HPE aruba networking

Data sheet

HPE Aruba Networking CX 6300 Switch Series

HPE

Key benefits

— Stackable Layer 3 switches with BGP, EVPN, VXLAN, VRF, and OSPF with robust security and QoS

— Non-blocking performance with up to 1760 Gbps switching capacity, up to 1310 Mpps of forwarding throughput and up to 400 Gbps stacking bandwidth.

— Compact 1U switches with full density HPE Smart Rate (1G/2.5G/5G/10GbE) multi-gigabit, 1G fiber, up to 90W PoE (Class 8), 10G LRM SFP+, and built-in high speed 1/10/25/40/50/100GbE uplinks available on select models[1]

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 layer.

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[1] and 40/100GbE uplinks and supports high density IEEE 802.3bt high power PoE. across fixed and modular configuration switch models. 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.

[1]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.

Key benefits (continued)

- High availability and scale with choice between 2 to 10-member Virtual Switching Framework (VSF) stacking and 2-member Virtual Switching Extension (VSX) cluster. VSX Live Upgrades and VSF in-service software upgrades deliver ISSU orchestration with no downtime or restart when upgrading within the same major release.
- Management via single point of visibility and control with HPE Aruba Networking Central across wired, wireless, and WAN
- Secure and simple access for users and IoT with HPE Aruba Networking Dynamic Segmentation
- Deep visibility and application recognition with CX Edge Insights, including granular data point collection with search, sort and reporting
- Intelligent monitoring, visibility, and remediation with HPE Aruba Networking CX Network Analytics Engine (NAE)
- Automated configuration and verification with HPE Aruba Networking Switch Multi-Edit Software
- Large TCAM size ideal for mobility and IoT deployments in large campuses with several thousand clients
- Selectable queue configurations allow for increased performance by defining number of queues and associated memory buffering to best meet the needs of network applications

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.

Data center bundle
For data center networks, the HPE Aruba Networking 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) for server racks. Bundle 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
- 1/10/25/50GbE SFP uplinks

Product Features

HPE Aruba Networking CX operating system
The HPE Aruba Networking CX 6300 Switch Series is based on the HPE Aruba Networking CX Switch Operating System, a modern, cloud-native, microservices-based network architecture that automates and simplifies critical tasks and complex workflows for the network operator. It delivers simplified IT operations with faster meantime to resolution, high availability, and end-to-end security.

For more information, read the HPE Aruba Networking CX Switch Operating System Data Sheet

In addition to the native features available in HPE Aruba Networking CX Switch Operating System, 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 — a single point of visibility and control HPE Aruba Networking CX Switches are supported on HPE Aruba Networking Central, a single, zero trust, AI-powered, and cloud-native point of visibility and control for network operations. Using flexible, cloud-based, or on-premises models, HPE Aruba Networking Central delivers unified wired, WLAN, and SD-WAN management.

To learn more about Central subscriptions available for HPE Aruba Networking CX Switches, read the HPE Aruba Networking Central SaaS Subscription Ordering Guide.

For more information on the capabilities of HPE Aruba Networking Central, visit its webpage at hpe.com/us/en/aruba-central.html

7th Generation ASICs — Purpose Built for 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.

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.

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

VSX Clusters – High Availability
HPE Aruba Networking Virtual Switching Extension (VSX) maintain synchronous state across dual control planes allows a unique high availability solution. VSX is delivered through redundancy gained by deploying two switches with an inter-switch link, with each switch maintaining its independent control.

— Architecture flexibility with a choice between VSX active-active network design or VSF stacking for scale and simplicity

— Continuous configuration synchronization via CX-OS

— Operational simplicity and usability for easy configuration

— High availability by design with support for VSX Live Upgrade

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 100GbE[1] 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) and 1GbE fiber 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[1] port connectivity

— HPE Smart Rate Multi-Gigabit (IEEE 802.3bz) Ethernet supports high speed wireless access points

— Flexibility to turn 5G smart rate into 10G ports on S4P41A and S4P42A models

— 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.

— 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[2] 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

[1] 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.

[2] 100M use on Smart Rate ports is limited to full-duplex only. For 100M half-duplex support, use 1G ports on other models.

- 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

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)

— 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

— 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

— IPv6 VXLAN/EVPN Overlay support, allows IPv6 traffic over the VXLAN overlay

— VXLAN ARP/ND suppression allows minimization of ARP and ND traffic flooding within individual VXLAN segments, thus optimizing the VXLAN network

— QinQ support to improve the VLAN utilization by adding another 802.1Q tag to tagged packets

— Audio Video Bridging only supported on 89A, 90A

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 CX Switch Operating System switches. Other security features include:

— HPE Aruba Networking CX Switch Operating System 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.

— 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:

— 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: HPE Aruba Networking Services

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 HPE Aruba Networking CX Switch Operating System software release and features, please visit the HPE Aruba Networking CX Switch Operating System Switch 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 networkingsupport.hpe.com/downloads

For support and services information, visit HPE Aruba Networking Services

Technical specifications

	HPE Aruba Networking 6300M 16p SmtRt 5G 32p 1G Class8 PoE 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P41A)	HPE Aruba Networking 6300M 32p SmtRt 5G CL8 8p SFP+ 10G LRM 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P42A)	HPE Aruba Networking 6300M 48p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P43A)	HPE Aruba Networking 6300M 24p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P44A)
	"32x 10/100/1000M and 16x SmartRate 1/2.5/5G BaseT Ports (Configuration can be changed to 8x SmartRate 10G BaseT Ports) with Class 8 PoE supporting up to 90W per port 2x 10G/25G/50G SFP56 ports 2x 1G/10G/25G SFP28 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 1x Bluetooth dongle to be used with CX Mobile App"	"32x SmartRate 1/2.5/5G BaseT Ports (Configuration can be changed to 16x SmartRate 5G and 8x SmartRate 10G BaseT Ports) with Class 8 PoE supporting up to 90W per port and 8x 1/10G SFP+ (LRM) 2x 10G/25G/50G SFP56 ports 2x 1G/10G/25G SFP28 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 1x Bluetooth adapter to be used with HPE Aruba Networking CX Switch Operating System Mobile App"	"48x ports 1G SFP 2x 10G/25G/50G SFP56 ports 2x 1G/10G/25G SFP28 ports (MACsec) 1x USB-C Console Port (higher priority than RJ45 console port) 1x RJ45 console port 1x OOBM 1x USB Type A Host port 1x Bluetooth adapter to be used with HPE Aruba Networking CX Switch Operating System Mobile App"	"24x ports 1G SFP 2x 10G/25G/50G SFP56 ports 2x 1G/10G/25G SFP28 ports (MACsec) 1x USB-C Console Port (higher priority than RJ45 console port) 1x RJ45 console port 1x OOBM 1x USB Type A Host port 1x Bluetooth adapter to be used with HPE Aruba Networking CX Switch Operating System Mobile App"
Power supplies	"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"	"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"	"2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supported PSUs JL085A JL757A PSU"	"2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) 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."	"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."

Technical specifications (continued)

	HPE Aruba Networking 6300M 16p SmtRt 5G 32p 1G Class8 PoE 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P41A)	HPE Aruba Networking 6300M 32p SmtRt 5G CL8 8p SFP+ 10G LRM 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P42A)	HPE Aruba Networking 6300M 48p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P43A)	HPE Aruba Networking 6300M 24p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P44A)
Physical characteristics				
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) (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 (h) x 44.2 cm (w) x 38.5 cm (d) (1.73" x 17.4" x 15.2")"
Configuration Weight	12.61 lb (5.72 kg)	12.52 lb (5.68 kg)	11.90 lb (5.40 kg)	11.40 lb (5.17 kg)
Additional Specifications				
CPU	1.8 GHz Quad Core Arm® Cortex™ A72	1.8 GHz Quad Core Cortex™ A72	1.8 GHz Quad Core Cortex™ A72	1.8 GHz Quad Core Cortex™ A72
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	16 MB	16 MB	16 MB	16 MB
Performance				
Model Switching Capacity	524 Gbps	780 Gbps	396 Gbps	348 Gbps
Model Throughput Capacity	390 Mpps	580 Mpps	295 Mpps	259 Mpps
Average Latency (LIFO-64-bytes packets)	"<5 µs 1G: 3.6 µs"	"<5 µs 10G LRM ports: 2.3 µs 10G dual mode ports: 5.5 µs 25G: 3.5 µs"	"<5 µs 1G: 3.4 µs 50G:2.1 µs"	<5 µs
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

Technical specifications (continued)

	HPE Aruba Networking 6300M 16p SmtRt 5G 32p 1G Class8 PoE 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P41A)	HPE Aruba Networking 6300M 32p SmtRt 5G CL8 8p SFP+ 10G LRM 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P42A)	HPE Aruba Networking 6300M 48p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P43A)	HPE Aruba Networking 6300M 24p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P44A)
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
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 periods[1] 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 periods[1] 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 periods[1] 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 periods[1] of time.

Technical specifications (continued)

	HPE Aruba Networking 6300M 16p SmtRt 5G 32p 1G Class8 PoE 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P41A)	HPE Aruba Networking 6300M 32p SmtRt 5G CL8 8p SFP+ 10G LRM 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P42A)	HPE Aruba Networking 6300M 48p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P43A)	HPE Aruba Networking 6300M 24p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P44A)
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 feet (3.04 km) Max	10,000 feet (3.04 km) Max	10,000 feet (3.04 km) Max	10,000 feet (3.04 km) Max
Max Non-Operating Altitude	15,000 feet (4.6 km) Max	15,000 feet (4.6 km) Max	15,000 feet (4.6 km) Max	15,000 feet (4.6 km) Max
Acoustic	With JL670A PSU: Idle: 352 BTU/hr 100% Traffic Rate: 457 BTU/hr With JL758A PSU: Idle: 379 BTU/hr 100% Traffic Rate: 461 BTU/hr	With JL670A PSU: Idle: 362 BTU/hr 100% Traffic Rate: 543 BTU/hr With JL758A PSU: Idle: 403 BTU/hr 100% Traffic Rate: 533 BTU/hr	With JL670A PSU: Idle: 229 BTU/hr 100% Traffic Rate: 433 BTU/hr With JL758A PSU: Idle: 208 BTU/hr 100% Traffic Rate: 420 BTU/hr	With JL670A PSU: Idle: 212 BTU/hr 100% Traffic Rate: 345 BTU/hr With JL758A PSU: Idle: 195 BTU/hr 100% Traffic Rate: 331 BTU/hr
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	TBD	TBD	TBD	TBD
AC Voltage	TBD	TBD	TBD	TBD
Current (for voltages listed above)	TBD	TBD	TBD	TBD
Power Consumption (230VAC)	TBD	TBD	TBD	TBD

Technical specifications (continued)

	HPE Aruba Networking 6300M 16p SmtRt 5G 32p 1G Class8 PoE 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P41A)	HPE Aruba Networking 6300M 32p SmtRt 5G CL8 8p SFP+ 10G LRM 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P42A)	HPE Aruba Networking 6300M 48p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P43A)	HPE Aruba Networking 6300M 24p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P44A)
Safety				
Include US, Canada, Europe, Worldwide	"Europe: EN 62368-1:2014 +A11:2017 2nd Ed. EN 62368-1:2020 +A11:2020 3rd Ed. US/Canada: UL 62368-1 3rd Ed. CAN/CSA-C22.2 No. 62368-1:19, 3rd Ed. Worldwide: 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. US/Canada: UL 62368-1 3rd Ed. CAN/CSA-C22.2 No. 62368-1:19, 3rd Ed. Worldwide: 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. US/Canada: UL 62368-1 3rd Ed. CAN/CSA-C22.2 No. 62368-1:19, 3rd Ed. Worldwide: 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. US/Canada: UL 62368-1 3rd Ed. CAN/CSA-C22.2 No. 62368-1:19, 3rd Ed. Worldwide: 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 AS/NZS CISPR 32: 2015 CNS 15936:2016 KS C 9832:2019 KS C 9835:2019 "	"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 AS/NZS CISPR 32: 2015 CNS 15936:2016 KS C 9832:2019 KS C 9835:2019 "	"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 AS/NZS CISPR 32: 2015 CNS 15936:2016 KS C 9832:2019 KS C 9835:2019 "	"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 AS/NZS CISPR 32: 2015 CNS 15936:2016 KS C 9832:2019 KS C 9835:2019 "
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)"	"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)"

Technical specifications (continued)

	HPE Aruba Networking 6300M 16p SmtRt 5G 32p 1G Class8 PoE 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P41A)	HPE Aruba Networking 6300M 32p SmtRt 5G CL8 8p SFP+ 10G LRM 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P42A)	HPE Aruba Networking 6300M 48p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P43A)	HPE Aruba Networking 6300M 24p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P44A)
Immunity				
Generic	CISPR 35	CISPR 35	CISPR 35	CISPR 35
EN	EN 55035:2017	EN 55035:2017	EN 55035:2017	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
South Korea	KS C 9835:2019	KS C 9835:2019	KS C 9835:2019	KS C 9835:2019
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.

Technical specifications

	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 100M[2]/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 100M[2]/1G/2.5G/5G/10G BaseT Class 6 PoE ports supporting up to 60W per port (MACsec) 2x 10G/25G/50G[1] 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 100M[2]/1G/2.5G/5G BaseT Class 8 PoE ports supporting up to 90W per port (MACsec) 2x 10G/25G/50G[1] 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) Supported PSUs JL086A JL087A JL670A JL758A Max PoE Power: 2640W	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	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
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)

[1] 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.

[2] 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 (continued)

	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 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz
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 µ Sec 10 Gbps: 1.50 µ Sec 25 Gbps: 2.91 µ Sec 50 Gbps[1]: 3.49 µ Sec	1 Gbps: 4.24 µ Sec 10 Gbps: 1.50 µ Sec 25 Gbps: 2.91 µ Sec 50 Gbps[1]: 3.49 µ Sec	1 Gbps: 4.24 µ Sec 10 Gbps: 1.50 µ Sec 25 Gbps: 2.91 µ Sec 50 Gbps[1]: 3.49 µ Sec
Average latency (LIFO-64-bytes packets)	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

[1] 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.

Technical specifications (continued)

	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°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[1] 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 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods[1] 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 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods[1] of time.
Operating relative humidity	5% to 95% @ 104°F (40°C) non condensing	5% to 95% @ 104°F (40°C) noncondensing	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	50 Hz/60 Hz	50 Hz/60 Hz	50 Hz/60 Hz
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

[1] No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.

Technical specifications (continued)

	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)
Safety			
Include US, Canada, Europe, Worldwide	Europe: EN 62368-1:2014 +A11:2017 EN 62368-1:2020 +A11:2020 US: UL 62368-1 2nd Ed. CAN: CSA-C22.2 No. 62368-1-14 2nd Ed. Worldwide: IEC 62368-1:2014 (2nd Ed) IEC 62368-1:2018 (3rd Ed) Taiwan: CNS 15598-1:2020	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 62368-1:2020 + 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
Emissions			
Include US, Canada, Europe, Worldwide	Europe: EN 55032:2015+A11:2020, Class A EN 55035:2017+A11:2020 EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A2:2021 US: FCC 47 CFR part 15 subpart B, Class A CAN: ICES-003 Issue 7:2020, Class A Japan: VCCI-CISPR 32:2016, Class A Taiwan: CNS 15936:2016, Class A AUS/NZ: AS/NZS CISPR 32:2015+A1:2020, Class A Worldwide: CISPR 32:2015/AMD1:2019, 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	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 +A11:2021 / IEC 60825-1:2014 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)

Technical specifications (continued)

	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.

Technical specifications (continued)

	HPE Aruba Networking CX 6300M 48p SR10 PTP/AVB Class8 PoE 4p 100G MACsec Switch (S0E91A)	HPE Aruba Networking 6300M 24p SFP+ LRM support and 2p 50G and 2p 25G MACsec Switch (R8S92A)
Description	48x ports SmartRate 100M[2]/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[1] 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[1] 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) Supported PSUs JL086A JL087A JL670A JL758A Max PoE Power: 2880W	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) 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)

[1] 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.

[2] 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 (continued)

	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)
Additional specifications		
CPU	Quad Core Arm Cortex A72 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz
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 µ Sec 10 Gbps: 1.50 µ Sec 25 Gbps: 2.91 µ Sec 50 Gbps[1]: 3.49 µ Sec	1 Gbps: 4.24 µ Sec 10 Gbps: 1.50 µ Sec 25 Gbps: 2.91 µ Sec 50 Gbps[1]: 3.49 µ 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

[1]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.

Technical specifications (continued)

	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°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[2] 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 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods[2] of time. 55°C 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), 5,000 ft
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	50 Hz/60 Hz	50 Hz/60 Hz
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

[2] No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.

Technical specifications (continued)

	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 62368-1:2020 + 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
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)

Technical specifications (continued)

	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.

Technical specifications (continued)

	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 port 4x 1G/10G/25G/50G[1] SFP ports Supports PoE Standards IEEE 802.3af, 802.3at 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	48x ports 10/100/1000 BaseT ports 4x 1G/10G/25G/50G[1] SFP ports 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	24x ports 10/100/1000 BaseT ports 4x 1G/10G/25G/50G[1] SFP ports 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	48x ports 10/100/1000 BaseT ports 4x 1G/10G/25G/50G[1] SFP ports 1x USB-C Console Port 1x OOBM 1x USB Type A Host port
Power supplies	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supported PSUs JL086A JL087A JL670A Max PoE Power: 720W	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supports JL085A PSU	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supports JL085A PSU	2 Field-replaceable, hot-swappable power-supply slots and comes with 1 Pwr2Prt power-supply pre-installed Additional Pwr2Prt power-supply can be ordered separately Supports JL760A Pwr2Prt power-supply only
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: 6.27 kg (13.8 lb)

[1]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.

Technical specifications (continued)

	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 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz
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[1]: 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps[1]: 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps[1]: 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps[1]: 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

[1] 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.

Technical specifications (continued)

	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°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[1] 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 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods[1] 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 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods[1] 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	50 Hz/60 Hz	50 Hz/60 Hz	50 Hz/60 Hz	50 Hz/60 Hz
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 With JL670A PSU: Idle: 62W 100% Traffic Rate: 81W	Idle: 56W 100% Traffic Rate: 75W	Idle: 49W 100% Traffic Rate: 64W	Idle: 56W 100% Traffic Rate: 75W

[1] No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.

Technical specifications (continued)

	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 US: UL 60950-1 2nd Ed. Canada: CAN/CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 US: UL 60950-1 2nd Ed. Canada: CAN/CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 US: UL 60950-1 2nd Ed. Canada: CAN/CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 EN 62368-1:2014 +A11:2017 US: UL 60950-1 2nd Ed. Canada: CAN/CSA-C22.2 No. 60950-1-07 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 US: FCC part 15 Class A Canada: ICES-003 Class A Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	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 Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	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 Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	Europe: EN 55032:2015 +AC:2016, Class A EN 55035:2017 EN 61000-3-2:2014 EN 61000-3-3:2013 US: FCC 47 CFR part 15B, Class A Canada: ICES-003 Class A 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

Technical specifications (continued)

	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
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.

Technical specifications (continued)

	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 30W per port 4x 1G/10G/25G/50G[1] SFP ports Supports PoE Standards IEEE 802.3af, 802.3at 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	24x ports 10/100/1000BaseT Ports supporting up to 30W per port 4x 1G/10G/25G/50G[1] SFP ports 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	48x ports 10/100/1000BaseT Ports 4x 1G/10G/25G/50G[1] SFP ports 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	24x ports 10/100/1000BaseT Ports 4x 1G/10G/25G/50G[1] SFP ports 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port
Power supplies	Internal (fixed) power supply (950W) Max PoE Power: 740W	Internal (fixed) power supply (950W) Max PoE Power: 370W	Internal (fixed) power supply (200W)	Internal (fixed) power supply (200W)
Fans	Fixed fans	Fixed fans	Fixed fans	Fixed fans
Physical characteristics				
Dimensions	(H) 4.39 cm x (W) 44.2 cm x (D) 32.7 cm (1.73" x 17.4" x 12.9")	(H) 4.39 cm x (W) 44.2 cm x (D) 32.7 cm (1.73" x 17.4" x 12.9")	(H) 4.39 cm x (W) 44.2 cm x (D) 32.7 cm (1.73" x 17.4" x 12.9")	(H) 4.39 cm x (W) 44.2 cm x (D) 32.7 cm (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 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz
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

[1] 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.

Technical specifications (continued)

	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[1]: 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps[1]: 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps[1]: 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps[1]: 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

[1] 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.

Technical specifications (continued)

	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°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[1] 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 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods[1] 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 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods[1] 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 5,000 ft to 10,000 ft. Can support excursion to 131°F (55°C) for short periods[1] 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_{WAd} = 5.2 Bel Sound Pressure, L_{pAm} (Bystander) = 34.9 dB	Sound Power, L_{WAd} = 5.0 Bel Sound Pressure, L_{pAm} (Bystander) = 32.3 dB	Sound Power, L_{WAd} = 4.9 Bel Sound Pressure, L_{pAm} (Bystander) = 31.5 dB	Sound Power, L_{WAd} = 4.9 Bel Sound Pressure, L_{pAm} (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	50 Hz/60 Hz	50 Hz/60 Hz	50 Hz/60 Hz	50 Hz/60 Hz
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 US: UL 60950-1 2nd Ed. Canada: CAN/ CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 US: UL 60950-1 2nd Ed. Canada: CAN/ CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 US: UL 60950-1 2nd Ed. Canada: CAN/ CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 US: UL 60950-1 2nd Ed. Canada: CAN/ CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations

[1] No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.

Technical specifications (continued)

	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 US: FCC part 15 Class A Canada: ICES-003 Class A Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	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 Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	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 Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	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 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	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35
EN	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017	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.

Technical specifications (continued)

	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)
Description	24x 1G/10G SFP+ ports 4x 1G/10G/25G1/50G SFP ports 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	48x ports SmartRate 100M[2]/1G/2.5G/5G BaseT Class 6 PoE ports supporting up to 60W per port 4x 1G/10G/25G[1]/50G SFP ports Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 60W) 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	24x ports Smart Rate 100M[2]/1G/2.5G/5G BaseT Class 6 PoE ports supporting up to 60W per port 4x 1G/10G/25G[1]/50G SFP ports Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 60W) 1x USB-C Console Port 1x OOBM port 1x USB Type A Host port	48x ports 10/100/1000 BaseT PoE+ ports supporting up to 30W per port 4x 1G/10G/25G[1]/50G SFP ports Supports PoE Standards IEEE 802.3af, 802.3at 1x USB-C 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) Supports JL085A PSU	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supported PSUs JL086A JL087A JL670A Max PoE Power: 2880W	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supported PSUs JL086A JL087A JL670A Max PoE Power: 1440W	2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supported PSUs JL086A JL087A JL670A Max PoE Power: 1440W
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 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.
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")	(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	5.8 Kg (12.78 lb)	6.71 kg (14.8 lb)	6.06 (13.36 lb)	5.72 kg (12.61 lb)

[1]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.

[2]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 (continued)

	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 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz	Quad Core Arm Cortex A72 @ 1.8 GHz
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[1]: 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps[1]: 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps[1]: 3.49 ų Sec	1 Gbps: 2.28 ų Sec 10 Gbps: 1.46 ų Sec 25 Gbps: 1.90 ų Sec 50 Gbps[1]: 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

[1]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.

Technical specifications (continued)

	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°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[1] of time. Operating temperature is reduced to 32°F (0°C) to 104°F (40°C) up to 5000 ft 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°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°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[1] 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°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[1] 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, LWAd = 4.9 Bel Sound Pressure, LpAm (Bystander) = 31.0 dB	Sound Power, LWAd = 4.8 Bel Sound Pressure, LpAm (Bystander) = 30.6 dB	Sound Power, LWAd = 5.2 Bel Sound Pressure, LpAm (Bystander) = 34.2 dB	Sound Power, LWAd = 4.7 Bel Sound Pressure, LpAm (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	50 Hz/60 Hz	50 Hz/60 Hz	50 Hz/60 Hz	50 Hz/60 Hz
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 JL087A PSU: Idle: 138W 100% Traffic Rate: 193W With JL670A PSU: Idle: 140W 100% Traffic Rate: 201W	With JL086A PSU: Idle: 93W 100% Traffic Rate: 137W With JL087A PSU: Idle: 91W 100% Traffic Rate: 131W With JL670A PSU: Idle: 98W 100% Traffic Rate: 139W	With JL086A PSU: Idle: 70W 100% Traffic Rate: 90W With JL087A PSU: Idle: 71W 100% Traffic Rate: 88W With JL670A PSU: Idle: 73W 100% Traffic Rate: 96W

[1] No more than 96 consecutive hours and no more than 360 hours total (15 days) in 1 year.

Technical specifications (continued)

	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 +A11:2009 +A1:2010 +A12:2011 + A2:2013 US: UL 60950-1 2nd Ed. Canada: CAN/ CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 US: UL 60950-1 2nd Ed. Canada: CAN/ CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 US: UL 60950-1 2nd Ed. Canada: CAN/ CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations	Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013 US: UL 60950-1 2nd Ed. Canada: CAN/ CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/ all known National Deviations
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 US: FCC part 15 Class A Canada: ICES-003 Class A Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	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 Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	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 Worldwide: VCCI Class A CISPR 22 Class A CISPR 32 Class A CISPR 24:2010	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 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)

Technical specifications (continued)

	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	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35
EN	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017	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.

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[1]

[1] UL 1069 standard supported in the US on JL659A and JL660A switch models

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)

— 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)

— HPE Aruba Networking CX 6300M 24p SFP+ 1G/10G 4p SFP56 50G 2xFan PSU Bundle (S5Z46A)

— HPE Aruba Networking 6300M 16p SmtRt 5G 32p 1G Class8 PoE 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P41A)

— HPE Aruba Networking 6300M 32p SmtRt 5G CL8 8p SFP+ 10G LRM 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P42A)

— HPE Aruba Networking 6300M 48p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P43A)

— HPE Aruba Networking 6300M 24p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G Switch (S4P44A)

— HPE Aruba Networking 6300M 16p SmtRt 5G 32p 1G Class8 PoE 2p SFP28 25G MACsec 2p SFP56 50G TAA Sw (S4P45A)

— HPE Aruba Networking 6300M 32p SmtRt 5G 8p SFP+ 10G LRM 2p SFP28 25G MACsec 2p SFP56 50G TAA Switch (S4P46A)

— HPE Aruba Networking 6300M 48p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G TAA Switch (S4P47A)

— HPE Aruba Networking 6300M 24p SFP 1G 2p SFP28 25G MACsec 2p SFP56 50G TAA Switch (S4P48A)

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)[2]

Transceivers

— HPE Aruba Networking 100M SFP LC FX 2km MMF XCVR (J9054D)[3]
— 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)
— 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)[4]
— HPE Aruba Networking 10G SFP+ LC LRM 220m MMF Transceiver (J9152D)[5]
— HPE Aruba Networking 10G SFP+ LC LR 10km SMF Transceiver (J9151E)[4]
— HPE Aruba Networking 10G SFP+ LC ER 40km SMF Transceiver (J9153D)[4]
— 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)[4]
— HPE Aruba Networking 25G SFP28 LC eSR 400m MMF Transceiver (JL485A)[4]
— HPE Aruba Networking 25G eSR SFP28 LC 400m TAA Transceiver (S5U19A)
— HPE Aruba Networking 25G SFP28 LC LR 10km SMF Transceiver (JL486A)[4]
— 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)[4]
— 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)[6]
— HPE Aruba Networking 4x100G DR QSFP-DD SN 500m SMF Transceiver (S3N90A)[6]
— HPE X142 40G QSFP+ MPO SR4 Transceiver (JH231A)[6]

[2] HPE QSFP28 to SFP28 Adapter (845970-B21) required to support 10G and 25G transceivers only when used with S0E91A and S0X44A switch models.
[3] J9054D 100 Mbps transceiver only supported in SFP+ ports on JL658A. 100 Mbps transceivers are not supported in any SFP56 port on all models.
[4] HPE QSFP28 to SFP28 Adapter (845970-B21) required when used with S0E91A and S0X44A switch models.
[5] J9152D XCVR natively supported only in the R8S91A and R8S92A models
[6] QSFP+ and QSFP28 products for use with S0E91A and S0X44A switch models only

— HPE Aruba Networking 100G QSFP28 MPO SR4 100m 12-fiber MPO MMF Transceiver (JL309A)[6]
— HPE Aruba Networking 100G LR QSFP28 LC SMF XCVR (S3N89A)[5]
— HPE X142 40G QSFP+ MPO eSR4 300M XCVR (JH233A)[6]
— HPE Aruba Networking 40G QSFP+ LC BiDi 150m MMF Transceiver (JL308A)[6]
— HPE X142 40G QSFP+ LC LR4 SM Transceiver (JH232A)[6]
— HPE Aruba Networking 40G QSFP+ LC ER4 40km SMF XCVR (Q9G82A)[6]
— HPE 100Gb QSFP28 Bi-directional XCVR (845972-B21)[6]
— HPE Aruba Networking 100G QSFP28 LC CWDM4 2km SMF Transceiver (R0Z30A)[6]
— HPE Aruba Networking 100 QSFP28 LC FR1 2km SMF Transceiver (R9B63A)[6]
— HPE Aruba Networking 100G QSFP28 LC LR4 10km SMF 2-strand Transceiver (JL310A)[6]
— HPE Aruba Networking 100G QSFP28 LC ER4L 40km SMF Transceiver (JL743A)[6]
— HPE Aruba Networking 25G BiDi 10km-Downstream 1330/1270 Transceiver (S1C96A)[6]
— HPE Aruba Networking 25G BiDi 10km-Upstream 1270/1330 Transceiver (S1C98A)[6]
— HPE Aruba Networking 25G BR40-D 1314/1289 Transceiver (S0V70A)
— HPE Aruba Networking 25G BR40-D 1289/1314 Transceiver (S0V71A)

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 (R0M46A)[1]
— HPE Aruba Networking 50G SFP56 to SFP56 3m DAC Cable (R0M47A)[1]
— HPE X242 40G QSFP+ to QSFP+ 1m DAC Cable (JH234A)[6]
— HPE X242 40G QSFP+ to QSFP+ 3m DAC Cable (JH235A)[6]
— HPE X242 40G QSFP+ to QSFP+ 5m DAC Cable (JH236A)[6]
— HPE Aruba Networking 40G QSFP+ to QSFP+ 7m AOC (R0Z22A)[6]
— HPE Aruba Networking 40G QSFP+ to QSFP+ 15m AOC (R0Z23A)[6]
— HPE Aruba Networking 40G QSFP+ to QSFP+ 30m AOC (R0Z24A)[6]
— HPE Aruba Networking 100G QSFP28-QSFP28 3m DAC Cable (JL307A)[6]
— HPE Aruba Networking 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable (R0Z25A)[6]
— HPE Aruba Networking 100G QSFP28 to QSFP28 3m Direct Attach Copper Cable (JL307A)[6]
— HPE Aruba Networking 100G QSFP28 to QSFP28 5m Direct Attach Copper Cable (R0Z26A)[6]

Software

— HPE Aruba Networking CX Mobile App is subscription free
— 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 (S0T77AAE)
— HPE Aruba Networking CX Soft 63xx Sw Adv 3y E-STU (S0T78AAE)
— HPE Aruba Networking CX Soft 63xx Sw Adv 5y E-STU (S0T79AAE)
— HPE Aruba Networking CX Soft 63xx Sw Adv 7y E-STU (S0T80AAE)

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)

[5] J9152D XCVR natively supported only in the R8S91A and R8S92A models
[6]QSFP+ and QSFP28 products for use with S0E91A and S0X44A switch models only

— 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 HPE Aruba 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.

Learn more at

HPE.com/us/en/aruba-cx-switches.html

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