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Instant ᴗn

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

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 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

Network security enabled with IEEE 802.1X, MAC authentication, VLANs, Network Access Control (ACL), and Port Security

Protection against compromised login credentials with Two-Factor Authentication

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.

BETTER TOGETHER WITH INSTANT ON

Instant On automatically detects and applies highest (critical) PoE priority to Instant On Access Points for uninterrupted power delivery and wireless network access. Wired and wireless voice traffic is prioritized with high QoS priority end-to-end for optimal voice performance.

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 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 AND TOPOLOGY VIEW

The site inventory view shows all Instant On switches and access points on a single interface, and the topology view provides an intuitive structure of all Instant On devices deployed on the network — allowing you to quickly identify non-functioning devices and troubleshoot accordingly. Network issues can be easily diagnosed with connectivity tests like Ping and Traceroute.

TWO-FACTOR AUTHENTICATION (2FA)

As the number of security breaches continues to rise, 2FA has become an essential tool to mitigate risk against compromised login credentials. Two-Factor Authentication (2FA), provides an additional layer of authentication, prevents attackers from remotely accessing the network, and secures sensitive customer information.

MULTI-SITE REMOTE MANAGEMENT

The cloud-hosted web interface and mobile app make it easy to remotely 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. Instant On allows you to create three admin accounts per site, offering the option to lock accounts from accidental deletion.

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.

Schedule configuration
Global Schedule feature can be applied to time-based ACLs, port or interface shutdown, or PoE power delivery, and up to 3 schedules can be configured. PoE scheduling allows user to configure a specific day/time of the week for Instant On switches to supply power to connected devices like surveillance cameras, printers and access points.

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.

Auto-voice network
Automatically recognizes IP phones and prioritize voice traffic. Easy setup to segment voice traffic to dedicated voice network for optimal performance.

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 (IEEE 802.3at)
Provides up to 30 W per port, which allows support of the class 4 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.

Brand	Standard	Class	Min. power at the PSE port	Max. power con- sumed at the PD port	Wire usage	EA Certified Logo
PoE 1	IEEE 802.3 af	0-3	15.4W	13W	2 pair	
	IEEE 802.3 at	4	30W	25.5W		

KEY FEATURES

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.

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

Network Access Control
Enable restricted access to protect the network by allowing connected devices to only reach specific destinations.

IEEE 802.1X port access control
Authentication of network users on a per port basis prior to permitting network access. Port authentication includes RADIUS assigned VLAN or dynamic VLAN creation.

Port Security — Allow List
Allow users to limit network access to specific clients per port.

Automatic denial-of-service protection
Monitors for malicious attacks and protects the network by blocking the attacks.

DHCP snooping
Provides network security by filtering untrusted DHCP messages.

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

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.

Automatic VLAN assignment — RADIUS assigned VLANs
Automatically assigns users to the appropriate VLAN based on their identity and location.

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.

KEY FEATURES

ROUTING FEATURES

Static IPv4 routing
Supports manual or DHCP IP address assignments to individual VLAN.

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.

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.

ADDITIONAL FEATURES ACCESSED THROUGH LOCAL WEB-MANAGEMENT INTERFACE

Top event dashboard
Provides notifications for critical events and quick access to the latest log events.

Quick start-up and VLAN wizard
Enables automatic configuring of initial settings such as IP address, device information, and system time. VLAN wizard can be used to set up initial VLAN IDs and port membership.

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 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.

Protected Ports
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. Additionally, user account authentication can now be done via RADIUS to access the web-interface.

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Secure Sockets Layer (SSL)

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

SNMPv1, v2c, and v3

Facilitates remote management with SNMP management station that discovers and monitors the switch.

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.

Cable diagnostic tool

Provides the mechanism to detect and report potential cabling issues, such as cable opens or cable shorts on copper links, in addition to providing distance to the fault and total length of cable.

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 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 (JL683B)
I/O ports and slots				
	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 2 SFP 1GbE ports	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 2 SFP 1GbE ports	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	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
Physical Characteristics				
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 (1.16 kg)	4.66 lb (2.11 kg)	5.32 lb (2.41 kg)	7.69 lb (3.49 kg)
Processor and Memory				
	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
Performance				
100 Mb Latency	< 5.2 uSec	< 5.2 uSec	< 4.7 uSec	< 4.7 uSec
1000 Mb Latency	<3.0 uSec	<3.0 uSec	<2.4 uSec	<2.4 uSec
10000 Mb Latency	n/a	n/a	< 1.3 uSec	< 1.3 uSec
Throughput (Mpps)	14.88 Mpps	14.88 Mpps	95.23 Mpps	95.23 Mpps
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
Environment				
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)
Acoustics[1]				
	Fanless	Fanless	Fanless	LWAd = 3.9 Bel LpAm (Bystander) = 25 dB

[1]Acoustics measured in 23°C semi-anechoic chamber with a loading of 100% traffic and 50% PoE on all ports. Measured in accordance with ISO 7779. Declared in accordance with ECMA-109:2010. Values presented are the Declared A-Weighted Sound Power Level (LWAd) and the mean Bystander A-Weighted Sound Pressure Level (LpAm)

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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 (JL683B)
Electrical Characteristics				
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 A/1.6 A	0.5 A /0.3 A	2.8 A/1.4 A
Maximum power rating	11.0 W	150.2 W	22.6 W	248.7W
Idle power	6.2 W	11.7 W	9.3 W	19.7W
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
Safety				
	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
Emissions				
	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
Immunity				
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
Device Management				
	Aruba Instant On Cloud; Web browser; SNMP Manager	Aruba Instant On Cloud; Web browser; SNMP Manager	Aruba Instant On Cloudl; Web browser; SNMP Manager	Aruba Instant On Cloud; 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 (JL683B)
Mounting				
	Supports table-top mounting Supports wall-mounting with ports facing either up or down Supports under-table mounting using base surface mounting holes	Mounts in an EIAstandard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rackmounting Supports wall-mounting with ports facing either up or down Supports under-table mounting using the brackets provided Supports under-table mounting using base surface mounting holes	Mounts in an EIAstandard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rackmounting Supports wall-mounting with ports facing either up or down Supports under-table mounting using the brackets provided Must be mounted top surface up. To prevent possible impact to longterm reliability, product should not be mounted upside-down	Mounts in an EIAstandard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rackmounting Supports wall-mounting with ports facing either up or down Supports under-table mounting using the brackets provided
Tranceivers				
	Aruba Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A) Aruba 1G SFP LC LX 10km SMF Transceiver (J4859D) Aruba Instant On 1G SFP RJ45 T 100m Cat5e Transceiver (R9D17A)		Aruba Instant On 10G SFP+ LC SR 300m OM3 MMF Transceiver (R9D18A) Aruba 10G SFP+ LC LR 10km SMF Transceiver (J9151E) Aruba Instant On 10G SFP+ to SFP+ 1m DAC (R9D19A) Aruba Instant On 10G SFP+ to SFP+ 3m DAC (R9D20A)	

TECHNICAL SPECIFICATIONS

Specifications	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 370W Switch (JL684B)	Aruba Instant On 1930 48G 4SFP/SFP+ Switch (JL685A)	Aruba Instant On 1930 48G Class4 PoE 4SFP/SFP+ 370W Switch (JL686B)
I/O ports and slots			
	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
Physical Characteristics			
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	8.23 lb (3.73 kg)	6.91 lb (3.13 kg)	10.12 lb (4.59 kg)
Processor and Memory			
	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
Performance			
100 Mb Latency	< 4.7 uSec	< 4.5 uSec	< 4.5 uSec
1000 Mb Latency	<2.4 uSec	< 2.2 uSec	< 2.2 uSec
10000 Mb Latency	< 1.3 uSec	< 1.2 uSec	< 1.2 uSec
Throughput (Mpps)	95.23 Mpps	130.95 Mpps	130.95 Mpps
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
Environment			
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)
Acoustics[1]			
	LWAd = 3.7 Bel LpAm (Bystander) = 23 dB	Fanless	LWAd = 4.0 Bel LpAm (Bystander) = 24 dB

[1]Acoustics measured in 23°C semi-anechoic chamber with a loading of 100% traffic and 50% PoE on all ports. Measured in accordance with ISO 7779. Declared in accordance with ECMA-109:2010. Values presented are the Declared A-Weighted Sound Power Level (LWAd) and the mean Bystander A-Weighted Sound Pressure Level (LpAm)

TECHNICAL SPECIFICATIONS

Specifications	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 370W Switch (JL684B)	Aruba Instant On 1930 48G 4SFP/ SFP+ Switch (JL685A)	Aruba Instant On 1930 48G Class4 PoE 4SFP/SFP+ 370W Switch (JL686B)
Electrical Characteristics			
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	4.9 A/2.4 A	.8 A/.5 A	5.2 A/2.6 A
Maximum power rating	440.4W	36.9 W	465.6W
Idle power	20.3W	16.8 W	38.3W
PoE power	370 W Class 4 PoE	–	370 W Class 4 PoE
Power supply	Internal power supply	Internal power supply	Internal power supply
Safety			
	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
Emissions			
	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
Immunity			
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
Device Management			
	Aruba Instant On Cloud; Web browser; SNMP Manager	Aruba Instant On Cloud; Web browser; SNMP Manager	Aruba Instant On Cloud; Web browser; SNMP Manager

TECHNICAL SPECIFICATIONS

Specifications	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 370W Switch (JL684B)	Aruba Instant On 1930 48G 4SFP/ SFP+ Switch (JL685A)	Aruba Instant On 1930 48G Class4 PoE 4SFP/SFP+ 370W Switch (JL686B)
Mounting			
	Mounts in an EIAstandard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rackmounting Supports wall-mounting with ports facing either up or down Supports under-table mounting using the brackets provided	Mounts in an EIAstandard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rackmounting Supports wall-mounting with ports facing either up or down Supports under-table mounting using the brackets provided Must be mounted top surface up. To prevent possible impact to longterm reliability, product should not be mounted upside-down	Mounts in an EIAstandard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rackmounting Supports wall-mounting with ports facing either up or down Supports under-table mounting using the brackets provided
Tranceivers			
	Aruba Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A) Aruba 1G SFP LC LX 10km SMF Transceiver (J4859D) Aruba Instant On 1G SFP RJ45 T 100m Cat5e Transceiver (R9D17A) Aruba Instant On 10G SFP+ LC SR 300m OM3 MMF Transceiver (R9D18A) Aruba 10G SFP+ LC LR 10km SMF Transceiver (J9151E) Aruba Instant On 10G SFP+ to SFP+ 1m DAC (R9D19A) Aruba Instant On 10G SFP+ to SFP+ 3m DAC (R9D20A)		

STANDARDS AND PROTOCOLS

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 (PoE models only)

- IEEE 802.3at PoE (PoE models only)

- IEEE 802.3x Flow control

- IEEE 802.1Q VLANS

- IEEE 802.1p Priority

- RFC 768, RFC 783, RFC 791, RFC 792, RFC 793, RFC 813,
  RFC 826, RFC 879, RFC 896, RFC 894, RFC 896, RFC 919,
  RFC 920, RFC 922, RFC 950, RFC 1027, RFC 1042, RFC 1071,
  RFC 1123, RFC 1141, RFC 1155, RFC 1157, RFC 1213, RFC
  1215, RFC 1286, RFC 1350, RFC 1442, RFC 1451, RFC 1493,
  RFC 1541, RFC 1573, RFC 1624, RFC 1643, RFC 1700, RFC
  1757, RFC 1867, RFC 1907, RFC 2011, RFC 2012, RFC 2013,
  RFC 2030, RFC 2131, RFC 2233, RFC 2236, RFC 2462, RFC
  2463, RFC 2464, RFC 2576, RFC 2579, RFC 2580, RFC 2616,
  RFC 2618, RFC 2665, RFC 2666, RFC 2674, RFC 2710, RFC
  2737, RFC 2819, RFC 2863, RFC 3019, RFC 3164, RFC 3176,
  RFC 3376, RFC 3411, RFC 3412, RFC 3413, RFC 3414, RFC
  3415, RFC 3416, RFC 4330, RFC 4443, RFC 4862, RFC 5424,
  RFC 5519, RFC 5722

- 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

ORDERING INFORMATION

Aruba Instant On 1930 Switch Series

Part Number	Description	Ports	Uplink Ports	Class 4 PoE Power Budget
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+	-
JL683B	Aruba Instant On 1930 24G Class4 PoE 4SFP/SFP+ 195W Switch	24	4 SFP/SFP+	195W
JL684B	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+	-
JL686B	Aruba Instant On 1930 48G Class4 PoE 4SFP/SFP+ 370W Switch	48	4 SFP/SFP+	370W

aruba Instant on

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