



## Aruba Instant On 1930 Switch Series

High performance, smart-managed switches designed with small businesses in mind

Whether you own a cafe, a design firm or a tech startup, a reliable and secure network plays a critical role in the success of your business. And you need a network solution that gives you peace of mind, allowing you to focus on growing your business instead of managing problems with your network.

**Aruba Instant On makes it easy to keep network users happy, mobile and IoT devices connected, and your network secure.**

The Aruba Instant On 1930 switches features advanced, smart-managed, fixed-configuration Gigabit switches designed for small businesses that are easy-to-deploy and affordable. They're made to handle today's bandwidth-heavy applications like voice and video conferencing, enabling consistent connectivity to enhance performance.

Using either the Instant On mobile app or the cloud-based web portal, you can quickly set up, monitor and manage the 1930 switch series from anywhere at any time. What's more, up to 30 W PoE power delivery is available out-of-the-box for your class 4 PoE devices, like access points, surveillance cameras and VoIP phones, all easily managed from the same platform.

Built-in security features protect your network from unauthorized access by allowing you to segment traffic and define access to each area of the network. **And all of this is included in the price of the hardware** – there are no hidden subscription or licensing fees.

### KEY FEATURES

Smart-managed layer 2+ Ethernet switch series ready to deploy in 8-, 24- and 48-port for non-PoE and Class 4 PoE (i.e. PoE+) models

PoE to power APs and IoT devices like IP phones, surveillance cameras and door locks

Two (2) dedicated 1G SFP fiber ports on 8-port models, and four (4) dedicated 1G/10G SFP+ fiber ports on 24-/48-port models to eliminate traffic bottlenecks across your network

Security controls let you define access in each area of your network, keeping your business data safe

Convenient mobile app and web-based GUI for set up, management and troubleshooting

### HIGHLIGHTS



#### Simplicity at its best

Plug-and-play switches that work together with Instant On APs right out of the box

Mobile app to easily setup, monitor and manage your network



#### Security you can count on

Protect your network from unauthorized access with IEEE 802.1X and VLANs

Automatic denial-of-service (DOS) monitors and protects the network against malicious attacks



#### We've got you covered

No extra licensing or subscription fees

Industry-leading limited lifetime warranty and support

## THE INSTANT ON DIFFERENTIATORS

### EASY SET UP AND MANAGEMENT

The Aruba Instant On mobile app allows you to set up, manage, and monitor Instant On switches and access points directly from your phone. Within the app, you get guided step-by-step instructions to install Instant On devices to get your network up and running quickly – no technical expertise required. And cloud-based access allows you to access the network from anywhere, at any time.

### NON-INTRUSIVE, AESTHETIC DESIGN

Aruba Instant On switches are designed to complement the sleek and clean look of the Instant On access points, and to blend discreetly into your site's environment. The 8-port models, as well as the 24- and 48-port non PoE+ models, are fan-less, making them ideal for quiet office deployments.

### HIGH PERFORMANCE WITH FLEXIBLE OPTIONS

The series consists of four (4) Class 4 PoE (PoE+) switches, and three (3) non-POE switches including 8- 24- and 48-port Gigabit Ethernet switches. The two (2) dedicated 1G SFP fiber ports on 8-port models, and four (4) dedicated 1G/10G SFP+ fiber ports on 24-/48-port models, ensure high performance and eliminate traffic bottlenecks across the network. Customizable features include basic Layer 2 features like VLANs and link aggregation, as well as advanced features such as Layer 3 IPv4 static routing, ACLs, and Spanning Tree Protocols, and IPv6 Host mode.

### OPTIMIZED USER EXPERIENCE

The Aruba Instant On mobile app provides common workflows for Instant On switches and access points making it easier to configure, monitor and manage your network remotely without the need for additional hardware like cloud keys or VPN. You can also update firmware on your Instant On devices directly from the cloud whenever you want, from wherever you are.

### SITE INVENTORY

The site inventory feature on the Instant On mobile app shows you all switches and AP's on a single screen, allowing you to quickly identify non-functioning devices and troubleshoot accordingly.

### MULTI-SITE MANAGEMENT

The cloud-hosted web interface and mobile app make it easy to manage multiple sites, multiple networks, distributed deployments and multi-tenant deployments. Each site is logically separated and has its own configuration, statistics, guest portal, and admin read/write privileges.

### BUILT-IN SECURITY

Built-in security features protect your network from external threats by blocking malware attacks and keeping unauthorized users off the network. Network traffic can be filtered and access restricted based on MAC and IP address.

### NO HIDDEN FEES

All features are included in the price of the hardware – there are no recurring subscription or licensing fees. Expert-level support and industry leading limited lifetime warranty are also included, along with chat support for the life of the product.

## KEY FEATURES

### MANAGEMENT

#### Cloud-based management for entire network

The cloud-hosted web interface and mobile app make it easy to manage networks with Instant On APs and Switches.

#### Simple local web GUI management

For management of individual switches, the intuitive Web GUI makes management simple, even for non-technical users. Supports up to five (5) HTTP and HTTP Secure (HTTPS) sessions.

#### Firmware update

Provides notification of the latest firmware with the ability to schedule update at a preferred time through Instant On mobile app and cloud-based web portal.

#### Default DHCP client mode

Allows the switch to be directly connected to a network, enabling plug-and-play operation. In the absence of a DHCP server on the network, the switch falls back to the static address 192.168.1.1.

#### Port mirroring

Enables traffic on a port or VLAN to be simultaneously sent to a network analyzer for monitoring.

#### Event logging and alerts

Provides detailed information for problem identification and resolution.

#### Account management

Allows administrators to add, modify, delete and transfer management accounts and passwords for secure access to Instant cloud management solution.

#### Locator LED

Allows users to set the locator LED on a specific switch to either turn on, blink, or turn off; simplifies troubleshooting by making it easy to locate a particular switch within a rack of similar switches.

### QUALITY OF SERVICE (QoS)

#### Traffic prioritization

Provides time-sensitive packets (like VoIP and video) with priority over other traffic based on DSCP or IEEE 802.1p classification.

#### IEEE 802.1p/Q VLAN tagging

Delivers data to devices based on the priority and type of traffic; supports IEEE 802.1Q.

#### Class of Service (CoS)

Sets the IEEE 802.1p/DSCP priority to queue mapping (4 queues). Supports strict priority queuing (SP) or weighted round robin (WRR) queuing. SP and WRR queuing can be configured on individual switch ports.

#### Advanced classifier based QoS

Classifies traffic using multiple match criteria based on Layer 2, 3, and 4 information.

### ACCESS SWITCHING

#### SFP/SFP+ fiber connectivity

Provides fiber connections for uplinks and other connections across longer distances than copper cabling can support. SFP ports are in addition to available copper Ethernet ports, providing a higher total number of available ports. Two (2) SFP 1G ports available on 8-port models and four (4) SFP+ 1G/10G ports on 24-/48 port models.

#### Ethernet Alliance Certified Class 4 PoE (PoE+; IEEE 802.3at)

Provides up to 30 W per port, which allows support of the class 4 PoE (i.e. PoE+) capable devices such as video IP phones, wireless access points, and advanced pan/tilt/zoom security cameras, as well as any 15.4 W IEEE 802.3af-compliant end device; mitigates the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments.

#### Auto-PoE power configuration

The switch automatically assigns the required power to a port for a PD device based on Link Layer Discovery Protocol (LLDP).

#### PoE power allocation

Support multiple methods (LLDP-MED automatic, class of PoE, or usage-based) to allocate PoE power for more efficient energy savings.

#### Auto MDI/MDI-X

Adjusts automatically for straight-through or crossover cables on all 10/100/1000 ports.

## KEY FEATURES

### NETWORK SECURITY

#### TPM-based security

Includes a Trusted Platform Module (TPM) for secure hardware-based generation and storage of cryptographic keys used for secure connection to the Instant On cloud portal.

#### IEEE 802.1Q VLAN support

Support for up to 256 VLANs with a VLAN ID range of 2-4093

#### IEEE 802.1X access control

Authentication of network users on a per port basis prior to permitting network access. Port authentication includes RADIUS assigned VLAN, dynamic VLAN creation, guest VLAN or into an unauthenticated VLAN.

#### Automatic denial-of-service protection

Monitors for malicious attacks and protects the network by blocking the attacks.

#### Packet storm protection

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

#### RADIUS

The switch supports RADIUS authentication with primary and backup server configuration.

#### RADIUS accounting

A robust set of attributes and statistics are available for collecting information from the switch.

#### Management VLAN ID

Provides secure management access to administrators in the specified VLAN.

#### Link Flap prevention

Minimizes the network disruption by automatically detecting and disabling ports that experience link flap events.

### PERFORMANCE AND EFFICIENCY

#### Energy Efficient Ethernet (EEE)

Compliant with IEEE 802.3az standard requirements to save energy during periods of low data activity.

#### Auto-port shut down

The switch saves power by automatically shutting down power to inactive ports. Power is restored on a port upon link detection.

#### Energy savings status

The switch provides an estimated cumulative energy savings due to green Ethernet features being enabled.

#### Energy-efficient cooling

Includes variable speed fans operating only at the speed necessary to maintain operating temperature to reduce excess noise and power consumption.

#### Fan-less operation

Fan-less design for 8-port models, 24- and 48-port non-PoE models, making the switches ideal for office deployments.

### SWITCHING Features

#### IEEE 802.3x Flow control

Provides a flow-throttling mechanism propagated through the network to prevent packet loss at a congested node.

#### Spanning Tree Protocol (STP)

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

#### Loop protection

If the switch detects a loop, it disables the source port from forwarding data packets originating from the switch to avoid broadcast storms.

#### BPDU filtering

Drops BPDU packets when STP is enabled globally but disabled on a specific port.

#### Jumbo frame support

Supports up to 9216 bytes frame size to improve the performance of large data transfers.

#### IGMP snooping v1/v2

Improves network performance through multicast filtering, instead of flooding traffic on all ports.

#### Link aggregation

Groups together multiple ports up to a maximum of eight (8) ports per trunk automatically using Link Aggregation Control Protocol (LACP), or manually, to form a high-bandwidth connection to the network backbone that helps prevent traffic bottlenecks. The 8-port models support 4 trunks, 24-port models support 8 trunks, and 48-port models support 16 trunks.

## KEY FEATURES

### LLDP/LLDP-MED (Media Endpoint Discovery)

Defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN for automatic configuration of network devices such as IP phones.

### Address Resolution Protocol (ARP)

The ARP table displays all of the IP addresses that have been resolved to MAC addresses, either dynamically or through static entry configuration.

## FEATURES ACCESSED THROUGH LOCAL WEB-MANAGEMENT INTERFACE

### Static IPv4 routing

Supports manual routing configuration of up to 32 static routes.

### Auto-voice VLAN

Recognizes IP phones and automatically assigns voice traffic to dedicated VLAN for IP phones.

### PoE scheduling

A PoE scheduler provides the ability to define the hours of PoE power being supplied to a group of switch ports based on a 24-hour day. The scheduler enables the flexibility to select individual days of a week as well as reoccurrence on a weekly basis with a start and end date.

### Access Control Lists (ACLs)

Enables network traffic filtering by creating an ACL, adds rules and matches criteria to an ACL, and applies the ACL to permit or deny on one or more interfaces or a VLAN. Supports for 50 inbound IPv4 and MAC ACLs with up to 480 ACEs.

### IPv6 host

Enables switches to be managed and deployed at the IPv6 network's edge.

### Rate limiting

Sets and enforces per-port ingress traffic limits based on percentages or packets per second.

### ARP Attack prevention

Dynamic ARP protection blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data

### DHCP snooping

Provides network security by filtering untrusted DHCP messages

### Port security

Ports in a port isolation group are restricted from forwarding Layer 2 traffic between ports in that group, providing data privacy and security.

### SCP and TFTP file transfer

Provides different mechanisms for secure file transfer through SCP (Secure Copy Protocol) or TFTP.

### Dual image support

Provide independent primary and secondary software images for backup while upgrading.

### User account management

Password strength checking and aging feature provides enhanced security to user account administration to the local web management interface.

### Secure Sockets Layer (SSL)

Encrypts all HTTP traffic, secures access to the local browser-based management of the switch.

### SNMPv1, v2c, and v3

Facilitate management of the switch, as the device can be discovered and monitored from an SNMP management station.

### Remote monitoring (RMON)

Remote monitoring (RMON) provides advanced monitoring and reporting capabilities for statistics, history, alarms and events. RMON data is retrieved from the switch through a network management platform over SNMP.

## WARRANTY, SERVICE AND SUPPORT

Aruba Instant On Limited Lifetime Support provides 24X7 phone support for the first 90 days and chat support for the entire warranty period. Community support is included for the life of the product.

Refer to the Hewlett Packard Enterprise website at [hpe.com/networking/services](https://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.

## TECHNICAL SPECIFICATIONS

Specifications	Aruba Instant On 1930 8G 2SFP Switch (JL680A)	Aruba Instant On 1930 8G Class4 PoE 2SFP 124W Switch (JL681A)	Aruba Instant On 1930 24G 4SFP/SFP+ Switch (JL682A)	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 195W Switch (JL683A)
<b>I/O ports and slots</b>				
	8 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	8 RJ-45 autosensing 10/100/1000 Class 4 PoE 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	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	24 RJ-45 autosensing 10/100/1000 Class 4 PoE 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
	2 SFP 1GbE ports	2 SFP 1GbE ports	4 SFP+ 1/10GbE ports	4 SFP+ 1/10GbE ports
<b>Physical Characteristics</b>				
Dimensions	10(w) x 6.28(d) x 1.73(h) in (25.4 x 15.95 x 4.39 cm) (1U height)	10(w) x 10(d) x 1.73(h) in (25.4 x 25.4 x 4.39 cm) (1U height)	17.42(w) x 8.72(d) x 1.73(h) in (44.25 x 22.15 x 4.39 cm) (1U height)	17.42(w) x 10.42(d) x 1.73(h) in (44.25 x 26.47 x 4.39 cm) (1U height)
Weight	2.55 lb (0.82 kg)	7.21 lb (1.16 kg)	5.32 lb (2.41 kg)	7.71 lb (3.50 kg)
<b>Processor and memory</b>				
	ARM Cortex-A9 @ 800 MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5 MB	ARM Cortex-A9 @ 800 MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5 MB	ARM Cortex-A9 @ 800 MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5 MB	ARM Cortex-A9 @ 800 MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5 MB
<b>Performance</b>				
100 Mb Latency	< 5.2 uSec	< 5.2 uSec	< 4.7 uSec	< 4.7 uSec
packet size	64B	64B	64B	64B
1000 Mb Latency	<3.0 uSec	<3.0 uSec	<2.4 uSec	<2.4 uSec
packet size	64B	64B	64B	64B
10000 Mb Latency	n/a	n/a	< 1.3 uSec	< 1.3 uSec
packet size	n/a	n/a	64B	64B
Throughput (Mpps)	14.88 Mpps	14.88 Mpps	95.23 Mpps	95.23 Mpps
packet size	64B	64B	64B	64B
switching capacity	20 Gbps	20 Gbps	128 Gbps	128 Gbps
Routing Table size (# of static entries)	32 static entries	32 static entries	32 static entries	32 static entries
MAC Address table size (# of entries)	8,000 entries	8,000 entries	16,000 entries	16,000 entries
Reliability MTBF (years)	178	95	158	76
<b>Environment</b>				
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating relative humidity	15% to 95% @ 104°F (40°C)	15% to 95% @ 104°F (40°C)	15% to 95% @ 104°F (40°C)	15% to 95% @ 104°F (40°C)
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	15% to 95% @ 140°F (60°C)	15% to 95% @ 140°F (60°C)	15% to 95% @ 140°F (60°C)	15% to 95% @ 140°F (60°C)
Altitude	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)
Acoustic	Power: 0 dB no fan	Power: 0 dB no fan	Power: 0 dB no fan	Pressure: 46.1 dBA Power: 60.5 dB

## TECHNICAL SPECIFICATIONS

Specifications	Aruba Instant On 1930 8G 2SFP Switch (JL680A)	Aruba Instant On 1930 8G Class4 PoE 2SFP 124W Switch (JL681A)	Aruba Instant On 1930 24G 4SFP/SFP+ Switch (JL682A)	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 195W Switch (JL683A)
<b>Electrical Characteristics</b>				
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
AC voltage	100 - 240 VAC	100 - 127 / 200 - 240 VAC	100 - 127 / 200 - 240 VAC	100 - 127 / 200 - 240 VAC
Current	0.2 A	0.8/1.6 A	0.5/0.3 A	2.6/1.3 A
Maximum power rating	11.0 W	150.2 W	22.6 W	234.0 W
Idle power	6.2 W	11.7 W	9.3 W	19.3 W
PoE power		124 W Class 4 PoE		195 W Class 4 PoE
Power Supply	External power adapter (included)	Internal power supply	Internal power supply	Internal power supply
<b>Safety</b>				
	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1 UL 62368-1 Ed. 2; IEC 62368-1 Ed. 2; EN 62368-1:2014	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1 UL 62368-1 Ed. 2; IEC 62368-1 Ed. 2; EN 62368-1:2014	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1 UL 62368-1 Ed. 2; IEC 62368-1 Ed. 2; EN 62368-1:2014	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1 UL 62368-1 Ed. 2; IEC 62368-1 Ed. 2; EN 62368-1:2014
<b>Emissions</b>				
	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015 +AC:2016 / CISPR-32, Class A	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015 +AC:2016 / CISPR-32, Class A	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015 +AC:2016 / CISPR-32, Class A	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015 +AC:2016 / CISPR-32, Class A
<b>Immunity</b>				
Generic	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35
EN	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Device Management</b>				
	Aruba Instant On solution; Web browser; SNMP Manager	Aruba Instant On Portal; Web browser; SNMP Manager	Aruba Instant On Portal; Web browser; SNMP Manager	Aruba Instant On Portal; Web browser; SNMP Manager

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Specifications	Aruba Instant On 1930 8G 2SFP Switch (JL680A)	Aruba Instant On 1930 8G Class4 PoE 2SFP 124W Switch (JL681A)	Aruba Instant On 1930 24G 4SFP/SFP+ Switch (JL682A)	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 195W Switch (JL683A)
Accessories				
Transceivers	Aruba 1G SFP LC SX 500m MMF XCVR (J4858D) Aruba 1G SFP LC LX 10km SMF XCVR (J4859D) Aruba 1G SFP RJ45 T 100m Cat5e XCVR (J8177D)	Aruba 1G SFP LC SX 500m MMF XCVR (J4858D) Aruba 1G SFP LC LX 10km SMF XCVR (J4859D) Aruba 1G SFP RJ45 T 100m Cat5e XCVR (J8177D)	Aruba 1G SFP LC SX 500m MMF Transceiver (J4858D) Aruba 1G SFP LC LX 10km SMF Transceiver (J4859D) Aruba 1G SFP RJ45 T 100m Cat5e Transceiver (J8177D) Aruba 10G SFP+ LC SR 300m MMF Transceiver (J9150D) Aruba 10G SFP+ LC LR 10km SMF Transceiver (J9151E) Aruba 10G SFP+ to SFP+ 1m DAC (J9281D) Aruba 10G SFP+ to SFP+ 3m DAC (J9283D)	Aruba 1G SFP LC SX 500m MMF Transceiver (J4858D) Aruba 1G SFP LC LX 10km SMF Transceiver (J4859D) Aruba 1G SFP RJ45 T 100m Cat5e Transceiver (J8177D) Aruba 10G SFP+ LC SR 300m MMF Transceiver (J9150D) Aruba 10G SFP+ LC LR 10km SMF Transceiver (J9151E) Aruba 10G SFP+ to SFP+ 1m DAC (J9281D) Aruba 10G SFP+ to SFP+ 3m DAC (J9283D)

## TECHNICAL SPECIFICATIONS

Specifications	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 370W Switch (JL684A)	Aruba Instant On 1930 48G 4SFP/ SFP+ Switch (JL685A)	Aruba Instant On 1930 48G Class4 PoE 4SFP/SFP+ 370W Switch (JL686A)
<b>I/O ports and slots</b>			
	24 RJ-45 autosensing 10/100/1000 Class 4 PoE 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	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	48 RJ-45 autosensing 10/100/1000 Class 4 PoE 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
<b>Physical Characteristics</b>			
Dimensions	17.42(w) x 10.42(d) x 1.73(h) in (44.25 x 26.47 x 4.39 cm) (1U height)	17.42(w) x 11.12(d) x 1.73(h) in (44.25 x 28.24 x 4.39 cm) (1U height)	17.42(w) x 12.7(d) x 1.73(h) in (44.25 x 32.26 x 4.39 cm) (1U height)
Weight	8.10 lb (3.67kg)	6.91 lb (3.13 kg)	9.97 lb (4.52 kg)
<b>Processor and memory</b>			
	ARM Cortex-A9 @ 800 MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5 MB	ARM Cortex-A9 @ 800 MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5 MB	ARM Cortex-A9 @ 800 MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5 MB
<b>Performance</b>			
100 Mb Latency	< 4.7 uSec	< 4.5 uSec	< 4.5 uSec
packet size	64B	64B	64B
1000 Mb Latency	<2.4 uSec	< 2.2 uSec	< 2.2 uSec
packet size	64B	64B	64B
10000 Mb Latency	< 1.3 uSec	< 1.2 uSec	< 1.2 uSec
packet size	64B	64B	64B
Throughput (Mpps)	95.23 Mpps	130.95 Mpps	130.95 Mpps
packet size	64B	64B	64B
switching capacity	128 Gbps	176 Gbps	176 Gbps
Routing Table size (# of static entries)	32 static entries	32 static entries	32 entries
MAC Address table size (# of entries)	16,000 entries	16,000 entries	16,000 entries
Reliability MTBF (years)	71	114	57
<b>Environment</b>			
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating relative humidity	15% to 95% @ 104°F (40°C)	15% to 95% @ 104°F (40°C)	15% to 95% @ 104°F (40°C)
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	15% to 95% @ 140°F (60°C)	15% to 95% @ 140°F (60°C)	15% to 95% @ 140°F (60°C)
Altitude	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)
Acoustic	Pressure: 32.2 dBA Power: 58.5 dB	Power: 0 dB no fan	Pressure: 40.6 Power: 63.2 dB

## TECHNICAL SPECIFICATIONS

Specifications	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 370W Switch (JL684A)	Aruba Instant On 1930 48G 4SFP/ SFP+ Switch (JL685A)	Aruba Instant On 1930 48G Class4 PoE 4SFP/SFP+ 370W Switch (JL686A)
<b>Electrical Characteristics</b>			
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
AC voltage	100 - 127 / 200 - 240 VAC	100 - 127 / 200 - 240 VAC	100 - 127 / 200 - 240 VAC
Current	4.8/2.4 A	.8/5 A	5/2.5 A
Maximum power rating	439.0 W	36.9 W	460.0 W
Idle power	20.9 W	16.8 W	34.5 W
PoE power	370 W Class 4 PoE		370 W Class 4 PoE
Power supply	Internal power supply	Internal power supply	Internal power supply
<b>Safety</b>			
	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1 UL 62368-1 Ed. 2; IEC 62368-1 Ed. 2; EN 62368-1:2014	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1 UL 62368-1 Ed. 2; IEC 62368-1 Ed. 2; EN 62368-1:2014	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1 UL 62368-1 Ed. 2; IEC 62368-1 Ed. 2; EN 62368-1:2014
<b>Emissions</b>			
	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015 +AC:2016/CISPR-32, Class A	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015 +AC:2016/CISPR-32, Class A	VCCI-CISPR 32, Class A; CNS 13438; ICES-003 Issue 6 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015 +AC:2016/CISPR-32, Class A
<b>Immunity</b>			
Generic	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35	CISPR 24 / CISPR 35
EN	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017	EN 55024:2010 / EN 55035:2017
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Device Management</b>			
	Aruba Instant On Portal; Web browser; SNMP Manager	Aruba Instant On Portal; Web browser; SNMP Manager	Aruba Instant On Portal; Web browser; SNMP Manager

## TECHNICAL SPECIFICATIONS

Specifications	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 370W Switch (JL684A)	Aruba Instant On 1930 48G 4SFP/SFP+ Switch (JL685A)	Aruba Instant On 1930 48G Class4 PoE 4SFP/SFP+ 370W Switch (JL686A)
Accessories			
Transceivers	Aruba 1G SFP LC SX 500m MMF XCVR (J4858D) Aruba 1G SFP LC LX 10km SMF XCVR (J4859D) Aruba 1G SFP RJ45 T 100m Cat5e XCVR (J8177D)	Aruba 1G SFP LC SX 500m MMF XCVR (J4858D) Aruba 1G SFP LC LX 10km SMF XCVR (J4859D) Aruba 1G SFP RJ45 T 100m Cat5e XCVR (J8177D)	Aruba 1G SFP LC SX 500m MMF Transceiver (J4858D) Aruba 1G SFP LC LX 10km SMF Transceiver (J4859D) Aruba 1G SFP RJ45 T 100m Cat5e Transceiver (J8177D) Aruba 10G SFP+ LC SR 300m MMF Transceiver (J9150D) Aruba 10G SFP+ LC LR 10km SMF Transceiver (J9151E) Aruba 10G SFP+ to SFP+ 1m DAC (J9281D) Aruba 10G SFP+ to SFP+ 3m DAC (J9283D)

## STANDARDS AND PROTOCOLS

## (APPLIES TO ALL PRODUCTS IN SERIES)

## General protocols

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3z 1000BASE-X
- IEEE 802.2af PoE 1 (PoE models only)
- IEEE 802.3at PoE 1 (PoE models only)
- IEEE 802.3x Flow control
- IEEE 802.1Q VLANs
- IEEE 802.1p Priority
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.1X Port Access Authentication
- IEEE 802.3az Energy Efficient Ethernet
- IEEE 802.1D: Spanning Tree Protocol
- IEEE 802.1W: Rapid Spanning Tree Protocol
- IEEE 802.1S: Multiple Spanning Tree Protocol
- IEEE 802.1AB Link Layer Discovery Protocol
- Denial of service protection
- CPU DoS Protection

## ORDERING INFORMATION

## Aruba Instant On 1930 Switch Series

Part Number	Description	Gig Ports	Uplink Ports	Class 4 PoE
JL680A	Aruba Instant On 1930 8G 2SFP Switch	8	2 SFP	-
JL681A	Aruba Instant On 1930 8G Class4 PoE 2SFP 124W Switch	8	2 SFP	124W
JL682A	Aruba Instant On 1930 24G 4SFP/SFP+ Switch	24	4 SFP/SFP+	-
JL683A	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 195W Switch	24	4 SFP/SFP+	195W
JL684A	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 370W Switch	24	4 SFP/SFP+	370W
JL685A	Aruba Instant On 1930 48G 4SFP/SFP+ Switch	48	4 SFP/SFP+	-
JL686A	Aruba Instant On 1930 48G Class4 PoE 4SFP/SFP+ 370W Switch	48	4 SFP/SFP+	370W