# HPE Networking Instant On Switch Series 1830

Entry-level, smart-managed switches designed for small business.



# Perfect for home offices, retail stores, small professional offices

# **Product overview**

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.

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

The 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, offer greater flexibility for space-constrained environments by eliminating the need for additional power outlets and simplifying wiring infrastructure.



1830 PoE switches offer up to 30W of power that is available for Class 4 PoE devices like access points, surveillance cameras and VoIP phones. The 8-port, 24port and 48-port PoE models come with a 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.

# Highlights

- Simplicity at its best
- 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

# **Instant On differentiators**

#### Easy setup and management

The 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 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.

### **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 and 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.



# **Key features**

#### 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 nontechnical 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 updates at preferred times through the Instant On mobile app and cloud-based web portal.

#### 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. Simplifies 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.

#### 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 30W 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.

Brand	Standard	Class	Min. power at the PSE port	Max. power consumed at the PD port	Wire usage	EA Certified Logo
PoF 1	IEEE 802.3 af	0-3	15.4W	13W	2	<b>MN</b>
FUE I	IEEE 802.3 at	4	30W	25.5W	pair	μ

#### 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.

Brand	Standard	Class	Max. power consumed at the PD port	Wire usage	EA Certified Logo
PoE 1	IEEE 802.3	3	13W	2 pair or 4 pair	<b>D</b> 3

### 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)

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-ofservice (DoS) attacks against the network.

# Global storm control

Protects against conditions where incoming packets flood the LAN, causing network performance degradation all types of network traffic (unicast or multicast).

### **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 environments where silent operation is needed.

# Features accessed through 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 Socket 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

Displays the active users connected to the switch, displaying client IP address and 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 and support

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 <u>hpe.com/networking/services</u> 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.

	Instant On 1830 8G Switch (JL810A)	Instant On 1830 8G 4p Class4 PoE 65W Switch (JL811A)	Instant On 1830 24G 2SFP Switch (JL812A)	
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	
Physical characteristics				
Dimensions (D x W x H)	15.7 x 17.3 x 3.91 cm	19.51 x 24.51 x 4.39 cm	21.59 x 44.3 x 4.39 cm	
Weight	1.70 lb (0.77 kg)	3.40 lb (1.54 kg)	5.50 lb (2.49 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: 1.5MB	ARM Cortex-A9 @ 800MHz, 512 MB SDRAM, 256 MB flash; packet buffer: 1.5MB	
Performance				
100 Mb latency	< 5.2 uSec	< 5.2 uSec	< 5.2 uSec	
1000 Mb latency	< 2.8 uSec	< 2.8 uSec	< 2.8 uSec	
10000 Mb latency	n/a	n/a	n/a	
Throughput (Mpps)	11.90 Mpps	11.90 Mpps	38.68 Mpps	
Capacity	16 Gbps	16 Gbps	52 Gbps	
MAC address table size (# of entries)	8,000 entries	8,000 entries	16,000 entries	
Reliability MTBF (years)	188.2	105.9	203.6	
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 <sup>1</sup>				
	Fanless	Fanless	Fanless	

<sup>1</sup>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).

	Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch (JL813A)	Instant On 1830 48G 4SFP Switch (JL814A)	Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch (JL815A)	
I/O ports and slots				
	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 (D x W x H)	25.3 x 44.3 x 4.39 cm	25.3 x 44.3 x 4.39 cm	35.1 x 44.3 x 4.39 cm	
Weight	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	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	
Performance				
100 Mb latency	< 5.2 uSec	< 5.2 uSec	< 5.2 uSec	
1000 Mb latency	< 2.8 uSec	< 2.8 uSec	< 2.8 uSec	
10000 Mb latency	n/a	n/a	n/a	
Throughput (Mpps)	38.68 Mpps	77.37 Mpps	77.37 Mpps	
Capacity	52 Gbps	104 Gbps	104 Gbps	
MAC address table size (# of entries)	16,000 entries	16,000 entries	16,000 entries	
Reliability MTBF (years)	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)	
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 <sup>1</sup>				
	Fanless	Fanless	Fanless	

<sup>1</sup>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).

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	Instant On 1830 8G Switch (JL810A)	Instant On 1830 8G 4p Class4 PoE 65W Switch (JL811A)	Instant On 1830 24G 2SFP Switch (JL812A)	
Electrical characteristics				
Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	
AC voltage	100-127VAC / 200-240VAC	100-127VAC / 200-240VAC	100-127VAC / 200-240VAC	
Current	12V - 1.0A	1.0A/0.5A	0.4A/0.3A	
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	
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	
PoE power	13W max Class 3 PD	65 W Class 4 PoE	_	
Power supply	External power adapter (included)	Internal power supply	Internal power supply	
Safety				
	EN/IEC 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013	EN/IEC 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013	EN/IEC 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013	
	EN/IEC 62368-1, 2nd. & 3rd. Ed.	EN/IEC 62368-1, 2nd. & 3rd. Ed.	EN/IEC 62368-1, 2nd. & 3rd. Ed.	
	UL 62368-1, 2nd. & 3rd. Ed.	UL 62368-1, 2nd. & 3rd. Ed.	L 62368-1, 2nd. & 3rd. Ed.	
	CAN/CSA C22.2 No. 62368-1, 2nd. & 3rd. Ed.	CAN/CSA C22.2 No. 62368-1, 2nd. & 3rd. Fd.	CAN/CSA C22.2 No. 62368-1, 2nd. & 3rd. Ed.	
	EN/IEC 60825-1:2014 Class 1	EN/IEC 60825-1:2014 Class 1	EN/IEC 60825-1:2014 Class 1	
Emissions				
	EN 55032:2015/CISPR 32, Class A	EN 55032:2015/CISPR 32, Class A	EN 55032:2015/CISPR 32, Class A	
	FCC CFR 47 Part 15: 2018 Class A	FCC CFR 47 Part 15: 2018 Class A	FCC CFR 47 Part 15: 2018 Class A	
	ICES-003 Class A	ICES-003 Class A	ICES-003 Class A	
	VCCI Class A	VCCI Class A	VCCI Class A	
	CNS 13438 Class A	CNS 13438 Class A	CNS 13438 Class A	
	KN 32 Class A	KN 32 Class A	KN 32 Class A	
	AS/NZS CISPR 32 Class A	AS/NZS CISPR 32 Class A	AS/NZS CISPR 32 Class A	

	Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch (JL813A)	Instant On 1830 48G 4SFP Switch (JL814A)	Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch (JL815A)
Electrical characteristics			
Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
AC voltage	100-127VAC / 200-240VAC	100-127VAC / 200-240VAC	100-127VAC / 200-240VAC
Current	2.7A/1.4A	0.9A/0.6A	5.2A/2.6A
Maximum power rating	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: 14.5W 200-220V: 13.4W	100-127V: 17.7W 200-220V: 17.7W	100-127V: 25.8W 200-220V: 25.4W
PoE power	195 W Class 4 PoE	_	370 W Class 4 PoE
Power supply	Internal power supply	Internal power supply	Internal power supply
Safety			
	EN/IEC 60950-1:2006 + A11:2009 + 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 60950-1:2006 + A11:2009 + 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 60950-1:2006 + A11:2009 + 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	EN/IEC 60825-1:2014 Class 1	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	EN 55032:2015/CISPR 32, Class A FCC CFR 47 Part 15: 2018 Class A ICES-003 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	VCCI Class A CNS 13438 Class A KN 32 Class A AS/NZS CISPR 32 Class A	VCCI Class A CNS 13438 Class A KN 32 Class A AS/NZS CISPR 32 Class A

	Instant On 1830 8G Switch (JL810A)	Instant On 1830 8G 4p Class4 PoE 65W Switch (JL811A)	Instant On 1830 24G 2SFP Switch (JL812A)
Immunity			
Generic	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
ESD	EN/IEC 61000-4-2	EN/IEC 61000-4-2	EN/IEC 61000-4-2
Radiated	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
Surge	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
Power frequency magnetic field	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
Harmonics	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
Device management			
	Instant On Cloud; Web browser; SNMP Manager	Instant On Cloud; Web browser; SNMP Manager	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 EIA standard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rack-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 long-term reliability, product should not be mounted upside-down	Mounts in an EIA standard 19 in. telco rack or equipment cabinet. 2-post rack kit included Supports table-top mounting Supports rack-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 long-term reliability, product should not be mounted upside-down
Transceivers			
	_	_	Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A) HPE Networking Instant On 1G SFP LC LX 10km SMF Transceiver (S0G20A) Aruba Instant On 1G SFP RJ45 T 100m Cat5e Transceiver (R9D17A)



	Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch (JL813A)	Instant On 1830 48G 4SFP Switch (JL814A)	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	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	
Radiated	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	
Surge	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	
Power frequency magnetic field	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	
Harmonics	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	
Device management				
	Instant On Cloud; Web browser; SNMP Manager	Instant On Cloud; Web browser; SNMP Manager	Instant On Cloud; Web browser; SNMP Manager	
Mounting				
	Mounts in an EIA standard 19 in. telco rack or equipment cabinet. 2-post rack kit included	Mounts in an EIA standard 19 in. telco rack or equipment cabinet. 2-post rack kit included	Mounts in an EIA standard 19 in. telco rack or equipment cabinet. 2-post rack kit included	
	Supports table-top mounting	Supports table-top mounting	Supports table-top mounting	
	Supports rack-mounting Supports wall-mounting with ports facing either up or down	Supports rack-mounting Supports wall-mounting with ports facing either up or down	Supports rack-mounting Supports wall-mounting with ports facing either up or down	
	Supports under-table mounting using the brackets provided	Supports under-table mounting using the brackets provided	Suports under-table mounting using the brackets provided	
Transceivers				
	Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A) HPE Networking Instant On 1G SFP LC LX	Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A) HPE Networking Instant On 1G SFP LC LX	Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A) HPE Networking Instant On 1G SFP LC LX	
	10km SMF Transceiver (SOG20A) Instant On 1G SFP RJ45 T 100m Cat5e Transceiver (R9D17A)	10km SMF Transceiver (S0G20A) Instant On 1G SFP RJ45 T 100m Cat5e Transceiver (R9D17A)	10km SMF Transceiver (S0G20A) Instant On 1G SFP RJ45 T 100m Cat5e Transceiver (R9D17A)	

# Standards and protocols

# (Applies to all product 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**

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

# IETF standards management support

RFC 1213	RFC 2011	RFC 2665	RFC 4113	RFC 2580
RFC 1286	RFC 2012	RFC 2666	RFC 1212	RFC 3410
RFC 1493	RFC 2013	RFC 2737	RFC 2271	RFC 3417
RFC 1573	RFC 2233	RFC 2863	RFC 2295	
RFC 1643	RFC 2578	RFC 4022	RFC 2579	

# **Ordering information**

# Instant On Switch Series 1830

Part number	Description	Ports	Uplink Ports	Class 4 PoE power budget	Class 3 PD
JL810A	Instant On 1830 8G Switch	8	_	_	Port 1
JL811A	Instant On 1830 8G 4p Class4 PoE 65W Switch	8	_	65W	_
JL812A	Instant On 1830 24G 2SFP Switch	24	2 SFP	_	-
JL813A	Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch	24	2 SFP	195W	-
JL814A	Instant On 1830 48G 4SFP Switch	48	4 SFP	—	_
JL815A	Instant On 1830 48G 24p Class4 PoE 4SFP 370W Switch	48	4 SFP	370W	_

# 3 and 5 year support options

Product SKU	Support SKU	Support SKU description
JL815A	H33ZDE	HPE 3 Year Foundation Care Next Business Day Exchange 1830 48G 24p PoE 4SFP 370W Switch Service
JL815A	H33ZFE	HPE 5 Year Foundation Care Next Business Day Exchange 1830 48G 24p PoE 4SFP 370W Switch Service
JL814A	H33ZGE	HPE 3 Year Foundation Care Next Business Day Exchange 1830 48G 4SFP Switch Service
JL814A	H33ZHE	HPE 5 Year Foundation Care Next Business Day Exchange 1830 48G 4SFP Switch Service
JL813A	H33ZJE	HPE 3 Year Foundation Care Next Business Day Exchange 1830 24G 12p PoE 2SFP 195W Switch Service
JL813A	H33ZKE	HPE 5 Year Foundation Care Next Business Day Exchange 1830 24G 12p PoE 2SFP 195W Switch Service
JL812A	H33ZLE	HPE 3 Year Foundation Care Next Business Day Exchange 1830 24G 2SFP Switch Service
JL812A	H33ZME	HPE 5 Year Foundation Care Next Business Day Exchange 1830 24G 2SFP Switch Service
JL811A	H33ZNE	HPE 3 Year Foundation Care Next Business Day Exchange 1830 8G 4p PoE 65W Switch Service
JL811A	H33ZQE	HPE 5 Year Foundation Care Next Business Day Exchange 1830 8G 4p PoE 65W Switch Service
JL810A	H33ZRE	HPE 3 Year Foundation Care Next Business Day Exchange 1830 8G Switch Service
JL810A	H33ZSE	HPE 5 Year Foundation Care Next Business Day Exchange 1830 8G Switch Service

(Go to Support Services Central to locate Foundation Care SKUs for switches.)

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