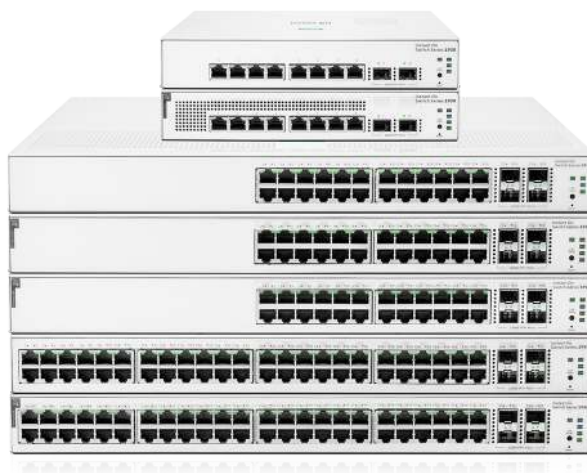


HPE Networking Instant On Switch Series 1930

High-performance, smart-managed switches designed for small and medium business



A great fit for cafés, design firms, and tech startups

Product overview

Whether you own a café, 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.

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

The HPE Networking Instant On Switch Series 1930 features advanced, smart-managed, fixed-configuration Gigabit switches designed for SMBs 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. Up to 30W of power is available out-of-the-box for your class 4 PoE devices, like access points, surveillance cameras and VoIP phones, all of which can be easily managed from the same platform.

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



Hewlett Packard
Enterprise

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 licensing fees
 - Industry-leading 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 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

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, Spanning Tree Protocols, and IPv6 Host mode.

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 management plane, 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 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.



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 updates at preferred times through the 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 the 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 30W 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 consumed 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		

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 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

Green Ethernet features provide estimated cumulative energy savings.



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.

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 available 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

Provides 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 be done via RADIUS to access the web-interface.



Secure Socket Layer (SSL)

Encrypts all HTTP traffic and 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

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

	HPE Networking Instant On Switch 8p Gigabit 2p SFP 1930 (JL680A)	HPE Networking Instant On Switch 8p Gigabit CL4 PoE 2p SFP 124W 1930 (JL681A)	HPE Networking Instant On Switch 24p Gigabit 4p SFP+ 1930 (JL682A)	HPE Networking Instant On Switch 24p Gigabit CL4 PoE 4p SFP+ 195W 1930 (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 (D x W x H)	10 x 6.28 x 1.73 in (25.4 x 15.95 x 4.39 cm)	10 x 10 x 1.73 in (25.4 x 25.4 x 4.39 cm)	17.42 x 8.72 x 1.73 in (44.25 x 22.15 x 4.39 cm)	17.42 x 10.42 x 1.73 in (44.25 x 26.47 x 4.39 cm)
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)
Acoustics¹				
	Fanless	Fanless	Fanless	LWAd = 3.9 Bel LpAm (Bystander) = 25 dB

¹Acoustics 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

	HPE Networking Instant On Switch 24p Gigabit CL4 PoE 4p SFP+ 370W 1930 (JL684B)	HPE Networking Instant On Switch 48p Gigabit 4p SFP+ 1930 (JL685A)	HPE Networking Instant On Switch 48p Gigabit CL4 PoE 4p SFP+ 370W 1930 (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 (D x W x H)	17.42 x 10.42 x 1.73 in (44.25 x 26.47 x 4.39 cm)	17.42 x 11.12 x 1.73 in (44.25 x 28.24 x 4.39 cm)	17.42 x 12.7 x 1.73 in (44.25 x 32.26 x 4.39 cm)
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 static 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)
Acoustics¹			
	LWAd = 3.7 Bel LpAm (Bystander) = 23 dB	Fanless	LWAd = 4.0 Bel LpAm (Bystander) = 24 dB

¹Acoustics 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

	HPE Networking Instant On Switch 8p Gigabit 2p SFP 1930 (JL680A)	HPE Networking Instant On Switch 8p Gigabit CL4 PoE 2p SFP 124W 1930 (JL681A)	HPE Networking Instant On Switch 24p Gigabit 4p SFP+ 1930 (JL682A)	HPE Networking Instant On Switch 24p Gigabit CL4 PoE 4p SFP+ 195W 1930 (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				
	Instant On Cloud; Web browser; SNMP Manager	Instant On Cloud; Web browser; SNMP Manager	Instant On Cloud; Web browser; SNMP Manager	Instant On Cloud; Web browser; SNMP Manager



Technical specifications

	HPE Networking Instant On Switch 24p Gigabit CL4 PoE 4p SFP+ 370W 1930 (JL684B)	HPE Networking Instant On Switch 48p Gigabit 4p SFP+ 1930 (JL685A)	HPE Networking Instant On Switch 48p Gigabit CL4 PoE 4p SFP+ 370W 1930 (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			
	Instant On Cloud; Web browser; SNMP Manager	Instant On Cloud; Web browser; SNMP Manager	Instant On Cloud; Web browser; SNMP Manager



Technical specifications

	HPE Networking Instant On Switch 8p Gigabit 2p SFP 1930 (JL680A)	HPE Networking Instant On Switch 8p Gigabit CL4 PoE 2p SFP 124W 1930 (JL681A)	HPE Networking Instant On Switch 24p Gigabit 4p SFP+ 1930 (JL682A)	HPE Networking Instant On Switch 24p Gigabit CL4 PoE 4p SFP+ 195W 1930 (JL683B)
Mounting				
	Supports table-top 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 wall-mounting with ports facing either up or down			
	Supports under-table mounting using base surface mounting holes	Supports table-top mounting	Supports table-top mounting	Supports table-top mounting
		Supports rackmounting	Supports rackmounting	Supports rackmounting
		Supports wall-mounting with ports facing either up or down	Supports wall-mounting with ports facing either up or down	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	Supports under-table mounting using the brackets provided
		Supports under-table mounting using base surface mounting holes	Must be mounted top surface up. To prevent possible impact to longterm reliability, product should not be mounted upside-down	
Transceivers				
	HPE Networking Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A)			
	HPE Networking Instant On 1G LX SFP LC 10km SMF Transceiver (S0G20A)			
	HPE Networking Instant On 1G SFP RJ45 100m Cat5e Transceiver (R9D17A/R9D17B)			
	HPE Networking Instant On 10G SFP+ LC SR 300m OM3 MMF Transceiver (R9D18A)			
	HPE Networking Instant On 10G LR SFP+ LC 10km SMF Transceiver (S0G21A)			
	HPE Networking Instant On 10GBASE-T RJ45 30m Cat6a Transceiver (S0G18A)			
	HPE Networking Instant On 10G SFP+ to SFP+ 1m Direct Attach Copper Cable (R9D19A)			
	HPE Networking Instant On 10G SFP+ to SFP+ 3m Direct Attach Copper Cable (R9D20A)			



Technical specifications

	HPE Networking Instant On Switch 24p Gigabit CL4 PoE 4p SFP+ 370W 1930 (JL684B)	HPE Networking Instant On Switch 48p Gigabit 4p SFP+ 1930 (JL685A)	HPE Networking Instant On Switch 48p Gigabit CL4 PoE 4p SFP+ 370W 1930 (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
Transceivers	HPE Networking Instant On 1G SFP LC SX 500m OM2 MMF Transceiver (R9D16A) HPE Networking Instant On 1G SFP LC LX 10km SMF Transceiver (SOG20A) HPE Networking Instant On 1G SFP RJ45 T 100m Cat5e Transceiver (R9D17A/R9D17B) HPE Networking Instant On 10G SFP+ LC SR 300m OM3 MMF Transceiver (R9D18A) HPE Networking Instant On 10G SFP+ LC LR 10km SMF Transceiver (SOG21A) HPE Networking Instant On 10GBASE-T RJ45 30m Cat6A Transceiver (SOG18A) HPE Networking Instant On 10G SFP+ to SFP+ 1m DAC (R9D19A) HPE Networking Instant On 10G SFP+ to SFP+ 3m DAC (R9D20A)		



Standards and protocols

(Applies to all product in series)

IEEE standards support

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
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

IETF standards support

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



Ordering information

HPE Networking Instant On Switch Series 1930

Part number	Description	Ports	Uplink ports	Class 4 PoE power budget
JL680A	HPE Networking Instant On Switch 8p Gigabit 2p SFP 1930	8	2 SFP	–
JL681A	HPE Networking Instant On Switch 8p Gigabit CL4 PoE 2p SFP 124W 1930	8	2 SFP	124W
JL682A	HPE Networking Instant On Switch 24p Gigabit 4p SFP+ 1930	24	4 SFP/SFP+	–
JL683B	HPE Networking Instant On Switch 24p Gigabit CL4 PoE 4p SFP+ 195W 1930	24	4 SFP/SFP+	195W
JL684B	HPE Networking Instant On Switch 24p Gigabit CL4 PoE 4p SFP+ 370W 1930	24	4 SFP/SFP+	370W
JL685A	HPE Networking Instant On Switch 48p Gigabit 4p SFP+ 1930	48	4 SFP/SFP+	–
JL686B	HPE Networking Instant On Switch 48p Gigabit CL4 PoE 4p SFP+ 370W 1930	48	4 SFP/SFP+	370W

3 and 5 year support options

Product SKU	Support SKU	Support SKU description
JL680A	HR1Y7E	HPE Aruba Networking Foundational Care 3Y NBD Exch ION 1930 8G Switch SVC
JL680A	HR1Y8E	HPE Aruba Networking Foundational Care 5Y NBD Exch ION 1930 8G Switch SVC
JL681A	HR1Z0E	HPE Aruba Networking Foundational Care 3Y NBD Exch ION 1930 8G PoE Switch SVC
JL681A	HR1Z1E	HPE Aruba Networking Foundational Care 5Y NBD Exch ION 1930 8G PoE Switch SVC
JL682A	HR1Z3E	HPE Aruba Networking Foundational Care 3Y NBD Exch ION 1930 24G Switch SVC
JL682A	HR1Z4E	HPE Aruba Networking Foundational Care 5Y NBD Exch ION 1930 24G Switch SVC
JL683B	HR1Z6E	HPE Aruba Networking Foundational Care 3Y NBD Exch ION 1930 24G PoE Switch SVC
JL683B	HR1Z7E	HPE Aruba Networking Foundational Care 5Y NBD Exch ION 1930 24G PoE Switch SVC
JL684B	HR1Z6E	HPE Aruba Networking Foundational Care 3Y NBD Exch ION 1930 24G PoE Switch SVC
JL684B	HR1Z7E	HPE Aruba Networking Foundational Care 5Y NBD Exch ION 1930 24G PoE Switch SVC
JL685A	HR1Z9E	HPE Aruba Networking Foundational Care 3Y NBD Exch ION 1930 48G Switch SVC
JL685A	HR2A0E	HPE Aruba Networking Foundational Care 5Y NBD Exch ION 1930 48G Switch SVC
JL686B	HR2A2E	HPE Aruba Networking Foundational Care 3Y NBD Exch ION 1930 48G PoE Switch SVC
JL686B	HR2A3E	HPE Aruba Networking Foundational Care 5Y NBD Exch ION 1930 48G PoE Switch SVC

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