## Overview

## Aruba CX 6300 Switch Series

The Aruba 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 loT, 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 Aruba CX switching portfolio, designed for today's enterprise campus, branch and data center networks. By combining a modern, fully programmable OS with the Aruba Network Analytics Engine, the 6300 switches provide industry leading monitoring and troubleshooting capabilities for the access layer.

A powerful Aruba Gen7 ASIC architecture delivers performance and robust feature support with flexible programmability for tomorrow's applications. The Aruba Virtual Stacking Framework (VSF) allows for stacking of up to 10 switches, providing scale and simplified management. This flexible series has built-in wirespeed $1 \mathrm{GbE} / 10 \mathrm{GbE} / 25 \mathrm{GbE}{ }^{1}$ uplinks and supports high density IEEE 802.3bt high power PoE. HPE Smart Rate multi-gigabit Ethernet paves the way for high speed access points and loT devices by delivering fast connectivity and high power PoE using existing cabling. Modular models offer redundancy and PoE customization with hot-swappable power supplies and fans. Back-to-front airflow available in switch bundle for hot-cold aisle top-of-rack (TOR) and out-of-band-management (OOBM) data center deployments.

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

Notes: ${ }^{15} 50$ capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.


Aruba CX 6300 Switch Series

## Hewlett Packard

## Overview

## Key Features

- Stackable Layer 3 switches with BGP, EVPN, VXLAN, VRF, and OSPF with robust security and QoS
- High performance 880 Gbps system switching capacity, 660 MPPS of system throughput and up to 200 Gbps stacking bandwidth ( 400 Gbps at full duplex)
- Compact 1 U switches with full density HPE Smart Rate (1/2.5/5GbE) multi-gigabit, 60 W PoE and SFP+ models
- Power-to-port switch bundle with back-to-front airflow ideal for data center 1GbE ToR and OOBM deployments
- Built-in high speed $10 \mathrm{GbE} / 25 \mathrm{GbE}$ uplinks ${ }^{1}$ (50GbE1 transceiver capability will be enabled in future software release) ${ }^{1}$
- 50 GbE connectivity with $50 \mathrm{GbE} \mathrm{DACs}^{1}$
- Intelligent monitoring, visibility, and remediation with Aruba Network Analytics Engine
- Manage via single pane of glass with Aruba Central across wired, wireless, and WAN
- Aruba NetEdit support for automated configuration and verification
- Aruba Dynamic Segmentation enables secure and simple access for users and loT

Notes: ${ }^{15} 50$ capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.

## Standard Features

## AOS-CX - A Modern Operating System

The Aruba CX 6300 Switch Series is based on AOS-CX, a modern, database-driven operating system that automates and simplifies many critical and complex network tasks.

A built-in time series database enables customers and developers to utilize software scripts for historical troubleshooting, as well as analysis of past trends. This helps predict and avoid future problems due to scale, security, and performance bottlenecks

Our AOS-CX software also includes Aruba Network Analytics Engine (NAE) and support for Aruba NetEdit. 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
- Continuous telemetry data with WebSocket subscriptions for event driven automation
- Continual state synchronization that provides superior fault tolerance and high availability
- All software processes communicate with the database rather than each other, ensuring near real-time state and resiliency and allowing individual software modules to be independently upgraded for higher availability.


## Aruba Network Analytics Engine - Advanced Monitoring And Diagnostics

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

## Aruba Netedit - Automated Switch Configuration And Management

The entire Aruba CX portfolio empowers IT teams to orchestrate multiple switch configuration changes for smooth end-to-end service rollouts. Aruba 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 change analysis
- Automated large-scale configuration deployment without programming
- Network health and topology visibility via Aruba NAE integration

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

## Aruba CX Mobile App - True Deployment Convenience

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

## Aruba Asics - Programmable Innovation

Based on over 30 years of continuous investment, Aruba'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 Aruba's NAE solution to inspect all data, which allows for industry-leading analytics capabilities. The Aruba CX 6300 is based on the Aruba Gen7 ASIC architecture.

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## Aruba Dynamic Segmentation - campus and branch fabric

The Aruba Dynamic Segmentation solution enables seamless mobility, consistent policy enforcement, and automated configurations for wired and wireless clients across networks of all sizes. And it extends these benefits to applications hosted on the data center and the public cloud.

This innovation begins with colorless ports and role-based micro-segmentation technologies. Colorless ports allows wired clients to connect to any switch port, with the configuration automated using Radius-Based Access Control. This eliminates the need for manual on-boarding of clients, including loT devices, onto the network.

Role-based micro-segmentation delivers benefits of reduced subnet and VLAN sprawl, simplified policy definition, and scales policy enforcement by introducing the concept of client User Roles. These roles are independent of network constructs such as VLANs and VRFs, and allows clients to be grouped into a User Role based on their identity. This allows the colorless ports technology to be extended to the overlay fabric, as clients are on-boarded with automatic tunnel creation based on the associated User Role policy. The User Role policy also offers the choice between micro-segmentation with a Layer 4 Role-Role ACL on switches or a Layer 7 stateful firewall enforcement.

Dynamic Segmentation provides much needed scale and flexibility in network design by allowing the stretching of VLANs and subnets across the entire network. Fabric overlays offer VXLAN or VXLAN-GBP tunnels on the data plane and provide the option of a Multi-Protocol BGP eVPN control plane for large deployments, or a static Layer 2 control plane for simplified deployments.

Dynamic Segmentation also eliminates the complexity of service-chaining and redirection of traffic to 3rd party firewalls. User Role Policy can steer client's traffic on overlay tunnels (User Based Tunnels) to Aruba's Policy Enforcement Firewall for deep-packet inspection and application aware Layer 7 stateful firewall filtering. After performing this stateful inspection for any security threats, the traffic is automatically put back on the VXLAN fabric to be delivered to its destination.

## Mobility And IoT Performance

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

Each switch includes the following:

- Up to 880 Gbps in non-blocking bandwidth and up to 660 Mpps for forwarding
- $10 \mathrm{GbE} / 25 \mathrm{GbE}$ uplinks ${ }^{1}$ and large TCAM sizes ideal for mobility and IoT deployments in large campuses with several thousand clients
- Selectable queue configurations that allow for increased performance by defining a number of queues and associated memory buffering to best meet the requirements of network applications
Notes: ${ }^{15}$ GG capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.


## VSF Stacking - Scale And Simplicity

The Aruba Virtual Switching Framework (VSF) allows you to quickly grow your network using high performance front plane stacking. Four built-in SFP56 ports support speeds of $1 \mathrm{GbE}, 10 \mathrm{GbE}$, and $25 \mathrm{GbE}^{1}$ for a total of up to 200 Gbps of stacking throughput per switch ( 400 Gbps at full duplex). 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 $10 \mathrm{GbE} / 25 \mathrm{GbE}^{1}$ transceivers
- Flexibility to mix both modular and fixed Aruba CX 6300 Switch Series models within a single stack to meet your deployment requirements
- Simplified configuration and management as the switches act as a single chassis when stacked
- The Aruba CX Mobile app provides support for a validated stack deployment that ensure that all stack links and uplinks are connected properly
Notes: ${ }^{15}$ GG capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.

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## Quality Of Service (Qos) Features

To support congestion actions and traffic prioritization, the Aruba 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


## An Aruba 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 $1 U$ models. Each switch includes four high-speed built-in uplinks that auto-negotiate from $1 \mathrm{GbE}, 10 \mathrm{GbE}$ to $25 \mathrm{GbE}{ }^{1}$ 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 1 U models support:
- 24 and 48 ports of HPE Smart Rate Multi-gigabit Ethernet IEEE 802.3bz (100M/1GbE/2.5GbE/5GbE) supporting high power IEEE 802.3bt Class 6 (60W)
- High density 24 port SFP+ model which is ideal for aggregation
- 10GbE/25GbE uplink ${ }^{1}$ port connectivity
- HPE Smart Rate multi-gigabit (IEEE 802.3bz) Ethernet supports high speed wireless access points
- For deployments that need higher port and PoE density, the 6300 supports 60 W of PoE in every port of a 48-port switch for a total of 2880W of PoE
- Industry standard IEEE 802.3bt High Power PoE support (class 6) provides up to 60W per port for 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 the same time as the 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 10/100/1000, Smart Rate and 10GBASE-T ports
- Unsupported Transceiver Mode (UTM) allows to insert and enable all unsupported 1G and 10G transceivers and cables. Note that there is no warranty nor support for the transceiver/cable when this feature is used.
- IPv6 capabilities include:
- IPv6 host enables switches to be managed in an IPv6 network
- Dual stack (IPv4 and IPv6) transitions from IPv4 to IPv6, supporting connectivity for both protocols
- MLD snooping forwards IPv6 multicast traffic to the appropriate interface
- IPv6 ACL/QoS supports ACL and QoS for IPv6 network traffic
- IPv6 routing supports Static and OSPFv3 protocols
- Security provides RA guard, DHCPv6 protection, dynamic IPv6 lockdown, and ND snooping
- 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

Notes: ${ }^{15}$ G G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.

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## 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 $\mathrm{N}+1$ and $\mathrm{N}+\mathrm{N}$ 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
- Uni-directional Link Detection (UDLD) to monitor link connectivity and shut down ports at both ends if uni- directional traffic is detected, preventing loops in STP- based networks
- EEE 802.3ad LACP supports up to 256 LAGs, each with up to 8 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.


## CX 6300M Bundle for Data Centers

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

- Power-to-port bundle (JL762A) includes 48 port 1GbE switch with $2 \times$ Fan Trays (JL761A) and $1 \times$ power supply (JL760A)
- Back (power-side)-to-front (1GbE port side) airflow
- $1 \mathrm{GbE} / 10 \mathrm{GbE} / 25 \mathrm{GbE} / 50 \mathrm{GbE}{ }^{1}$ SFP uplinks

Notes: ${ }^{150 G}$ capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.

## Simplified Configuration And Management

In addition to Aruba Central, the Aruba CX Mobile App, Aruba NetEdit and Aruba Network Analytics Engine, the 6300 series offers the following:

- Built-in programmable and easy to use REST API interface
- Aruba AirWave on-premises and Aruba Central cloud- based management
- Zero-Touch Provisioning (ZTP) simplifies installation of switching infrastructure using DHCP-based or Aruba Activatebased process with Aruba AirWave and Aruba Central
- 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 sFlow (RFC 3176)
- 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

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reporting capabilities for statistics, history, alarms and events

- 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
- Power down mode delivers energy savings by allowing the switch to power down most of the switch, except a clock which will boot up the switch when scheduled
- IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests
- Precision Time Protocol allows precise clock synchronization across distributed network switches as defined in IEEE 1588. Needed for time critical applications like AVB, smart grid power automation, etc. Supports transparent clock E-E.


## 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) 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

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## 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)


## 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-tomany 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


## Security

The Aruba 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 Aruba AOS-CX switches. Other security features include:

- TAA Compliance 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

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- 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
- 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.


## 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


## Standard Features

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


## Convergence

- IP multicast routing includes PIM Sparse, Source Specific Multicast,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


## Customer First, Customer Last Support

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

- Foundation Care for Aruba support services include priority access to Aruba Technical Assistance Center(TAC) engineers $24 \times 7 \times 365$, flexible hardware and onsite support options, and total coverage for Aruba products. Aruba switches with assigned Aruba Central subscriptions benefit with option for additional hardware support only.
- Aruba Pro Care adds fast access to senior Aruba TAC engineers, who are assigned as a single point of contact for case management, reducing the time spent addressing and resolving issues.

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

## Warranty, Services And Support

- Limited Lifetime Warranty, see https://www.arubanetworks.com/support-services/ product-warranties/ for warranty and support information included with your product purchase
- For Software Releases and Documentation, refer to https://asp.arubanetworks.com/downloads
- For support and services information, visit https://www.arubanetworks.com/support-services/arubacare/


## Configuration Information

## BTO Models

## 6300M <br> Rule \# Description

1, 2, 3, 4, 6 Aruba 6300M 24-port SFP+ and 4-port SFP56 Switch

- Aruba 6300M 24-port SFP+ and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (250W JL085A, 250W JL757A) Mix OK
- Includes Fantrays Min2 / Max 2 (JL669B)
- Min=0 $\backslash$ Max $=24$ SFP/SFP+ 100M/1/10G Transceivers
- Min=0 $\backslash$ Max $=4$ SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- $1 \cup$ - Height

1, 2, 3, 4 Aruba 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch

- eAruba 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (680W JL086A,1050W JL087A, 1600W JL670A, 1050W JL758A) Mix OK
- Includes Fantrays Min2 / Max 2 (JL669B)
- Min=0 $\backslash$ Max $=4$ SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- $1 \cup$ - Height

1, 2, 3, 4 Aruba 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch

- Aruba 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (680W JL086A,1050W JL087A, 1600W JL670A, 1050W JL758A) Mix OK
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover
- Min=0 $\backslash$ Max $=4$ SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- 1 U - Height

1, 2, 3, 4 Aruba 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch

- Aruba 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (680W JL086A,1050W JL087A, 1600W JL670A, 1050W JL758A) Mix OK
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover
- Min=0 $\backslash$ Max $=4$ SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- $1 \cup$ - Height

1, 2, 3, 4 Aruba 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch

- Aruba 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (680W JL086A,1050W JL087A, 1600W JL670A, 1050W JL758A) Mix OK
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover
- Min=0 $\backslash$ Max $=4$ SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- $1 \cup$ - Height

1, 2, 3, 4 Aruba 6300M 48-port 1GbE and 4-port SFP56 Switch

- Aruba 6300M 48-port 1GbE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (250W JL085A, 250W JL757A) Mix OK
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover
- Min=0 $\backslash$ Max $=4$ SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- $1 \cup$ - Height

1, 2, 3, 4 Aruba 6300M 24-port 1GbE and 4-port SFP56 Switch

- Aruba 6300M 24-port 1GbE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (250W JL085A, 250W JL757A) Mix OK
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover
- Min=0 $\backslash$ Max $=4$ SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver


## Configuration Information

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- 1 - Height
1, 2, 3, 4, 5 Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
JL762A
- Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
- Includes 1 Pwr2Prt PSU, can select Min0 / Max1 (250W JL760A)
- Includes 2 Pwr2Prt Fan trays (JL761A), with no open slots
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- \(1 \cup\) - Height
Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
- C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)
Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
- C15 PDU Jumper Cord (ROW) (J9944A)
Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
- HPE 2.5 m C15 to NEMA 6-20P Pwr Cord(JL336A)
Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)
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## 6300F

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Rule \# Description
1, 2, 3, 4, 5 Aruba 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch

\section*{Aruba 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch No Loc}
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)
1, 2, 3, 4, 5 Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch
JL666A
- Includes Non-Pluggable, Internal PSU behind sheetmetal Chassis Frame
- Includes Non-Pluggable, Internal Fans behind sheetmetal Chassis Frame
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- \(1 \cup\) - Height

Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch PDU
- C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)

Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch PDU
JL666A\#B2C
- C15 PDU Jumper Cord (ROW) (J9944A)

Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch 220v
JL666A\#B2E
- HPE 2.5m C15 to NEMA 6-20P Pwr Cord(JL336A)

Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch No Loc
JL666A\#AC3
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)
1, 2, 3, 4, 5 Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch

\section*{Configuration Information}
- Includes Non-Pluggable, Internal PSU behind sheetmetal Chassis Frame
- Includes Non-Pluggable, Internal Fans behind sheetmetal Chassis Frame
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- 1 U - Height

Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch PDU
JL667A\#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch PDU JL667A\#B2C
- C13 PDU Jumper Cord (ROW)

Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch 220v
JL667A\#B2E
- HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A)

Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch No Loc
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)
1, 2, 3, 4, 5 Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch
JL668A
- Includes Non-Pluggable, Internal PSU behind sheetmetal Chassis Frame
- Includes Non-Pluggable, Internal Fans behind sheetmetal Chassis Frame
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- \(1 \cup\) - Height

Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch PDU
JL668A\#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch PDU JL668A\#B2C
- C13 PDU Jumper Cord (ROW)

Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch 220v
JL668A\#B2E
- HPE 2.3 m C13 to NEMA 6-15P Pwr Cord(J9936A)

Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch No Loc
JL668A\#AC3
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)

\section*{Configuration Rules}

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

J4858D
Aruba 1G SFP LC LX 10km SMF Transceiver J4859D
Aruba 1G SFP LC LH 70km SMF Transceiver J4860D
Aruba 1G SFP RJ45 T 100m Cat5e Transceiver J8177D
Aruba 1G SFP LC SX 500m MMF TAA Transceiver JL745A
Aruba 1G SFP LC LX 10km SMF TAA Transceiver JL746A
Aruba 1G SFP RJ45 T 100m Cat5e TAA Transceiver JL747A
2 The following Transceivers install into this Switch: (Use BTO only when adding to switch)
Aruba 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver JL563A
Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver J9150D
Aruba 10G SFP+ LC LR 10km SMF Transceiver J9151E
Aruba 10G SFP+ LC ER 40km SMF Transceiver J9153D
Aruba 10G SFP+ LC SR 300m MMF TAA Transceiver JL748A
Aruba 10G SFP+ LC LR 10km SMF TAA Transceiver JL749A
Aruba 10G SFP+ to SFP+ 1m Direct Attach Copper Cable J9281D
Aruba 10G SFP+ to SFP+ 3m Direct Attach Copper Cable J9283D
3 The following Transceivers install into this Switch: (Use BTO only when adding to switch)
Aruba 25G SFP28 LC SR 100m MMF Transceiver
JL484A

\section*{Configuration Information}
\begin{tabular}{|c|c|c|}
\hline & Aruba 25G SFP28 LC eSR 400 m MMF Transceiver & JL485A \\
\hline & Aruba 25G SFP28 LC LR 10 km SMF Transceiver & JL486A \\
\hline & Aruba 25G SFP28 to SFP28 0.65m Direct Attach Cable & JL487A \\
\hline & Aruba 25G SFP28 to SFP28 3m Direct Attach Copper Cable & JL488A \\
\hline & Aruba 25G SFP28 to SFP28 5m Direct Attach Copper Cable & JL489A \\
\hline 4 & The following Transceivers install into this Switch: (Use BTO only when adding to switch) & \\
\hline & Aruba 50G SFP56 to SFP56 0.65m Direct Attach Copper Cable & R0M46A \\
\hline & Aruba 50G SFP56 to SFP56 3m Direct Attach Copper Cable & R0M47A \\
\hline Notes: & 50G capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release. & \\
\hline 5 & Localization required on orders without \#B2B, \#B2C, \#B2E or \#AC3 options. & \\
\hline 6 & The following Transceivers install into this Switch: (Use BTO only when adding to switch) & \\
\hline & Aruba 100M SFP LC FX 2km MMF Transceiver & J9054D \\
\hline Notes: & \begin{tabular}{l}
- Locking Power Cord (J9955A) L6-20P is available through the OCA Accessories tab \\
- Drop down under power supply should offer the following options and results: \\
- Switch/Router/Power Supply to PDU Power Cord - \#B2B in North America, 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 Power Cord - \#AC3 Option \\
- OCA Only Model Selection Form>Aruba > Switches > ArubaOS > AOS-CX: \\
Aruba 6300 Switch Series
\end{tabular} & \\
\hline \multicolumn{3}{|l|}{Rack Level Integration CTO Models} \\
\hline \multicolumn{3}{|c|}{6300M} \\
\hline Rule \# & Description & SKU \\
\hline 1, 2, 3, 4, & Aruba 6300M 24-port SFP+ and 4-port SFP56 Switch & JL658A \\
\hline \multicolumn{3}{|l|}{6,8} \\
\hline & \begin{tabular}{l}
- Aruba 6300M 24-port SFP+ and 4-port SFP56 Switch \\
- Must Select PSU Min1 / Max2 (250W JL085A, 250W JL757A) Mix OK \\
- Includes Fantrays Min2 / Max 2 (JL669B) \\
- \(M i n=0 \backslash M a x=24 S F P / S F P+100 M / 1 / 10 G\) Transceivers \\
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver \\
- 1 - Height
\end{tabular} & \\
\hline \multicolumn{3}{|l|}{\begin{tabular}{l}
- Aruba 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch \\
- Must Select PSU Min1 / Max2 (680W JL086A,1050W JL087A, 1600W JL670A, 1050W JL758A) Mix OK \\
- Includes Fantrays Min2 / Max 2 (JL669B) \\
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver \\
- 1U-Height
\end{tabular}} \\
\hline 1, 2, 3, 4, & \begin{tabular}{l}
Aruba 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch \\
- Aruba 6300M 24 -port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch \\
- Must Select PSU Min1 / Max2 (680W JL086A,1050W JL087A, 1600W JL670A, 1050W JL758A) Mix OK \\
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover \\
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver \\
- 1U-Height
\end{tabular} & JL660A \\
\hline \multicolumn{2}{|l|}{1, 2, 3, 4, 6 Aruba 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch} & JL661A \\
\hline
\end{tabular}

\section*{Configuration Information}
- Aruba 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (680W JL086A,1050W JL087A, 1600W JL670A, 1050W JL758A) Mix OK
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- \(1 U\) - Height

1, 2, 3, 4, 6 Aruba 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch
JL662A
- Aruba 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (680W JL086A,1050W JL087A, 1600W JL670A, 1050W JL758A) Mix OK
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- \(1 \cup\) - Height

1, 2, 3, 4, 6 Aruba 6300M 48-port 1GbE and 4-port SFP56 Switch
JL663A
- Aruba 6300M 48-port 1GbE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (250W JL085A, 250W JL757A) Mix OK
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover
- Min=0 \(\backslash \operatorname{Max}=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- 1U-Height

1, 2, 3, 4, 6 Aruba 6300M 24-port 1GbE and 4-port SFP56 Switch
JL664A
- "Aruba 6300M 24-port 1GbE and 4-port SFP56 Switch
- Must Select PSU Min1 / Max2 (250W JL085A, 250W JL757A) Mix OK
- Includes 1 Fan tray (JL669B), with 1 open slot with blank cover
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- 1 U - Height"

1, 2, 3, 4, Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
JL762A
5, 6, 7
- Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
- Includes 1 Pwr2Prt PSU, can select Min0 / Max1 (250W JL760A)
- Includes 2 Pwr2Prt Fan trays (JL761A), with no open slots
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- \(1 \cup\) - Height

Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
JL762A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)

Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle JL762A\#B2C
- C15 PDU Jumper Cord (ROW) (J9944A)

Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle JL762A\#B2E
- HPE 2.5m C15 to NEMA 6-20P Pwr Cord(JL336A)

Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle JL762A\#AC3
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)

\section*{6300F}

Rule \# Description
SKU
1, 2, 3, 4, Aruba 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch
- Includes Non-Pluggable, Internal PSU behind sheetmetal Chassis Frame
- Includes Non-Pluggable, Internal Fans behind sheetmetal Chassis Frame
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver

\section*{Configuration Information}
- 1 U - Height

Aruba 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch PDU
- C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)

Aruba 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch PDU JL665A\#B2C
- C15 PDU Jumper Cord (ROW) (J9944A)

Aruba 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch \(220 v\)
- HPE 2.5m C15 to NEMA 6-20P Pwr Cord(JL336A)

Aruba 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch No Loc
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)
1, 2, 3, 4, Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch
JL665A\#B2B

JL665A\#B2E

JL665A\#AC3

5, 6, 7
- Includes Non-Pluggable, Internal PSU behind sheetmetal Chassis Frame
- Includes Non-Pluggable, Internal Fans behind sheetmetal Chassis Frame
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- \(1 \cup\) - Height

Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch PDU
- C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)

Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch PDU
JL666A\#B2B

JL666A\#B2C
- C15 PDU Jumper Cord (ROW) (J9944A)

Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch 220v
- HPE 2.5 m C15 to NEMA 6-20P Pwr Cord(JL336A)

Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch No Loc
JL666A\#AC3
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)
1, 2, 3, 4, Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch
JL667A
5, 6, 7
- Includes Non-Pluggable, Internal PSU behind sheetmetal Chassis Frame
- Includes Non-Pluggable, Internal Fans behind sheetmetal Chassis Frame
- Min=0 \(\backslash \operatorname{Max}=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- 1 U - Height

Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch PDU
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch PDU
- C13 PDU Jumper Cord (ROW)

Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch 220v
- HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A)

Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch No Loc
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)
1, 2, 3, 4, Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch
JL667A\#B2B

JL667A\#B2C

JL667A\#B2E

JL667A\#AC3

5, 6, 7
- Includes Non-Pluggable, Internal PSU behind sheetmetal Chassis Frame
- Includes Non-Pluggable, Internal Fans behind sheetmetal Chassis Frame
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- \(1 \cup\) - Height

Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch PDU
JL668A\#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

\section*{Configuration Information}

Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch PDU
JL668A\#B2C
- C13 PDU Jumper Cord (ROW)

Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch 220v JL668A\#B2E
- HPE 2.3 m C13 to NEMA 6-15P Pwr Cord(J9936A)

Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch No Loc
JL668A\#AC3
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)

\section*{Configuration Rules}

Rule \# Description
SKU
The following Transceivers install into this Switch (Use \#OD1 quoted to switch if switch is CTO) - if applicable:
Aruba 1G SFP LC SX 500m OM2 MMF Transceiver
J4858D
Aruba 1G SFP LC LX 10km SMF Transceiver J4859D
Aruba 1G SFP LC LH 70km SMF Transceiver J4860D
Aruba 1G SFP RJ45 T 100m Cat5e Transceiver J8177D
Aruba 1G SFP LC SX 500m MMF TAA Transceiver JL745A
Aruba 1G SFP LC LX 10km SMF TAA Transceiver
Aruba 1G SFP RJ45 T 100m Cat5e TAA Transceiver
JL746A
JL747A
The following Transceivers install into this Switch (Use \#OD1 quoted to switch if switch is CTO) - if applicable:
Aruba 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver
JL563A
Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver
J9150D
Aruba 10G SFP+ LC LR 10km SMF Transceiver
J9151E
Aruba 10G SFP+ LC ER 40km SMF Transceiver
Aruba 10G SFP+ LC SR 300m MMF TAA Transceiver
J9153D

Aruba 10G SFP+ LC LR 10km SMF TAA Transceiver
JL748A
- JL749A
\({ }^{1}\) Aruba 10G SFP+ to SFP+ 1m Direct Attach Copper Cable
J9281D
\({ }^{1}\) Aruba 10G SFP+ to SFP+ 3 m Direct Attach Copper Cable
J9283D
Notes: \(\quad{ }^{1} 50 \mathrm{G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
3 The following Transceivers install into this Switch (Use \#OD1 quoted to switch if switch is CTO) - if applicable:
Aruba 25G SFP28 LC SR 100m MMF Transceiver
JL484A
Aruba 25G SFP28 LC eSR 400 m MMF Transceiver
JL485A
Aruba 25G SFP28 LC LR 10km SMF Transceiver
JL486A
\({ }^{1}\) Aruba 25G SFP28 to SFP28 0.65m Direct Attach Cable JL487A
\({ }^{1}\) Aruba 25G SFP28 to SFP28 3m Direct Attach Copper Cable JL488A
\({ }^{1}\) Aruba 25G SFP28 to SFP28 5m Direct Attach Copper Cable JL489A
Notes: \(\quad{ }^{1} 50 \mathrm{G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
4 The following Transceivers install into this Switch (Use \#OD1 quoted to switch if switch is CTO) - if applicable:
Aruba 50G SFP56 to SFP56 0.65m Direct Attach Copper Cable
R0M46A
Aruba 50G SFP56 to SFP56 3m Direct Attach Copper Cable
R0M47A
5 Localization required on orders without \#B2B, \#B2C, \#B2E or \#AC3 options.

7 When Switches are Factory Racked with this power supply, Then B2B, or B2C should be the Defaulted Power Cable option on the Power Supplies. (See Drop down remark in "Internal Power Supplies" section.)

\section*{Configuration Information}


\section*{Transceivers}
\(\begin{array}{ll}\text { Remarks: } & \text { Description } \\ & \text { SFP Transceivers }\end{array}\)
Aruba 100M SFP LC FX 2km MMF Transceiver J9054D
Notes: Not supported on SFP56 Ports
Aruba 1G SFP LC SX 500m OM2 MMF Transceiver J4858D
Aruba 1G SFP LC LX 10km SMF Transceiver J4859D
Aruba 1G SFP LC LH 70km SMF Transceiver J4860D
Aruba 1G SFP RJ45 T 100m Cat5e Transceiver J8177D
Aruba 1G SFP LC SX 500m MMF TAA Transceiver JL745A
Aruba 1G SFP LC LX 10km SMF TAA Transceiver JL746A
Aruba 1G SFP RJ45 T 100m Cat5e TAA Transceiver JL747A

\section*{SFP+ Transceivers}

Aruba 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver JL563A
Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver J9150D
Aruba 10G SFP+ LC LR 10km SMF Transceiver J9151E
Aruba 10G SFP+ LC ER 40km SMF Transceiver J9153D
Aruba 10G SFP+ LC SR 300m MMF TAA Transceiver JL748A
Aruba 10G SFP+ LC LR 10km SMF TAA Transceiver JL749A
Aruba 10G SFP+ to SFP+ 1m Direct Attach Copper Cable J9281D
Aruba 10G SFP+ to SFP+ 3m Direct Attach Copper Cable J9283D

\section*{SFP28 Transceivers}

Aruba 25G SFP28 LC SR 100m MMF Transceiver JL484A
Aruba 25G SFP28 LC eSR 400m MMF Transceiver JL485A
Aruba 25G SFP28 LC LR 10km SMF Transceiver JL486A
Aruba 25G SFP28 to SFP28 0.65m Direct Attach Cable JL487A
Aruba 25G SFP28 to SFP28 3m Direct Attach Copper Cable JL488A
Aruba 25G SFP28 to SFP28 5m Direct Attach Copper Cable JL489A
SFP56 Transceivers
Aruba 50G SFP56 to SFP56 0.65m Direct Attach Copper Cable ROM46A
Notes: Not supported on SFP
Aruba 50G SFP56 to SFP56 3m Direct Attach Copper Cable
R0M47A

\section*{Configuration Information}

\section*{Power Supplies}

System (std \(0 / / \max 2\) ) User Selection (min \(1 / / \max 2)\) per enclosure
JL762A System (std 1 // max 2) User Selection (min 0 // max 1) per enclosure

Rule \#
Aruba X372 54VDC 1600W 110-240VAC Power Supply
- Uses \(1 \times \mathrm{C15}, 1600 \mathrm{w}\)

Aruba X372 54VDC 1600W 110-240VAC Power Supply PDU
- C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)

Aruba X372 54VDC 1600W 110-240VAC Power Supply PDU
- C15 PDU Jumper Cord (ROW) (J9944A)

Aruba X372 54VDC 1600W 110-240VAC Power Supply 220v
- HPE 2.5 m C15 to NEMA 6-20P Pwr Cord(JL336A)

Aruba X372 54VDC 1600W 110-240VAC Power Supply No Loc
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)

Aruba 6300M 250W 36-72VDC Input Non-PoE Power Supply
- DC supply, comes with DC power cable, only mix with AC PSU JL085A 250W

1, 4
Aruba X371 12VDC 250W 100-240VAC Power-to-Port Power Supply
- Uses \(1 \times\) C13, 250w

Aruba X371 12VDC 250W 100-240VAC Power-to-Port Power Supply PDU
- C13 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)

Aruba X371 12VDC 250W 100-240VAC Power-to-Port Power Supply PDU
- C13 PDU Jumper Cord (ROW) (J9944A)

Aruba X371 12VDC 250W 100-240VAC Power-to-Port Power Supply 220v
- HPE 2.5 m C13 to NEMA 6-20P Pwr Cord(JL336A)

Aruba X371 12VDC 250W 100-240VAC Power-to-Port Power Supply No Loc
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)
1, 3 Aruba X372 54VDC 680W 100-240VAC Power Supply
- Uses \(1 \times \mathrm{C} 15,680 \mathrm{w}\)

Aruba X372 54VDC 680W 100-240VAC Power Supply PDU NA, JP or TW
- C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)

Aruba X372 54VDC 680W 100-240VAC Power Supply PDU ROW
- C15 PDU Jumper Cord (ROW) (J9944A)

Aruba X372 54VDC 680W 100-240VAC Power Supply United States 220 volt
- HPE 2.5m C15 to NEMA 6-20P Pwr Cord(JL336A)

JL670A\#B2B

JL670A\#B2C

JL670A\#B2E

JL670A\#AC3

JL085A\#0D1

JL085A\#B2B

JL085A\#B2C

JL085A\#B2E

JL085A\#AC3

JL757A\#0D1

JL760A\#0D1

JL760A\#B2B

JL760A\#B2C

JL760A\#B2E

JL760A\#AC3

JL086A\#0D1

JL086A\#B2B

JL086A\#B2C

JL086A\#B2E

\section*{Configuration Information}

\author{
Aruba X372 54VDC 680W 100-240VAC Power Supply \\ JL086A\#AC3 \\ - No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P) \\ Aruba 6300M 1050W 36-72VDC Input PoE Power Supply \\ - DC supply, comes with DC power cable, only mix with AC PSU JL087A 1050W \\ Aruba X372 54VDC 1050W 110-240VAC Power Supply \\ - Uses \(1 \times \mathrm{C15}, 1050 \mathrm{w}\) \\ Aruba X372 54VDC 1050W 110-240VAC Power Supply PDU NA, JP or TW \\ - C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A) \\ Aruba X372 54VDC 1050W 110-240VAC Power Supply PDU ROW JL087A\#B2C \\ - C15 PDU Jumper Cord (ROW) (J9944A) \\ Aruba X372 54VDC 1050W 110-240VAC Power Supply United States 220 volt \\ JL087A\#B2E \\ - HPE 2.5 m C15 to NEMA 6-20P Pwr Cord(JL336A) \\ Aruba X372 54VDC 1050W 110-240VAC Power Supply \\ JL087A\#AC3
}

1, 3, 5

1, 3
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L620P)

\section*{Configuration Rules}

Rule \# Description
SKU
Localization (Wall Power Cord) required on orders without \#B2B, \#B2C, (PDU Power Cord) or \#B2E. (See Localization Menu)
2 The Following Switches are compatible with this PSU
Aruba 6300M 24-port SFP+ and 4-port SFP56 Switch
JL658A
Aruba 6300M 48-port 1GbE and 4-port SFP56 Switch JL663A
Aruba 6300M 24-port 1GbE and 4-port SFP56 Switch JL664A
3
The Following Switches are compatible with this PSU
Aruba 6300M 48-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch
JL659A
Aruba 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch JL660A
Aruba 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch JL661A
Aruba 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch JL662A
4

5
Notes:
The Following Switch is only compatible with this Power to Port PSU;
Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
JL762A
It is recommended that the JL758A 1050W PSU NOT be mixed with the JL670A 1600W PSU.
- If you want the Locking Power Cord (J9955A) L6-20P, then you must order this power cord through the Accessories tab
- 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. (OCA Default B2B or B2C for Rack Level CTO)
- Switch/Router/Power Supply to Wall Power Cord - Localized Option (OCA 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

\section*{PSU Options}

For JL670A, JL085A, JL760A, JL086A, JL087A (std \(0 / / \max\) 1) User Selection (min \(0 / / \max\) 1) per PSU
HPE 2.0m C13 to C14 PDU India Power Cord
JL671A
- C13 India PDU Cable for Factory Racked Systems Only

HPE 2.5m C15 to C14 PDU India Power Cord
- C15 India PDU Cable for Factory Racked Systems Only

\section*{Configuration Information}
Notes: These PDU cables are for Solutions shipping to India.

\section*{Switch Options}

JL658A, JL659A, JL762A System (std 2 // max 2) User Selection (min 0 // max 0) per enclosure JL660A, JL661A, JL662A, JL663A, JL664A System (std 1 // max 2) User Selection (min 0 // max 1) per enclosure
\(\begin{array}{ll}\text { Remarks } & \text { Description } \\ & \text { Fan Trays } \\ & \text { Aruba X751 Front to Back Fan Tray } \\ & \text { Aruba 6300M Power-to-Port Fan Tray } \\ \text { Notes: } & -\quad \text { Spare only } \\ & -\quad \text { The Following Switch is only compatible with this Power to Port FanTray; } \\ & \text { Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port } 2 \text { Fan Trays } 1 \text { PSU Bundle } \\ \text { Notes: } & -\quad \text { When configuring JL658A JL659A or JL762A: "This switch includes } 2 \text { Fan Trays. No additional } \\ & \quad \text { Fan Trays necessary" }\end{array}\)

\section*{Rack Mount Kits}

System (std \(0 / / \max 1\) ) User Selection (min \(0 / / \max 1)\) per enclosure
Aruba X414 1 U Universal 4-post Rack Mount Kit
J9583B
Notes: If the switch will be factory racked into an HPE Universal Rack, then (Min 1) of the 4 Post Rack Mount kit is required.

\section*{Air Duct Kit}

For System (std \(0 / / \max 1\) ) User Selection (min \(0 / / \max 1)\) per Switch
Aruba X544 Universal 4-post Duct Kit (Must order 4-post rack mount kit separately)
Notes: - Only for Power to Port Bundles
- If the Switch Bundle will be Factory Racked, then this Duct Kit is required with \#0D1 for the Power to Port Switch Bundles: JL762A
- For optimal performance, it is recommended that the user select the Duct Kit for Power to Port Switch Bundles
- If this Air Duct Kit is selected, then the following 4 Post Rack Mount kit must be selected: J9583B - Aruba X414 1U Universal 4-post Rack Mount Kit

\section*{India PDU Cable}

For JL665A, JL666A, JL667A, JL668A, JL762A (std 0 // max 1) User Selection (min 0 // max 1) per enclosure
HPE 2.0m C13 to C14 PDU India Power Cord
- C13 India PDU Cable for Factory Racked Systems Only

HPE 2.5m C15 to C14 PDU India Power Cord JL672A
- C15 India PDU Cable for Factory Racked Systems Only

Notes: These PDU cables are for Solutions shipping to India.

\section*{USB Console Cables}

System (std 0 // max 99) User Selection (min \(0 / /\) max 99) per switch
Aruba USBA-RJ45 PIN3TX-6RX Cable
Aruba USBA-RJ45 PC-to-Switch PIN6TX-3RX Cable
Aruba USB-A to USB-C PC-to-Switch Cable
Aruba USB-C to USB-C PC-to-Switch Cable

\section*{Configuration Information}

\section*{Software}

Aruba CX Mobile App https://www.arubanetworks.com/products/networking/switches/cx-mobileapp/
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{7}{*}{Remarks} & Description & SKU \\
\hline & NetEdit & \\
\hline & Aruba NetEdit Single Node 1yr Subscription E-STU & JL639AAE \\
\hline & Aruba NetEdit Single Node 3yr Subscription E-STU & JL640AAE \\
\hline & Aruba NetEdit Single Node 1 year Subscription E-STU for HPE & R9G36AAE \\
\hline & Aruba NetEdit Single Node 3 year Subscription E-STU for HPE & R9G37AAE \\
\hline & Central & \\
\hline \multirow[t]{6}{*}{Notes:} & For details and complete listing of Aruba Central licensing options, please see https://www.arubanetworks.com/assets/ds/DS_ArubaCentral.pdf Aruba Central Data Sheet https://www.arubanetworks.com/assets/ds/DS_ArubaCentral.pdf & \\
\hline & Aruba Central Switch 48p Foundation 1 year Subscription E-STU & Q9Y78AAE \\
\hline & Aruba Central 63xx or 38xx Switch Foundation 3 year Subscription E-STU & Q9Y79AAE \\
\hline & Aruba Central 63xx or 38xx Switch Foundation 5 year Subscription E-STU & Q9Y80AAE \\
\hline & Aruba Central Switch 48 port Foundation 7 year Subscription E-STU & Q9Y81AAE \\
\hline & Aruba Central Switch 48 port Foundation Sub 7yr E-STU & R3K02AAE \\
\hline \multirow[t]{11}{*}{Notes:} & \begin{tabular}{l}
Add the Central Cloud Skus to the Aruba Catalog as Standalone: \\
Aruba > Network Management > Central > Cloud Services
\end{tabular} & \\
\hline & Aruba Central On-Premises Switch 63xx or 38xx Foundation 1 year Subscription E-STU & R6U83AAE \\
\hline & Aruba Central On-Premises Switch 63xx or 38xx Foundation 3 year Subscription E-STU & R6U84AAE \\
\hline & Aruba Central On-Premises Switch 63xx or 38xx Foundation 5 year Subscription E-STU & R6U85AAE \\
\hline & Aruba Central On-Premises Switch 63xx or 38xx Foundation 7 year Subscription E-STU & R6U86AAE \\
\hline & Aruba Central On-Premises Switch 63xx or 38xx Foundation 10 year Subscription E-STU & R6U87AAE \\
\hline & Aruba Central On-Premises \(63 x x\) or \(38 x x\) Switch Foundation 1 year Subscription COP only TAC E-STU & R8M05AAE \\
\hline & Aruba Central On-Premises \(63 x x\) or \(38 x x\) Switch Foundation 3 year Subscription COP only TAC E-STU & R8M06AAE \\
\hline & Aruba Central On-Premises \(63 x x\) or \(38 x x\) Switch Foundation 5 year Subscription COP only TAC E-STU & R8M07AAE \\
\hline & Aruba Central On-Premises \(63 x x\) or \(38 x x\) Switch Foundation 7 year Subscription COP only TAC E-STU & R8M08AAE \\
\hline & Aruba Central On-Premises 63xx or 38xx Switch Foundation 10 year Subscription COP only TAC ESTU & R8M09AAE \\
\hline \multirow[t]{12}{*}{Notes:} & \begin{tabular}{l}
Add the Central On-Prem Skus to the Aruba Catalog as Standalone: \\
Aruba > Network Management > Central > On-Prem Services
\end{tabular} & \\
\hline & Fabric Composer & \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 1 year Subscription E-STU & R8D18AAE \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 3 year Subscription E-STU & R8D19AAE \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 5 year Subscription E-STU & R8D20AAE \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 7 year Subscription E-STU & R8D21AAE \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 10 year Subscription E-STU & R8D22AAE \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 1 year Subscription E-STU for HPE & R9G31AAE \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 3 year Subscription E-STU for HPE & R9G32AAE \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 5 year Subscription E-STU for HPE & R9G33AAE \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 7 year Subscription E-STU for HPE & R9G34AAE \\
\hline & Aruba Fabric Composer Device Management Service Tier 3 Switch 10 year Subscription E-STU for HPE & R9G35AAE \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Aruba 6300M 24-port SFP+ and 4-port SFP56 Switch (JL658A)} \\
\hline Description & \multicolumn{2}{|l|}{\begin{tabular}{l}
\(24 \times 1 \mathrm{G} / 10 \mathrm{G}\) SFP+ ports \\
\(4 \times 1 \mathrm{G} / 10 \mathrm{G} / 25 \mathrm{G}^{1}\) SFP ports \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular}} \\
\hline \begin{tabular}{l}
Additional \\
Ports and Slots
\end{tabular} & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { 1x USB-C console port } \\
& \text { 1x OOBM } \\
& \text { 1x USB Type A host port } \\
& \text { 1x Bluetooth dongle to be used with CX Mobile App }
\end{aligned}
\]} \\
\hline Power Supplies & \multicolumn{2}{|l|}{2 field-replaceable, hot-swappable power supply slots. 1 minimum power supply required (ordered separately) Supports JL085A PSU} \\
\hline Fan Tray & \multicolumn{2}{|l|}{Switch has two fan tray slots and comes with two fan trays installed. Fan trays are field replaceable and hot-swappable. Minimum 2 fan trays required. Each fan tray is comprised of two fans.} \\
\hline \begin{tabular}{l}
Physical \\
Characteristics
\end{tabular} & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 15.2(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \times 38.5 \times 4.4 \mathrm{~cm})
\end{aligned}
\] \\
\hline & Weight & \(12.78 \mathrm{lbs}(5.8 \mathrm{Kg})\) \\
\hline Mounting and Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A 72 @ 1.8GHz} \\
\hline Memory and Flash & \multicolumn{2}{|l|}{\begin{tabular}{l}
8 GBytes DDR4 \\
32 GBytes eMMC
\end{tabular}} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{21}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 880 Gbps \\
\hline & Model throughput capacity & 654 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(1.99 \mu \mathrm{Sec}\) \\
10Gbps: \(1.49 \mu \mathrm{Sec}\) \\
25Gbps: \(2.85 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 2.82 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VFR & 256 \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline Environment & Operating temperature & \begin{tabular}{l}
\(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \\
\(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \\
\(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet \\
Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. \\
Operating temperature is reduced to \(32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)\) to \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\) up to 5000 ft when 10 G SFP+ LR or ER Transceivers are installed.
\end{tabular} \\
\hline \multirow[t]{7}{*}{Environment} & Operating relative humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline & Max non-operating altitude & Up to 15,000ft (3.048 Km) \\
\hline & Acoustic & \begin{tabular}{l}
Sound power, \\
LWAd = 4.9 Bel \\
Sound pressure, \\
LpAm (bystander) \(=31.0 \mathrm{~dB}\)
\end{tabular} \\
\hline & Primary airflow & Front and side-to-back \\
\hline \multirow[t]{4}{*}{Electrical Characteristics} & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline & AC voltage & JL085A PSU: 100V-240V \\
\hline & Current (for voltages listed above) & JL085A PSU: 3A/1.2A \\
\hline & Power consumption (230VAC) & Hibernation (O rpm fan): 9W Idle: 51W 100\% traffic rate: 85W \\
\hline Safety & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Emissions & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline \multirow[t]{11}{*}{Immunity} & Generic & CISPR 24 / CISPR 35 \\
\hline & EN & EN 55024:2010 / EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline \multicolumn{3}{|l|}{Notes: \({ }^{1}\) Not more than 96 consecutive hours or 360 hours total or 15 occurrences in a 1-year period.} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline \multirow[t]{2}{*}{Description} & \begin{tabular}{l}
\(48 x\) ports SmartRate 100M/1G/2.5G/5G BASE-T Class 6 PoE ports supporting up to 60 W per port \(4 \times 1 \mathrm{G} / 10 \mathrm{G} / 25 \mathrm{G}^{1}\) SFP ports \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 60W) \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{l}
Additional \\
Ports and \\
Slots
\end{tabular} & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { 1x USB-C console port } \\
& \text { 1x OOBM } \\
& \text { 1x USB Type A host port } \\
& \text { 1x Bluetooth dongle to be used with CX Mobile App }
\end{aligned}
\]} \\
\hline Power Supplies & \multicolumn{2}{|l|}{2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supported PSUs: JL086A, JL087A, JL670A Max PoE power: 2880W} \\
\hline Fan Tray & \multicolumn{2}{|l|}{Switch has two fan tray slots and comes with two fan trays installed. Fan trays are field replaceable and hot-swappable. Minimum 2 fan trays required. Each fan tray is comprised of two fans.} \\
\hline Physical Characteristics & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 15.2(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \times 38.5 \times 4.4 \mathrm{~cm})
\end{aligned}
\] \\
\hline & Weight & \(14.8 \mathrm{lbs}(6.71 \mathrm{~kg})\) \\
\hline Mounting and Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A 72 @ 1.8GHz} \\
\hline Memory and Flash & \multicolumn{2}{|l|}{\begin{tabular}{l}
8 GBytes DDR4 \\
32 GBytes eMMC
\end{tabular}} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{21}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 880 Gbps \\
\hline & Model throughput capacity & 654 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(4.24 \mu \mathrm{Sec}\) \\
10Gbps: \(1.50 \mu \mathrm{Sec}\) \\
25Gbps: \(2.91 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps ( 400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline \multirow[t]{6}{*}{Environment} & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(1-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft (3.048 Km) \\
\hline & Max non-operating altitude & Up to 15,000ft (3.048 Km) \\
\hline & Acoustic & Sound power, LWAd = 4.8 Bel Sound pressure, LpAm (bystander) \(=30.6 \mathrm{~dB}\) \\
\hline & Primary airflow & Front and side-to-back \\
\hline \multirow[t]{4}{*}{Electrical Characteristics} & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline & AC voltage & \begin{tabular}{l}
JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V \\
JL087A PSU: 110V-240V
\end{tabular} \\
\hline & Current (for voltages listed above) & JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A \\
\hline & Power consumption (230VAC) & \begin{tabular}{l}
With JL086A PSU: \\
Hibernation (O rpm fan): 24W Idle: 133W 100\% traffic rate: 199W \\
With JL087A PSU: \\
Hibernation (O rpm fan): 22W Idle: 138W \(100 \%\) traffic rate: 193 W \\
With JL670A PSU: Hibernation (O rpm fan): 21W Idle: 140W \(100 \%\) traffic rate: 201 W
\end{tabular} \\
\hline Safety & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Emissions & \multicolumn{2}{|l|}{\begin{tabular}{l}
Europe: EN 55022:2010, Class A EN 55032:2012, Class A EN 55024:2010, EN 61000-3-2:2014, EN 61000-33:2013 \\
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
\end{tabular}} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|l|l|l|}
\hline \multirow{5}{*}{ Immunity } & Generic & CISPR 24 / CISPR 35 \\
\cline { 2 - 7 } & EN & EN 55024:2010 / EN 55035:2017 \\
\cline { 2 - 6 } & ESD & IEC 61000-4-2 \\
\cline { 2 - 4 } & Radiated & IEC 61000-4-3 \\
\cline { 2 - 4 } & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Aruba 6300M 24-port HPE Smart Rate 1/2.5/5GbE Class 6 PoE and 4-port SFP56 Switch (JL660A)} \\
\hline Description & \multicolumn{2}{|l|}{\begin{tabular}{l}
\(24 \times\) ports SmartRate 100M/1G/2.5G/5G BASE-T Class 6 PoE ports supporting up to 60 W per port \(4 \times 1 \mathrm{G} / 10 \mathrm{G} / 25 \mathrm{G}^{1}\) SFP ports \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release. \\
Supports PoE Standards IEEE 802.3af, 802.3at and 802.3bt (up to 60W)
\end{tabular}} \\
\hline \begin{tabular}{l}
Additional \\
Ports and Slots
\end{tabular} & \multicolumn{2}{|l|}{\begin{tabular}{l}
1x USB-C console port \\
\(1 \times\) OOBM \\
1x USB Type A host port \\
1x Bluetooth dongle to be used with CX Mobile App
\end{tabular}} \\
\hline Power Supplies & \multicolumn{2}{|l|}{\begin{tabular}{l}
2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supported PSUs: JL086A, JL087A, JL670A \\
Max PoE power: 1440W
\end{tabular}} \\
\hline Fan Tray & \multicolumn{2}{|l|}{\begin{tabular}{l}
Switch has two fan tray slots and comes with one fan tray installed. \\
Fan trays are field replaceable and hot-swappable. Minimum 1 fan tray required. Second fan tray ordered separately. \\
Each fan tray is comprised of two fans.
\end{tabular}} \\
\hline Physical Characteristics & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 15.2(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \times 38.5 \times 4.4 \mathrm{~cm})
\end{aligned}
\] \\
\hline & Weight & \(13.36 \mathrm{lbs}(6.06 \mathrm{~kg})\) \\
\hline Mounting and Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA-standard 19 in . telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A 72 @ 1.8GHz} \\
\hline Memory and Flash & \multicolumn{2}{|l|}{\begin{tabular}{l}
8 GBytes DDR4 \\
32 GBytes eMMC
\end{tabular}} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{7}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 640 Gbps \\
\hline & Model throughput capacity & 476 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(4.24 \mu \mathrm{Sec}\) \\
10Gbps: \(1.50 \mu \mathrm{Sec}\) \\
25Gbps: \(2.91 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (egress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline Environment & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. Requires two fan trays to support excursion. \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline & Max non-operating altitude & Up to 15,000ft (3.048 Km) \\
\hline & Acoustic & Sound power, LWAd = 5.2 Bel Sound pressure, LpAm (bystander) \(=34.2 \mathrm{~dB}\) \\
\hline & Primary airflow & Front and side-to-back \\
\hline Electrical & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline Characteristics & AC voltage & JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V JL087A PSU: 110V-240V \\
\hline & \begin{tabular}{l}
Current \\
(for voltages listed above)
\end{tabular} & JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A \\
\hline & Power consumption (230VAC) & \begin{tabular}{l}
With JL086A PSU: \\
Hibernation (O rpm fan): 24 W Idle: 93W \\
\(100 \%\) traffic rate: 137 W \\
With JL087A PSU: \\
Hibernation (O rpm fan): 22W Idle: 91W \\
\(100 \%\) traffic rate: 131 W \\
With JL670A PSU: \\
Hibernation ( 0 rpm fan): 21W Idle: 98W \\
\(100 \%\) traffic rate: 139 W
\end{tabular} \\
\hline Safety & \begin{tabular}{l}
Europe: EN 60950-1:2006 +A11:2009 + US: UL 60950-1 2nd Ed.. \\
Canada: CAN/CSA-C22.2 No. 60950-1-07 Worldwide: IEC 60950-1:2005 w/all know
\end{tabular} & 1:2010 +A12:2011 + A2:2013 \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline Emissions & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline \multirow[t]{8}{*}{Immunity} & Generic & CISPR 24 / CISPR 35 \\
\hline & EN & EN 55024:2010 / EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline \multirow[t]{3}{*}{Immunity} & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline \multicolumn{3}{|l|}{Notes: \({ }^{1}\) Not more than 96 consecutive hours or 360 hours total or 15 occurrences in a 1-year period.} \\
\hline \multicolumn{3}{|l|}{Aruba 6300M 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL661A)} \\
\hline Description & \multicolumn{2}{|l|}{\begin{tabular}{l}
\(48 \times 10 / 100 / 1000\) BASE-T PoE+ ports supporting up to 30 W per port \\
\(4 \times 1 \mathrm{G} / 10 \mathrm{G} / 25 \mathrm{G}^{1}\) SFP ports \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver \\
capability enabled by future software release. \\
Supports PoE Standards IEEE 802.3af, 802.3at
\end{tabular}} \\
\hline \begin{tabular}{l}
Additional \\
Ports and \\
Slots
\end{tabular} & \multicolumn{2}{|l|}{```
1x USB-C console port
1x OOBM
1x USB Type A host port
1x Bluetooth dongle to be used with CX Mobile App
```} \\
\hline Power Supplies & \multicolumn{2}{|l|}{2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supported PSUs: JL086A, JL087A, JL670A Max PoE power: 1600 W} \\
\hline Fan Tray & \multicolumn{2}{|l|}{\begin{tabular}{l}
Switch has two fan tray slots and comes with one fan tray installed. \\
Fan trays are field replaceable and hot-swappable. Minimum 1 fan tray required. Second fan tray ordered separately. \\
Each fan tray is comprised of two fans.
\end{tabular}} \\
\hline \multirow[t]{2}{*}{Physical Characteristics} & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 15.2(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \times 38.5 \times 4.4 \mathrm{~cm})
\end{aligned}
\] \\
\hline & Weight & \(12.61 \mathrm{lbs}(5.72 \mathrm{~kg}\) ) \\
\hline Mounting and Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A 72 @ 1.8GHz} \\
\hline Memory and Flash & \multicolumn{2}{|l|}{8 GBytes DDR4 32 GBytes eMMC} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{18}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 496 Gbps \\
\hline & Model throughput capacity & 369 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(2.28 \mu \mathrm{Sec}\) \\
10Gbps: \(1.46 \mu \mathrm{Sec}\) \\
25Gbps: \(1.90 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline \multirow[t]{3}{*}{Performance} & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline \multirow[t]{8}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline & Max non-operating altitude & Up to 15,000ft (3.048 Km) \\
\hline & Acoustic & \begin{tabular}{l}
Sound power, \\
LWAd \(=4.7 \mathrm{Bel}\) \\
Sound pressure, \\
LpAm (bystander) \(=29.8 \mathrm{~dB}\)
\end{tabular} \\
\hline & Primary airflow & Front and side-to-back \\
\hline \multirow[t]{4}{*}{Electrical Characteristics} & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline & AC voltage & \begin{tabular}{l}
JL670A PSU: 110V-120V/208V-240V \\
JL086A PSU: 100V-240V \\
JL087A PSU: 110V-240V
\end{tabular} \\
\hline & Current (for voltages listed above) & JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A \\
\hline & Power consumption (230VAC) & \begin{tabular}{l}
With JL086A PSU: \\
Hibernation (O rpm fan): 18W \\
Idle: 70W \\
\(100 \%\) traffic rate: 90W
\end{tabular} \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline & & \begin{tabular}{l}
With JL087A PSU: \\
Hibernation (O rpm fan): 16W Idle: 71W \(100 \%\) traffic rate: 88 W \\
With JL670A PSU: \\
Hibernation (0 rpm fan): 16W Idle: 73W \\
100\% traffic rate: 96 W
\end{tabular} \\
\hline Safety & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Emissions & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline \multirow[t]{5}{*}{Immunity} & Generic & CISPR \(24 /\) CISPR 35 \\
\hline & EN & EN 55024:2010 / EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline \multirow[t]{6}{*}{Immunity} & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline \multicolumn{3}{|l|}{Notes: \({ }^{1}\) Not more than 96 consecutive hours or 360 hours total or 15 occurrences in a 1-year period.} \\
\hline \multicolumn{3}{|l|}{Aruba 6300M 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL662A)} \\
\hline Description & \multicolumn{2}{|l|}{\begin{tabular}{l}
\(24 \times\) 10/100/1000 BASE-T PoE+ ports supporting up to 30 W per port 1G/10G/25G \({ }^{1}\) SFP ports \\
Notes: \({ }^{15} 50\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular}} \\
\hline \multirow[t]{4}{*}{\begin{tabular}{l}
Additional \\
Ports and Slots
\end{tabular}} & \multicolumn{2}{|l|}{\(1 \times\) USB-C console port} \\
\hline & \multicolumn{2}{|l|}{1x OOBM} \\
\hline & \multicolumn{2}{|l|}{1x USB Type A host port} \\
\hline & \multicolumn{2}{|l|}{\(1 \times\) Bluetooth dongle to be used with CX Mobile App} \\
\hline \multirow[t]{4}{*}{Power Supplies} & \multicolumn{2}{|l|}{2 field-replaceable, hot-swappable power supply slots} \\
\hline & \multicolumn{2}{|l|}{1 minimum power supply required (ordered separately)} \\
\hline & \multicolumn{2}{|l|}{Supported PSUs: JL086A, JL087A, JL670A} \\
\hline & \multicolumn{2}{|l|}{Max PoE power: 720W} \\
\hline \multirow[t]{2}{*}{Fan Tray} & \multicolumn{2}{|l|}{\begin{tabular}{l}
Switch has two fan tray slots and comes with one fan tray installed. \\
Fan trays are field replaceable and hot-swappable. Minimum 1 fan tray required. Second fan tray ordered separately. \\
Each fan tray is comprised of two fans.
\end{tabular}} \\
\hline & Dimensions & \(17.4(\mathrm{w}) \times 15.2(\mathrm{~d}) \times 1.73\) (h) in \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline Physical & & \((44.2 \times 38.5 \times 4.4 \mathrm{~cm})\) \\
\hline Characteristics & Weight & \(12.23 \mathrm{lbs}(5.55 \mathrm{~kg}\) ) \\
\hline Mounting and Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A72 @ 1.8GHz} \\
\hline Memory and Flash & \multicolumn{2}{|l|}{8 GBytes DDR4 32 GBytes eMMC} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{16}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 448 Gbps \\
\hline & Model throughput capacity & 334 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
\(1 \mathrm{Gbps}: 2.28 \mu \mathrm{Sec}\) \\
10Gbps: \(1.46 \mu \mathrm{Sec}\) \\
25Gbps: \(1.90 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & VRF & 256 \\
\hline \multirow[t]{5}{*}{Performance} & MAC table capacity & 32,768 \\
\hline & IGMP Groups & 8,192 \\
\hline & MLD Groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline \multirow[t]{8}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline & Max non-operating altitude & Up to 15,000ft (3.048 Km) \\
\hline & Acoustic & \begin{tabular}{l}
Sound power, \\
LWAd \(=4.7 \mathrm{Bel}\) \\
Sound pressure, \\
LpAm (bystander) \(=29.4 \mathrm{~dB}\)
\end{tabular} \\
\hline & Primary airflow & Front and side-to-back \\
\hline Electrical & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline Characteristics & AC voltage & JL670A PSU: 110V-120V/208V-240V JL086A PSU: 100V-240V \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{3}{*}{} & & JL087A PSU: 110V-240V \\
\hline & \begin{tabular}{l}
Current \\
(for voltages listed above)
\end{tabular} & JL670A PSU: 11A/8A JL086A PSU: 8A/3.5A JL087A PSU: 12A/5A \\
\hline & Power consumption (230VAC) & \begin{tabular}{l}
With JL086A PSU: \\
Hibernation (O rpm fan): 20W Idle: 60W \\
\(100 \%\) traffic rate: 76 W \\
With JL087A PSU: \\
Hibernation (O rpm fan): 17W \\
Idle: 59W \\
\(100 \%\) traffic rate: 74 W \\
With JL670A PSU: \\
Hibernation (O rpm fan): 16W \\
Idle: 62W \\
100\% traffic rate: 81W
\end{tabular} \\
\hline Safety & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Emissions & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline Immunity & Generic & CISPR 24 / CISPR 35 \\
\hline & EN & EN 55024:2010 / EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline Immunity & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline \multicolumn{3}{|l|}{Notes: \({ }^{1}\) Not more than 96 consecutive hours or 360 hours total or 15 occurrences in a 1-year period.} \\
\hline \multicolumn{3}{|l|}{Aruba 6300M 48-port 1GbE and 4-port SFP56 Switch (JL663A)} \\
\hline Description & \begin{tabular}{l}
48× 10/100/1000 BASE-T PoE+ 1G/10G/25G \({ }^{1}\) SFP ports \\
Notes: \({ }^{150 \mathrm{G}}\) capability is for use capability enabled by future softw
\end{tabular} & DACs for both interconnect and VSF stacking. 50G transceiver se. \\
\hline Additional Ports and Slots & \[
\begin{aligned}
& \text { 1x USB-C console port } \\
& \text { 1x OOBM } \\
& \text { 1x USB Type A host port } \\
& \text { 1x Bluetooth dongle to be used wi }
\end{aligned}
\] & bile App \\
\hline \begin{tabular}{l}
Power \\
Supplies
\end{tabular} & \begin{tabular}{l}
2 field-replaceable, hot-swappable \\
1 minimum power supply required Supports JL085A PSU
\end{tabular} & upply slots separately) \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline Fan Tray & \multicolumn{2}{|l|}{\begin{tabular}{l}
Switch has two fan tray slots and comes with one fan tray installed. \\
Fan trays are field replaceable and hot-swappable. Minimum 1 fan tray required. Second fan tray ordered separately. \\
Each fan tray is comprised of two fans.
\end{tabular}} \\
\hline \multirow[t]{2}{*}{Physical Characteristics} & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 15.2(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \times 38.5 \times 4.4 \mathrm{~cm})
\end{aligned}
\] \\
\hline & Weight & \(12.14 \mathrm{lbs}(5.51 \mathrm{~kg}\) ) \\
\hline Mounting and Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {Tm }}\) A 72 @ 1.8GHz} \\
\hline Memory and Flash & \multicolumn{2}{|l|}{8 GBytes DDR4 32 GBytes eMMC} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{15}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 496 Gbps \\
\hline & Model throughput capacity & 369 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(2.28 \mu \mathrm{Sec}\) \\
10Gbps: \(1.46 \mu \mathrm{Sec}\) \\
25Gbps: \(1.90 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps ( 400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline \multirow[t]{6}{*}{Performance} & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline \multirow[t]{7}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(40^{\circ} \mathrm{C}\) ), 5,001 to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline & Max non-operating altitude & Up to 15,000ft ( 3.048 Km ) \\
\hline & Acoustic & \begin{tabular}{l}
Sound power, \\
LWAd \(=4.6\) Bel \\
Sound pressure,
\end{tabular} \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{} & & LpAm (bystander) \(=28.7 \mathrm{~dB}\) \\
\hline & Primary airflow & Front and side-to-back \\
\hline \multirow[t]{4}{*}{Electrical characteristics} & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline & AC voltage & JL085A PSU: 100V-240V \\
\hline & Current (for voltages listed above) & JL085A PSU: 3A/1.2A \\
\hline & Power Consumption (230VAC) & \begin{tabular}{l}
Hibernation (O rpm fan): 9W Idle: 56W \\
100\% traffic rate: 75 W
\end{tabular} \\
\hline Safety & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Emissions & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline \multirow[t]{11}{*}{Immunity} & Generic & CISPR 24 / CISPR 35 \\
\hline & EN & EN 55024:2010 / EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline \multicolumn{3}{|l|}{Notes: \({ }^{1}\) Not more than 96 consecutive hours or 360 hours total or 15 occurrences in a 1-year period.} \\
\hline
\end{tabular}

\section*{Aruba 6300M 24-port 1GbE and 4-port SFP56 Switch (JL664A)}
\begin{tabular}{l|l} 
Description & \(24 \times 10 / 100 / 1000\) BASE-T PoE+ ports \\
& \(1 G / 10 G / 25 G^{1}\) SFP ports
\end{tabular}

Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\begin{tabular}{|c|c|c|}
\hline Additional ports and slots & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { 1x USB-C console port } \\
& \text { 1x OOBM } \\
& \text { 1x USB Type A host port } \\
& \text { 1x Bluetooth dongle to be used with CX Mobile App }
\end{aligned}
\]} \\
\hline Power supplies & \multicolumn{2}{|l|}{2 field-replaceable, hot-swappable power supply slots 1 minimum power supply required (ordered separately) Supports JL085A PSU} \\
\hline Fan tray & \multicolumn{2}{|l|}{\begin{tabular}{l}
Switch has two fan tray slots and comes with one fan tray installed. \\
Fan trays are field replaceable and hot-swappable. Minimum 1 fan tray required. Second fan tray ordered separately. \\
Each fan tray is comprised of two fans.
\end{tabular}} \\
\hline \multirow[t]{2}{*}{Physical characteristics} & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 15.2(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \times 38.5 \times 4.4 \mathrm{~cm})
\end{aligned}
\] \\
\hline & Weight & \(11.97 \mathrm{lbs}(5.43 \mathrm{~kg}\) ) \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline Mounting and enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A 72 @ 1.8GHz} \\
\hline Memory and Flash & \multicolumn{2}{|l|}{8 GBytes DDR4 32 GBytes eMMC} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{21}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 448 Gbps \\
\hline & Model throughput capacity & 334 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(2.28 \mu \mathrm{Sec}\) \\
10Gbps: \(1.46 \mu \mathrm{Sec}\) \\
25Gbps: \(1.90 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline \multirow[t]{2}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline \multirow[t]{6}{*}{Environment} & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline & Max non-operating altitude & Up to 15,000ft (3.048 Km) \\
\hline & Acoustic & \begin{tabular}{l}
Sound power, \\
LWAd \(=4.6 \mathrm{Bel}\) \\
Sound pressure, \\
LpAm (bystander) \(=28.6 \mathrm{~dB}\)
\end{tabular} \\
\hline & Primary airflow & Front and side-to-back \\
\hline \multirow[t]{3}{*}{Electrical Characteristics} & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline & AC voltage & JL085A PSU: 100V-240V \\
\hline & \begin{tabular}{l}
Current \\
(for voltages listed above)
\end{tabular} & JL085A PSU: 3A/1.2A \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|l|l|l|}
\hline & \begin{tabular}{l} 
Power Consumption \\
(230VAC)
\end{tabular} & \begin{tabular}{l} 
Hibernation (O rpm fan): 9W \\
Idle: 49W \\
100\% traffic rate: 64W
\end{tabular} \\
\hline Safety & \begin{tabular}{l} 
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
\end{tabular} \\
\hline Emissions & \begin{tabular}{l} 
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
\end{tabular} \\
\hline Lasers & \begin{tabular}{l} 
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular} \\
\hline Immunity & \begin{tabular}{ll} 
Generic
\end{tabular} & CISPR 24 / CISPR 35
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle (JL762A)} \\
\hline Description & \multicolumn{2}{|l|}{\begin{tabular}{l}
\(48 \times 10 / 100 / 1000\) BASE-T PoE+ ports \\
1G/10G/25G \({ }^{1}\) SFP ports \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular}} \\
\hline Additional ports and slots & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { 1x USB-C console port } \\
& \text { 1x OOBM } \\
& \text { 1x USB Type A host portJL } \\
& \text { 1x Bluetooth dongle to be used with CX Mobile App }
\end{aligned}
\]} \\
\hline Power supplies & \multicolumn{2}{|l|}{\begin{tabular}{l}
2 field-replaceable, hot-swappable power supply slots \\
Comes with 1 power-to-port power supply pre-installed \\
Additional power-to-port power supply can be ordered separately \\
Supports JL760A Aruba X371 12VDC 250W 100-240VAC Power-to-Port Power Supply only
\end{tabular}} \\
\hline Fan tray & \multicolumn{2}{|l|}{\begin{tabular}{l}
Switch has two fan tray slots and comes with two fan trays installed \\
Fan trays are field replaceable and hot-swappable. Minimum 2 fan trays required. Second fan tray ordered separately \\
Each fan tray is comprised of two fans \\
Supports JL761A Aruba 6300M Power-to-Port Fan Tray only
\end{tabular}} \\
\hline Physical characteristics & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 15.2(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \times 38.5 \times 4.4 \mathrm{~cm})
\end{aligned}
\] \\
\hline & Weight & \(12.5 \mathrm{lbs}(5.7 \mathrm{~kg}\) ), with 1 PSU \(13.8 \mathrm{lbs}(6.27 \mathrm{~kg})\), with 2 PSUs \\
\hline Mounting and enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A72 @ 1.8GHz} \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline Memory and Flash & \multicolumn{2}{|l|}{8 GBytes DDR4 32 GBytes eMMC} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB shared packet buffer memory} \\
\hline \multirow[t]{21}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 496 Gbps \\
\hline & Model throughput capacity & 369 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(2.28 \mu \mathrm{Sec}\) \\
10Gbps: \(1.46 \mu \mathrm{Sec}\) \\
25Gbps: \(1.90 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{11}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{1} 50 \mathrm{G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline \multirow[t]{8}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(90 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline & Max non-operating altitude & Up to 15,000ft ( 3.048 Km ) \\
\hline & Acoustic & \begin{tabular}{l}
Sound power, \\
LWAd = 4.6 Bel \\
Sound pressure, \\
LpAm (bystander) \(=28.7 \mathrm{~dB}\)
\end{tabular} \\
\hline & Primary airflow & Back-to-front and side \\
\hline Electrical & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline Characteristics & AC voltage & JL760A PSU: 100V-240V \\
\hline & \begin{tabular}{l}
Current \\
(for voltages listed above)
\end{tabular} & JL760A PSU: 3A/1.2A \\
\hline & Power Consumption (230VAC) & \begin{tabular}{l}
Hibernation (O rpm fan): 9W Idle: 56W \\
100\% traffic rate: 75W
\end{tabular} \\
\hline Safety & \multicolumn{2}{|l|}{Europe: EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011 + A2:2013, EN 62368-1:2014 +A11:2017} \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline & \multicolumn{2}{|l|}{\begin{tabular}{l}
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 Taiwan: CNS-14336-1
\end{tabular}} \\
\hline Emissions & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline \multirow[t]{11}{*}{Immunity} & Generic & CISPR 35 \\
\hline & EN & EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline Notes: \({ }^{1} \mathrm{~N}\) & re than 96 consecutive hours or 360 & otal or 15 occurrences in a 1-year period. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Aruba 6300F 48-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL665A)} \\
\hline Description & \multicolumn{2}{|l|}{\begin{tabular}{l}
\(48 \times 10 / 100 / 1000\) BASE-T PoE+ ports supporting up to 30 W per port \\
1G/10G/25G \({ }^{1}\) SFP ports \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release. \\
Supports PoE Standards IEEE 802.3af, 802.3at
\end{tabular}} \\
\hline \begin{tabular}{l}
Additional \\
Ports And Slots
\end{tabular} & \multicolumn{2}{|l|}{\[
\begin{aligned}
& 1 \times \text { USB-C console port } \\
& 1 \times \text { OOBM } \\
& 1 x \text { USB Type A host port } \\
& 1 \times \text { Bluetooth dongle to be used with CX Mobile App }
\end{aligned}
\]} \\
\hline Power Supplies & \multicolumn{2}{|l|}{Internal (fixed) power supply (950W) Max PoE power: 740W} \\
\hline Fan Tray & \multicolumn{2}{|l|}{Fixed fans} \\
\hline \begin{tabular}{l}
Physical \\
Characteristics
\end{tabular} & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 12.9(\mathrm{~d}) \\
& (44.2 \mathrm{~cm} \times 32.7 \times 4 .
\end{aligned}
\] \\
\hline & Weight & \(11.24 \mathrm{lbs}(5.10 \mathrm{~kg}\) ) \\
\hline Mounting And Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A 72 @ 1.8 GHz} \\
\hline Memory And Flash & \multicolumn{2}{|l|}{8 GBytes DDR4 32 GBytes eMMC} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{5}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 496 Gbps \\
\hline & Model throughput capacity & 369 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(2.28 \mu \mathrm{Sec}\) \\
10Gbps: \(1.46 \mu \mathrm{Sec}\) \\
25Gbps: \(1.90 \mu \mathrm{Sec}\)
\end{tabular} \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline & & \begin{tabular}{l}
50Gbps \({ }^{1}\) : \(3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline Environment & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. \\
\hline & Operating & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline Environment & Max non-operating altitude & Up to 15,000ft (3.048 Km) \\
\hline & Acoustic & Sound power, LWAd = 5.2 Bel Sound pressure, LpAm (bystander) \(=34.9 \mathrm{~dB}\) \\
\hline & Primary airflow & Front and side-to-back \\
\hline Electrical & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline Characteristics & AC voltage & Fixed PSU: 100V-120V/200V-240V \\
\hline & \begin{tabular}{l}
Current \\
(for voltages listed above)
\end{tabular} & Fixed PSU: 11A/6A \\
\hline & Power Consumption (230VAC) & \begin{tabular}{l}
Hibernation (O rpm fan): 12W Idle: 63W \\
100\% traffic rate: 86 W
\end{tabular} \\
\hline Safety & \begin{tabular}{l}
Europe: EN 60950-1:2006 +A11:2009 + US: UL 60950-1 2nd Ed.. \\
Canada: CAN/CSA-C22.2 No. 60950-1-07 \\
Worldwide: IEC 60950-1:2005 w/all know
\end{tabular} & \begin{tabular}{l}
1:2010 +A12:2011 + A2:2013 \\
National Deviations
\end{tabular} \\
\hline Emissions & \begin{tabular}{l}
Europe: EN 55022:2010, Class A EN 550 \\
EN 61000-3-3:2013 \\
US: FCC part 15 Class A \\
Canada: ICES-003 Class A \\
Worldwide: VCCI Class A, CISPR 22 Class
\end{tabular} & \begin{tabular}{l}
2:2012, Class A EN 55024:2010, EN 61000-3-2:2014 \\
CISPR 32 Class A CISPR 24:2010
\end{tabular} \\
\hline Lasers & EN 60825-1:2007 / IEC 60825-1:2007 Clas Class 1 Laser Products / Laser Klasse 1 (A & \begin{tabular}{l}
\[
\text { ss } 1
\] \\
plicable for accessories - Optical Transceivers only)
\end{tabular} \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{11}{*}{Immunity} & Generic & CISPR 24 / CISPR 35 \\
\hline & EN & EN 55024:2010 / EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline
\end{tabular}

Notes: \({ }^{1}\) Not more than 96 consecutive hours or 360 hours total or 15 occurrences in a 1-year period.
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Aruba 6300F 24-port 1GbE Class 4 PoE and 4-port SFP56 Switch (JL666A)} \\
\hline Description & Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release. & \begin{tabular}{l}
porting up to 30W per port \\
DACs for both interconnect and VSF stacking. 50G transceiver se.
\end{tabular} \\
\hline & \multicolumn{2}{|l|}{Supports PoE Standards IEEE 802.3af, 802.3a \(\dagger\)} \\
\hline \multirow[t]{4}{*}{Additional Ports And Slots} & \multicolumn{2}{|l|}{\(1 \times\) USB-C console port} \\
\hline & \multicolumn{2}{|l|}{1x OOBM} \\
\hline & \multicolumn{2}{|l|}{1x USB Type A host port} \\
\hline & \multicolumn{2}{|l|}{\(1 \times\) Bluetooth dongle to be used with CX Mobile App} \\
\hline Power & \multicolumn{2}{|l|}{Internal (fixed) power supply (950W)} \\
\hline Supplies & \multicolumn{2}{|l|}{Max PoE power: 370W} \\
\hline Fan Tray & \multicolumn{2}{|l|}{Fixed fans} \\
\hline \multirow[t]{2}{*}{Physical Characteristics} & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 12.9(\mathrm{~d}) \times 1.73 \mathrm{ch}) \text { in } \\
& (44.2 \mathrm{~cm} \times 32.7 \times 4.39 \mathrm{~cm}))
\end{aligned}
\] \\
\hline & Weight & \(10.91 \mathrm{lbs}(4.95 \mathrm{~kg}\) ) \\
\hline Mounting And Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A 72 @ 1.8GHz} \\
\hline Memory And Flash & \multicolumn{2}{|l|}{8 GBytes DDR4 32 GBytes eMMC} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{11}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 448 Gbps \\
\hline & Model throughput capacity & 334 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
\(1 \mathrm{Gbps}: 2.28 \mu \mathrm{Sec}\) \\
10Gbps: \(1.46 \mu \mathrm{Sec}\) \\
25Gbps: \(1.90 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{10}{*}{} & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline \multirow[t]{5}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline \multirow[t]{3}{*}{Environment} & Max non-operating altitude & Up to 15,000ft (3.048 Km) \\
\hline & Acoustic & \begin{tabular}{l}
Sound power, \\
LWAd = 5.0 Bel \\
Sound pressure, \\
LpAm (bystander) \(=32.3 \mathrm{~dB}\)
\end{tabular} \\
\hline & Primary airflow & Front and side-to-back \\
\hline \multirow[t]{4}{*}{Electrical Characteristics} & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline & AC voltage & Fixed PSU: 100V-120V/200V-240V \\
\hline & Current (for voltages listed above) & Fixed PSU: 11A/6A \\
\hline & Power Consumption (230VAC) & \begin{tabular}{l}
Hibernation (O rpm fan): 12W Idle: 52W \\
100\% traffic rate: 67 W
\end{tabular} \\
\hline Safety & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Emissions & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline \multirow[t]{10}{*}{Immunity} & Generic & CISPR 24 / CISPR 35 \\
\hline & EN & EN 55024:2010 / EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline \multicolumn{3}{|l|}{Notes: \({ }^{1}\) Not more than 96 consecutive hours or 360 hours total or 15 occurrences in a 1-year period.} \\
\hline \multicolumn{3}{|l|}{Aruba 6300F 48-port 1GbE and 4-port SFP56 Switch (JL667A)} \\
\hline Description & \multicolumn{2}{|l|}{\begin{tabular}{l}
48x 10/100/1000 BASE-T \\
\(1 \mathrm{G} / 10 \mathrm{G} / 25 \mathrm{G}^{1}\) SFP ports \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular}} \\
\hline Additional Ports And Slots & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { 1x USB-C console port } \\
& \text { 1x OOBM } \\
& \text { 1x USB Type A host port } \\
& \text { 1x Bluetooth dongle to be used with CX Mobile App }
\end{aligned}
\]} \\
\hline Power Supplies & \multicolumn{2}{|l|}{Internal (fixed) power supply (200W)} \\
\hline Fan Tray & \multicolumn{2}{|l|}{Fixed fans} \\
\hline Physical Characteristics & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 12.9(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \mathrm{~cm} \times 32.7 \times 4.39 \mathrm{~cm}))
\end{aligned}
\] \\
\hline & Weight & \(9.83 \mathrm{lbs}(4.46 \mathrm{~kg})\) \\
\hline Mounting And Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A 72 @ 1.8GHz} \\
\hline Memory And Flash & \multicolumn{2}{|l|}{8 GBytes DDR4 32 GBytes eMMC} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{21}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 496 Gbps \\
\hline & Model throughput capacity & 369 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(2.28 \mu \mathrm{Sec}\) \\
10Gbps: \(1.46 \mu \mathrm{Sec}\) \\
25Gbps: \(1.90 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline Environment & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \\
\hline
\end{tabular}

\section*{Technical Specifications}


\section*{Technical Specifications}

Aruba 6300F 24-port 1GbE and 4-port SFP56 Switch (JL668A)
\begin{tabular}{|c|c|c|}
\hline Description & \begin{tabular}{l}
\[
24 \times 10 / 100 / 1000 \text { BASE-T }
\] \\
\(4 \times 1 / 10 / 25 / 50 G^{1}\) SFP ports \\
Notes: \({ }^{150 G}\) capability is for use with 50 G capability enabled by future software rel
\end{tabular} & DACs for both interconnect and VSF stacking. 50G transceiver se. \\
\hline \begin{tabular}{l}
Additional \\
Ports And Slots
\end{tabular} & \begin{tabular}{l}
1x USB-C console port
\[
1 \times \text { OOBM }
\] \\
1x USB Type A host port \\
1x Bluetooth dongle to be used with CX M
\end{tabular} & bile App \\
\hline Power Supplies & \multicolumn{2}{|l|}{Internal (fixed) power supply (200W)} \\
\hline Fan Tray & \multicolumn{2}{|l|}{Fixed fans} \\
\hline Physical Characteristics & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 12.9(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \mathrm{~cm} \times 32.7 \times 4.39 \mathrm{~cm}))
\end{aligned}
\] \\
\hline & Weight & \(9.61 \mathrm{lbs}(4.36 \mathrm{~kg})\) \\
\hline Mounting And Enclosure & \multicolumn{2}{|l|}{Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. Horizontal surface mounting only. 2-post rack kit included.} \\
\hline CPU & \multicolumn{2}{|l|}{Quad Core ARM Cortex \({ }^{\text {TM }}\) A 72 @ 1.8GHz} \\
\hline Memory And Flash & \multicolumn{2}{|l|}{8 GBytes DDR4 32 GBytes eMMC} \\
\hline Packet Buffer & \multicolumn{2}{|l|}{8 MB packet buffer memory} \\
\hline \multirow[t]{21}{*}{Performance} & System switching capacity & 880 Gbps \\
\hline & System throughput capacity & 660 Mpps \\
\hline & Model switching capacity & 448 Gbps \\
\hline & Model throughput capacity & 334 Mpps \\
\hline & Average latency (LIFO, 64-byte packets) & \begin{tabular}{l}
1Gbps: \(2.28 \mu \mathrm{Sec}\) \\
10Gbps: \(1.46 \mu \mathrm{Sec}\) \\
25Gbps: \(1.90 \mu \mathrm{Sec}\) \\
50Gbps \({ }^{1}: 3.49 \mu \mathrm{Sec}\) \\
Notes: \({ }^{1} 50 \mathrm{G}\) capability is for use with 50 G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular} \\
\hline & Stack size & 10 members \\
\hline & Max stacking distance & Up to 10 kms with long range transceivers \\
\hline & Stacking bandwidth & 200 Gbps (400 Gbps at full duplex) \\
\hline & Switched virtual interfaces (dual stack) & 1,024 \\
\hline & IPv4 host table (ARP) & 49,152 \\
\hline & IPv6 host table (ND) & 49,152 \\
\hline & IPv4 unicast routes & 61,000 \\
\hline & IPv6 unicast routes & 61,000 \\
\hline & IPv4 multicast routes & 8,192 \\
\hline & IPv6 multicast routes & 8,192 \\
\hline & MAC table capacity & 32,768 \\
\hline & IGMP groups & 8,192 \\
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{6}{*}{Environment} & Operating temperature & \begin{tabular}{l}
\(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \\
\(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \\
\(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time.
\end{tabular} \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline & Max non-operating altitude & Up to 15,000ft (3.048 Km) \\
\hline \multirow[t]{2}{*}{Environment} & Acoustic & \begin{tabular}{l}
Sound power, \\
LWAd = 4.9 Bel \\
Sound pressure, \\
LpAm (bystander) \(=31.6 \mathrm{~dB}\)
\end{tabular} \\
\hline & Primary airflow & Front and side-to-back \\
\hline \multirow[t]{4}{*}{Electrical Characteristics} & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline & AC voltage & Fixed PSU: 100V-120V/200V-240V \\
\hline & Current (for voltages listed above) & Fixed PSU: 2.5A/1.4A \\
\hline & Power Consumption (230VAC) & \begin{tabular}{l}
Hibernation (O rpm fan): 6W Idle: 49W \\
100\% traffic rate: 63W
\end{tabular} \\
\hline Safety & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Emissions & \multicolumn{2}{|l|}{\begin{tabular}{l}
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
\end{tabular}} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline \multirow[t]{11}{*}{Immunity} & Generic & CISPR 24 / CISPR 35 \\
\hline & EN & EN 55024:2010 / EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline \multicolumn{3}{|l|}{Notes: \({ }^{1}\) Not more than 96 consecutive hours or 360 hours total or 15 occurrences in a 1-year period.} \\
\hline
\end{tabular}

\section*{Technical Specifications}

\section*{Standards And Protocols}

Applies to all products in series
- 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 802.3ad 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 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 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
- 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

Technical Specifications
- RFC 1772 Application of the Border Gateway Protocol in the Internet
- RFC 1757 Remote Network Monitoring Management Information Base
- 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 3101 OSPF Not-so-stubby-area option
- 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

Technical Specifications
- 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 4750 OSPFv2 MIB partial support no SetMIB
- 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 8201 Path MTU Discovery for IP version 6
- SNMPv1/v2c/v3
- ITU-T Rec G.8032/Y. 1344 Mar. 2010
- \(2.5 \mathrm{G} / 5 \mathrm{GBASE}-\mathrm{T}\) (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)
- 40-Gigabit Ethernet (IEEE 802.3ba-2010)
- 50-Gigabit Ethernet (IEEE 802.3cd-2018)
- 100-Gigabit Ethernet (IEEE 802.3ba-2010, 802.3bj-2014, 802.3bm-2014)

\section*{Aruba Data Center Networking Solution for HPE}

\section*{New Aruba Data Center Networking Solution SKUs for HPE}

Hewlett Packard Enterprise and Aruba offer customers highly differentiated pre-engineered IT infrastructure solutions that span a wide variety HPE compute, storage, networking that span virtualization, vSAN, HCI, HPC, MCS, Microsoft, SAP HANA, Vmware, Nutanix application and laaS service offerings. Aruba 10/25 and 40/100G CX switches can be deployed as part of these solutions and is often designed into these integrated solutions along with HPE ProLiant DL/DX servers, SimpliVity, Nimble, Synergy, Cray Shasta, Cray ClusterStor, Superdome Flex and HPE GreenLake. These ready-to-deploy, integrated IT data center solutions help simplify and speed IT service delivery while reducing the time, risk, and expertise needed to deploy complex solutions.

To ensure that these Hewlett Packard Enterprise and Aruba integrated solutions receive simplified ordering and the highest-level of customer service and support, Aruba has created a special tracking Aruba Data Center networking SKUs for HPE deployments that identifies these integrated solutions to ensure they receive rapid support triage and streamlines escalation through HPE Pointnext. Please use these new tracking SKUs when Aruba CX switches are included in HPE integrated and mixed compute, storage and networking configuration and deployments.

Notes: Current Aruba "J\#" SKUs should still be used for all data center network centric (Aruba "only", Non HPE environments). Please contact your sales representative for additional information and ordering guidance.

\section*{Aruba 6300 DC Switch Series BTO Models}

\section*{Rule \#}

Description
1, 2, 3, 4, 5, 6 Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE R9F63A
- Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
- Includes 1 Pwr2Prt PSU, can select MinO / Max1 (250W R9F61A)
- Includes 2 Pwr2Prt Fan trays (R9F62A), with no open slots
- Min=0 \(\backslash\) Max \(=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- 1U-Height

Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE PDU R9F63A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)

Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE PDU R9F63A\#B2C
- C15 PDU Jumper Cord (ROW) (J9944A)

Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE 220v R9F63A\#B2E
- HPE 2.5 m C15 to NEMA 6-20P Pwr Cord(JL336A)

Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE No Loc R9F63A\#AC3
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L6-20P)

\section*{Rule \# Description}

1
The following Transceivers install into this Switch: (Use BTO only when adding to switch) Aruba 1G SFP LC SX 500m OM2 MMF Transceiver for HPE

R9F86A
Aruba 1G SFP LC LX 10km SMF Transceiver J4859D
Aruba 1G SFP LC LH 70km SMF Transceiver J4860D
Aruba 1G SFP RJ45 T 100m Cat5e Transceiver for HPE R9F87A
2
The following Transceivers install into this Switch: (Use BTO only when adding to switch) Aruba 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver

JL563A
Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver for HPE R9F82A
Aruba 10G SFP+ LC LR 10km SMF Transceiver J9151E
Aruba 10G SFP+ LC ER 40km SMF Transceiver J9153D
Aruba 10G SFP+ to SFP+ 1m Direct Attach Copper Cable for HPE R9F83A
Aruba 10G SFP+ to SFP+ 3 m Direct Attach Copper Cable for HPE R9F84A
3
The following Transceivers install into this Switch: (Use BTO only when adding to switch)
Aruba 25G SFP28 LC SR 100m MMF Transceiver for HPE
R9F89A
Aruba 25G SFP28 LC eSR 400m MMF Transceiver for HPE R9F90A
Aruba 25G SFP28 LC LR 10km SMF Transceiver JL486A

\section*{Aruba Data Center Networking Solution for HPE}
Aruba 25G SFP28 to SFP28 0.65m Direct Attach Copper Cable for HPE ..... R9F91A
Aruba 25G SFP28 to SFP28 3m Direct Attach Copper Cable for HPE ..... R9F92A
Aruba 25G SFP28 to SFP28 5m Direct Attach Copper Cable for HPE ..... R9F93A
The following Transceivers install into this Switch: (Use BTO only when adding to switch)Aruba 50G SFP56 to SFP56 0.65m Direct Attach Copper Cable for HPEAruba 50G SFP56 to SFP56 3m Direct Attach Copper Cable for HPE
5 Localization required on orders without B2B, B2C, B2E or AC3 options.The following Transceivers install into this Switch: (Use BTO only when adding to switch)Aruba 100M SFP LC FX 2km MMF Transceiver for HPE
Notes: - Drop down under power supply should offer the following options and results:
- Switch/Router/Power Supply to PDU Power Cord - B2B in North America, 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 Power Cord - AC3 Option
- Locking Power Cord (J9955A) L6-20P is available through the OCA Accessories tab
- OCA Only Model Selection Form - HPE Offering > Aruba > DC Solutions Switches for HPE > AOS-CX: Aruba 6300 DC Switch SeriesR9G07A

\section*{Rack Level Integration CTO Models}
\begin{tabular}{lll} 
Rule \# & Description \\
\(1,2,3,4,5,6\), & Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE & SKU
\end{tabular}
- Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle
- Includes 1 Pwr2Prt PSU, can select MinO / Max1 (250W R9F61A)
- Includes 2 Pwr2Prt Fan trays (R9F62A), with no open slots
- Min=0 \(\backslash \operatorname{Max}=4\) SFP/SFP+/SFP28/SFP56 1/10/25/50G Transceiver
- 1U - Height

Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE PDU R9F63A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A)

Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE PDU R9F63A\#B2C
- C15 PDU Jumper Cord (ROW) (J9944A)

Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE 220v R9F63A\#B2E
- HPE 2.5 m C15 to NEMA 6-20P Pwr Cord(JL336A)

Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE No Loc R9F63A\#AC3
- No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L6-20P)

\section*{Configuration Rules}

\section*{Rule \# Description}

The following Transceivers install into this Switch: (Use OD1 or B01 quoted to switch if switch is CTO) - if applicable:
Aruba 1G SFP LC SX 500m OM2 MMF Transceiver for HPE R9F86A
Aruba 1G SFP LC LX 10km SMF Transceiver J4859D
Aruba 1G SFP LC LH 70km SMF Transceiver
J4860D
Aruba 1G SFP RJ45 T 100m Cat5e Transceiver for HPE
R9F87A
2
The following Transceivers install into this Switch: (Use OD1 quoted to switch if switch is CTO) - if applicable:

Aruba 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver JL563A
Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver for HPE R9F82A
Aruba 10G SFP+ LC LR 10km SMF Transceiver J9151E
Aruba 10G SFP+ LC ER 40km SMF Transceiver J9153D
Aruba 10G SFP+ to SFP+ 1m Direct Attach Copper Cable for HPE R9F83A

\section*{Aruba Data Center Networking Solution for HPE}
\begin{tabular}{|c|c|c|}
\hline & Aruba 10G SFP+ to SFP+ 3m Direct Attach Copper Cable for HPE & R9F84A \\
\hline \multirow[t]{7}{*}{3} & The following Transceivers install into this Switch: (Use OD1 or B01 quoted to switch if switch is CTO) - if applicable: & \\
\hline & Aruba 25G SFP28 LC SR 100 m MMF Transceiver for HPE & R9F89A \\
\hline & Aruba 25G SFP28 LC eSR 400m MMF Transceiver for HPE & R9F90A \\
\hline & Aruba 25G SFP28 LC LR 10km SMF Transceiver & JL486A \\
\hline & Aruba 25G SFP28 to SFP28 0.65m Direct Attach Copper Cable for HPE & R9F91A \\
\hline & Aruba 25G SFP28 to SFP28 3m Direct Attach Copper Cable for HPE & R9F92A \\
\hline & Aruba 25G SFP28 to SFP28 5m Direct Attach Copper Cable for HPE & R9F93A \\
\hline \multirow[t]{3}{*}{4} & The following Transceivers install into this Switch: (Use OD1 or B01 quoted to switch if switch is CTO) - if applicable: & \\
\hline & Aruba 50G SFP56 to SFP56 0.65m Direct Attach Copper Cable for HPE & R9G06A \\
\hline & Aruba 50G SFP56 to SFP56 3m Direct Attach Copper Cable for HPE & R9G07A \\
\hline 5 & Localization required on orders without B2B, B2C, B2E or AC3 options. & \\
\hline 6 & If the CTO Switch Chassis needs to be racked, Then the CTO Base Model needs to integrate (with OD1) to the HPE Network Rack. & \\
\hline 7 & When Switches are Factory Racked with this power supply, Then B2B, or B2C should be the Defaulted Power Cable option on the Power Supplies. (See Drop down remark in "Power Supplies" section.) & \\
\hline \multirow[t]{2}{*}{8} & The following Transceivers install into this Switch: (Use BTO only when adding to switch) R9F88A - Aruba 100M SFP LC FX 2km MMF Transceiver for HPE & \\
\hline & Aruba 100M SFP LC FX 2km MMF Transceiver for HPE & R9F88A \\
\hline \multirow[t]{2}{*}{Notes:} & \begin{tabular}{l}
- Drop down under power supply should offer the following options and results: \\
- Switch/Router/Power Supply to PDU Power Cord - B2B in North America, Mexico, Taiwan, and Japan or B2C ROW. (OCA Default B2B or B2C for Rack Level CTO) \\
- Switch/Router/Power Supply to Wall Power Cord - Localized Option (OCA Default for BTO)
\end{tabular} & \\
\hline & \begin{tabular}{l}
- High Volt Switch/Router/Power Supply to Wall Power Cord - B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan) \\
- No Power Cord - AC3 Option \\
- Locking Power Cord (J9955A) L6-20P is available through the OCA Accessories tab
\end{tabular} & \\
\hline
\end{tabular}

\section*{Transceivers}

\section*{SFP Transceivers}
\begin{tabular}{llr} 
Rule \# & Description & SKU \\
& Aruba 100M SFP LC FX 2km MMF Transceiver for HPE & R9F88A \\
Notes: & Not supported in the SFP56 Ports & R9F86A \\
& Aruba 1G SFP LC SX 500m OM2 MMF Transceiver for HPE & J4859D \\
& Aruba 1G SFP LC LX 10km SMF Transceiver & J4860D \\
& Aruba 1G SFP LC LH 70km SMF Transceiver & R9F87A \\
& Aruba 1G SFP RJ45 T 100m Cat5e Transceiver for HPE & SKU \\
& SFP+ Transceivers & JL563A \\
Rule \# & Description & R9F82A \\
1 & Aruba 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver & J9151E \\
& Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver for HPE & J9153D \\
& Aruba 10G SFP+ LC LR 10km SMF Transceiver & R9F83A \\
& Aruba 10G SFP+ LC ER 40km SMF Transceiver & R9F84A \\
& Aruba 10G SFP+ to SFP+ 1m Direct Attach Copper Cable for HPE to SFP+ 3m Direct Attach Copper Cable for HPE & \\
& SFP28 Transceivers & SKU \\
& Description & R9F89A \\
& Aruba 25G SFP28 LC SR 100m MMF Transceiver for HPE & R9F90A \\
& Aruba 25G SFP28 LC eSR 400m MMF Transceiver for HPE & JL486A
\end{tabular}

\section*{Aruba Data Center Networking Solution for HPE}
\begin{tabular}{|c|c|c|}
\hline \multirow{6}{*}{Rule \#} & Aruba 25G SFP28 to SFP28 3m Direct Attach Copper Cable for HPE & R9F92A \\
\hline & Aruba 25G SFP28 to SFP28 5m Direct Attach Copper Cable for HPE & R9F93A \\
\hline & SFP56 Transceivers & \\
\hline & Description & SKU \\
\hline & Aruba 50G SFP56 to SFP56 0.65m Direct Attach Copper Cable for HPE & R9G06A \\
\hline & Aruba 50G SFP56 to SFP56 3m Direct Attach Copper Cable for HPE & R9G07A \\
\hline \multicolumn{3}{|l|}{Switch Options} \\
\hline \multicolumn{3}{|c|}{Fan Trays} \\
\hline \multicolumn{3}{|c|}{R9F63A System (std 2 // max 2) User Selection (min 0 // max 0) per enclosure} \\
\hline Rule \# & Description & SKU \\
\hline 1 & Aruba 6300M Power to Port Airflow Fan Tray for HPE & R9F62A \\
\hline \multirow[t]{2}{*}{Notes:} & Spare only & \\
\hline & Configuration Rules & \\
\hline Rule \# & Description & \\
\hline \multirow[t]{2}{*}{1} & The Following Switch is only compatible with this Power to Port FanTray; & \\
\hline & Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE & R9F63A \\
\hline \multirow[t]{4}{*}{Notes:} & This switch includes 2 Fan Trays. No additional Fan Trays necessary" & \\
\hline & Rack Mount Kits & \\
\hline & System (std 0 // max 1) User Selection (min 0 // max 1) per enclosure & \\
\hline & Aruba 1U Universal 4-post Rack Mount Kit for HPE & R9F57A \\
\hline \multirow[t]{4}{*}{Notes:} & If the switch will be factory racked into an HPE Universal Rack, then (Min 1) of the 4 Post Rack & \\
\hline & Mount kit is required and should nest to Rack. & \\
\hline & Air Duct Kit & \\
\hline & For System (std 0 // max 1) User Selection (min 0 // max 1) per Switch & \\
\hline 1, 2, 3 & Aruba Universal 4-post Duct Kit for HPE & R9F60A \\
\hline \multirow[t]{2}{*}{Notes:} & Only for Power to Port Bundles & \\
\hline & Configuration Rules & \\
\hline Rule \# & Description & \\
\hline \multirow[t]{2}{*}{1} & The Following Switch is only compatible with this Power to Port FanTray; & \\
\hline & Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE & R9F63A \\
\hline 2 & For optimal performance, it is recommended that the user select the Duct Kit for Power to Port Switch Bundles & \\
\hline \multirow[t]{4}{*}{3} & If this Air Duct Kit is selected then the following 4 Post Rack Mount kit must be selected: & \\
\hline & Aruba 1U Universal 4-post Rack Mount Kit for HPE & R9F57A \\
\hline & India PDU Cable & \\
\hline & For R9F63A (std 0 // max 1) User Selection (min 0 // max 1) per enclosure & \\
\hline \multirow[t]{2}{*}{1} & HPE 2.0m C13 to C14 PDU India Power Cord & JL671A \\
\hline & - C13 India PDU Cable for Factory Racked Systems Only & \\
\hline \multirow[t]{2}{*}{1} & HPE 2.5m C15 to C14 PDU India Power Cord & JL672A \\
\hline & - C15 India PDU Cable for Factory Racked Systems Only Configuration Rules & \\
\hline Rule \# & Description & \\
\hline 1 & This Power Cord is only valid when the \#AC3 option is selected for the supported Switch Enclosure & \\
\hline Notes: & This PDU cable is for Solutions shipping to India. & \\
\hline
\end{tabular}

\section*{Aruba Data Center Networking Solution for HPE}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{Power Supplies} \\
\hline \multirow{4}{*}{1, 2} & \multicolumn{2}{|l|}{Power Supply Units} \\
\hline & R9F63A System (std \(1 / /\) max 2) User Selection (min \(0 / /\) max 1) per enclosure & \\
\hline & \begin{tabular}{l}
Aruba 6300M 12VDC 250W 100-240VAC Power to Port Airflow Power Supply Unit for HPE \\
- Uses \(1 \times \mathrm{C} 13,250 \mathrm{w}\)
\end{tabular} & R9F61A \\
\hline & Aruba 6300M 12VDC 250W 100-240VAC Power to Port Airflow Power Supply Unit for HPE PDU & R9F61A\#B2B \\
\hline & - C13 PDU Jumper Cord (NA/MEX/TW/JP) (J9943A) & \\
\hline & Aruba 6300M 12VDC 250W 100-240VAC Power to Port Airflow Power Supply Unit for HPE PDU & R9F61A\#B2C \\
\hline & - C13 PDU Jumper Cord (ROW) (J9944A) & \\
\hline & Aruba 6300M 12VDC 250W 100-240VAC Power to Port Airflow Power Supply Unit for HPE 220v & R9F61A\#B2E \\
\hline & - HPE 2.5m C13 to NEMA 6-20P Pwr Cord(JL336A) & \\
\hline & Aruba 6300M 12VDC 250W 100-240VAC Power to Port Airflow Power Supply Unit for HPE No Loc & R9F61A\#AC3 \\
\hline & - No Localized Power Cord Selected. Use J9955A to obtain a Locking Plug Power Cord (L6-20P) & \\
\hline & Configuration Rules & \\
\hline Rule \# & Description & \\
\hline 1 & Localization (Wall Power Cord) required on orders without B2B, B2C, (PDU Power Cord) or B2E. (See Localization Menu) & \\
\hline 2 & The Following Switch is only compatible with this Power to Port PSU: & \\
\hline & Aruba 6300M 48G Power to Port Airflow 2 Fans 1 Power Supply Unit Bundle for HPE & R9F63A \\
\hline \multirow[t]{12}{*}{Notes:} & - Drop down under power supply should offer the following options and results: & \\
\hline & - Switch/Router to PDU Power Cord - B2B in NA, Mexico, Taiwan, and Japan or B2C ROW. (OCA Default B2B or B2C for Rack Level CTO) & \\
\hline & - Switch/Router/Power Supply to Wall Power Cord - Localized Option (OCA Default for BTO and Box Level CTO) & \\
\hline & - High Volt Switch/Router/Power Supply to Wall Power Cord - B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan) & \\
\hline & - No Localized Power Cord Selected - AC3 Option & \\
\hline & - If you want the Locking Power Cord (J9955A) L6-20P, then you must order this power cord through the Accessories tab & \\
\hline & PSU Options & \\
\hline & For R9F61A(std 0 // max 1) User Selection (min 0 // max 1) per PSU & \\
\hline & HPE 2.0m C13 to C14 PDU India Power Cord & JL671A \\
\hline & - C13 India PDU Cable for Factory Racked Systems Only & \\
\hline & HPE 2.5m C15 to C14 PDU India Power Cord & JL672A \\
\hline & - C15 India PDU Cable for Factory Racked Systems Only & \\
\hline Notes: & \begin{tabular}{l}
- This Power Cord is only valid when the \#AC3 option is selected for the supported Power Supply \\
- This PDU cable is for Solutions shipping to India.
\end{tabular} & \\
\hline
\end{tabular}

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\section*{Aruba Data Center Networking Solution for HPE}

\section*{Technical Specifications}

Aruba 6300M 48-port 1GbE and 4-port SFP56 Power-to-Port 2 Fan Trays 1 PSU Bundle (R9F63A)
\begin{tabular}{|c|c|c|}
\hline Description & \multicolumn{2}{|l|}{\begin{tabular}{l}
\(48 \times 10 / 100 / 1000\) BASE-T PoE+ ports \\
1G/10G/25G \({ }^{1}\) SFP ports \\
Notes: \({ }^{150 G}\) capability is for use with 50G DACs for both interconnect and VSF stacking. 50G transceiver capability enabled by future software release.
\end{tabular}} \\
\hline Additional ports and slots & \multicolumn{2}{|l|}{\begin{tabular}{l}
1x USB-C console port \\
\(1 \times\) OOBM \\
1x USB Type A host portJL \\
1x Bluetooth dongle to be used with CX Mobile App
\end{tabular}} \\
\hline Power supplies & \multicolumn{2}{|l|}{2 field-replaceable, hot-swappable power supply slots Comes with 1 power-to-port power supply pre-installed Additional power-to-port power supply can be ordered separately Supports R9F61A Aruba X371 12VDC 250W 100-240VAC Power-to-Port Power Supply only} \\
\hline Fan tray & \multicolumn{2}{|l|}{\begin{tabular}{l}
Switch has two fan tray slots and comes with two fan trays installed \\
Fan trays are field replaceable and hot-swappable. Minimum 2 fan trays required. Second fan tray ordered separately \\
Each fan tray is comprised of two fans \\
Supports R9F62A Aruba 6300M Power-to-Port Fan Tray only
\end{tabular}} \\
\hline \multirow[t]{2}{*}{Physical characteristics} & Dimensions & \[
\begin{aligned}
& 17.4(\mathrm{w}) \times 15.2(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.2 \times 38.5 \times 4.4 \mathrm{~cm})
\end{aligned}
\] \\
\hline & Weight & \(12.5 \mathrm{lbs}(5.7 \mathrm{~kg})\), with 1 PSU \(13.8 \mathrm{lbs}(6.27 \mathrm{~kg})\), with 2 PSUs \\
\hline
\end{tabular}
\begin{tabular}{l|l|l|}
\hline \begin{tabular}{l} 
Mounting and \\
enclosure
\end{tabular} & \begin{tabular}{l} 
Mounts in an EIA- standard 19 in. telco rack or equipment cabinet. \\
Horizontal surface mounting only. 2-post rack kit included.
\end{tabular} \\
\hline CPU & Quad Core ARM Cortex \({ }^{\text {TM }}\) A72 @ 1.8GHz \\
\hline Memory and & 8 GBytes DDR4 \\
Flash & 32 GBytes eMMC
\end{tabular}

\section*{Aruba Data Center Networking Solution for HPE}
\begin{tabular}{|c|c|c|}
\hline & MLD groups & 8,192 \\
\hline & IPv4/IPv6/MAC ACL entries (ingress) & 20,480/5,120/20,480 \\
\hline & IPv4/IPv6/MAC ACL entries (engress) & 8,192/2,048/8,192 \\
\hline & VRF & 256 \\
\hline \multirow[t]{8}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\), up to 5,000 feet \(32^{\circ} \mathrm{F}\) to \(104^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.40^{\circ} \mathrm{C}\right), 5,001\) to 10,000 feet \(1^{\circ} \mathrm{C}\) de-rating per 1,000 feet above 5,000 feet Can support excursion to \(131^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)\) for short periods \({ }^{1}\) of time. \\
\hline & Operating humidity & \(15 \%\) to \(95 \%\) relative humidity at \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Non-operating temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\) \\
\hline & Non-operating humidity & \(15 \%\) to \(90 \%\) relative humidity at \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), non-condensing \\
\hline & Max operating altitude & Up to 10,000ft ( 3.048 Km ) \\
\hline & Max non-operating altitude & Up to 15,000ft ( 3.048 Km ) \\
\hline & Acoustic & Sound power, LWAd = 4.6 Bel Sound pressure, LpAm (bystander) \(=28.7 \mathrm{~dB}\) \\
\hline & Primary airflow & Back-to-front and side \\
\hline \multirow[t]{4}{*}{Electrical Characteristics} & Frequency & \(50-60 \mathrm{~Hz}\) \\
\hline & AC voltage & R9F61A PSU: 100V-240V \\
\hline & Current (for voltages listed above) & R9F61A PSU: 3A/1.2A \\
\hline & Power Consumption (230VAC) & \begin{tabular}{l}
Hibernation (O rpm fan): 9W \\
Idle: 56W \\
100\% traffic rate: 75W
\end{tabular} \\
\hline Safety & \multicolumn{2}{|l|}{\begin{tabular}{l}
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 \\
Taiwan: CNS-14336-1
\end{tabular}} \\
\hline Emissions & \multicolumn{2}{|l|}{```
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
```} \\
\hline Lasers & \multicolumn{2}{|l|}{\begin{tabular}{l}
EN 60825-1:2007 / IEC 60825-1:2007 Class 1 \\
Class 1 Laser Products / Laser Klasse 1 (Applicable for accessories - Optical Transceivers only)
\end{tabular}} \\
\hline \multirow[t]{11}{*}{Immunity} & Generic & CISPR 35 \\
\hline & EN & EN 55035:2017 \\
\hline & ESD & IEC 61000-4-2 \\
\hline & Radiated & IEC 61000-4-3 \\
\hline & EFT/Burst & IEC 61000-4-4 \\
\hline & Surge & IEC 61000-4-5 \\
\hline & Conducted & IEC 61000-4-6 \\
\hline & Power frequency magnetic field & IEC 61000-4-8 \\
\hline & Voltage dips and interruptions & IEC 61000-4-11 \\
\hline & Harmonics & IEC 61000-3-2, EN 61000-3-2 \\
\hline & Flicker & IEC 61000-3-3, EN 61000-3-3 \\
\hline \multicolumn{3}{|l|}{Notes: \({ }^{1}\) Not more than 96 consecutive hours or 360 hours total or 15 occurrences in a 1-year period.} \\
\hline
\end{tabular}

\section*{Summary of Changes}
\begin{tabular}{|c|c|c|c|}
\hline Date & Version History & Action & Description of Change \\
\hline 04-Apr-2022 & Version 16 & Changed & Configuration Information section was updated. \\
\hline 07-Feb-2022 & Version 15 & Changed & Configuration Information section was updated. \\
\hline 06-Dec-2021 & Version 14 & Changed & New Aruba Data Center Networking Solution for HPE section was added to QuickSpecs \\
\hline 02-Aug-2021 & Version 13 & Changed & Standard Features, Configuration Information, and Technical Specifications section were updated. SKUs added as well. \\
\hline 07-Jun-2021 & Version 12 & Changed & Overview, Standard Features, and Configuration Information sections were updated. \\
\hline 04-May-2021 & Version 11 & Changed & Standard Features, Configuration Information, and Technical Specifications sections were updated. \\
\hline 08-Mar-2021 & Version 10 & Changed & SKUs were added in Configuration Information section. \\
\hline 14-Dec-2020 & Version 9 & Changed & Overview Standard Features, Configuration information and Technical Specifications sections were updated. \\
\hline 07-Dec-2020 & Version 8 & Changed & Standard Features, Configuration information and Technical Specifications sections were updated. \\
\hline 08-Sep-2020 & Version 7 & Changed & Configuration Information section was updated. \\
\hline 10-Aug-2020 & Version 6 & Changed & Standard Features and Configuration information sections were updated. \\
\hline 06-Jul-2020 & Version 5 & Changed & Overview Standard Features, Configuration information and Technical Specifications sections were updated. \\
\hline 03-Feb-2020 & Version 4 & Changed & Configuration information section was updated. \\
\hline 20-Jan-2020 & Version 3 & Changed & Configuration information and Technical Specifications sections were updated. \\
\hline 06-Jan-2020 & Version 2 & Changed & Standard Features, Configuration information and Technical Specifications sections were updated. \\
\hline 01-Nov-2019 & Version 1 & New & New QuickSpecs \\
\hline
\end{tabular}

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