience, and simplified IT management can be enjoyed throughout the network. Regardless of how users and IoT devices connect, consistent policies are enforced across wired and wireless networks, keeping traffic secure and separate.

#### Product differentiators

#### AOS-CX — a modern operating system

The HPE Aruba Networking CX 6300 Switch Series is based on AOS-CX, a modern, database-driven operating system that automates and simplifies many critical and complex network tasks. A built-in time series database enables customers and developers to utilize software scripts for historical troubleshooting, as well as analysis of past trends. This helps predict and avoid future problems due to scale, security, and performance bottlenecks. Because AOS-CX is built on a modular architecture with a stateful database, our operating system provides the following unique capabilities:

- Easy access to all network state information allows unique visibility and analytics
- REST APIs and Python scripting for fine-grained programmability of network tasks
- A micro-services architecture that enables full integration with other workflow systems and services
- Continuous telemetry data with WebSocket subscriptions for event driven automation
- Continual state synchronization that provides superior fault tolerance and high availability

 All software processes communicate with the database rather than each other, ensuring near real-time state and resiliency and allowing individual software modules to be independently upgraded for higher availability

Every CX switch includes AOS-CX at no cost and with an active, perpetual set of native features which has everything needed to deploy, connect, and troubleshoot an enterprise network, including:

- Network Analytics Engine (NAE)
- Dynamic Segmentation
- Switch Stacking
- High Availability and Resiliency
- Quality of Service (QoS)
- Layer 2 Switching
- Layer 3 Services and Routing
- IP Multicast
- · Network Security
- Support for HPE Aruba Networking Switch Multi-Edit Software

In addition to the native features available in AOS-CX, we offer an optional, term-based HPE Aruba Networking CX Advanced Feature Pack that unlocks visibility and advanced security use cases.

For more information, read the HPE Aruba Networking CX Feature Pack Ordering Guide.

# HPE Aruba Networking Central — unified single pane of glass management

HPE Aruba Networking Central is an Al-powered solution that simplifies IT operations, improves agility, and reduces costs by unifying management of all network infrastructure. Built for enterprise-grade resiliency and security, while simple enough for smaller businesses with limited IT staff, HPE Aruba Networking Central is your single point of visibility and control that spans the entire network — from branch to data center, wired and wireless LAN to WAN.

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking, 50G fransceived and DACs are not supported on 50F91A and 50X44A switch models, which requires QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

Available as a cloud-based or on-premises solution, HPE Aruba Networking Central is designed to simplify Day 0 through Day 2 operations with streamlined workflows for tasks such as virtual switch stack creation, automated monitoring using Al-powered insights and NAE, as well as a unified view of all devices and users, both wired and wireless. Comprehensive switch management capabilities include configuration, on-boarding, monitoring, troubleshooting, and reporting.

An HPE Aruba Networking Central Foundational subscription enables comprehensive switch management capabilities that include configuration, onboarding, monitoring, troubleshooting, and reporting. An HPE Aruba Networking Central Advanced subscription expands these capabilities with premium security and AlOps, including the HPE Aruba Networking Central NetConductor Fabric Wizard and Policy Manager to enable Dynamic Segmentation and distributed enforcement at a global scale.

Additionally, an HPE Aruba Networking Central Advanced subscription enables the CX Advanced Feature Pack so there is no need to separately purchase a CX Advanced Feature Pack. This streamlines operational efficiency, reducing the need for your IT team to keep track of multiple subscriptions, active terms, and renewal dates.

For more information on HPE Aruba Networking Central subscriptions, see the HPE Aruba Networking Central SaaS Subscription Ordering Guide.

### HPE Aruba Networking Network Analytics Engine — advanced monitoring and diagnostics

For enhanced visibility and troubleshooting, HPE Aruba Networking's Network Analytics Engine (NAE) automatically monitors and analyzes events that can impact network health.

Advanced telemetry and automation provide the ability to easily identify and troubleshoot network, system, application, and security related issues easily, through

the use of Python agents, CLI-based agents, CLI-based agents and REST APIs.

The Time Series Database (TSDB) stores configuration and operational state data, making it available to quickly resolve network issues. The data may also be used to analyze trends, identify anomalies, and predict future capacity requirements.

HPE Aruba Networking Central uses NAE and agents to deliver switch monitoring, analytics, and enhanced troubleshooting for wired assurance. HPE Aruba Networking Switch Multi-Edit Software and third-party tools such as ServiceNow and Slack provide the intelligence to integrate NAE alerts into IT service management processes, speeding problem resolution.

# HPE Aruba Networking Switch Multi-Edit Software — automated switch configuration and management

The HPE Aruba Networking CX portfolio empowers IT teams to orchestrate multiple switch configuration changes for smooth end-to-end service rollouts. HPE Aruba Networking Switch Multi-Edit Software introduces automation that allows for rapid network-wide changes, and ensures policy conformance post network updates. Intelligent capabilities include search, edit, validation (including conformance checking), deployment, and audit features. Capabilities include:

- Centralized configuration with validation for consistency and compliance
- Time savings via simultaneous viewing and editing of multiple configurations
- Customized validation tests for corporate compliance and network change analysis
- Automated large-scale configuration deployment without programming
- Network health and topology visibility via HPE Aruba Networking NAE integration

**Note:** A separate software license is required to use HPE Aruba Networking Switch Multi-Edit Software.

# HPE Aruba Networking CX Mobile App — true deployment convenience

An easy to use mobile app simplifies connecting and managing HPE Aruba Networking CX 6300 switches for any size project. Switch information can also be imported into HPE Aruba Networking Switch Multi-Edit Software for simplified configuration management and to continuously validate the conformance of configurations anywhere in the network. The HPE Aruba Networking CX Mobile App is available for download.

# HPE Aruba Networking ASICs — programmable innovation

Based on over 30 years of continuous investment, HPE Aruba Networking's ASICs create the basis for innovative and agile software feature advancements, unparalleled performance, and deep visibility. These programmable ASICs are purpose-built to allow for a tighter integration of switch hardware and software within campus and data center architectures to optimize performance and capacity. Virtual Output Queuing (VOQ) isolates congestion, prevents Head of Line Blocking (HOLB), and allows full line rate on outgoing (egress) ports. Flexible ASIC resources enable HPE Aruba Networking's NAE solution to inspect all data, which allows for industry-leading analytics capabilities. The HPE Aruba Networking CX 6300 is based on the HPE Aruba Networking Gen7 ASIC architecture

#### HPE Aruba Networking Dynamic Segmentation — campus and branch fabric

The HPE Aruba Networking Dynamic Segmentation solution enables seamless mobility, consistent policy enforcement, and automated configurations for wired and wireless clients across networks of all sizes. It unifies role-based access and policy enforcement across LAN, WLAN, and SD-WAN networks with centralized policy definition and dedicated enforcement points, ensuring that users and devices can only communicate with destinations consistent with their role — keeping traffic secure and separate.

Dynamic Segmentation is based on establishing least privilege access to IT resources by segmenting traffic based on identity, a fundamental concept of both Zero Trust and SASE frameworks where trust is based on roles and policies, not on where and how a user or device connects.

This innovation begins with colorless ports and role-based micro-segmentation technologies. Colorless ports allow wired clients to connect to any switch port, with the configuration automated using RADIUS-based access control. This eliminates the need for manual on-boarding of clients, including IoT devices, onto the network.

Role-based micro-segmentation delivers benefits of reduced subnet and VLAN sprawl, simplified policy definition, and scalable policy enforcement by introducing the concept of client user roles. Independent of network constructs such as VLANs and VRFs. clients can be grouped into a user role based on their identity, allowing the colorless ports technology to be extended to the centralized overlay fabric, as clients are on-hoarded with automatic tunnel creation based on the associated user roles policy. The user roles policy offers the choice between micro-segmentation using centralized and unified policy enforcement for wireless and wired traffic with Layer 7 stateful firewall on gateways or a distributed approach with a Layer 4 role-role ACL on switches

Dynamic Segmentation provides scale and flexibility in network design by allowing the stretching of VLANs and subnets across the entire network with an EVPN/VXLAN-based distributed overlay fabric. Fabric overlays use VXLAN or VXLAN-GBP tunnels on the data plane and provide the option of a Multi-Protocol BGP EVPN control plane for large deployments, or a static Layer 2 control plane for simplified deployments.

#### **Mobility and IoT performance**

The HPE Aruba Networking CX 6300 Switch Series uses a fully distributed architecture that utilizes the HPE Aruba Networking Gen7 ASICs. This ensures that our switches offer very low latency, increased packet buffering, and adaptive power consumption. All switching and routing are wire-speed to meet the demands of bandwidth-intensive applications today and in the future. Each switch includes the following:

- Up to 1760 Gbps in non-blocking bandwidth and up to 1310 Mpps for forwarding
- 1/10/25/40/50/100G uplinks<sup>1</sup> and large TCAM sizes ideal for mobility and IoT deployments in large campuses with several thousand clients
- Selectable queue configurations that allow for increased performance by defining a number of queues and associated memory buffering to best meet the requirements of network applications

#### VSF Stacking — scale and simplicity

The HPE Aruba Networking Virtual Switching Framework (VSF) allows you to quickly grow your network using high performance front plane stacking. Additional features include:

- Support for up to 10 switches (or members) in a stack via chain or ring topology
- Flexibility to create stacks that span longer distances such as hundreds of meters across campuses to kilometers between sites using long-range 10GbE/25GbE transceivers
- Flexibility to mix both modular and fixed HPE Aruba Networking 6300 models within a single stack to meet your deployment requirements
- Simplified configuration and management as the switches act as a single chassis when stacked
- High availability by design using VSF in-service software upgrades for ISSU orchestration and no downtime or restart when upgrading within the same major release (requires at least a 2 member VSF stack)
- The HPE Aruba Networking CX Mobile app provides support for a validated stack deployment that ensure that all stack links and uplinks are connected properly

# An HPE Aruba Networking CX 6300 switch for any enterprise environment

Whether in the branch office or a small to large enterprise environment, you can choose from 24 and 48 port 1U models. Each switch includes four high-speed built-in uplinks that auto-negotiate between 1GbE, 10GbE, 25GbE, 40GbE and 100GbE¹ to deliver non-blocking performance. Fixed format (F) models include built-in power supplies. The modular (M) models have rear slots for hot swappable power supplies that allow you to customize your PoE requirements, and its fans are field replaceable. Additional highlights:

- Compact 1U models support:
  - 24 and 48 ports of HPE Smart Rate
     Multi-gigabit Ethernet IEEE 802.3bz
     (100M2/1GbE/2.5GbE/5GbE/10GbE)
     supporting high power IEEE 802.3bt
     Class 6 (60W) to Class 8 (90W)
  - High density 24 port SFP+ model which is ideal for aggregation
- -1/10/25/40/50/100GbE uplink<sup>1</sup> port connectivity
- HPE Smart Rate Multi-Gigabit (IEEE 802.3bz) Ethernet supports high speed wireless access points
- For deployments that need higher port and PoE density, the 6300 supports up to 90W of PoE in a 48-port switch for a total of 2880W of PoE
- Industry standard IEEE 802.3bt High Power PoE support (Class 8) provides up to 90W to support of the latest IoT devices and APs. PoE support for IEEE 802.3at Power over Ethernet (PoE+) provides up to 30W per port as well as any IEEE 802.3af-compliant end device
- Support for pre-standard PoE detection provides power to legacy PoE devices
- High availability with always-on PoE that supplies PoE power even during scheduled reboots and firmware upgrades
- Quick PoE supplies PoE power to powered devices as soon as the switch is plugged into AC power so device can initialize at same time as switch OS boots up.

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

- Support for Energy Efficient Ethernet IEEE 802.3az reduces power consumption during periods of low network traffic.
- Support for top-of-rack (ToR) and out-of-band management (OOBM) data center deployments with CX 6300M Power-to-port bundle that delivers required power-to-port (back to front) airflow.
- Auto-MDIX provides automatic adjustments for straight-through or crossover cables on all gigabit Ethernet, and Smart Rate<sup>2</sup> ports
- Unsupported Transceiver Mode (UTM) allows to insert and enable all unsupported 1/10/25/40/50/100GbE transceivers and cables. Note that there is no warranty nor support for the transceiver/cable when this feature is used
- IPv6 capabilities include:
  - IPv6 host enables switches to be managed in an IPv6 network
  - Dual stack (IPv4 and IPv6) transitions from IPv4 to IPv6, supporting connectivity for both protocols
  - MLD snooping forwards IPv6 multicast traffic to the appropriate interface
  - -- IPv6 ACL/QoS supports ACL and QoS for IPv6 network traffic
  - IPv6 routing supports Static and OSPFv3 protocols
  - Security provides RA guard, DHCPv6 protection, dynamic IPv6 lockdown, ND snooping, IPv6 Destination Guard, IPv6 DHCP Guard, and IPv6 Router Advertisement Guard
- Jumbo frames allow for high-performance backups and disaster-recovery systems; provides a maximum frame size of 9198 bytes
- Packet storm protection against broadcast and multicast storms with user-defined thresholds
- Smart link enables simple, fast converging link redundancy and load balancing with dual uplinks avoiding Spanning Tree complexities

#### CX 6300L layer 2 switches

Three CX 6300L switch models are available for customers needing scalability, high-capacity, and cost-effective connectivity in the access layer. Features include:

- 24 ports of SR10 (1G/2.5G/5G/10G) or 48 ports of SR5 (1G/2.5G/5G) HPE Smart Rate<sup>2</sup> Multi-gigabit Ethernet downlinks that support high power IEEE 802.3bt Class 6 (60W) to Class 8 (90W) PoE and MACsec 256 data link layer encryption
- Scalability with VSF front-plane stacking up to 10 CX 6300L switch members (does not stack with CX 6300F or CX 6300M switches)
- Layer 2 switching with support for IPv4 based static routing, quality of service (QoS), IPv4 access control lists (ACL), and User-Based Tunneling for Dynamic Segmentation<sup>3</sup>
- Modular, hot-swappable power supplies and fans that allow you to customize for PoE requirements and field replacement needs

#### CX 6300M bundle for data centers

The CX 6300M 48 port power-to-port switch bundle serves as a top of rack (ToR) switch for 1GbE servers and also as a 1GbE out-of-band management (OOBM) switch for data centers server racks. Features include:

- Power-to-port bundle (JL762A) includes 48 port 1GbE switch with 2 x Fan Trays (JL761A) and 1 x power supply (JL760A)
- Back (power-side) to front (1GbE port side) airflow
- 1/10/25/50GbE1 SFP uplinks

#### High availability and resiliency

To ensure a high degree of up-time we offer high availability and multicast features needed for a full Layer 3 deployment at access and aggregation such as PBR, BFD, MSDP, BSR, and IP SLA without the need for software licenses. This includes:

• Hot Swappable Power Supplies available in the 6300 "M" models

- Provides N+1 and N+N redundancy for high reliability in the event of power line or supply failures
- Optional secondary power supplies to increase the total available PoE power
- Fixed power supplies in 6300 "F" models
- Bidirectional Forward Detection (BFD)
   enables sub-second failure detection
   for rapid routing protocol re-balancing,
   supporting both IPV4 and IPv6 networks
- Virtual Router Redundancy Protocol (VRRP) allows groups of two routers to dynamically create highly available routed environments in IPV4 and IPV6 networks
- Unidirectional Link Detection (UDLD) to monitor link connectivity and shut down ports at both ends if unidirectional traffic is detected, preventing loops in STP-based networks
- IEEE 802.3ad LACP supports up to 256 LAGs, each with up to 16 links per LAG; and provides support for static or dynamic groups and a user-selectable hashing algorithm
- IEEE 802.1s Multiple Spanning Tree provides high link availability in VLAN environments where multiple Spanning Trees are required; and legacy support for IEEE 802.1d and IEEE 802.1w
- IEEE 802.3ad link-aggregation-control protocol (LACP) and port trunking support static and dynamic trunks where each trunk supports up to eight links (ports) per static trunk
- Support for Microsoft Network Load Balancer (NLB) for server applications
- Ethernet Ring Protection Switching (ERPS) supports rapid protection and recovery in a ring topology
- Hot-Patching support for standalone CX 6300 and for 6300 with VSF Stacking

#### Quality of Service (QoS) features

To support congestion actions and traffic prioritization, the HPE Aruba Networking CX 6300 Series includes the following:

 Strict priority (SP) queuing and Deficit Weighted Round Robin (DWRR)

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires OSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

<sup>&</sup>lt;sup>2</sup> 100M use on Smart Rate ports is limited to full-duplex only. For 100M half-duplex support, use 1G ports on other models.

<sup>3</sup> VXLAN tunnelling not supported on CX 6300L switch models

- Traffic prioritization (IEEE 802.1p) for real-time classification into 8 priority levels that are mapped to 8 queues
- Layer 4 prioritization based on TCP/UDP port numbers
- Class of Service (CoS) sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ
- Rate limiting sets per-port ingress enforced maximums and per-port, per-queue minimums
- Transmission rates of egressing frames can be limited on a per-queue basis using Egress Queue Shaping (EQS)
- Large buffers for graceful congestion management

## Simplified configuration and management

In addition to HPE Aruba Networking Central, the HPE Aruba Networking CX Mobile App, HPE Aruba Networking Switch Multi-Edit Software and HPE Aruba Networking Network Analytics Engine, the 6300 series offers the following:

- Built-in programmable and easy to use REST API interface
- Simple day zero provisioning
- Scalable ASIC-based wire speed network monitoring and accounting with no impact on network performance; network operators can gather a variety of network statistics and information for capacity planning and real-time network monitoring purposes
- Management interface control enables or disables each of the following depending on security preferences, console port, or reset button
- Industry-standard CLI with a hierarchical structure for reduced training time and expense. Delivers increased productivity in multivendor environments
- Management security restricts access to critical configuration commands, provides multiple privilege levels with password

- protection and local and remote syslog capabilities allow logging of all access
- SNMP v2c/v3 provides SNMP read and trap support of industry standard Management Information Base (MIB), and private extensions
- SNMP support includes: Write Set Speed and Duplex, Write Port Security, Write PoE Priority, Write Config Mgmt, SNMP-Read single OID for average CPU and memory, SNMP MIB View
- SNMP Trap include: Transceiver Traps (insertion/removal), SNMP Trap, SNMP MIB-SNMB Authentication, SNMPv2 MIB, Port Sec MIB-Port Sec, Config MIB-Running Config Change, Config MIB, AAA Server MIB, AAA Server State
- Remote monitoring (RMON) with standard SNMP to monitor essential network functions. Supports events, alarms, history, and statistics groups as well as a private alarm extension group; RMON, and sFlow® provide advanced monitoring and reporting capabilities for statistics, history, alarms and events
- IP Flow Information Export (IPFIX) enables client flow information collection to enhance visibility
- Simplifies configuration while onboarding switches with Zero Touch Provisioning by using Dynamic Border Gateway Protocol (BGP) peering to establish a peer group of switches within an IP range
- Provides insights on latency, failures, and error events through HPE Aruba Networking Central for enhanced visibility during client onboarding
- TFTP and SFTP support offers different mechanisms for configuration updates; trivial FTP (TFTP) allows bidirectional transfers over a TCP/ IP network; Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security
- Debug and sampler utility supports ping and traceroute for IPv4 and IPv6
- Network Time Protocol (NTP) synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among

- all clock-dependent devices within the network so the devices can provide diverse applications based on the consistent time
- IEEE 802.1AB Link Layer Discovery
   Protocol (LLDP) advertises and receives
   management information from adjacent
   devices on a network, facilitating easy
   mapping by network management
   applications
- Dual flash images provides independent primary and secondary operating system files for backup while upgrading
- Assignment of descriptive names to ports for easy identification
- Multiple configuration files can be stored to a flash image
- Ingress and egress port monitoring enable more efficient network problem solving
- Unidirectional link detection (UDLD)
  monitors the link between two switches
  and blocks the ports on both ends of the
  link if the link goes down at any point
  between the two devices
- IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests
- Precision Time Protocol (PTP) allows for precise clock synchronization across distributed network switches as defined in IEEE 1588. Transparent Clock (PTP-TC) and Boundary Clock (PTP-BC) are needed for time critical applications like smart grid power automation, financial systems and more. Boundary Clock makes use of 2-Step time stamping mode.

### **Layer 2 switching**

The following layer 2 services are supported:

- VLAN support and tagging for IEEE 802.1Q (4094 VLAN IDs)
- Jumbo packet support improves the performance of large data transfers; supports frame size of up to 9198 bytes
- IEEE 802.1v protocol VLANs isolate select non-IPv4 protocols automatically into their own VLANs
- Rapid Per-VLAN Spanning Tree (RPVST+) allows each VLAN to build a separate

Spanning Tree to improve link bandwidth usage; is compatible with PVST+

- MVRP allows automatic learning and dynamic assignment of VLANs
- VXLAN encapsulation (tunnelling) protocol for overlay network that enables a more scalable virtual network deployment<sup>1</sup>
- Bridge Protocol Data Unit (BPDU) tunnelling Transmits STP BPDUs transparently, allowing correct tree calculations across service providers, WANs, or MANs
- Port mirroring duplicates port traffic (ingress and egress) to a monitoring port; supports 4 mirroring groups
- STP supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- Internet Group Management Protocol (IGMP snooping) Controls and manages the flooding of multicast packets in a Layer 2 network
- IPv4 Multicast in VXLAN/EVPN Overlay support allows PIM-SM/IGMP snooping in the VXLAN Overlay<sup>1</sup>
- IPv6 VXLAN/EVPN Overlay support, allows IPv6 traffic over the VXLAN overlay<sup>1</sup>
- VXLAN ARP/ND suppression allows minimization of ARP and ND traffic flooding within individual VXLAN segments, thus optimizing the VXLAN network<sup>1</sup>
- QinQ support to improve the VLAN utilization by adding another 802.1Q tag to tagged packets

#### • Layer 3 services

The following layer 3 services are supported:

- Bidirectional Forwarding Detection (BFD) enables link connectivity monitoring and reduces network convergence time for static route, OSPFv2 and VRRP
- User Datagram Protocol (UDP) helper function allows UDP broadcasts to be directed across router interfaces to specific

IP unicast or subnet broadcast addresses and prevents server spoofing for UDP services such as DHCP

- Loopback interface address defines an address in Open Shortest Path First (OSPF), improving diagnostic capability
- Route maps provide more control during route redistribution; allow filtering and altering of route metrics
- Address Resolution Protocol (ARP) determines the MAC address of another IP host in the same subnet; supports static ARPs; gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network
- Dynamic Host Configuration Protocol (DHCP) simplifies the management of large IP networks and supports client; DHCP Relay enables DHCP operation across subnets
- DHCP server centralizes and reduces the cost of IPv4 address management
- Domain Name System (DNS) provides a distributed database that translates domain names and IP addresses, which simplifies network design; supports client and server
- mDNS (Multicast Domain Name System)
   Gateway enables discovery of mDNS
   groups across L3 boundaries
- Generic Routing Encapsulation (GRE) enables tunneling traffic from site to site over a Layer 3 path
- Supports internal loopback testing for maintenance purposes and increased availability; loopback detection protects against incorrect cabling or network configurations and can be enabled on a per-port or per-VLAN basis for added flexibility
- IP sub-interface is a virtual interface created by dividing physical interface into multiple logical interfaces tagged using different VLAN-IDs. A physical interface can be a regular physical, Split port or LAG L3 interface. A sub-interface is used for many uses-cases such as VRF-lite

interconnection and inter-VLAN routing (router on-a-stick)

#### Layer 3 routing

The following layer 3 routing services are supported:

- Border Gateway Protocol (BGP) provides IPv4 and IPv6 routing, which is scalable, robust, and flexible
- Border Gateway Protocol 4 (BGP-4) delivers an implementation of the Exterior Gateway Protocol (EGP) utilizing path vectors; uses TCP for enhanced reliability for the route discovery process; reduces bandwidth consumption by advertising only incremental updates; supports extensive policies for increased flexibility; scales to very large networks with graceful restart capability
- Equal-Cost Multipath (ECMP) enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth
- Multi-protocol BGP (MP-BGP) enables sharing of IPv6 routes using BGP and connections to BGP peers using IPv6
- Routing Information Protocol version 2 (RIPv2) provides an easy to configure routing protocol for small networks as while RIPng provides support for small IPv6 networks
- Open shortest path first (OSPF) delivers faster convergence; uses link-state routing Interior Gateway Protocol (IGP), which supports ECMP, NSSA, and MD5 authentication for increased security and graceful restart for faster failure recovery.
- OSPF provides OSPFv2 for IPv4 routing and OSPFv3 for IPv6 routing
- Static IP routing provides manually configured routing; includes ECMP capability
- Policy-based routing uses a classifier to select traffic that can be forwarded based on policy set by the network administrator
- Static IPv4 and IPv6 routing provides simple manually configured IPv4 and IPv6 routes

- IP performance optimization provides a set of tools to improve the performance of IPv4 networks; includes directed broadcasts, customization of TCP parameters, support of ICMP error packets, and extensive display capabilities
- Dual IP stack maintains separate stacks for IPv4 and IPv6 to ease the transition from an IPv4-only network to an IPv6-only network design

#### Security

The HPE Aruba Networking CX 6300 Switch Series come with an integrated trusted platform module (TPM) for platform integrity. This ensures the boot process started from a trusted combination of HPE Aruba Networking AOS-CX switches. Other security features include:

- AOS-CX uses FIPS 140-2 validated cryptography for protection of sensitive information
- Access control list (ACL) support for both IPv4 and IPv6; allows for filtering traffic to prevent unauthorized users from accessing the network, or for controlling network traffic to save resources; rules can either deny or permit traffic to be forwarded; rules can be based on a Layer 2 header or a Layer 3 protocol header
- ACLs also provide filtering based on the IP field, source/destination IP address/subnet, and source/ destination TCP/UDP port number on a per-VLAN or per-port basis
- Enrollment over Secure Transport (EST)
  enables secure certificate enrollment,
  allowing for easier enterprise management
  of PKI
- Remote Authentication Dial-In User Service (RADIUS)
- Terminal Access Controller Access-Control System (TACACS+) delivers an authentication tool using TCP with encryption of the full authentication request, providing additional security
- Management access security for both on- and off-box authentication for administrative access. RADIUS or TACACS+ can be used to provide encrypted user authentication.

Additionally, TACACS+ can also provide admin authorization services

- Control Plane Policing sets rate limit on control protocols to protect CPU overload from DOS attacks
- Supports multiple user authentication methods. Uses an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server to authenticate in accordance with industry standards
- Web based authentication using Captive Portal on ClearPass is supported for use cases such as Guest Access and for devices that don't support 802.1x or MAC Auth.
- Supports MAC-based client authentication
- Concurrent IEEE 802.1X, Web, and MAC authentication schemes per switch port accepts up to 32 sessions of IEEE 802.1X, Web, and MAC authentications
- DHCP protection blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks
- Secure management access delivers secure encryption of all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3
- Switch CPU protection provides automatic protection against malicious network traffic trying to shut down the switch
- ICMP throttling defeats ICMP denial-of-service attacks by enabling any switch port to automatically throttle ICMP traffic
- Identity-driven ACL enables implementation of a highly granular and flexible access security policy and VLAN assignment specific to each authenticated network user
- STP BPDU port protection blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks
- Dynamic IP lockdown works with DHCP protection to block traffic from unauthorized hosts, preventing IP source address spoofing
- Dynamic ARP protection blocks ARP broadcasts from unauthorized hosts,

- preventing eavesdropping or theft of network data
- STP root guard protects the root bridge from malicious attacks or configuration mistakes
- Port security allows access only to specified MAC addresses, which can be learned or specified by the administrator
- MAC address lockout prevents particular configured MAC addresses from connecting to the network
- Source-port filtering allows only specified ports to communicate with each other
- Secure shell encrypts all transmitted data for secure remote CLI access over IP networks
- Secure Sockets Layer (SSL) encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- Secure FTP allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file
- Critical Authentication Role ensures that important infrastructure devices such as IP phones are allowed network access even in the absence of a RADIUS server
- MAC Pinning allows non-chatty legacy devices to stay authenticated by pinning client MAC addresses to the port until the clients logoff or get disconnected
- Security banner displays a customized security policy when users log in to the switch
- RadSec enables RADIUS authentication and accounting data to be passed safely and reliably across insecure networks
- Private VLAN (PVLAN) provides traffic isolation between users on the same VLAN; typically a switch port can only communicate with other ports in the same community and/or an uplink port, regardless of VLAN ID or destination MAC address. This extends network security by restricting peer-peer communication to prevent variety of malicious attacks.

Page 9

- Auto VLAN Creation automates VLAN creation on access switches for authenticated clients.
- DHCP smart relay allows the DHCP relay agent to use secondary IP addresses when the DHCP server does not reply the DHCP-OFFER message
- IEEE 802.1AE MACsec provides switch-to-switch and switch-to-host security on a link between two ports using standard encryption and authentication, available on uplink and downlink ports

#### Visibility and advanced security

Customers can choose to upgrade their switch with an HPE Aruba Networking CX Advanced Feature Pack to unlock the following benefits for their business:

- Deep visibility and application recognition with CX Edge Insights, including granular datapoint collection with search, sort and reporting.
- Role and application-based policy control and enforcement with the ability to recognize more than 3800 applications across 22 categories, and take action.
   Policy actions include drop, remark, and mirror.
- Hardened network security posture with WAN MACsec encryption services and support for Reflexive Policy.

#### **Multicast**

- IGMP Snooping allows multiple VLANs to receive the same IPv4 multicast traffic, lessening network bandwidth demand by reducing multiple streams to each VLAN
- Multicast Listener Discovery (MLD) enables discovery of IPv6 multicast listeners; support MLD v1 and v2
- Protocol Independent Multicast (PIM) defines modes of IPv4 and IPv6 multicasting to allow one-to-many and many-to-many transmission of information; supports PIM Sparse Mode (SM), Source-Specific Multicast (SSM), and Dense Mode (DM) for both IPv4 and IPv6
- Internet Group Management Protocol (IGMP) utilizes Any-Source Multicast (ASM) to manage IPv4 multicast networks; supports IGMPv1, v2, and v3
- Multicast Service Discovery Protocol (MSDP) efficiently routes multicast traffic through core networks

 MSDP for Anycast RP is an intra-domain feature that provides redundancy and load-sharing capabilities

#### Convergence

- IP multicast routing includes PIM Sparse, Source-Specific Multicast (SSM), and Dense modes to route IP multicast traffic
- IP multicast snooping (data-driven IGMP) prevents flooding of IP multicast traffic
- Protocol Independent Multicast for IPv6 supports one-to-many and many-to-many media casting use cases such as IPTV over IPv6 networks
- LLDP-MED (Media Endpoint Discovery) defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- PoE allocations supports multiple methods (allocation by usage or class, with LLDP and LLDP-MED) to allocate PoE power for more efficient power management and energy savings.
- Auto VLAN configuration for voice RADIUS VLAN uses a standard RADIUS attribute and LLDP-MED to automatically configure a VLAN for IP phones
- CDPv2 uses CDPv2 to configure legacy IP phones

#### **Additional information**

- Green initiative support for RoHS (EN 50581:2012) and WEEE regulations
- TAA-compliant CX 6300 switch models are available

#### Customer first, customer last support

When your network is important to your business, then your business needs the backing of HPE Aruba Networking Support Services. Partner with HPE Aruba Networking product experts to increase your team productivity, keep pace with technology advances, software releases, and obtain break-fix support.

Foundational Care for HPE Aruba Networking support services include priority access to HPE Aruba Networking Technical Assistance Center(TAC) engineers 24x7x365, flexible hardware and on-site support options, and total coverage for HPE Aruba Networking products. HPE Aruba Networking switches with assigned HPE Aruba Networking Central subscriptions benefit with option for additional hardware support only.

HPE Aruba Networking Pro Care adds fast access to senior HPE Aruba Networking TAC engineers, who are assigned as a single point of contact for case management, reducing the time spent addressing and resolving issues.

For complete details on Foundational Care and HPE Aruba Networking Pro Care, please visit: arubanetworks.com/supportservices/

#### Warranty, services and support

Limited Lifetime Warranty, see HPE Aruba
Networking warranty and support summary
document for warranty and support
information included with your product
purchase

For more detailed information on HPE Aruba Networking AOS-CX software release and features, please visit the <u>AOS-CX Switch</u> Software Documentation Portal

Explore and compare switch features for each platform and software release on the HPE Aruba Networking Switch Feature
Navigator

For Software Releases and Documentation, refer to <a href="networkingsupport.hpe.com/">networkingsupport.hpe.com/</a> downloads

For support and services information, visit arubanetworks.com/support-services

	HPE Aruba Networking CX 6300M 48p SR10 PTP/AVB Class8 PoE 4p 100G MACsec Switch (S0E91A)	HPE Aruba Networking 6300M 24p HPE Smart Rate 1G/2.5G/5G/10G Class6 PoE and 2p 50G and 2p 25G Switch (R8S89A)	HPE Aruba Networking 6300M 48p HPE Smart Rate 1G/2.5G/5G Class8 PoE and 2p 50G and 2p 25G Switch (R8S90A)
Description	48x ports SmartRate 100M²/1G/2.5G/5G/10G BaseT Class 8 PoE ports supporting up to 90W per port (MACsec) 4x 10G/25G/40G/100G QSFP/QSFP28 ports (MACsec) Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 90W) 1x USB-C Console Port (higher priority than RJ45 console port) 1x RJ45 console port 1x OOBM 1x USB Type A Host port	24x ports SmartRate 100M²/1G/2.5G/5G/10G BaseT Class 6 PoE ports supporting up to 60W per port (MACsec) 2x 10G/25G/50G¹ SFP ports 2x 10G/25G SFP ports (MACsec) Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 60W) 1x USB-C Console Port 1x RJ Console Port 1x OOBM port 1x USB Type A Host port	48x ports SmartRate 100M²/1G/2.5G/5G BaseT Class 8 PoE ports supporting up to 90W per port (MACsec) 2x 10G/25G/50G¹ SFP ports 2x 10G/25G SFP ports (MACsec) Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 90W) 1x USB-C Console Port 1x RJ Console Port 1x OOBM port 1x USB Type A Host port
	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately)	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately)	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately)
Power supplies	Supported PSUs JL086A JL087A JL670A JL758A Max PoE Power: 2640W	Supported PSUs JL086A JL087A JL670A JL758A Max PoE Power: 2880W	Supported PSUs JL086A JL087A JL670A JL758A Max PoE Power: 2880W
Fans	Switch has three fan tray slots and comes with three JL714A fan trays installed  • Min 3 fan trays required.  • Fan trays are field replaceable and hot-swappable.  • Each fan tray contains two fans.	Switch has two fan tray slots and comes with two fan trays installed.  • Min 2 fan trays required.  • Fan trays are field replaceable and hot-swappable.  • Each fan tray contains two fans.	Switch has two fan tray slots and comes with two fan trays installed • Min 2 fan trays required. • Fan trays are field replaceable and hot-swappable. • Each fan tray contains two fans.
Physical characteristics			
Dimensions	4.4 cm (h) x 44.2 cm (w) x 47.2 cm (d) (1.73" x 17.4" x 18.6")	4.4 cm (h) x 44.2 cm (w) x 38.5 cm (d) (1.73" x 17.4" x 15.2")	4.4 cm (h) x 44.2 cm (w) x 38.5 cm (d) (1.73" x 17.4" x 15.2")
Configuration weight	7.75 kg (17.09 lb)	5.26 kg (11.60 lb)	5.48 kg (12.08 lb)

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires OSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

 $<sup>^2</sup>$  100M use on Smart Rate ports is limited to full-duplex only. For 100M half-duplex support, use 1G ports on other models.

	HPE Aruba Networking CX 6300M 48p SR10 PTP/AVB Class8 PoE 4p 100G MACsec Switch (S0E91A)	HPE Aruba Networking 6300M 24p HPE Smart Rate 1G/2.5G/5G/10G CL6 PoE and 2p 50G and 2p 25G Switch (R8S89A)	HPE Aruba Networking 6300M 48p HPE Smart Rate 1G/2.5G/5G CL8 PoE and 2p 50G and 2p 25G Switch (R8S90A)
Additional specifications			
CPU	Quad Core Arm® Cortex™ A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz
Memory and flash	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC
Packet buffer	32 MB	16 MB	16 MB
Performance			
Switching capacity	1760 Gbps	780 Gbps	780 Gbps
Throughput capacity	1310 Mpps	580 Mpps	580 Mpps
Average latency (LIFO-64-bytes packets)	1 Gbps: 4.24 ų Sec 10 Gbps: 1.50 ų Sec 25 Gbps: 2.91 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 4.24 ų Sec 10 Gbps: 1.50 ų Sec 25 Gbps: 2.91 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 4.24 ų Sec 10 Gbps: 1.50 ų Sec 25 Gbps: 2.91 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec
Stack size	10 members	10 members	10 members
Max stacking distance	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers
Stacking bandwidth	400 Gbps	200 Gbps	200 Gbps
Switched virtual interfaces (dual stack)	1,024	1,024	1,024
IPv4 host table (ARP)	49,152	49,152	49,152
IPv6 host table (ND)	49,152	49,152	49,152
IPv4 unicast routes	61,000	61,000	61,000
IPv6 unicast routes	61,000	61,000	61,000
IPv4 multicast routes	8,192	8,192	8,192
IPv6 multicast routes	8,192	8,192	8,192
MAC table capacity	32,768	32,768	32,768
IGMP groups	4,096	4,096	4,096
MLD groups	4,096	4,096	4,096
IPv4/IPv6/MAC ACL entries (ingress)	20,480/5,120/20,480	20,480/5,120/20,480	20,480/5,120/20,480
IPv4/IPv6/MAC ACL entries (egress)	8,192/2,048/8,192	8,192/2,048/8,192	8,192/2,048/8,192
VRF	256	256	256

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires OSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

	HPE Aruba Networking CX 6300M 48p SR10 PTP/AVB Class8 PoE 4p 100G MACsec Switch (S0E91A)	HPE Aruba Networking 6300M 24p HPE Smart Rate 1G/2.5G/5G/10G CL6 PoE and 2p 50G and 2p 25G Switch (R8S89A)	HPE Aruba Networking 6300M 48p HPE Smart Rate 1G/2.5G/5G CL8 PoE and 2p 50G and 2p 25G Switch (R8S90A)
Environment			
Operating temperature	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft.
	Can support excursion to 131°F (55°C) for short periods <sup>1</sup> of time.	Can support excursion to 131°F (55°C) for short periods <sup>1</sup> of time.	Can support excursion to 131°F (55°C) for short periods <sup>1</sup> of time.
Operating relative humidity	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing
Non-operating	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft
Non-operating storage relative humidity	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing
Max operating altitude	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max
Max Non-operating altitude	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max
Acoustic	Sound Power, LWAd = 5.8 Bel Sound Pressure, LpAm (Bystander) = 41.7 dB	Sound Power, LWAd = 4.9 Bel Sound Pressure, LpAm (Bystander) = 33.0 dB	Sound Power, LWAd = 5.0 Bel Sound Pressure, LpAm (Bystander) = 33.4 dB
Primary airflow	Front and side to back	Front and side to back	Front and side to back
Electrical characteristics			
Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Input voltage	JL670A PSU: 110V-120V/200V/208V-240V; AC input JL086A PSU: 100V-240V; AC input JL087A PSU: 110V-240V; AC input JL758A PSU: 36-72VDC; DC input	JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V JL087A PSU: 110V-240V	JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V JL087A PSU: 110V-240V
Current (for voltages listed above)	JL670A PSU: 11A/9A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A JL758A PSU: 16.6 – 34.3A	JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A	JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A
Power consumption (230VAC)	With single JL086A PSU: Idle: 207W 100% Traffic Rate: 283W With single JL087A PSU: Idle: 208W 100% Traffic Rate: 282W With single JL670A PSU: Idle: 211W 100% Traffic Rate: 283W	With JL086A PSU: Idle: 90W 100% Traffic Rate: 143W With JL087A PSU: Idle: 90W 100% Traffic Rate: 140W With JL670A PSU: Idle: 101W 100% Traffic Rate: 152W	With JL086A PSU: Idle: 104W 100% Traffic Rate: 173W With JL087A PSU: Idle: 104W 100% Traffic Rate: 173W With JL670A PSU: Idle: 115W 100% Traffic Rate: 184W

 $<sup>^{\</sup>rm 1}$  No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.

## **Technical specifications**

HPE Aruba Networking CX 6300M 48p SR10 PTP/AVB Class8 PoE 4p

HPE Aruba Networking 6300M 24p HPE Smart Rate 1G/2.5G/5G/10G CL6 PoE and 2p 50G and 2p 25G

HPE Aruba Networking 6300M 48p HPE Smart Rate 1G/2.5G/5G CL8

#### PoE and 2p 50G and 2p 25G Switch 100G MACsec Switch (S0E91A) Switch (R8S89A) (R8S90A) Safety Include US, Canada, Europe, Europe Europe: Europe: Worldwide EN 62368-1:2014 +A11:2017 EN 62368-1:2014 +A11:2017 EN 62368-1:2014 +A11:2017 EN 62368-1:2020 +A11:2020 US: UL 62368-1 2nd Ed. EN 62368-1:2020 +A11:2020 EN 62368-1:2020 +A11:2020 CAN: CSA-C22.2 No. 62368-1-14 3rd Ed. 3rd Ed. 2nd Ed. Worldwide: BS EN 62368-1:2014 + A11:2017 BS EN 62368-1:2014 + A11:2017 IEC 62368-1:2014 (2nd Ed) 2nd Ed 2nd Ed BS EN 62368-1:2020 + A11:2020 IEC 62368-1:2018 (3rd Ed) BS EN 62368-1:2020 + A11:2020 Taiwan: CNS 15598-1:2020 3rd Ed 3rd Ed US/Canada: US/Canada: UL 62368-1 2nd Ed. UL 62368-1 2nd Ed. CAN/CSA-C22.2 No. 62368-1-14 CAN/CSA-C22.2 No. 62368-1-14 2nd Ed. 2nd Ed. Worldwide: Worldwide: IEC 60950-1:2005 + Am1:2009 IEC 60950-1:2005 + Am1:2009 + Am2:2013 w/all known National + Am2:2013 w/all known National Deviations IEC 62368-1:2014 2nd Ed. w/all IEC 62368-1:2014 2nd Ed. w/all known National Deviations known National Deviations IEC 62368-1:2018 3rd Ed. w/all IEC 62368-1:2018 3rd Ed. w/all known National Deviations known National Deviations **Emissions** Include US, Canada, Europe, Europe: Europe: Europe: Worldwide EN 55032:2015+A11:2020, Class A EN 55032:2015 +A11:2020, Class EN 55032:2015 +A11:2020, Class EN 55035:2017+A11:2020 EN 55035:2017 +A11:2020 EN 55035:2017 +A11:2020 EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A2:2021 EN 61000-3-2:2014, Class A EN 61000-3-2:2014. Class A US: FCC 47 CFR part 15 subpart B, EN 61000-3-3:2013 EN 61000-3-3:2013 US/Canada: Class A US/Canada: CAN: ICES-003 Issue 7:2020, Class FCC CFR47 Part 15:2014, Class A FCC CFR47 Part 15:2014, Class A ICES-003 Class A ICES-003 Class A Α Japan: VCCI-CISPR 32:2016, Class Worldwide: Worldwide: VCCI Class A VCCI Class A Taiwan: CNS 15936:2016, Class A CISPR 32 Class A CISPR 32 Class A AUS/NZ: AS/NZS CISPR CISPR 35:2016 CISPR 35:2016 32:2015+A1:2020, Class A Worldwide: CISPR 32:2015/AMD1:2019, Class CISPR 35:2016 Lasers EN 60825-1:2014 +A11:2021 / Include US, Canada, Europe, EN 60825-1:2014 / IEC EN 60825-1:2014 / IEC 60825-1:2014 Class 1 Worldwide IEC 60825-1:2014 60825-1:2014 Class 1 Class 1 Laser Products / Laser Class 1 Laser Products / Class 1 Laser Products / Laser Klasse 1 Laser Klasse 1 (Applicable for accessories -(Applicable for (Applicable for Optical Transceivers only) accessories - Optical accessories - Optical

Transceivers only)

Transceivers only)

	HPE Aruba Networking CX 6300M 48p SR10 PTP/AVB Class8 PoE 4p 100G MACsec Switch (S0E91A)	HPE Aruba Networking 6300M 24p HPE Smart Rate 1G/2.5G/5G/10G CL6 PoE and 2p 50G and 2p 25G Switch (R8S89A)	HPE Aruba Networking 6300M 48p HPE Smart Rate 1G/2.5G/5G CL8 PoE and 2p 50G and 2p 25G Switch (R8S90A)
Immunity			
Generic	CISPR 35	CISPR 35	CISPR 35
EN	EN 55035:2017	EN 55035:2017	EN 55035:2017
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	IEC 61000-3-2:2018+A1:2020; EN IEC 61000-3-2:2019+A1:2021	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2
Flicker	IEC/EN 61000-3-3:2013+A2:2021	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3
Mounting and enclosure			
	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.

	HPE Aruba Networking 6300M 48SR5 12p Class8 PoE and 36p Class6 PoE HPE Smart Rate 1G/2.5G/5G and 2p 50G and 2p 10G LRM support Switch (R8S91A)	HPE Aruba Networking 6300M 24p SFP+ LRM support and 2p 50G and 2p 25G MACsec Switch (R8592A)	
Description	48x ports SmartRate 100M²/1G/2.5G/5G BaseT Class 8 PoE ports supporting up to 90W per port on ports 13-48 (MACsec) 2x 10G/25G/50G¹ SFP ports 2x 1G/10G SFP ports (LRM + MACsec) Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 90W) 1x USB-C Console Port 1x RJ Console Port 1x OOBM port 1x USB Type A Host port	24x 1G/10G SFP+ ports (LRM + MACsec) 2x 10G/25G/50G <sup>1</sup> SFP ports 2x 10G/25G SFP ports (MACsec) 1x USB-C Console Port 1x RJ Console Port 1x OOBM port 1x USB Type A Host port	
Power supplies	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately)	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately)	
	Supported PSUs JL086A JL087A JL670A JL758A Max PoE Power: 2880W	Supported PSUs JL085A JL757A PSU	
Fans	Switch has two fan tray slots and comes with two fan trays installed.  • Min 2 fan trays required.  • Fan trays are field replaceable and hot-swappable.  • Each fan tray contains two fans.	Switch has two fan tray slots and comes with two fan trays installed.  • Min 2 fan trays required.  • Fan trays are field replaceable and hot-swappable.  • Each fan tray contains two fans.	
Physical characteristics			
Dimensions	(H) 4.4 cm x (W) 44.2 cm x (D) 38.5 cm (1.73" x 17.4" x 15.2")	(H) 4.4 cm x (W) 44.2 cm x (D) 38.5 cm (1.73" x 17.4" x 15.2")	
Configuration weight	5.47 kg (12.06 lb)	4.85 kg (10.70 lb)	

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires OSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

<sup>&</sup>lt;sup>2</sup> 100M use on Smart Rate ports is limited to full-duplex only. For 100M half-duplex support, use 1G ports on other models.

## **Technical specifications**

HPE Aruba Networking 6300M 12p Class8 PoE and 36p Class6 PoE HPE Smart Rate 1G/2.5G/5G and 2p 10G Switch (R8S91A)

HPE Aruba Networking 6300M 24p SFP+ LRM support and 2p 50G and 2p 25G MACsec Switch (R8S92A)

	and 2p 50G and 2p 10G Switch (R8S91A)	(R8S92A)
Additional specifications		
CPU	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz
Memory and flash	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC
Packet buffer	16 MB	16 MB
Performance		
Switching capacity	720 Gbps	780 Gbps
Throughput capacity	535 Mpps	580 Mpps
Average latency (LIFO-64-bytes packets)	1 Gbps: 4.24 ų Sec 10 Gbps: 1.50 ų Sec 25 Gbps: 2.91 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 4.24 ų Sec 10 Gbps: 1.50 ų Sec 25 Gbps: 2.91 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec
Stack size	10 members	10 members
Max stacking distance	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers
Stacking bandwidth	200 Gbps	200 Gbps
Switched virtual interfaces (dual stack)	1,024	1,024
IPv4 host table (ARP)	49,152	49,152
IPv6 host table (ND)	49,152	49,152
IPv4 unicast routes	61,000	61,000
IPv6 unicast routes	61,000	61,000
IPv4 multicast routes	8,192	8,192
IPv6 multicast routes	8,192	8,192
MAC table capacity	32,768	32,768
IGMP groups	4,096	4,096
MLD groups	4,096	4,096
IPv4/IPv6/MAC ACL entries (ingress)	20,480/5,120/20,480	20,480/5,120/20,480
IPv4/IPv6/MAC ACL entries (egress)	8,192/2,048/8,192	8,192/2,048/8,192
VRF	256	256

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

	HPE Aruba Networking 6300M 12p Class8 PoE and 36p Class6 PoE HPE Smart Rate 1G/2.5G/5G and 2p 50G and 2p 10G Switch (R8S91A)	HPE Aruba Networking 6300M 24p SFP+ LRM support and 2p 50G and 2p 25G MACsec Switch (R8S92A)
Environment		
Operating temperature	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft.
	Can support excursion to 131°F (55°C) for short periods <sup>2</sup> of time.	Can support excursion to 131°F (55°C) for short periods <sup>2</sup> of time.
		55C excursion not supported when 10G LRM/LR/ER inserted
		When 10G BT and 10G LRM/LR/ER transceivers are installed together, fan redundancy is only supported up to 104°F (40°C), 5,000ft
Operating relative humidity	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing
Non-operating	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft
Non-operating storage relative humidity	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing
Max operating altitude	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max
Max Non-operating altitude	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max
Acoustic	Sound Power, LWAd = 4.9 Bel Sound Pressure, LpAm (Bystander) = 32.6 dB	Sound Power, LWAd = 4.6 Bel Sound Pressure, LpAm (Bystander) = 30.1 dB
Primary airflow	Front and side to back	Front and side to back
Electrical characteristics		
Frequency	50Hz/60Hz	50Hz/60Hz
AC voltage	JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V JL087A PSU: 110V-240V	JL085A PSU: 100V-240V
Current (for voltages listed above)	JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A	JL085A PSU: 3A/1.2A
Power consumption (230VAC)	With JL086A PSU: Idle: 104W 100% Traffic Rate: 168W With JL087A PSU: Idle: 104W 100% Traffic Rate: 168W With JL670A PSU: 98 Idle: 113W 100% Traffic Rate: 179W	Idle: 87W 100% Traffic Rate: 131W

 $<sup>^{2}</sup>$  No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year

	HPE Aruba Networking 6300M 12p Class8 PoE and 36p Class6 PoE HPE Smart Rate 1G/2.5G/5G and 2p 50G and 2p 10G Switch (R8S91A)	HPE Aruba Networking 6300M 24p SFP+ LRM support and 2p 50G and 2p 25G MACsec Switch (R8S92A)
Safety		
Include US, Canada, Europe, Worldwide	Europe: EN 62368-1:2014 +A11:2017 2nd Ed. EN 62368-1:2020 +A11:2020 3rd Ed. UK: BS EN 62368-1:2014 + A11:2017 2nd Ed BS EN 62368-1:2020 + A11:2020 3rd Ed US/Canada: UL 62368-1 2nd Ed. CAN/CSA-C22.2 No. 62368-1-14 2nd Ed. Worldwide: IEC 60950-1:2005 + Am1:2009 + Am2:2013 w/all known National Deviations IEC 62368-1:2014 2nd Ed. w/all known National Deviations IEC 62368-1:2018 3rd Ed. w/all known National Deviations	Europe: EN 62368-1:2014 +A11:2017 2nd Ed. EN 62368-1:2020 +A11:2020 3rd Ed. UK: BS EN 62368-1:2014 + A11:2017 2nd Ed BS EN 62368-1:2014 + A11:2017 2nd Ed US/Canada: UL 62368-1 2nd Ed. CAN/CSA-C22.2 No. 62368-1-14 2nd Ed. Worldwide: IEC 60950-1:2005 + Am1:2009 + Am2:2013 w/all known National Deviations IEC 62368-1:2014 2nd Ed. w/all known National Deviations IEC 62368-1:2018 3rd Ed. w/all known National Deviations
Emissions		
Include US, Canada, Europe, Worldwide	Europe: EN 55032:2015 +A11:2020, Class A EN 55035:2017 +A11:2020 EN 61000-3-2:2014, Class A EN 61000-3-3:2013 US/Canada: FCC CFR47 Part 15:2014, Class A ICES-003 Class A Worldwide: VCCI Class A CISPR 32 Class A CISPR 35:2016	Europe: EN 55032:2015 +A11:2020, Class A EN 55035:2017 +A11:2020 EN 61000-3-2:2014, Class A EN 61000-3-3:2013 US/Canada: FCC CFR47 Part 15:2014, Class A ICES-003 Class A Worldwide: VCCI Class A CISPR 32 Class A CISPR 35:2016
Lasers		
Include US, Canada, Europe, Worldwide	EN 60825-1:2014 / IEC 60825-1:2014 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)	EN 60825-1:2014 / IEC 60825-1:2014 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)

	HPE Aruba Networking 6300M 12p Class8 PoE and 36p Class6 PoE HPE Smart Rate 1G/2.5G/5G and 2p 50G and 2p 10G Switch (R8S91A)	HPE Aruba Networking 6300M 24p SFP+ LRM support and 2p 50G and 2p 25G MACsec Switch (R8S92A)
Immunity		
Generic	CISPR 35	CISPR 35
EN	EN 55035:2017	EN 55035:2017
ESD	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11
Harmonics	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2
Flicker	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3
Mounting and enclosure		
	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.

	HPE Aruba Networking 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL662A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Switch (JL663A)	HPE Aruba Networking 6300M 24-port 1GbE and 4-port SFP56 Switch (JL664A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle (JL762A)
Description	24x ports 10/100/1000 BaseT PoE+ ports supporting up to 30W per	48x ports 10/100/1000 BaseT ports	24x ports 10/100/1000 BaseT ports	48x ports 10/100/1000 BaseT ports
	port	4x 1G/10G/25G/50G <sup>1</sup> SFP ports	4x 1G/10G/25G/50G <sup>1</sup> SFP ports	4x 1G/10G/25G/50G <sup>1</sup> SFP ports
	4x 1G/10G/25G/50G <sup>1</sup> SFP ports	1x USB-C Console Port 1x OOBM port	1x USB-C Console Port 1x OOBM port	1x USB-C Console Port 1x OOBM
	Supports PoE Standards IEEE 802.3af, 802.3at	1x USB Type A Host port	1x USB Type A Host port	1x USB Type A Host port
	1x USB-C Console Port 1x OOBM port 1x USB Type A Host port			
Power supplies	2 field-replaceable, hot-swappable power supply slots	2 field-replaceable, hot-swappable power supply slots	2 field-replaceable, hot-swappable power supply slots	2 Field-replaceable, hot-swappable power-supply slots and comes with 1 Pwr2Prt
	1 minimum power supply required (ordered separately)	1 minimum power supply required (ordered separately)	1 minimum power supply required (ordered separately)	power-supply pre-installed  Additional Pwr2Prt
	Supported PSUs JL086A JL087A	Supports JL085A PSU	Supports JL085A PSU	power-supply can be ordered separately  Supports JL760A Pwr2Prt
	JL670A			power-supply only
	Max PoE Power: 720W			
Fans	Switch has two fan tray slots and comes with one fan tray installed. Min 1 fan tray required. Optional second fan tray ordered separately. Fan trays are field replaceable and hot-swappable. Each fan tray contains two fans.	Switch has two fan tray slots and comes with one fan tray installed. Min 1 fan tray required. Optional second fan tray ordered separately. Fan trays are field replaceable and hot-swappable. Each fan tray contains two fans.	Switch has two fan tray slots and comes with one fan tray installed. Min 1 fan tray required. Optional second fan tray ordered separately. Fan trays are field replaceable and hot-swappable. Each fan tray contains two fans.	Switch has two fan tray slots and comes with two fan trays installed. Min 2 fan trays required. Fan trays are field replaceable and hot-swappable. Each fan tray contains two fans. Supports JL761A Pwr2Prt Fan Tray only.
Physical characteristics				
Dimensions	4.4 cm (h) x 44.2 cm (w) x 38.5 (d) cm (1.73" x 17.4" x 15.2")	4.4 cm (h) x 44.2 cm (w) x 38.5 cm (d) (1.73" x 17.4" x 15.2")	4.4 cm x (h) 44.2 cm (w) x 38.5 cm (d) (1.73" x 17.4" x 15.2")	4.4 cm x (h) 44.2 cm (w) x 38.5 cm (d) (1.73" x 17.4" x 15.2")
Configuration weight	5.55 kg (12.23 lb)	5.51 kg (12.14 lb)	5.43 kg (11.97 lb)	1PSU: 5.7 kg (12.5 lb) 2PSU: 6.27kg (13.8 lb)

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

	HPE Aruba Networking 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL662A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Switch (JL663A)	HPE Aruba Networking 6300M 24-port 1GbE and 4-port SFP56 Switch (JL664A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle (JL762A)
Additional specifications				
CPU	Quad Core Arm Cortex A72 @ 1.8GHz			
Memory and flash	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC	8 GBytes DDR4 32 GBytes eMMC
Packet buffer	8 MB	8 MB	8 MB	8 MB
Performance				
Switching capacity	448 Gbps	496 Gbps	448 Gbps	496 Gbps
Throughput capacity	334 Mpps	369 Mpps	334 Mpps	369 Mpps
Average latency (LIFO-64-bytes packets)	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec
Stack size	10 members	10 members	10 members	10 members
Max. stacking distance	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers
Stacking bandwidth	200 Gbps	200 Gbps	200 Gbps	200 Gbps
Switched virtual interfaces (dual stack)	1,024	1,024	1,024	1,024
IPv4 host table (ARP)	49,152	49,152	49,152	49,152
IPv6 host table (ND)	49,152	49,152	49,152	49,152
IPv4 unicast routes	61,000	61,000	61,000	61,000
IPv6 unicast routes	61,000	61,000	61,000	61,000
IPv4 multicast routes	8,192	8,192	8,192	8,192
IPv6 multicast routes	8,192	8,192	8,192	8,192
MAC table capacity	32,768	32,768	32,768	32,768
IGMP groups	4,096	4,096	4,096	4,096
MLD groups	4,096	4,096	4,096	4,096
IPv4/IPv6/MAC ACL entries (ingress)	20,480/5,120/20,480	20,480/5,120/20,480	20,480/5,120/20,480	20,480/5,120/20,480
IPv4/IPv6/MAC ACL entries (egress)	8,192/2,048/8,192	8,192/2,048/8,192	8,192/2,048/8,192	8,192/2,048/8,192
VRF	256	256	256	256

 $<sup>^1</sup>$  50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.



	HPE Aruba Networking 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL662A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Switch (JL663A)	HPE Aruba Networking 6300M 24-port 1GbE and 4-port SFP56 Switch (JL664A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle (JL762A)
Environment				
Operating temperature	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods¹ of time.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods¹ of time.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods¹ of time.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1°C for every 1,000 ft from 5000 ft to 1,0000 ft.
Operating relative humidity	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing
Non-operating	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15000 ft
Non-operating storage relative humidity	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing
Max operating altitude	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max
Max non-operating altitude	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max
Acoustic	Sound Power, $L_{WAd}$ = 4.7 Bel Sound Pressure, $L_{pAm}$ (Bystander) = 29.4 dB	Sound Power, $L_{WAd}$ = 4.6 Bel Sound Pressure, $L_{pAm}$ (Bystander) = 28.7 dB	Sound Power, $L_{WAd}$ = 4.6 Bel Sound Pressure, $L_{pAm}$ (Bystander) = 28.6 dB	Sound Power, $L_{WAd}$ = 5.0 Bel Sound Pressure, $L_{pAm}$ (Bystander) = 32.5 dB with 1 x JL760A PSU
Primary airflow	Front and side to back	Front and side to back	Front and side to back	Back to Front and Side
Electrical characteristics				
Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
AC voltage	JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V JL087A PSU: 110V-240V	JL085A PSU: 100V-240V	JL085A PSU: 100V-240V	JL760A PSU: 100V-240V
Current (for voltages listed above)	JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A	JL085A PSU: 3A/1.2A	JL085A PSU: 3A/1.2A	JL760A PSU: 3A-1.2A
80 PLUS® certification	-	-	-	TBA for JL760A PS.
Power consumption (230VAC)	With JL086A PSU: Idle: 60W 100% Traffic Rate: 76W With JL087A PSU: Idle: 59W 100% Traffic Rate: 74W	Idle: 56W 100% Traffic Rate: 75W	Idle: 49W 100% Traffic Rate: 64W	Idle: 56W 100% Traffic Rate: 75W
	With JL670A PSU: Idle: 62W 100% Traffic Rate: 81W			

 $<sup>^{\</sup>rm 1}$  No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.

	HPE Aruba Networking 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL662A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Switch (JL663A)	HPE Aruba Networking 6300M 24-port 1GbE and 4-port SFP56 Switch (JL664A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle (JL762A)
Safety				
	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 EN 62368-1:2014
	US: UL 60950-1 2nd Ed.	US: UL 60950-1 2nd Ed.	US: UL 60950-1 2nd Ed.	+A11:2017 US: UL 60950-1 2nd Ed.
	Canada: CAN/CSA-C22.2 No. 60950-1-07	Canada: CAN/CSA-C22.2 No. 60950-1-07	Canada: CAN/CSA-C22.2 No. 60950-1-07	Canada: CAN/CSA-C22.2 No. 60950-1-07
	Worldwide: IEC 60950-1:2005 w/all known National Deviations	Worldwide: IEC 60950-1:2005 w/all known National Deviations	Worldwide: IEC 60950-1:2005 w/all known National Deviations	Worldwide: IEC 60950-1:2005 w/all known National Deviations IEC 62368-1:2014 2nd Ed.
				Taiwan: CNS-14336-1
Emissions				
	Europe: EN 55022:2010, Class A EN 55032:2012, Class A EN 55024:2010 EN 61000-3-2:2014 EN 61000-3-3:2013	Europe: EN 55022:2010, Class A EN 55032:2012, Class A EN 55024:2010 EN 61000-3-2:2014 EN 61000-3-3:2013	Europe: EN 55022:2010, Class A EN 55032:2012, Class A EN 55024:2010 EN 61000-3-2:2014 EN 61000-3-3:2013	Europe: EN 55032:2015 +AC:2016, Class A EN 55035:2017 EN 61000-3-2:2014 EN 61000-3-3:2013
	US: FCC part 15 Class A	US: FCC part 15 Class A	US: FCC part 15 Class A	US: FCC 47 CFR part 15B, Class A
	Canada: ICES-003 Class A	Canada: ICES-003 Class A	Canada: ICES-003 Class A	Canada: ICES-003 Class A
	Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	Worldwide: VCCI Class A CISPR 32 Ed 2.0: 2015 + COR1:2016, Class A CISPR 35:2016
Lasers				
	EN 60825-1:2007 / IEC 60825-1:2007 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)	EN 60825-1:2007 / IEC 60825-1:2007 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)	EN 60825-1:2007 / IEC 60825-1:2007 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)	EN 60825-1:2007 / IEC 60825-1:2007 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)
Immunity				
Generic	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35	CISPR 35
EN	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017	EN 55035:2017
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2

	HPE Aruba Networking 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL662A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Switch (JL663A)	HPE Aruba Networking 6300M 24-port 1GbE and 4-port SFP56 Switch (JL664A)	HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle (JL762A)
Immunity				
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2
Flicker	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3
Mounting and enclosure				
	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.

	HPE Aruba Networking 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL665A)	HPE Aruba Networking 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL666A)	HPE Aruba Networking 6300F 48-port 1GbE and 4-port SFP56 Switch (JL667A)	HPE Aruba Networking 6300F 24-port 1GbE and 4-port SFP56 Switch (JL668A)
Description	48x ports 10/100/1000BaseT PoE+ Ports supporting up to	24x ports 10/100/1000BaseT Ports supporting up to 30W per	48x ports 10/100/1000BaseT Ports	24x ports 10/100/1000BaseT Ports
	30W per port	port	4x 1G/10G/25G/50G <sup>1</sup> SFP ports	4x 1G/10G/25G/50G <sup>1</sup> SFP ports
	4x 1G/10G/25G/50G <sup>1</sup> SFP	4x 1G/10G/25G/50G <sup>1</sup> SFP		
	ports	ports	1x USB-C Console Port 1x OOBM port	1x USB-C Console Port 1x OOBM port
	Supports PoE Standards IEEE 802.3af, 802.3at	1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	1x USB Type A Host port	1x USB Type A Host port
	1x USB-C Console Port 1x OOBM port 1x USB Type A Host port			
Power supplies	Internal (fixed) power supply (950W)	Internal (fixed) power supply (950W)	Internal (fixed) power supply (200W)	Internal (fixed) power supply (200W)
	Max PoE Power: 740W	Max PoE Power: 370W		
Fans	Fixed fans	Fixed fans	Fixed fans	Fixed fans
Physical characteristics				
Dimensions	(H) 4.39 cm x	(H) 4.39 cm x	(H) 4.39 cm x	(H) 4.39 cm x
	(W) 44.2 cm x	(W) 44.2 cm x	(W) 44.2 cm x	(W) 44.2 cm x
	(D) 32.7 cm	(D) 32.7 cm	(D) 32.7 cm	(D) 32.7 cm
	(1.73" x 17.4" x 12.9")	(1.73" x 17.4" x 12.9")	(1.73" x 17.4" x 12.9")	(1.73" x 17.4" x 12.9")
Configuration weight	5.10 kg (11.24 lb)	4.95 kg (10.91 lb)	4.46 kg (9.83 lb)	4.36 kg (9.61 lb)
Additional specifications				
CPU	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz
Memory and flash	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC
Packet buffer	8 MB	8 MB	8 MB	8 MB

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking, 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

	HPE Aruba Networking 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL665A)	HPE Aruba Networking 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL666A)	HPE Aruba Networking 6300F 48-port 1GbE and 4-port SFP56 Switch (JL667A)	HPE Aruba Networking 6300F 24-port 1GbE and 4-port SFP56 Switch (JL668A)
Performance				
Switching capacity	496 Gbps	448 Gbps	496 Gbps	448 Gbps
Throughput capacity	369 Mpps	334 Mpps	369 Mpps	334 Mpps
Average latency (LIFO-64-bytes packets)	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec
Stack size	10 members	10 members	10 members	10 members
Max. stacking distance	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers
Stacking bandwidth	200 Gbps	200 Gbps	200 Gbps	200 Gbps
Switched Virtual Interfaces (dual stack)	1,024	1,024	1,024	1,024
IPv4 host table (ARP)	49,152	49,152	49,152	49,152
IPv6 host table (ND)	49,152	49,152	49,152	49,152
IPv4 unicast routes	61,000	61,000	61,000	61,000
IPv6 unicast routes	61,000	61,000	61,000	61,000
IPv4 multicast routes	8,192	8,192	8,192	8,192
IPv6 multicast routes	8,192	8,192	8,192	8,192
MAC table capacity	32,768	32,768	32,768	32,768
IGMP groups	4,096	4,096	4,096	4,096
MLD groups	4,096	4,096	4,096	4,096
IPv4/IPv6/MAC ACL entries (ingress)	20,480/5,120/20,480	20,480/5,120/20,480	20,480/5,120/20,480	20,480/5,120/20,480
IPv4/IPv6/MAC ACL entries (egress)	8,192/2,048/8,192	8,192/2,048/8,192	8,192/2,048/8,192	8,192/2,048/8,192
VRF	256	256	256	256

 $<sup>^{\</sup>perp}$  50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

	HPE Aruba Networking 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL665A)	HPE Aruba Networking 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL666A)	HPE Aruba Networking 6300F 48-port 1GbE and 4-port SFP56 Switch (JL667A)	HPE Aruba Networking 6300F 24-port 1GbE and 4-port SFP56 Switch (JL668A)
Environment				
Operating temperature	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft Can support excursion to 131°F (55°C) for short periods¹ of time.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods¹ of time.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods¹ of time.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods¹ of time.
Operating relative humidity	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing
Non-operating	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft
Non-operating storage relative humidity	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing
Max operating altitude	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max
Max non-operating altitude	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max
Acoustic	Sound Power, L <sub>WAd</sub> = 5.2 Bel Sound Pressure, L <sub>pAm</sub> (Bystander) = 34.9 dB	Sound Power,  L <sub>WAd</sub> = 5.0 Bel Sound Pressure,  L <sub>DAm</sub> (Bystander) = 32.3 dB	Sound Power, L <sub>WAd</sub> = 4.9 Bel Sound Pressure, L <sub>pAm</sub> (Bystander) = 31.5 dB	Sound Power, L <sub>WAd</sub> = 4.9 Bel Sound Pressure, L <sub>pAm</sub> (Bystander) = 31.6 dB
Primary airflow	Front and side to back	Front and side to back	Front and side to back	Front and side to back
Electrical characteristics				
Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
AC voltage	Fixed PSU: 100V-120V/200V-240V	Fixed PSU: 100V-120V/200V-240V	Fixed PSU: 100V-120V/200V-240V	Fixed PSU: 100V-120V/200V-240V
Current (for voltages listed above)	Fixed PSU: 11A/6A	Fixed PSU: 11A/6A	Fixed PSU: 2.5A/1.4A	Fixed PSU: 2.5A/1.4A
80 PLUS® certification	-	-	-	-
Power consumption (230VAC)	Idle: 63W 100% Traffic Rate: 86W	Idle: 52W 100% Traffic Rate: 67W	Idle: 52W 100% Traffic Rate: 74W	Idle: 49W 100% Traffic Rate: 63W
Safety				
	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013
	US: UL 60950-1 2nd Ed.	US: UL 60950-1 2nd Ed.	US: UL 60950-1 2nd Ed.	US: UL 60950-1 2nd Ed.
	Canada: CAN/CSA-C22.2 No. 60950-1-07	Canada: CAN/CSA-C22.2 No. 60950-1-07	Canada: CAN/CSA-C22.2 No. 60950-1-07	Canada: CAN/CSA-C22.2 No. 60950-1-07
	Worldwide: IEC 60950-1:2005 w/all known National Deviations	Worldwide: IEC 60950-1:2005 w/all known National Deviations	Worldwide: IEC 60950-1:2005 w/all known National Deviations	Worldwide: IEC 60950-1:2005 w/all known National Deviations

 $<sup>^{\</sup>rm 1}$  No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.



	HPE Aruba Networking 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL665A)	HPE Aruba Networking 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL666A)	HPE Aruba Networking 6300F 48-port 1GbE and 4-port SFP56 Switch (JL667A)	HPE Aruba Networking 6300F 24-port 1GbE and 4-port SFP56 Switch (JL668A)
Emissions				
	Europe: EN 55022:2010, Class A EN 55032:2012, Class A EN 55024:2010 EN 61000-3-2:2014 EN 61000-3-3:2013	Europe: EN 55022:2010, Class A EN 55032:2012, Class A EN 55024:2010 EN 61000-3-2:2014 EN 61000-3-3:2013	Europe: EN 55022:2010, Class A EN 55032:2012, Class A EN 55024:2010 EN 61000-3-2:2014 EN 61000-3-3:2013	Europe: EN 55022:2010, Class A EN 55032:2012, Class A EN 55024:2010 EN 61000-3-2:2014 EN 61000-3-3:2013
	US: FCC part 15 Class A			
	Canada: ICES-003 Class A	Canada: ICES-003 Class A	Canada: ICES-003 Class A	Canada: ICES-003 Class A
	Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010
Lasers				
	EN 60825-1:2007 / IEC 60825-1:2007 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)	EN 60825-1:2007 / IEC 60825-1:2007 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)	EN 60825-1:2007 / IEC 60825-1:2007 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)	EN 60825-1:2007 / IEC 60825-1:2007 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)
Immunity				
Generic	CISPR 24 / CISPR 35			
EN	EN 55024:2010 / EN 55035:2017			
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2
Flicker	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3

Mounting and enclosure	HPE Aruba Networking	HPE Aruba Networking	HPE Aruba Networking	HPE Aruba Networking
	6300F 48-port 1GbE Class	6300F 24-port 1GbE Class	6300F 48-port 1GbE and	6300F 24-port 1GbE and
	4 PoE and 4-port SFP56	4 PoE and 4-port SFP56	4-port SFP56 Switch	4-port SFP56 Switch
	Switch (JL665A)	Switch (JL666A)	(JL667A)	(JL668A)
riodining and enclosure	Mounts in an EIA-standard			
	19 in. telco rack or			
	equipment cabinet.	equipment cabinet.	equipment cabinet.	equipment cabinet.
	Horizontal surface	Horizontal surface	Horizontal surface	Horizontal surface
	mounting only. 2-post rack			
	kit included.	kit included.	kit included.	kit included.



HPE Aruba Networking 6300M 24-port SFP+ and 4-port SFP56 Switch (JL658A)	HPE Aruba Networking 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL659A)	HPE Aruba Networking 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL660A)	HPE Aruba Networking 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL661A)
24x 1G/10G SFP+ ports  4x 1G/10G/25G <sup>1</sup> /50G SFP ports	48x ports SmartRate 100M <sup>2</sup> /1G/2.5G/5G BaseT Class 6 PoE ports supporting up to 60W per port	24x ports Smart Rate 100M²/1G/2.5G/5G BaseT Class 6 PoE ports supporting up to 60W per port	48x ports 10/100/1000 BaseT PoE+ ports supporting up to 30W per port
1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	4x 1G/10G/25G <sup>1</sup> /50G SFP ports	4x 1G/10G/25G <sup>1</sup> /50G SFP ports	4x 1G/10G/25G <sup>1</sup> /50G SFP ports
	Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 60W)	Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 60W)	Supports PoE Standards IEEE 802.3af, 802.3at  1x USB-C Console Port
	1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	1x OOBM port 1x USB Type A Host port
2 field-replaceable, hot-swappable power supply slots	2 field-replaceable, hot-swappable power supply slots	2 field-replaceable, hot-swappable power supply slots	2 field-replaceable, hot-swappable power supply slots
1 minimum power supply required (ordered separately)	1 minimum power supply required (ordered separately)	1 minimum power supply required (ordered separately)	1 minimum power supply required (ordered separately)
Supports JL085A PSU	Supported PSUs JL086A JL087A JL670A	Supported PSUs JL086A JL087A JL670A	Supported PSUs JL086A JL087A JL670A
	Max PoE Power: 2880W	Max PoE Power: 1440W	Max PoE Power: 1440W
Switch has two fan tray slots and comes with two fan trays installed. Min 2 fan trays required. Fan trays are field replaceable and hot-swappable. Each fan tray contains two fans.	Switch has two fan tray slots and comes with two fan trays installed. Min 2 fan trays required. Fan trays are field replaceable and hot-swappable. Each fan tray contains two fans.	Switch has two fan tray slots and comes with one fan tray installed. Min 1 fan tray required. Fan trays are field replaceable and hot-swappable. Each fan tray contains two fans.	Switch has two fan tray slots and comes with one fan tray installed. Min 1 fan tray required. Fan trays are field replaceable and hot-swappable. Each fan tray contains two fans.
(H) 4.4 cm x (W) 44.2 cm x (D) 38.5 cm (1.73" x 17.4" x 15.2")	(H) 4.4 cm x (W) 44.2 cm x (D) 38.5 cm (1.73" x 17.4" x 15.2")	(H) 4.4 cm x (W) 44.2 cm x (D) 38.5 cm (1.73" x 17.4" x 15.2")	(H) 4.4 cm x (W) 44.2 cm x (D) 38.5 cm (1.73" x 17.4" x 15.2")
5.8 Kg (12.78 lb)	6.71 kg (14.8 lb)	6.06 (13.36 lb)	5.72 kg (12.61 lb)
	6300M 24-port SFP+ and 4-port SFP56 Switch (JL658A)  24x 1G/10G/25G¹/50G SFP ports  1x USB-C Console Port 1x OOBM port 1x USB Type A Host port  2 field-replaceable, hot-swappable power supply slots  1 minimum power supply required (ordered separately)  Supports JL085A PSU  Switch has two fan tray slots and comes with two fan trays installed. Min 2 fan trays required. Fan trays are field replaceable and hot-swappable. Each fan tray contains two fans.  (H) 4.4 cm x (W) 44.2 cm x (W) 44.2 cm x (D) 38.5 cm (1.73" x 17.4" x 15.2")	### Aruba Networking 6300M 24-port SFP+ and 4-port SFP56 Switch (JL658A)  24x 1G/10G SFP+ ports	HPE Aruba Networking 6300M 24-port SPP5

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking, 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires OSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

 $<sup>^2</sup>$  100M use on Smart Rate ports is limited to full-duplex only. For 100M half-duplex support, use 1G ports on other models.

	HPE Aruba Networking 6300M 24-port SFP+ and 4-port SFP56 Switch (JL658A)	HPE Aruba Networking 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL659A)	HPE Aruba Networking 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL660A)	HPE Aruba Networking 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL661A)
Additional specifications				
CPU	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz
Memory and flash	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC
Packet buffer	8 MB	8 MB	8 MB	8 MB
Performance				
Switching capacity	880 Gbps	880 Gbps	640 Gbps	496 Gbps
Throughput capacity	654 Mpps	654 Mpps	476 Mpps	369 Mpps
Average latency (LIFO-64-bytes packets)	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec
Stack size	10 members	10 members	10 members	10 members
Max. stacking distance	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers
Stacking bandwidth	200 Gbps	200 Gbps	200 Gbps	200 Gbps
Switched virtual interfaces (dual stack)	1,024	1,024	1,024	1,024
IPv4 host table (ARP)	49,152	49,152	49,152	49,152
IPv6 host table (ND)	49,152	49,152	49,152	49,152
IPv4 unicast routes	61,000	61,000	61,000	61,000
IPv6 unicast routes	61,000	61,000	61,000	61,000
IPv4 multicast routes	8,192	8,192	8,192	8,192
IPv6 multicast routes	8,192	8,192	8,192	8,192
MAC table capacity	32,768	32,768	32,768	32,768
IGMP groups	4,096	4,096	4,096	4,096
MLD groups	4,096	4,096	4,096	4,096
IPv4/IPv6/MAC ACL entries (ingress)	20,480/5,120/20,480	20,480/5,120/20,480	20,480/5,120/20,480	20,480/5,120/20,480
IPv4/IPv6/MAC ACL entries (egress)	8,192/2,048/8,192	8,192/2,048/8,192	8,192/2,048/8,192	8,192/2,048/8,192
VRF	256	256	256	256

 $<sup>^{1}</sup>$  50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

	HPE Aruba Networking 6300M 24-port SFP+ and 4-port SFP56 Switch (JL658A)	HPE Aruba Networking 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL659A)	HPE Aruba Networking 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL660A)	HPE Aruba Networking 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL661A)
Environment				
Operating temperature	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods¹ of time. Operating temperature is reduced to 32°F (0°C) to 104°F (40°C) up to 5000ft when 10G SFP+ LR or ER Transceivers are installed.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods¹ of time. Requires two fan trays to support excursion.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods¹ of time.
Operating relative humidity	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing	5% to 95% @ 104°F (40°C) non-condensing
Non-operating	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft	-40°F to 158°F (-40°C to 70°C) up to 15,000 ft
Non-operating storage relative humidity	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing	5% to 95% @ 149°F (65°C) non-condensing
Max operating altitude	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max
Max non-operating altitude	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max
Acoustic	Sound Power, L <sub>WAd</sub> = 4.9 Bel Sound Pressure, L <sub>nAm</sub> (Bystander) = 31.0 dB	Sound Power, L <sub>WAd</sub> = 4.8 Bel Sound Pressure, L <sub>DAm</sub> (Bystander) = 30.6 dB	Sound Power, L <sub>WAd</sub> = 5.2 Bel Sound Pressure, L <sub>DAM</sub> (Bystander) = 34.2 dB	Sound Power, L <sub>WAd</sub> = 4.7 Bel Sound Pressure, L <sub>DAM</sub> (Bystander) = 29.8 dB
Primary airflow	Front and side to back	Front and side to back	Front and side to back	Front and side to back
Electrical characteristics				
Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
AC voltage	JL085A PSU: 100V-240V	JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V JL087A PSU: 110V-240V	JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V JL087A PSU: 110V-240V	JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V JL087A PSU: 110V-240V
Current (for voltages listed above)	JL085A PSU: 3A/1.2A	JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A	JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A	JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A
Power consumption (230VAC)	Idle: 51W 100% Traffic Rate: 85W	With JL086A PSU: Idle: 133W 100% Traffic Rate: 199W	With JL086A PSU: Idle: 93W 100% Traffic Rate: 137W	With JL086A PSU: Idle: 70W 100% Traffic Rate: 90W
		With JL087A PSU: Idle: 138W 100% Traffic Rate: 193W	With JL087A PSU: Idle: 91W 100% Traffic Rate: 131W	With JL087A PSU: Idle: 71W 100% Traffic Rate: 88W
		With JL670A PSU: Idle: 140W 100% Traffic Rate: 201W	With JL670A PSU: Idle: 98W 100% Traffic Rate: 139W	With JL670A PSU: Idle: 73W 100% Traffic Rate: 96W

 $<sup>^{\</sup>rm 1}$  No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.

	HPE Aruba Networking 6300M 24-port SFP+ and 4-port SFP56 Switch (JL658A)	HPE Aruba Networking 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL659A)	HPE Aruba Networking 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL660A)	HPE Aruba Networking 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL661A)
Safety				
	Europe: EN 60950-1:2006	Europe: EN 60950-1:2006	Europe: EN 60950-1:2006	Europe: EN 60950-1:2006
	+A11:2009 +A1:2010	+A11:2009 +A1:2010	+A11:2009 +A1:2010	+A11:2009 +A1:2010
	+A12:2011 + A2:2013	+A12:2011 + A2:2013	+A12:2011 + A2:2013	+A12:2011 + A2:2013
	US: UL 60950-1 2nd Ed.	US: UL 60950-1 2nd Ed.	US: UL 60950-1 2nd Ed.	US: UL 60950-1 2nd Ed.
	Canada: CAN/CSA-C22.2	Canada: CAN/CSA-C22.2	Canada: CAN/CSA-C22.2	Canada: CAN/CSA-C22.2
	No. 60950-1-07	No. 60950-1-07	No. 60950-1-07	No. 60950-1-07
	Worldwide: IEC	Worldwide: IEC	Worldwide: IEC	Worldwide: IEC
	60950-1:2005 w/all known	60950-1:2005 w/all known	60950-1:2005 w/all known	60950-1:2005 w/all known
	National Deviations	National Deviations	National Deviations	National Deviations
Emissions				
	Europe:	Europe:	Europe:	Europe:
	EN 55022:2010, Class A	EN 55022:2010, Class A	EN 55022:2010, Class A	EN 55022:2010, Class A
	EN 55032:2012, Class A	EN 55032:2012, Class A	EN 55032:2012, Class A	EN 55032:2012, Class A
	EN 55024:2010	EN 55024:2010	EN 55024:2010	EN 55024:2010
	EN 61000-3-2:2014	EN 61000-3-2:2014	EN 61000-3-2:2014	EN 61000-3-2:2014
	EN 61000-3-3:2013	EN 61000-3-3:2013	EN 61000-3-3:2013	EN 61000-3-3:2013
	US:	US:	US:	US:
	FCC part 15 Class A	FCC part 15 Class A	FCC part 15 Class A	FCC part 15 Class A
	Canada:	Canada:	Canada:	Canada:
	ICES-003 Class A	ICES-003 Class A	ICES-003 Class A	ICES-003 Class A
	Worldwide:	Worldwide:	Worldwide:	Worldwide:
	VCCI Class A	VCCI Class A	VCCI Class A	VCCI Class A
	CISPR 22 Class A	CISPR 22 Class A	CISPR 22 Class A	CISPR 22 Class A
	CISPR 32 Class A	CISPR 32 Class A	CISPR 32 Class A	CISPR 32 Class A
	CISPR 24:2010	CISPR 24:2010	CISPR 24:2010	CISPR 24:2010
Lasers				
	EN 60825-1:2007 / IEC	EN 60825-1:2007 / IEC	EN 60825-1:2007 / IEC	EN 60825-1:2007 / IEC
	60825-1:2007 Class 1	60825-1:2007 Class 1	60825-1:2007 Class 1	60825-1:2007 Class 1
	Class 1 Laser Products /	Class 1 Laser Products /	Class 1 Laser Products /	Class 1 Laser Products /
	Laser Klasse 1	Laser Klasse 1	Laser Klasse 1	Laser Klasse 1
	(Applicable for accessories:	(Applicable for accessories:	(Applicable for accessories:	(Applicable for accessories:
	Optical Transceivers only)	Optical Transceivers only)	Optical Transceivers only)	Optical Transceivers only)

	HPE Aruba Networking 6300M 24-port SFP+ and 4-port SFP56 Switch (JL658A)	HPE Aruba Networking 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL659A)	HPE Aruba Networking 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL660A)	HPE Aruba Networking 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL661A)
Immunity				
Generic	CISPR 24 / CISPR 35			
EN	EN 55024:2010 / EN 55035:2017			
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2
Flicker	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3
Mounting and enclosure				
	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.

	HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8/6 PoE 2p 50G and 2p 10G LRM L2 Switch (S3L77A)	HPE Aruba Networking 6300L 24p Smart Rate 1G/2.5G/5G/10G Class6 PoE 2p 50G and 2p 25G L2 Switch (S3L75A)	HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8 PoE 2p 50G and 2p 25G L2 Switch (S3L76A)
Description	48x ports SmartRate 100M²/1G/2.5G/5G BaseT Class 8 PoE ports supporting up to 90W per port on ports 1-12, and up to 60W per port on ports 13-48 (MACsec) 2x 10G/25G/50G SFP ports 2x 1G/10G SFP ports (LRM + MACsec) Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 90W) 1x USB-C Console Port 1x RJ45 console port 1x OOBM 1x USB Type A Host port	24x ports SmartRate 100M²/1G/2.5G/5G/10G BaseT Class 6 PoE ports supporting up to 60W per port (MACsec) 2x 10G/25G/50G¹ SFP ports 2x 10G/25G SFP ports (MACsec) Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 60W) 1x USB-C Console Port 1x RJ Console Port 1x OOBM port 1x USB Type A Host port	48x ports SmartRate 100M²/1G/2.5G/5G BaseT Class 8 PoE ports supporting up to 90W per port (MACsec) 2x 10G/25G/50G¹ SFP ports 2x 10G/25G SFP ports (MACsec) Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 90W) 1x USB-C Console Port 1x RJ Console Port 1x OOBM port 1x USB Type A Host port
Power supplies	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately)	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately)	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately)
	Supported PSUs JL086A JL087A JL670A JL758A Max PoE Power: 2880W	Supported PSUs JL086A JL087A JL670A JL758A Max PoE Power: 2880W	Supported PSUs JL086A JL087A JL670A JL758A Max PoE Power: 2880W
Fans	Switch has two fan tray slots and comes with two fan trays installed  • Min 2 fan trays required.  • Fan trays are field replaceable and hot-swappable.  • Each fan tray contains two fans.	Switch has two fan tray slots and comes with two fan trays installed.  • Min 2 fan trays required.  • Fan trays are field replaceable and hot-swappable.  • Each fan tray contains two fans.	Switch has two fan tray slots and comes with two fan trays installed  • Min 2 fan trays required.  • Fan trays are field replaceable and hot-swappable.  • Each fan tray contains two fans.
Physical characteristics	- Lacir lail Itay Cottialits (Wo lails.	- Laci i i i i i ay comanis i wo i diis.	- Laci raii iray comanis iwo lalis.
Dimensions	4.4 cm (h) x 44.2 cm (w) x 38.5 cm (d) (1.73" x 17.4" x 15.2")	4.4 cm (h) x 44.2 cm (w) x 38.5 cm (d) 38.5 cm (1.73" x 17.4" x 15.2")	4.4 cm (h) x 44.2 cm (w) x 38.5 cm (d) 38.5 cm (1.73" x 17.4" x 15.2")
Configuration weight	5.47 kg (12.06 lb)	5.26 kg (11.60 lb)	5.48 kg (12.08 lb)

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires S1J07A or S1J08A QSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

 $<sup>^2</sup>$  100M use on Smart Rate ports is limited to full-duplex only. For 100M half-duplex support, use 1G ports on other models.

	HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8/6 PoE 2p 50G and 2p 10G LRM L2 Switch (S3L77A)	HPE Aruba Networking 6300L 24p Smart Rate 1G/2.5G/5G/10G Class6 PoE 2p 50G and 2p 25G L2 Switch (S3L75A)	HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8 PoE 2p 50G and 2p 25G L2 Switch (S3L76A)
Additional specifications			
CPU	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz	Quad Core Arm Cortex A72 @ 1.8GHz
Memory and flash	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC	8 GB DDR4 32 GB eMMC
Packet buffer	16 MB	16 MB	16 MB
Performance			
Switching capacity	720 Gbps	780 Gbps	780 Gbps
Throughput capacity	535 Mpps	580 Mpps	580 Mpps
Average latency (LIFO-64-bytes packets)	1 Gbps: 4.24 ų Sec 10 Gbps: 1.50 ų Sec 25 Gbps: 2.91 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec	1 Gbps: 4.24 ų Sec 10 Gbps: 1.50 ų Sec 25 Gbps: 2.91 ų Sec 50 Gbps¹: 3.49 ų Sec	1 Gbps: 4.24 ų Sec 10 Gbps: 1.50 ų Sec 25 Gbps: 2.91 ų Sec 50 Gbps <sup>1</sup> : 3.49 ų Sec
Stack size	10 members	10 members	10 members
Max stacking distance	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers	Up to 10 kms with long range transceivers
Stacking bandwidth	200 Gbps	200 Gbps	200 Gbps
Switched virtual interfaces (dual stack)	1,024	1,024	1,024
IPv4 host table (ARP)	49,152	49,152	49,152
IPv6 host table (ND)	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>
IPv4 unicast routes	61,000	61,000	61,000
IPv6 unicast routes	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>
IPv4 multicast routes	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>
IPv6 multicast routes	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>
MAC table capacity	32,768	32,768	32,768
IGMP groups	4,096	4,096	4,096
MLD groups	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>
IPv4/IPv6/MAC ACL entries (ingress)	20,480/NA <sup>2</sup> /20,480	20,480/5,120/20,480	20,480/5,120/20,480
IPv4/IPv6/MAC ACL entries (egress)	8,192/NA <sup>2</sup> /8,192	8,192/NA <sup>2</sup> /8,192	8,192/NA <sup>2</sup> /8,192
VRF	1 default VRF, 1 management VRF	1 default VRF, 1 management VRF	1 default VRF, 1 management VRF
		<del>-</del>	<del>-</del>

<sup>&</sup>lt;sup>1</sup> 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceivers and DACs are not supported on S0E91A and S0X44A switch models, which requires S1J07A or S1J08A OSFP to SFP56 DAC cable for VSF stacking with other CX 6300F and CX 6300M switch models only. VSF stacking not supported on 1G ports.

 $<sup>^{\</sup>rm 2}$  IPv6 and Multicast are not supported on CX 6300L Switch Series

	HPE Aruba Networking 6300L	HPE Aruba Networking 6300L 24p	HPE Aruba Networking 6300L 48p
	48p Smart Rate 1G/2.5G/5G	Smart Rate 1G/2.5G/5G/10G Class6	Smart Rate 1G/2.5G/5G Class8
	Class8/6 PoE 2p 50G and 2p 10G	PoE 2p 50G and 2p 25G L2 Switch	PoE 2p 50G and 2p 25G L2 Switch
	LRM L2 Switch (S3L77A)	(S3L75A)	(S3L76A)
Environment			
Operating temperature	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft.	32°F to 113°F (0°C to 45°C) up to 5,000 ft. Derate -1 degree C for every 1,000 ft from 5,000 ft to 10,000 ft.
	Can support excursion to 131°F (55°C) for short periods¹ of time.	Can support excursion to 131°F (55°C) for short periods <sup>1</sup> of time.	Can support excursion to 131°F (55°C) for short periods <sup>1</sup> of time.
Operating relative humidity	5% to 95% @ 104°F (40°C)	5% to 95% @ 104°F (40°C)	5% to 95% @ 104°F (40°C)
	non-condensing	non-condensing	non-condensing
Non-operating	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C) up	-40°F to 158°F (-40°C to 70°C) up
	up to 15,000 ft	to 15,000 ft	to 15,000 ft
Non-operating storage relative humidity	5% to 95% @ 149°F (65°C)	5% to 95% @ 149°F (65°C)	5% to 95% @ 149°F (65°C)
	non-condensing	non-condensing	non-condensing
Max operating altitude	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max	10,000 ft (3.04 km) Max
Max Non-operating altitude	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max	15,000 ft (4.6 km) Max
Acoustic	Sound Power, LWAd = 4.9 Bel	Sound Power, LWAd = 4.9 Bel	Sound Power, LWAd = 5.0 Bel
	Sound Pressure, LpAm (Bystander)	Sound Pressure, LpAm (Bystander)	Sound Pressure, LpAm (Bystander)
	= 32.6 dB	= 33.0 dB	= 33.4 dB
Primary airflow	Front and side to back	Front and side to back	Front and side to back
Electrical characteristics			
Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Input voltage	JL670A PSU:	JL670A PSU:	JL670A PSU:
	110V-120V/208V-240V	110V-120V/208V-240V	110V-120V/208V-240V
	JL086A PSU: 100V-240V	JL086A PSU: 100V-240V	JL086A PSU: 100V-240V
	JL087A PSU: 110V-240V	JL087A PSU: 110V-240V	JL087A PSU: 110V-240V
Current (for voltages listed above)	JL670A PSU: 11A/8A	JL670A PSU: 11A/8A	JL670A PSU: 11A/8A
	JL086A PSU: 8A/3.5A	JL086A PSU: 8A/3.5A	JL086A PSU: 8A/3.5A
	JL087A PSU: 12A/5A	JL087A PSU: 12A/5A	JL087A PSU: 12A/5A
Power consumption (230VAC)	With JL086A PSU:	With JL086A PSU:	With JL086A PSU:
	Idle: 104W	Idle: 90W	Idle: 104W
	100% Traffic Rate: 168W	100% Traffic Rate: 143W	100% Traffic Rate: 173W
	With JL087A PSU:	With JL087A PSU:	With JL087A PSU:
	Idle: 104W	Idle: 90W	Idle: 104W
	100% Traffic Rate: 168W	100% Traffic Rate: 140W	100% Traffic Rate: 173W
	With JL670A PSU:	With JL670A PSU:	With JL670A PSU:
	Idle: 113W	Idle: 101W	Idle: 115W
	100% Traffic Rate: 179W	100% Traffic Rate: 152W	100% Traffic Rate: 184W

 $<sup>^{\</sup>rm 1}$  No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.

	HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8/6 PoE 2p 50G and 2p 10G LRM L2 Switch (S3L77A)	HPE Aruba Networking 6300L 24p Smart Rate 1G/2.5G/5G/10G Class6 PoE 2p 50G and 2p 25G L2 Switch (S3L75A)	HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8 PoE 2p 50G and 2p 25G L2 Switch (S3L76A)
Safety			
Include US, Canada, Europe, Worldwide	Europe: EN 62368-1:2014 +A11:2017 2nd Ed. EN 62368-1:2020 +A11:2020 3rd Ed.	Europe: EN 62368-1:2014 +A11:2017 2nd Ed. EN 62368-1:2020 +A11:2020 3rd Ed.	Europe: EN 62368-1:2014 +A11:2017 2nd Ed. EN 62368-1:2020 +A11:2020 3rd Ed.
	UK: BS EN 62368-1:2014 + A11:2017 2nd Ed BS EN 62368-1:2020 + A11:2020	UK: BS EN 62368-1:2014 + A11:2017 2nd Ed BS EN 62368-1:2020 + A11:2020	UK: BS EN 62368-1:2014 + A11:2017 2nd Ed BS EN 62368-1:2020 + A11:2020
	3rd Ed  US/Canada: UL 62368-1 2nd Ed.  CAN/CSA-C22.2 No. 62368-1-14  2nd Ed.	3rd Ed US/Canada: UL 62368-1 2nd Ed. CAN/CSA-C22.2 No. 62368-1-14 2nd Ed. Worldwide:	3rd Ed US/Canada: UL 62368-1 2nd Ed. CAN/CSA-C22.2 No. 62368-1-14 2nd Ed. Worldwide:
	Worldwide: IEC 62368-1:2018 3rd Ed. w/all	IEC 60950-1:2005 + Am1:2009 + Am2:2013 w/all known National Deviations	IEC 60950-1:2005 + Am1:2009 + Am2:2013 w/all known National Deviations
	known National Deviations	IEC 62368-1:2018 3rd Ed. w/all known National Deviations	IEC 62368-1:2018 3rd Ed. w/all known National Deviations
Emissions			
Include US, Canada, Europe, Worldwide	Europe: EN 55032:2015 +A11:2020, Class A EN 55035:2017 +A11:2020	Europe: EN 55032:2015 +A11:2020, Class A EN 55035:2017 +A11:2020	Europe: EN 55032:2015 +A11:2020, Class A EN 55035:2017 +A11:2020
	EN 61000-3-2:2014, Class A EN 61000-3-3:2013	EN 61000-3-2:2014, Class A EN 61000-3-3:2013 US/Canada:	EN 61000-3-2:2014, Class A EN 61000-3-3:2013 US/Canada:
	US/Canada: FCC CFR47 Part 15:2014, Class A ICES-003 Class A	FCC CFR47 Part 15:2014, Class A ICES-003 Class A Worldwide: VCCI Class A	FCC CFR47 Part 15:2014, Class A ICES-003 Class A Worldwide: VCCI Class A
	Worldwide: VCCI Class A CISPR 32 Class A CISPR 35:2016	CISPR 32 Class A CISPR 35:2016	CISPR 32 Class A CISPR 35:2016
Lasers			
Include US, Canada, Europe, Worldwide	EN 60825-1:2014 +A11:2021/ IEC 60825-1:2014 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)	EN 60825-1:2014 / IEC 60825-1:2014 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)	EN 60825-1:2014 / IEC 60825-1:2014 Class 1 Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories: Optical Transceivers only)

	HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8/6 PoE 2p 50G and 2p 10G LRM L2 Switch (S3L77A)	HPE Aruba Networking 6300L 24p Smart Rate 1G/2.5G/5G/10G Class6 PoE 2p 50G and 2p 25G L2 Switch (S3L75A)	HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8 PoE 2p 50G and 2p 25G L2 Switch (S3L76A)
Immunity			
Generic	CISPR 35	CISPR 35	CISPR 35
EN	EN 55035:2017+A11:2020	EN 55035:2017+A11:2020	EN 55035:2017+A11:2020
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2	IEC 61000-3-2, EN 61000-3-2
Flicker	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3	IEC 61000-3-3, EN 61000-3-3
Mounting and enclosure			
	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.

## Standards and protocols

- ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
- CPU DoS Protection
- Bootstrap Router (BSR) Mechanism for PIM. PIM WG draft-ietf-savi-mix
- IEEE 802.1AB-2005
- IEEE 802.1ak-2007
- IEEE 802.1AX-2008 Link Aggregation
- IEEE 802.1D MAC Bridges
- IEEE 802.1p Priority
- IEEE 802.1Q VLANs
- IEEE 802.1s Multiple Spanning Trees
- IEEE 802.1t-2001
- IEEE 802.1v VLAN classification by Protocol and Port
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3ae 10-Gigabit Ethernet
- IEEE 802.3af Power over Ethernet
- IEEE 802.3at Power over Ethernet
- IEEE 802.3bt Power over Ethernet
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- IEEE 802.3x Flow Control
- IEEE 802.3z 1000BASE-X
- RFC 1122 Requirements for Internet Hosts -Communications Layers
- RFC 1215 Convention for defining traps for use with the SNMP
- RFC 1256 ICMP Router Discovery Messages
- RFC 1350 TFTP Protocol (revision 2)
- RFC 1393 Traceroute Using an IP Option
- RFC 1403 BGP OSPF Interaction
- RFC 1519 CIDR
- RFC 1542 BOOTP Extensions
- RFC 1583 OSPF Version 2

- RFC 1591 Domain Name System Structure and Delegation
- RFC 1657 Definitions of Managed Objects for BGP-4 using SMIv2
- RFC 1772 Application of the Border Gateway Protocol in the Internet
- RFC 1812 Requirements for IP Version 4 Router
- RFC 1918 Address Allocation for Private Internet
- RFC 1997 BGP Communities Attribute
- RFC 1998 An Application of the BGP Community Attribute in Multi-home Routing
- RFC 2131 DHCP
- RFC 2132 DHCP Options and BOOTP Vendor Extensions
- RFC 2236 IGMP
- RFC 2328 OSPF Version 2
- RFC 2375 IPv6 Multicast Address Assignments
- RFC 2385 Protection of BGP Sessions via the TCP MD5 Signature Option
- RFC 2401 Security Architecture for the Internet Protocol
- RFC 2402 IP Authentication Header
- RFC 2439 BGP Route Flap Damping
- RFC 2460 Internet Protocol, Version 6 (IPv6) Specification
- RFC 2464 Transmission of IPv6 over Ethernet Networks
- RFC 2545 Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing
- RFC 2576 (Coexistence between SNMP V1, V2, V3)
- RFC 2579 (SMIv2 Text Conventions)
- RFC 2580 (SMIv2 Conformance)
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- RFC 2711 IPv6 Router Alert Option
- RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol
- RFC 2918 Route Refresh Capability for BGP-4

- RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only)
- RFC 2934 Protocol Independent Multicast MIB for IPv4
- RFC 3019 MLDv1 MIB
- RFC 3046 DHCP Relay Agent Information Option
- RFC 3056 Connection of IPv6 Domains via IPv4 Clouds
- RFC 3065 Autonomous System Confederation for BGP
- RFC 3068 An Anycast prefix for 6to4 Relay Route
- RFC 3137 OSPF Stub Router Advertisement sFlow
- RFC 3376 IGMPv3
- RFC 3416 (SNMP Protocol Operations v2)
- RFC 3417 (SNMP Transport Mappings)
- RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
- RFC 3484 Default Address Selection for IPv6
- RFC 3509 Alternative Implementations of OSPF Area Border Routers
- RFC 3575 IANA Considerations for RADIUS
- RFC 3623 Graceful OSPF Restart
- RFC 3768 VRRP
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- RFC 3973 PIM Dense Mode
- RFC 4022 MIB for TCP
- RFC 4113 MIB for UDP
- RFC 4213 Basic Transition Mechanisms for IPv6 Hosts and Routers
- RFC 4251 The Secure Shell (SSH) Protocol
- RFC 4252 SSHv6 Authentication
- RFC 4253 SSHv6 Transport Layer
- RFC 4254 SSHv6 Connection
- RFC 4271 A Border Gateway Protocol 4 (BGP-4)

- RFC 4273 Definitions of Managed Objects for BGP-4
- RFC 4291 IP Version 6 Addressing Architecture
- RFC 4292 IP Forwarding Table MIB
- RFC 4293 Management Information Base for the Internet Protocol (IP)
- RFC 4360 BGP Extended Communities Attribute
- RFC 4419 Key Exchange for SSH
- RFC 4443 ICMPv6
- RFC 4456 BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP)
- RFC 4486 Subcodes for BGP Cease Notification Message
- RFC 4541 IGMP & MLD Snooping Switch
- RFC 4552 Authentication/Confidentiality for OSPFv3
- RFC 4601 PIM Sparse Mode
- RFC 4607 Source-Specific Multicast for IP
- RFC 4675 RADIUS VLAN & Priority
- RFC 4724 Graceful Restart Mechanism for BGP
- RFC 4760 Multiprotocol Extensions for BGP-4
- RFC 4861 IPv6 Neighbor Discovery
- RFC 4862 IPv6 Stateless Address Auto-configuration
- RFC 4940 IANA Considerations for OSPF
- RFC 5065 Autonomous System Confederation for BGP
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
- RFC 5187 OSPFv3 Graceful Restart
- RFC 5340 OSPFv3 for IPv6
- RFC 5424 Syslog Protocol
- RFC 5492 Capabilities Advertisement with BGP-4
- RFC 5519 Multicast Group Membership Discovery MIB (MLDv2 only)
- RFC 5701 IPv6 Address Specific BGP Extended Community Attribute

- RFC 5722 Handling of Overlapping IPv6 Fragments
- RFC 5798 VRRP (exclude Accept Mode and sub-sec timer)
- RFC 5880 Bidirectional Forwarding Detection
- RFC 5905 Network Time Protocol Version
   4: Protocol and Algorithms Specification
- RFC 6620 FCFS SAVI
- RFC 6987 OSPF Stub Router Advertisement
- RFC 7047 The Open vSwitch Database Management Protocol
- RFC 7313 Enhanced Route Refresh Capability for BGP-4
- RFC 768 User Datagram Protocol
- RFC 783 TFTP Protocol (revision 2)
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 813 Window and Acknowledgement Strategy in TCP
- RFC 815 IP datagram reassembly algorithms
- RFC 8201 Path MTU Discovery for IP version 6
- RFC 826 ARP
- RFC 879 TCP maximum segment size and related topics
- RFC 896 Congestion control in IP/TCP internetworks
- RFC 917 Internet subnets
- RFC 919 Broadcasting Internet Datagrams
- RFC 922 Broadcasting Internet Datagrams in the Presence of Subnets (IP\_BROAD)
- RFC 925 Multi-LAN address resolution
- RFC 951 BOOTP
- RFC 1027 Proxy ARP
- SNMPv1/v2c/v3
- RFC 4861 IPv6 Neighbor Discovery
- RFC 4862 IPv6 Stateless Address Auto-configuration
- ITU-T Rec G.8032/Y.1344 Mar. 2010

- RFC 1757 Remote Network Monitoring Management Information Base
- 2.5G/5GBASE-T (IEEE 802.3bz-2016),
   2.5G/5G NBASE-T
- 10GBASE-T (IEEE 802.3an-2006)
- 25-Gigabit Ethernet (IEEE 802.3by-2016, 802.3cc-2017)
- 50-Gigabit Ethernet (IEEE 802.3cd-2018)
- RFC 3101 OSPF Not-so-stubby-area option
- RFC 4750 OSPFv2 MIB partial support no SetMIB
- UL 1069 Standard for Hospital Signaling and Nurse Call Equipment<sup>1</sup>

# HPE Aruba Networking CX 6300 switches and accessories

#### **Switch models**

- HPE Aruba Networking CX 6300M 48p SR10 PTP/AVB Class8 PoE 4p 100G MACsec Switch (S0E91A)
- HPE Aruba Networking CX 6300M 48p SR10 PTP/AVB Class8 PoE 4p 100G MACsec TAA Switch (S0X44A)
- HPE Aruba Networking 6300M 24p HPE Smart Rate 1G/2.5G/5G/10G Class6 PoE and 2p 50G and 2p 25G Switch (R8S89A)
- HPE Aruba Networking 6300M 48p
   HPE Smart Rate 1G/2.5G/5G Class8 PoE
   and 2p 50G and 2p 25G Switch (R8S90A)
- HPE Aruba Networking 6300M 48SR5 12p Class8 PoE and 36p Class6 PoE HPE Smart Rate 1G/2.5G/5G and 2p 50G and 2p 10G LRM support Switch (R8S91A)
- HPE Aruba Networking 6300M 24p SFP+ LRM support and 2p 50G and 2p 25G MACsec Switch (R8S92A)
- HPE Aruba Networking 6300M 24-port SFP+ and 4-port SFP56 Switch (JL658A)
- HPE Aruba Networking 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL659A)

 $<sup>^{\</sup>rm 1}$  UL 1069 standard supported in the US on JL659A and JL660A switch models

- HPE Aruba Networking 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL660A)
- HPE Aruba Networking 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL661A)
- HPE Aruba Networking 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL662A)
- HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Switch (JL663A)
- HPE Aruba Networking 6300M 24-port 1GbE and 4-port SFP56 Switch (JL664A)
- HPE Aruba Networking 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL665A)
- HPE Aruba Networking 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL666A)
- HPE Aruba Networking 6300F 48-port 1GbE and 4-port SFP56 Switch (JL667A)
- HPE Aruba Networking 6300F 24-port 1GbE and 4-port SFP56 Switch (JL668A)
- HPE Aruba Networking 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle (JL762A)
- HPE Aruba Networking 6300M 24p 10M/100M/1G Class4 PoE 4p SFP56 50G TAA Switch (S0F99A)
- HPE Aruba Networking 6300M 48p 10M/100M/1G 4p SFP56 50G TAA Switch (S0G00A)
- HPE Aruba Networking 6300M 24p 10M/100M/1G 4p SFP56 50G TAA Switch (S0G01A)
- HPE Aruba Networking 6300M 24p SFP+ 1G/10G 4p SFP56 50G TAA Switch (S0G03A)
- HPE Aruba Networking 6300M 48p Smart Rate 1G/2.5G/5G Class6 PoE 4p SFP56 50G TAA Switch (S0G04A)
- HPE Aruba Networking 6300M 24p Smart Rate 1G/2.5G/5G Class6 PoE 4p SFP56 50G TAA Switch (S0G05A)

- HPE Aruba Networking 6300M 48p 10M/100M/1G Class4 PoE 4p SFP56 50G TAA Switch (S0G06A)
- HPE Aruba Networking 6300M 48p 10M/100M/1G 4p SFP56 50G Power-to-Port 2xFan PSU TAA Bundle (S0G02A)
- HPE Aruba Networking 6300F 48p 10M/100M/1G Class4 PoE 4p SFP56 50G TAA Switch (S0G95A)
- HPE Aruba Networking 6300F 24p 10M/100M/1G Class4 PoE 4p SFP56 50G TAA Switch (S0G96A)
- HPE Aruba Networking 6300F 48p 10M/100M/1G 4p SFP56 50G TAA Switch (S0G97A)
- HPE Aruba Networking 6300F 24p 10M/100M/1G 4p SFP56 50G TAA Switch (S0G98A)

#### Layer 2 switch models

- HPE Aruba Networking 6300L 24p Smart Rate 1G/2.5G/5G/10G Class6 PoE 2p 50G and 2p 25G L2 Switch (S3L75A)
- HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8 PoE 2p 50G and 2p 25G L2 Switch (S3L76A)
- HPE Aruba Networking 6300L 48p Smart Rate 1G/2.5G/5G Class8/6 PoE 2p 50G and 2p 10G LRM L2 Switch (S3L77A)

#### **Power supplies**

- HPE Aruba Networking X371 12VDC 250W 100-240VAC Power Supply (JL085A)
- HPE Aruba Networking X372 54VDC 680W 100-240VAC Power Supply (JL086A)
- HPE Aruba Networking X372 54VDC 1050W 110-240VAC Power Supply (JL087A)
- HPE Aruba Networking X372 54VDC 1600W 110-240VAC Power Supply (JL670A)

- HPE Aruba Networking X371 12VDC 250W 100-240VAC Power-to-Port Power Supply (JL760A)
- HPE Aruba Networking 6300M 250W 36-72VDC PSU (JL757A)
- HPE Aruba Networking 6300M 1050W 36-72VDC (JL758A)

#### Fan trays

- HPE Aruba Networking X751 Front to Back Fan Tray (JL669B)
- HPE Aruba Networking 6300M
   Power-to-Port Fan Tray (JL761A)
- HPE Aruba Networking X741 Port to Power Airflow Fan unit (JL714A)

#### Accessories

- HPE X410 1U Universal 4-post Rack Mount Kit (J9583A)
- HPE Aruba Networking X414 1U Universal 4-pack Rack Mounting Kit (J9583B)
- HPE Aruba Networking USB-A to RJ45 PC-to-Switch Cable (R9G48B)
- HPE Aruba Networking USB-A to RJ45 PIN3TX-6RX Cable (R8Z87A)
- HPE Aruba Networking USB-A to USB-C PC-to-Switch Cable (R9J32A)
- HPE Aruba Networking USB-C to USB-C PC-to-Switch Cable (R9J33A)
- HPE Aruba Networking CX Switch Bluetooth Adapter (S1H23A)
- HPE QSFP28 to SFP28 Adapter (845970-B21)<sup>4</sup>

#### **Transceivers**

- HPE Aruba Networking 100M SFP LC FX 2km MMF XCVR (J9054D)<sup>2</sup>
- HPE Aruba Networking 1G SFP LC SX 500m MMF Transceiver (J4858D)
- HPE Aruba Networking 1G SFP LC LX 10km SMF Transceiver (J4859D)
- HPE Aruba Networking 1G SFP LC LH 70km SMF Transceiver (J4860D)
- HPE Aruba Networking 1G SFP RJ45 T 100m Cat5e Transceiver (J8177D)

<sup>&</sup>lt;sup>2</sup> J9054D 100Mbps transceiver only supported in SFP+ ports on JL658A. 100Mbps transceivers are not supported in any SFP56 port on all models

 $<sup>^4</sup>$  HPE QSFP28 to SFP28 Adapter (845970-B21) required to support 10G and 25G transceivers only when used with S0E91A and S0X44A switch models

- HPE Aruba Networking 1G SFP LC SX 500m MMF TAA Transceiver (JL745A)
- HPE Aruba Networking 1G SFP LC LX 10km SMF TAA Transceiver (JL746A)
- HPE Aruba Networking 1G SFP RJ45 T 100m Cat5e TAA Transceiver (JL747A)
- HPE Aruba Networking 10G SFP+ LC SR 300m MMF Transceiver (J9150D)<sup>5</sup>
- HPE Aruba Networking 10G SFP+ LC LRM 220m MMF Transceiver (J9152D)<sup>3</sup>
- HPE Aruba Networking 10G SFP+ LC LR 10km SMF Transceiver (J9151E)<sup>5</sup>
- HPE Aruba Networking 10G SFP+ LC ER 40km SMF Transceiver (J9153D)<sup>5</sup>
- HPE Aruba Networking 10GBASE-T SFP+ RJ45 30m Transceiver (JL563C)
- HPE Aruba Networking 10G SFP+ LC SR 300m MMF TAA Transceiver (JL748A)
- HPE Aruba Networking 10G SR SFP+ LC 400m OM4 C-XCVR (S2P30A)
- HPE Aruba Networking 10G LR SFP+ LC 10km SMF C-XCVR (S2P31A)
- HPE Aruba Networking 10G ER SFP+ LC 40km SMF C-XCVR (S2P32A)
- HPE Aruba Networking 25G SR SFP28 LC 100m MMF C-XCVR (S2P33A)
- HPE Aruba Networking 25G LR SFP28 LC 10km SMF C-XCVR (S2P34A)
- HPE Aruba Networking 10G SFP+ LC LR 10km SMF TAA Transceiver (JL749A)
- HPE Aruba Networking 25G SFP28 LC SR 100m MMF Transceiver (JL484A)<sup>5</sup>
- HPE Aruba Networking 25G SFP28 LC eSR 400m MMF Transceiver (JL485A)<sup>5</sup>
- HPE Aruba Networking 25G SFP28 LC LR 10km SMF Transceiver (JL486A)<sup>5</sup>
- HPE Aruba Networking 25G SFP LC LR 10km SMF TAA XCVR (S2N63A)
- HPE Aruba Networking 50G SFP56 LC SR 100m MMF XCVR (R0M48A)
- HPE Aruba Networking 50G eSR 300m MMF Transceiver (S0V64A)
- HPE Aruba Networking 50G LR 10km SMF Transceiver (S0V65A)

- HPE Aruba Networking 50G ER 40km SMF Transceiver (S0V66A)
- HPE Aruba Networking 25G ER LC 40km SMF Transceiver (S0V69A)<sup>5</sup>
- HPE Aruba Networking 50G BiDi 10km-Downstream 1330/1270 Transceiver (S1C92A)
- HPE Aruba Networking 50G BiDi 10km-Upstream 1270/1330 Transceiver (S1C94A)
- HPE Aruba Networking 100G SR2 MPO QSFP28 100m MMF Transceiver (S1C93A)<sup>4</sup>
- HPE Aruba Networking 4x100G DR QSFP-DD SN 500m SMF Transceiver (S3N90A)<sup>4</sup>
- HPE X142 40G QSFP+ MPO SR4 Transceiver (JH231A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 MPO SR4 100m 12-fiber MPO MMF Transceiver (JL309A)<sup>4</sup>
- HPE Aruba Networking 100G LR QSFP28 LC SMF XCVR (S3N89A)<sup>4</sup>
- HPE X142 40G QSFP+ MPO eSR4 300M XCVR (JH233A)<sup>4</sup>
- HPE Aruba Networking 40G QSFP+ LC BiDi 150m MMF Transceiver (JL308A)<sup>4</sup>
- HPE X142 40G QSFP+ LC LR4 SM Transceiver (JH232A)<sup>4</sup>
- HPE Aruba Networking 40G QSFP+ LC ER4 40km SMF XCVR (Q9G82A)<sup>4</sup>
- HPE 100Gb QSFP28 Bi-directional XCVR (845972-B21)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 LC CWDM4 2km SMF Transceiver (ROZ30A)<sup>4</sup>
- HPE Aruba Networking 100 QSFP28 LC FR1 2km SMF Transceiver (R9B63A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 LC LR4 10km SMF 2-strand Transceiver (JL310A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 LC ER4L 40km SMF Transceiver (JL743A)<sup>4</sup>
- HPE Aruba Networking 25G BiDi 10km-Downstream 1330/1270 Transceiver (S1C96A)<sup>4</sup>

 HPE Aruba Networking 25G BiDi 10km-Upstream 1270/1330 Transceiver (S1C98A)<sup>4</sup>

#### **Cables**

- HPE Aruba Networking 50G QSFP56 to SFP56 0.65m DAC Cable (S1J07A)
- HPE Aruba Networking 50G QSFP56 to SFP56 3m DAC Cable (S1J08A)
- HPE Aruba Networking 10G SFP+ to SFP+ 1m Direct Attach Copper Cable (J9281D)
- HPE Aruba Networking 10G SFP+ to SFP+ 3m Direct Attach Copper Cable (J9283D)
- HPE Aruba Networking 25G SFP28 to SFP28 0.65m Direct Attach Copper Cable (JL487A)
- HPE Aruba Networking 25G SFP28 to SFP28 3m Direct Attach Copper Cable (JL488A)
- HPE Aruba Networking 25G SFP28 to SFP28 5m Direct Attach Copper Cable (JL489A)
- HPE Aruba Networking 50G SFP56 to SFP56 0.65m DAC Cable (ROM46A)<sup>1</sup>
- HPE Aruba Networking 50G SFP56 to SFP56 3m DAC Cable (R0M47A)<sup>1</sup>
- HPE X242 40G QSFP+ to QSFP+ 1m DAC Cable (IH234A)<sup>4</sup>
- HPE X242 40G QSFP+ to QSFP+ 3m DAC Cable (JH235A)<sup>4</sup>
- HPE X242 40G QSFP+ to QSFP+ 5m DAC Cable (JH236A)<sup>4</sup>
- HPE Aruba Networking 40G QSFP+ to QSFP+ 7m AOC (ROZ22A)<sup>4</sup>
- HPE Aruba Networking 40G QSFP+ to QSFP+ 15m AOC (R0Z23A)<sup>4</sup>
- HPE Aruba Networking 40G QSFP+ to QSFP+ 30m AOC (R0Z24A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28-QSFP28 3m DAC Cable (JL307A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable (ROZ25A)<sup>4</sup>

 $<sup>^{\</sup>rm 3}$  J9152D XCVR natively supported only in the R8S91A and R8S92A models

QSFP+ and QSFP28 products for use with S0E91A and S0X44A switch models only

 $<sup>^{5}</sup>$  HPE QSFP28 to SFP28 Adapter (845970-B21) required when used with S0E91A and S0X44A switch models.

- HPE Aruba Networking 100G QSFP28 to QSFP28 3m Direct Attach Copper Cable (JL307A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 to QSFP28 5m Direct Attach Copper Cable (ROZ26A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 to QSFP28 2m AOC (JL856A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 to QSFP28 7m AOC (ROZ27A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 to QSFP28 15m AOC (R0Z28A)<sup>4</sup>
- HPE Aruba Networking 100G QSFP28 to QSFP28 30m AOC (R0Z29A)<sup>4</sup>

#### Software

- HPE Aruba Networking CX Mobile App arubanetworks.com/products/networking/ switches/cx-mobileapp/
- HPE Aruba Networking Switch Multi-Edit Software Single Node: 1 year (JL639AAE)
- HPE Aruba Networking Switch Multi-Edit Software Single Node: 3 years (JL640AAE)

# HPE Aruba Networking CX Advanced feature packs

- HPE Aruba Networking CX Soft 63xx Sw Adv 10y E-STU (S0T76AAE)
- HPE Aruba Networking CX Soft 63xx Sw Adv 1y E-STU (SOT77AAE)
- HPE Aruba Networking CX Soft 63xx Sw Adv 3y E-STU (SOT78AAE)
- HPE Aruba Networking CX Soft 63xx Sw Adv 5y E-STU (S0T79AAE)
- HPE Aruba Networking CX Soft 63xx Sw Adv 7y E-STU (SOT80AAE)

## HPE Aruba Networking Central Foundational licenses

 HPE Aruba Networking Central Switch 6300/38xx Foundational 1 year Subscription E-STU (Q9Y78AAE)

- HPE Aruba Networking Central Switch 6300/38xx Foundational 3 year Subscription E-STU (Q9Y79AAE)
- HPE Aruba Networking Central Switch 6300/38xx Foundational 5 year Subscription E-STU (Q9Y80AAE)
- HPE Aruba Networking Central Switch 6300/38xx Foundational 7 year Subscription E-STU (Q9Y81AAE)
- HPE Aruba Networking Central Switch 6300/38xx Foundational 10 year Subscription E-STU (R3K02AAE)
- HPE Aruba Networking Central 63xx or 38xx Switch Foundational 1 year Subscription E-STU (Q9Y78AAE)
- HPE Aruba Networking Central On-Premises 63xx or 38xx Switch Foundational 1 year Subscription E-STU (R6U83AAE)
- HPE Aruba Networking Central On-Premises 63xx or 38xx Switch Foundational 3 year Subscription E-STU (R6U84AAE)
- HPE Aruba Networking Central 63xx or 38xx Switch Foundational 3 year Subscription E-STU (Q9Y79AAE)
- HPE Aruba Networking Central On-Premises 63xx or 38xx Switch Foundational 5 year Subscription E-STU (R6U85AAE)
- HPE Aruba Networking Central 63xx or 38xx Switch Foundational 5 year Subscription E-STU (Q9Y80AAE)
- HPE Aruba Networking Central On-Premises 63xx or 38xx Switch Foundational 7 year Subscription E-STU (R6U86AAE)
- HPE Aruba Networking Central 63xx or 38xx Switch Foundational 7 year Subscription E-STU (Q9Y81AAE)
- HPE Aruba Networking Central On-Premises 63xx or 38xx Switch Foundational 10 year Subscription E-STU (R6U87AAE)

 HPE Aruba Networking Central 63xx or 38xx Switch Foundational 10 year Subscription E-STU (R3K02AAE)

For details and complete listing of HPE Aruba Networking Central licensing options, please refer to the <u>HPE Aruba</u> Networking Central Data Sheet

#### **HPE Aruba Networking Fabric Composer**

- HPE Aruba Networking Fabric Composer Device Management Service Tier 3 Switch 1 year Subscription E-STU (R8D18AAE)
- HPE Aruba Networking Fabric Composer Device Management Service Tier 3 Switch 3 year Subscription E-STU (R8D19AAE)
- HPE Aruba Networking Fabric Composer Device Management Service Tier 3 Switch 5 year Subscription E-STU (R8D20AAE)

#### Support

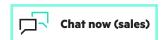
- JL658A: 4 Hour On-site 3 Year (HR4C9E)
- JL659A: 4 Hour On-site 3 Year (HR4R3E)
- JL660A: 4 Hour On-site 3 Year (HL5Z0E)
- JL661A: 4 Hour On-site 3 Year (HR4Z8E)
- JL662A: 4 Hour On-site 3 Year (HL6R3E)
- JL663A: 4 Hour On-site 3 Year (HR5N2E)
- JL664A: 4 Hour On-site 3 Year (HL7J3E)
- JL665A: 4 Hour On-site 3 Year (HR5W0E)
- JL666A: 4 Hour On-site 3 Year (HR6E5E)
- JL667A: 4 Hour On-site 3 Year (HR6P0E)
- JL668A: 4 Hour On-site 3 Year (HR6X5E)
- JL762A: 4 Hour On-site 3 Year (HR5N2E)

For HPE Aruba Networking Central hardware only support, 24x7 TAC support, and many other support options, go to Support Services HPE Aruba Networking SKU lookup tool.

 $<sup>^{\</sup>rm 4}$  QSFP+ and QSFP28 products for use with S0E91A and S0X44A switch models only

#### **Data sheet**







© Copyright 2024 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.

Arm is a registered trademark of Arm Limited. Bluetooth is a trademark owned by its proprietor and used by Hewlett Packard Enterprise under license. Microsoft is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. sFlow is a registered trademark of InMon Corp. All third-party marks are property of their respective owners.