Overview

HPE Aruba Networking CX 8400 Switch Series

The past several decades in networking have been defined by static, closed networking solutions designed for the client-server era. The HPE Aruba Networking CX 8400 campus core and aggregation switch is a game-changing solution offering a flexible and innovative approach to dealing with the new application, security and scalability demands of the mobile cloud and IoT era.

The CX 8400 provides carrier class high availability with industry-leading line rate 10GbE/25GbE/40GbE/100GbE connectivity in a compact 8 slot chassis. Together with fixed form factor solutions such as the HPE Aruba Networking CX 8320 Switch and the HPE Aruba Networking CX 8325 Switch, the CX 8400 rounds out HPE Aruba Networking's core, aggregation and data center switching portfolio with a solution that ensures higher performance and higher uptime for the most demanding enterprise networks.

HPE Aruba Networking CX 8400 Switch Series

Key Features

- High performance 19.2 terabits per second switching (1.2Tbps/slot) capacity
- Carrier-class high availability with HPE Aruba Networking Virtual Switching Extension (VSX), redundant management, power, and fabric
- AOS-CX enables automation and usability using built-in REST APIs and Python scripts
- Intelligent monitoring, visibility, and remediation with HPE Aruba Networking Network Analytics Engine
- Dynamic VXLAN with BGP-EVPN for deep segmentation in data center and campus networks
- One-touch deployment with the HPE Aruba Networking CX Mobile App
- HPE Aruba Networking NetEdit support for automated configuration and verification
- Advanced Layer 2/3 feature set includes BGP, EVPN, OSPF, VRF, and IPv6
- Compact 8U chassis with high density, line rate 10GbE/25GbE/40GbE/100GbE connectivity

Standard Features

AOS-CX - A Modern Software System

The HPE Aruba Networking CX 8400 Switch Series is based on AOS-CX, a modern, database-driven operating system that automates and simplifies many critical and complex network tasks. A built-in time series database enables customers and developers to utilize software scripts for historical troubleshooting, as well as analysis of past trends. This helps predict and avoid future problems due to scale, security, and performance bottlenecks. AOS-CX operating system features are organized into HPE Aruba Networking CX Foundation and HPE Aruba Networking CX Advanced software licenses.

Every HPE Aruba Networking CX switch includes an active, embedded HPE Aruba Networking CX Foundation license at no additional cost with the option to upgrade to an HPE Aruba Networking CX Advanced license.

The CX Foundation license has everything needed to deploy, connect, and troubleshoot an enterprise network, including:

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

The HPE Aruba Networking CX Advanced license includes HPE Aruba Networking CX Edge Insights, offering deep visibility with application recognition, identification, and flow capture from layer 4 to layer 7.

For more information on the CX Advanced License, read the **HPE Aruba Networking CX Switch License Ordering Guide.**

Because AOS-CX is built on a modular Linux architecture with a stateful database, our operating system provides the following unique capabilities:

- Easy access to all network state information allows unique visibility and analytics
- REST APIs and Python scripting for fine-grained programmability of network tasks
- A micro-services architecture that enables full integration with other workflow systems and services
- Supports HPE Aruba Networking Fabric Composer - a software-defined orchestration solution that simplifies and accelerates leaf-spine network provisioning and day-to-day operations across rack-scale compute and storage infrastructure.
- Continual state synchronization that provides superior fault tolerance, fault monitoring and high availability.
- All software processes communicate with the database rather than each other, ensuring near real-time state and resiliency and allowing individual software modules to be independently upgraded for higher availability.

HPE Aruba Networking Network Analytics Engine - advanced monitoring and diagnostics

For enhanced visibility and troubleshooting, HPE Aruba Networking's Network Analytics Engine (NAE) automatically interrogates and analyzes events that can impact a networks health. Advanced telemetry and automation provide the ability to easily identify and troubleshoot network, system, application and security related issues easily, through the use of python agents, CLI-based agents and REST APIs.

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

HPE Aruba Networking Central, Cloud-Based Network Management

Flexible cloud-based or on-premises management for unified network operations of wired, WLAN, SD-WAN, and public cloud infrastructure. Designed to simplify day zero through day two operations with streamlined workflows. Switch management capabilities include configuration, onboarding, monitoring, troubleshooting, and reporting.

Standard Features

An HPE Aruba Networking Central Advanced license expands these capabilities with premium security and AIOps, including the HPE Aruba Networking Central NetConductor Fabric Wizard and Policy Manager to enable dynamic segmentation and distributed enforcement at a global scale.

The HPE Aruba Networking Central Advanced license now comes with all HPE Aruba Networking CX Advanced features so there is no need to purchase a CX Advanced license. This streamlines operational efficiency, reducing the need for IT teams to keep track of multiple licenses, active terms, and renewal dates. For more information on HPE Aruba Networking Central licensing, see the **HPE Aruba Networking Central SaaS Subscription Ordering Guide.**

HPE Aruba Networking NetEdit – automated switch configuration and management

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

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

Notes: A separate software license is required to use HPE Aruba Networking NetEdit.

HPE Aruba Networking CX Mobile App – unparalleled deployment convenience

An easy to use mobile app simplifies connecting and managing HPE Aruba Networking CX 6300 switches for any size project. Switch information can also be imported into HPE Aruba Networking NetEdit for simplified configuration management and to continuously validate the conformance of configurations anywhere in the network.

HPE Aruba Networking Virtual Switching Extension (VSX)

The ability of AOS-CX to maintain synchronous state across dual control planes allows a simplified carrier-class high availability solution called HPE Aruba Networking Virtual Switching Extension (VSX). Designed using the best features of existing high availability technologies such as Multi-chassis Link Aggregation (MC LAG), HPE Aruba Networking VSX enables a distributed architecture that is highly available during upgrades or control plane events. Features include:

- Continuous configuration synchronization via AOS-CX
- Flexible active-active network designs at Layers 2 and 3
- Operational simplicity and usability for easy configuration
- High availability by design during upgrades including support for VSX Live Upgrade with LACP traffic draining

Performance

- **High-speed fully distributed architecture**
  Provides up to 19.2 Tbps switching capacity with up to 7.142 billion packets per second (BPPS) for throughput; all switching and routing is performed in the line modules; meets the demands of bandwidth-intensive applications today and in the future
- **Scalable system design**
  Provides investment protection to support future technologies and higher-speed connectivity

Connectivity

- **High-density port connectivity**
  Supports up to 8 line modules, including a 32-port 10 Gigabit Ethernet with MACsec in hardware (not software), an 8-port 40 Gigabit Ethernet, a 6-port 40/100 Gigabit Ethernet module and a 32 port 25GbE module.
- **Jumbo frames**
  Allows high-performance backups and disaster-recovery systems; provides a maximum frame size of 9K bytes
- **Unsupported Transceiver Mode (UTM)**
  Allows possible use of 1G and 10G transceivers and DAC cables considered unsupported. No warranty nor support for the transceiver/cable when used.

Standard Features

- **Loopback**
  Supports internal loopback testing for maintenance purposes and increased availability; loopback detection protects against incorrect cabling or network configurations and can be enabled on a per-port or per-VLAN basis for added flexibility
- **Packet storm protection**
  Protects against unknown broadcast, unknown multicast, or unicast storms with user-defined thresholds

Quality of Service (QoS)

- **Strict priority (SP) queuing and Deficit Weighted Round Robin (DWRR)**
  Enable congestion avoidance
- **Data Center Bridging (DCB)**
  Supports lossless Ethernet networking standards to eliminate packet loss due to queue overflow
  - Priority Flow Control (PFC) 7 priorities per port
  - Enhanced Transmission Service (ETS)
  - DCB Exchange Protocol (Pre-standard LLDP DCBX IEEE 1.01 version)
- **Flow-Control Guard**
  Prevents accumulation of excessive congestion with periodic flushing. Avoids packets buffering for an extended time period
- **ECN with slope**
  Marks packets as ECN-CE (Congestion Experienced. Helps TCP to reduce receive window size during congestion
- **Advanced lossless pool configuration**
- **Global buffering statistics**
- **Storage Solution Support**
  iSCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMeOF)

Resiliency and high availability

- **AOS-CX software resiliency with VSX)**
- **Redundant and load-sharing fabrics, management, fan assemblies, and power supplies**
  Increases total performance and power availability while providing hitless, stateful failover
- **All hot-swappable modules**
  Allows replacement of modules without any impact on other modules
- **Ethernet Ring Protection Switching (ERPS)**
  Supports rapid protection and recovery in a ring topology.
- **Separate data and control paths**
  Separates control from services and keeps service processing isolated; increases security and performance
- **Bidirectional forward detection (BFD)**
  Enable sub-second failure detection for rapid routing protocol re-balancing
- **Virtual Router Redundancy Protocol (VRRP)**
  Allows groups of two routers to dynamically back each other up to create highly available routed environments
- **Unidirectional link detection (UDLD)**
  Monitors link connectivity and shuts down ports at both ends if unidirectional traffic is detected, preventing loops in STP-based networks
- **IEEE 802.3ad LACP**
  Supports up to 128 link aggregation groups (LAGs), each with eight links per LAG; and provides support for static or dynamic groups and a user-selectable hashing algorithm
- **Multiple internal power supplies**
  Provides high reliability, requiring only two power supplies to support a fully populated HPE Aruba Networking CX 8400 and adding two more gives the solution N+N power redundancy

Standard Features

Management

In addition to the HPE Aruba Networking CX Mobile App, HPE Aruba Networking NetEdit and HPE Aruba Networking Network Analytics Engine, the 8400 series offers the following:

- Built-in programmable and easy to use REST API interface
- **IPSLA**
  Monitor the network for degradation of various services, including monitoring voice. Monitoring is enabled via the NAE for history and for automated gathering of additional information when anomalies are detected.
- **Management interface control**
  Enables or disables each of the following interfaces depending on security preferences: console port, or reset button
- **Industry-standard CLI with a hierarchical structure**
  Reduces training time and expenses, and increases productivity in multivendor installations
- **Management security**
  Restricts access to critical configuration commands; offers multiple privilege levels with password protection; 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
- **sFlow® (RFC 3176)**
  Provides scalable ASIC-based wire speed network monitoring and accounting with no impact on network performance; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes
- **Remote monitoring (RMON)**
  Uses standard SNMP to monitor essential network functions and supports events, alarms, history, and statistics groups as well as a private alarm extension group
- **TFTP, and SFTP support**
  Offers different mechanisms for configuration updates;; trivial FTP (TFTP) is a simpler method using User Datagram Protocol (UDP); Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security
- **Debug and sampler utility**
  Supports ping and traceroute for both IPv4 and IPv6
- **Network Time Protocol (NTP)**
  Synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clock-dependent devices within the network. Can serve as the NTP server in a customer network.
- **IEEE 802.1AB Link Layer Discovery Protocol (LLDP)**
  Advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications
- **LACP-fallback**
  Enables Zero Touch Provisioning over Link Aggregation Groups.
- **Dual flash images**
  Provides independent primary and secondary operating system files for backup while upgrading
- **Supportability**
  Job scheduler framework
- **Analytics**
  AIOPS NAE Agent & Engine Improvements – Unicast Routing and Client Services

Standard Features

Layer 2 switching

- **VLAN**
  Supports up to 4,094 port-based or IEEE 802.1Q-based VLANs; and supports MAC-based VLANs
- **VLAN translation**
  Remaps VLANs during transit across a core network.
- **Q-in-Q VLAN tunnels**
  Expands the VLAN space by tagging the tagged packets. It allows services in a private VLAN to be transparently transmitted over a public network.
- **Bridge Protocol Data Unit (BPDU) tunneling**
  Transmits STP BPDUs transparently, allowing correct tree calculations across service providers, WANs, or MANs
- **Port mirroring**
  Duplicates port traffic (ingress and egress) to monitoring port; supports 4 mirroring groups, with an unlimited number of ports per group
- **STP**
  Supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP). It supports STP TCN Trap, STP New Root.
- **Rapid Per-VLAN Spanning Tree+ (RPVST+)**
  Allows each VLAN to build a separate spanning tree to improve link bandwidth usage in network environments with multiple VLANs

Layer 3 services

- **Address Resolution Protocol (ARP)**
  Determines the MAC address of another IP host in the same subnet; supports static ARPs; gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network
- **IP Directed Broadcast**
  Support directed broadcast on configured network subnets.
- **Dynamic Host Configuration Protocol (DHCP)**
  Simplifies the management of large IP networks; DHCP Relay enables DHCP operation across subnets
- **DHCP relay coexistence with server**
  Allows DHCP relay coexistence with DHCP server for both IPv4 and IPv6
- **Domain Name System (DNS)**
  Provides a distributed database that translates domain names and IP addresses, which simplifies network design; supports client and server. It supports mDNS Gateway.

Network Virtualization

- **Static VXLAN**
  Allows operators to manually connect two or more VXLAN tunnel endpoints (VTEP)
- **Dynamic VXLAN with BGP-EVPN**
  Deep segmentation for Spine/Leaf data center networks or Layer 3 campus designs, including NSX environments, with centralized gateway and symmetric Integrated Routing and Bridging (IRB) based distributed gateways VXLAN tunnels
- **VXLAN distributed anycast gateway**
  Addressing mechanism that enables the use of the same gateway IP addresses across all the leaf switches part of a VXLAN network. It supports VSX active forwarding for VXLAN underlay

Standard Features

Layer 3 routing

- **Policy Based Routing (PBR)**
  Enables using a classifier to select traffic that can be forwarded based on policy set by the network administrator
- **Static IPv4 routing**
  Provides simple manually configured IPv4 routing
- **Open shortest path first (OSPF)**
  Delivers faster convergence; uses link-state routing Interior Gateway Protocol (IGP), which supports ECMP, NSSA, and MD5 authentication for increased security and graceful restart for faster failure recovery
- **Border Gateway Protocol (BGP-4 and BGP-6**
  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
- **Dynamic BGP peering**
  Simplifies BGP configuration for ZTP scenarios and enables CX for Azure stack integration
- **IP performance optimization**
  Provides a set of tools to improve the performance of IPv4 networks; includes directed broadcasts, customization of TCP parameters, support of ICMP error packets, and extensive display capabilities
- **Static IPv6 routing**
  Provides simple manually configured IPv6 routing
- **Dual IP stack**
  Maintains separate stacks for IPv4 and IPv6 to ease the transition from an IPv4-only network to an IPv6-only network design
- **Multiprotocol BGP (MP-BGP) with IPv6 Address Family**
  Enables sharing of IPv6 routes using BGP and connections to BGP peers using IPv6.
- **IPv6 Multicast Routing**
  Provides capability to enable routing of IPv6 multicast traffic. Supports multicast listener discovery (MLD), MLD Snooping, and PIM-SM IPv6 Routing.
- **6in4 tunnels**
  Supports the tunneling of IPv6 traffic in an IPv4 network.
- **OSPFv3 for IPv6**
  Delivers faster convergence; uses link-state routing interior gateway protocol (IGP), which supports ECMP, NSSA, and IPSEC authentication for increased security and graceful restart for faster failure recovery
- **Loopback IP redistribution in OSPF**
  Allows redistribution of IPv4 and IPv6 addresses of loopback interface in OSFPv2/v3
- **Equal-Cost Multipath (ECMP)**
  Enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth
- **Generic routing encapsulation**
  Enables tunneling from site-to-site over a Layer 3 path
  DHCP Smart Relay

Visibility

Customers can choose to upgrade the active, embedded CX Foundation license to the term-based CX Advanced license to unlock the following benefits for their business:

- Delivers deep visibility with HPE Aruba Networking CX Edge Insights for application recognition, identification, and flow capture from layer 4 to layer 7. CX Edge Insights enables granular datapoint collection with search, sort and reporting as well as the ability to recognize 22 categories and more than 3700 applications.

Standard Features

Security

- **TAA Compliance**
  The HPE Aruba Networking CX 8400, a TAA-compliant product, with the AOS-CX uses FIPS 140-2 validated cryptography for protection of sensitive information
- **Federal Certification**
  Compliant with DoDIN, APL, NDcPP, FIPS, and USGv6 requirements for federal certifications.
- **Access control list (ACL) Features**
  Supports powerful ACLs, including VLAN ACL, for both IPv4 and IPv6. Supports creation of object groups representing sets of devices like IP addresses. For instance, IT management devices could be grouped in this way. ACLs can also support protecting control plane services such as SSH, SNMP, NTP or web servers.
- **Remote Authentication Dial-In User Service (RADIUS)**
  Eases security access administration by using a password authentication server
- **Enrollment over Secure Transport (EST)**
  Enables secure certificate enrollment, allowing for easier enterprise management of PKI
- **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**
  AOS-CX provides for both on-box as well as off-box authentication for administrative access. RADIUS or TACACS+ can be used to provide encrypted user authentication. Additionally, TACACS+ can also provide user authorization services
- **Secure shell (SSHv2)**
  Uses external servers to securely log in to a remote device; with authentication and encryption, it protects against IP spoofing and plain-text password interception; increases the security of Secure FTP (SFTP) transfers
- **Korea Government Security Features**
  - Ensure configuration integrity
  - Limit concurrent users for web access

Multicast

- **IGMP Snooping**
  Allows multiple VLANs to receive the same IPv4 multicast traffic, lessening network bandwidth demand by reducing multiple streams to each VLAN
- **PIM Multicast Boundary (v4)**
  VSX Graceful shutdown for IGMP/MLD
  Multicast NSF
- **Anycast RP**
  Two or more RPs configured with same /32 Host IP address on loopback interfaces. All the downstream routers will be configured to point to Anycast RP address for multicast routes. Device will automatically select the closest RP for each source and receiver. If equal costs routes exist, the process of registering the sources will be shared equally by all the RPs in the network.
- **MSDP Mesh Groups**
  MSDP used for Anycast RP is an intradomain feature that provides redundancy and load-sharing capabilities.
  When MSDP mesh groups are used, SA messages are not flooded to other mesh group peers. When MSDP peer in group receives SA message from another MSDP peer in the group, it assumes that this SA message was sent to all the other MSDP peers in the group. It also eliminates RPF checks on arriving SA messages. With MSDP mesh group configured, SA messages are always accepted from mesh group peer
- **PIM-Dense Mode**
  Floods multicast traffic to every corner of the network (push-model). Method is for delivering data to receivers without receivers requesting the data. Can be efficient in certain deployments in which there are active receivers on every subnet in the network. Branches without downstream receivers are pruned from the forwarding trees.
- **FastLeave (FL) and Forced-FastLeave (FFL) for IGMP**
  FL and FFL for IGMP/MLD speed up the process of blocking unnecessary Multicast traffic to a switch port that is connected to end nodes. They help to eliminate the CPU overhead of having to generate an IGMP/MLD Group-Specific Query message.

Standard Features

- **Support for Microsoft Network Load Balancer (NLB) for server applications**
- **Protocol Independent Multicast (PIM)**
  Defines modes of IPv4 multicasting to allow one-to-many and many-to-many transmission of information; supports PIM, Sparse Mode (SM) , Source-Specific Multicast (SSM), and PIM Dense Mode (DM).
- **Internet Group Management Protocol (IGMP)**
  Utilizes Any-Source Multicast (ASM) to manage IPv4 multicast networks; supports IGMPv1, v2, and v3

Additional information

- **Green initiative support**
  Provides support for RoHS and WEEE regulations

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.

- Foundation Care for HPE Aruba Networking Support Services include priority access to HPE Aruba Networking Technical Assistance Center (TAC) engineers 24x7x365, flexible hardware and onsite 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 Foundation Care and HPE Aruba Networking Pro Care, please visit:
https://www.arubanetworks.com/supportservices/

Warranty, services, and support

- **Limited Lifetime Warranty**
  See **https://www.arubanetworks.com/support-services/product-warranties/** for warranty and support information included with your product purchase.
- **Software Releases and Features:**
  Refer to **AOS-CX Switch Software Documentation Portal** or **HPE Aruba Networking Switch Feature Navigator**
- **Support and services information**
  Visit **https://www.arubanetworks.com/support-services/arubacare/.**

Configuration Information

BTO Models

Standard Switch Enclosures

Rule #	Description	SKU
	HPE Aruba Networking 8400 8-slot Chassis/3xFan Trays/18xFans/Cable Manager/X462 Bundle	JL375A
	• Bundle includes: 8-slot chassis, 3x Fan Trays, 18x Fans, Cable Manager, X462 Rack Rail Kit • 3 Fabric Module Slots • 2 Management Module Slots • 4 Power Supply Slots • 8 Line Module Slots • Includes 3 Fan Tray Bundles (JL371A) with 0 open FT Slots • Includes 1 2-Post Rack Kit (JL374A) • 8U – Height	
1, 2, 3,4, 5	HPE Aruba Networking 8400 1x Mgmt 3x PS 2x 8400X Fabric 1x 32p 10G 1x 8p 40G Module Bundle	JL376A
	• Bundle includes: 8-slot chassis, 3x Fan Trays, 18x Fans, Cable Manager, X462 Rack Rail Kit, 1x Management Module, 3x Power Supplies, 2x Fabric Modules, 1x 32p 10G Module, 1x 8p 40G Module • Includes 2 Fabric Modules (JL367A) with 1 open FM slot • Includes 1 Management Modules (JL368A) with 1 open MM slot • Includes 3 Power Supplies (JL372A) with 1 open PS slot • Includes 2 Line Modules (Qty 1 of JL363A and JL365A) with 6 open LM slots • Includes 3 Fan Tray Bundles (JL371A) with 0 open FT Slots • Includes 1 2-Post Rack Kit (JL374A) • Min=0 \ Max= 32 SFP/SFP+ 1G/10G Transceivers • Min=0 \ Max = 8 QSFP+ 40G Transceiver • 8U – Height	
	HPE Aruba Networking 8400 1x Mgmt 3x PS 2x 8400X Fabric 1x 32p 10G 1x 8p 40G Module Bundle PDU	JL376A#B2B
	• C19 PDU Jumper Cord (NA/MEX/TW/JP)	
	HPE Aruba Networking 8400 1x Mgmt 3x PS 2x 8400X Fabric 1x 32p 10G 1x 8p 40G Module Bundle PDU	JL376A#B2C
	• C19 PDU Jumper Cord (ROW)	
	HPE Aruba Networking 8400 1x Mgmt 3x PS 2x 8400X Fabric 1x 32p 10G 1x 8p 40G Module Bundle 220v	JL376A#B2E
	• HPE 2.5m C19 to NEMA 6-20P 250V 20Amp Non-locking Power Cord(JL351A)	
	HPE Aruba Networking 8400 1x Mgmt 3x PS 2x 8400X Fabric 1x 32p 10G 1x 8p 40G Module Bundle	JL376A#AC3
	• No Localized Power Cord Selected	

Configuration Rules

Rule #	Description	SKU
1	The following Transceivers install into this Module: (Use BTO only when adding to switch)	
	HPE Aruba Networking 1G SFP LC SX 500m OM2 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

Configuration Information

Rule #	Description	SKU
2	The following Transceivers install into this Module: (Use BTO only when adding to switch)	
	HPE Aruba Networking 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver	JL563B
	HPE Aruba Networking 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver	JL563C
	HPE Aruba Networking 10G SFP+ LC SR 300m OM3 MMF Transceiver	J9150D
	HPE Aruba Networking 10G SFP+ LC LR 10km SMF Transceiver	J9151E
	HPE Aruba Networking 10G SFP+ LC LRM 220m OM2 MMF Transceiver	J9152D
	HPE Aruba Networking 10G SFP+ LC ER 40km SMF Transceiver	J9153D
	HPE Aruba Networking 10G SR SFP+ LC 400m OM4 MMF C-Class Transceiver	S2P30A
	HPE Aruba Networking 10G LR SFP+ LC 10km SMF C-Class Transceiver	S2P31A
	HPE Aruba Networking 10G ER SFP+ LC 40km SMF C-Class Transceiver	S2P32A
	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 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285D
3	The following Transceivers install into this Module: (Use BTO only when adding to switch)	
	HPE Aruba Networking 40G QSFP+ LC Bidirectional 150m MMF 2-strand Transceiver	JL308A
	HPE Networking X142 40G QSFP+ MPO SR4 Transceiver	JH231A
	HPE Networking X142 40G QSFP+ MPO eSR4 300M Transceiver	JH233A
	HPE Networking X142 40G QSFP+ LC LR4 SM Transceiver	JH232A
	HPE Aruba Networking 40G QSFP+ LC ER4 40km SMF Transceiver	Q9G82A
	HPE Networking X242 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable	JH234A
	HPE Networking X242 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable	JH235A
	HPE Networking X242 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable	JH236A
	Unbuildable/FAN required, generates CFGU: If order is quoted for India and contains "#B2C" Option, then Display the following: For BTO shipments to India: Please replace <Base Model>#B2C option with <Base Model>#AC3 in the Bill of Materials and add the appropriate INDIA PDU Power Cord below via Ad-Hoc: For Factory Integration of Power Cord, please add "#0D1" to the Power Cord Sku suffix. (Ex. JL671A#0D1)	
	HPE Networking 2.0m C13 to C14 PDU India Power Cord	JL671A
	HPE Networking 2.5m C15 to C14 PDU India Power Cord	JL672A
	HPE Networking 2.5m C19 to C20 PDU India Power Cord	JL673A
5	Localization required on orders without #B2B, #B2C, #B2E, or #AC3 options.	

Notes:
- Locking Power Cord (JL335A) L6-20P is available through the Watson Accessories tab
- OCA Only Model Selection Form -
- HPE Offering > HPE Aruba Networking > Switches - HPE Aruba Networking OS: 8400 Switch Series

Modules

Rule #	Description	SKU
	Redundant Management Module	
	For Switch JL375A System (std 0 // max 2) User Selection (min 0 // max 2) per enclosure For Switch JL376A System (std 1 // max 2) User Selection (min 0 // max 1) per enclosure	
	HPE Aruba Networking 8400 Management Module	JL368A
	Fabric Modules	
	For Switch JL375A System (std 0 // max 3) User Selection (min 0 // max 3) per enclosure For Switch JL376A System (std 2 // max 3) User Selection (min 0 // max 1) per enclosure	
	HPE Aruba Networking 8400X 7.2Tbps Fabric Module	JL367A
	Line Module	
	For Switch JL375A System (std 0 // max 8) User Selection (min 0 // max 8) per enclosure For Switch JL376A System (std 2 // max 8) User Selection (min 0 // max 6) per enclosure	
1, 2, 6	HPE Aruba Networking 8400X 32-port 10GbE SFP/SFP+ with MACsec Advanced Module	JL363A

Configuration Information

	• min=0 \ max=32 SFP\SFP+ Transceivers	
1, 2, 5	HPE Aruba Networking 8400X-32Y 32p 1/10/25G SFP/SFP+/SFP28 Module	JL687A
	• min=0 \ max=32 SFP/SFP+/SFP28 Transceivers	
3	HPE Aruba Networking 8400X 8-port 40GbE QSFP+ Advanced Module	JL365A
	• min=0 \ max=8 QSFP+ Transceivers	
3, 4	HPE Aruba Networking 8400X 6-port 40GbE/100GbE QSFP28 Advanced Module	JL366A
	• min=0 \ max=6 QSFP+\QSFP28 Transceivers	

Configuration Rules

Rule #	Description	SKU
1	The following Transceivers install into this Module: (Use BTO only when adding to switch)	
	HPE Aruba Networking 1G SFP LC SX 500m OM2 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
2	The following Transceivers install into this Module: (Use BTO only when adding to switch)	
	HPE Aruba Networking 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver	JL563B
	HPE Aruba Networking 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver	JL563C
	HPE Aruba Networking 10G SFP+ LC SR 300m OM3 MMF Transceiver	J9150D
	HPE Aruba Networking 10G SFP+ LC LR 10km SMF Transceiver	J9151E
	HPE Aruba Networking 10G SFP+ LC ER 40km SMF Transceiver	J9153D
	HPE Aruba Networking 10G SR SFP+ LC 400m OM4 MMF C-Class Transceiver	S2P30A
	HPE Aruba Networking 10G LR SFP+ LC 10km SMF C-Class Transceiver	S2P31A
	HPE Aruba Networking 10G ER SFP+ LC 40km SMF C-Class Transceiver	S2P32A
	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 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285D
3	The following Transceivers install into this Module: (Use BTO only when adding to switch)	
	HPE Aruba Networking 40G QSFP+ LC ER4 40km SMF Transceiver	Q9G82A
	HPE Networking X142 40G QSFP+ MPO SR4 Transceiver	JH231A
	HPE Networking X142 40G QSFP+ LC LR4 SM Transceiver	JH232A
	HPE Networking X142 40G QSFP+ MPO eSR4 300M Transceiver	JH233A
	HPE Aruba Networking 40G QSFP+ LC Bidirectional 150m MMF 2-strand Transceiver	JL308A
	HPE Networking X242 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable	JH234A
	HPE Networking X242 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable	JH235A
	HPE Networking X242 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable	JH236A
4	The following Transceivers install into this Module: (Use BTO only when adding to switch)	
	HPE Aruba Networking 100G DR QSFP28 LC 500m SMF Transceiver	S3N88A
	HPE Aruba Networking 100G LR QSFP28 LC 10km SMF Transceiver	S3N89A
	HPE Aruba Networking 100G QSFP28 to QSFP28 3m Direct Attach Copper Cable	JL307A
	HPE Aruba Networking 100G QSFP28 MPO SR4 100m 12-fiber MPO OM3 MMF Transceiver	JL309A
	HPE Aruba Networking 100G QSFP28 LC LR4 10km SMF 2-strand Transceiver	JL310A
	HPE Aruba Networking 100G QSFP28 LC ER4L 40km SMF Transceiver	JL743A
	HPE Aruba Networking 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable	R0Z25A
	HPE Aruba Networking 100G QSFP28 to QSFP28 5m Direct Attach Copper Cable	R0Z26A
	HPE Aruba Networking 100G QSFP28 to QSFP28 7m Active Optical Cable	R0Z27A
	HPE Aruba Networking 100G QSFP28 to QSFP28 15m Active Optical Cable	R0Z28A
	HPE Aruba Networking 100G QSFP28 to QSFP28 30m Active Optical Cable	R0Z29A
5	The following Transceivers install into this Module: (Use BTO only when adding to switch)	
	HPE Aruba Networking 25G SFP28 LC SR 100m MMF Transceiver	JL484A
	HPE Aruba Networking 25G SFP28 LC eSR 400m MMF Transceiver	JL485A
	HPE Aruba Networking 25G SFP28 LC LR 10km SMF Transceiver	JL486A
	HPE Aruba Networking 25G SR SFP28 LC 100m MMF C-Class Transceiver	S2P33A
	HPE Aruba Networking 25G LR SFP28 LC 10km SMF C-Class Transceiver	S2P34A

Configuration Information

	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
6	The following Transceivers install into this Module: (Use BTO only when adding to switch)	
	HPE Aruba Networking 10G SFP+ LC LRM 220m OM2 MMF Transceiver	J9152D

Transceivers

Remarks	Description	SKU
	SFP Transceivers	
	HPE Aruba Networking 1G SFP LC SX 500m OM2 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
	SFP + Transceivers	
1	HPE Aruba Networking 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver	JL563B
Notes:	For JL363A, Limit 12 per switch/module, only to be installed in ports 1-12. For JL687A, no limit (max 32)	
	HPE Aruba Networking 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver	JL563C
	HPE Aruba Networking 10G SFP+ LC SR 300m OM3 MMF Transceiver	J9150D
	HPE Aruba Networking 10G SFP+ LC LR 10km SMF Transceiver	J9151E
	HPE Aruba Networking 10G SFP+ LC LRM 220m OM2 MMF Transceiver	J9152D
	HPE Aruba Networking 10G SFP+ LC ER 40km SMF Transceiver	J9153D
	HPE Aruba Networking 10G SR SFP+ LC 400m OM4 MMF C-Class Transceiver	S2P30A
	HPE Aruba Networking 10G LR SFP+ LC 10km SMF C-Class Transceiver	S2P31A
	HPE Aruba Networking 10G ER SFP+ LC 40km SMF C-Class Transceiver	S2P32A
	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 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285D

Rule#	Configuration Rules
1	• Clic Error Only: – If JL375A (8400 Bundle) is being configured, Then min 0 / max 12 of JL563A (10GBT XCVR) per JL363A (32 port 10G Module). Up to 8 modules can be selected per JL375A Switch Bundle. – If JL376A (8400 Bundle) is being configured, Then min 0 / max 12 of JL563A (10GBT XCVR) for included JL363A (32 port 10G Module). XCVRs not included. • Else min 0 / max 12 of JL563A (10GBT XCVR) per JL363A (32 port 10G Module). Up to 6 modules can be selected per JL376A Switch Bundle. • The JL363A Line Module can accommodate up to qty 12 10GBT Transceivers(JL563A) due to heat restrictions. • OCA Blue **Notes:** A maximum qty of 12 XCVRs (JL563A) can be installed into ports 1-12 within the JL376A Switch or JL363A Module.

	SFP28 Transceivers	
	HPE Aruba Networking 25G SFP28 LC SR 100m MMF Transceiver	JL484A
	HPE Aruba Networking 25G SFP28 LC eSR 400m MMF Transceiver	JL485A
	HPE Aruba Networking 25G SFP28 LC LR 10km SMF Transceiver	JL486A
	HPE Aruba Networking 25G SR SFP28 LC 100m MMF C-Class Transceiver	S2P33A
	HPE Aruba Networking 25G LR SFP28 LC 10km SMF C-Class Transceiver	S2P34A
	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
	QSFP+ Transceivers	

Configuration Information

	HPE Aruba Networking 40G QSFP+ LC ER4 40km SMF Transceiver	Q9G82A
	HPE Networking X142 40G QSFP+ MPO SR4 Transceiver	JH231A
	HPE Networking X142 40G QSFP+ LC LR4 SM Transceiver	JH232A
	HPE Networking X142 40G QSFP+ MPO eSR4 300M Transceiver	JH233A
	HPE Networking X242 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable	JH234A
	HPE Networking X242 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable	JH235A
	HPE Networking X242 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable	JH236A
	HPE Aruba Networking 40G QSFP+ LC Bidirectional 150m MMF 2-strand Transceiver	JL308A
	QSFP28 Transceivers	
	HPE Aruba Networking 100G DR QSFP28 LC 500m SMF Transceiver	S3N88A
	HPE Aruba Networking 100G LR QSFP28 LC 10km SMF Transceiver	S3N89A
	HPE Aruba Networking 100G QSFP28 to QSFP28 3m Direct Attach Copper Cable	JL307A
	HPE Aruba Networking 100G QSFP28 MPO SR4 100m 12-fiber MPO OM3 MMF Transceiver	JL309A
	HPE Aruba Networking 100G QSFP28 LC LR4 10km SMF 2-strand Transceiver	JL310A
	HPE Aruba Networking 100G QSFP28 LC ER4L 40km SMF Transceiver	JL743A
	HPE Aruba Networking 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable	R0Z25A
	HPE Aruba Networking 100G QSFP28 to QSFP28 5m Direct Attach Copper Cable	R0Z26A
	HPE Aruba Networking 100G QSFP28 to QSFP28 7m Active Optical Cable	R0Z27A
	HPE Aruba Networking 100G QSFP28 to QSFP28 15m Active Optical Cable	R0Z28A
	HPE Aruba Networking 100G QSFP28 to QSFP28 30m Active Optical Cable	R0Z29A
	Internal Power Supplies	
Remarks	**Description**	**SKU**
	For Switch JL375A System (std 0 // max 4) User Selection (min 0 // max 4) per enclosure For Switch JL376A System (std 3 // max 4) User Selection (min 0 // max 1) per enclosure	
1,2	HPE Aruba Networking X382 54VDC 2700W AC Power Supply • includes 1 x c19, 2750w	JL372A
	HPE Aruba Networking X382 54VDC 2700W AC Power Supply PDU • C19 PDU Jumper Cord (NA/MEX/TW/JP)	JL372A#B2B
	HPE Aruba Networking X382 54VDC 2700W AC Power Supply PDU • C19 PDU Jumper Cord (ROW)	JL372A#B2C
	HPE Aruba Networking X382 54VDC 2700W AC Power Supply 220v • HPE 2.5m C19 to NEMA 6-20P 250V 20Amp Non-locking Power Cord(JL351A)	JL372A#B2E
	HPE Aruba Networking X382 54VDC 2700W AC Power Supply • No Localized Power Cord Selected	JL372A#AC3

Rule#	**Description**
1	Localization (Wall Power Cord) required on orders without #B2B, #B2C, (PDU Power Cord) or #B2E. (See Localization Menu)
2	Unbuildable/FAN required, generates CFGU: If order is quoted for India and contains "#B2C" Option, then Display the following: For BTO shipments to India: Please replace <Base Model>#B2C option with <Base Model>#AC3 in the Bill of Materials and add the appropriate INDIA PDU Power Cord below via Ad-Hoc: For Factory Integration of Power Cord, please add "#0D1" to the Power Cord Sku suffix. (Ex. JL671A#0D1)

HPE Networking 2.0m C13 to C14 PDU India Power Cord	JL671A
HPE Networking 2.5m C15 to C14 PDU India Power Cord	JL672A
HPE Networking 2.5m C19 to C20 PDU India Power Cord	JL673A

Configuration Information

Notes:
- Drop down under power supply should offer the following options and results:
- Switch/Router to PDU Power Cord - #B2B in NA, Mexico, Taiwan, and Japan or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO)
- Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)
- High Volt Switch/Router/Power Supply to Wall Power Cord #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)
- No Localized Power Cord Selected - #AC3 Option
- Locking Power Cord (JL335A) L6-20P is available through the Watson Accessories tab

Switch Options

Fan Trays

For Switch JL375A System (std 3 // max 3) User Selection (min 0 // max 0) per enclosure
For Switch JL376A System (std 3 // max 3) User Selection (min 0 // max 0) per enclosure

HPE Aruba Networking 8400 1 Fan Tray and 6 Fans Bundle	JL371A

Notes: 3 Fan Tray Bundles are included with the JL375A and JL376A Switch Bundle

Rack Mount Kits

For Switch JL375A System (std 1 // max 1) User Selection (min 0 // max 0) per enclosure
For Switch JL376A System (std 1 // max 1) User Selection (min 0 // max 0) per enclosure

HPE Aruba Networking X462 2-post Rack Rail Kit	JL374A

Notes: 1 Rack Mount Kit is included with the JL375A and JL376A Switch Bundle

India PDU Cable

For Switch System (std 0 // max 1) User Selection (min 0 // max 1) per enclosure

HPE Networking 2.5m C19 to C20 PDU India Power Cord	JL673A

This cable is intended for India use only. Typically power cord is ordered when power supply option #AC3 is selected. C19 India PDU Cable for Factory Racked Systems Only

USB Console Cables

System (std 0 // max 99) per enclosure

HPE Aruba Networking USBA-RJ45 PIN3TX-6RX 2.5m Cable	R8Z87A
HPE Aruba Networking USBA-RJ45 PC-to-Switch PIN6TX-3RX 2.5m Cable	R9G48B
HPE Aruba Networking USB-A reversible to USB-C PC-to-Switch 3m Cable	R9J32A
HPE Aruba Networking USB-C to USB-C PC-to-Switch 3m Cable	R9J33A

Notes: This cable is only compatible with the following Switches; JL375A, JL376A

Accessories

Remarks	Description	SKU

Spares

For Switch JL375A System (std 0 // max 99) User Selection (min 0 // max 99) per enclosure
For Switch JL376A System (std 0 // max 99) User Selection (min 0 // max 99) per enclosure

HPE Aruba Networking 8400 8-slot Chassis/3xFan Trays/18xFans/Cable Manager/X462 Bundle	JL375A
HPE Aruba Networking X382 54VDC 2700W AC Power Supply	JL372A
HPE Aruba Networking 8400 1 Fan Tray and 6 Fans Bundle	JL371A
HPE Aruba Networking 8400 Fan for X731 Fan Tray	JL370A
HPE Aruba Networking X731 Fan Tray	JL369A
HPE Aruba Networking X462 2-post Rack Rail Kit	JL374A
HPE Aruba Networking X464 4-post Rack Rail Kit	JL373A
HPE Aruba Networking X414 1U Universal 4-post Rack Mount Kit	J9583B
HPE Aruba Networking X2C2 RJ45 to DB9 Console Cable	JL448A

Configuration Information

Software

Remarks	Description	SKU
	HPE Aruba Networking OS-CX Software	
	CX Advanced Software Licenses	
	HPE Aruba Networking CX Software 8/9xxx Switch Advanced 1-year Subscription E-STU	S0T87AAE
	HPE Aruba Networking CX Software 8/9xxx Switch Advanced 3-year Subscription E-STU	S0T88AAE
	HPE Aruba Networking CX Software 8/9xxx Switch Advanced 5-year Subscription E-STU	S0T89AAE
	HPE Aruba Networking CX Software 8/9xxx Switch Advanced 7-year Subscription E-STU	S0T90AAE
	HPE Aruba Networking CX Software 8/9xxx Switch Advanced 10-year Subscription E-STU	S0T86AAE
	Central	
	Cloud Services / 8XXX Switch Foundation Subscriptions	
2	HPE Aruba Networking Central Switch Class5 Foundation 1-year Subscription E-STU	R3K03AAE
2	HPE Aruba Networking Central Switch Class5 Foundation 3-year Subscription E-STU	R3K04AAE
2	HPE Aruba Networking Central Switch Class5 Foundation 5-year Subscription E-STU	R3K05AAE
2	HPE Aruba Networking Central Switch Class5 Foundation 7-year Subscription E-STU	R3K06AAE
2	HPE Aruba Networking Central Switch Class5 Foundation 10-year Subscription E-STU	R3K07AAE
	On-Prem Services / 8XXX Switch Foundation Subscriptions	
3	HPE Aruba Networking Central on Prem Switch Class-5 Foundation 1 year Subscription E-STU	R6U88AAE
3	HPE Aruba Networking Central on Prem Switch Class-5 Foundation 3 year Subscription E-STU	R6U89AAE
3	HPE Aruba Networking Central on Prem Switch Class-5 Foundation 5 year Subscription E-STU	R6U90AAE
3	HPE Aruba Networking Central on Prem Switch Class-5 Foundation 7 year Subscription E-STU	R6U91AAE
3	HPE Aruba Networking Central on Prem Switch Class-5 Foundation 10 year Subscription E-STU	R6U92AAE
	On-Prem Services / 8XXX/9XXX/10XXX Switch Advanced Subscriptions	
3	HPE Aruba Networking Central On-Premises Switch Class5 Advanced 1-year Subscription E-STU	R6V08AAE
3	HPE Aruba Networking Central On-Premises Switch Class5 Advanced 3-year Subscription E-STU	R6V09AAE
3	HPE Aruba Networking Central On-Premises Switch Class5 Advanced 5-year Subscription E-STU	R6V10AAE
3	HPE Aruba Networking Central On-Premises Switch Class5 Advanced 7-year Subscription E-STU	R6V11AAE
3	HPE Aruba Networking Central On-Premises Switch Class5 Advanced 10-year Subscription E-STU	R6V12AAE
	FedRAMP Services / 8XXX Switch Foundation Subscriptions	
6	HPE Aruba Networking Central 84xx/83xx/64xx/54xx Switch Foundation Government 1yr Subscription E-STU	R8L04AAE
6	HPE Aruba Networking Central 84xx/83xx/64xx/54xx Switch Foundation Government 3yr Subscription E-STU	R8L05AAE
6	HPE Aruba Networking Central 84xx/83xx/64xx/54xx Switch Foundation Government 5yr Subscription E-STU	R8L06AAE
6	HPE Aruba Networking Central 84xx/83xx/64xx/54xx Switch Foundation Government 7yr Subscription E-STU	R8L07AAE
6	HPE Aruba Networking Central 84xx/83xx/64xx/54xx Switch Foundation Government 10yr Sub E-STU	R8L08AAE

Configuration Rules

Rule #	Description	SKU
2	Add the Central Cloud Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > Cloud Services	
3	Add the Central On-Prem Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > On-Prem Services	
6	Add the Central FedRAMP Service Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > FedRAMP	

Configuration Information

NetEdit

NetEdit / Single Node Subscription

HPE Aruba Networking NetEdit Single Node 1yr Subscription E-STU	JL639AAE
HPE Aruba Networking NetEdit Single Node 3yr Subscription E-STU	JL640AAE

Fabric Composer

Single Node Subscription for Data Center Solutions

HPE Aruba Networking Fabric Composer Device Management Service Tier 4 Switch 1y Subscription E-STU	R7G99AAE
HPE Aruba Networking Fabric Composer Device Management Service Tier 4 Switch 3y Subscription E-STU	R7H00AAE
HPE Aruba Networking Fabric Composer Device Management Service Tier 4 Switch 5y Subscription E-STU	R7H01AAE

As-a-Service

Central

Cloud Services / 8XXX Switch Foundation Subscriptions

2	HPE Aruba Networking Central Switch Class-5 Foundation 1 year Subscription SaaS	R3K03AAS
2	HPE Aruba Networking Central Switch Class-5 Foundation 3 year Subscription SaaS	R3K04AAS
2	HPE Aruba Networking Central Switch Class-5 Foundation 5 year Subscription SaaS	R3K05AAS
2	HPE Aruba Networking Central Switch Class-5 Foundation 7 year Subscription SaaS	R3K06AAS
2	HPE Aruba Networking Central Switch Class-5 Foundation 10 year Subscription SaaS	R3K07AAS

Cloud Services / Switch Advanced AAS Licenses

7	HPE Aruba Networking Central Switch Class-5 Advanced 7 year Subscription SaaS	S0W45AAS
7	HPE Aruba Networking Central Switch Class-5 Advanced 10 year Subscription SaaS	S0W46AAS
7	HPE Aruba Networking Central Switch Class-5 Advanced 1 year Subscription SaaS	S0W62AAS
7	HPE Aruba Networking Central Switch Class-5 Advanced 3 year Subscription SaaS	S0W63AAS
7	HPE Aruba Networking Central Switch Class-5 Advanced 5 year Subscription SaaS	S0W64AAS
7	HPE Aruba Networking Central Switch Class-5 Advanced 7 year Subscription SaaS	S0W65AAS
7	HPE Aruba Networking Central Switch Class-5 Advanced 10 year Subscription SaaS	S0W66AAS
7	HPE Aruba Networking Central Switch Class-5 Advanced 1 year Subscription SaaS	S0W87AAS
7	HPE Aruba Networking Central Switch Class-5 Advanced 3 year Subscription SaaS	S0W88AAS
7	HPE Aruba Networking Central Switch Class-5 Advanced 5 year Subscription SaaS	S0W89AAS

Configuration Rules

Rules #	Description	SKU
2	Add the Central Cloud Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > Cloud Services	
7	For IRIS reference only. No action required for OCX and Clic	

Technical Specifications

Series Specifications		
Line modules and slots	Supports a maximum of 256 10GbE (SFP/SFP+) or 25G (SFP/SFP+/SFP28) ports, or 64 40GbE (QSFP+) ports, or 48 ports 40/100GbE (QSFP28) combination Eight slots for line modules	
Module VoQ	1.5GB for JL363A and JL365A 3GB for JL366A 4GB for JL687A	
Additional ports and slots	2 management module slots 3 fabric module slots 4 power supply slots	
Power supplies	4 power supply slots	
	2 minimum power supply required for a fully loaded chassis (or with 8 line modules)	
Fan tray	Included with JL376A	
Physical characteristics	**Dimensions**	17.4(w) x 26(d) x 13.8(h) in. (44.1 x 66.0 x 35.1 cm) (8U height)
	Weight	-Empty configuration weight: 76 lbs (34 kg) -JL376A weight: 164 lbs (74 kg) -Full configuration weight: 241 lbs (109 kg)
Mounting and enclosure	Mounts in an EIA standard 19-inch rack or other equipment cabinet (hardware included); horizontal surface mounting only	
Performance	**Switching Capacity**	19.2Tbps
	IPv4 Host Table	756,000
	IPv6 Host Table	524,000
	IPv4 Unicast Routes	1,011,712 (BGP RIB is limited to 256,00)
	IPv6 Unicast Routes	524,288
	MAC Table Size	768,000
	IGMP Groups	32,767
	MLD Groups	32,767
	IPv4 Multicast Routes	32,767
	IPv6 Multicast Routes	32,767
Environment	**Operating**	32°F to 104°F (-0°C to 40°C) with 5% to 95%, non-condensing
	Non-operating	-40°F to 158°F (-40°C to 70°C) with 5% to 95%, non-condensing
	Max operating altitude	Up to 10,000ft (3.048 Km)
	Max non-operating altitude	Up to 30,000ft (9.144 Km)
	Acoustics	Sound power (LWAd) 7.3 Bel Sound pressure (LpAm) (Bystander) 55.6 dB
Electrical characteristics	**Frequency**	47-63 Hz
	AC voltage	90 – 140/180 – 264 VAC
	DC voltage	
	Current	16 A
	Power output	2750 W
Safety	EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 +A2:2013; EN62368-1:2014; IEC 60950-1:2005 Ed.2; Am 1:2009+A2:2013; IEC62368-1, Ed. 2; IEC60825:2007 (Applies to products with lasers); UL60950-1, CSA 22.2 No 60950-1; UL62368-1 Ed. 2	
Emissions	VCCI Class A; EN 55022 Class A; CISPR 22 Class A; IEC/EN 61000-3-2; IEC/EN 61000-3-3; ICES-003 Class A; AS/NZS CISPR 22 Class A; FCC; (CFR 47, Part 15) Class A; GB9254; EN55032:2012 Class A; CISPR32:2012 Class A	

Technical Specifications

Immunity	**Generic**	Directive 2014/35/EU
	EN	EN 55024:2010+ A1:2001 + A2:2003; ETSI EN 300 386 V1.3.3
	ESD	EN 61000-4-2
	Radiated	EN 61000-4-3
	EFT/Burst	EN 61000-4-4
	Surge	EN 61000-4-5
	Conducted	EN 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	EN 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	SNMP, RJ45 for Serial Console, USB-Type A for file management only, RJ45 Ethernet for OOBM	

Standards and protocols

Applies to all products in series

- IEEE 802.1AB-2009
- IEEE 802.1AE (JL363A only)
- IEEE 802.1ak-2007
- IEEE 802.1t-2001
- IEEE 802.1AX-2008 Link Aggregation
- IEEE 802.1p Traffic Class Expediting and Dynamic Multicast Filtering
- IEEE 802.1Q VLANs
- IEEE 802.1s Multiple Spanning Trees
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- IEEE 802.3ae 10 Gigabit Ethernet
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3ba 40 Gigabit Ethernet Architecture
- IEEE 802.3x Flow Control
- IEEE 802.3z Gigabit Ethernet
- RFC 768 UDP
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 813 Window and Acknowledgement Strategy in TCP
- RFC 815 IP datagram reassembly algorithms
- 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 1215 Convention for defining traps for use with the SNMP
- RFC 1256 ICMP Router Discovery Messages
- RFC 1393 Traceroute Using an IP Option
- 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

Technical Specifications

- RFC 1981 Path MTU Discovery for IP version 6
- RFC 1997 BGP Communities Attribute
- RFC 1998 An Application of the BGP Community Attribute in Multi-home Routing
- RFC 2385 Protection of BGP Sessions via the TCP MD5 Signature Option
- RFC 2401 Security Architecture for the Internet Protocol
- RFC 2402 IP Authentication Header
- RFC 2406 IP Encapsulating Security Payload (ESP)
- RFC 2460 Internet Protocol, Version 6 (IPv6) Specification
- RFC 2545 Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol
- RFC 2918 Route Refresh Capability for BGP-4
- RFC 2934 Protocol Independent Multicast MIB for IPv4
- RFC 3137 OSPF Stub Router Advertisement
- RFC 3176 InMon Corporation's sFlow: A Method for Monitoring Traffic in Switched and Routed Networks
- RFC 3509 Alternative Implementations of OSPF Area Border Routers
- RFC 3623 Graceful OSPF Restart
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- RFC 4213 Basic Transition Mechanisms for IPv6 Hosts and Routers
- RFC 4251 The Secure Shell (SSH) Protocol
- 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 4486 Subcodes for BGP Cease Notification Message
- RFC 4552 Authentication/Confidentiality for OSPFv3
- RFC 4724 Graceful Restart Mechanism for BGP
- RFC 4760 Multiprotocol Extensions for BGP-4
- RFC 4940 IANA Considerations for OSPF
- RFC 5187 OSPFv3 Graceful Restart
- RFC 5701 IPv6 Address Specific BGP Extended Community Attribute
- RFC 6987 OSPF Stub Router Advertisement
- RFC 7047 The Open vSwitch Database Management Protocol
- RFC 7059 A Comparison of IPv6-over-IPv4 Tunnel Mechanisms
- RFC 7313 Enhanced Route Refresh Capability for BGP-4
- RFC 8201 Path MTU Discovery for IP version 6

Summary of Changes

Date	Version History	Action	Description of Change
03-Sep-2024	Version 35	Changed	Configuration Information section was updated
15-Jul-2024	Version 34	Changed	Configuration Information section was updated
04-Mar-2024	Version 33	Changed	Configuration Information section was updated
04-Dec-2023	Version 32	Changed	Obsolete SKU was removed. Configuration Information section was updated. Series name was updated.
15-May-2023	Version 31	Changed	Configuration Information section was updated
13-Mar-2023	Version 30	Changed	Configuration Information section was updated
06-Feb-2023	Version 29	Changed	Standard Features and Configuration Information sections were updated.
05-Dec-2022	Version 28	Changed	Configuration Information section was updated
07-Nov-2022	Version 27	Changed	Standard Features and Configuration Information sections were updated.
03-Oct-2022	Version 26	Changed	Configuration Information section was updated.
06-Jun-2022	Version 25	Changed	Standard Features and Configuration Information sections were updated.
02-May-2022	Version 24	Changed	Configuration Information section was updated.
06-Dec-2021	Version 23	Changed	Standard Features sections was updated. SKUs were added in Configuration Information section.
07-Sep-2021	Version 22	Changed	Overview and Standard Features sections were updated.
07-Jun-2021	Version 21	Changed	Standard Features and Configuration Information sections were updated.
08-Mar-2021	Version 20	Changed	SKUs added in Configuration Information section and Technical Specifications section was updated.
07-Dec-2020	Version 19	Changed	Overview, Standard Features, and Configuration Information sections were updated.
08-Sep-2020	Version 18	Changed	Configuration Information section was updated.
10-Aug-2020	Version 17	Changed	Standard Features section was updated.
04-May-2020	Version 16	Changed	Configuration Information section was updated.
06-Apr-2020	Version 15	Changed	Standard Features, Configuration Information and Technical Specification sections were updated.
09-Dec-2019	Version 14	Changed	Technical Specification section was updated.
01-Nov-2019	Version 13	Changed	Overview, Standard Features, Configuration Information and Related Options sections were updated.
03-Jun-2019	Version 12	Changed	Overview, Key features, Features and benefits and Accessories sections were update.
04-Mar-2019	Version 11	Changed	SKU J9151D was replaced with J9151E. Obsolete SKUs were removed.
03-Dec-2018	Version 10	Changed	Features and benefits updated
02-Jul-2018	Version 9	Changed	Product overview, Key features, Features and benefits changed due to a Software feature update
04-Jun-2018	Version 8	Changed	Configuration section updated
07-May-2018	Version 7	Added	SKUs added: JL563A; Q9G82A
04-Dec-2017	Version 6	Changed	Updates made on the Configuration section
06-Nov-2017	Version 5	Changed	Updates made on Features and benefits
16-Oct-2017	Version 4	Changed	Updates on Product overview, Features and benefits, Technical Specifications.
25-Sep-2017	Version 3	Changed	Updates made on the Configuration section
11-Aug-2017	Version 2	Changed	Changes made on Features and benefits
07-Aug-2017	Version 1	New	New QuickSpecs

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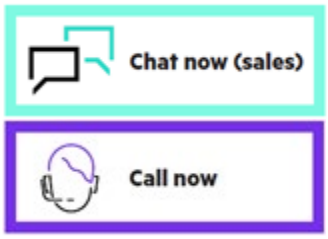

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