

## DATA SHEET

# ARUBA CX 8360v2 SWITCH SERIES

High Performance Enterprise Campus and Data Center Switch

## PRODUCT OVERVIEW

The Aruba CX 8360 v2 Switch Series offers a flexible and innovative approach to addressing the application, security, and scalability demands of the mobile, cloud, and IoT era. These switches serve the needs of the next-generation core and aggregation layer of campuses, as well as virtual and highly dynamic data center environments. They provide up to 4.8Tbps of capacity, with line-rate Gigabit Ethernet interfaces including support for Smart Rate (1/2.5, 5 Gbps), 10Gbps, 25Gbps, 40Gbps, 50 Gbps, and 100Gbps.

The CX 8360 series includes industry-leading line rate ports with 1/10/25/50GbE (SFP/SFP+/SFP28) and 40/100GbE (QSFP+/QSFP28) connectivity in a compact 1U form factor. 4x10Gbps and 4x25Gbps break out from 40/100G ports offer advanced flexibility in connectivity and aggregation. These switches deliver a fantastic investment for customers wanting to migrate from older 1GbE/10GbE to faster 25GbE, or from 10GbE/40GbE uplinks to 50/100GbE ports.

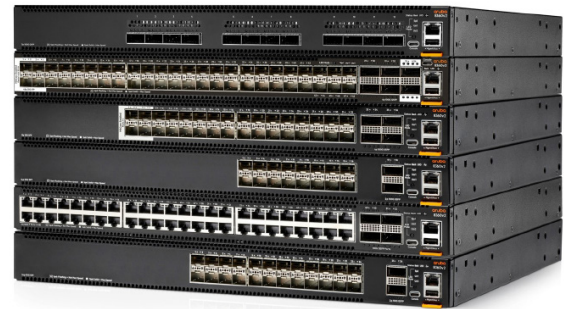
In addition, the 48 and 32 x 25G port 8360 models support low-density MACsec ports and enable secured connectivity at 10GbE and 25GbE over unsecured domains. MACsec is also supported on 2 high-speed 40/100G ports on the CX 8360 48-port model.

## PRODUCT DIFFERENTIATORS

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

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

AOS-CX operating system features are organized into Aruba CX Foundation and Aruba CX Advanced software licenses.



## KEY FEATURES

- High-performance 4.8Tbps and 2,678 Mpps
- Intelligent monitoring and visibility with Aruba Network Analytics Engine
- High availability with industry leading VSX redundancy, and redundant power supplies and fans
- Designed for core/aggregation in the campus or Top of Rack or End of Row in data center environments
- MACsec secured connectivity over untrusted domains
- ArubaOS-CX automation and programmability using built-in REST APIs and Python scripts
- Advanced Layer 2/3 feature set includes BGP, OSPF, VRF, and IPv6
- 50G support on 8360-48Y6C, 32Y4C and 16Y2C switches
- Addition of Smart Rate (1/2.5/5/10G) ports on the 8360-48XT4C

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

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

- Aruba Network Analytics Engine (NAE)
- Dynamic Segmentation
- Switch Stacking
- High Availability and Resiliency
- Quality of Service (QoS)
- Layer 2 Switching
- Layer 3 Services and Routing

<sup>1</sup> Supported in a future software release.



- IP Multicast
- Network Security
- Support for Aruba NetEdit

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

For more information on the CX Advanced License, read the [Aruba CX Switch License Ordering Guide](#).

### Aruba Central, Cloud-based network management

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

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

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

### Aruba Network Analytics Engine

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

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

### Aruba Virtual Switching Extension

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

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

## PRODUCT CAPABILITIES

### Performance

#### High-speed fully distributed architecture

Provides up to 4.8Tbps for bidirectional switching and 1,145 Mpps for forwarding to meet the demands of bandwidth-intensive applications today and in the future

#### Scalable system design

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

### Connectivity

#### Variety of port density options

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

- 44 ports of 1GbE/10GbE/25GbE (SFP/SFP+/SFP28)  
+or up to 22 ports of 50GbE  
+4 ports of 10GbE/25GbE with MACsec  
+4 ports of 40GbE/100GbE (QSFP+/QSFP28)  
+2 ports of 40GbE/100GbE with MACsec
- 12 ports of 40GbE/ 50GbE/100GbE (QSFP+/QSFP28)
- 16 ports of 1GbE/10GbE/25GbE or 8 ports of 50GbE (SFP/SFP+/SFP28) + 2 ports of 40GbE/100GbE (QSFP+/QSFP28)
- 28 ports of 1GbE/10GbE/25GbE (SFP/SFP+/SFP28)  
+ 4 10GbE/25GbE (SFP+/SFP28) with MACsec  
+ 4 ports of 40GbE/100GbE (QSFP+/QSFP28)
- 24 ports of 1GbE/10GbE (SFP/SFP+)  
+ 2 ports of 40GbE/100GbE (QSFP+/QSFP28)
- 48 ports of 100M/1GbE/10GbE (10GBASE-T)  
+ 4 ports of 40GbE/100GbE (QSFP+/QSFP28) + Support Smart Rate (1/2.5/5/10G)

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



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

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

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

### Jumbo frames

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

### Unsupported Transceiver Mode (UTM)

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

### Loopback

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

### Packet storm protection

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

### Quality of Service (QoS)

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

Enables congestion avoidance

#### Data Center Bridging (DCB)

- Supports lossless Ethernet networking standards to eliminate packet loss due to queue overflow
- Priority Flow Control (PFC) 7 priorities per port
- Enhanced Transmission Service (ETS)
- DCB Exchange Protocol (Pre-standard LLDP DCBX IEEE 1.01 version)

### Flow-Control Guard

Prevents accumulation of excessive congestion with periodic flushing. Avoids packets buffering for an extended time period

### ECN with slope

Marks packets as ECN-CE (Congestion Experienced). Helps TCP to reduce receive window size during congestion

### Advanced lossless pool configuration

#### Global buffering statistics

#### Storage Solution Support

iSCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMe over Fabrics)

#### Resiliency and high availability

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

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

#### Hot swappable power supply and fan modules

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

#### Separate data and control paths

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

#### Aruba Virtual Switching Extension (VSX)

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

#### Virtual Router Redundancy Protocol (VRRP)

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

#### Bidirectional Forward Detection (BFD)

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

#### Ethernet Ring Protection Switching (ERPS)

Supports rapid protection and recovery in a ring topology.

#### Unidirectional Link Detection (UDLD)

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

#### IEEE 802.3ad LACP

Supports up to 54 LAGs, with up to 16 members per LAG (32 for a VSX pair), with a user-selectable L1- 4 hashing algorithm



## Management

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

### REST API interface

Built-in, programmable and easy-to-use

### Management interface control

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

### Industry-standard CLI with a hierarchical structure

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

### Management security

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

### IP SLA

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

### SNMP v2c/v3

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

### sFlow® (RFC 3176)

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

### Remote monitoring (RMON)

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

### TFTP and SFTP support

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

## Supportability

Job scheduler framework

### Debug and sampler utility

Supports ping and traceroute for IPv4 and IPv6

### Network Time Protocol (NTP)

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

### Precision Time Protocol

- Enables precise clock synchronization across distributed devices
- Needed for time critical applications like AVB and financial systems
- Support for transparent clock E-E and P-P
- Support for boundary clock

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

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

### LACP-fallback

Enables Zero Touch Provisioning over Link Aggregation Groups.

### Dual flash images

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

### Multiple configuration files

Stores files easily to the flash image

## Layer 2 Switching

### VLAN

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

### VLAN Translation

Remaps VLANs during transit across a core network

### Bridge Protocol Data Unit (BPDU) tunneling

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

### Port mirroring

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



## STP

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

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

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

## Internet Group Management Protocol (IGMP)

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

## Static VXLAN

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

## Dynamic VXLAN with BGP-EVPN

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

- Port PBR VXLAN support
- VXLAN DC Multi-fabric DCI support
- VSX Active Forwarding support for VXLAN underlay
- Route-map support BGP EVPN AF

## IPv4 Multicast in VXLAN/EVPN Overlay

Enable PIM-SM/IGMP snooping in the VXLAN Overlay

## IPv6 VXLAN/EVPN Overlay Support

Enables IPv6 traffic over the VXLAN overlay

## VXLAN distributed anycast gateway

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

## VXLAN ARP/ND suppression

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

## Dynamic Segmentation

VXLAN Group-Based Policy (GBP) and Role-based Policies

- Enables micro segmentation and role-based policies across the VXLAN overlay

Dual VTEP termination and VXLAN GBP relay

Reserved GBP Tag for Infrastructure (Switch Generated) Traffic

- Allows stub fabric extender VTEPs to relay VXLAN GBP between static and dynamic VXLAN tunnels

## Troubleshooting on the Overlay

- Supports ping over VXLAN for IPv4 and IPv6
- Supports traceroute over VXLAN for IPv4 and IPv6 services on the overlay
- Supports RADIUS server over VXLAN for IPv4 and IPv6
- IPv4 DHCP relay over VXLAN for non-default VRF
- Route-leaking to/from default VRF

## Layer 3 Services

### Address Resolution Protocol (ARP)

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

### IP Directed Broadcast

Supports directed broadcast on configured network subnets

### Multi-fabric GPO

Enables GPO for multi-fabric unicast traffic

### Dynamic Host Configuration Protocol (DHCP)

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

### DHCP Server

- Supports DHCP services (for IPv4 and IPv6) in customer networks
- Support for DHCP smart relay

### DHCP relay coexistence with server

Allows DHCP relay coexistence with DHCP server for both IPv4 and IPv6

### Domain Name System (DNS)

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

## Layer 3 Routing

### Static IPv4 routing

Provides simple manually configured IPv4 routing



### Sub-interface

- Allows multiple IP addresses on a single routed interface.
- Supports unicast and multicast routing for both IPv4 and IPv6
- Supports OSPF, BGP and PIM for both IPv4 and IPv6
- Supported on RoP, L3 lags and Hydra interfaces
- Network Load Balancing (NLB)
- PBR and Ingress Policy support

### Open shortest path first (OSPF)

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

Configurable OSPF distance for type-5 LSA

Configurable default-metric for OSPF default-information

### Loopback IP redistribution in OSPF

Allows redistribution of IPv4 and IPv6 addresses of loopback interface in OSPFv2/v3

### 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

MPLS, L3 VPN PE to CE routing, ECMP

### Dynamic BGP peering

Simplifies BGP configuration for ZTP scenarios and enables CX for Azure stack integration

### Routing Information Protocol version 2 (RIPv2)

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

### Routing Information Protocol Next Generation (RIPng)

Extension of RIPv2 for support of IPv6 networking

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

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

### Policy Based Routing (PBR)

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

### 6in4 tunnels

- Supports the tunneling of IPv6 traffic in an IPv4 network

### IP performance optimization

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

### Static IPv6 routing

Provides simple manually configured IPv6 routing

### Dual IP stack

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

### OSPFv3

Provides OSPF support for IPv6

### Equal-Cost Multipath (ECMP)

- Enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth
- 32 way Equal-cost multi-path routing (ECMP)

### Generic Routing Encapsulation (GRE)

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

### Visibility

#### CX Edge Insights

Upgrade the active, perpetual CX Foundation license to the term based CX Advanced license to unlock deep visibility with CX Edge Insights for application recognition, identification, and flow capture from layer 4 to layer 7. CX Edge Insights enables granular datapoint collection with search, sort and reporting as well as the ability to recognize 22 categories and more than 3700 applications

### Security

#### TAA Compliance

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

#### Access control list (ACL) Features

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



- 802.1x, Mac-auth, LUR, DUR, Port-Access Policy, Static Port Filtering
- MAC lockdown, MAC lockout, sticky MAC

#### Private VLAN

- Enables traffic isolation for users on the same VLAN
- Support for isolated, community and primary VLANs
- VSF, L3-Mcast, IGMP snooping, MLD snooping, ACL/QoS interop, L3 unicast (BGP, IPDB, L3 addressing, static routes)
- VSX support

#### Enrollment over Secure Transport (EST)

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

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

Eases security access administration by using a password authentication server

- RADIUS Port-Access (Accounting, Tracking, CoA, v4/v6, Dead Only Server Tracking)

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

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

#### RadSec

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

#### Management access security

- AOS-CX provides for both on-box as well as off-box authentication for administrative access. RADIUS or TACACS+ can be used to provide encrypted user authentication
- Additionally, TACACS+ can also provide user authorization services
- Dot1x supplicant: support for EAP-TLS

#### Secure shell (SSHv2)

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

#### MACsec

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

## Multicast

### Internet Group Management Protocol (IGMP)

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

### PIM Multicast Boundary (v4)

VSX Graceful shutdown for IGMP/MLD Multicast NSF

### Multicast Listener Discovery (MLD)

Enables discovery of IPv6 multicast listeners; supports MLDv1 and v2

ROP Extension for VSX Border Leaf (Centralized/Distributed)

### PIM-SSM

- ACL Support to define the PIM-SSM ranges
- VSX, IPv6, IGMPv3 for IPv4, MSDP and PIM-SSM interaction

### Anycast Rendezvous Point (RP)

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

### Multicast Service Delivery Protocol (MSDP)

Efficiently routes multicast traffic through core networks

### MSDP Mesh Groups

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

### PIM-Dense Mode

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



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

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

### Network Load Balancer (NLB)

- Supported for server applications
- Load balancing technology for server clustering developed on Microsoft Windows Server
- Supports load sharing and redundancy among servers within a cluster

### IGMP/MLD Snooping

Prevent flooding of multicast traffic to non-listening ports

### Protocol Independent Multicast (PIM)

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

### Additional information

#### Green initiative support

Provides support for RoHS (EN 50581:2012) regulations

#### Korea Government Security Features

- Ensure configuration integrity
- Limit concurrent users for web access

#### Analytics

- AIOPS - NAE Agent & Engine Improvements – Unicast Routing
- AIOPS - NAE Agent & Engine Improvements – Client Services

#### Customer first, customer last support

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

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

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

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

### Warranty, services and support

#### Limited Lifetime Warranty

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

Please reference the below web pages for more detailed information Aruba AOS-CX software releases and features

#### AOS-CX Switch Software Documentation Portal

[https://www.arubanetworks.com/techdocs/AOS-CX/help\\_portal/Content/home.htm](https://www.arubanetworks.com/techdocs/AOS-CX/help_portal/Content/home.htm)

#### Aruba Switch Feature Navigator

<https://feature-navigator.arubanetworks.com/>

For **Software Releases and Documentation**, refer to

<https://asp.arubanetworks.com/downloads>

For **support and services** information, visit

<https://www.arubanetworks.com/support-services/arubacare/>

For **global services** information, see

<https://www.arubanetworks.com/services/>





## SPECIFICATIONS

|   | Aruba 8360-48Y6C v2<br>MACsec<br>Front-to-Back<br>5 Fans, 2 AC<br>Power Supplies<br>[JL704C]  | Aruba 8360-48Y6C v2<br>MACsec<br>Back-to-Front<br>5 Fans, 2 AC<br>Power Supplies<br>[JL705C] | Aruba 8360-32Y4C v2<br>MACsec Front-to-Back 3 Fans,<br>2 Power<br>Supplies<br>[JL700C]   | Aruba 8360-32Y4C v2<br>MACsec Back-to-Front 3 Fans,<br>2 Power<br>Supplies<br>[JL701C] | Aruba 8360-16Y2C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL702C]  | Aruba 8360-16Y2C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL703C] |
|---|---|--|--|--|---|--|
| <b>I/O ports and slots</b>                                  |   |  |  |  |   |  |
|   | Up to 22 ports of 50G<br>44 ports of 1GbE/10GbE/25GbE (SFP/SFP+/SFP28)<br>4 ports of 10GbE/25GbE (SFP+/SFP28) with MACsec<br>4 ports of 40GbE/100GbE (QSFP+/QSFP28)<br>2 ports of 40GbE/100GbE (QSFP+/QSFP28) with MACsec |  | Up to 12 ports of 50G<br>28 ports of 1GbE/10GbE/25GbE (SFP/SFP+/SFP28) 4 ports of 10GbE/25GbE (SFP+/SFP28) with MACsec 4 ports of 40GbE/100GbE (QSFP+/QSFP28) (optional 1GBASE-T SFP, 10GBASE-T SFP+ transceivers and 4x10G/25G breakout cables supported) |  | Up to 8 ports of 50G<br>16 ports of 1GbE/10GbE/25GbE (SFP/SFP+/SFP28)<br>2 ports of 40GbE/100GbE (QSFP+/QSFP28) (optional 1GBASE-T SFP and 10GBASE-T SFP+ transceivers and 4x10G/25G breakout cables supported) |  |
| <b>Additional ports and slots</b>                           |   |  |  |  |   |  |
| Power Supplies  | 2 field-replaceable and hot-swappable power supplies <sup>1</sup>   |  |  |  |   |  |
| Fans  | 5 field-replaceable and hot-swappable fans <sup>2</sup>   |  | 3 field-replaceable and hot-swappable fans <sup>2</sup>  |  |   |  |
| Management  | RJ-45 serial and USB-C console; RJ-45 Ethernet port; USB-Type A   |  |  |  |   |  |
| <b>Physical characteristics</b>                             |   |  |  |  |   |  |
| Physical Dimensions (HxWxD)                                 | 1.73in x 17.4in x 22.0in<br>44.0mm x 442.5mm x 558.8  |  | 1.73in x 17.4in x 16.0in<br>44.0mm x 442.5mm x 406.4   |  |   |  |
| Full configuration weight                                   | 23.65lb<br>10.73kgs   |  | 18.05 lb<br>8.19 kg  |  | 17.00 lb (estim.)<br>7.71 kg (estim.)   |  |
| <b>Memory and Processor</b>                                 |   |  |  |  |   |  |
| CPU   | 1.8 GHz 4-core 64-bit   |  |  |  |   |  |
| Memory, Drive and Flash                                     | 16GB RAM, 32GB Flash/Storage  |  |  |  |   |  |
| Packet Buffer   | 32MB  |  |  |  |   |  |
| <b>Performance</b>  |   |  |  |  |   |  |
| Switching Capacity  | 4.8Tbps   |  | 2.4Tbps  |  | 1.2Tbps   |  |
| MAC Address Table Size                                      | 212,992   |  |  |  |   |  |
| IPv4 Host Table   | 145,780   |  |  |  |   |  |
| IPv6 Host Table   | 145,780   |  |  |  |   |  |
| IPv4 Unicast Routes   | 606,977   |  |  |  |   |  |
| IPv6 Unicast Routes   | 630,784   |  |  |  |   |  |
| Maximum Number of Access Control List (ACL) Entries Ingress | IPv4 65,536, IPv6 16,384, MAC 65,536  |  |  |  |   |  |

<sup>1</sup> Bundles include the 2 power supplies (2x JL601A in JL704C, 2x JL713A in JL705C, 2x JL600A in JL700A & JL702A, 2x JL712A in JL701A & JL703A)

<sup>2</sup> Bundles include the 3 fans (5x JL714A in JL704C, 5x JL715A in JL705C, 3x JL714A in JL700A & JL702A and 3x JL715A in JL701A & JL703A)



## SPECIFICATIONS

|  | Aruba 8360-48Y6C v2<br>MACsec<br>Front-to-Back<br>5 Fans, 2 AC<br>Power Supplies<br>[JL704C] | Aruba 8360-48Y6C v2<br>MACsec<br>Back-to-Front<br>5 Fans, 2 AC<br>Power Supplies<br>[JL705C] | Aruba 8360-32Y4C v2<br>MACsec Front-to-Back 3 Fans,<br>2 Power<br>Supplies<br>[JL700C] | Aruba 8360-32Y4C v2<br>MACsec Back-to-Front 3 Fans,<br>2 Power<br>Supplies<br>[JL701C] | Aruba 8360-16Y2C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL702C] | Aruba 8360-16Y2C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL703C] |
|--|--|--|--|--|--|--|
| <b>Performance</b>   |  |  |  |  |  |  |
| Maximum Number of Access Control List (ACL) Entries Egress | IPv4 8,192, IPv6 2,048, MAC 8,192  |  |  |  |  |  |
| Maximum VLANs  | 4,094  |  |  |  |  |  |
| IGMP Groups  | 7,000  |  |  |  |  |  |
| MLD Groups   | 7,000  |  |  |  |  |  |
| IPv4 Multicast Routes                                      | 7,000  |  |  |  |  |  |
| IPv6 Multicast Routes                                      | 7,000  |  |  |  |  |  |
| <b>Environment</b>   |  |  |  |  |  |  |
| Operating Temperature <sup>3</sup>                         | 32°F to 113°F (0°C to 45°C) up to 5000 ft  | 32°F to 104°F (0°C to 40°C) up to 5000 ft  | 32°F to 113°F (0°C to 45°C) up to 5000 ft  | 32°F to 104°F (0°C to 40°C) up to 5000 ft  | 32°F to 113°F (0°C to 45°C) up to 5000 ft  | 32°F to 104°F (0°C to 40°C) up to 5000 ft  |
| Operating Relative Humidity                                | 15% to 95% relative humidity at 113°F (45°C), non-condensing                                 | 15% to 95% relative humidity at 104°F (40°C), non-condensing                                 | 15% to 95% relative humidity at 113°F (45°C), non-condensing                           | 15% to 95% relative humidity at 104°F (40°C), non-condensing                           | 15% to 95% relative humidity at 113°F (45°C), non-condensing                       | 15% to 95% relative humidity at 104°F (40°C), non-condensing                       |
| Non-Operating Temperature                                  | -40°C to 70°C (-40°F to 158°F) up to 4.6km (15,000 ft.)                                      |  |  |  |  |  |
| Non-Operating/Storage Relative Humidity                    | 15% to 95% at 149°F (65°C) non-condensing  |  |  |  |  |  |
| Maximum Operating Altitude                                 | Up to 10,000ft (3.048Km)   |  |  |  |  |  |
| Maximum Non-Operating Altitude                             | Up to 15,000ft (4.6Km)   |  |  |  |  |  |
| Primary Airflow  | Front-to-Back (Frnt-to-Bck) or Back-to-Front (Bck-to-Front)                                  |  |  | Power-to-Port (PwrToPrt) or Port-to-Power (PrtToPwr)                                   |  |  |
| BTU/hr   | 1,450  | 1,450  | 1,450  | 1,450  | 1,109  | 1,109  |
| Acoustics <sup>4</sup>                                     | $L_{WAd} = 6.3$ Bel<br>$L_{pAm}$ (Bystander) = 45.4 dB                                       | $L_{WAd} = 6.4$ Bel<br>$L_{pAm}$ (Bystander) = 45.8 dB                                       | $L_{WAd} = 6.3$ Bel<br>$L_{pAm}$ (Bystander) = 45.4 dB                                 | $L_{WAd} = 6.4$ Bel<br>$L_{pAm}$ (Bystander) = 45.8 dB                                 | $L_{WAd} = 6.0$ Bel<br>$L_{pAm}$ (Bystander) = 42.8 dB                             | $L_{WAd} = 6.0$ Bel<br>$L_{pAm}$ (Bystander) = 42.8 dB                             |
| <b>Electrical Characteristics</b>                          |  |  |  |  |  |  |
| Frequency  | 47-63 Hz   |  |  |  |  |  |
| AC Voltage Current   | 100-127V/200-240V<br>10A (Low Voltage) / 5A (High Voltage)                                   |  |  | 7.1A for 100-127VAC<br>3.4A for 200-240VAC   |  |  |
| Power Consumption  | 230W Idle Power / 725W Max Power   |  | Max: 425W<br>Idle: 120W  |  | Max: 325W<br>Idle: 110W  |  |

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

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



| SPECIFICATIONS    |   |  |  |  |  |  |
|-------------------|---|--|--|--|--|--|
|                   | Aruba 8360-48Y6C v2<br>MACsec<br>Front-to-Back<br>5 Fans, 2 AC<br>Power Supplies<br>[JL704C]  | Aruba 8360-48Y6C v2<br>MACsec<br>Back-to-Front<br>5 Fans, 2 AC<br>Power Supplies<br>[JL705C] | Aruba 8360-32Y4C v2<br>MACsec Front-to-Back 3 Fans,<br>2 Power<br>Supplies<br>[JL700C] | Aruba 8360-32Y4C v2<br>MACsec Back-to-Front 3 Fans,<br>2 Power<br>Supplies<br>[JL701C] | Aruba 8360-16Y2C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL702C] | Aruba 8360-16Y2C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL703C] |
| <b>Regulatory</b> |   |  |  |  |  |  |
| Compliance        | Products comply with CE Markings according to directives 2014/30/EU (EMC) and 2014/35/EU (Safety)   |  |  |  |  |  |
| RoHS              | EN 63000:2018   |  |  |  |  |  |
| <b>Safety</b>     |   |  |  |  |  |  |
| EU                | EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013<br>EN62368-1, Ed.2:2014   |  |  |  |  |  |
| North America     | UL60950-1, CSA 22.2 No 60950-1  |  |  |  |  |  |
| Worldwide         | IEC60950-1:2005 Ed.2 + Am 1:2009 + A2:2013<br>IEC 62368-1:2014  |  |  |  |  |  |
| <b>EMC</b>        |   |  |  |  |  |  |
|                   | EN 55024:2010+A2016/CISPR24:2015<br>EN55032:2015/CISPR 32, Class A<br>EN55035:2017/CISPR 35<br>EN61000-3-2:2014, Class A<br>EN61000-3-3:2013<br>FCC CFR 47 Part 15:2010, Class A<br>ICES-003, Class A<br>VCCI Class A<br>CNS 13438<br>CNS 13438 Class A |  |  |  |  |  |
| <b>Laser</b>      |   |  |  |  |  |  |
| Transceivers      | EN60825-1:2014 / IEC 60825-1: 2014 Class 1<br>Class 1 Laser Products / Laser Klasse 1   |  |  |  |  |  |
| <b>Mounting</b>   |   |  |  |  |  |  |
|                   | Mounts in an EIA standard 19-inch rack or other equipment cabinet; horizontal surface mounting only; 2-post and 4-post mounting options available <sup>5</sup> ; air duct available for 4-post deployments and sold separately                          |  |  |  |  |  |

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



| SPECIFICATIONS  |  |   |  |  |  |   |
|---|--|---|--|--|--|---|
|   | Aruba 8360-48XT4C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL706C]                            | Aruba 8360-48XT4C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL707C] | Aruba 8360-12C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL708C]       | Aruba 8360-12C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL709C] | Aruba 8360-24XF2C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL710C]  | Aruba 8360-24XF2C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL711C] |
| <b>I/O ports and slots</b>                                  |  |   |  |  |  |   |
|   | 48 ports of 100M/1GbE/10GBASE-T<br>4 ports of 40GbE/100GbE (QSFP+/QSFP28)<br>Supports Smart Rate (1/2.5/5/10G) |   | 12 ports of 40GbE/100GbE (QSFP+/QSFP28) (optional 4x10G/25G breakout cables supported) |  | 24 ports of 1GbE/10GbE (SFP/SFP+) 2 ports of 40GbE/100GbE (QSFP+/QSFP28) (optional 1GBASE-T SFP and 10GBASE-T SFP+ transceivers and 4x10G/25G breakout cables supported) |   |
| <b>Additional ports and slots</b>                           |  |   |  |  |  |   |
| Power Supplies  | 2 field-replaceable and hot-swappable power supplies <sup>6</sup>  |   |  |  |  |   |
| Fans  | 3 field-replaceable and hot-swappable fans <sup>7</sup>  |   |  |  |  |   |
| Management  | RJ-45 serial and USB-C console; RJ-45 Ethernet port; USB-Type A  |   |  |  |  |   |
| <b>Physical characteristics</b>                             |  |   |  |  |  |   |
| Physical Dimensions (HxWxD)                                 | 1.73in x 17.4in x 16.0in<br>44.0mm x 442.5mm x 406.4   |   |  |  |  |   |
| Full configuration weight                                   | 18.85 lb.<br>8.55 kg   |   | 17.65 lb<br>8.01 kg  |  | 17.8 lb<br>8.07 kg   |   |
| <b>Memory and Processor</b>                                 |  |   |  |  |  |   |
| CPU   | 1.8 GHz 4-core 64-bit  |   |  |  |  |   |
| Memory, Drive and Flash                                     | 16GB RAM, 32GB Flash/Storage   |   |  |  |  |   |
| Packet Buffer   | 32MB   |   |  |  |  |   |
| <b>Performance</b>  |  |   |  |  |  |   |
| Switching Capacity  | 1.76Tbps   |   | 2.4Tbps  |  | 880Gbps  |   |
| MAC Address Table Size                                      | 212,992  |   |  |  |  |   |
| IPv4 Host Table   | 145,780  |   |  |  |  |   |
| IPv6 Host Table   | 145,780  |   |  |  |  |   |
| IPv4 Unicast Routes   | 606,977  |   |  |  |  |   |
| IPv6 Unicast Routes   | 630,784  |   |  |  |  |   |
| Maximum Number of Access Control List (ACL) Entries Ingress | IPv4 65,536, IPv6 16,384, MAC 65,536   |   |  |  |  |   |

<sup>6</sup> Bundles include the 2 power supplies (2xJL600A in JL706A and 2xJL712A in JL707A 2xJL600A in JL708A & JL710A and 2xJL712A in JL709A & JL711A)

<sup>7</sup> Bundles JL706A and JL707A include the 3 fans (3xJL714A in JL706A and 3xJL715A in JL707A and JL710A 3xJL714A in JL708A & JL710A and 3xJL715A in JL709A & JL711A)



## SPECIFICATIONS

|  | Aruba 8360-48XT4C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL706C] | Aruba 8360-48XT4C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL707C] | Aruba 8360-12C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL708C] | Aruba 8360-12C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL709C] | Aruba 8360-24XF2C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL710C] | Aruba 8360-24XF2C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL711C] |
|--|---|---|--|--|---|---|
| <b>Performance</b>   |   |   |  |  |   |   |
| Maximum Number of Access Control List (ACL) Entries Egress | IPv4 8,192, IPv6 2,048, MAC 8,192   |   |  |  |   |   |
| Maximum VLANs  | 4,094   |   |  |  |   |   |
| IGMP Groups  | 7,000   |   |  |  |   |   |
| MLD Groups   | 7,000   |   |  |  |   |   |
| IPv4 Multicast Routes                                      | 7,000   |   |  |  |   |   |
| IPv6 Multicast Routes                                      | 7,000   |   |  |  |   |   |
| <b>Environment</b>   |   |   |  |  |   |   |
| Operating Temperature <sup>8</sup>                         | 32°F to 113°F (0°C to 45°C) up to 5000 ft   | 32°F to 104°F (0°C to 40°C) up to 5000 ft   | 32°F to 113°F (0°C to 45°C) up to 5000 ft  | 32°F to 104°F (0°C to 40°C) up to 5000 ft  | 32°F to 113°F (0°C to 45°C) up to 5000 ft   | 32°F to 104°F (0°C to 40°C) up to 5000 ft   |
| Operating Relative Humidity                                | 15% to 95% relative humidity at 113°F (45°C), non-condensing                        | 15% to 95% relative humidity at 104°F (40°C), non-condensing                        | 15% to 95% relative humidity at 113°F (45°C), non-condensing                     | 15% to 95% relative humidity at 104°F (40°C), non-condensing                     | 15% to 95% relative humidity at 113°F (45°C), non-condensing                        | 15% to 95% relative humidity at 104°F (40°C), non-condensing                        |
| Non-Operating Temperature                                  | -40°C to 70°C (-40°F to 158°F) up to 4.6km (15,000 ft.)                             |   |  |  |   |   |
| Non-Operating/Storage Relative Humidity                    | 15% to 95% at 149°F (65°C) non-condensing   |   |  |  |   |   |
| Maximum Operating Altitude                                 | Up to 10,000ft (3.048Km)  |   |  |  |   |   |
| Maximum Non-Operating Altitude                             | Up to 15,000ft (4.6Km)  |   |  |  |   |   |
| Primary Airflow  | Port-to-Power (PrtToPwr)  | Power-to-Port (PwrToPrt)  | Port-to-Power (PrtToPwr)   | Power-to-Port (PwrToPrt)   | Port-to-Power (PrtToPwr)  | Power-to-Port (PwrToPrt)  |
| BTU/hr   | 1,706   | 1,706   | 1,280  | 1,280  | 1,280   | 1,280   |
| Acoustics <sup>9</sup>                                     | $L_{WAd} = 6.7$ Bel<br>$L_{pAm}$ (Bystander) = 48.7 dB                              | $L_{WAd} = 6.5$ Bel<br>$L_{pAm}$ (Bystander) = 47.6 dB                              | $L_{WAd} = 6.3$ Bel<br>$L_{pAm}$ (Bystander) = 46.7 dB                           | $L_{WAd} = 6.2$ Bel<br>$L_{pAm}$ (Bystander) = 45.3 dB                           | $L_{WAd} = 6.0$ Bel<br>$L_{pAm}$ (Bystander) = 42.6 dB                              | $L_{WAd} = 6.2$ Bel<br>$L_{pAm}$ (Bystander) = 44.4 dB                              |
| <b>Electrical Characteristics</b>                          |   |   |  |  |   |   |
| Frequency  | 47-63 Hz  |   |  |  |   |   |
| AC Voltage Current   | 7.1A for 100-127VAC<br>3.4A for 200-240VAC  |   |  |  |   |   |
| Power Consumption  | Max: 500W<br>Idle: 120W   |   | Max: 375W<br>Idle: 120W  |  | Max: 375W<br>Idle: 120W   |   |

<sup>8</sup> Derate -1°C for every 1000 ft from 5000 ft to 10000 ft regardless of airflow direction

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



| SPECIFICATIONS    |   |   |  |  |   |   |
|-------------------|---|---|--|--|---|---|
|                   | Aruba 8360-48XT4C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL706C]   | Aruba 8360-48XT4C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL707C] | Aruba 8360-12C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL708C] | Aruba 8360-12C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL709C] | Aruba 8360-24XF2C v2<br>Front-to-Back<br>3 Fans,<br>2 Power<br>Supplies<br>[JL710C] | Aruba 8360-24XF2C v2<br>Back-to-Front<br>3 Fans,<br>2 Power<br>Supplies<br>[JL711C] |
| <b>Regulatory</b> |   |   |  |  |   |   |
| Compliance        | Products comply with CE Markings according to directives 2014/30/EU (EMC) and 2014/35/EU (Safety)   |   |  |  |   |   |
| RoHS              | EN 50581:2012   |   |  |  |   |   |
| <b>Safety</b>     |   |   |  |  |   |   |
| EU                | EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013<br>EN62368-1, Ed.2:2014   |   |  |  |   |   |
| North America     | UL/CUL 69050-1: 2nd Edition<br>UL/CUL 63268-1:2014<br>UL60950-1, CSA 22.2 No 60950-1  |   |  |  |   |   |
| Worldwide         | IEC60950-1:2005 Ed.2 + Am 1:2009 + A2:2013<br>IEC 62368-1:2014  |   |  |  |   |   |
| <b>EMC</b>        |   |   |  |  |   |   |
|                   | EN 55024:2010+A2016/CISPR24:2015<br>EN55032:2015/CISPR 32, Class A<br>EN55035:2017/CISPR 35<br>EN61000-3-2:2014, Class A<br>EN61000-3-3:2013<br>FCC CFR 47 Part 15:2010, Class A<br>ICES-003, Class A<br>VCCI Class A<br>CNS 13438<br>CNS 13438 Class A |   |  |  |   |   |
| <b>Laser</b>      |   |   |  |  |   |   |
| Transceivers      | EN60825-1:2014 / IEC 60825-1: 2014 Class 1<br>Class 1 Laser Products / Laser Klasse 1   |   |  |  |   |   |
| <b>Mounting</b>   |   |   |  |  |   |   |
|                   | Mounts in an EIA standard 19-inch rack or other equipment cabinet; horizontal surface mounting only; 2-post and 4-post mounting options available <sup>10</sup> ; air duct available for 4-post deployments and sold separately                         |   |  |  |   |   |

<sup>10</sup> Rack mounting kit must be ordered separately



## STANDARDS AND PROTOCOLS

The following standards and protocols are supported.

- CPU DoS Protection
- IEEE 802.1AB-2009
- IEEE 802.1AE MACSEC
- IEEE 802.1AEbn-2011 GCM-AES-256 Cipher Suite
- IEEE 802.1AEbw-2013 Extended Packet Numbering
- IEEE 802.1ak-2007
- IEEE 802.1AX-2008 Link Aggregation
- IEEE 802.1p Priority
- IEEE 802.1p Traffic Class Expediting and Dynamic Multicast Filtering
- IEEE 802.1Q VLANs
- IEEE 802.1s Multiple Spanning Trees
- IEEE 802.1t-2001
- IEEE 802.1v VLAN classification by Protocol and Port
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3ae 10-Gigabit Ethernet
- IEEE 802.3an 10-GBASE-T-2006
- IEEE 802.3by 25 Gigabit Ethernet
- IEEE 802.3bz 2.5GBASE-T and 5GBASE-T
- IEEE 802.3cc 25 Gigabit Ethernet
- IEEE 802.3ba 40/100-Gigabit Ethernet
- IEEE 802.3cd 50-Gigabit Ethernet
- IEEE 802.3bj-100 Gigabit Ethernet
- IEEE 802.3x Flow Control
- IEEE 802.3z 1000BASE-X
- IEEE 802.3z Gigabit Ethernet
- RFC 1215 Convention for defining traps for use with the SNMP
- RFC 1256 ICMP Router Discovery Messages
- RFC 1350 TFTP Protocol (revision 2)
- RFC 1393 Traceroute Using an IP Option
- RFC 1403 BGP OSPF Interaction
- RFC 1519 CIDR
- RFC 1583 OSPF Version 2
- RFC 1591 Domain Name System Structure and Delegation
- RFC 1657 Definitions of Managed Objects for BGP-4 using SMIPv2
- RFC 1757 Remote Network Monitoring Management Information Base
- RFC 1772 Application of the Border Gateway Protocol in the Internet
- RFC 1812 Requirements for IP Version 4 Router
- RFC 1918 Address Allocation for Private Internet
- RFC 1981 Path MTU Discovery for IP version 6
- RFC 1997 BGP Communities Attribute
- RFC 1998 An Application of the BGP Community Attribute in Multi-home Routing
- RFC 2131 DHCP
- RFC 2131 DHCP Options and BOOTP Vendor Extensions
- RFC 2236 IGMP
- RFC 2328 OSPF Version 2
- RFC 2375 IPv6 Multicast Address Assignments
- RFC 2385 Protection of BGP Sessions via the TCP MD5 Signature Option
- RFC 2401 Security Architecture for the Internet Protocol
- RFC 2402 IP Authentication Header
- RFC 2406 IP Encapsulating Security Payload (ESP)
- RFC 2439 BGP Route Flap Damping
- RFC 2460 Internet Protocol, Version 6 (IPv6) Specification
- RFC 2464 Transmission of IPv6 over Ethernet Networks
- RFC 2545 Use of BGP-4 Multiprotocol Extensions for IPv6 Inter-Domain Routing
- RFC 2576 Coexistence between SNMP V1, V2, V3)
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- RFC 2711 IPv6 Router Alert Option
- RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol
- RFC 2918 Route Refresh Capability for BGP-4
- RFC 2934 Protocol Independent Multicast MIB for IPv4
- RFC 3019 MLDv1 MIB
- RFC 3056 Connection of IPv6 Domains via IPv4 Clouds
- RFC 3065 Autonomous System Confederation for BGP
- RFC 3101 OSPF Not-so-stubby-area option
- RFC 3137 OSPF Stub Router Advertisement
- RFC 3176 InMon Corporation's sFlow: A Method for Monitoring Traffic in Switched and Routed Networks
- RFC 3376 IGMPv3
- RFC 3416 (SNMP Protocol Operations v2)
- RFC 3417 (SNMP Transport Mappings)
- RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
- RFC 3484 Default Address Selection for IPv6
- RFC 3509 Alternative Implementations of OSPF Area Border Routers
- RFC 3623 Graceful OSPF Restart
- RFC 3768 VRRP
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- RFC 3973 PIM Dense Mode
- RFC 4022 MIB for TCP
- RFC 4113 MIB for UDP

<sup>11</sup> 50GbE transceiver capability enabled in future software release



- RFC 4213 Basic Transition Mechanisms for IPv6 Hosts and Routers
- RFC 4251 The Secure Shell (SSH) Protocol
- RFC 4252 SSHv6 Authentication
- RFC 4253 SSHv6 Transport Layer
- RFC 4254 SSHv6 Connection
- RFC 4271 A Border Gateway Protocol 4 (BGP-4)
- RFC 4273 Definitions of Managed Objects for BGP-4
- RFC 4291 IP Version 6 Addressing Architecture
- RFC 4292 IP Forwarding Table MIB
- RFC 4293 Management Information Base for the Internet Protocol (IP)
- RFC 4360 BGP Extended Communities Attribute
- RFC 4419 Key Exchange for SSH
- RFC 4443 ICMPv6
- RFC 4456 BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP)
- RFC 4486 Subcodes for BGP Cease Notification Message
- RFC 4541 IGMP & MLD Snooping Switch
- RFC 4552 Authentication/Confidentiality for OSPFv3
- RFC 4601 PIM Sparse Mode
- RFC 4724 Graceful Restart Mechanism for BGP
- RFC 4750 OSPFv2 MIB [partial support no Set MIB]
- RFC 4760 Multiprotocol Extensions for BGP-4
- RFC 4861 IPv6 Neighbor Discovery
- RFC 4862 IPv6 Stateless Address Auto-configuration
- RFC 4940 IANA Considerations for OSPF
- RFC 5065 Autonomous System Confederation for BGP
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
- RFC 5187 OSPFv3 Graceful Restart
- RFC 5340 OSPFv3 for IPv6
- RFC 53492 Capabilities Advertisement with BGP-4
- RFC 5424 Syslog Protocol
- RFC 5519 Multicast Group Membership Discovery MIB (MLDv2 only)
- RFC 5701 IPv6 Address Specific BGP Extended Community Attribute
- RFC 5722 Handling of Overlapping IPv6 Fragments
- RFC 5798 VRRP (exclude Accept Mode and sub-sec timer)
- RFC 5880 Bidirectional Forwarding Detection
- RFC 6987 OSPF Stub Router Advertisement
- RFC 7047 The Open vSwitch Database Management Protocol
- RFC 7059 A Comparison of IPv6-overIPv4 Tunnel

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

## ARUBA CX 8360 SWITCHES AND ACCESSORIES

### Aruba CX 8360v2 Bundles<sup>12</sup>

- JL700C Aruba 8360-32Y4C v2 32p 25G SFP+/28 4 Sec 4p 100G QSFP+/28 Front-to-Back 3 Fans 2 AC Bdl<sup>13</sup>
- JL701C Aruba 8360-32Y4C v2 32p 25G SFP+/28 4 Sec 4p 100G QSFP+/28 Back-to-Front 3 Fans 2 AC Bdl<sup>13</sup>
- JL702C Aruba 8360-16Y2C v2 16p 25G SFP/SFP+/SFP28 2p 100G QSFP+/28 Front-to-Back 3 Fans 2 AC Bdl<sup>14</sup>
- JL703C Aruba 8360-16Y2C v2 16p 25G SFP/SFP+/SFP28 2p 100G QSFP+/28 Back-to-Front 3 Fans 2 AC Bdl<sup>14</sup>
- JL706C Aruba 8360-48XT4C v2 48p 1G/10GBase-T 4p 100G QSFP+/28 Front-to-Back 3 Fans 2 AC Bundle<sup>15, 20</sup>
- JL707C Aruba 8360-48XT4C v2 48p 1G/10GBase-T 4p 100G QSFP+/28 Back-to-Front 3 Fans 2 AC Bundle<sup>15, 20</sup>
- JL708C Aruba 8360-12C v2 12-port 100G QSFP+/QSFP28 Front-to-Back 3 Fans 2 AC Bundle<sup>16</sup>
- JL709C Aruba 8360-12C v2 12-port 100G QSFP+/QSFP28 Back-to-Front 3 Fans 2 AC Bundle<sup>16</sup>
- JL710C Aruba 8360-24XF2C v2 24p 10G SFP/SFP+ 2p 100G QSFP+/28 Front-to-Back 3 Fans 2 AC Bundle<sup>17</sup>
- JL711C Aruba 8360-24XF2C v2 24p 10G SFP/SFP+ 2p 100G QSFP+/28 Back-to-Front 3 Fans 2 AC Bundle<sup>17</sup>
- JL704C Aruba 8360-48Y6C v2 48p 25G SFP+/28 4 Sec 6p 100G QSFP+/28 2 Sec Frnt-to-Bck 5 Fans 2 AC Bdl<sup>18</sup>

<sup>12</sup> 8360v2 bundles include redundant fan, redundant power supply, and a 2-post rack kit. 4-post rack kit must be ordered separately.

<sup>13</sup> JL700C and JL701C include the 8360-32Y4C base switch [JL717C] which can be purchased as Spare.

<sup>14</sup> JL702C and JL703C include the 8360-16Y2C base switch [JL718C] which can be purchased as Spare.

<sup>15</sup> JL706C and JL707C include the 8360-48Y6C base switch [JL720C] which can be purchased as Spare.

<sup>16</sup> JL708C and JL709C include the 8360-12C base switch [JL721C] which can be purchased as Spare.

<sup>17</sup> JL710C and JL711C include the 8360-24XF2C base switch [JL722C] which can be purchased as Spare.

<sup>18</sup> JL704C and JL705C include the 8360-48Y6C base switch [JL719C], which can be purchased as Spare.





- JL705C Aruba 8360-48Y6C v2 48p 25G SFP+/28 4 Sec 6p 100G QSFP+/28 2 Sec Bck-to-Frnt 5 Fans 2 AC Bdl<sup>18</sup>

#### Power supply

- JL601A Aruba X391 850W Port-to-Power AC PSU
- JL713A Aruba X391 850W Power-to-Port AC PSU
- JL600A Aruba 8360 550W Port-to-Power 100-240VAC Power Supply
- JL712A Aruba 8360 550W Power-to-Port 100-240VAC Power Supply

#### Accessories

- JL714A Aruba 8360 Port-to-Power Fan
- JL715A Aruba 8360 Power-to-Port Fan
- HPE Aruba Networking CX Switch Bluetooth Adapter (S1H23A)

#### Base unit spares (Fans, PS not included)

- JL719C Aruba 8360-48Y6C v2 48p 25G SFP/SFP+/SFP28 4 Sec 6p 100G QSFP+/QSFP28 2 Sec Switch
- JL718C Aruba 8360-16Y2C v2 16-port 25G SFP/SFP+/SFP28 2-port 100G QSFP+/QSFP28 Switch
- JL717C Aruba 8360-32Y4C v2 32-port 25G SFP/SFP+/SFP28 4 Sec 4-port 100G QSFP+/QSFP28 Switch
- JL720C Aruba 8360-48XT4C v2 48-port 1G/10GBase-T 4-port 100G QSFP+/QSFP28 Switch
- JL722C Aruba 8360-24XF2C v2 24-port 10G SFP/SFP+ 2-port 100G QSFP+/QSFP28 Switch
- JL721C Aruba 8360-12C v2 12-port 100G QSFP+/QSFP28 Switch

#### Mounting kit (switch bundles include a 2-post rack kit. 4-post RM kits must be ordered separately if required).

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

#### Air duct

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

#### Console Cable

- Aruba X2C2 RJ45 to DB9 Console Cable (JL448A)

#### Transceivers<sup>19, 20, 21</sup>

- Aruba 1G SFP LC SX 500m MMF XCVR (J4858D)
- Aruba 1G SFP LC SX 500m MMF TAA XCVR (JL745A)
- Aruba 1G SFP LC LX 10km SMF XCVR (J4859D)
- Aruba 1G SFP LC LX 10km SMF TAA XCVR (JL746A)

- Aruba 1G SFP LC LH 70km SMF XCVR (J4860D)
- Aruba 1G SFP RJ45 T 100m Cat5e XCVR (J8177D)
- Aruba 1G SFP RJ45 T 100m Cat5e TAA XCVR (JL747A)
- Aruba 10G SFP+ LC SR 300m MMF XCVR (J9150D)
- Aruba 10G SFP+ LC SR 300m MMF TAA XCVR (JL748A)
- Aruba 10G SFP+ LC LR 10km SMF XCVR (J9151E)
- Aruba 10G SFP+ LC LR 10km SMF TAA XCVR (JL749A)
- Aruba 10G SFP+ LC ER 40km SMF XCVR (J9153D)
- Aruba 10GBASE-T SFP+ RJ45 30m Cat6A XCVR (JL563B)
- Aruba 10G SFP+ to SFP+ 1m DAC Cable (J9281D)
- Aruba 10G SFP+ to SFP+ 3m DAC Cable (J9283D)
- HPE (Compute) BLc 10G SFP+ 3m Direct Attach Cable (487655-B21)
- HPE (Compute) BLc 10G SFP+ 5m Direct Attach Cable (537963-B21)
- Aruba 25G SFP28 LC SR 100m MMF Transceiver (JL484A)
- Aruba 25G SFP28 LC eSR 400m MMF Transceiver (JL485A)
- Aruba 25G SFP28 LC LR 10km SMF Transceiver (JL486A)
- Aruba 25G SFP28 to SFP28 0.65m Direct Attach Copper Cable (JL487A)
- Aruba 25G SFP28 to SFP28 3m Direct Attach Copper Cable (JL488A)
- Aruba 25G SFP28 to SFP28 5m Direct Attach Copper Cable (JL489A)
- HPE (Compute) 25G SFP28 to SFP28 3m Direct Attach Cable (844477-B21)
- HPE (Compute) 25G SFP28 to SFP28 5m Direct Attach Cable (844480-B21)
- Aruba 25G SFP28 to SFP28 3m Active Optical Cable (R0M44A)
- Aruba 25G SFP28 to SFP28 7m Active Optical Cable (R0M45A)
- Aruba 25G SFP28 to SFP28 15m Active Optical Cable (R0Z21A)
- Aruba 50G SFP56 LC SR 100m MMF Transceiver (R0M48A)
- Aruba 40G QSFP+ LC BiDi 150m MMF XCVR (JL308A)
- HPE X142 40G QSFP+ MPO SR4 Transceiver (JH231A)
- HPE X142 40G QSFP+ MPO eSR4 300M XCVR (JH233A)
- HPE X142 40G QSFP+ LC LR4 SM Transceiver (JH232A)
- Aruba 40G QSFP+ LC ER4 40km SMF XCVR (Q9G82A)
- HPE X242 40G QSFP+ to QSFP+ 1m DAC Cable (JH234A)
- HPE X242 40G QSFP+ to QSFP+ 3m DAC Cable (JH235A)
- HPE X242 40G QSFP+ to QSFP+ 5m DAC Cable (JH236A)

<sup>19</sup> 8360 Series Switches do not support the use of 10G LRM technology, nor 7M 10G DAC lengths

<sup>20</sup> Breakout cable not supported on 8360 48XT4C models JL706C/JL707C (no support for split ports)

<sup>21</sup> Consult the ArubaOS-Switch and AOS-CX Transceiver Guide in the Aruba Support Portal for the minimum required software releases to support these transceivers. Guide also provides certain limitations for specific transceivers for use on switch models.



- HPE (Compute) QSFP+ to 4xSFP+ 3m Breakout Direct Attach Cable (721064-B21)<sup>20</sup>
- HPE (Compute) HPE BLc QSFP+ to 4x10G SFP+ AOC 15m Opt (721076-B21)<sup>20</sup>
- Aruba 100G QSFP28 MPO SR4 MMF Transceiver (JL309A)
- Aruba 100G QSFP28 LC LR4 SMF Transceiver (JL310A)
- Aruba 100G QSFP28-QSFP28 1m Direct Attach Copper Cable (R0Z25A)
- Aruba 100G QSFP28-QSFP28 3m Direct Attach Copper Cable (JL307A)
- Aruba 100G QSFP28-QSFP28 5m Direct Attach Copper Cable (R0Z26A)
- Aruba 100G QSFP28 to QSFP28 7m AOC (R0Z27A)
- Aruba 100G QSFP28 to QSFP28 15m AOC (R0Z28A)
- Aruba 100G QSFP28 to QSFP28 30m AOC (R0Z29A)
- HPE (Compute) QSFP28 to 4x25G SFP28 7m AOC (845420-B21)<sup>20</sup>
- HPE (Compute) QSFP28 to 4x25G SFP28 15m AOC (845424-B21)<sup>20</sup>
- HPE (Compute) QSFP28 to 4xSFP28 3m Breakout Direct Attach Cable (845416-B21)<sup>20</sup>

#### Aruba CX Advanced Licenses

- Aruba CX Soft 8/9xxx Sw Adv 1y E-STU (S0T87AAE)
- Aruba CX Soft 8/9xxx Sw Adv 3y E-STU (S0T88AAE)
- Aruba CX Soft 8/9xxx Sw Adv 5y E-STU (S0T89AAE)
- Aruba CX Soft 8/9xxx Sw Adv 7y E-STU (S0T90AAE)
- Aruba CX Soft 8/9xxx Sw Adv 10y E-STU (S0T86AAE)

#### Aruba Central CX Switch Subscription SKUs

- Aruba Central 8xxx/9xxx/10xxx Switch Foundation 1 year Subscription E-STU (R3K03AAE)
- Aruba Central 8xxx/9xxx/10xxx Switch Foundation 3 year Subscription E-STU (R3K04AAE)
- Aruba Central 8xxx/9xxx/10xxx Switch Foundation 5 year Subscription E-STU (R3K05AAE)
- Aruba Central 8xxx/9xxx/10xxx Switch Foundation 7 year Subscription E-STU (R3K06AAE)
- Aruba Central 8xxx/9xxx/10xxx Switch Foundation 10 year Subscription E-STU (R3K07AAE)

- Aruba Central On-Premises 8xxx Switch Foundation 1 year Subscription E-STU (R6U88AAE)
- Aruba Central On-Premises 8xxx Switch Foundation 3 year Subscription E-STU (R6U89AAE)
- Aruba Central On-Premises 8xxx Switch Foundation 5 year Subscription E-STU (R6U90AAE)
- Aruba Central On-Premises 8xxx Switch Foundation 7 year Subscription E-STU (R6U91AAE)
- Aruba Central On-Premises 8xxx Switch Foundation 10 year Subscription E-STU (R6U92AAE)

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

#### Aruba Fabric Composer Ordering Information

Description (SKUs for CX 6400, 8325, 8360, 8400, and 10000 Series Switches)

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

#### Support

- JL700C: 4 Hour Onsite 3 Year (HU7U7E)
- JL701C: 4 Hour Onsite 3 Year (HU7U7E)
- JL702C: 4 Hour Onsite 3 Year (HU7U7E)
- JL703C: 4 Hour Onsite 3 Year (HU7U7E)
- JL704C: 4 Hour Onsite 3 Year (HU7U7E)
- JL705C: 4 Hour Onsite 3 Year (HU7U7E)
- JL706C: 4 Hour Onsite 3 Year (HU7U7E)
- JL707C: 4 Hour Onsite 3 Year (HU7U7E)
- JL708C: 4 Hour Onsite 3 Year (HU7U7E)
- JL709C: 4 Hour Onsite 3 Year (HU7V9E)
- JL710C: 4 Hour Onsite 3 Year (HU7U7E)
- JL711C: 4 Hour Onsite 3 Year (HU7U7E)

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