

### 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 power so 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 1GbE or 10GbE uplinks and up to 740 W PoE+
- Software-defined ready with REST APIs and OpenFlow support
- Simple deployment with Zero Touch Provisioning

### 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 2930F 8G PoE+ 2SFP+ Switch	JL258A
Aruba 2930F 24G 4SFP Switch	JL259A
Aruba 2930F 48G 4SFP Switch	JL260A

## Overview

Aruba 2930F 24G PoE+ 4SFP Switch	JL261A
Aruba 2930F 48G PoE+ 4SFP Switch	JL262A
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 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch	JL559A

## 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

- **IEEE 802.3at Power over Ethernet (PoE+)**

## Standard Features

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
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### 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<sup>1</sup> 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:**<sup>1</sup> 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 user-specified) to allocate and manage PoE/PoE+ power for more efficient energy savings
- **Local MAC Authentication**  
assigns attributes such as VLAN and QoS using 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

## 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

### 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

## Standard Features

### 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 next-hop routes)

### 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

## Standard Features

- **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
- **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, re-enrollment and renewal

### 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>

## 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 24G 4SFP+ Switch <ul style="list-style-type: none"> <li>• 24 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 24G 4SFP+ Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 24G 4SFP+ Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 24G 4SFP+ Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL253A
1, 2, 3	Aruba 2930F 48G 4SFP+ Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 24G 4SFP+ Swch PDU <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 24G 4SFP+ Swch PDU <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 24G 4SFP+ Swch US220v <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL254A
1, 2, 3	Aruba 2930F 24G PoE+ 4SFP+ Switch <ul style="list-style-type: none"> <li>• 24 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 24G PoE+ 4SFP+ Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 24G PoE+ 4SFP+ Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 24G PoE+ 4SFP+ Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL255A
1, 2, 3	Aruba 2930F 48G PoE+ 4SFP+ Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL256A

## Configuration Information

Rule #	Description	SKU
1, 2, 3	Aruba 2930F 8G PoE+ 2SFP+ Switch <ul style="list-style-type: none"> <li>• 8 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 2 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \\\ max=2 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 8G PoE+ 2SFP+ Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 8G PoE+ 2SFP+ Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 8G PoE+ 2SFP+ Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL258A
1, 3	Aruba 2930F 24G 4SFP Switch <ul style="list-style-type: none"> <li>• 24 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 24G 4SFP Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 24G 4SFP Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 24G 4SFP Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL259A
1, 3	Aruba 2930F 48G PoE+ 4SFP 740W Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 48G PoE+ 4SFP 740W Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G PoE+ 4SFP 740W Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G PoE+ 4SFP 740W Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul> Aruba 2930F 48G PoE+ 4SFP 740W Switch <ul style="list-style-type: none"> <li>• No Localized Power Cord Selected</li> </ul>	JL557A
1, 3	Aruba 2930F 48G 4SFP Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 48G 4SFP Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G 4SFP Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G 4SFP Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL260A

## Configuration Information

Rule #	Description	SKU
1, 3	Aruba 2930F 24G PoE+ 4SFP Switch <ul style="list-style-type: none"> <li>• 24 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 24G PoE+ 4SFP Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 24G PoE+ 4SFP Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 24G PoE+ 4SFP Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL261A JL261A#B2B JL261A#B2C JL261A#B2E
1, 3	Aruba 2930F 48G PoE+ 4SFP+ 740W Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W Switch <ul style="list-style-type: none"> <li>• No Localized Power Cord Selected</li> </ul>	JL558A JL558A#B2B JL558A#B2C JL558A#B2E JL558A#AC3
1, 3	Aruba 2930F 48G PoE+ 4SFP Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 48G PoE+ 4SFP Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G PoE+ 4SFP Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G PoE+ 4SFP Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL262A JL262A#B2B JL262A#B2C JL262A#B2E
1, 2, 3, 4	<b>TAA Compliant Chassis</b> Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch <ul style="list-style-type: none"> <li>• 24 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \\\ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL263A JL263A#B2B JL263A#B2C JL263A#B2E

## Configuration Information

Rule #	Description	SKU
1, 2, 3, 4	Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch <ul style="list-style-type: none"> <li>• No Localized Power Cord Selected</li> </ul>	JL559A
1, 2, 3, 4	Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL264A
1	<b>Configuration Rules</b>	
2		
3		
4		

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	J9054D
2	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	J9283D
3	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 Taiwan only.	
<b>Remarks:</b> 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		

## Configuration Information

### Rack Level Integration CTO Models

Rule #	Description	SKU
	Aruba 2930F 24G 4SFP+ Switch	JL253A
1, 2, 3, 4, 5	<ul style="list-style-type: none"> <li>• 24 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul>	
	Aruba 2930F 24G 4SFP+ Switch PDU NA, JP or TW	JL253A#B2B
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2930F 24G 4SFP+ Switch PDU ROW	JL253A#B2C
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
	Aruba 2930F 24G 4SFP+ Switch United States 220 volt	JL253A#B2E
	<ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	
	Aruba 2930F 48G 4SFP+ Switch	JL254A
1, 2, 3, 4, 5	<ul style="list-style-type: none"> <li>• 48 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul>	
	Aruba 2930F 24G 4SFP+ Swch PDU	JL254A#B2B
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2930F 24G 4SFP+ Swch PDU	JL254A#B2C
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
	Aruba 2930F 24G 4SFP+ Swch US220v	JL254A#B2E
	<ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	
	Aruba 2930F 24G PoE+ 4SFP+ Switch	JL255A
1, 2, 3, 4, 5	<ul style="list-style-type: none"> <li>• 24 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul>	
	Aruba 2930F 24G PoE+ 4SFP+ Switch PDU NA, JP or TW	JL255A#B2B
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2930F 24G PoE+ 4SFP+ Switch PDU ROW	JL255A#B2C
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
	Aruba 2930F 24G PoE+ 4SFP+ Switch United States 220 volt	JL255A#B2E
	<ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP+ Switch	JL256A
1, 2, 3, 4, 5	<ul style="list-style-type: none"> <li>• 48 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP/SFP+ 1G/10G ports</li> <li>• min=0 \ max=4 SFP/SFP+ Transceivers</li> <li>• 1U - Height</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP+ Switch PDU NA, JP or TW	JL256A#B2B
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP+ Switch PDU ROW	JL256A#B2C
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP+ Switch United States 220 volt	JL256A#B2E
	<ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	

## Configuration Information

Rule #	Description	SKU
	Aruba 2930F 24G 4SFP Switch	JL259A
1, 3, 4, 5	<ul style="list-style-type: none"> <li>• 24 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul>	
	Aruba 2930F 24G 4SFP Switch PDU NA, JP or TW	JL259A#B2B
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2930F 24G 4SFP Switch PDU ROW	JL259A#B2C
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
	Aruba 2930F 24G 4SFP Switch United States 220 volt	JL259A#B2E
	<ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP 740W Switch	JL557A
1, 3	<ul style="list-style-type: none"> <li>• 48 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP 740W Switch PDU NA, JP or TW	JL557A#B2B
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP 740W Switch PDU ROW	JL557A#B2C
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP 740W Switch United States 220 volt	JL557A#B2E
	<ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP 740W Switch	JL557A#AC3
	<ul style="list-style-type: none"> <li>• No Localized Power Cord Selected</li> </ul>	
	Aruba 2930F 48G 4SFP Switch	JL260A
1, 3, 4, 5	<ul style="list-style-type: none"> <li>• 48 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul>	
	Aruba 2930F 48G 4SFP Switch PDU NA, JP or TW	JL260A#B2B
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2930F 48G 4SFP Switch PDU ROW	JL260A#B2C
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
	Aruba 2930F 48G 4SFP Switch United States 220 volt	JL260A#B2E
	<ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	
	Aruba 2930F 24G PoE+ 4SFP Switch	JL261A
1, 3, 4, 5	<ul style="list-style-type: none"> <li>• 24 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul>	
	Aruba 2930F 24G PoE+ 4SFP Switch PDU NA, JP or TW	JL261A#B2B
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2930F 24G PoE+ 4SFP Switch PDU ROW	JL261A#B2C
	<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
	Aruba 2930F 24G PoE+ 4SFP Switch United States 220 volt	JL261A#B2E
	<ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	

## Configuration Information

Rule #	Description	SKU
1, 3	Aruba 2930F 48G PoE+ 4SFP+ 740W Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W Switch <ul style="list-style-type: none"> <li>• No Localized Power Cord Selected</li> </ul> Aruba 2930F 48G PoE+ 4SFP Switch	JL558A JL558A#B2B JL558A#B2C JL558A#B2E JL558A#AC3 JL262A
1, 3, 4, 5	Aruba 2930F 48G PoE+ 4SFP+ 740W Switch <ul style="list-style-type: none"> <li>• 48 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>• 4 SFP 1G ports</li> <li>• min=0 \\\ max=4 SFP Transceivers</li> <li>• 1U - Height</li> </ul> Aruba 2930F 48G PoE+ 4SFP Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G PoE+ 4SFP Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G PoE+ 4SFP Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul> <b>TAA Compliant Chassis</b> Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch	JL262A#B2B JL262A#B2C JL262A#B2E JL263A
1, 2, 3, 4, 5, 6	Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch	JL263A#B2B JL263A#B2C JL263A#B2E JL559A
1, 2, 3, 4, 5, 6	Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch PDU ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul> Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch United States 220 volt <ul style="list-style-type: none"> <li>• HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL559A#B2B JL559A#B2C JL559A#B2E

## Configuration Information

Rule #	Description	SKU
	Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch <ul style="list-style-type: none"> <li>No Localized Power Cord Selected</li> </ul>	JL559A#AC3
	Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch	JL264A
1, 2, 3, 4, 5, 6	<ul style="list-style-type: none"> <li>48 RJ-45 PoE+ autosensing 10/100/1000 ports</li> <li>4 SFP/SFP+ 1G/10G ports</li> <li>min=0 \\\ max=4 SFP/SFP+ Transceivers</li> <li>1U - Height</li> </ul>	
	Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch PDU NA, JP or TW <ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	JL264A#B2B
	Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch PDU ROW <ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JL264A#B2C
	Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch United States 220 volt <ul style="list-style-type: none"> <li>HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)</li> </ul>	JL264A#B2E

### Configuration Rules

Rule #	Description	SKU
1	The following Transceivers install into this Chassis : <ul style="list-style-type: none"> <li>Aruba 1G SFP LC SX 500m OM2 MMF Transceiver</li> <li>Aruba 1G SFP LC LX 10km SMF Transceiver</li> <li>Aruba 1G SFP LC LH 70km SMF Transceiver</li> <li>Aruba 1G SFP RJ45 T 100m Cat5e Transceiver</li> <li>Aruba 100M SFP LC FX 2km MMF Transceiver</li> </ul>	J4858D J4859D J4860D J8177D J9054D
2	The following Transceivers install into this Switch: <ul style="list-style-type: none"> <li>Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver</li> <li>Aruba 10G SFP+ LC LR 10km SMF Transceiver</li> <li>Aruba 10G SFP+ LC ER 40km SMF Transceiver</li> <li>Aruba 10G SFP+ to SFP+ 1m Direct Attach Copper Cable</li> <li>Aruba 10G SFP+ to SFP+ 3m Direct Attach Copper Cable</li> </ul>	J9150D J9151E J9153D J9281D J9283D
3	If this switch is factory installed in HPE Racks, Then the J9583A#0D1 is required.	
4	CLIC Only - Allow the J9583AZ in all regions.	
5	Localization required on orders without #B2B, #B2C, #B2E options.	
6	If this Switch Chassis is selected for Rack Level Integration, Then the Switch Chassis needs to integrate (with #0D1) to the HPE Rack.	
Remarks:	<p>TAA Switch Chassis are available in the US, UK, Israel, Vietnam, South Korea, India and Taiwan only.</p> <p>Drop down under power supply should offer the following options and results:</p> <p>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)</p> <p>Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)</p> <p>#AC3 - No Power Cord.</p> <p>Enter the following menu selections as integrated to the CTO Model X server above if order is factory built.</p>	

## Configuration Information

### Transceivers

Rule #	Description	SKU
<b>SFP Transceivers</b>		
	Aruba 100M SFP LC FX 2km MMF Transceiver	J9054D
	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
<b>SFP+ Transceivers</b>		
	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	J9283D

### Cables

Rule #	Description	SKU
<b>Console Cables</b>		
	(std 0 // max 99) User Selection (min 0 // max 99) per switch	
	Aruba X2C2 RJ45 to DB9 Console Cable	JL448A
<b>Multi-Mode Cables</b>		
	(std 0 // max 99) User Selection (min 0 // max 99) per switch	
	HPE LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
	HPE LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
	HPE LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
	HPE LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
	HPE LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
	HPE LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
	HPE LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A

## Configuration Information

### Switch Enclosure Options

#### Mounting Kit

Rule #	Description	SKU
1, 2	(std 0 // max 1) User Selection (min 0 // max 1) per switch HPE X410 1U Universal 4-post Rackmount Kit	J9583A

#### Configuration Rules

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

#### Accessories

Rule #	Description	SKU
	For JL258A System (std 0 // max 1) User Selection (min 0 // max 1) per switch	
	Aruba 2930F 8-port Cable Guard	JL311A
	Aruba 2930F 8-port Power Shelf	JL312A

## Related Options

### Accessories

Rule #	Description	SKU
<b>Transceivers</b>		
	Aruba 100M SFP LC FX 2km MMF Transceiver	J9054D
	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	J8177D
	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 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	J9283D
<b>NOTE:</b>	No support for J9152D 10G LRM, nor J9285D 10G 7m DAC	
<b>Cables</b>		
	Aruba X2C2 RJ45 to DB9 Console Cable	JL448A
	HPE LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
	HPE LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
	HPE LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
	HPE LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
	HPE LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
	HPE LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
	HPE LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
	HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A
	• Aruba 2930F 24G 4SFP+ Switch (JL253A)	
	HPE X410 1U Universal 4-post Rackmount Kit	J9583A
	• Aruba 2930F 48G 4SFP+ Switch (JL254A)	
	HPE X410 1U Universal 4-post Rackmount Kit	J9583A
	• Aruba 2930F 24G PoE+ 4SFP+ Switch (JL255A)	
	HPE X410 1U Universal 4-post Rackmount Kit	J9583A
	• Aruba 2930F 48G PoE+ 4SFP+ Switch (JL256A)	
	HPE X410 1U Universal 4-post Rackmount Kit	J9583A
	• Aruba 2930F 8G PoE+ 2SFP+ Switch (JL258A)	
	Aruba 2930F 8-port Cable Guard	JL311A
	Aruba 2930F 8-port Power Shelf	JL312A
	• Aruba 2930F 24G 4SFP Switch (JL259A)	
	HPE X410 1U Universal 4-post Rackmount Kit	J9583A

## Related Options

- Aruba 2930F 48G 4SFP Switch (JL260A)  
HPE X410 1U Universal 4-post Rackmount Kit J9583A
- Aruba 2930F 24G PoE+ 4SFP Switch (JL261A)  
HPE X410 1U Universal 4-post Rackmount Kit J9583A
- Aruba 2930F 48G PoE+ 4SFP Switch (JL262A)  
HPE X410 1U Universal 4-post Rackmount Kit J9583A
- Aruba 2930F 24G PoE+ 4SFP+ TAA-compliant Switch (JL263A)  
HPE X410 1U Universal 4-post Rackmount Kit J9583A
- Aruba 2930F 48G PoE+ 4SFP+ TAA-compliant Switch (JL264A)  
HPE X410 1U Universal 4-post Rackmount Kit J9583A
- Aruba 2930F 48G PoE+ 4SFP 740W Switch (JL557A)  
HPE X410 1U Universal 4-post Rackmount Kit J9583A
- Aruba 2930F 48G PoE+ 4SFP+ 740W Switch (JL558A)  
HPE X410 1U Universal 4-post Rackmount Kit J9583A
- Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch (JL559A)  
HPE X410 1U Universal 4-post Rackmount Kit J9583A

**NOTE:** Details are not available for all accessories. The following specifications were available at the time of publication.

## Technical Specifications

### 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

<b>Product Type</b>	Mounting Kit
<b>Physical characteristics</b>	<b>Dimensions:</b> 1.42(w) x 4.33(d) x 0.69(h) in (3.6 x 11 x 1.75 cm) <b>Weight:</b> 1.28 lb (0.58 kg)
<b>Notes</b>	<b>Dimensions:</b> 10.94" x 3.62" x 1.69" or 27.8cm x 9.2cm x 4.3cm w/ears 10.94" x 1.69" x 1.69" or 27.8cm x 4.3cm x 4.3cm without ears <b>Weight:</b> 1.262 lbs or 57 kg (including faceplate, ears, and screws) 1.026 lbs or .47 kg (faceplate only)
<b>Warranty</b>	Limited Lifetime Warranty: See <a href="http://www.hpe.com/networking/warrantysummary">http://www.hpe.com/networking/warrantysummary</a> for warranty and support information included with your product purchase.
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 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.

<b>Product Type</b>	Mounting Kit
<b>Physical characteristics</b>	<b>Dimensions:</b> 10.75(w) x 6(d) x 2(h) in (27.31 x 15.24 x 5.08 cm) <b>Weight:</b> 0.93 lb (0.42 kg)
<b>Overall Positioning Statement</b>	The Aruba 2930F 8-port Power Shelf provides an easy to use solution for attaching the external power adapter 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.
<b>Key Features</b>	Quickly attach external power adapter to 8 port switch Designed for use with Aruba 2930F 8G PoE+ 2SFP+ Switch
<b>Notes</b>	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.
<b>Warranty</b>	Limited Lifetime Warranty: See <a href="http://www.hpe.com/networking/warrantysummary">http://www.hpe.com/networking/warrantysummary</a> for warranty and support information included with your product purchase.
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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.

## Technical Specifications

### HPE LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable (AJ833A)

<b>Cabling</b>	<p><b>Cable type:</b> 50/125 <math>\mu\text{m}</math> (core/cladding) diameter, multimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m</p> <p><b>Maximum distance:</b> 10Gbps Transfer Rate (Ethernet): 300m</p>
<b>Notes</b>	<p><b>Cable Specs:</b> Tight buffered duplex fiber optic multimode OM3 50/125 <math>\mu\text{m}</math> fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.</p> <p><b>Dimensions:</b> Core diameter: <math>50 \pm 3.0\mu\text{m}</math> Cladding diameter: <math>125 \pm 2.0\mu\text{m}</math> Coating diameter: <math>245 \pm 10\mu\text{m}</math></p> <p><b>Optical glass:</b> Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</p> <p><b>Optical glass:</b> Bandwidth: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.</p> <p><b>CABLE:</b> The cable is duplex zipcord graded index 50/125um multimode optical fiber and designed to work in both the 850 and 1300 nm wavelength windows.</p>
	<p><b>Bulk Cable &amp; Cable Assembly Configuration:</b></p> <p><b>Jacket Material:</b> Riser Grade - Low Smoke Zero Halogen thermoplastic.</p> <p><b>Jacket Color:</b> Aqua for OM3 multimode per TIA 598</p> <p><b>Boot Color:</b> White</p> <p><b>Insertion Loss:</b> less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</p> <p><b>Maximum Cable attenuation:</b> 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.</p> <p><b>Weight:</b> Air Packed Weight: 1 LB Net Weight: 0.454Kg</p>

### Services

### HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable (QK732A)

<b>Notes</b>	<p><b>Cable Specs:</b> Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.</p> <p><b>Core Diameter:</b> 50um <math>\pm 3\mu\text{m}</math>, Cladding diameter: 125um <math>\pm 2\mu\text{m}</math>; Coating diameter: 245 <math>\pm 10\mu\text{m}</math></p> <p><b>Bandwidth:</b> 3000 MHz-km @ 850nm (Laser)</p> <p><b>Jacket Color:</b> Blue</p> <p><b>Jacket Material:</b> Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</p> <p><b>Boot Color:</b> White</p> <p><b>Outer Jacket Print:</b> HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable</p> <p><b>Insertion Loss:</b> Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</p> <p><b>Maximum Cable Attenuation:</b> 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</p>
<b>Services</b>	<p>Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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.</p>

## Technical Specifications

### HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable (QK733A)

<b>Notes</b>	<p><b>Cable Specs:</b> Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.</p> <p><b>Core diameter:</b> 50um <math>\pm</math>3um, Cladding diameter: 125um <math>\pm</math>2um; Coating diameter: 245 <math>\pm</math> 10um</p> <p><b>Bandwidth:</b> 3000 MHz-km @ 850nm (Laser)</p> <p><b>Jacket Color:</b> Blue</p> <p><b>Jacket Material:</b> Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</p> <p><b>Boot Color:</b> White</p> <p><b>Outer Jacket Print:</b> HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.</p> <p><b>Insertion Loss:</b> Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</p> <p><b>Maximum Cable Attenuation:</b> 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</p>
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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.

### HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable (QK734A)

<b>Notes</b>	<p><b>Cable Specs:</b> Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.</p> <p><b>Core diameter:</b> 50um <math>\pm</math>3um, Cladding diameter: 125um <math>\pm</math>2um; Coating diameter: 245 10um</p> <p><b>Bandwidth:</b> 3000 MHz-km @ 850nm (Laser)</p> <p><b>Jacket Color:</b> Blue</p> <p><b>Jacket Material:</b> Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</p> <p><b>Boot Color:</b> White</p> <p><b>Outer Jacket Print:</b> HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable</p> <p><b>Insertion Loss:</b> Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</p> <p><b>Maximum Cable Attenuation:</b> 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</p>
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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.

### HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable (QK735A)

<b>Notes</b>	<p><b>Cable Specs:</b> Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.</p> <p><b>Core diameter:</b> 50um <math>\pm</math>3um, Cladding diameter: 125um <math>\pm</math>2um; Coating diameter: 245 <math>\pm</math> 10um</p> <p><b>Bandwidth:</b> 3000 MHz-km @ 850nm (Laser)</p> <p><b>Jacket Color:</b> Blue</p> <p><b>Jacket Material:</b> Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</p> <p><b>Boot Color:</b> White</p> <p><b>Outer Jacket Print:</b> HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable</p> <p><b>Insertion Loss:</b> Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</p> <p><b>Maximum Cable Attenuation:</b> 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</p>
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## Technical Specifications

### 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.

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### HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable (QK736A)

#### Notes

**Cable Specs:** Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.  
**Core diameter:** 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um  
**Bandwidth:** 3000 MHz-km @ 850nm (Laser)  
**Jacket Color:** Blue  
**Jacket Material:** Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic.  
**Boot Color:** White  
**Outer Jacket Print:** HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.  
**Insertion Loss:** Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m  
**Maximum Cable Attenuation:** 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

#### 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.

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### HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable (QK737A)

#### Notes

**Cable Specs:** Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.  
**Core diameter:** 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um  
**Bandwidth:** 3000 MHz-km @ 850nm (Laser)  
**Jacket Color:** Blue  
**Jacket Material:** Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic  
**Boot Color:** White  
**Outer Jacket Print:** HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.  
**Insertion Loss:** Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m  
**Maximum Cable Attenuation:** 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

#### 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.

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## Technical Specifications

### Aruba 2930F 24G 4SFP+ Switch (JL253A)

<b>I/O ports and slots</b>	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+ 1/10GbE ports; PHY-less
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<b>Dimensions</b> 17.42(w) x 7.88(d) x 1.73(h) in (44.25 x 20.02 x 4.39 cm) (1U height) <b>Weight</b> 5.31 lb (2.41 kg)
<b>Memory and processor</b>	Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.875MB Egress, 4 GB eMMC
<b>Performance</b>	<b>1000 Mb Latency</b> < 3.8 µs (64-byte packets) <b>10 Gbps Latency</b> < 1.6 µs (64-byte packets) <b>Throughput</b> up to 95.2 Mpps <b>Switching capacity</b> 128 Gbps <b>Routing table size</b> 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP <b>MAC address table size</b> 32768 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) <b>Operating relative humidity</b> up to 10000 Feet <b>Nonoperating/Storage temperature</b> 15% to 95% @ 104°F (40°C), noncondensing <b>Nonoperating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C); up to 15000 Feet <b>Acoustic</b> Power: 49.7 dB, Pressure: 37.1 dB <b>Airflow direction</b> Side-to-side
<b>Electrical characteristics</b>	<b>Maximum heat dissipation</b> 100 BTU/hr (105.5 kJ/hr) <b>Voltage</b> 100 - 127 / 200 - 240 VAC, rated <b>Current</b> 0.6/0.4 A <b>Maximum power rating</b> 29.3 W <b>Idle power</b> 19.5 W <b>Frequency</b> 50/60 Hz <b>NOTES:</b> 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.
<b>Safety</b>	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
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
<b>Immunity</b>	<b>Generic</b> EN 55024:2010/CISPR 24 <b>ESD</b> IEC 61000-4-2 <b>Radiated</b> IEC 61000-4-3 <b>EFT/Burst</b> IEC 61000-4-4 <b>Surge</b> IEC 61000-4-5 <b>Conducted</b> IEC 61000-4-6

## Technical Specifications

<b>Management</b>	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)
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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)

<b>I/O ports and slots</b>	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 4 SFP+ 1/10GbE ports; PHY-less
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<p><b>Dimensions</b> 17.42(w) x 9.7(d) x 1.73(h) in (44.25 x 24.63 x 4.39 cm) (1U height)</p> <p><b>Weight</b> 6.83 lb (3.10 kg)</p>
<b>Memory and processor</b>	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
<b>Performance</b>	<p><b>1000 Mb Latency</b> &lt; 3.8 µs (64-byte packets)</p> <p><b>10 Gbps Latency</b> &lt; 1.6 µs (64-byte packets)</p> <p><b>Throughput</b> up to 112.0 Mpps</p> <p><b>Switching capacity</b> 176 Gbps</p> <p><b>Routing table size</b> 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP</p> <p><b>MAC address table size</b> 32768 entries</p>
<b>Environment</b>	<p><b>Operating temperature</b> 32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet</p> <p><b>Operating relative humidity</b> 15% to 95% @ 104°F (40°C), noncondensing</p> <p><b>Nonoperating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C); up to 15000 Feet</p> <p><b>Nonoperating/Storage temperature</b> 15% to 95% @ 149°F (65°C), noncondensing</p> <p><b>Acoustic</b> Power: 54.1 dB, Pressure: 40.2 dB</p> <p><b>Airflow direction</b> Side-to-side</p>
<b>Electrical characteristics</b>	<p><b>Maximum heat dissipation</b> 157.2 BTU/hr (165.8 KJ/hr)</p> <p><b>Voltage</b> 100 - 127 / 200 - 240 VAC, rated</p> <p><b>Current</b> 0.9/0.6 A</p> <p><b>Maximum power rating</b> 46.6 W</p> <p><b>Idle power</b> 32.7 W</p> <p><b>Frequency</b> 50/60 Hz</p> <p><b>NOTES:</b></p> <p style="color: red;">Idle power is the actual power consumption of the device with no ports connected..</p> <p style="color: red;">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..</p>

## Technical Specifications

<b>Safety</b>	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																				
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<b>Immunity</b>	<table> <tr> <td><b>Generic</b></td><td>EN 55024:2010/CISPR 24</td></tr> <tr> <td><b>ESD</b></td><td>IEC 61000-4-2</td></tr> <tr> <td><b>Radiated</b></td><td>IEC 61000-4-3</td></tr> <tr> <td><b>EFT/Burst</b></td><td>IEC 61000-4-4</td></tr> <tr> <td><b>Surge</b></td><td>IEC 61000-4-5</td></tr> <tr> <td><b>Conducted</b></td><td>IEC 61000-4-6</td></tr> <tr> <td><b>Power frequency magnetic field</b></td><td>IEC 61000-4-8</td></tr> <tr> <td><b>Voltage dips and interruptions</b></td><td>IEC 61000-4-11</td></tr> <tr> <td><b>Harmonics</b></td><td>IEC/EN 61000-3-2</td></tr> <tr> <td><b>Flicker</b></td><td>IEC/EN 61000-3-3</td></tr> </table>	<b>Generic</b>	EN 55024:2010/CISPR 24	<b>ESD</b>	IEC 61000-4-2	<b>Radiated</b>	IEC 61000-4-3	<b>EFT/Burst</b>	IEC 61000-4-4	<b>Surge</b>	IEC 61000-4-5	<b>Conducted</b>	IEC 61000-4-6	<b>Power frequency magnetic field</b>	IEC 61000-4-8	<b>Voltage dips and interruptions</b>	IEC 61000-4-11	<b>Harmonics</b>	IEC/EN 61000-3-2	<b>Flicker</b>	IEC/EN 61000-3-3
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<b>Harmonics</b>	IEC/EN 61000-3-2																				
<b>Flicker</b>	IEC/EN 61000-3-3																				
<b>Management</b>	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)																				
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 PoE+ 4SFP+ Switch (JL255A)

<b>I/O ports and slots</b>	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; 1000BASE-T: full only 4 SFP+ 1/10GbE ports; PHY-less												
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port												
<b>Physical characteristics</b>	<table> <tr> <td><b>Dimensions</b></td><td>17.42(w) x 11.98(d) x 1.73(h) in (44.25 x 30.42 x 4.39 cm) (1U height)</td></tr> <tr> <td><b>Weight</b></td><td>8.6 lb (3.9 kg)</td></tr> </table>	<b>Dimensions</b>	17.42(w) x 11.98(d) x 1.73(h) in (44.25 x 30.42 x 4.39 cm) (1U height)	<b>Weight</b>	8.6 lb (3.9 kg)								
<b>Dimensions</b>	17.42(w) x 11.98(d) x 1.73(h) in (44.25 x 30.42 x 4.39 cm) (1U height)												
<b>Weight</b>	8.6 lb (3.9 kg)												
<b>Memory and processor</b>	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												
<b>Performance</b>	<table> <tr> <td><b>1000 Mb Latency</b></td><td>&lt; 3.8 µs (64-byte packets)</td></tr> <tr> <td><b>10 Gbps Latency</b></td><td>&lt; 1.6 µs (64-byte packets)</td></tr> <tr> <td><b>Throughput</b></td><td>up to 95.2 Mpps</td></tr> <tr> <td><b>Switching capacity</b></td><td>128 Gbps</td></tr> <tr> <td><b>Routing table size</b></td><td>2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP</td></tr> <tr> <td><b>MAC address table size</b></td><td>32768 entries</td></tr> </table>	<b>1000 Mb Latency</b>	< 3.8 µs (64-byte packets)	<b>10 Gbps Latency</b>	< 1.6 µs (64-byte packets)	<b>Throughput</b>	up to 95.2 Mpps	<b>Switching capacity</b>	128 Gbps	<b>Routing table size</b>	2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP	<b>MAC address table size</b>	32768 entries
<b>1000 Mb Latency</b>	< 3.8 µs (64-byte packets)												
<b>10 Gbps Latency</b>	< 1.6 µs (64-byte packets)												
<b>Throughput</b>	up to 95.2 Mpps												
<b>Switching capacity</b>	128 Gbps												
<b>Routing table size</b>	2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP												
<b>MAC address table size</b>	32768 entries												
<b>Environment</b>	<table> <tr> <td><b>Operating temperature</b></td><td>32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet</td></tr> <tr> <td><b>Operating relative humidity</b></td><td>15% to 95% @ 104°F (40°C), noncondensing</td></tr> <tr> <td><b>Nonoperating/Storage temperature</b></td><td>-40°F to 158°F (-40°C to 70°C); up to 15000 Feet</td></tr> <tr> <td><b>Nonoperating/Storage temperature</b></td><td>15% to 95% @ 149°F (65°C), noncondensing</td></tr> <tr> <td><b>Acoustic</b></td><td>Power: 54.1 dB, Pressure: 40.2 dB</td></tr> <tr> <td><b>Airflow direction</b></td><td>Side-to-side</td></tr> </table>	<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet	<b>Operating relative humidity</b>	15% to 95% @ 104°F (40°C), noncondensing	<b>Nonoperating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet	<b>Nonoperating/Storage temperature</b>	15% to 95% @ 149°F (65°C), noncondensing	<b>Acoustic</b>	Power: 54.1 dB, Pressure: 40.2 dB	<b>Airflow direction</b>	Side-to-side
<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet												
<b>Operating relative humidity</b>	15% to 95% @ 104°F (40°C), noncondensing												
<b>Nonoperating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet												
<b>Nonoperating/Storage temperature</b>	15% to 95% @ 149°F (65°C), noncondensing												
<b>Acoustic</b>	Power: 54.1 dB, Pressure: 40.2 dB												
<b>Airflow direction</b>	Side-to-side												

## Technical Specifications

<b>Electrical characteristics</b>	<b>80plus.org Certification</b>	Silver
	<b>Maximum heat dissipation</b>	258.0 BTU/hr (272.2 KJ/hr)
	<b>Voltage</b>	100 - 127 / 200 - 240 VAC, rated
	<b>Current</b>	4.9/2.4 A
	<b>Maximum power rating</b>	445 W
	<b>Idle power</b>	36.8 W
	<b>PoE power</b>	370 W PoE+
	<b>Frequency</b>	50/60 Hz
	<b>NOTES:</b>	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..
<b>Safety</b>	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	
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438	
<b>Immunity</b>	<b>Generic</b> EN 55024:2010/CISPR 24 <b>ESD</b> IEC 61000-4-2 <b>Radiated</b> IEC 61000-4-3 <b>EFT/Burst</b> IEC 61000-4-4 <b>Surge</b> IEC 61000-4-5 <b>Conducted</b> IEC 61000-4-6 <b>Power frequency magnetic field</b> IEC 61000-4-8 <b>Voltage dips and interruptions</b> IEC 61000-4-11 <b>Harmonics</b> IEC/EN 61000-3-2 <b>Flicker</b> IEC/EN 61000-3-3	
<b>Management</b>	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)	
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 PoE+ 4SFP+ Switch (JL256A)

<b>I/O ports and slots</b>	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; 1000BASE-T: full only  4 SFP+ 1/10GbE ports; PHY-less
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<b>Dimensions</b> 17.42(w) x 11.98(d) x 1.73(h) in (44.25 x 30.42 x 4.39 cm) (1U height) <b>Weight</b> 9.83 lb (4.46 kg)
<b>Memory and processor</b>	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

<b>Performance</b>	<b>1000 Mb Latency</b>	< 3.8 µs (64-byte packets)
	<b>10 Gbps Latency</b>	< 1.6 µs (64-byte packets)
	<b>Throughput</b>	up to 112.0 Mpps
	<b>Switching capacity</b>	176 Gbps
	<b>Routing table size</b>	2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP
	<b>MAC address table size</b>	32768 entries
<b>Environment</b>	<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C); up to 5000 Feet, -0C to 40C (32F to 104F) up to 10000 Feet
	<b>Operating relative humidity</b>	15% to 95% @ 104°F (40°C), noncondensing
	<b>Nonoperating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet
	<b>Nonoperating/Storage temperature</b>	15% to 95% @ 149°F (65°C), noncondensing
	<b>Acoustic</b>	Power: 55.7 dB, Pressure: 41.7 dB
	<b>Airflow direction</b>	Side-to-side
<b>Electrical characteristics</b>	<b>80plus.org Certification</b>	Silver
	<b>Maximum heat dissipation</b>	293.0 BTU/hr (309.1 kJ/hr)
	<b>Voltage</b>	100 - 127 / 200 - 240 VAC, rated
	<b>Current</b>	5.1/2.5 A
	<b>Maximum power rating</b>	459 W
	<b>Idle power</b>	48.6 W
	<b>PoE power</b>	370 W PoE+
	<b>Frequency</b>	50/60 Hz
	<b>NOTES:</b>	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.
<b>Safety</b>	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	
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438	
<b>Immunity</b>	<b>Generic</b> EN 55024:2010/CISPR 24 <b>ESD</b> IEC 61000-4-2 <b>Radiated</b> IEC 61000-4-3 <b>EFT/Burst</b> IEC 61000-4-4 <b>Surge</b> IEC 61000-4-5 <b>Conducted</b> IEC 61000-4-6 <b>Power frequency magnetic field</b> IEC 61000-4-8 <b>Voltage dips and interruptions</b> IEC 61000-4-11 <b>Harmonics</b> IEC/EN 61000-3-2 <b>Flicker</b> IEC/EN 61000-3-3	
<b>Management</b>	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)	
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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.	

## Technical Specifications

### Aruba 2930F 8G PoE+ 2SFP+ Switch (JL258A)

<b>I/O ports and slots</b>	8 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; 1000BASE-T: full only 2 SFP+ 1/10GbE ports; PHY-less
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<b>Dimensions</b> 10(w) x 10(d) x 1.73(h) in (25.4 x 25.4 x 4.39 cm) (1U height) <b>Weight</b> 4.41 lb (2.0 kg)
<b>Memory and processor</b>	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
<b>Performance</b>	<b>1000 Mb Latency</b> < 3.8 µs (64-byte packets) <b>10 Gbps Latency</b> < 1.6 µs (64-byte packets) <b>Throughput</b> up to 41.7 Mpps <b>Switching capacity</b> 56 Gbps <b>Routing table size</b> 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP <b>MAC address table size</b> 32768 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C); up to 5000 Feet, -0C to 40C (32F to 104F) <b>Operating relative humidity</b> up to 10000 Feet <b>Nonoperating/Storage temperature</b> 15% to 95% @ 104°F (40°C), noncondensing <b>Nonoperating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C); up to 15000 Feet <b>Acoustic</b> Power: 0 dB, Pressure: 0 dB Fanless
<b>Electrical characteristics</b>	<b>Description</b> Power supply meets DoE VI certification. <b>Maximum heat dissipation</b> 58.6 BTU/hr (61.8 kJ/hr) <b>Voltage</b> 90 - 264 VAC, rated <b>Current</b> 2.6 A <b>Maximum power rating</b> 155 W <b>PoE power</b> 125 W PoE+ <b>Frequency</b> 50/60 Hz <b>NOTES:</b> 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).
<b>Safety</b>	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
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
<b>Immunity</b>	<b>Generic</b> EN 55024:2010/CISPR 24 <b>ESD</b> IEC 61000-4-2 <b>Radiated</b> IEC 61000-4-3 <b>EFT/Burst</b> IEC 61000-4-4 <b>Surge</b> IEC 61000-4-5

## Technical Specifications

<b>Conducted</b>	IEC 61000-4-6
<b>Power frequency magnetic field</b>	IEC 61000-4-8
<b>Voltage dips and interruptions</b>	IEC 61000-4-11
<b>Harmonics</b>	IEC/EN 61000-3-2
<b>Flicker</b>	IEC/EN 61000-3-3
<b>Management</b>	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)
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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)

<b>I/O ports and slots</b>	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
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<b>Dimensions</b> 17.42(w) x 7.88(d) x 1.73(h) in (44.25 x 20.02 x 4.39 cm) (1U height) <b>Weight</b> 5.31 lb (2.41 kg)
<b>Memory and processor</b>	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
<b>Performance</b>	<b>1000 Mb Latency</b> < 3.8 µs (64-byte packets) <b>Throughput</b> up to 41.7 Mpps <b>Switching capacity</b> 56 Gbps <b>Routing table size</b> 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP <b>MAC address table size</b> 32768 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C); up to 5000 Feet, -0C to 40C (32F to 104F) <b>Operating relative humidity</b> up to 10000 Feet <b>Nonoperating/Storage temperature</b> 15% to 95% @ 104°F (40°C), noncondensing <b>Nonoperating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C); up to 15000 Feet <b>Acoustic</b> Power: 49.7 dB, Pressure: 37.1 dB <b>Airflow direction</b> Side-to-side
<b>Electrical characteristics</b>	<b>Maximum heat dissipation</b> 100 BTU/hr (105.5 kJ/hr) <b>Voltage</b> 100 - 127 / 200 - 240 VAC, rated <b>Current</b> 0.6/0.4 A <b>Maximum power rating</b> 29.3 W <b>Idle power</b> 19.5 W <b>Frequency</b> 50/60 Hz <b>NOTES:</b> 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.

## Technical Specifications

<b>Safety</b>	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																				
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438																				
<b>Immunity</b>	<table> <tr> <td><b>Generic</b></td><td>EN 55024:2010/CISPR 24</td></tr> <tr> <td><b>ESD</b></td><td>IEC 61000-4-2</td></tr> <tr> <td><b>Radiated</b></td><td>IEC 61000-4-3</td></tr> <tr> <td><b>EFT/Burst</b></td><td>IEC 61000-4-4</td></tr> <tr> <td><b>Surge</b></td><td>IEC 61000-4-5</td></tr> <tr> <td><b>Conducted</b></td><td>IEC 61000-4-6</td></tr> <tr> <td><b>Power frequency magnetic field</b></td><td>IEC 61000-4-8</td></tr> <tr> <td><b>Voltage dips and interruptions</b></td><td>IEC 61000-4-11</td></tr> <tr> <td><b>Harmonics</b></td><td>IEC/EN 61000-3-2</td></tr> <tr> <td><b>Flicker</b></td><td>IEC/EN 61000-3-3</td></tr> </table>	<b>Generic</b>	EN 55024:2010/CISPR 24	<b>ESD</b>	IEC 61000-4-2	<b>Radiated</b>	IEC 61000-4-3	<b>EFT/Burst</b>	IEC 61000-4-4	<b>Surge</b>	IEC 61000-4-5	<b>Conducted</b>	IEC 61000-4-6	<b>Power frequency magnetic field</b>	IEC 61000-4-8	<b>Voltage dips and interruptions</b>	IEC 61000-4-11	<b>Harmonics</b>	IEC/EN 61000-3-2	<b>Flicker</b>	IEC/EN 61000-3-3
<b>Generic</b>	EN 55024:2010/CISPR 24																				
<b>ESD</b>	IEC 61000-4-2																				
<b>Radiated</b>	IEC 61000-4-3																				
<b>EFT/Burst</b>	IEC 61000-4-4																				
<b>Surge</b>	IEC 61000-4-5																				
<b>Conducted</b>	IEC 61000-4-6																				
<b>Power frequency magnetic field</b>	IEC 61000-4-8																				
<b>Voltage dips and interruptions</b>	IEC 61000-4-11																				
<b>Harmonics</b>	IEC/EN 61000-3-2																				
<b>Flicker</b>	IEC/EN 61000-3-3																				
<b>Management</b>	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)																				
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 (JL260A)

<b>I/O ports and slots</b>	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 4 SFP												
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port												
<b>Physical characteristics</b>	<table> <tr> <td><b>Dimensions</b></td><td>17.42(w) x 9.7(d) x 1.73(h) in (44.25 x 24.63 x 4.39 cm) (1U height)</td></tr> <tr> <td><b>Weight</b></td><td>6.83 lb (3.10 kg)</td></tr> </table>	<b>Dimensions</b>	17.42(w) x 9.7(d) x 1.73(h) in (44.25 x 24.63 x 4.39 cm) (1U height)	<b>Weight</b>	6.83 lb (3.10 kg)								
<b>Dimensions</b>	17.42(w) x 9.7(d) x 1.73(h) in (44.25 x 24.63 x 4.39 cm) (1U height)												
<b>Weight</b>	6.83 lb (3.10 kg)												
<b>Memory and processor</b>	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												
<b>Performance</b>	<table> <tr> <td><b>1000 Mb Latency</b></td><td>&lt; 3.8 µs (64-byte packets)</td></tr> <tr> <td><b>Throughput</b></td><td>up to 77.4 Mpps</td></tr> <tr> <td><b>Switching capacity</b></td><td>104 Gbps</td></tr> <tr> <td><b>Routing table size</b></td><td>2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP</td></tr> <tr> <td><b>MAC address table size</b></td><td>32768 entries</td></tr> </table>	<b>1000 Mb Latency</b>	< 3.8 µs (64-byte packets)	<b>Throughput</b>	up to 77.4 Mpps	<b>Switching capacity</b>	104 Gbps	<b>Routing table size</b>	2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP	<b>MAC address table size</b>	32768 entries		
<b>1000 Mb Latency</b>	< 3.8 µs (64-byte packets)												
<b>Throughput</b>	up to 77.4 Mpps												
<b>Switching capacity</b>	104 Gbps												
<b>Routing table size</b>	2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP												
<b>MAC address table size</b>	32768 entries												
<b>Environment</b>	<table> <tr> <td><b>Operating temperature</b></td><td>32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet</td></tr> <tr> <td><b>Operating relative humidity</b></td><td>15% to 95% @ 104°F (40°C), noncondensing</td></tr> <tr> <td><b>Nonoperating/Storage temperature</b></td><td>-40°F to 158°F (-40°C to 70°C); up to 15000 Feet</td></tr> <tr> <td><b>Nonoperating/Storage temperature</b></td><td>15% to 95% @ 149°F (65°C), noncondensing</td></tr> <tr> <td><b>Acoustic</b></td><td>Power: 54.1 dB, Pressure: 40.2 dB</td></tr> <tr> <td><b>Airflow direction</b></td><td>Side-to-side</td></tr> </table>	<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet	<b>Operating relative humidity</b>	15% to 95% @ 104°F (40°C), noncondensing	<b>Nonoperating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet	<b>Nonoperating/Storage temperature</b>	15% to 95% @ 149°F (65°C), noncondensing	<b>Acoustic</b>	Power: 54.1 dB, Pressure: 40.2 dB	<b>Airflow direction</b>	Side-to-side
<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet												
<b>Operating relative humidity</b>	15% to 95% @ 104°F (40°C), noncondensing												
<b>Nonoperating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet												
<b>Nonoperating/Storage temperature</b>	15% to 95% @ 149°F (65°C), noncondensing												
<b>Acoustic</b>	Power: 54.1 dB, Pressure: 40.2 dB												
<b>Airflow direction</b>	Side-to-side												

## Technical Specifications

<b>Electrical characteristics</b>	<b>Maximum heat dissipation</b>	100.0 BTU/hr (105.5 kJ/hr)
	<b>Voltage</b>	100 - 127 / 200 - 240 VAC, rated
	<b>Current</b>	0.9/0.6 A
	<b>Maximum power rating</b>	46.6 W
	<b>Idle power</b>	32.7 W
	<b>Frequency</b>	50/60 Hz
	<b>NOTES:</b>	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.
<b>Safety</b>	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	
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438	
<b>Immunity</b>	<b>Generic</b> EN 55024:2010/CISPR 24 <b>ESD</b> IEC 61000-4-2: <b>Radiated</b> IEC 61000-4-3 <b>EFT/Burst</b> IEC 61000-4-4 <b>Surge</b> IEC 61000-4-5 <b>Conducted</b> IEC 61000-4-6 <b>Power frequency magnetic field</b> IEC 61000-4-8 <b>Voltage dips and interruptions</b> IEC 61000-4-11	
	<b>Harmonics</b> IEC/EN 61000-3-2 <b>Flicker</b> IEC/EN 61000-3-3	
<b>Management</b>	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)	
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 PoE+ 4SFP Switch (JL261A)

<b>I/O ports and slots</b>	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; 1000BASE-T: full only 4 SFP
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<b>Dimensions</b> 17.42(w) x 11.98(d) x 1.73(h) in (44.25 x 30.42 x 4.39 cm) (1U height) <b>Weight</b> 8.6 lb (3.9 kg)
<b>Memory and processor</b>	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

## Technical Specifications

<b>Performance</b>	<b>1000 Mb Latency</b>	< 3.8 µs (64-byte packets)
	<b>Throughput</b>	up to 41.7 Mpps
	<b>Switching capacity</b>	56 Gbps
	<b>Routing table size</b>	2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP
	<b>MAC address table size</b>	32768 entries
<b>Environment</b>	<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet
	<b>Operating relative humidity</b>	15% to 95% @ 104°F (40°C), noncondensing
	<b>Nonoperating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet
	<b>Nonoperating/Storage temperature</b>	15% to 95% @ 149°F (65°C)
	<b>Acoustic</b>	Power: 54.1 dB, Pressure: 40.6 dB
	<b>Airflow direction</b>	Side-to-side
<b>Electrical characteristics</b>	<b>80plus.org Certification</b>	Silver
	<b>Maximum heat dissipation</b>	258.0 BTU/hr (272.2 kJ/hr)
	<b>Voltage</b>	100 - 127 / 200 - 240 VAC, rated
	<b>Current</b>	4.9/2.4 A
	<b>Maximum power rating</b>	445 W
	<b>Idle power</b>	36.8 W
	<b>PoE power</b>	370 W PoE+
	<b>Frequency</b>	50/60 Hz
	<b>NOTES:</b>	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.
<b>Safety</b>	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	
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438	
<b>Immunity</b>	<b>Generic</b> EN 55024:2010/CISPR 24 <b>ESD</b> IEC 61000-4-2: <b>Radiated</b> IEC 61000-4-3 <b>EFT/Burst</b> IEC 61000-4-4 <b>Surge</b> IEC 61000-4-5 <b>Conducted</b> IEC 61000-4-6 <b>Power frequency magnetic field</b> IEC 61000-4-8 <b>Voltage dips and interruptions</b> IEC 61000-4-11	
	<b>Harmonics</b>	IEC/EN 61000-3-2
	<b>Flicker</b>	IEC/EN 61000-3-3
<b>Management</b>	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)	

## Technical Specifications

<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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.
<b>Aruba 2930F 48G PoE+ 4SFP Switch (JL262A)</b>	
<b>I/O ports and slots</b>	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; 1000BASE-T: full only 4 SFP
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<p><b>Dimensions</b> 17.42(w) x 11.98(d) x 1.73(h) in (44.25 x 30.42 x 4.39 cm) (1U height)</p> <p><b>Weight</b> 9.83 lb (4.46 kg)</p>
<b>Memory and processor</b>	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
<b>Performance</b>	<p><b>1000 Mb Latency</b> &lt; 3.8 µs (64-byte packets)</p> <p><b>Throughput</b> up to 77.4 Mpps</p> <p><b>Switching capacity</b> 104 Gbps</p> <p><b>Routing table size</b> 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP</p> <p><b>MAC address table size</b> 32768 entries</p>
<b>Environment</b>	<p><b>Operating temperature</b> 32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet</p> <p><b>Operating relative humidity</b> 15% to 95% @ 104°F (40°C), noncondensing</p> <p><b>Nonoperating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C); up to 15000 Feet</p> <p><b>Nonoperating/Storage temperature</b> 15% to 95% @ 149°F (65°C)</p> <p><b>Acoustic</b> Power: 55.7 dB, Pressure: 41.7 dB</p> <p><b>Airflow direction</b> Side-to-side</p>
<b>Electrical characteristics</b>	<p><b>80plus.org Certification</b> Silver</p> <p><b>Maximum heat dissipation</b> 293.0 BTU/hr (309.1 kJ/hr)</p> <p><b>Voltage</b> 100 - 127 / 200 - 240 VAC, rated</p> <p><b>Current</b> 5.1/2.5 A</p> <p><b>Maximum power rating</b> 459 W</p> <p><b>Idle power</b> 48.6 W</p> <p><b>PoE power</b> 370 W PoE+</p> <p><b>Frequency</b> 50/60 Hz</p> <p><b>NOTES:</b></p> <p style="color: #FF0000;">Idle power is the actual power consumption of the device with no ports connected.</p> <p style="color: #FF0000;">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.</p>
<b>Safety</b>	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
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438

## Technical Specifications

<b>Immunity</b>	<b>Generic</b>	EN 55024:2010/CISPR 24
	<b>ESD</b>	IEC 61000-4-2
	<b>Radiated</b>	IEC 61000-4-3
	<b>EFT/Burst</b>	IEC 61000-4-4
	<b>Surge</b>	IEC 61000-4-5
	<b>Conducted</b>	IEC 61000-4-6
	<b>Power frequency magnetic field</b>	IEC 61000-4-8
	<b>Voltage dips and interruptions</b>	IEC 61000-4-11
	<b>Harmonics</b>	IEC/EN 61000-3-2
	<b>Flicker</b>	IEC/EN 61000-3-3
<b>Management</b>	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)	
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 PoE+ 4SFP+ TAA-compliant Switch (JL263A)

<b>I/O ports and slots</b>	24 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; 1000BASE-T: full only 4 SFP+ 1/10GbE ports PHY-less
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<b>Dimensions</b> 17.42(w) x 11.98(d) x 1.73(h) in. (44.25 x 30.42 x 4.39 cm) (1U height) <b>Weight</b> 8.6 lb (3.9 kg)
<b>Memory and processor</b>	Dual Core ARM® 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
<b>Performance</b>	<b>1000 Mb Latency</b> < 3.8 µs (64-byte packets) <b>10 Gbps Latency</b> < 1.6 µs (64-byte packets) <b>Throughput</b> Up to 95.2 Mpps <b>Switching capacity</b> 128 Gbps <b>Routing table size</b> 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP <b>MAC address table size</b> 32,768 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C); up to 5000 Feet, -0°C to 40°C (32°F to 104°F) up to 10000 Feet <b>Operating relative humidity</b> 15% to 95% @ 104°F (40°C), noncondensing <b>Nonoperating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C); up to 15000 Feet <b>Nonoperating/Storage temperature</b> 15% to 95% @ 149°F (65°C) <b>Acoustic</b> Power: 54.1 dB, Pressure: 40.6 dB <b>Airflow direction</b> Side-to-side

## Technical Specifications

<b>Electrical characteristics</b>	<b>80plus.org Certification</b>	Silver
	<b>Maximum heat dissipation</b>	258.0 BTU/hr (272.2kJ/hr)
	<b>Voltage</b>	100-127 / 200-240 VAC, rated
	<b>Current</b>	4.9/2.4 A
	<b>Maximum power rating</b>	445 W
	<b>Idle power</b>	36.8 W
	<b>PoE power</b>	370 W PoE+
	<b>Frequency</b>	50/60 Hz
	<b>NOTES:</b>	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.
<b>Safety</b>	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	
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438	
<b>Immunity</b>	<b>Generic</b> EN 55024:2010/CISPR 24 <b>ESD</b> IEC 61000-4-2 <b>Radiated</b> IEC 61000-4-3 <b>EFT/Burst</b> IEC 61000-4-4 <b>Surge</b> IEC 61000-4-5 <b>Conducted</b> IEC 61000-4-6 <b>Power frequency magnetic field</b> IEC 61000-4-8 <b>Voltage dips and interruptions</b> IEC 61000-4-11	
	<b>Harmonics</b> IEC/EN 61000-3-2 <b>Flicker</b> IEC/EN 61000-3-3	
<b>Management</b>	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)	
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 PoE+ 4SFP+ TAA-compliant Switch (JL264A)

<b>I/O ports and slots</b>	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; 1000BASE-T: full only 4 SFP+ 1/10GbE ports PHY-less
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<b>Dimensions</b> 17.42(w) x 11.98(d) x 1.73(h) in. (44.25 x 30.42 x 4.39 cm) (1U height) <b>Weight</b> 9.83 lb (4.46 kg)
<b>Memory and processor</b>	Dual Core ARM® 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

## Technical Specifications

<b>Performance</b>	<b>1000 Mb Latency</b>	< 3.8 µs (64-byte packets)
	<b>10 Gbps Latency</b>	< 1.6 µs (64-byte packets)
	<b>Throughput</b>	Up to 112.0 Mpps
	<b>Switching capacity</b>	176 Gbps
	<b>Routing table size</b>	2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP
	<b>MAC address table size</b>	32,768 entries
<b>Environment</b>	<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C); up to 5000 Feet, -0°C to 40°C (32°F to 104°F) up to 10000 Feet
	<b>Operating relative humidity</b>	15% to 95% @ 104°F (40°C), noncondensing
	<b>Nonoperating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet
	<b>Nonoperating/Storage temperature</b>	15% to 95% @ 149°F (65°C)
	<b>Acoustic</b>	Power: 55.7 dB, Pressure: 41.7 dB
	<b>Airflow direction</b>	Side-to-side
<b>Electrical characteristics</b>	<b>80plus.org Certification</b>	Silver
	<b>Maximum heat dissipation</b>	293.0 BTU/hr (309.1 kJ/hr)
	<b>Voltage</b>	100-127 / 200-240 VAC, rated
	<b>Current</b>	5.1/2.5 A
	<b>Maximum power rating</b>	459 W
	<b>Idle power</b>	48.6 W
	<b>PoE power</b>	370 W PoE+
	<b>Frequency</b>	50/60 Hz
	<b>NOTES:</b>	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.
<b>Safety</b>	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	
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438	
<b>Immunity</b>	<b>Generic</b> EN 55024:2010/CISPR 24 <b>ESD</b> IEC 61000-4-2 <b>Radiated</b> IEC 61000-4-3 <b>EFT/Burst</b> IEC 61000-4-4 <b>Surge</b> IEC 61000-4-5 <b>Conducted</b> IEC 61000-4-6 <b>Power frequency magnetic field</b> IEC 61000-4-8 <b>Voltage dips and interruptions</b> IEC 61000-4-11	
	<b>Harmonics</b> IEC/EN 61000-3-2 <b>Flicker</b> IEC/EN 61000-3-3	
<b>Management</b>	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)	

## Technical Specifications

<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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.
<b>Aruba 2930F 48G PoE+ 4SFP 740W Switch (JL557A)</b>	
<b>I/O ports and slots</b>	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; 1000BASE-T: full only 4 SFP+
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<p><b>Dimensions</b> 17.42 (w) x 12.77 (d) x 1.73 (h) in (44.25 x 32.42 x 4.39 cm) (1U height)</p> <p><b>Weight</b> 10.56 lb (4.79 kg)</p>
<b>Memory and processor</b>	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
<b>Performance</b>	<p><b>1000 Mb Latency</b> &lt; 3.8 µs (64-byte packets)</p> <p><b>Throughput</b> up to 77.4 Mpps</p> <p><b>Switching capacity</b> 104 Gbps</p> <p><b>Routing table size</b> 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP</p> <p><b>MAC address table size</b> 32,768</p>
<b>Environment</b>	<p><b>Operating temperature</b> 32°F to 113°F (0°C to 45°C); up to 5,000 Feet, 0°C to 40°C (32°F to 104°F) up to 10,000 Feet</p> <p><b>Operating relative humidity</b> 15% to 95% @ 104°F (40°C), noncondensing</p> <p><b>Nonoperating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C); up to 15,000 Feet</p> <p><b>Nonoperating/Storage temperature</b> 15% to 95% @ 149°F (65°C)</p> <p><b>Acoustic (power and pressure) in decibals</b> Power: 55.1 dB, Pressure: 41.1 dB</p> <p><b>Airflow direction</b> Side to side</p>
<b>Electrical characteristics</b>	<p><b>80plus.org Certification</b> Gold</p> <p><b>Maximum heat dissipation</b> 420.9 BTU/hr (444.1 kJ/hr)</p> <p><b>Voltage</b> 100-127 / 200-240 VAC, rated</p> <p><b>Current</b> 9.2 / 4.9 A</p> <p><b>Maximum power rating</b> 980W</p> <p><b>Idle power</b> 49.9W</p> <p><b>PoE power</b> 740 W PoE+</p> <p><b>Frequency</b> 50/60 Hz</p> <p><b>NOTES:</b></p> <p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p>
<b>Safety</b>	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

## Technical Specifications

<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
<b>Immunity</b>	
<b>Generic</b>	EN 55024:2010/CISPR 24
<b>ESD</b>	IEC 61000-4-2
<b>Radiated</b>	IEC 61000-4-3
<b>EFT/Burst</b>	IEC 61000-4-4
<b>Surge</b>	IEC 61000-4-5
<b>Conducted</b>	IEC 61000-4-6
<b>Power frequency magnetic field</b>	IEC 61000-4-8
<b>Voltage dips and interruptions</b>	IEC 61000-4-11
<b>Harmonics</b>	IEC/EN 61000-3-2
<b>Flicker</b>	IEC/EN 61000-3-3
<b>Management</b>	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)
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 PoE+ 4SFP+ 740W Switch (JL558A)

<b>I/O ports and slots</b>	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; 1000BASE-T: full only 4 SFP+ 1/10GbE ports PHY-less
<b>Additional ports and slots</b>	1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	<p><b>Dimensions</b> 17.42 (w) x 12.77 (d) x 1.73 (h) in (44.25 x 32.42 x 4.39 cm) (1U height)</p> <p><b>Weight</b> 10.56 lb (4.79 kg)</p>
<b>Memory and processor</b>	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
<b>Performance</b>	<p><b>1000 Mb Latency</b> &lt; 3.8 µs (64-byte packets)</p> <p><b>10Gbps latency</b> &lt; 1.6 µs (64-byte packets)</p> <p><b>Throughput</b> up to 112.0 Mpps</p> <p><b>Switching capacity</b> 176 Gbps</p> <p><b>Routing table size</b> 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP</p> <p><b>MAC address table size</b> 32,768</p>

## Technical Specifications

<b>Environment</b>	<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C); up to 5,000 Feet, 0°C to 40°C (32°F to 104°F) up to 10,000 Feet
	<b>Operating relative humidity</b>	15% to 95% @ 104°F (40°C), noncondensing
	<b>Nonoperating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C); up to 15,000 Feet
	<b>Nonoperating/Storage temperature</b>	15% to 95% @ 149°F (65°C)
	<b>Acoustic (power and pressure) in decibals</b>	Power: 55.1 dB, Pressure: 41.1 dB
	<b>Airflow direction</b>	Side to side
<b>Electrical characteristics</b>	<b>80plus.org Certification</b>	Gold
	<b>Maximum heat dissipation</b>	420.9 BTU/hr (444.1 kJ/hr)
	<b>Voltage</b>	100-127 / 200-240 VAC, rated
	<b>Current</b>	9.2 / 4.9 A
	<b>Maximum power rating</b>	980W
	<b>Idle power</b>	49.9W
	<b>PoE power</b>	740 W PoE+
	<b>Frequency</b>	50/60 Hz
	<b>NOTES:</b>	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.
<b>Safety</b>	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	
<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438	
<b>Immunity</b>	<b>Generic</b> EN 55024:2010/CISPR 24 <b>ESD</b> IEC 61000-4-2 <b>Radiated</b> IEC 61000-4-3 <b>EFT/Burst</b> IEC 61000-4-4 <b>Surge</b> IEC 61000-4-5 <b>Conducted</b> IEC 61000-4-6 <b>Power frequency magnetic field</b> IEC 61000-4-8 <b>Voltage dips and interruptions</b> IEC 61000-4-11	
	<b>Harmonics</b>	IEC/EN 61000-3-2
	<b>Flicker</b>	IEC/EN 61000-3-3
<b>Management</b>	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)	
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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.	

## Technical Specifications

### Aruba 2930F 48G PoE+ 4SFP+ 740W TAA-compliant Switch (JL559A)

**I/O ports and slots** 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; 1000BASE-T: full only  
4 SFP+ 1/10GbE ports  
PHY-less

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

**Physical characteristics**

<b>Dimensions</b>	17.42 (w) x 12.77 (d) x 1.73 (h) in (44.25 x 32.42 x 4.39 cm) (1U height)
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<b>Weight</b>	10.56 lb (4.79 kg)
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<b>Memory and processor</b>	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
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<b>Performance</b>	<b>1000 Mb Latency</b> < 3.8 µs (64-byte packets)
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<b>10Gbps latency</b>	< 1.6 µs (64-byte packets)
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<b>Throughput</b>	up to 112.0 Mpps
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<b>Switching capacity</b>	176 Gbps
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<b>Routing table size</b>	2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP
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<b>MAC address table size</b>	32,768
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<b>Environment</b>	<b>Operating temperature</b>	32°F to 113°F (0°C to 45°C); up to 5,000 Feet, 0°C to 40°C (32°F to 104°F) up to 10,000 Feet
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<b>Operating relative humidity</b>	15% to 95% @ 104°F (40°C), noncondensing
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<b>Nonoperating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C); up to 15,000 Feet
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<b>Nonoperating/Storage temperature</b>	15% to 95% @ 149°F (65°C)
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<b>Acoustic (power and pressure) in decibals</b>	Power: 55.1 dB, Pressure: 41.1 dB
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<b>Airflow direction</b>	Side to side
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<b>Electrical characteristics</b>	<b>80plus.org Certification</b> Gold
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<b>Maximum heat dissipation</b>	420.9 BTU/hr (444.1 kJ/hr)
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<b>Voltage</b>	100-127 / 200-240 VAC, rated
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<b>Current</b>	9.2 / 4.9 A
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<b>Maximum power rating</b>	980W
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<b>Idle power</b>	49.9W
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<b>PoE power</b>	740 W PoE+
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<b>Frequency</b>	50/60 Hz
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<b>NOTES:</b>	Idle power is the actual power consumption of the device with no ports connected.
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	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.
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**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
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## Technical Specifications

<b>Emissions</b>	EN 55032:2012/CISPR 32 Class A; FCC CFR 47 Part 15 Class A; VCCI Class A; ICES-003 Class A; CNS 13438
<b>Immunity</b>	
<b>Generic</b>	EN 55024:2010/CISPR 24
<b>ESD</b>	IEC 61000-4-2
<b>Radiated</b>	IEC 61000-4-3
<b>EFT/Burst</b>	IEC 61000-4-4
<b>Surge</b>	IEC 61000-4-5
<b>Conducted</b>	IEC 61000-4-6
<b>Power frequency magnetic field</b>	IEC 61000-4-8
<b>Voltage dips and interruptions</b>	IEC 61000-4-11
<b>Harmonics</b>	IEC/EN 61000-3-2
<b>Flicker</b>	IEC/EN 61000-3-3
<b>Management</b>	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)
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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.

## Technical Specifications

### Standards and Protocols (applies to all products in series)

#### Denial of service protection

- CPU DoS Protection

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#### 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

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#### 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

## Technical Specifications

### General Protocols

- 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
- UDLD (Uni-directional Link Detection)

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### 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

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### 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

## Technical Specifications

### 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

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### MIBs

- IEEE 802.1ap (MSTP and STP MIB's only)
- IEEE 8021-Bridge-MIB (2008)
- IEEE 8021-Q-Bridge-MIB (2008)
- RFC 1155 Structure & ID of Mgmt Info for TCP/IP Internets
- RFC 1156 (TCP/IP MIB)
- RFC 1157 A Simple Network Management Protocol (SNMP)
- RFC 1213 MIB II
- RFC 1493 Bridge MIB
- RFC 1724 RIPv2 MIB
- RFC 2021 RMONv2 MIB
- RFC 2578 Structure of Management Information Version 2 (SMIV2)
- RFC 2579 Textual Conventions for SMIV2
- RFC 2580 Conformance Statements for SMIV2
- RFC 2613 SMON MIB
- RFC 2618 RADIUS Client MIB
- RFC 2620 RADIUS Accounting MIB
- RFC 2665 Ethernet-Like-MIB
- RFC 2668 802.3 MAU MIB
- RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
- RFC 2737 Entity MIB (Version 2)
- RFC 2819 RMON MIB
- RFC 2863 The Interfaces Group MIB
- RFC 2925 Ping MIB
- RFC 2932 IP (Multicast Routing MIB)
- RFC 2933 IGMP MIB
- RFC 3414 SNMP-User based-SM MIB
- RFC 3415 SNMP-View based-ACM MIB
- RFC 3417 Simple Network Management Protocol (SNMP) over IEEE 802 Networks
- RFC 3418 MIB for SNMPv3
- RFC 4836 Managed Objects for 802.3 Medium Attachment Units (MAU)

## Technical Specifications

### Network Management

- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
- RFC 1155 Structure of Management Information
- RFC 1157 SNMPv1
- RFC 2021 Remote Network Monitoring Management Information Base Version 2 using SMIv2
- RFC 2576 Coexistence between SNMP versions
- RFC 2578 Structure of Management Information Version 2 (SMIv2)
- RFC 2579 Textual Conventions for SMIv2
- RFC 2580 Conformance Statements for SMIv2
- RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
- RFC 2819 Remote Network Monitoring Management Information Base
- RFC 2856 Textual Conventions for Additional High Capacity Data Types
- RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations
- RFC 3164 BSD syslog Protocol
- RFC 3176 sFlow
- RFC 3411 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 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
- RFC 5424 Syslog Protocol
- ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
- SNMPv1/v2c/v3
- XMON

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### 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
-

## Technical Specifications

### Security

- IEEE 802.1X Port Based Network Access Control
- RFC 1321 The MD5 Message-Digest Algorithm
- RFC 1334 PPP Authentication Protocols (PAP)
- RFC 1492 An Access Control Protocol, Sometimes Called TACACS
- RFC 1492 TACACS+
- RFC 1994 PPP Challenge Handshake Authentication Protocol (CHAP)
- RFC 2082 RIP-2 MD5 Authentication
- RFC 2104 Keyed-Hashing for Message Authentication
- RFC 2138 RADIUS Authentication
- RFC 2139 RADIUS Accounting
- RFC 2246 Transport Layer Security (TLS)
- RFC 2548 Microsoft Vendor-specific RADIUS Attributes
- RFC 2618 RADIUS Authentication Client MIB
- RFC 2620 RADIUS Accounting Client MIB
- RFC 2698 A Two Rate Three Color Marker
- RFC 2716 PPP EAP TLS Authentication Protocol
- RFC 2818 HTTP Over TLS
- RFC 2865 RADIUS (client only)
- RFC 2865 RADIUS Authentication
- RFC 2866 RADIUS Accounting
- RFC 2867 RADIUS Accounting Modifications for Tunnel Protocol Support
- RFC 2868 RADIUS Attributes for Tunnel Protocol Support
- RFC 2869 RADIUS Extensions
- RFC 2882 NAS Requirements: Extended RADIUS Practices
- RFC 3162 RADIUS and IPv6
- RFC 3576 Dynamic Authorization Extensions to RADIUS
- RFC 3579 RADIUS Support For Extensible Authentication Protocol (EAP)
- RFC 3580 IEEE 802.1X RADIUS
- RFC 3580 IEEE 802.1X Remote Authentication Dial In User Service (RADIUS) Usage Guidelines
- RFC 4675 RADIUS Attributes
- RFC 6614 Transport Layer Security (TLS) Encryption over Radius (RadSec)
- RFC 7030 Enrollment over Secure Transport
- Access Control Lists (ACLs)
- draft-grant-tacacs-02 (TACACS)
- Guest VLAN for 802.1X
- MAC Authentication
- MAC Lockdown
- MAC Lockout
- Port Security
- Secure Sockets Layer (SSL)
- SSHv2 Secure Shell
- Web Authentication

## Summary of Changes

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



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