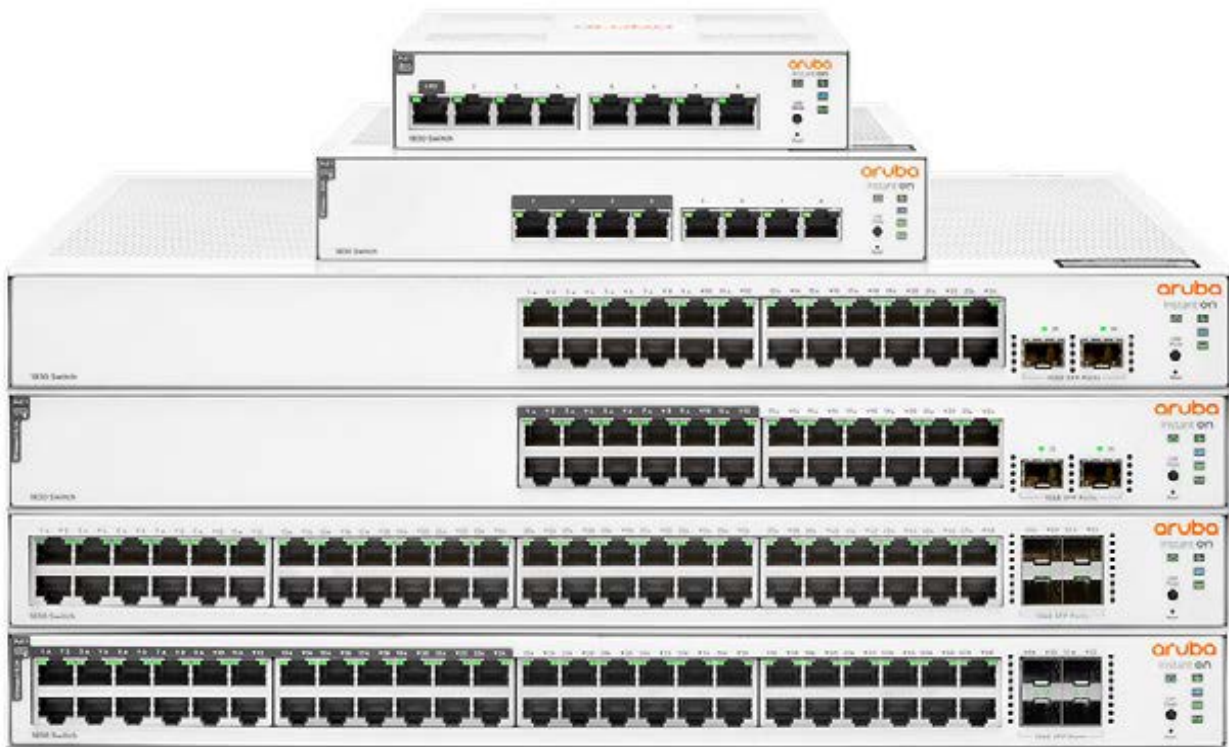Overview

Aruba Instant On 1830 Switch Series

Small businesses continue to face challenges to stay afloat as the world wrestles with this multi-year pandemic. They need day-to-day tasks to be simple to keep operations running smoothly, and with increasing costs making it more expensive than ever to stay in business, they need affordable solutions.

Fast, reliable, and secure network connections play a critical role in helping businesses maintain a competitive advantage. At the same time, with constrained resources and a growing number of interconnected devices, getting the most valuable networking solution for the money has become a basic need for budget-strapped small businesses.

Aruba Instant On 1830 Switch Series is an affordable, easy to deploy, smart-managed switch series for small businesses looking for a cost-effective ways to keep up with evolving network demands. These are entry-level switches offering Layer 2 switching capabilities, Gigabit connectivity along with flexible management modes - all at an affordable price point.

Overview

Key Features

- Smart-managed Layer 2 Ethernet switch series ready to deploy in 8-, 24-, 48-port for non-PoE and Class 4 PoE models.
- Up to 370W of PoE to power APs, IP Phones, surveillance cameras, door locks and other IoT devices
- Two (2) and four (4) dedicated 1G SFP fiber ports on 24- and 48-port models respectively to eliminate traffic bottlenecks across your network
- Cost-effective PoE Support: with half of the ports capable of supporting PoE, these switches are ideal for cost-sensitive environments.
- 8-port non-PoE switch that can be powered by an upstream Power over Ethernet (PoE) switch for environments where no line power is available.
- Convenient mobile app and web-based GUI for set up, management and troubleshooting
- Compact and fan-less 8-port non-PoE and PoE, and 24-port non-PoE model for acoustically sensitive environments

Standard Features

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 Global Storm Control, TPM (Trusted Platform module) based security 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

With a flexible management dashboard, Power over Ethernet (PoE) options, and energy-efficient features, these switches deliver a solid business network for small businesses with limited budget.

The Aruba Instant On 1830 Switch Series includes six switches: two (2) 8-port, two (2) 24-port and two (2) 48-port models in PoE and non-PoE configurations. Besides powering up through a power adapter, the 8-port non-PoE model can also be powered from an external PoE switch, offering greater flexibility for space-constrained environments by eliminating the need for additional power outlets and simplifying wiring infrastructure.

With PoE models, up to 30W PoE power delivery is available for Class 4 PoE devices like access points, surveillance cameras and VoIP phones. The 8-port, 24-port and 48-port PoE models come with the power budget of 65W, 195W and 370W respectively to support latest IoT devices.

Using either the Instant On mobile app or the cloud-based web portal, you can quickly set up, monitor and manage the 1830 Switch Series from anywhere at any time.

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

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.

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.

Standard Features

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

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.

Multi-Site Remote Management

The cloud-hosted web interface and mobile app make it easy to remotely manage multiple sites, multiple networks, distributed 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.

Management

Cloud-Based Management

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.

Secure Web-Management Sessions With HTTPS

Encrypts and otherwise protects management sessions through HTTP Secure (HTTPS), which prevents snooping of sensitive management information. Regardless of whether the switch is managed from the local Web GUI or the cloud, data between the switch and the management interface is encrypted and secure.

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.

Standard Features

Configuration File Management

Allows the user to back up and restore the configuration settings in case of a firmware upgrade or to apply them to other switches on the network.

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 default static address 192.168.1.1.

Locator LED

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

Comprehensive LED Display

Provides an at-a-glance view of status, activity, speed, and full-duplex operation with per-port indicators.

Management VLAN ID

Provides secure management access to the switch for administrators from within the specified VLAN.

Simple Network Time Protocol (SNTP)

Allows automatic synchronization of the switch date and time for accurate tracking of system events and various schedules set by the administrator.

Quality Of Service (Qos)

Class of Service (CoS)

Provides time-sensitive packets (like VoIP and video) with priority over other traffic based on DSCP or IEEE 802.1p classification; packets are mapped to four hardware queues for more effective throughput.

Connectivity

Auto MDI/MDI-X

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

Auto-negotiating capability

Supports half/full-duplex auto-negotiating capability on every port that doubles the throughput of every port.

Standard Features

1G fiber connectivity

Provides 1G 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) and four (4) SFP ports available on 24- and 48- port models respectively.

Ethernet Alliance PSE Class 4 PoE Certification

Power Over Ethernet (PoE) functionality is supported on certain 1830 models, known as power source equipment (PSE) ports which provide power to connected devices.

With half of the ports supporting Class 4 PoE, these models provide up to 30 W per port, which allows support of class 4 PoE or IEEE 802.3at capable devices such as video IP phones, wireless access points, as well as any 15.4 W IEEE 802.3af compliant end device, mitigating the cost of additional electrical cabling and circuits that would otherwise be necessary.

Ethernet Alliance PD Class 3 PoE Certification

Devices receiving power through PoE are referred to as powered devices (PDs).

The 8-port non-PoE Gigabit Ethernet model is a powered device that can be powered by an upstream Power over Ethernet (PoE) switch for environments where no line power is available, besides being powered up by an external power adapter. Port 1 supports Class 3 PoE with the capability of receiving IEEE 802.3af PoE power up to a maximum of 13W.

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.

PoE Scheduling
Allows user to configure a specific day/time of the week (e.g., business hours) for Instant On switches to supply power to connected devices (e.g., surveillance cameras, access points etc.).

Port Scheduling
Allows user to configure up to three (3) schedules to enable or disable individual ports or PoE power delivery on certain switch ports by selecting a particular time of the day or a periodic occurrence.

Switching

Flow control

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

Spanning Tree Protocol (STP)

Standard Features

Supports 802.1D STP, 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence. Provides redundant links while preventing network loops.

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

Loop protection
Allows loop detection in the network for switches that do not run spanning tree, or on which STP feature is disabled.

IGMP v1, v2 snooping
IGMP snooping allows the switch to forward IPv4 multicast traffic intelligently. With IGMP snooping enabled, the switch forwards traffic only to ports that request the multicast traffic. This prevents the switch from broadcasting traffic to all ports and possibly affecting network performance.

Link aggregation
Groups together multiple ports of up to 16 trunks with 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.

Link Layer Discovery Protocol (LLDP)
Advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications.

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.

VLAN support
Offers some of the benefits of both bridging and routing. VLANs partition the network into logical segments, which provide better administration, security, and multicast traffic management.

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

Auto recovery
Allows ports to be placed in a suspended state when defined error conditions are met. Features supported by Auto Recovery are BPDU Guard, Storm Control, Port Security, Loop Protection and Link Flap Prevention.

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.

Automatic denial-of-service protection

Manages high-volume traffic and prevents denial-of-service (DoS) attacks against the network.

Global Storm Control

Protects against conditions where incoming packets flood the LAN, causing network performance degradation for unicast traffic with an unknown destination, and for broadcast and multicast traffic.

Standard Features

Performance and Efficiency

Energy Efficient Ethernet (EEE)

Compliant with 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-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 non-PoE, and PoE models as well as 24-port non-PoE model, making the switches ideal for silent operation environments.

Features Accessed Through Local Web-Management Interface

Quick start-up wizard

Includes a quick start-up wizard which enable automatic configuring of the initial settings such as IP address, device information and system time.

Jumbo frame support

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

User account management
Password strength checking and aging feature provides enhanced security to user account administration on the local web management interface. Password management further enhances the security so that only authorized users can access the switch's web interface.

Secure Sockets Layer (SSL)
Encrypts all HTTP traffic and secures access to the local browser-based management of the switch.

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.

SNMPv1, v2c (read only)
Facilitates remote management of the switch as the device can be discovered and monitored from an SNMP management station.

Diagnostics

Event logs

Provides detailed information for problem identification and resolution.

Session logging

Standard Features

Displays the active users connected to the switch, displaying client IP address, duration of the individual session.

Remote syslog

Provides support for a single syslog server allowing the user to redirect and store events to a remote syslog server (supported on local web only).

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 (supported on local web only).

Ping IPv4

The switch supports ICMP for sending ping requests to IPv4 addresses.

Support file
Includes summary information for the switch including the current switch configuration, statistics and buffered log messages (supported on local web only).

MAC address table
Also known as the bridge table or the forwarding database, this table enables the switch to forward traffic through the appropriate port and supports up to 16K MAC address entries.

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.

Configuration Information

BTO Models
IOn 1830

Rule #	Description	SKU
1	Aruba Instant On 1830 8G Switch	JL810A
	• 8 RJ-45 autosensing 10/100/1000 ports	
	• Desktop Model	
	Aruba Instant On 1830 8G Switch	JL810A
	• No Localized Power Cord Selected	
1	Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch	JL811A
	• 4 RJ-45 autosensing 10/100/1000 Class 4 PoE ports	
	• 4 RJ-45 autosensing 10/100/1000 ports	
	• 1U - Height	
	Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch	JL811A
	• No Localized Power Cord Selected	
	Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch	JL811A
	• C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch	JL811A
	• C15 PDU Jumper Cord (ROW)	
	Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch	JL811A
	• NEMA L6-20P Cord (NA/MEX/JP/TW)	
1, 2	Aruba Instant On 1830 24G 2SFP Switch	JL812A
	• 24 RJ-45 autosensing 10/100/1000 ports	
	• 2 SFP 1000 Mbps ports (min=0 \ max=2 SFP Transceivers)	
	• 1U - Height	
	Aruba Instant On 1830 24G 2SFP Switch	JL812A
	• No Localized Power Cord Selected	
	Aruba Instant On 1830 24G 2SFP Switch	JL812A
	• C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba Instant On 1830 24G 2SFP Switch	JL812A
	• C15 PDU Jumper Cord (ROW)	
	Aruba Instant On 1830 24G 2SFP Switch	JL812A
	• NEMA L6-20P Cord (NA/MEX/JP/TW)	
1, 2	Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch	JL813A
	• 12 RJ-45 autosensing 10/100/1000 Class 4 PoE ports	
	• 12 RJ-45 autosensing 10/100/1000 ports	
	• 2 SFP 1000 Mbps ports (min=0 \ max=2 SFP Transceivers)	
	• 1U - Height	
	Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch	JL813A
	• No Localized Power Cord Selected	
	Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch	JL813A
	• C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch	JL813A
	• C15 PDU Jumper Cord (ROW)	
	Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch	JL813A
	• NEMA L6-20P Cord (NA/MEX/JP/TW)	
1, 2	Aruba Instant On 1830 48G 4SFP Switch	JL814A
	• 48 RJ-45 autosensing 10/100/1000 ports	
	• 4 SFP 1000 Mbps ports (min=0 \ max=4 SFP Transceivers)	
	• 1U - Height	
	Aruba Instant On 1830 48G 4SFP Switch	JL814A
	• No Localized Power Cord Selected	

Configuration Information

	Aruba Instant On 1830 48G 4SFP Switch	JL814A
	• C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba Instant On 1830 48G 4SFP Switch	JL814A
	• C15 PDU Jumper Cord (ROW)	
	Aruba Instant On 1830 48G 4SFP Switch	JL814A
	• NEMA L6-20P Cord (NA/MEX/JP/TW)	
1, 2	Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch	JL815A
	• 24 RJ-45 autosensing 10/100/1000 Class 4 PoE ports	
	• 24 RJ-45 autosensing 10/100/1000 ports	
	• 4 SFP 1000 Mbps ports (min=0 \ max=4 SFP Transceivers)	
	• 1U - Height	
	Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch	JL815A
	• No Localized Power Cord Selected	
	Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch	JL815A
	• C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch	JL815A
	• C15 PDU Jumper Cord (ROW)	
	Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch	JL815A
	• NEMA L6-20P Cord (NA/MEX/JP/TW)	

Configuration Rules

Rule #	Description	
1	Localization (Wall Power Cord) required on orders without B2B or B2C (PDU Power Cord). (See HPN Localization Menu)	
2	The following Transceivers install into this switch:	
	Aruba Instant On 1G SFP LC SX 500m OM2 MMF Transceiver	R9D16A
	Aruba Instant On 1G SFP RJ45 T 100m Cat5e Transceiver	R9D17A
	Aruba 1G SFP LC LX 10km SMF Transceiver	J4859D

Notes :
– Drop down under power supply should offer the following options and results:

  o Switch/Router to PDU Power Cord - B2B in NA, Mexico, Taiwan, and Japan or B2C ROW.

  o Switch/Router/Power Supply to Wall Power Cord - Localized Option

 – No Localized Power Cord Selected - AC3 Option

 – OCA Only Model Selection Form - Aruba > Instant On > Switches: Aruba Instant On 1830 Switch Series

SFP Transceivers

Rule #	Description	SKU
	Aruba Instant On 1G SFP LC SX 500m OM2 MMF Transceiver	R9D16A
	Aruba Instant On 1G SFP RJ45 T 100m Cat5e Transceiver	R9D17A
	Aruba 1G SFP LC LX 10km SMF Transceiver	J4859D

Technical Specifications

	Aruba Instant On 1830 8G Switch (JL810A)	Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch (JL811A)	Aruba Instant On 1830 24G 2SFP Switch (JL812A)	Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch (JL813A)	Aruba Instant On 1830 48G 4SFP Switch (JL814A)	Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch (JL815A)
I/O ports and slots						
	8 RJ-45 autosensing 10/100/1000 ports IEEE 802.3af Class 3 PD (port 1) (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 ports IEEE 802.3at Class 4 PoE (ports 1-4) (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 2 SFP 1GbE ports	24 RJ-45 autosensing 10/100/1000 ports IEEE 802.3at Class 4 PoE (ports 1-12) (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	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 1GbE ports	48 RJ-45 autosensing 10/100/1000 ports IEEE 802.3at Class 4 PoE (ports 1-24) (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 1GbE ports
Physical Characteristics						
Dimensions	157.0(d) x 173.0(w) x 39.1(h) mm	195.1(d) x 245.1(w) x 43.9(h) mm	215.9(d) x 443.0(w) x 43.9(h) mm	253.0(d) x 443.0(w) x 43.9(h) mm	253.0(d) x 443.0(w) x 43.9(h) mm	351.0(d) x 443.0(w) x 43.9(h) mm
Weight	1.70 lb (0.77 kg)	3.40 lb (1.54 kg)	5.50 lb (2.49 kg)	7.65 lb (3.47 kg)	7.80 lb (3.54 kg)	10.90 lb (4.94 kg)
Processor and Memory						
	ARM Cortex-A9 @ 800MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5MB	ARM Cortex-A9 @ 800MHz, 512 MB SDRAM, 256 MB flash; packet buffer:	ARM Cortex-A9 @ 800MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5MB	ARM Cortex-A9 @ 800MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5MB	"RM Cortex-A9 @ 800MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5MB	ARM Cortex-A9 @ 800MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5MB

Technical Specifications

		1.5MB				

	Aruba Instant On 1830 8G Switch **(JL810A)**	**Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch** **(JL811A)**	**Aruba Instant On 1830 24G 2SFP Switch** **(JL812A)**	**Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch** **(JL813A)**	**Aruba Instant On 1830 48G 4SFP Switch** **(JL814A)**	**Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch** **(JL815A)**
Performance						
100 Mb latency	< 5.2 uSec	< 5.2 uSec	< 5.2 uSec	< 5.2 uSec	< 5.2 uSec	< 5.2 uSec
1000 Mb latency	< 2.8 uSec	< 2.8 uSec	< 2.8 uSec	< 2.8 uSec	< 2.8 uSec	< 2.8 uSec
10000 Mb latency	n/a	n/a	n/a	n/a	n/a	n/a
Throughput (Mpps)	11.90 Mpps	11.90 Mpps	38.68 Mpps	38.68 Mpps	77.37 Mpps	77.37 Mpps
Capacity	16 Gbps	16 Gbps	52 Gbps	52 Gbps	104 Gbps	104 Gbps
MAC address table size (# of entries)	8,000 entries	8,000 entries	16,000 entries	16,000 entries	16,000 entries	16,000 entries
Reliability MTBF (years)	188.2	105.9	203.6	96.6	114.4	83.5
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)	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)	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)	-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)	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)	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)
Acoustics[1]						
	Fanless	Fanless	Fanless	LWAd = 3.1 Bel LpAm (Bystander) = 17 dB	LWAd = 3.4 Bel LpAm (Bystander) = 19 dB	LWAd = 4.0 Bel LpAm (Bystander) = 25 dB

Technical Specifications

Notes: [1]Acoustics measured in 23°C semi-anechoic chamber with a loading of 100% traffic and (for JL813A and JL815A) 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)

	Aruba Instant On 1830 8G Switch (JL810A)	Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch (JL811A)	Aruba Instant On 1830 24G 2SFP Switch (JL812A)	Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch (JL813A)	Aruba Instant On 1830 48G 4SFP Switch (JL814A)	Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch (JL815A)
100% traffic	Fanless	Fanless	Fanless	LWAd = 3.1 Bel LpAm (Bystander) = 17 dB	LWAd = 3.4 Bel LpAm (Bystander) = 19 dB	LWAd = 3.5 Bel LpAm (Bystander) = 20 dB
100% traffic / 0% PoE	Fanless	Fanless	Fanless	LWAd = 3.1 Bel LpAm (Bystander) = 17 dB	-	LWAd = 3.5 Bel LpAm (Bystander) = 20 dB
100% traffic / 50% PoE	Fanless	Fanless	Fanless	LWAd = 3.1 Bel LpAm (Bystander) = 17 dB	-	LWAd = 4.0 Bel LpAm (Bystander) = 25 dB
100% traffic / 100% PoE	Fanless	Fanless	Fanless	LWAd = 5.1 Bel LpAm (Bystander) = 35 dB	-	LWAd = 5.7 Bel LpAm (Bystander) = 41 dB

Electrical Characteristics

Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
AC voltage	100-127VAC / 200-240VAC	100-127VAC / 200-240VAC	100-127VAC / 200-240VAC	100-127VAC / 200-240VAC	100-127VAC / 200-240VAC	100-127VAC / 200-240VAC
Current	12V -- 1.0A	1.0A/0.5A	0.4A/0.3A	2.7A/1.4A	0.9A/0.6A	5.2A/2.6A
Maximum power rating	100-127V: 8.09W 200-220V: 8.05W	100-127V: 86.07W 200-220V: 83.67W	100-127V: 19.1W 200-220V: 19W	100-127V: 244.6W 200-220V: 237.2W	100-127V: 40.2W 200-220V: 40W	100-127V: 462.5W 200-220V: 452.5W
Idle power	100-127V: 5.8W 200-220V: 5.9W	100-127V: 8.3W 200-220V: 8.2W	100-127V: 7.6W 200-220V: 7.8W	100-127V: 14.5W 200-220V: 13.4W	100-127V: 17.7W 200-220V: 17.7W	100-127V: 25.8W 200-220V: 25.4W
PoE power	13W max Class 3 PD	65 W Class 4 PoE	-	195 W Class 4 PoE	-	370 W Class 4 PoE
Power supply	External power adapter (included)	Internal power supply	Internal power supply	Internal power supply	Internal power supply	Internal power supply
Safety	EN/IEC 60950-1:2006 + A11:2009 + A1:2010 +	EN/IEC 60950-1:2006 + A11:2009 + A1:2010 +	EN/IEC 60950-1:2006 + A11:2009 + A1:2010 +	EN/IEC 60950-1:2006 + A11:2009 + A1:2010 +	EN/IEC 60950-1:2006 + A11:2009 +	EN/IEC 60950-1:2006 + A11:2009 +

Technical Specifications

	A12:2011 + A2:2013 EN/IEC 62368-1, 2nd. & 3rd. Ed. UL 62368-1, 2nd. & 3rd. Ed. CAN/CSA C22.2 No. 62368-1, 2nd. & 3rd. Ed. EN/IEC 60825-1:2014 Class 1	A12:2011 + A2:2013 EN/IEC 62368-1, 2nd. & 3rd. Ed. UL 62368-1, 2nd. & 3rd. Ed. CAN/CSA C22.2 No. 62368-1, 2nd. & 3rd. Ed. EN/IEC 60825-1:2014 Class 1	A12:2011 + A2:2013 EN/IEC 62368-1, 2nd. & 3rd. Ed. L 62368-1, 2nd. & 3rd. Ed. CAN/CSA C22.2 No. 62368-1, 2nd. & 3rd. Ed. EN/IEC 60825-1:2014 Class 1	A12:2011 + A2:2013 EN/IEC 62368-1, 2nd. & 3rd. Ed. UL 62368-1, 2nd. & 3rd. Ed. CAN/CSA C22.2 No. 62368-1, 2nd. & 3rd. Ed. EN/IEC 60825-1:2014 Class 1	A1:2010 + A12:2011 + A2:2013 EN/IEC 62368-1, 2nd. & 3rd. Ed. UL 62368-1, 2nd. & 3rd. Ed. CAN/CSA C22.2 No. 62368-1, 2nd. & 3rd. Ed. EN/IEC 60825-1:2014 Class 1	A1:2010 + A12:2011 + A2:2013 EN/IEC 62368-1, 2nd. & 3rd. Ed. UL 62368-1, 2nd. & 3rd. Ed. CAN/CSA C22.2 No. 62368-1, 2nd. & 3rd. Ed. EN/IEC 60825-1:2014 Class 1
Emissions	EN 55032:2015/ CISPR 32, Class A FCC CFR 47 Part 15: 2018 Class A ICES-003 Class A VCCI Class A CNS 13438 Class A KN 32 Class A AS/NZS CISPR 32 Class A	EN 55032:2015/ CISPR 32, Class A FCC CFR 47 Part 15: 2018 Class A ICES-003 Class A VCCI Class A CNS 13438 Class A KN 32 Class A AS/NZS CISPR 32 Class A	EN 55032:2015/ CISPR 32, Class A FCC CFR 47 Part 15: 2018 Class A ICES-003 Class A VCCI Class A CNS 13438 Class A KN 32 Class A AS/NZS CISPR 32 Class A	EN 55032:2015/ CISPR 32, Class A FCC CFR 47 Part 15: 2018 Class A ICES-003 Class A VCCI Class A CNS 13438 Class A KN 32 Class A AS/NZS CISPR 32 Class A	EN 55032:2015/ CISPR 32, Class A FCC CFR 47 Part 15: 2018 Class A ICES-003 Class A VCCI Class A CNS 13438 Class A KN 32 Class A AS/NZS CISPR 32 Class A	EN 55032:2015/ CISPR 32, Class A FCC CFR 47 Part 15: 2018 Class A ICES-003 Class A VCCI Class A CNS 13438 Class A KN 32 Class A AS/NZS CISPR 32 Class A
	Aruba Instant On 1830 8G Switch **(JL810A)**	**Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch (JL811A)**	**Aruba Instant On 1830 24G 2SFP Switch** **(JL812A)**	**Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch** **(JL813A)**	**Aruba Instant On 1830 48G 4SFP Switch** **(JL814A)**	**Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch** **(JL815A)**
Immunity						
Generic	EN 55035, CISPR 35, KN35	EN 55035, CISPR 35, KN35	EN 55035, CISPR 35, KN35	EN 55035, CISPR 35, KN35	EN 55035, CISPR 35, KN35	EN 55035, CISPR 35, KN35
EN	EN 55035, CISPR 35	EN 55035, CISPR 35	EN 55035, CISPR 35	EN 55035, CISPR 35	EN 55035, CISPR 35	EN 55035, CISPR 35
ESD	EN/IEC 61000-4-2	EN/IEC 61000-4-2	EN/IEC 61000-4-2	EN/IEC 61000-4-2	EN/IEC 61000-4-2	EN/IEC 61000-4-2

Technical Specifications

Radiated	EN/IEC 61000-4-3	EN/IEC 61000-4-3	EN/IEC 61000-4-3	EN/IEC 61000-4-3	EN/IEC 61000-4-3	EN/IEC 61000-4-3
EFT/Burst	EN/IEC 61000-4-4	EN/IEC 61000-4-4	EN/IEC 61000-4-4	EN/IEC 61000-4-4	EN/IEC 61000-4-4	EN/IEC 61000-4-4
Surge	EN/IEC 61000-4-5	EN/IEC 61000-4-5	EN/IEC 61000-4-5	EN/IEC 61000-4-5	EN/IEC 61000-4-5	EN/IEC 61000-4-5
Conducted	EN/IEC 61000-4-6	EN/IEC 61000-4-6	EN/IEC 61000-4-6	EN/IEC 61000-4-6	EN/IEC 61000-4-6	EN/IEC 61000-4-6
Power frequency magnetic field	EN/IEC 61000-4-8	EN/IEC 61000-4-8	EN/IEC 61000-4-8	EN/IEC 61000-4-8	EN/IEC 61000-4-8	EN/IEC 61000-4-8
Voltage dips and interruptions	EN/IEC 61000-4-11	EN/IEC 61000-4-11	EN/IEC 61000-4-11	EN/IEC 61000-4-11	EN/IEC 61000-4-11	EN/IEC 61000-4-11
Harmonics	EN/IEC 61000-3-2	EN/IEC 61000-3-2	EN/IEC 61000-3-2	EN/IEC 61000-3-2	EN/IEC 61000-3-2	EN/IEC 61000-3-2
Flicker	EN /IEC 61000-3-3	EN /IEC 61000-3-3	EN /IEC 61000-3-3	EN /IEC 61000-3-3	EN /IEC 61000-3-3	EN /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	Aruba Instant On Cloud; Web browser; SNMP Manager	Aruba Instant On Cloud; Web browser; SNMP Manager	Aruba Instant On Cloud; Web browser; SNMP Manager
Mounting						
Mounting positions and supported racking	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 rack-mounting Supports wall-mounting with ports facing either up or down Supports under-table mounting using the brackets provided Must be mounted top	Mounts in an EIAstandard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rack-mounting Supports wall-mounting with ports facing either up or down Supports under-table mounting using the brackets provided Must be mounted top	Mounts in an EIAstandard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rack-mounting 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 rack-mounting 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 rack-mounting Supports wall-mounting with ports facing either up or down Suports under-table mounting using the brackets provided

Technical Specifications

	Aruba Instant On 1830 8G Switch (JL810A)	Aruba Instant On 1830 8G 4p Class4 PoE 65W Switch (JL811A)	Aruba Instant On 1830 24G 2SFP Switch (JL812A)	Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch (JL813A)	Aruba Instant On 1830 48G 4SFP Switch (JL814A)	Aruba Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch (JL815A)
	surface up. To prevent possible impact to longterm reliability, product should not be mounted upside-down	surface up. To prevent possible impact to longterm reliability, product should not be mounted upside-down				
Transceivers			Aruba Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A)	Aruba Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A)	Aruba Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A)	Aruba Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A)
			Aruba 1G SFP LC LX 10km SMF Transceiver (J4859D)	Aruba 1G SFP LC LX 10km SMF Transceiver (J4859D)	Aruba 1G SFP LC LX 10km SMF Transceiver (J4859D)	Aruba 1G SFP LC LX 10km SMF Transceiver (J4859D)

Standards and Protocols (applies to all products in series)

IEEE Standards Support	
IEEE 802.3	10 Mbps Ethernet
IEEE 802.3u	100Base-T Ethernet
IEEE 802.3z	1000 Mbps Ethernet
IEEE 802.3ab	1000Base-T
IEEE 802.3x	Flow Control
IEEE 802.1Q	VLANs
IEEE 802.1p	Traffic Prioritization
IEEE 802.3ad	Link Aggregation Control Protocol (LACP)
IEEE 802.1D	Spanning Tree Protocol
IEEE 802.1w	Rapid Spanning Tree Protocol
IEEE 802.3af	PoE 1 (PoE models only)
IEEE 802.3at	PoE 1 (PoE models only)
IEEE 802.3az	Energy-Efficient Ethernet (EEE)
IEEE 802.1AB	Link Layer Discovery Protocol
IEEE 802.3ac	Frame extension for VLAN tags

IETF Standards Support

Technical Specifications

- RFC 768
- RFC 783
- RFC 791
- RFC 792
- RFC 793
- RFC 813
- RFC 879
- RFC 896
- RFC 826
- RFC 894
- RFC 919
- RFC 922
- RFC 950
- RFC 1042
- RFC 1071
- RFC 1123
- RFC 1141
- RFC 1155
- RFC 1157
- RFC 1350
- RFC 1533
- RFC 1541
- RFC 1624
- RFC 1700
- RFC 1867
- RFC 2030
- RFC2616
- RFC 2131
- RFC 2132
- RFC 3164
- RFC 5424
- RFC3411
- RFC3412
- RFC3413
- RFC 4330
- RFC 3268
- RFC 4251
- RFC 4252
- RFC 4253
- RFC 4254
- RFC 4716
- RFC 4419
- RFC 4541

IETF Standards Management Support

- RFC 1213
- RFC 1286
- RFC 1493
- RFC 1573
- RFC 1643
- RFC 2011
- RFC 2012
- RFC 2013

Technical Specifications

- RFC 2233
- RFC 2578
- RFC 2665
- RFC 2666
- RFC 2737
- RFC 2863
- RFC 4022
- RFC 4113
- RFC 1212
- RFC 2271
- RFC 2295
- RFC 2579
- RFC 2580
- RFC 3410
- RFC 3417

Summary of Changes

Date	Version History	Action	Description of Change:
01-Aug-2022	Version 4	Changed	Configuration Information and Technical Specifications sections were updated.
16-May-2022	Version 3	Changed	Configuration Information section was updated.
04-Apr-2022	Version 2	Changed	Technical Specifications section was updated.
24-Jan-2022	Version 1	New	New QuickSpecs

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