## QuickSpecs

## Overview

## Aruba 2930F Switch Series

The Aruba 2930F Switch Series is designed for customers creating smart digital workplaces that are optimized for mobile users with an integrated wired and wireless approach. These convenient Layer 3 network switches include built-in uplinks and PoE power, and are simple to deploy and manage with advanced security and network management tools like Aruba ClearPass Policy Manager, Aruba AirWave and cloud-based Aruba Central.

A powerful Aruba ProVision ASIC delivers performance, robust feature support and value with programmability for the latest applications. Stacking with Virtual Switching Framework (VSF) provides simplicity and scalability. The 2930F supports built-in 1GbE or 10GbE uplinks, PoE+, Access OSPF routing, Dynamic Segmentation, robust QoS, RIP routing, and IPv6 with no software licensing required.

The Aruba 2930F Switch Series provides a convenient and cost-effective access switch solution that can be quickly set up with Zero Touch Provisioning. The robust basic Layer 3 feature set includes a limited lifetime warranty.


## Aruba 2930F Switch Series

## Key Features

- Aruba Layer 3 switch series with VSF stacking, static, RIP and Access OSPF Routing, dynamic segmentation, ACLs, and robust QoS
- Supports cloud and on-premises management. And advanced policy management using Aruba ClearPass
- Convenient built-in 1 GbE or 10 GbE uplinks and up to 740 W PoE+
- Software-defined ready with REST APIs and OpenFlow support
- Simple deployment with Zero Touch Provisioning


## Hewlett Packard

## Overview

## Models

| Aruba 2930F 24G 4SFP+ Switch | JL253A |
| :---: | :---: |
| Aruba 2930F 48G 4SFP+ Switch | JL254A |
| Aruba 2930F 24G PoE+ 4SFP+ Switch | JL255A |
| Aruba 2930F 48G PoE+ 4SFP+ Switch | JL256A |
| Aruba Central Managed 2930F 48G PoE+ 4SFP+ Switch | JL256ACM |
| Aruba 2930F 8G PoE+ 2SFP+ Switch | JL258A |
| Aruba Central Managed 2930F 8G PoE+ 2SFP+ Switch | JL258ACM |
| Aruba 2930F 12G PoE+ 2G/2SFP+ Switch | JL693A |
| Aruba 2930F 24G 4SFP Switch | JL259A |
| Aruba 2930F 48G 4SFP Switch | JL260A |
| Aruba 2930F 24G PoE+4SFP Switch | JL261A |
| Aruba Central Managed 2930F 24G PoE+ 4SFP Switch | JL261ACM |
| Aruba 2930F 48G PoE+ 4SFP Switch | JL262A |
| Aruba Central Managed 2930F 48G PoE+ 4SFP Switch | JL262ACM |
| Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch | JL263A |
| Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch | JL264A |
| Aruba 2930F 48G PoE+ 4SFP 740W Switch | JL557A |
| Aruba 2930F 48G PoE+ 4SFP+ 740W Switch | JL558A |
| Aruba Central Managed 2930F 48G PoE+ 4SFP+ 740W Switch | JL558ACM |
| Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch | JL559A |

## Standard Features

## Enhanced Capabilities

Unified Wired and Wireless Support

- Supports unified wired and wireless policies

Aruba ClearPass Policy Manager

- Switch auto-configuration
automatically configures switch for different settings such as VLAN, CoS, PoE max power, and PoE priority when an Aruba access point is detected.
- User role
defines a set of switch-based policies in areas such as security, authentication, and QoS. A user role can be assigned to a group of users or devices, using switch-based local user role or download from ClearPass
- Aruba Dynamic Segmentation
automatically enforces user, device and application-aware policies on Aruba wired and wireless networks. Automated device profiling, role-based access control, and Layer 7 firewall features deliver enhanced visibility and performance for a better overall experience for both IT and end users alike.
- Dynamic segmentation
provides a secured tunnel to transport network traffic on a per-port or per-user-role basis to an Aruba Controller. In per-user-role Tunneled Node, users are authenticated with ClearPass Policy Manager which can direct the traffic to be tunneled to Aruba controller or switch locally
- Static IP visibility
allows ClearPass to do accounting for clients with static IP address


## Software-defined networks

- REST APIs and OpenFlow

Supports multiple programmatic interfaces, including REST APIs and Openflow 1.0 and 1.3, to enable automation of network operations, monitoring, and troubleshooting.

## Quality of Service (QoS)

- Traffic prioritization (IEEE 802.1p)
for classification into eight priority levels mapped to eight 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
- Large buffers
provide graceful congestion management
- Unknown Unicast Rate Limiting
throttles unicast packets with unknown destination addresses and limits flooding on the VLAN


## Connectivity

- Convenient built-in 10 Gbps Ethernet (4 x SFP+) uplinks
available on select models
- Auto-MDIX
provides automatic adjustments for straight-through or crossover cables on all 10/100 and 10/100/1000 ports
- 12-port fanless model available
$12 \times 1$ Gbps Ethernet PoE+ ports and four built-in uplinks ( $2 \times$ SFP+ and $2 \times 1$ GBASE-T). Built-in power supply.
- IEEE 802.3at Power over Ethernet (PoE+)
provides up to 30 W per port that allows support of the latest PoE+-capable devices such as IP phones, wireless access points, and security cameras, as well as any IEEE 802.3af-compliant end device; eliminates the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments
- Support for pre-standard PoE
detects and provides power to pre-standard PoE devices


## Standard Features

## IPv6

- 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 RIPng protocols
- Security
- provides RA guard, DHCPv6 protection, dynamic IPv6 lockdown, and ND snooping


## Performance and efficiency

- Energy-efficient design
- 80 PLUS Silver Certified power supply increases power efficiency and savings
- Energy-efficient Ethernet (EEE) support reduces power consumption in accordance with IEEE 802.3az
- Designed with the latest Aruba Provision ASIC
providing very low latency, increased packet buffering, and adaptive power consumption
- Selectable queue configurations
allows for increased performance by selecting the number of queues and associated memory buffering that best meet the requirements of the network applications
- -Stacking topology
- Virtual Switching Framework (VSF) front plane stacking creates one virtual resilient switch from up to eight ${ }^{1}$ switches
- Ring topology supports up to an 8-member stack
- Virtualized switching provides simplified management as the switches act as a single chassis when stacked

NOTE: ${ }^{1}$ Requires ArubaOS-Switch 16.06 software.

## Convergence

- IP multicast snooping and data-driven IGMP
automatically prevent flooding of IP multicast traffic
- LLDP-MED (Media Endpoint Discovery)
defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to configure automatically network devices such as IP phones
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
facilitates easy mapping using network management applications with LLDP automated device discovery protocol
- PoE and PoE+ allocations
support multiple methods (automatic, IEEE 802.3at dynamic, LLDP-MED fine grain, IEEE 802.3af device class, or userspecified) to allocate and manage PoE/PoE+ power for more efficient energy savings
- Local MAC Authentication
assigns attributes such as VLAN and QoS using a locally configured profile that can be a list of MAC prefixes
- IP multicast routing
includes PIM Sparse and Dense modes to route IP multicast traffic (limited to 16 interfaces)
- Protocol Independent Multicast for IPv6
supports one-to-many and many-to-many media casting use cases such as IPTV over IPv6 networks


## Standard Features

## Resiliency and high availability

- IEEE 802.1s Multiple Spanning Tree
provides high link availability by allowing multiple spanning trees; provides legacy support for IEEE 802.1d and IEEE 802.1w
- Virtual Router Redundancy Protocol (VRRP)
allows groups of two routers to dynamically back each other up to create highly available routed environments for IPv4 and IPv6 networks (limited to 128 VRs)
- IEEE 802.3ad link-aggregation-control protocol (LACP) and port trunking
support up to 60 static or dynamic trunks with each trunk having up to eight links (ports) per static trunk
- SmartLink
provides easy-to-configure link redundancy of active and standby links
- SNMPv1, v2, and v3
provide complete support of SNMP; provide full support of industry-standard Management Information Base (MIB) plus private extensions; SNMPv3 supports increased security using encryption


## Simplified configuration and management

- Aruba Central support
cloud based management platform offers simple, secure, and cost effective way to manage switches
- Zero-Touch Provisioning (ZTP)
simplifies installation of the switch infrastructure using Aruba Activate or a DHCP-based process with AirWave and Central Network Management
- Built-in programmable and easy-to-use REST API interface
provides configuration automation for campus networks
- Flexible management with same hardware supports both cloud-based Central and on-premises AirWave with the same hardware, ensuring management platform changes without ripping and replacing switching infrastructure
- Out-of-band Ethernet management port
enables management on a separate physical management network, and keeps management traffic segmented from network data traffic


## Manageability

- Dual flash images
provides independent primary and secondary operating system files for backup while upgrading
- Friendly port names
allow assignment of descriptive names to ports
- Find-Fix-Inform feature
finds and fixes common network problems automatically, then informs administrator
- Supports multiple configuration files
stored to a flash image
- RMON, XRMON, and sFlow
provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- Troubleshooting
ingress and egress port monitoring enable more efficient network problem solving
- Unidirectional link detection (UDLD)
monitors the link between two switches and blocks the ports on both ends of the link if the link goes down at any point between the two devices
- IP service level agreements (SLA) for voice
monitor quality of voice traffic using the UDP jitter and UDP jitter for VoIP tests


## Standard Features

## Layer 2 switching

- VLAN Support and Tagging
supports IEEE 802.1Q (4094 VLAN IDs) and 2K VLANs simultaneously
- Jumbo packet support
improves the performance of large data transfers; supports frame size of up to 9220 bytes
- IEEE 802.1v protocol VLANs
isolate select non-IPv4 protocols automatically into their own VLANs


## Layer 2 switching

- Rapid Per-VLAN Spanning Tree (RPVST+)
allows each VLAN to build a separate spanning tree to improve link bandwidth usage; is compatible with PVST+
- GVRP and MVRP
allows automatic learning and dynamic assignment of VLANs
- VxLAN
encapsulation (tunneling) protocol for overlay network that enables a more scalable virtual network deployment


## Layer 3 services

- DHCP server
centralizes and reduces the cost of IPv4 address management


## Layer 3 routing

- Static IP routing
provides manually configured routing; includes ECMP capability
- 256 static and 10,000 RIP routes
facilitate segregation of user data, without adding external hardware
- Routing Information Protocol (RIP)
provides RIPv1, RIPv2, and RIPng routing
- Access OSPF
provides OSPFv2 and OSPFv3 protocols for routing between access and the next layer on the LAN. Only one OSPF area and up to 8 interfaces are supported
- Policy-based routing
uses a classifier to select traffic that can be forwarded based on policy set by the network administrator (limited to 16 nexthop routes)


## Monitor and diagnostics

- Digital optical monitoring of SFP+ and 1000BASE-T transceivers
allows detailed monitoring of the transceiver settings and parameters


## Warranty and support

- Limited Lifetime Warranty
see http://www.hpe.com/networking/warrantysummary for warranty and support information included with your product purchase.


## Software releases

to find software for your product, refer to http://www.hpe.com/networking/support; for details on the software releases available with your product purchase, refer to http://www.hpe.com/networking/warrantysummary

## Standard Features

## Security

- Control Plane Policing set rate limit on control protocols to protect CPU overload from DOS attacks
- 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 Web-based authentication
- supports MAC-based authentication
- Authentication flexibility
- Multiple IEEE 802.1X users per port
provides authentication of multiple devices on a single port; prevents a user from "piggybacking" on another user's IEEE 802.1X authentication
- Concurrent IEEE 802.1X, Web, and MAC authentication schemes per port
switch port will accept up to 32 sessions of IEEE 802.1X, Web, and MAC authentications
- TPM-based Security
includes a Trusted Platform Module (TPM) for secure hardware-based generation and storage of cryptographic keys that can be used for a variety of authentication purposes
- Access control lists (ACLs)
provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number
- Source-port filtering allows only specified ports to communicate with each other
- RADIUS/TACACS+
eases switch management security administration by using a password authentication server
- 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
- Port security
allows access only to specified MAC addresses, which can be learned or specified by the administrator
- Radius over TLS (RadSec)
allows users to use a more secure and reliable mode of communications between switch and radius servers over unsecure networks
- MAC address lockout
prevents particular configured MAC addresses from connecting to the network
- Secure FTP
allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file
- Switch management logon security
helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authentication
- Custom banner
displays security policy when users log in to the switch
- STP BPDU port protection
blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks
- DHCP protection
blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks
- 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
- Identity-driven ACL
enables implementation of a highly granular and flexible access security policy and VLAN assignment specific to each authenticated network user
- Per-port broadcast throttling

Configures broadcast control selectively on heavy traffic port uplinks

## Standard Features

- Private VLAN
provides network security by restricting peer-to-peer communication to prevent a variety of malicious attacks; 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
- Open authentication role
simplifies first-time deployment of AAA in brownfield deployments by allowing full network access for failed clients and provides instant connectivity as soon as a client is plugged-in
- 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
- Enrollment over Secure Transport (EST)
enhances the switch PKI infrastructure with a simpler, scalable and more secure method of certificate provisioning, reenrollment and renewal


## Configuration Information

## Build To Order:

BTO is a standalone unit with no integration. BTO products ship standalone are not part of a CTO or Rack-Shippable solution.

## BTO Models

Rule \#
Description
SKU
1, 2, 3 Aruba 2930F 12G PoE+ 2G/2SFP+ Switch
JL693A

- 12 RJ-45 PoE+ autosensing 10/100/1000 ports
- 2 SFP/SFP+ 1G/10G ports
- min=0 $\backslash \backslash \mathrm{max}=2 \mathrm{SFP} / \mathrm{SFP}+$ Transceivers
- 1U-Height

Aruba 2930F 12G PoE+ 2G/2SFP+ Switch PDU
JL693A\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 12G PoE+ 2G/2SFP+ Switch PDU
JL693A\#B2C

- C15 PDU Jumper Cord (ROW)

Aruba 2930F 12G PoE+ 2G/2SFP+ Switch 220v
JL693A\#B2E

- HPE 2.3 m C13 to NEMA 6-15P Pwr Cord(J9936A)

Aruba 2930F 12G PoE+ 2G/2SFP+ Switch No Loc
JL693A\#AC3

- No Localized Power Cord Selected

Aruba 2930F 24G 4SFP+ Switch
JL253A

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 $\backslash \backslash \max =4$ SFP/SFP+ Transceivers
- $1 \cup$ - Height

Aruba 2930F 24G 4SFP+ Switch PDU NA, JP or TW
JL253A\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 24G 4SFP+ Switch PDU ROW
JL253A\#B2C

- C15 PDU Jumper Cord (ROW)

Aruba 2930F 24 G 4SFP+ Switch United States 220 volt
JL253A\#B2E

- HPE 2.3 m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 24G 4SFP+ Switch
JL253A\#AC3

- No Localized Power Cord Selected

Aruba 2930F 48G 4SFP+ Switch
JL254A

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 $\backslash \backslash \max =4$ SFP/SFP+ Transceivers
- $1 \cup$ - Height

Aruba 2930F 24G 4SFP+ Swch PDU
JL254A\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 24 G 4SFP+ Swch PDU
JL254A\#B2C

- C15 PDU Jumper Cord (ROW)

Aruba 2930F 24G 4SFP+ Swch US220v
JL254A\#B2E

- HPE 2.3 m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 48G 4SFP+ Switch
JL254A\#AC3

- No Localized Power Cord Selected

Aruba 2930F $24 \mathrm{GPoE}+4 \mathrm{SFP}+$ Switch
JL255A

- 24 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 <br>max=4 SFP/SFP+ Transceivers
- $1 \cup$ - Height


## Configuration Information

Rule \# Description ..... SKU
Aruba 2930F 24G PoE+ 4SFP+ Switch PDU NA, JP or TW ..... JL255A\#B2B- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 24G PoE+ 4SFP+ Switch PDU ROW JL255A\#B2C

- C15 PDU Jumper Cord (ROW)
Aruba 2930F 24G PoE+4SFP+ Switch United States 220 volt ..... JL255A\#B2E- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)Aruba 2930F 24G PoE+ 4SFP+ SwitchJL255A\#AC3- No Localized Power Cord Selected
Aruba 2930F 48G PoE+4SFP+ Switch JL256A
- 48 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 <br>max=4 SFP/SFP+ Transceivers
- 1 U - Height
Aruba 2930F 48G PoE + 4SFP+ Switch PDU NA, JP or TW
JL256A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 48G PoE+4SFP+ Switch PDU ROW
JL256A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 48G PoE+4SFP+ Switch United States 220 volt
JL256A\#B2E
- HPE 2.3 m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 48G PoE+ 4SFP+ Switch
JL256A\#AC3
- No Localized Power Cord Selected
Aruba 2930F 8G PoE+ 2SFP+ Switch
JL258A
- 8 RJ-45 PoE+ autosensing 10/100/1000 ports
- 2 SFP/SFP+ 1G/10G ports
- min=0 $\backslash \backslash \mathrm{max}=2$ SFP/SFP+ Transceivers
- 1U-Height
Aruba 2930F 8G PoE+ 2SFP+ Switch PDU NA, JP or TW
JL258A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 8G PoE+ 2SFP+ Switch PDU ROW JL258A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 8G PoE+ 2SFP+ Switch United States 220 volt
JL258A\#B2E
- HPE 2.3 m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 8G PoE + 2SFP+ Switch
JL258A\#AC3
- No Localized Power Cord Selected
Aruba 2930F 24G 4SFP Switch
JL259A
- 24 RJ-45 autosensing 10/100/1000 ports
- 4 SFP 1G ports
- min=0 $\backslash \backslash \max =4$ SFP Transceivers
- $1 \cup$ - Height
Aruba 2930F 24G 4SFP Switch PDU NA, JP or TW
JL259A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 24G 4SFP Switch PDU ROW
JL259A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 24G 4SFP Switch United States 220 volt
JL259A\#B2E
- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 24G 4SFP Switch
JL259A\#AC3
- No Localized Power Cord Selected


## Configuration Information

Rule \# Description ..... SKU
1, 3 Aruba 2930F 48G PoE+ 4SFP 740W Switch ..... JL557A- 48 RJ-45 autosensing 10/100/1000 ports- 4 SFP 1 ports- min=0 $\backslash \backslash \max =4$ SFP Transceivers

- 1U-Height
Aruba 2930F 48G PoE+ 4SFP 740W Switch PDU NA, JP or TW ..... JL557A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 48G PoE+ 4SFP 740W Switch PDU ROW ..... JL557A\#B2C- C15 PDU Jumper Cord (ROW)
Aruba 2930F 48G PoE+4SFP 740W Switch United States 220 volt JL557A\#B2E
- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 48G PoE+ 4SFP 740W SwitchJL557A\#AC3
- No Localized Power Cord Selected
Aruba 2930F 48G 4SFP SwitchJL260A
- 48 RJ-45 autosensing 10/100/1000 ports
- 4 SFP 1 g ports- min=0 $\backslash \backslash \max =4$ SFP Transceivers- 1 U - HeightAruba 2930F 48G 4SFP Switch PDU NA, JP or TWJL260A\#B2B
- $\quad$ C15 PDU Jumper Cord (NA/MEX/TW/JP)JL260A\#B2C- C15 PDU Jumper Cord (ROW)JL260A\#B2E- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)Aruba 2930F 48G 4SFP SwitchJL260A\#AC3
- No Localized Power Cord Selected
Aruba 2930F 24G PoE+ 4SFP Switch
JL261A
- 24 RJ- 45 PoE+ autosensing 10/100/1000 ports
- 4 SFP 1 g ports
- min=0 $\backslash \backslash \max =4$ SFP Transceivers
- 1 U - Height
Aruba 2930F 24G PoE+ 4SFP Switch PDU NA, JP or TW
JL261A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 24G PoE+ 4SFP Switch PDU ROW JL261A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 24G PoE+ 4SFP Switch United States 220 volt
JL261A\#B2E
- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 24G PoE+4SFP Switch
JL261A\#AC3
- No Localized Power Cord Selected
Aruba 2930F 48G PoE+ 4SFP+ 740W Switch
- 48 RJ- 45 PoE+ autosensing 10/100/1000 ports
- 4 SFP 1G ports
- min=0 $\backslash \backslash \max =4$ SFP Transceivers
- $1 U$ - Height
Aruba 2930F 48G PoE+ 4SFP+ 740W Switch PDU NA, JP or TW JL558A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 48G PoE+ 4SFP+ 740W Switch PDU ROW JL558A\#B2C
- C15 PDU Jumper Cord (ROW)


## Configuration Information

Aruba 2930F 48G PoE+ 4SFP+ 740W Switch United States 220 volt
JL558A\#B2E

- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 48G PoE+4SFP+740W Switch
JL558A\#AC3

- No Localized Power Cord Selected

Aruba 2930F 48G PoE+ 4SFP Switch
JL262A

- 48 RJ- 45 PoE+ autosensing 10/100/1000 ports
- 4 SFP 1G ports
- min=0 $\backslash \backslash$ max=4 SFP Transceivers
- 1 U - Height

Aruba 2930F 48G PoE+ 4SFP Switch PDU NA, JP or TW
JL262A\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 48G PoE+ 4SFP Switch PDU ROW
JL262A\#B2C

- C15 PDU Jumper Cord (ROW)

Aruba 2930F 48G PoE+ 4SFP Switch United States 220 volt
JL262A\#B2E

- HPE 2.3 m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 48G PoE+4SFP Switch
JL262A\#AC3

- No Localized Power Cord Selected


## Central Managed Chassis

Rule \# Description SKU
3, 5, 6,7 Aruba Central Managed 2930F 48G PoE+4SFP+ Switch
JL256ACM

- 48 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 $\backslash \backslash \mathrm{max}=4$ SFP/SFP+ Transceivers
- 1 - Height

Aruba Central Managed 2930F 48G PoE+ 4SFP+ Switch United States 220 volt
JL256ACM\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba Central Managed 2930F 48G PoE+ 4SFP+ Switch JL256ACM\#AC3

- No Localized Power Cord Selected

3, 5, 6, 7 Aruba Central Managed 2930F 8G PoE+ 2SFP+ Switch JL258ACM

- 8 RJ-45 PoE+ autosensing 10/100/1000 ports
- 2 SFP/ SFP+ 1G/10G ports
- min=0 <br>max=2 SFP/ SFP+ Transceivers
- $1 U$ - Height

Aruba Central Managed 2930F 8G PoE+ 2SFP+ Switch United States 220 volt
JL258ACM\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba Central Managed 2930F 8G PoE + 2SFP+ Switch
JL258ACM\#AC3

- No Localized Power Cord Selected

3, 5, 6 Aruba Central Managed 2930F 24G PoE+ 4SFP Switch JL261ACM

- 24 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP 1G ports
- min=0 $\backslash \backslash m a x=4$ SFP Transceivers
- 1U-Height

Aruba Central Managed 2930F 24G PoE+ 4SFP Switch PDU NA, JP or TW
JL261ACM\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba Central Managed 2930F 24G PoE+ 4SFP Switch JL261ACM\#AC3

- No Localized Power Cord Selected


## Configuration Information

3, 5, 6

3, 5, 6

Rule \#
1, 2, 3, 4

Aruba Central Managed 2930F 48G PoE+4SFP Switch
JL262ACM

- 48 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP 1G ports
- min=0 $\backslash \backslash \max =4$ SFP Transceivers
- 1 U - Height

Aruba Central Managed 2930F 48G PoE+ 4SFP Switch PDU NA, JP or TW

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba Central Managed 2930F 48G PoE+ 4SFP Switch
JL262ACM\#B2B

- No Localized Power Cord Selected

Aruba Central Managed 2930F 48G PoE + 4SFP+ 740W Switch
JL262ACM\#AC3

- 48 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP 1G ports
- min=0 $\backslash \backslash \max =4$ SFP Transceivers
- $1 \cup$ - Height

Aruba Central Managed 2930F 48G PoE+ 4SFP+ 740W Switch PDU NA, JP or TW
JL558ACM\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba Central Managed 2930F 48G PoE+ 4SFP+ 740W Switch
JL558ACM\#AC3

- No Localized Power Cord Selected


## TAA Compliant Chassis

Aruba 2930F 8 G PoE+ 2SFP+ TAA-compliant Switch
SKU

- 8 RJ-45 PoE+ autosensing 10/100/1000 ports
- 2 SFP/SFP+ 1G/10G ports
- min=0 <br>max=2 SFP/SFP+ Transceivers
- $1 U$ - Height

Aruba 2930F 8G PoE+ 2SFP+ TAA-compliant Switch PDU
JL692A\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 8G PoE+ 2SFP+ TAA-compliant Switch PDU JL692A\#B2C

- C15 PDU Jumper Cord (ROW)

Aruba 2930F 8G PoE+ 2SFP+ TAA-compliant Switch 220v
JL692A\#B2E

- HPE 2.3 m C13 to NEMA 6-15P Pwr Cord(J9936A)

Aruba 2930F 8G PoE+ 2SFP+ TAA-compliant Switch No Loc
JL692A\#AC3

- No Localized Power Cord Selected

1, 2, 3, 4 Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch JL263A

- 24 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 $\backslash \backslash \max =4$ SFP/SFP+ Transceivers
- 1U-Height

Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch PDU NA, JP or TW
JL263A\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch PDU ROW JL263A\#B2C

- C15 PDU Jumper Cord (ROW)

Aruba 2930F 24G PoE+4SFP+ TAA-compliant Switch United States 220 volt JL263A\#B2E

- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch JL263A\#AC3

- No Localized Power Cord Selected

Configuration Information
1, 2, 3, 4 Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant SwitchJL559A- 48 RJ-45 PoE+ autosensing 10/100/1000 ports- 4 SFP/SFP+ 1G/10G ports- min=0 $\backslash \backslash \max =4$ SFP/SFP+ Transceivers

- $1 \cup$ - Height
Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch PDU NA, JP or TW ..... JL559A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch PDU ROW ..... JL559A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch United States 220 volt ..... JL559A\#B2E- HPE 2.3 m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch ..... JL559A\#AC3
- No Localized Power Cord Selected
1, 2, 3, 4 Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch ..... JL264A- 48 RJ- 45 PoE+ autosensing 10/100/1000 ports- 4 SFP/SFP+1G/10G ports
- min=0 $\backslash \backslash \max =4$ SFP/SFP+ Transceivers
- 1 U - Height
Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch PDU NA, JP or TW ..... JL264A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch PDU ROW ..... JL264A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch United States 220 volt ..... JL264A\#B2E- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 48G PoE+4SFP+ TAA-compliant Switch ..... JL264A\#AC3
- No Localized Power Cord Selected
Configuration Rules
Rule \# Description ..... SKU
1 The following Transceivers install into this Chassis:
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 100M SFP LC FX 2km MMF Transceiver ..... J9054D2 The following Transceivers install into this Switch:
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+ to SFP+1m Direct Attach Copper Cable ..... J9281D
Aruba 10G SFP+ to SFP+3m Direct Attach Copper Cable ..... J9283D3 Localization required on orders without \#B2B, \#B2C or \#B2E options.4 TAA Switch Chassis are available in the US, UK, Israel, Vietnam, South Korea, India and Taiwanonly.
5


## Configuration Information

6 The following Transceivers install into this Switch:
Aruba CM 1G SFP LC SX 500m OM2 MMF Transceiver J4858DCM
Aruba CM 1G SFP LC LX 10km SMF Transceiver J4859DCM
Aruba CM 1G SFP LC LH 70km SMF Transceiver J4860DCM
Aruba CM 1G SFP RJ45 T 100m Cat5e Transceiver J8177DCM
Aruba CM 100M SFP LC FX 2km MMF Transceiver J9054DCM
$7 \quad$ The following Transceivers install into this Switch:
Aruba CM 10G SFP+ LC SR 300m OM3 MMF Transceiver J9150DCM
Aruba CM 10G SFP+ LC LR 10km SMF Transceiver J9151ECM
NOTE: 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)
\#AC3 - No Power Cord

## Rack Level Integration CTO Models

Rule \# Description SKU
1, 2, 3, 4, 5 Aruba 2930F 24G 4SFP+ Switch
JL253A

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 <br>max=4 SFP/SFP+ Transceivers
- 1 U - Height

Aruba 2930F 24G 4SFP+ Switch PDU NA, JP or TW JL253A\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 24G 4SFP+ Switch PDU ROW
JL253A\#B2C

- C15 PDU Jumper Cord (ROW)

Aruba 2930F 24G 4SFP+ Switch United States 220 volt JL253A\#B2E

- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 24G 4SFP+ Switch
JL253A\#AC3

- No Localized Power Cord Selected

1, 2, 3, 4, 5 Aruba 2930F 48G 4SFP+ Switch JL254A

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 <br> max=4 SFP/SFP+ Transceivers
- 1U-Height

Aruba 2930F 24G 4SFP+ Swch PDU
JL254A\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 24G 4SFP+ Swch PDU
JL254A\#B2C

- C15 PDU Jumper Cord (ROW)

Aruba 2930F 24G 4SFP+ Swch US220v JL254A\#B2E

- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 48G 4SFP+ Switch

- No Localized Power Cord Selected

1, 2, 3, 4, 5 Aruba 2930F 24G PoE+ 4SFP+ Switch
JL255A

- 24 RJ- 45 PoE+ autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 $\backslash \backslash \max =4$ SFP/SFP+ Transceivers
- $1 \cup$ - Height


## Configuration Information

Rule \# Description ..... SKUAruba 2930F 24G PoE+ 4SFP+ Switch PDU NA, JP or TWJL255A\#B2B- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 24G PoE+ 4SFP+ Switch PDU ROW ..... JL255A\#B2C

- C15 PDU Jumper Cord (ROW)Aruba 2930F 24G PoE+4SFP+ Switch United States 220 voltJL255A\#B2E- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)Aruba 2930F 24G PoE+4SFP+ SwitchJL255A\#AC3- No Localized Power Cord Selected
1, 2, 3, 4, 5 Aruba 2930F 48G PoE+4SFP+ Switch ..... JL256A- 48 RJ- 45 PoE+ autosensing 10/100/1000 ports- 4 SFP/SFP+ 1G/10G ports- min=0 <br>max=4 SFP/SFP+ Transceivers
- 1U-HeightAruba 2930F 48G PoE+ 4SFP+ Switch PDU NA, JP or TWJL256A\#B2B- C15 PDU Jumper Cord (NA/MEX/TW/JP)Aruba 2930F 48G PoE + 4SFP + Switch PDU ROWJL256A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 48G PoE+ 4SFP+ Switch United States 220 volt ..... JL256A\#B2E- HPE 2.3 m C13 to NEMA 6-15P Power Cord(J9936A)Aruba 2930F 48G PoE + 4SFP+ SwitchJL256A\#AC3
- No Localized Power Cord Selected
1, 3, 4, 5 Aruba 2930F 24G 4SFP SwitchJL259A- 24 RJ-45 autosensing 10/100/1000 ports- 4 SFP 1G ports- min=0 $\backslash \backslash m a x=4$ SFP Transceivers- 1 U - HeightAruba 2930F 24G 4SFP Switch PDU NA, JP or TWJL259A\#B2B- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 24G 4SFP Switch PDU ROW ..... JL259A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 24G 4SFP Switch United States 220 volt ..... JL259A\#B2E
- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 24G 4SFP SwitchJL259A\#AC3- No Localized Power Cord Selected
1, 3 Aruba 2930F 48G PoE+ 4SFP 740W SwitchJL557A- 48 RJ-45 autosensing 10/100/1000 ports- 4 SFP 1G ports- min=0 <br> max=4 SFP Transceivers
- 1U-Height
Aruba 2930F 48G PoE+ 4SFP 740W Switch PDU NA, JP or TW ..... JL557A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 48G PoE+ 4SFP 740W Switch PDU ROW ..... JL557A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 48G PoE+ 4SFP 740W Switch United States 220 volt ..... JL557A\#B2E- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 48G PoE+ 4SFP 740W Switch ..... JL557A\#AC3- No Localized Power Cord Selected


## Configuration Information

Rule \# Description ..... SKU
1, 3, 4, 5 Aruba 2930F 48G 4SFP Switch ..... JL260A- 48 RJ-45 autosensing 10/100/1000 ports- 4 SFP 1 ports- min=0 $\backslash \backslash \max =4$ SFP Transceivers- 1 U - Height
Aruba 2930F 48G 4SFP Switch PDU NA, JP or TW ..... JL260A\#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 48G 4SFP Switch PDU ROW ..... JL260A\#B2C- C15 PDU Jumper Cord (ROW)
Aruba 2930F 48G 4SFP Switch United States 220 volt JL260A\#B2E
- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 48G 4SFP Switch
JL260A\#AC3
- No Localized Power Cord Selected
1, 3, 4, 5 Aruba 2930F 24G PoE+ 4SFP Switch ..... JL261A- 24 RJ- 45 PoE+ autosensing 10/100/1000 ports- 4 SFP 1 g ports- min=0 <br>max=4 SFP Transceivers
- 1U-Height
Aruba 2930F 24G PoE+ 4SFP Switch PDU NA, JP or TW ..... JL261A\#B2B- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 24G PoE + 4SFP Switch PDU ROW ..... JL261A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 24G PoE+ 4SFP Switch United States 220 volt ..... JL261A\#B2E- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)
Aruba 2930F 24G PoE+ 4SFP Switch ..... JL261A\#AC3
- No Localized Power Cord Selected
1, 3 Aruba 2930F 48G PoE+ 4SFP+ 740W SwitchJL558A- 48 RJ- 45 PoE+ autosensing 10/100/1000 ports- 4 SFP 1 ports
- min=0 <br>max=4 SFP Transceivers
- 1U-Height
Aruba 2930F 48G PoE+ 4SFP+ 740W Switch PDU NA, JP or TW ..... JL558A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 48G PoE+4SFP+ 740W Switch PDU ROW ..... JL558A\#B2C
- C15 PDU Jumper Cord (ROW)
Aruba 2930F 48G PoE+ 4SFP+ 740W Switch United States 220 volt ..... JL558A\#B2E
- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)Aruba 2930F 48G PoE+4SFP+740W SwitchJL558A\#AC3- No Localized Power Cord Selected
1, 3, 4, 5Aruba 2930F 48G PoE+ 4SFP SwitchJL262A- 48 RJ-45 PoE+ autosensing 10/100/1000 ports- 4 SFP 1 ports
- min=0 <br>max=4 SFP Transceivers
- 1 U - Height
Aruba 2930F 48G PoE+ 4SFP Switch PDU NA, JP or TW ..... JL262A\#B2B
- $\quad$ C15 PDU Jumper Cord (NA/MEX/TW/JP)
Aruba 2930F 48G PoE+ 4SFP Switch PDU ROW ..... JL262A\#B2C- C15 PDU Jumper Cord (ROW)


## Configuration Information

Aruba 2930F 48G PoE+ 4SFP Switch United States 220 volt
JL262A\#B2E

- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 48G PoE+ 4SFP Switch
JL262A\#AC3

- No Localized Power Cord Selected


## TAA Compliant Chassis

Rule \# Description
SKU

```
1, 2, 3, 4, 5, Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch
- 24 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 \\ max=4 SFP/SFP+ Transceivers
- 1U-Height

Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch PDU NA, JP or TW
JL263A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch PDU ROW
JL263A\#B2C
- C15 PDU Jumper Cord (ROW)

Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch United States 220 volt
JL263A\#B2E
- HPE 2.3 m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 24G PoE+4SFP+ TAA-compliant Switch
JL263A\#AC3
- No Localized Power Cord Selected

1, 2, 3, 4, 5, Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch
JL559A
- 48 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 \(\backslash \backslash \mathrm{max}=4 \mathrm{SFP} / \mathrm{SFP}+\) Transceivers
- 1 - Height

Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch PDU NA, JP or TW
JL559A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch PDU ROW
JL559A\#B2C
- C15 PDU Jumper Cord (ROW)

Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch United States 220 volt
JL559A\#B2E
- HPE 2.3m C13 to NEMA 6-15P Power Cord(J9936A)

Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch
JL559A\#AC3
- No Localized Power Cord Selected

1, 2, 3, 4, 5, Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch
JL264A
6
- 48 RJ-45 PoE+ autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 \(\backslash \backslash \max =4\) SFP/SFP+ Transceivers
- 1 - Height

Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch PDU NA, JP or TW
JL264A\#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch PDU ROW
JL264A\#B2C
- C15 PDU Jumper Cord (ROW)

Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch United States 220 volt
JL264A\#B2E
- HPE 2.3 m C13 to NEMA 6-15P Power Cord(J9936A)

\section*{Configuration Information}
\begin{tabular}{|c|c|c|}
\hline & \begin{tabular}{l}
Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch \\
- No Localized Power Cord Selected
\end{tabular} & JL264A\#AC3 \\
\hline & Configuration Rules & \\
\hline Rule \# & Description & SKU \\
\hline \multirow[t]{6}{*}{1} & The following Transceivers install into this Chassis: & \\
\hline & Aruba 1G SFP LC SX 500m OM2 MMF Transceiver & J4858D \\
\hline & Aruba 1G SFP LC LX 10km SMF Transceiver & J4859D \\
\hline & Aruba 1G SFP LC LH 70km SMF Transceiver & J4860D \\
\hline & Aruba 1G SFP RJ45 T 100m Cat5e Transceiver & J8177D \\
\hline & Aruba 100M SFP LC FX 2km MMF Transceiver & J9054D \\
\hline \multirow[t]{6}{*}{2} & The following Transceivers install into this Switch: & \\
\hline & Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver & J9150D \\
\hline & Aruba 10G SFP+ LC LR 10km SMF Transceiver & J9151E \\
\hline & Aruba 10G SFP+ LC ER 40km SMF Transceiver & J9153D \\
\hline & Aruba 10G SFP+ to SFP+ 1m Direct Attach Copper Cable & J9281D \\
\hline & Aruba 10G SFP+ to SFP+ 3 m Direct Attach Copper Cable & J9283D \\
\hline 3 & If this switch is factory installed in HPE Racks, Then the J9583A\#0D1 is required. CLIC Only - Allow the J9583AZ in all regions. & \\
\hline 4 & Localization required on orders without \#B2B, \#B2C, \#B2E options. & \\
\hline 5 & If this Switch Chassis is selected for Rack Level Integration, Then the Switch Chassis needs to integrate (with \#OD1) to the HPE Rack. & \\
\hline 6 & TAA Switch Chassis are available in the US, UK, Israel, Vietnam, South Korea, India and Taiwan only. & \\
\hline NOTE: & \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. (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) \\
\#AC3 - No Power Cord. \\
Enter the following menu selections as integrated to the CTO Model \(X\) server above if order is factory built.
\end{tabular} & \\
\hline \multicolumn{3}{|l|}{Transceivers} \\
\hline \multirow[t]{12}{*}{Rule \#} & Description & SKU \\
\hline & SFP Transceivers & \\
\hline & Aruba 100M SFP LC FX 2km MMF Transceiver & J9054D \\
\hline & Aruba 1G SFP LC SX 500m OM2 MMF Transceiver & J4858D \\
\hline & Aruba 1G SFP LC LX 10km SMF Transceiver & J4859D \\
\hline & Aruba 1G SFP LC LH 70km SMF Transceiver & J4860D \\
\hline & Aruba 1G SFP RJ45 T 100m Cat5e Transceiver & J8177D \\
\hline & Aruba CM 100M SFP LC FX 2km MMF Transceiver & J9054DCM \\
\hline & Aruba CM 1G SFP LC SX 500m OM2 MMF Transceiver & J4858DCM \\
\hline & Aruba CM 1G SFP LC LX 10km SMF Transceiver & J4859DCM \\
\hline & Aruba CM 1G SFP LC LH 70km SMF Transceiver & J4860DCM \\
\hline & Aruba CM 1G SFP RJ45 T 100m Cat5e Transceiver & J8177DCM \\
\hline
\end{tabular}

\section*{Configuration Information}
\begin{tabular}{|c|c|c|}
\hline \multirow{3}{*}{Rule \#} & SFP+ Transceivers & \\
\hline & Description & SKU \\
\hline & Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver & J9150D \\
\hline \multirow[t]{2}{*}{NOTE:} & Temperature Limitiations & \\
\hline & Aruba 10G SFP+ LC LR 10km SMF Transceiver & J9151E \\
\hline \multirow[t]{2}{*}{NOTE:} & Temperature Limitiations & \\
\hline & Aruba 10G SFP+ LC ER 40km SMF Transceiver & J9153D \\
\hline \multirow[t]{5}{*}{NOTE:} & Mounting Limitations & \\
\hline & Aruba 10G SFP+ to SFP+1m Direct Attach Copper Cable & J9281D \\
\hline & Aruba 10G SFP+ to SFP+ 3m Direct Attach Copper Cable & J9283D \\
\hline & Aruba CM 10G SFP+ LC SR 300m OM3 MMF Transceiver & J9150DCM \\
\hline & Aruba CM 10G SFP+ LC LR 10km SMF Transceiver & J9151ECM \\
\hline NOTE: & \begin{tabular}{l}
Temperature limitations apply when the J9150D Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver or J9151E Aruba 10G SFP+ LC LR 10km SMF XCVR are configured with JL693A Aruba 2930F 12G PoE+ 2G/2SFP+ Switch. See product installation guide for more information. \\
Mounting limitations apply when the J9153D Aruba 10G SFP+ LC ER 40km SMF Transceiver is configured with a JL693A Aruba 2930F 12G PoE+ 2G/2SFP+ Switch. See product installation guide for more information.
\end{tabular} & \\
\hline \multicolumn{3}{|l|}{Cables} \\
\hline \multirow[t]{4}{*}{Rule \#} & Description & SKU \\
\hline & Console Cables & \\
\hline & (std 0 // max 99) User Selection (min 0 // max 99) per switch & \\
\hline & Aruba X2C2 RJ45 to DB9 Console Cable & JL448A \\
\hline \multirow[t]{16}{*}{NOTE:} & Option not available for Central Managed Switch Configuration; Can be ordered Separately if needed. & \\
\hline & Multi-Mode Cables & \\
\hline & (std 0 // max 99) User Selection (min \(0 / / \mathrm{max} 99)\) per switch & \\
\hline & HPE LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable & AJ833A \\
\hline & HPE LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable & AJ834A \\
\hline & HPE LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable & AJ835A \\
\hline & HPE LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable & AJ836A \\
\hline & HPE LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable & AJ837A \\
\hline & HPE LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable & AJ838A \\
\hline & HPE LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable & AJ839A \\
\hline & HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable & QK732A \\
\hline & HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 2 m Cable & QK733A \\
\hline & HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable & QK734A \\
\hline & HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable & QK735A \\
\hline & HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable & QK736A \\
\hline & HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable & QK737A \\
\hline NOTE: & Option not available for Central Managed Switch Configuration; Can be ordered Separately if needed. & \\
\hline
\end{tabular}

\section*{Configuration Information}

\section*{Switch Enclosure Options}
\begin{tabular}{ll} 
Rule \# & \begin{tabular}{l} 
Mounting Kit \\
Description \\
(std \(0 / /\) max 1) User Selection (min \(0 / / \max 1)\) per switch
\end{tabular} \\
\(1,2,3\) & HPE X410 1U Universal 4-post Rackmount Kit
\end{tabular}\(\quad\) SKU

\section*{Configuration Rules}

\section*{Rule \# Description}

1 If this Mounting Kit is order with \#OD1 then it integrates to the HPE Universal Rack. (not the switch)
2 This Rack Mount Kit is not compatible with JL258A, JL692A, and JL693A.
3 Option not available for Central Managed Switch Configuration; Can be ordered Separately if needed.
\begin{tabular}{|c|c|c|}
\hline \multirow{8}{*}{Rule \#} & Accessories & \\
\hline & Description & SKU \\
\hline & For JL258A and JL692A System (std 0 // max 1) User Selection (min 0 // max 1) per switch & \\
\hline & Aruba 2930F 8-port Cable Guard & JL311A \\
\hline & Aruba 2930F 8-port Power Shelf & JL312A \\
\hline & Aruba Central Managed 2930F 8-port Cable Guard & JL311ACM \\
\hline & Aruba Central Managed 2930F 8-port Power Shelf & JL312ACM \\
\hline & Configuration Rules & \\
\hline Rule \# & Description & \\
\hline 1 & For JL258A and JL692A System (std 0 // max 1) User Selection (min 0 // max 1) per switch & \\
\hline 2 & For JL258ACM System (std 0 // max 1) User Selection (min 0 // max 1) per switch & \\
\hline
\end{tabular}

\section*{Technical Specifications}

\section*{Aruba 2930F 8-port Cable Guard (JL311A)}

The Cable Guard secures cables that are connected to the switch and provides extra security against theft or tampering with the switch and its cables after it is installed
\begin{tabular}{|c|c|}
\hline Product Type & Mounting Kit \\
\hline Physical characteristics & Dimensions: \(1.42(\mathrm{w}) \times 4.33(\mathrm{~d}) \times 0.69(\mathrm{~h})\) in \((3.6 \times 11 \times 1.75 \mathrm{~cm})\) Weight: \(1.28 \mathrm{lb}(0.58 \mathrm{~kg})\) \\
\hline Notes & \begin{tabular}{l}
Dimensions: \(10.94^{\prime \prime} \times 3.62^{\prime \prime} \times 1.69^{\prime \prime}\) or \(27.8 \mathrm{~cm} \times 9.2 \mathrm{~cm} \times 4.3 \mathrm{~cm}\) w/ears \(10.94^{\prime \prime} \times 1.69^{\prime \prime} \times 1.69^{\prime \prime}\) or \(27.8 \mathrm{~cm} \times 4.3 \mathrm{~cm}\) \(\times 4.3 \mathrm{~cm}\) without ears \\
Weight: 1.262 lbs or 57 kg (including faceplate, ears, and screws) 1.026 lbs or . 47 kg (faceplate only)
\end{tabular} \\
\hline Warranty & Limited Lifetime Warranty: See http://www.hpe.com/networking/warrantysummary for warranty and support information included with your product purchase. \\
\hline Services & \begin{tabular}{l}
Refer to the Hewlett Packard Enterprise website at \\
http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.
\end{tabular} \\
\hline
\end{tabular}

Aruba 2930F 8-port Power Shelf (JL312A)
An easy-to-use solution for attaching the external power adapter to any of the Aruba 2530 8-port switches.
\begin{tabular}{ll} 
Product Type & Mounting Kit \\
Physical & Dimensions: \(10.75(\mathrm{w}) \times 6(\mathrm{~d}) \times 2(\mathrm{~h})\) in \((27.31 \times 15.24 \times 5.08 \mathrm{~cm})\) \\
characteristics & Weight: \(0.93 \mathrm{lb}(0.42 \mathrm{~kg})\)
\end{tabular}

Overall Positioning The Aruba 2930F 8-port Power Shelf provides an easy to use solution for attaching the external power adapter Statement to the Aruba 2930F 8G 2SFP+ PoE+ Switch. The power adapter shelf can be quickly attached on the rear of the Aruba 2930F 8G PoE+ 2SFP+ Switch and the adapter fit into place. This power adapter shelf is designed for wall, table or rack deployments.
\(\begin{array}{ll}\text { Key Features } & \text { Quickly attach external power adapter to } 8 \text { port switch } \\ & \text { Designed for use with Aruba 2930F 8G PoE + 2SFP+ Switch }\end{array}\)
\begin{tabular}{ll} 
Notes & \begin{tabular}{l} 
The Aruba 2930F 8-port Power Shelf is an accessory for the Aruba 2930F 8G PoE+ 2SFP+ Switch. The shelf \\
mounts on the back of the switch providing a place to hold the external power adapter. \\
Warranty \\
Limited Lifetime Warranty: See http://www.hpe.com/networking/warrantysummary for warranty and \\
Services
\end{tabular} \begin{tabular}{l} 
support information included with your product purchase. \\
Refer to the Hewlett Packard Enterprise website at \\
http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. \\
For details about services and response times in your area, please contact your local Hewlett Packard Enterprise \\
sales office.
\end{tabular}
\end{tabular}

Technical Specifications

Aruba 2930F 24G 4SFP+ Switch (JL253A)
\begin{tabular}{ll} 
I/O ports and & 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE \\
slots & \(802.3 a b\) Type 1000BASE-T) \\
& Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only \\
& 4 SFP+ 1/10GbE ports; PHY-less
\end{tabular}

Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots
Physical
characteristics
\begin{tabular}{ll} 
Dimensions & \(17.42(\mathrm{w}) \times 7.88(\mathrm{~d}) \times 1.73(\mathrm{~h})\) in \((44.25 \times 20.02 \times 4.39 \mathrm{~cm})\) ( 1 U height) \\
Weight & \(5.31 \mathrm{lb}(2.41 \mathrm{~kg})\)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Memory and processor & Dual Core ARM Cortex A9 @ 101 4.5MB Ingress/7.875MB Egres & Hz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB eMMC \\
\hline Performance & 1000 Mb Latency & < 3.8 ¢ ( 64 -byte packets) \\
\hline & 10 Gbps Latency & < \(1.6 \mu \mathrm{~s}\) (64-byte packets) \\
\hline & Throughput & up to 95.2 Mpps \\
\hline & Switching capacity & 128 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32768 entries \\
\hline Environment & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(45^{\circ} \mathrm{C}\) ); up to 5000 Feet, -0 C to \(40 \mathrm{C}(32 \mathrm{~F}\) to 104F) up to 10000 Feet \\
\hline & Operating relative humidity & 15\% to 95\% @ \(104^{\circ} \mathrm{F}\) ( \(40^{\circ} \mathrm{C}\) ), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage temperature & \(15 \%\) to \(95 \%\) @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Acoustic & Power: 49.7 dB, Pressure: 37.1 dB \\
\hline & Airflow direction & Side-to-side \\
\hline Electrical & Maximum heat dissipation & 100.0 BTU/hr (105.5 kJ/hr) \\
\hline characteristics & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 0.6/0.4 A \\
\hline & Maximum power rating & 29.3 W \\
\hline & Idle power & 19.5 W \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline
\end{tabular}

NOTES:
Idle power is the actual power consumption of the device with no ports connected.
Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated..
\begin{tabular}{ll} 
Safety & UL 60950-1, 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 \\
& + A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1 \\
Emissions & EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
\end{tabular}

Technical Specifications
\begin{tabular}{lll} 
Immunity & Generic & EN 55024:2010/CISPR 24 \\
& ESD & IEC 61000-4-2 \\
& Radiated & IEC 61000-4-3 \\
& EFT/Burst & IEC 61000-4-4 \\
& Surge & IEC 61000-4-5 \\
& Conducted & IEC 61000-4-6 \\
& Power frequency magnetic field & IEC 61000-4-8 \\
& Voltage dips and interruptions & IEC 61000-4-11 \\
& Harmonics & IEC/EN 61000-3-2 \\
& Flicker & IEC/EN 61000-3-3
\end{tabular}

Management Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)
Services Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Aruba 2930F 48G 4SFP+ Switch (JL254A)
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{I/O ports and slots} & \multicolumn{2}{|l|}{48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only} \\
\hline & \multicolumn{2}{|l|}{4 SFP+ 1/10GbE ports; PHY-less} \\
\hline Additional ports and slots & 1 dual-personality (RJ-45 or & -B) serial console port \\
\hline \multirow[t]{2}{*}{Physical characteristics} & Dimensions & 17.42 (w) \(\times 9.7(\mathrm{~d}) \times 1.73\) (h) in ( \(44.25 \times 24.63 \times 4.39 \mathrm{~cm}\) ) (1U height) \\
\hline & Weight & 6.83 lb ( 3.10 kg ) \\
\hline Memory and processor & \multicolumn{2}{|l|}{Dual Core ARM Cortex @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.875MB Egress, 4 GB eMMC} \\
\hline \multirow[t]{6}{*}{Performance} & 1000 Mb Latency & < \(3.8 \mu \mathrm{~s}\) (64-byte packets) \\
\hline & 10 Gbps Latency & < \(1.6 \mu \mathrm{~s}\) (64-byte packets) \\
\hline & Throughput & up to 112.0 Mpps \\
\hline & Switching capacity & 176 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32768 entries \\
\hline \multirow[t]{6}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(45^{\circ} \mathrm{C}\) ); up to 5000 Feet, -0 C to 40 C ( 32 F to 104F) up to 10000 Feet \\
\hline & Operating relative humidity & 15\% to 95\% @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage temperature & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Acoustic & Power: 54.1 dB, Pressure: 40.2 dB \\
\hline & Airflow direction & Side-to-side \\
\hline
\end{tabular}

Technical Specifications
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{7}{*}{Electrical characteristics} & Maximum heat dissipation & 157.2 BTU/hr (165.8 KJ/hr) \\
\hline & Voltage & 100-127/200-240 VAC, rated \\
\hline & Current & 0.9/0.6 A \\
\hline & Maximum power rating & 46.6 W \\
\hline & Idle power & 32.7 W \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline & \multicolumn{2}{|l|}{Idle power is the actual power consumption of the device with no ports connected.. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated..} \\
\hline Safety & \multicolumn{2}{|l|}{UL 60950-1, 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1} \\
\hline Emissions & \multicolumn{2}{|l|}{EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438} \\
\hline Immunity & Generic & EN 55024:2010/CISPR 24 \\
\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/EN 61000-3-2 \\
\hline & Flicker & IEC/EN 61000-3-3 \\
\hline Management & \multicolumn{2}{|l|}{Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)} \\
\hline Services & \multicolumn{2}{|l|}{Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.} \\
\hline
\end{tabular}

Aruba 2930F 24G PoE+ 4SFP+ Switch (JL255A)
I/O ports and 24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, slots IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASET: full only
4 SFP+1/10GbE ports; PHY-less
Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots

Physical characteristics

\section*{Memory and processor}

\section*{Dimensions}

Weight
\(17.42(\mathrm{w}) \times 11.98(\mathrm{~d}) \times 1.73(\mathrm{~h})\) in \((44.25 \times 30.42 \times 4.39 \mathrm{~cm})\) ( 1 U height) \(8.6 \mathrm{lb}(3.9 \mathrm{~kg})\) Dual Core ARM Cortex @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5 MB Ingress/7.875MB Egress, 4 GB eMMC

Technical Specifications
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{6}{*}{Performance} & 1000 Mb Latency & < 3.8 ¢s (64-byte packets) \\
\hline & 10 Gbps Latency & < \(1.6 \mu\) s (64-byte packets) \\
\hline & Throughput & up to 95.2 Mpps \\
\hline & Switching capacity & 128 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32768 entries \\
\hline \multirow[t]{6}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(45^{\circ} \mathrm{C}\) ); up to 5000 Feet, - 0 C to 40 C ( 32 F to 104F) up to 10000 Feet \\
\hline & Operating relative humidity & \(15 \%\) to 95\% @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage tempera & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage temperat & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Acoustic & Power: 54.1 dB, Pressure: 40.2 dB \\
\hline & Airflow direction & Side-to-side \\
\hline \multirow[t]{9}{*}{Electrical characteristics} & Power efficiency certifications & 80plus.org certification: Silver \\
\hline & Maximum heat dissipation & 258.0 BTU/hr (272.2 KJ/hr) \\
\hline & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 4.9/2.4 A \\
\hline & Maximum power rating & 445 W \\
\hline & Idle power & 36.8 W \\
\hline & PoE power & 370 W PoE+ \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline & \multicolumn{2}{|l|}{\begin{tabular}{l}
NOTES: Idle power is the actual power consumption of the device with no ports connected.. \\
Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated..
\end{tabular}} \\
\hline Safety & UL 60950-1 2nd Edition; EN 6095 +A1:2009 +A2:2013; CSA 22.2 No & \[
\begin{aligned}
& \text { 1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 } \\
& \text { 9950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class } 1
\end{aligned}
\] \\
\hline Emissions & EN 55032:2012/CISPR 32 Class A; & C CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438 \\
\hline \multirow[t]{10}{*}{Immunity} & Generic & EN 55024:2010/CISPR 24 \\
\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/EN 61000-3-2 \\
\hline & Flicker & IEC/EN 61000-3-3 \\
\hline Management & \multicolumn{2}{|l|}{Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)} \\
\hline Services & Refer to the Hewlett Packard Ente the service-level descriptions and please contact your local Hewlett P & se website at http://www.hpe.com/networking/services for details on duct numbers. For details about services and response times in your area, ard Enterprise sales office. \\
\hline
\end{tabular}

Technical Specifications
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{I/O ports and slots} & \multicolumn{2}{|l|}{48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASET: full only} \\
\hline & \multicolumn{2}{|l|}{4 SFP+ 1/10GbE ports; PHY-less} \\
\hline Additional ports and slots & 1 dual-personality (RJ-45 or US & -B) serial console port \\
\hline \multirow[t]{2}{*}{Physical characteristics} & Dimensions & 17.42 (w) \(\times 11.98(\mathrm{~d}) \times 1.73(\mathrm{~h})\) in \((44.25 \times 30.42 \times 4.39 \mathrm{~cm})(1 \mathrm{U}\) height) \\
\hline & Weight & \(9.83 \mathrm{lb}(4.46 \mathrm{~kg})\) \\
\hline Memory and processor & \multicolumn{2}{|l|}{Dual Core ARM Cortex @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.875MB Egress, 4 GB eMMC} \\
\hline \multirow[t]{6}{*}{Performance} & 1000 Mb Latency & < 3.8 ¢ ( 64 -byte packets) \\
\hline & 10 Gbps Latency & < \(1.6 \mu \mathrm{~s}\) (64-byte packets) \\
\hline & Throughput & up to 112.0 Mpps \\
\hline & Switching capacity & 176 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32768 entries \\
\hline \multirow[t]{6}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(45^{\circ} \mathrm{C}\) ); up to 5000 Feet, -0 OC to 40 C ( 32 F to 104 F ) up to 10000 Feet \\
\hline & Operating relative humidity & \(15 \%\) to \(95 \%\) @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage temperature & \(15 \%\) to \(95 \%\) @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Acoustic & Power: 55.7 dB, Pressure: 41.7 dB \\
\hline & Airflow direction & Side-to-side \\
\hline \multirow[t]{8}{*}{Electrical characteristics} & Power efficiency certifications & 80plus.org certification: Silver \\
\hline & Maximum heat dissipation & 293.0 BTU/hr (309.1 kJ/hr) \\
\hline & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 5.1/2.5 A \\
\hline & Maximum power rating & 459 W \\
\hline & Idle power & 48.6 W \\
\hline & PoE power & 370 W PoE+ \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline
\end{tabular}

\section*{NOTES:}

Idle power is the actual power consumption of the device with no ports connected..
Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated..
\begin{tabular}{ll} 
Safety & UL 60950-1 2nd Edition; EN 60950-1:2006 + A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 \\
& + A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1 \\
Emissions & EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
\end{tabular}

Technical Specifications
\begin{tabular}{lll} 
Immunity & Generic & EN 55024:2010/CISPR 24 \\
& ESD & IEC 61000-4-2 \\
& Radiated & IEC 61000-4-3 \\
& EFT/Burst & IEC 61000-4-4 \\
& Surge & IEC 61000-4-5 \\
& Conducted & IEC 61000-4-6 \\
& Power frequency magnetic field & IEC 61000-4-8 \\
& Voltage dips and interruptions & IEC 61000-4-11 \\
& Harmonics & IEC/EN 61000-3-2 \\
& Flicker & IEC/EN 61000-3-3
\end{tabular}

Management Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)
Services Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.
NOTE: \(\quad{ }^{1}\) All hardware SKUs can be managed by Aruba Central. Central Managed (CM) SKUs are used for simplified ordering within U.S. and Canada only. Append "CM" to the indicated SKU \#: (e.g., JL261ACM to order the JL261A). Requires an active Central license and end-user information consistent with the Central license purchase. Applicable accessories with a valid "CM" suffix should also be placed on the same order.


\section*{Technical Specifications}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{8}{*}{Electrical characteristics} & Power efficiency certifications & DoE VI certification. \\
\hline & Maximum heat dissipation & 58.6 BTU/hr ( \(61.8 \mathrm{~kJ} / \mathrm{hr}\) ) \\
\hline & Voltage & 90-264 VAC, rated \\
\hline & Current & 2.6 A \\
\hline & Maximum power rating & 155 W \\
\hline & PoE power & 125 W PoE+ \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline & \multicolumn{2}{|l|}{\begin{tabular}{l}
Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated. \\
PoE Power is the power supplied by the internal power supply, it is dependent on the type and quantity of power supplies and may be supplemented with the use of a External Power Supply (EPS).
\end{tabular}} \\
\hline Safety & \multicolumn{2}{|l|}{UL 60950-1 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1} \\
\hline Emissions & \multicolumn{2}{|l|}{EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438} \\
\hline Immunity & Generic & EN 55024:2010/CISPR 24 \\
\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/EN 61000-3-2 \\
\hline & Flicker & IEC/EN 61000-3-3 \\
\hline Management & \multicolumn{2}{|l|}{Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)} \\
\hline Services & \multicolumn{2}{|l|}{Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.} \\
\hline
\end{tabular}

Technical Specifications

Aruba 2930F 12G PoE+ 2G/2SFP+ Switch (JL693A)
\begin{tabular}{ll} 
I/O ports and & 12 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, \\
slots & IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE- \\
& T: full only \\
& 2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 u Type \\
& \begin{tabular}{ll} 
100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full \\
& only \\
& 2 SFP+ 1/10GbE ports; PHY-less
\end{tabular}
\end{tabular}

Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots
Physical
characteristics
\begin{tabular}{ll} 
Dimensions & \(10(\mathrm{w}) \times 10(\mathrm{~d}) \times 1.73(\mathrm{~h})\) in \((25.4 \times 25.4 \times 4.39 \mathrm{~cm})\) (1U height) \\
Weight & \(4.85 \mathrm{lb}(2.2 \mathrm{~kg})\)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Memory and processor & \multicolumn{2}{|l|}{Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.785 Egress, 4 GB eMMC} \\
\hline \multirow[t]{6}{*}{Performance} & 1000 Mb Latency & < 3.8 ¢ ( 64 -byte packets) \\
\hline & 10 Gbps Latency & < \(1.6 \mu \mathrm{~s}\) (64-byte packets) \\
\hline & Throughput & up to 41.7 Mpps \\
\hline & Switching capacity & 68 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32768 entries \\
\hline \multirow[t]{5}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(45^{\circ} \mathrm{C}\) ); up to 5000 Feet, -0 C to 40 C ( 32 F to 104 F ) up to 10000 Feet \\
\hline & Operating relative humidity & \(15 \%\) to 95\% @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage temperature & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Acoustic & Power: 0 dB , Pressure: 0 dB Fanless \\
\hline \multirow[t]{7}{*}{Electrical characteristics} & Power efficiency certifications & meets DoE VI certification. \\
\hline & Maximum heat dissipation & 68.2 BTU/hr (72.0 kJ/hr) \\
\hline & Voltage & 90-264 VAC, rated \\
\hline & Current & 1.7 A \\
\hline & Maximum power rating & 170 W \\
\hline & PoE power & 139 W PoE+ \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline
\end{tabular}

\section*{NOTES:}

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated.
PoE Power is the power supplied by the internal power supply, it is dependent on the type and quantity of power supplies and may be supplemented with the use of a External Power Supply (EPS).
\begin{tabular}{ll} 
Safety & UL 60950-1 2nd Edition; EN 60950-1:2006 +A11:2009 + A1:2010 + A12:2011+A2:2013; IEC 60950-1:2005 \\
& + A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1 \\
Emissions & EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
\end{tabular}

Technical Specifications
\begin{tabular}{lll} 
Immunity & Generic & EN 55024:2010/CISPR 24 \\
& ESD & IEC 61000-4-2 \\
& Radiated & IEC 61000-4-3 \\
& EFT/Burst & IEC 61000-4-4 \\
& Surge & IEC 61000-4-5 \\
& Conducted & IEC 61000-4-6 \\
& Power frequency magnetic field & IEC 61000-4-8 \\
& Voltage dips and interruptions & IEC 61000-4-11 \\
& Harmonics & IEC/EN 61000-3-2 \\
& Flicker & IEC/EN 61000-3-3
\end{tabular}

Management Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)
Services Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Aruba 2930F 24G 4SFP Switch (JL259A)
I/O ports and slots 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 SFP

Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots
Physical characteristics
Dimensions \(\quad\)\begin{tabular}{l}
\(17.42(\mathrm{w}) \times 7.88(\mathrm{~d}) \times 1.73(\mathrm{~h})\) in \((44.25 \times 20.02 \times 4.39 \mathrm{~cm})(1 \mathrm{U}\) \\
height \()\)
\end{tabular}

Weight \(\quad 5.31 \mathrm{lb}(2.41 \mathrm{~kg})\)
\begin{tabular}{|c|c|c|}
\hline Memory and processor & \multicolumn{2}{|l|}{Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.785 Egress, 4 GB eMMC} \\
\hline \multirow[t]{5}{*}{Performance} & 1000 Mb Latency & < 3.8 ¢ ( 64 -byte packets) \\
\hline & Throughput & up to 41.7 Mpps \\
\hline & Switching capacity & 56 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32768 entries \\
\hline \multirow[t]{6}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(45^{\circ} \mathrm{C}\) ); up to 5000 Feet, -0 C to \(40 \mathrm{C}(32 \mathrm{~F}\) to 104F) up to 10000 Feet \\
\hline & Operating relative humidity & \(15 \%\) to 95\% @ \(104^{\circ} \mathrm{F}\) ( \(40^{\circ} \mathrm{C}\) ), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage temperature & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Acoustic & Power: 49.7 dB, Pressure: 37.1 dB \\
\hline & Airflow direction & Side-to-side \\
\hline
\end{tabular}

Technical Specifications
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{7}{*}{Electrical characteristics} & Maximum heat dissipation & 100.0 BTU/hr (105.5 kJ/hr) \\
\hline & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 0.6/0.4 A \\
\hline & Maximum power rating & 29.3 W \\
\hline & Idle power & 19.5 W \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline & \multicolumn{2}{|l|}{Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated.} \\
\hline Safety & \multicolumn{2}{|l|}{UL 60950-1 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1} \\
\hline Emissions & \multicolumn{2}{|l|}{EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438} \\
\hline Immunity & Generic & EN 55024:2010/CISPR 24 \\
\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/EN 61000-3-2 \\
\hline & Flicker & IEC/EN 61000-3-3 \\
\hline Management & \multicolumn{2}{|l|}{Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)} \\
\hline Services & Refer to the Hewlett Packard Ente the service-level descriptions and please contact your local Hewlett & ise website at http://www.hpe.com/networking/services for details on uct numbers. For details about services and response times in your area, ard Enterprise sales office. \\
\hline
\end{tabular}

Aruba 2930F 48G 4SFP Switch (JL260A)
I/O ports and \(\quad 48\) RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE
slots 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 SFP

Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots

Physical characteristics

Memory and processor

Dimensions
Weight
\(17.42(\mathrm{w}) \times 9.7(\mathrm{~d}) \times 1.73(\mathrm{~h})\) in \((44.25 \times 24.63 \times 4.39 \mathrm{~cm})\) ( 1 U height) \(6.83 \mathrm{lb}(3.10 \mathrm{~kg})\)
Dual Core ARM Cortex @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.875MB Egress, 4 GB eMMC

Technical Specifications
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{5}{*}{Performance} & 1000 Mb Latency & < 3.8 ¢ ( 64 -byte packets) \\
\hline & Throughput & up to 77.4 Mpps \\
\hline & Switching capacity & 104 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32768 entries \\
\hline \multirow[t]{6}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(45^{\circ} \mathrm{C}\) ); up to 5000 Feet, -0 C to 40 C ( 32 F to 104 F ) up to 10000 Feet \\
\hline & Operating relative humidity & 15\% to 95\% @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage temperature & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Acoustic & Power: 54.1 dB, Pressure: 40.2 dB \\
\hline & Airflow direction & Side-to-side \\
\hline \multirow[t]{7}{*}{Electrical characteristics} & Maximum heat dissipation & 100.0 BTU/hr (105.5 kJ/hr) \\
\hline & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 0.9/0.6 A \\
\hline & Maximum power rating & 46.6 W \\
\hline & Idle power & 32.7 W \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline & \multicolumn{2}{|l|}{Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated.} \\
\hline Safety & UL 60950-1, 2nd Edition; EN 60950 +A1:2009 +A2:2013; CSA 22.2 No. & \[
\begin{aligned}
& \text { 1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 } \\
& \text { 0950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class } 1
\end{aligned}
\] \\
\hline Emissions & EN 55032:2012/CISPR 32 Class A; & C CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438 \\
\hline \multirow[t]{10}{*}{Immunity} & Generic & EN 55024:2010/CISPR 24 \\
\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/EN 61000-3-2 \\
\hline & Flicker & IEC/EN 61000-3-3 \\
\hline Management & \multicolumn{2}{|l|}{Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)} \\
\hline Services & Refer to the Hewlett Packard Enterpris the service-level descriptions and pr please contact your local Hewlett Pa & ise website at http://www.hpe.com/networking/services for details on duct numbers. For details about services and response times in your area, ard Enterprise sales office. \\
\hline
\end{tabular}

Technical Specifications

Aruba 2930F 24G PoE+ 4SFP Switch (JL261A, JL261ACM \({ }^{1}\) )
\begin{tabular}{|c|c|}
\hline I/O ports and slots & \begin{tabular}{l}
24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASET: full only \\
4 SFP
\end{tabular} \\
\hline Additional ports and slots & 1 dual-personality (RJ-45 or USB micro-B) serial console port \\
\hline Physical characteristics & \begin{tabular}{ll} 
Dimensions & \(17.42(\mathrm{w}) \times 11.98(\mathrm{~d}) \times 1.73(\mathrm{~h})\) in \((44.25 \times 30.42 \times 4.39 \mathrm{~cm})(1 \mathrm{U}\) height \()\) \\
Weight & \(8.6 \mathrm{lb}(3.9 \mathrm{~kg})\)
\end{tabular} \\
\hline
\end{tabular}

Memory and Dual Core ARM Cortex A9 @ \(1016 \mathrm{MHz}, 1\) GB DDR3 SDRAM; Packet buffer size: 12.38 MB processor Performance

Environment
Electrical
characteristics 4.5MB Ingress/7.785 Egress, 4 GB eMMC
\begin{tabular}{|c|c|}
\hline 1000 Mb Latency & < 3.8 ¢ ( 64 -byte packets) \\
\hline Throughput & up to 41.7 Mpps \\
\hline Switching capacity & 56 Gbps \\
\hline Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline MAC address table size & 32768 entries \\
\hline Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(45^{\circ} \mathrm{C}\) ); up to 5000 Feet, -0 C to 40 C ( 32 F to 104 F ) up to 10000 Feet \\
\hline Operating relative humidity & \(15 \%\) to 95\% @ \(104^{\circ} \mathrm{F}\) ( \(40^{\circ} \mathrm{C}\) ), noncondensing \\
\hline Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline Non-operating/Storage temperature & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\) \\
\hline Acoustic & Power: 54.1 dB, Pressure: 40.6 dB \\
\hline Airflow direction & Side-to-side \\
\hline Power efficiency certifications & 80plus.org certification: Silver \\
\hline Maximum heat dissipation & 258.0 BTU/hr (272.2 kJ/hr) \\
\hline Voltage & 100-127/200-240 VAC, rated \\
\hline Current & 4.9/2.4 A \\
\hline Maximum power rating & 445 W \\
\hline Idle power & 36.8 W \\
\hline PoE power & \(370 \mathrm{~W} \mathrm{PoE}+\) \\
\hline Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline
\end{tabular}

NOTES:
Idle power is the actual power consumption of the device with no ports connected.
Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated.
\begin{tabular}{ll} 
Safety & UL 60950-1 2nd Edition; EN 60950-1:2006 + A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 \\
& + A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1 \\
Emissions & EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
\end{tabular}

Technical Specifications
\begin{tabular}{lll} 
Immunity & Generic & EN 55024:2010/CISPR 24 \\
& ESD & IEC 61000-4-2: \\
& Radiated & IEC 61000-4-3 \\
& EFT/Burst & IEC 61000-4-4 \\
& Surge & IEC 61000-4-5 \\
& Conducted & IEC 61000-4-6
\end{tabular}

Aruba 2930F 48G PoE+ 4SFP Switch (JL262A, JL262ACM \({ }^{1}\) )
I/O ports and 48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 u Type 100BASE-TX, slots IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASET: full only
4 SFP
Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots
Physical
characteristics
\begin{tabular}{ll} 
Dimensions & \(17.42(\mathrm{w}) \times 11.98(\mathrm{~d}) \times 1.73(\mathrm{~h})\) in \((44.25 \times 30.42 \times 4.39 \mathrm{~cm})\) ( 1 U height) \\
Weight & \(9.83 \mathrm{lb}(4.46 \mathrm{~kg})\)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Memory and processor & \multicolumn{2}{|l|}{Dual Core ARM Cortex @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.875MB Egress, 4 GB eMMC} \\
\hline \multirow[t]{5}{*}{Performance} & 1000 Mb Latency & < 3.8 ¢ ( 64 -byte packets) \\
\hline & Throughput & up to 77.4 Mpps \\
\hline & Switching capacity & 104 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32768 entries \\
\hline \multirow[t]{6}{*}{Environment} & Operating temperature & \(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(45^{\circ} \mathrm{C}\) ); up to 5000 Feet, -0 C to 40 C (32F to 104F) up to 10000 Feet \\
\hline & Operating relative humidity & \(15 \%\) to \(95 \%\) @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage temperature & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\) \\
\hline & Acoustic & Power: 55.7 dB, Pressure: 41.7 dB \\
\hline & Airflow direction & Side-to-side \\
\hline
\end{tabular}

Technical Specifications
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{9}{*}{Electrical characteristics} & Power efficiency certifications & 80plus.org certification: Silver \\
\hline & Maximum heat dissipation & 293.0 BTU/hr (309.1 kJ/hr) \\
\hline & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 5.1/2.5 A \\
\hline & Maximum power rating & 459 W \\
\hline & Idle power & 48.6 W \\
\hline & PoE power & 370 W PoE+ \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline & \multicolumn{2}{|l|}{Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated.} \\
\hline Safety & \multicolumn{2}{|l|}{UL 60950-1 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1} \\
\hline Emissions & \multicolumn{2}{|l|}{EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438} \\
\hline Immunity & Generic & EN 55024:2010/CISPR 24 \\
\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/EN 61000-3-2 \\
\hline & Flicker & IEC/EN 61000-3-3 \\
\hline Management & \multicolumn{2}{|l|}{Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)} \\
\hline Services & \multicolumn{2}{|l|}{Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.} \\
\hline NOTE: & \({ }^{1}\) All hardware SKUs can be mana ordering within U.S. and Canada JL261A). Requires an active Cen purchase. Applicable accessories & by Aruba Central. Central Managed (CM) SKUs are used for simplified Append "CM" to the indicated SKU \#: (e.g., JL261ACM to order the license and end-user information consistent with the Central license a valid "CM" suffix should also be placed on the same order. \\
\hline
\end{tabular}

Technical Specifications

Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch (JL263A)
\begin{tabular}{ll} 
I/O ports and & 24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASETX, \\
slots & IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE- \\
& T: full only \\
& 4 SFP+ 1/10GbE ports \\
& PHY-less
\end{tabular}

Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Physical characteristics} & Dimensions & \(17.42(\mathrm{w}) \times 11.98(\mathrm{~d}) \times 1.73(\mathrm{~h}) \mathrm{in} .(44.25 \times 30.42 \times 4.39 \mathrm{~cm})\) (1U height) \\
\hline & Weight & \(8.6 \mathrm{lb}(3.9 \mathrm{~kg})\) \\
\hline Memory and processor & \multicolumn{2}{|l|}{Dual Core ARM \({ }^{\circledR}\) Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5 MB Ingress/7.785 MB Egress, 4 GB eMMC} \\
\hline \multirow[t]{6}{*}{Performance} & 1000 Mb Latency & < 3.8 [ ( 64 -byte packets) \\
\hline & 10 Gbps Latency & < 1.6 ¢ ( 64 -byte packets) \\
\hline & Throughput & Up to 95.2 Mpps \\
\hline & Switching capacity & 128 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32,768 entries \\
\hline \multirow[t]{6}{*}{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 5000 Feet, \(-0^{\circ} \mathrm{C}\) to \(40^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.\) to \(104^{\circ}\) F) up to 10000 Feet \\
\hline & Operating relative humidity & 15\% to 95\% @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage temperature & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\) \\
\hline & Acoustic & Power: 54.1 dB, Pressure: 40.6 dB \\
\hline & Airflow direction & Side-to-side \\
\hline \multirow[t]{8}{*}{Electrical characteristics} & Power efficiency certifications & 80plus.org certification: Silver \\
\hline & Maximum heat dissipation & 258.0 BTU/hr (272.2kJ/hr) \\
\hline & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 4.9/2.4 A \\
\hline & Maximum power rating & 445 W \\
\hline & Idle power & 36.8 W \\
\hline & PoE power & 370 W PoE+ \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline
\end{tabular}

NOTES:
Idle power is the actual power consumption of the device with no ports connected.
Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated.
\(\begin{array}{ll}\text { Safety } & \text { UL 69050-1: 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 } \\ & + \text { A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class } 1 \\ \text { Emissions } & \text { EN 55032:2012/CISPR } 32 \text { Class A; FCC CFR 47 Part } 15 \text { Class A; VCCI Class A; ICES-003 Class A; CNS } 13438\end{array}\)

Technical Specifications
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{10}{*}{Immunity} & Generic & EN 55024:2010/CISPR 24 \\
\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/EN 61000-3-2 \\
\hline & Flicker & IEC/EN 61000-3-3 \\
\hline Management & \multicolumn{2}{|l|}{Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)} \\
\hline Services & Refer to the Hewlett Packard Ente the service-level descriptions and please contact your local Hewlett P & e website at http://www.hpe.com/networking/services for details on uct numbers. For details about services and response times in your area, rd Enterprise sales office. \\
\hline
\end{tabular}

Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch (JL264A)
I/O ports and slots 48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASETX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASET: full only 4 SFP+1/10GbE ports PHY-less
Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots
\begin{tabular}{|c|c|c|}
\hline Physical characteristics & Dimensions Weight & ```
17.42(w) \times11.98(d) \times 1.73(h) in. ( }44.25\times30.42\times4.39\textrm{cm})(1\textrm{U}\mathrm{ height)
9.83 lb (4.46 kg)
``` \\
\hline Memory and processor & \multicolumn{2}{|l|}{Dual Core ARM \({ }^{\circledR}\) Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5 MB Ingress/7.785 MB Egress, 4 GB eMMC} \\
\hline \multirow[t]{6}{*}{Performance} & 1000 Mb Latency & < 3.8 ¢ (64-byte packets) \\
\hline & 10 Gbps Latency & < \(1.6 \mu \mathrm{~s}\) (64-byte packets) \\
\hline & Throughput & Up to 112.0 Mpps \\
\hline & Switching capacity & 176 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32,768 entries \\
\hline \multirow[t]{6}{*}{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 5000 Feet, \(-0^{\circ} \mathrm{C}\) to \(40^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.\) to \(104^{\circ}\) F) up to 10000 Feet \\
\hline & Operating relative humidity & \(15 \%\) to 95\% @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage tem & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15000 Feet \\
\hline & Non-operating/Storage tem & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\) \\
\hline & Acoustic & Power: 55.7 dB, Pressure: 41.7 dB \\
\hline & Airflow direction & Side-to-side \\
\hline
\end{tabular}

\section*{Technical Specifications}
\begin{tabular}{lll} 
Electrical & Power efficiency certifications & 80plus.org certification: Silver \\
characteristics & Maximum heat dissipation & 293.0 BTU/hr (309.1 kJ/hr) \\
& Voltage & \(100-127\) / 200-240 VAC, rated
\end{tabular}

Technical Specifications

Aruba 2930F 48G PoE+ 4SFP 740W Switch (JL557A)
\begin{tabular}{ll} 
I/O ports and & 48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, \\
slots & IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE- \\
& T: full only \\
& 4 SFP+
\end{tabular}

Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port
and slots
Physical
characteristics

Dimensions

Weight
\begin{tabular}{|c|c|c|}
\hline Memory and processor & Dual Core ARM Cortex A9 @ 1016 MHz 4.5MB Ingress/7.785 Egress,4 GB eMMC & z, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB C \\
\hline Performance & 1000 Mb Latency & < 3.8 ¢ ( 64 -byte packets) \\
\hline & Throughput & up to 77.4 Mpps \\
\hline & Switching capacity & 104 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32,768 \\
\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, \(0^{\circ} \mathrm{C}\) to \(40^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.\) to \(\left.104^{\circ} \mathrm{F}\right)\) up to 10,000 Feet \\
\hline & Operating relative humidity & \(15 \%\) to \(95 \%\) @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15,000 Feet \\
\hline & Non-operating/Storage temperature & 15\% to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\) \\
\hline & Acoustic (power and pressure) in decibels & Power: 55.1 dB, Pressure: 41.1 dB \\
\hline & Airflow direction & Side to side \\
\hline Electrical & Power efficiency certifications & 80plus.org certification: Gold \\
\hline characteristics & Maximum heat dissipation & 420.9 BTU/hr (444.1 kJ/hr) \\
\hline & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 9.2 / 4.9 A \\
\hline & Maximum power rating & 980W \\
\hline & Idle power & 49.9W \\
\hline & PoE power & \(740 \mathrm{~W} \mathrm{PoE}+\) \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline
\end{tabular}

\section*{NOTES:}

Idle power is the actual power consumption of the device with no ports connected.
Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated.
\begin{tabular}{ll} 
Safety & UL 69050-1: 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 \\
& + A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1 \\
Emissions & EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
\end{tabular}

Technical Specifications
\begin{tabular}{lll} 
Immunity & Generic & EN 55024:2010/CISPR 24 \\
& ESD & IEC 61000-4-2 \\
& Radiated & IEC 61000-4-3 \\
& EFT/Burst & IEC 61000-4-4 \\
& Surge & IEC 61000-4-5 \\
& Conducted & IEC 61000-4-6 \\
& Power frequency magnetic field & IEC 61000-4-8 \\
& Voltage dips and interruptions & IEC 61000-4-11 \\
& Harmonics & IEC/EN 61000-3-2 \\
& Flicker & IEC/EN 61000-3-3
\end{tabular}
\begin{tabular}{ll} 
Management & \begin{tabular}{l} 
Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line \\
interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management
\end{tabular} \\
& \begin{tabular}{l} 
(serial RS-232C or micro USB)
\end{tabular} \\
Services & \begin{tabular}{l} 
Refer to the Hewlett Packard Enterprise website at \(\boldsymbol{h t t p}: / / \mathbf{w w w}\).hpe.com/networking/services for details on \\
the service-level descriptions and product numbers. For details about services and response times in your area, \\
please contact your local Hewlett Packard Enterprise sales office.
\end{tabular}
\end{tabular}

Aruba 2930F 48G PoE+ 4SFP+ 740W Switch (JL558A, JL558ACM \({ }^{1}\) )
I/O ports and 48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 u Type 100BASE-TX, slots IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASET: full only 4 SFP+1/10GbE ports PHY-less
Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots
Physical
characteristics

Dimensions

Weight
10.56 lb ( 4.79 kg )

Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.785 Egress,4 GB eMMC
processor
Performance

Environment

1000 Mb Latency
10Gbps latency
Throughput Switching capacity
Routing table size MAC address table size Operating temperature
< \(3.8 \mu \mathrm{~s}\) (64-byte packets)
< \(1.6 \mu \mathrm{~s}\) (64-byte packets)
up to 112.0 Mpps
176 Gbps
2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP 32,768
\(32^{\circ} \mathrm{F}\) to \(113^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.\) to \(\left.45^{\circ} \mathrm{C}\right)\);
up to 5,000 Feet,
\(0^{\circ} \mathrm{C}\) to \(40^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.\) to \(\left.104^{\circ} \mathrm{F}\right)\)
up to 10,000 Feet
\(15 \%\) to \(95 \%\) @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing
\(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15,000 Feet
\(15 \%\) to \(95 \%\) @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\)
Power: 55.1 dB, Pressure: 41.1 dB
Acoustic (power and pressure) in decibels
Airflow direction

Side to side

Technical Specifications
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{9}{*}{Electrical characteristics} & Power efficiency certifications & 80plus.org certification: Gold \\
\hline & Maximum heat dissipation & 420.9 BTU/hr (444.1 kJ/hr) \\
\hline & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 9.2 / 4.9 A \\
\hline & Maximum power rating & 980W \\
\hline & Idle power & 49.9W \\
\hline & PoE power & 740 W PoE+ \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline & \multicolumn{2}{|l|}{Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated.} \\
\hline Safety & \multicolumn{2}{|l|}{UL 69050-1: 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1} \\
\hline Emissions & \multicolumn{2}{|l|}{EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438} \\
\hline Immunity & Generic & EN 55024:2010/CISPR 24 \\
\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/EN 61000-3-2 \\
\hline & Flicker & IEC/EN 61000-3-3 \\
\hline Management & \multicolumn{2}{|l|}{Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)} \\
\hline Services & \multicolumn{2}{|l|}{Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.} \\
\hline NOTE: & \multicolumn{2}{|l|}{\({ }^{1}\) All hardware SKUs can be managed by Aruba Central. Central Managed (CM) SKUs are used for simplified ordering within U.S. and Canada only. Append "CM" to the indicated SKU \#: (e.g., JL261ACM to order the JL261A). Requires an active Central license and end-user information consistent with the Central license purchase. Applicable accessories with a valid "CM" suffix should also be placed on the same order.} \\
\hline
\end{tabular}

Technical Specifications

Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch (JL559A)
\begin{tabular}{ll} 
I/O ports and & 48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, \\
slots & IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE- \\
& T: full only \\
& 4 SFP+ 1/10GbE ports \\
& PHY-less
\end{tabular}

Additional ports 1 dual-personality (RJ-45 or USB micro-B) serial console port and slots
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{Physical characteristics} & Dimensions & \[
\begin{aligned}
& 17.42(\mathrm{w}) \times 12.77(\mathrm{~d}) \times 1.73(\mathrm{~h}) \text { in } \\
& (44.25 \times 32.42 \times 4.39 \mathrm{~cm}) \\
& \text { (1U height) }
\end{aligned}
\] \\
\hline & Weight & \(10.56 \mathrm{lb}(4.79 \mathrm{~kg})\) \\
\hline Memory and processor & \multicolumn{2}{|l|}{Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.785 Egress,4 GB eMMC} \\
\hline \multirow[t]{6}{*}{Performance} & 1000 Mb Latency & < 3.8 ¢ ( 64 -byte packets) \\
\hline & 10Gbps latency & < 1.6 ¢ ( 64 -byte packets) \\
\hline & Throughput & up to 112.0 Mpps \\
\hline & Switching capacity & 176 Gbps \\
\hline & Routing table size & 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP \\
\hline & MAC address table size & 32,768 \\
\hline \multirow[t]{6}{*}{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, \(0^{\circ} \mathrm{C}\) to \(40^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F}\right.\) to \(\left.104^{\circ} \mathrm{F}\right)\) up to 10,000 Feet \\
\hline & Operating relative humidity & \(15 \%\) to \(95 \%\) @ \(104^{\circ} \mathrm{F}\left(40^{\circ} \mathrm{C}\right)\), noncondensing \\
\hline & Non-operating/Storage temperature & \(-40^{\circ} \mathrm{F}\) to \(158^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.\) to \(\left.70^{\circ} \mathrm{C}\right)\); up to 15,000 Feet \\
\hline & Non-operating/Storage temperature & \(15 \%\) to 95\% @ \(149^{\circ} \mathrm{F}\left(65^{\circ} \mathrm{C}\right)\) \\
\hline & Acoustic (power and pressure) in decibels & Power: 55.1 dB, Pressure: 41.1 dB \\
\hline & Airflow direction & Side to side \\
\hline \multirow[t]{8}{*}{Electrical characteristics} & Power efficiency certifications & 80plus.org certification: Gold \\
\hline & Maximum heat dissipation & 420.9 BTU/hr (444.1 kJ/hr) \\
\hline & Voltage & 100-127 / 200-240 VAC, rated \\
\hline & Current & 9.2 / 4.9 A \\
\hline & Maximum power rating & 980W \\
\hline & Idle power & 49.9W \\
\hline & PoE power & 740 W PoE+ \\
\hline & Frequency & \(50 / 60 \mathrm{~Hz}\) \\
\hline
\end{tabular}

NOTES:
Idle power is the actual power consumption of the device with no ports connected.
Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), \(100 \%\) traffic, all ports plugged in, and all modules populated.
Safety UL 69050-1: 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2014 / IEC 60825-1:2014 Class 1
Emissions EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
Immunity Generic EN 55024:2010/CISPR 24

\section*{Technical Specifications}
\begin{tabular}{ll} 
ESD & IEC 61000-4-2 \\
Radiated & IEC 61000-4-3 \\
EFT/Burst & IEC 61000-4-4 \\
Surge & IEC 61000-4-5 \\
Conducted & IEC 61000-4-6 \\
Power frequency magnetic field & IEC 61000-4-8 \\
Voltage dips and interruptions & IEC 61000-4-11 \\
Harmonics & IEC/EN 61000-3-2 \\
Flicker & IEC/EN 61000-3-3
\end{tabular}

Management Aruba Central; Aruba AirWave Network Management; IMC - Intelligent Management Center; Command-line interface; Web browser; Configuration menu; SNMP manager; Telnet; RMON1; FTP; Out-of-band management (serial RS-232C or micro USB)
Services Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

\section*{Standards and Protocols (applies to all products in series) \\ Denial of service protection}
- CPU DoS Protection

\section*{Device Management}
- RFC 1155 Structure and Mgmt Information (SMIv1)
- RFC 1157 SNMPv1/v2c
- RFC 1591 DNS (client)
- RFC 1901 (Community based SNMPv2)
- RFC 1901-1907 SNMPv2c, SMIv2 and Revised MIB-II
- RFC 1908 (SNMP v1/2 Coexistence)
- RFC 2576 (Coexistence between SNMP V1, V2, V3)
- RFC 2578-2580 SMIv2
- RFC 2579 (SMIv2 Text Conventions)
- RFC 2580 (SMIv2 Conformance)
- RFC 2819 (RMON groups Alarm, Event, History and Statistics only)
- RFC 3416 (SNMP Protocol Operations v2)
- RFC 3417 (SNMP Transport Mappings)
- HTML and telnet management
- HTTP, SSHv1, and Telnet
- Multiple Configuration Files
- Multiple Software Images
- SNMP v3 and RMON RFC support
- SSHv1/SSHv2 Secure Shell
- TACACS/TACACS+
- Web UI

\section*{Technical Specifications}

\section*{General Protocols}
- 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 802.1v 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 802.3af Power over Ethernet
- IEEE 802.3at PoE+
- IEEE 802.3az Energy Efficient Ethernet
- IEEE 802.3x Flow Control
- RFC 768 UDP
- RFC 783 TFTP Protocol (revision 2)
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 TELNET
- RFC 868 Time Protocol
- RFC 951 BOOTP
- RFC 1058 RIPv1
- RFC 1256 ICMP Router Discovery Protocol (IRDP)
- RFC 1350 TFTP Protocol (revision 2)
- RFC 1519 CIDR
- RFC 1542 BOOTP Extensions
- RFC 1918 Address Allocation for Private Internet
- RFC 2030 Simple Network Time Protocol (SNTP) v4
- RFC 2131 DHCP
- RFC 2236 IGMP Snooping
- RFC 2453 RIPv2
- RFC 2865 Remote Authentication Dial In User Service (RADIUS)
- RFC 2866 RADIUS Accounting
- RFC 3046 DHCP Relay Agent Information Option
- RFC 3411 An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks
- RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)
- RFC 3413 Simple Network Management Protocol (SNMP) Applications
- RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)
- RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)
- RFC 3416 Protocol Operations for SNMP
- RFC 3417 Transport Mappings for the Simple Network Management Protocol (SNMP)
- RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
- RFC 3575 IANA Considerations for RADIUS
- RFC 3576 Ext to RADIUS (CoA only)
- RFC 4541 Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches
- RFC 4675 RADIUS VLAN \& Priority
- RFC 4861 Neighbor Discovery for IP version 6 (IPv6)
- RFC 4862 IPv6 Stateless Address Autoconfiguration
- RFC 5905 Network Time Protocol Version 4: Protocol and Algorithms Specification

\section*{Technical Specifications}
- UDLD (Uni-directional Link Detection)

\section*{IP Multicast}
- RFC 1112 IGMP
- RFC 2236 IGMPv2
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- RFC 3376 IGMPv3
- RFC 4541 Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches

\section*{QoS/CoS}
- IEEE 802.1p (CoS)
- RFC 2474 DiffServ Precedence, including 8 queues/port
- RFC 2475 DiffServ Architecture
- RFC 2597 DiffServ Assured Forwarding (AF)
- RFC 2598 DiffServ Expedited Forwarding (EF)
- Ingress Rate Limiting

\section*{IPv6}
- RFC 1981 IPv6 Path MTU Discovery
- RFC 2080 RIPng for IPv6
- RFC 2081 RIPng Protocol Applicability Statement
- RFC 2082 RIP-2 MD5
- RFC 2460 IPv6 Specification
- RFC 2464 Transmission of IPv6 over Ethernet Networks
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only)
- RFC 2925 Remote Operations MIB (Ping only)
- RFC 3019 MLDv1 MIB
- RFC 3315 DHCPv6 (client and relay)
- RFC 3484 Default Address Selection for IPv6
- RFC 3513 IPv6 Addressing Architecture
- RFC 3596 DNS Extension for IPv6
- RFC 3810 MLDv2 for IPv6
- RFC 4022 MIB for TCP
- RFC 4113 MIB for UDP
- RFC 4251 SSHv6 Architecture
- RFC 4252 SSHv6 Authentication
- RFC 4253 SSHv6 Transport Layer
- RFC 4254 SSHv6 Connection
- RFC 4291 IP Version 6 Addressing Architecture
- RFC 4293 MIB for IP
- RFC 4419 Key Exchange for SSH
- RFC 4443 ICMPv6
- RFC 4541 IGMP \& MLD Snooping Switch
- RFC 4861 IPv6 Neighbor Discovery
- RFC 4862 IPv6 Stateless Address Auto-configuration
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
- RFC 6620 FCFS SAVI

\section*{Summary of Changes}
\begin{tabular}{|c|c|c|c|}
\hline Date & Version History & Action & Description of Change: \\
\hline 02-Dec-2019 & Version 16 & Changed & Configuration Information section was updated. Obsolete SKUs were removed. \\
\hline 04-Nov-2019 & Version 15 & Changed & Overview, Standard Features, Configuration Information and Technical Specification sections were updated. \\
\hline 07-Oct-2019 & Version 14 & Changed & Overview, Standard Features, Configuration Information and Technical Specification sections were updated. \\
\hline 05-Aug-2019 & Version 13 & Changed & Configuration Information section was updated \\
\hline 01-Jul-2019 & Version 12 & Changed & \begin{tabular}{l}
Standard Features and Technical Specification sections were updated. SKU descriptions were updated. \\
Obsolete SKUs were removed.
\end{tabular} \\
\hline 04-Mar-2019 & Version 11 & Changed & SKU J9151D was replaced with J9151E Obsolete SKUs were removed. \\
\hline 03-Dec-2018 & Version 10 & Changed & Software feature update: Key features, Product overview, Enhanced Capabilities and Technical Specifications updated \\
\hline 02-Jul-2018 & Version 9 & Changed & Software feature update \\
\hline 15-Jan-2018 & Version 8 & Changed & Minor changes made on Technical Specifications \\
\hline 08-Jan-2018 & Version 7 & Added & Models added: JL557A, JL558A, JL559A \\
\hline 03-Jul-2017 & Version 6 & Added & SKU added: JL448A \\
\hline 20-Jan-2017 & Version 5 & Changed & Minor changes made on Standards and protocols \\
\hline 07-Nov-2016 & Version 4 & Changed & Product overview, Features and Benefits, Technical Specifications updated \\
\hline 02-Sep-2016 & Version 3 & Changed & Product description updated. \\
\hline 24-Jun-2016 & Version 2 & Changed & Updated B2E Attribute Description for all switches on the Configuration section. \\
\hline 06-Jun-2016 & Version 1 & New & New QuickSpecs \\
\hline
\end{tabular}

\section*{\(f\) y in}

Sign up for updates

Hewlett Packard
Enterprise

\footnotetext{
© Copyright 2019 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warrant y. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

To learn more, visit: http://www.hpe.com/networking
c05052929-15576 - Worldwide - V16-02-December-2019
}```

