Overview

HPE Storage Ethernet Switch H-series SN8325H

HPE Storage Ethernet H-series SN8325H half width switches address today's data center's complex networking requirements, growth, expansion and are perfect for Top-Of-Rack (TOR) deployments. All SN8325H half width switches are TAA compliant to ensure support of TAA restrictions. It is optimized for virtualized environments, hyperconverged infrastructure, and storage deployments. The HPE Storage Ethernet H-series SN8325H half width switches are designed to provide high-performance 1/10/25/40/100G connectivity with fixed, redundant power and fixed cooling in a half-width, single RU form factor while meeting the requirements of a wide array of compute and storage lossy and lossless networking use cases. These half-width switches help organizations balance density, high availability, and affordability which helps to save space and costs on server, storage and dHCI/HCI connectivity.

HPE Storage Ethernet H-series SN8325H half width switches are also ideal for smaller edge or colocation data centers that require limited port density or have limited rack space. SN8325H switches can be used in small branch and edge locations where space is at a premium (e.g., virtualized data centers, next generation storage, retail locations, healthcare facilities, media and entertainment, streaming video, financial services industry, and enterprise branches) and which don't always have IT racks but often have storage closets being used to store servers and IT equipment. The SN8325H switches leverage the same high-performance ASIC and fully featured operating system that the full-width HPE Aruba CX 8325 provides. The SN8325H also utilizes HPE Aruba AOS-CX operating system. This provides a modern, database-driven OS that automates and simplifies critical and complex network tasks. AOS-CX provides an advanced Layer 2/3 feature set including BGP, OSPF, VRF-Lite, IPv6, dynamic VXLAN and intelligent monitoring, visibility, and remediation with a network analytics engine. The switch can be managed with HPE Aruba Networking Central, a cloud-based network management solution, or on-premises with HPE Aruba Networking Fabric Composer, NetConductor, or CLI based management.

Delivering the highest feature set at the right price allows you to get the most out of your Ethernet infrastructure to best support a variety of use cases, including media and entertainment; streaming video, financial services industry, virtualized data centers, and next generation storage, including software-defined storage and NVMe® flash storage. HPE Storage Ethernet Switch H-series SN8325H are available with factory integrated AOS-CX for immediate deployment. With HPE Storage Ethernet Switch H-series SN8325H, you can:

- **Optimize Storage**— modernize your network to eliminate limitations and bottlenecks that can be caused by the addition of flash storage.
- **Enjoy efficient network performance**— avoid packet loss, provide predictable performance with line-rate packet delivery across all ports and all packet sizes
- **Realize breakthrough economics**— make better use of your data center resources with the highest port density per rack unit and the industry's lowest power consumption.
- **Accelerate business innovation**— utilize 1/10/25/40/100Gbps Ethernet connectivity for workloads and enhance connectivity that responds quickly to business needs and stays on the leading edge of Ethernet switching technology.

Flexible connectivity

- HPE Storage Ethernet H-series SN8325H 18SFP28 4QSFP28 is designed to support any combination of 1/10/25G interfaces on its 18 ports – no port grouping necessary. The 4 ports of 100G can be split using breakout cabling depending on your needs providing up to 1.74 Tbps of bidirectional switching capacity with 2 Bpps.
- HPE Storage Ethernet H-series SN8325H 16QSFP28 allows for support of different port speeds utilizing breakout cabling, based on 40/100GbE splits, an example is 100GbE to be split into 4x25G. This switch provides up to 3.24 Tbps of bidirectional switching capacity with 2 Bpps.

Overview

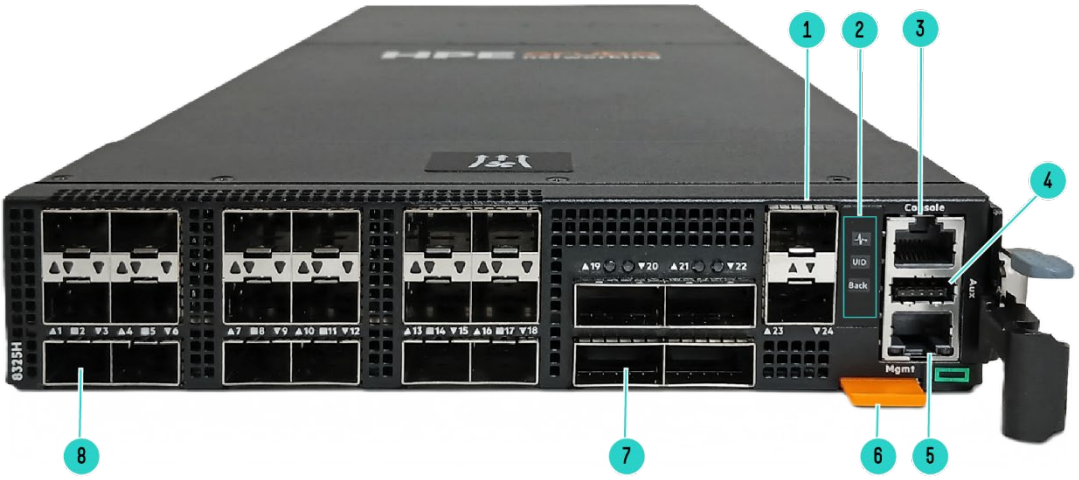
Models

HPE Storage Ethernet Switch H-series SN8325H Ethernet Switch Models

Description	SKU
HPE Storage DCN 18p SFP28 25GbE 4p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H	S4Q65A
HPE Storage DCN 18p SFP28 25GbE 4p QSFP28 100GbE Connector to Power Half Width Sw H-series SN8325H	S4Q66A
HPE Storage DCN 16p QSFP28 100GbE Power to Connector Half Width Switch H-series SN8325H	S4Q67A
HPE Storage DCN 16p QSFP28 100GbE Connector to Power Half Width Switch H-series SN8325H	S4Q68A
HPE Storage DCN H-series SN8325H 4-post Rack Mount Kit	S4Q69A
HPE Aruba Networking 1U Universal 4-post Rack Mount Kit	R9F57A
HPE Storage DCN H-series SN8325H Rack Mount Blank Panel	S4Q71A

Notes:

- Required to order one R9F57A for any SN8325H order. Only one R9F57A is required if a customer installs 2 switches per rack installation kit (S4Q69A). R9F57A is not required for customers adding a single switch for upgrade to existing installation with one open slot in the chassis.
- Only 1 Rack Mount kit (R9F57A) is required for 2x SN8325H switches within the same rack
- A Blank Panel (S4Q71A) can be used for customers only ordering one half width switch within the same rack and wanting to prevent cold isle and hot air from mixing in their data center.



HPE Storage DCN 18p SFP28 25GbE 4p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H (Front View)

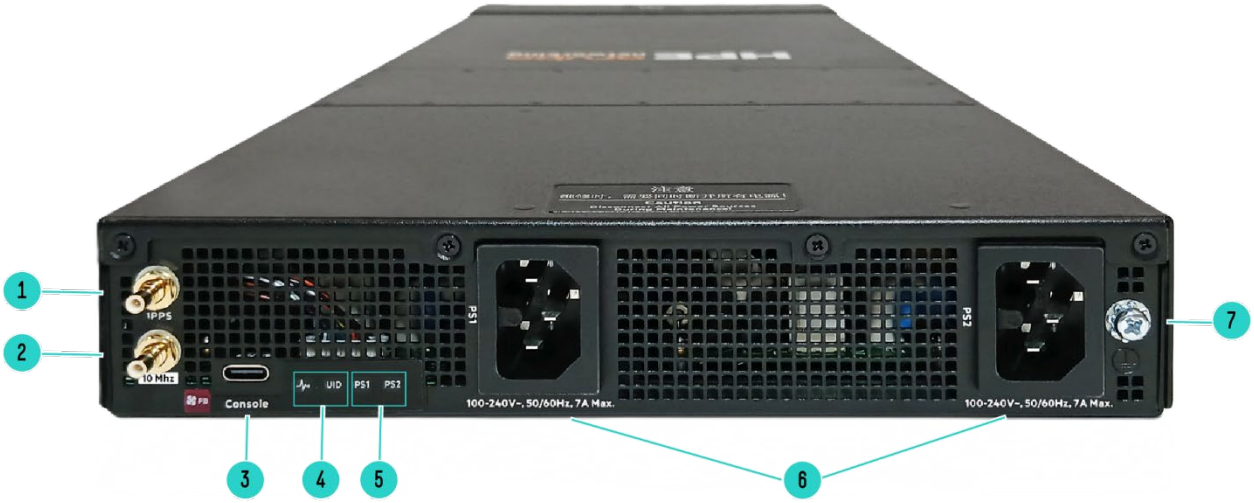
1. 10G/1G SFP+ x 2 telemetry ports (general purpose ports
2. Status LEDs ((System; Fan; Power Supply 1, 2; Unit Identifier)
3. RJ-45 Serial Console Port (Baud Rate 115200)
4. USB Type-A Auxiliary Port (Labelled “Aux”)
5. 1000/100/10 Mbps Out-Of-Band-Management Port (Labelled “Mgmt”, Baud Rate 115200)
6. Luggage Tab (Contains Product and Unit Identification Info)
7. SFP28/SFP Ports (1-18)
8. QSFP28/QSFP Ports (19-22); split x4 supported

Overview

HPE Storage DCN 16p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H (Front View)

1. Status LEDs ((System; Fan; Power Supply 1, 2; Unit Identifier)
2. RJ-45 Serial Console Port (Baud Rate 115200)
3. USB Type-A Auxiliary Port (Labelled “Aux”)
4. 1000/100/10 Mbps Out-Of-Band-Managemen TPort (Labelled “Mgmt”, Baud Rate 115200)
5. Luggage Tab (Contains Product and Unit Identification Info)
6. 10G/1G SFP+ x 2 telemetry ports (general purpose port)
7. QSFP28/QSFP Ports (1-16); split x4 supported

Overview



HPE Storage DCN 16p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H (Rear View)

Rear Panel Features

1. SMB 1PPS IO connector
2. SMB 10MHz IO connector
3. USB- Console Port
4. System LEDs
5. PSU Status LEDs
6. Ground Lug
7. Inlet C16 Sockets

Standard Features

Key Features and Benefits

- The HPE Storage Ethernet Switch H-series SN8325H comes in two different port configuration options to support wider customer application needs. First, a half-width switch with 18 ports of 1/10/25GbE and 4 ports of 40/100GbE Ethernet ports that can breakout to 10GbE or 25GbE ports. Second, a half-width switch with 16 ports of 40/100GbE which can breakout to 4 ports of 10GbE or 25GbE. Both are ideal for Primary, Secondary storage, and Hyperconverged Infrastructures. The SN8325H switches are the ideal top of rack (ToR) solution.
- HPE Storage Ethernet Switch H-series SN8325H introduces low latency for 1/10/25GbE and 40/100GbE switching, features a robust implementation of data, control and management planes, and offers a compact form factor and low power consumption.
- HPE Storage Ethernet Switch H-series SN8325H provides low cut-through latency (less than 900ns). This is advantageous for flash storage which has moved latency bottlenecks form storage access to the network, as well as for the burst nature of today's software defined and cloud data centers traffic.
- The buffering architecture of the HPE Storage Ethernet Switch H-series SN8325H provides superior microburst absorption for applications that burst data at random intervals.
- The HPE Storage Ethernet Switch H-series SN8325H provides a flexible combination of ports, allowing for efficiency, simplifying scale-out environments, and saving on total cost of ownership.
- Optimized port configuration enables high-speed rack connectivity to the server at 1/10/25GbE speeds with 40/100GbE ports that allow for a variety of blocking ratios that suit specific application requirements.
- HPE Storage Ethernet Switch H-series SN8325H supports RoCEv2, full buffer utilization, and zero packet loss combined into a small form factor with low latency make it the ideal switch for ESF (Ethernet Storage Fabric).
- The HPE Storage Ethernet Switch H-series SN8325H provides port density in a single rack unit, allowing for higher capacity and efficiency, simplifying scale-out environments and saving on total cost of ownership.
- Its unique half-width form factors and port counts, these Ethernet switches allow for two SN8325H units side by side in a redundant or separately to be deployed side-by-side allowing for increased density, making it the ideal top-of-rack switch.
- SN8325H is the best fit with a mix of 1/10/25GbE and 40/100GbE ports that are all designed for zero packet loss. Distributed storage, hyperconverged, analytic and database solutions require the ability to scale out without compromising performance or high availability.
- High throughput, low latency and active-active network switching capabilities are crucial when deploying clustered servers and storage. HPE Storage Ethernet Switch H-series SN8325H delivers connectivity to many clients plus 40/100GbE connectivity to selected servers, storage systems or for network uplinks, and all with low latency.
- SN8325H supports additional 1/10GbE telemetry ports, which can be used for standard applications and/or VSX Heartbeat, etc.

HPE Aruba AOS-CX

The HPE Storage Ethernet H-series SN8325H Switch Series is based on AOS-CX, a modern, database-driven operating system that is built on a modular Linux architecture. This operating system provides the following unique capabilities:

- Easy access to all network configuration state information
- REST APIs for fine-grained programmability of network tasks
- A micro-services architecture that enables full integration with other workflow systems and services
- All software processes communicate with the database rather than each other, ensuring near real-time state and resiliency

Deployment Models:
L3 network, L2 network, Clos, Out-of-band management, Overlay network

Use cases:
Containers, Big data, Private cloud, Network virtualization, DevOps / automation, Monitoring and analytics, Hyperconverged infrastructure

Standard Features

Key Features

Virtual Routing and Forwarding: Run multiple network paths without the need for multiple switches, giving you traffic isolation and network segmentation for multiple devices.

Ethernet Virtual Private Networks (EVPN): The most advanced capabilities available for EVPN allow legacy layer-2 applications to operate over next-generation layer-3 networks.

HPE Aruba Networking CX Operating System—a modern software system HPE Aruba Networking CX Operating System (AOS-CX) is a modern, microservices-based, database-driven operating system that comes with every HPE Aruba Networking CX switch. AOS-CX automates and simplifies many critical and complex network tasks. A built-in time series database enables customers and developers to utilize software scripts for historical troubleshooting, as well as analysis of past trends. This helps predict and avoid future problems due to scale, security, and performance bottlenecks. HPE Aruba Networking CX Operating System features are organized into HPE Aruba Networking CX Foundational and HPE Aruba Networking CX Advanced software licenses.
Key capabilities supported on the 8325 include:

- HPE Aruba Networking Network Analytics Engine (NAE)
- Dynamic Segmentation
- Switch Stacking
- High Availability and Resiliency
- Quality of Service (QoS)
- Layer 2 Switching
- Layer 3 Services and Routing
- IP Multicast
- Network Security
- Support for HPE Aruba Networking Switch Multi-Edit Software
- Designed using the best features of existing HA technologies such as Multi-chassis Link Aggregation (MC-LAG) and Virtual Switching Framework (VSF), HPE Aruba Networking VSX enables a distributed architecture that is highly available during upgrades or control plane events.

Layer 3 Features

- Address Resolution Protocol (ARP) determines the MAC address of another IP host in the same subnet; supports static ARPs
- Domain Name System (DNS) provides a distributed database that translates domain names and IP addresses, which simplifies network design; supports client and server
- Supports internal loopback testing for maintenance purposes and increased availability; loopback detection protects against incorrect cabling or network configurations and can be enabled on a per-port or per
- VLAN basis for added flexibility
- Dynamic Host Configuration Protocol (DHCP) simplifies the management of large IP networks and supports client; DHCPv4 Relay support enables DHCP operation across subnets
  Layer 3 Routing
  The following Layer 3 routing services are supported:
- Static IP routing provides manually configured routes.
- Dual stack static IPv4 and IPv6 routing provides simple manually configured IPv4 and IPv6 routing
- Dual IP stack maintains separate stacks for IPv4 and IPv6 to ease the transition from an IPv4-only network to an IPv6-only network design

Standard Features

Layer 2 features

- VLAN support and tagging support for IEEE 802.1Q (4094 VLAN IDs) and 512 VLANs simultaneously
- Jumbo packet support improves the performance of large data transfers; supports frame size of up to 9,220 bytes
- Rapid Per-VLAN Spanning Tree (RPVST+) allows each VLAN to build a separate spanning tree to improve link bandwidth
  usage; is compatible with PVST+
- 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)
- MVRP allows automatic learning and dynamic assignment of VLANs
- Bridge Protocol Data Unit (BPDU) tunneling transmits STP BPDUs transparently, allowing correct tree calculations across service providers, WANs, or MANs
- Port mirroring duplicates port traffic (ingress and egress) to a monitoring port; supports 4 mirroring groups
- Internet Group Management Protocol (IGMP) Controls and manages the flooding of multicast packets in a Layer 2 networks

PTP features

- Supports PTP (1588 v2), SMPTE
- PTP timing interfaces: 1 PPS, 10 MHz
- Boundary clock

Network Virtualization

- VXLAN support
- VXLAN Routing - symmetric and asymmetric
- L2 gateway services integration with VMware NSX
- VXLAN head end replication
- VXLAN active-active bridging with MLAG
- Controller-less network virtualization with EVPN

Management

- REST SNMP
- RJ-45 serial
- USB-C console
- RJ-45 Ethernet port
- REST API switch management using and configuration using SWAGGER
- Switch configuration by CLI, REST API, and WebUI
- FW Upgrade Management
- Hotpatch Management - Hot-patching provides users of AOS-CX with a way to update running software without rebooting their system. Hot-patches are distributed as signed patch files.
- Automated install and provisioning: zero touch install and zero touch provisioning
- Management VRF
- DHCP and v4/v6 DHCP relays
- Checkpoints rollback of the entire system to eliminate risk from system updates

Monitoring and Troubleshooting

- Monitor traffic patterns and preemptive capacity planning with buffer monitoring
- Traditional monitoring with SNMPv2 and SNMPv3 and network-specific MIBs
- Troubleshooting with alerts, syslog, hardware inventory, log files, tech support file.
- sFlow monitoring for system statistics and network traffic
- IPFIX monitoring for system statistics and network traffic

Standard Features

Security

- Access control lists (ACLs) L2-L4 classification

QoS

- Data Center Bridging Capability Exchange protocol (DCBX)
- Classification based on Class of Service (CoS) (IEEE 802.1p) or DSCP (queuing, scheduling-DWRR and Strict Priority - and buffer allocation)
- Ingress ACL-based classification/policing
- Priority flow control and explicit congestion notification (ECN)
- Dynamic buffer configuration as default

Service and Support

Recommended Services

HPE Tech Care Service

HPE Tech Care Service is the operational support service experience for HPE products. The service goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service delivers a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2-hour response time. Essential which provides a 15-minute response time 24x7 for most enterprise level customers, and Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.

https://www.hpe.com/services/techcare

HPE Aruba Networking Foundational Care Overview

HPE Aruba Networking has developed an enhanced support program which allows customers to choose multiple service level options for their network and the associated HPE Aruba Networking hardware and software components. This fee-based service allows access to HPE Aruba Networking support services as outlined below and enables increased availability of network infrastructure.

Foundational Care support consists of the following three service elements:

- Technical support (delivered in English only but with multi-lingual chat through Ava, the virtual assistant in the HPE Networking Support Portal, formerly known as Aruba Support Portal [ASP])
- Hardware replacement (managed and delivered through the Technical Assistance Center (TAC) or self-serve through the HPE Networking Support Portal)
- Software updates and support (delivered as self-serve through the HPE Networking Support Portal)

For Aruba Services Foundational Care information, visit: **https://www.hpe.com/psnow/doc/a00137490enw**

Configuration Information

Step 1 - Base Configuration. Select one Model

Description	SKU
HPE Storage DCN 18p SFP28 25GbE 4p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H	S4Q65A
HPE Storage DCN 18p SFP28 25GbE 4p QSFP28 100GbE Connector to Power Half Width Sw H-series SN8325H	S4Q66A
HPE Storage DCN 16p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H	S4Q67A
HPE Storage DCN 16p QSFP28 100GbE Connector to Power Half Width Sw H-series SN8325H	S4Q68A
HPE Storage DCN H-series SN8325H 4-post Rack Mount Kit	S4Q69A
HPE Aruba Networking 1U Universal 4-post Rack Mount Kit	R9F57A
HPE Storage DCN H-series SN8325H Rack Mount Blank Panel	S4Q71A

Notes:

- Required to order one R9F57A for any SN8325H order. Only one R9F57A is required if a customer installs 2 switches per rack installation kit (S4Q69A). R9F57A is not required for customers adding a single switch for upgrade to existing installation with one open slot in the chassis.
- Only 1 Rack Mount kit (R9F57A) is required for 2x SN8325H switches within the same rack
- A Blank Panel (S4Q71A) can be used for customers only ordering one half width switch within the same rack and wanting to prevent cold isle and hot air from mixing in their data center.

Step 2 – Options

- Refer to HPE H-series Switches **SPOCK** Connectivity Stream for latest SN8325H with HPE Aruba AOS-CX interconnect support matrix

Transceivers – for HPE Storage Ethernet H-series SN8325H half width switches

100GbE

Note #	Description	SKU
	HPE 100GbE QSFP28 SR4 100m Transceiver	Q2F19A
3, 4	HPE 100Gb QSFP28 LC SWDM4 Multi-mode 100m Transceiver	R0R40A
	HPE 100GbE QSFP28 500m 1310mm PSM4 Transceiver	Q8J73A
14	HPE 100GbE QSFP28 LC DR1 500m 1-pack Transceiver	R8M61A
	HPE Aruba Networking 100G QSFP28 MPO SR4 MMF Transceiver	R9F75A
	HPE Aruba Networking 100G QSFP28 LC LR4 10km SMF 2-strand Transceiver	JL310A
	HPE Aruba Networking 100G QSFP28 LC CWDM4 2km SMF Transceiver	R0Z30A
	HPE Aruba Networking 100G QSFP28 LC ER4L 40km SMF Transceiver	JL743A
	HPE Aruba Networking 100G DR QSFP28 LC 500m SMF Transceiver	S3N88A
	HPE Aruba Networking 100G LR QSFP28 LC 10km SMF Transceiver	S3N89A
	HPE 100Gb QSFP28 Bidirectional Transceiver	845972-B21
	HPE 100Gb QSFP28 MPO SR4 100m Transceiver	845966-B21

Configuration Information

40GbE

Note #	Description	SKU
	HPE Aruba Networking 40G QSFP+ MPO SR4 Transceiver	R9F97A
	HPE Aruba Networking 40G QSFP+ MPO eSR4 300M Transceiver	R9F98A
	HPE Networking X142 40G QSFP+ LC LR4 SM Transceiver	JH232A
	HPE Aruba Networking 40G QSFP+ LC ER4 40km SMF Transceiver	Q9G82A
	HPE Aruba Networking 40G QSFP+ LC Bidirectional 150m MMF 2-strand Transceiver	R9G02A

25GbE

	HPE 25Gb SFP28 Short Wave Extended Temperature 1-pack Pull Tab Optical Transceiver	Q2P64B
	HPE 25Gb SFP28 SR 30m Transceiver	R0R42A
	HPE Aruba Networking 25G SFP28 LC SR 100m MMF Transceiver	R9F89A
	HPE 25Gb SFP28 SR 100m Transceiver	845398-B21
	HPE Aruba Networking 25G SFP28 LC eSR 400m MMF Transceiver	R9F90A
	HPE Aruba Networking 25G SFP28 LC LR 10km SMF Transceiver	JL486A

10GbE

	HPE 10GbE SFP+ SR Multi-mode 300m Transceiver	Q6M30A
	HPE 10Gb SFP+ Short Wave 1-pack Pull Tab Optical Transceiver	Q2P65A
	HPE Aruba Networking 10G SFP+ LC LR 10km SMF Transceiver	J9151E
2, 5	HPE 10GBASE-T SFP+ RJ45 30m 1-pack Transceiver	R0R41B
	HPE BladeSystem c-Class 10Gb SFP+ SR Transceiver	455883-B21
2, 5	HPE Aruba Networking 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver	JL563C
2, 5	HPE Aruba Networking 10GBASE-T SFP+ RJ45 30m Cat6A Transceiver	R9F85A
	HPE Aruba Networking 10G SFP+ LC SR 300m OM3 MMF Transceiver	R9F82A
	HPE Aruba Networking 10G SFP+ LC ER 40km SMF Transceiver	J9153D
	HPE Aruba Networking 10G SFP+ LC SR 300m MMF TAA Transceiver	R9Q46A
	HPE Aruba Networking 10G SFP+ LC LR 10km SMF TAA Transceiver	R9Q47A

1GbE

	HPE Aruba Networking 1G SFP RJ45 T 100m Cat5e TAA Transceiver	R9Q45A

Optic Adapter

1	HPE QSFP28 to SFP28 Adapter	845970-B21

Configuration Information

Supported DAC/Copper Cables and Adapters

Note #	Description	SKU
	HPE Aruba Networking 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	R9F83A
	HPE Aruba Networking 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	R9F84A
	HPE Aruba Networking 25G SFP28 to SFP28 0.65m Direct Attach Copper Cable	R9F91A
	HPE 25Gb SFP28 to SFP28 3m Direct Attach Copper Cable	844477-B21
	HPE 25Gb SFP28 to SFP28 5m Direct Attach Copper Cable	844480-B21
	HPE 25Gb SFP28 to SFP28 0.5m Direct Attach Copper Cable	R4G18A
	HPE 25Gb SFP28 to SFP28 1m Direct Attach Copper Cable	R4G19A
	HPE Aruba Networking 25G SFP28 to SFP28 0.65m Direct Attach Copper Cable	R9F91A
	HPE Aruba Networking 25G SFP28 to SFP28 3m Direct Attach Copper Cable	JL488A
	HPE Aruba Networking 25G SFP28 to SFP28 5m Direct Attach Copper Cable	JL489A
	HPE Aruba Networking 25G SFP28 to SFP28 3m Direct Attach Copper Cable	R9F92A
	HPE Aruba Networking 25G SFP28 to SFP28 5m Direct Attach Copper Cable	R9F93A
	HPE Aruba Networking 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable	R9F99A
	HPE Aruba Networking 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable	R9G00A
	HPE Aruba Networking 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable	R9G01A
	HPE 100Gb QSFP28 to QSFP28 5m Direct Attach Copper Cable	845408-B21
	HPE 100GbE QSFP28 to 4x25GbE SFP28 1m Direct Attach Copper Cable	Q9S72A
	HPE Aruba Networking 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable	R9F77A
	HPE Aruba Networking 100G QSFP28-QSFP28 3m Direct Attach Copper Cable	R9F74A
	HPE Aruba Networking 100G QSFP28 to QSFP28 5m Direct Attach Copper Cable	R9F78A
	HPE 100Gb QSFP28 to QSFP28 3m Direct Attach Copper Cable	845406-B21
	HPE 100Gb QSFP28 to 4x25Gb SFP28 3m Direct Attach Copper Cable	845416-B21

Supported AOC (Optical) Cables and Adapters

Note #	Description	SKU
	HPE 25GbE SFP28 to SFP28 3m Smart Active Optical Cable	Q9S67A
	HPE 25GbE SFP28 to SFP28 5m Smart Active Optical Cable	Q9S68A
	HPE 25GbE SFP28 to SFP28 10m Smart Active Optical Cable	Q9S69A
	HPE 25GbE SFP28 to SFP28 15m Smart Active Optical Cable	Q9S70A
	HPE Aruba Networking 25G SFP28 to SFP28 3m Active Optical Cable	R9F94A
	HPE Aruba Networking 25G SFP28 to SFP28 7m Active Optical Cable	R9F95A
	HPE Aruba Networking 25G SFP28 to SFP28 15m Active Optical Cable	R9F96A
	HPE 100GbE QSFP28 to QSFP28 5m Active Optical Cable	Q9S71A
	HPE 40GbE QSFP+ to 4x10GbE SFP+ 5m Active Optical Cable	Q9S66A

Configuration Information

Note #	Description	SKU
	HPE Aruba Networking 40G QSFP+ to QSFP+ 7m Active Optical Cable	R9G03A
	HPE Aruba Networking 40G QSFP+ to QSFP+ 15m Active Optical Cable	R9G04A
	HPE Aruba Networking 40G QSFP+ to QSFP+ 30m Active Optical Cable	R9G05A
	HPE Aruba Networking 100G QSFP28 to QSFP28 2m Active Optical Cable	R9F76A
	HPE Aruba Networking 100G QSFP28 to QSFP28 7m Active Optical Cable	R9F79A
	HPE Aruba Networking 100G QSFP28 to QSFP28 15m Active Optical Cable	R9F80A
	HPE Aruba Networking 100G QSFP28 to QSFP28 30m Active Optical Cable	R9F81A
	HPE QSFP28 to 4x25Gb SFP28 7m Active Optical Cable	845420-B21
	HPE QSFP28 to 4x25Gb SFP28 15m Active Optical Cable	845424-B21

Configuration Rules and Notes:

1 HPE QSA28 (QSFP28 to SFP28) adapter (845970-B21) is compatible with all H-series half-width switches and is required to convert a QSFP28 slot to a single SFP28 or SFP+ slot for 1G, 10G, or 25G operation with this switch model

2 This HPE transceiver is compatible and supported for use in the SFP28 slots and also the QSFP28 slots with this H-series switch model with the QSA28 (QSFP28 to SFP28) adapter (845970-B21).

3 The R0R40A HPE 100Gb QSFP28 LC SWDM4 MM 100m does not interoperate with the 845972-B21 HPE 100Gb QSFP28 Bidirectional XCVR transceivers.

4 100Gbe SWDM4 LC transceivers JH419A and R0R40A are interoperable.

5 10Gbase-T SFP+ RJ45 transceiver supports maximum length 30M CAT6a cable. This 10Gabse-T transceiver is not qualified for use at 1GbE and shall be operated only at 10GbE.

Supported Optical Cables for all H-series switch models

Description	SKU
HPE Premier Flex MPO/MPO Multi-mode OM4 12 Fiber 10m Cable	QK729A
HPE Premier Flex MPO/MPO Multi-mode OM4 8 Fiber 50m Cable	QK731A
HPE Premier Flex LC/LC Multi-mode OM4 2 Fiber 1m Cable	QK732A
HPE Premier Flex LC/LC Multi-mode OM4 2 Fiber 2m Cable	QK733A
HPE Premier Flex LC/LC Multi-mode OM4 2 Fiber 5m Cable	QK734A
HPE Premier Flex LC/LC Multi-mode OM4 2 Fiber 15m Cable	QK735A
HPE Premier Flex LC/LC Multi-mode OM4 2 Fiber 30m Cable	QK736A
HPE Premier Flex LC/LC Multi-mode OM4 2 Fiber 50m Cable	QK737A
HPE LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
HPE LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
HPE LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
HPE LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
HPE LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
HPE LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
HPE LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A

Configuration Information

Description	SKU
HPE Premier Flex MPO/MPO OM4 100m Cable	H6Z30A
HPE Multi Fiber Push On to 4 x Lucent Connector 5m Cable	K2Q46A
HPE Multi Fiber Push On to 4 x Lucent Connector 15m Cable	K2Q47A
HPE Premier Flex MPO/MPO Multi-mode OM4 12 Fiber 1m Cable	Q1H63A
HPE Premier Flex MPO/MPO Multi-mode OM4 12 Fiber 2m Cable	Q1H64A
HPE Premier Flex MPO/MPO Multi-mode OM4 12 Fiber 5m Cable	Q1H65A
HPE Premier Flex MPO/MPO Multi-mode OM4 12 Fiber 15m Cable	Q1H66A
HPE Premier Flex MPO/MPO Multi-mode OM4 12 Fiber 30m Cable	Q1H67A
HPE Premier Flex MPO to 4xLC 30m Cbl	Q1H68A
HPE Premier Flex MPO to 4 x Lucent Connector 50m Cable	Q1H69A
HPE 5m Single-Mode LC/LC Fibre Channel Cable	AK346A
HPE Premier Flex Wide Band OM5 LC 2 Fibers 100m Cable	R9M64A
HPE Premier Flex Wide Band OM5 LC 2 Fibers 150m Cable	R9M65A
HPE Premier Flex Wide Band MPO OM5 8 Fibers 100m Cable	R9M62A

Step 3 – Service Options (Optional)

Note #	Description	SKU
4, 7	5 yr Tech Care Basic wDMR SV	HU4B3A50C1J
4, 7	3 yr Tech Care Basic wDMR SV	HU4B3A40C1J
4, 7	3 yr Tech Care Basic wDMR SV	HU4B3A30C1J
4	5 yr Tech Care Basic SV	HU4B2A50C1J
4	4 yr Tech Care Basic SV	HU4B2A40C1J
4	3 yr Tech Care Basic SV	HU4B2A30C1J
5, 7	5 yr Tech Care Essentials wDMR SV	HU4A7A50C1J
5, 7	4 yr Tech Care Essentials wDMR SV	HU4A7A40C1J
5, 7	3 yr Tech Care Essentials wDMR SV	HU4A7A30C1J
5	5 yr Tech Care Essentials SV	HU4A6A50C1J
5	4 yr Tech Care Essentials SV	HU4A6A40C1J
5	3 yr Tech Care Essentials SV	HU4A6A30C1J
6, 7	5 yr Tech Care Critical wDMR SV	HU4A4A50C1J
6, 7	4 yr Tech Care Critical wDMR SV	HU4A4A40C1J
6, 7	3 yr Tech Care Critical wDMR SV	HU4A4A30C1J
6	5 yr Tech Care Critical SV	HU4A3A50C1J
6	4 yr Tech Care Critical SV	HU4A3A40C1J
6	3 yr Tech Care Critical SV	HU4A3A30C1J

Configuration Information

Note #	Description	SKU
1	HPE Aruba Networking Foundational Care 3Y NBD Exchange 8325H Sw SVC	H8A01A30C1J
1	HPE Aruba Networking Foundational Care 5Y NBD Exchange 8325H Sw SVC	H8A01A50C1J
1	HPE Aruba Networking Foundational Care 3Y NBD On-site 8325H Sw SVC	H7J32A30C1J
1	HPE Aruba Networking Foundational Care 5Y NBD On-site 8325H Sw SVC	H7J32A50C1J
1	HPE Aruba Networking Foundational Care 3Y NBD DMR On-site 8325H Sw SVC	H7J33A30C1J
1	HPE Aruba Networking Foundational Care 5Y NBD DMR On-site 8325H Sw SVC	H7J33A50C1J
2	HPE Aruba Networking Foundational Care 3Y 24x7 On-site 8325H Sw SVC	H7J34A30C1J
2	HPE Aruba Networking Foundational Care 5Y 24x7 On-site 8325H Sw SVC	H7J34A50C1J
2	HPE Aruba Networking Foundational Care 3Y 24x7 DMR On-site 8325H Sw SVC	H7J35A30C1J
2	HPE Aruba Networking Foundational Care 5Y 24x7 DMR On-site 8325H Sw SVC	H7J35A50C1J
3	HPE Aruba Networking Foundational Care 3Y CTR On-site 8325H Sw SVC	H7J36A30C1J
3	HPE Aruba Networking Foundational Care 5Y CTR On-site 8325H Sw SVC	H7J36A50C1J
3	HPE Aruba Networking Foundational Care 3Y CTR DMR On-site 8325H Sw SVC	H7J37A30C1J
3	HPE Aruba Networking Foundational Care 35 CTR DMR On-site 8325H Sw SVC	H7J37A50C1J

Configuration Rules and Notes:

1 Next Business Day (NBD)
- Exchange is parts only.
- On-site is labor. Parts per Service Level Objective (SLO)

2 24x7 Has 4-hour onsite labor. Parts per Service Level Objective (SLO)

3 Call to Repair (CTR) Parts and on-site labor operation within 6 hours of call on critical outages.

4 Basic provides 9x5 business hour availability and a 2-hour response time.

5 Essential provides a 15-minute response time 24x7 for most enterprise level customers.

6 Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.

7 DMR = Defective Media Retention. Allows customers to retain defective storage media during warranty periods, enabling them to manage data security and disposal according to their own procedures.

Step 4 - HPE Aruba Networking Central CX & Fabric Composer Switch Subscription SKUs (Optional)

Description	SKU
Fabric Composer Device Management Service Tier 4 Switch 1-Year Subscription E-STU	R7G99AE
Fabric Composer Device Management Service Tier 4 Switch 3-Year Subscription E-STU	R7H00AE
Fabric Composer Device Management Service Tier 4 Switch 5-Year Subscription E-STU	R7H01AE
HPE Aruba Networking Central Switch Class5 Foundation 1-year Subscription E-STU	R3K03AAE
HPE Aruba Networking Central Switch Class5 Foundation 3-year Subscription E-STU	R3K04AAE
HPE Aruba Networking Central Switch Class5 Foundation 5-year Subscription E-STU	R3K05AAE
HPE Aruba Networking Central Switch Class5 Foundation 7-year Subscription E-STU	R3K06AAE
HPE Aruba Networking Central Switch Class5 Foundation 10-year Subscription E-STU	R3K07AAE

Configuration Information

Description	SKU
HPE Aruba Networking Central on Prem Switch Class-5 Foundation 1 year Subscription E-STU	R6U88AAE
HPE Aruba Networking Central on Prem Switch Class-5 Foundation 3 year Subscription E-STU	R6U89AAE
HPE Aruba Networking Central on Prem Switch Class-5 Foundation 5 year Subscription E-STU	R6U90AAE
HPE Aruba Networking Central on Prem Switch Class-5 Foundation 7 year Subscription E-STU	R6U91AAE
HPE Aruba Networking Central on Prem Switch Class-5 Foundation 10 year Subscription E-STU	R6U92AAE

Technical Specifications

Family Information (H-series with Aruba AOS-CX)				
	HPE Storage DCN 18p SFP28 25GbE 4p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H S4Q65A	**HPE Storage DCN 18p SFP28 25GbE 4p QSFP28 100GbE Connector to Power Half Width Sw H-series SN8325H S4Q66A**	**HPE Storage DCN 16p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H S4Q67A**	**HPE Storage DCN 16p QSFP28 100GbE Connector to Power Half Width Sw H-series SN8325H S4Q68A**
Description	Ideal ½ width ToR 1/10/25/40/100GbE	Ideal ½ width ToR 1/10/25/40/100GbE	Ideal ½ width ToR 40/100GbE or use breakouts for 1/10/25	Ideal ½ width ToR 40/100GbE or use breakouts for 1/10/25
TAA Compliant	Yes	Yes	Yes	Yes
Ports Speeds	18 x 1/10/25GbE + 4x40/100GbE Breakout - 16x1/10/25GbE	18 x 1/10/25GbE + 4x40/100GbE Breakout - 16x1/10/25GbE	16x40/100GbE Breakout – 64x1/10/25GbE	16x40/100GbE Breakout – 64x1/10/25GbE
Minimum Configuration	18 + 4 Ports	18 + 4 Ports	16 Ports	16 Ports
Size	1U (½ 19" wide)	1U (½ 19" wide)	1U (½ 19" wide)	1U (½ 19" wide)
Switching Capacity	1.74 Tb/s (870 Gb/s in + 870 Gb/s out)	1.74 Tb/s (870 Gb/s in + 870 Gb/s Out)	3.24 Tb/s (1.62 Tb/s in + 1.62 Tb/s out)	3.24 Tb/s (1.62 Tb/s in + 1.62 Tb/s out)
Processing Capacity	2Bpps	2Bpps	2Bpps	2Bpps
Forwarding Technology	Cut Through	Cut Through	Cut Through	Cut Through
Typical Power Consumption	Idle: 100W Typical: 123W 100% Traffic Rate: 340W Hibernation (0rpm fan): 8W ***100% traffic rate power measured /w DACs only,240VAC at 40C at full fan speed. Idle power measured /w DACs only; 50% traffic,240VAC at 25C. Power consumption will vary by type of installed transceiver.	Idle: 100W Typical: 123W 100% Traffic Rate: 340W Hibernation (0rpm fan): 8W ***100% traffic rate power measured /w DACs only,240VAC at 45C at full fan speed. Idle power measured /w DACs only; 50% traffic,240VAC at 25C. Power consumption will vary by type of installed transceiver.	Idle: 105W Typical: 133W 100% Traffic Rate: 349W Hibernation (0rpm fan): 8W ***100% traffic rate power measured /w DACs only,240VAC at 40C at full fan speed. Idle power measured /w DACs only; 50% traffic,240VAC at 25C. Power consumption will vary by type of installed transceiver.	Idle: 105W Typical: 133W 100% Traffic Rate: 349W Hibernation (0rpm fan): 8W ***100% traffic rate power measured /w DACs only,240VAC at 45C at full fan speed. Idle power measured /w DACs only; 50% traffic,240VAC at 25C. Power consumption will vary by type of installed transceiver.
Energy Efficiency	full load: 91.3% @ 115Vac/60Hz, 92.6% @ 230Vac/50Hz	full load: 91.3% @ 115Vac/60Hz , 92.6% @ 230Vac/50Hz	80 Plus Gold	80 Plus Gold
Supported OS	Aruba AOS-CX	Aruba AOS-CX	Aruba AOS-CX	Aruba AOS-CX
System Memory	32GB	32GB	32GB	32GB
SSD Memory	128GB	128GB	128GB	128GB
Packet Buffer	32 MB	32 MB	32 MB	32 MB
1GbE Mgmt Port	1 RJ45	1 RJ45	1 RJ45	1 RJ45

Technical Specifications

	HPE Storage DCN 18p SFP28 25GbE 4p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H S4Q65A	HPE Storage DCN 18p SFP28 25GbE 4p QSFP28 100GbE Connector to Power Half Width Sw H-series SN8325H S4Q66A	HPE Storage DCN 16p QSFP28 100GbE Power to Connector Half Width Sw H-series SN8325H S4Q67A	HPE Storage DCN 16p QSFP28 100GbE Connector to Power Half Width Sw H-series SN8325H S4Q68A
Serial Port	1 RJ45 (Baud 115200)	1 RJ45 (Baud 115200)	1 RJ45 (Baud 115200)	1 RJ45 (Baud 115200)
USB Port	USB-C Console	USB-C Console	USB-C Console	USB-C Console
Airflow	Power-to-Connector (P2C) airflow	Connector-to-Power (C2P) airflow	Power-to-Connector (P2C) airflow	Connector-to-Power (C2P) airflow
Power Supplies	2 (1+1 redundant) not replaceable	2 (1+1 redundant) not replaceable	2 (1+1 redundant) not replaceable	2 (1+1 redundant) not replaceable
Fans	4 fans (N+1) not replaceable	4 fans (N+1) not replaceable	4 fans (N+1) not replaceable	4 fans (N+1) not replaceable
Power Supplies with integrated fans	Frequency: 50-60Hz Input range: 100-240Vac Input current 7A-4A IEC C15 To C16	Frequency: 50-60Hz Input range: 100-240Vac Input current 7A-4A IEC C15 To C16	Frequency: 50-60Hz Input range: 100-240Vac Input current 7A-4A IEC C15 To C16	Frequency: 50-60Hz Input range: 100-240Vac Input current 7A-4A IEC C15 To C16
Size	(H) 4.3 cm x (W) 21 cm x (D) 57.7 cm (1.69"x 8.27"x 22.70")	(H) 4.3 cm x (W) 21 cm x (D) 57.7 cm (1.69"x 8.27"x 22.70")	(H) 4.3 cm x (W) 21 cm x (D) 57.7 cm (1.69"x 8.27"x 22.70")	(H) 4.3 cm x (W) 21 cm x (D) 57.7 cm (1.69"x 8.27"x 22.70")
Weight	5.94 kg (13.08 lb)	5.94 kg (13.08 lb)	6.01 kg (13.24 lb)	6.01 kg (13.24 lb)

Technical Specifications

Environment	
Operating temperature	0C to 45°C
Non-Operating temperature	-40C to-40ºC to 70ºC
NEBs and ETSI operating temperature	-5°C to 55°C
Noncondensing	5% to 95% at 45° Power to Connector 5% to 95% at 40°C Connector to PowerC
Operating Altitude	0 - 3048m
Compliant	RoHS
Safety/ EMC	EN/IEC 62368-1 2nd, & 3rd, Edition. UL 62368-1 3rd, Edition. CSA C22.2 No. 62368-1:19, 3rd. Edition. EN 55032: 2015/CISPR 32, Class A AS/NZS CISPR 32, Class A EN 55035, CISPR 35, KS C 9835 ETSI EN 301 489-1 TEC-SD-DD-EMC-221-05-OCT-16
NEBS	SR-3580, Level 3, NEBS Criteria Levels GR-1089-CORE, EMC & Electrical Safety GR-63-CORE, Physical Protections ETSI EN 300 386, Class A, EMC ETSI EN 300 019-2-1, Class 1.2, Storage ETSI EN 300 019-2-2, Class 2.3, Transportation ETSI EN 300 019-2-3, Class 3.1 & 3.1E, Stationary Use at Weather Protected Locations ETSI 300 132, Power Supply Interface to Telecom Equipment, -48 VDC ETSI ETS 300 753, Acoustic Noise

Electrical characteristics	
Frequency	50/60 Hz
Voltage	100V-240V AC

Ethernet Ports Maximum High Power Support

- **SN8325H 18SFP28 4QSFP28**
  - Ports 1,2,17,18 Power Class 3 (2.5W)
  - Ports 3-16 Power Class1 (1.5W)
  - Ports 19-22 Power Class (4.5W)

- **SN8325H 16QSFP28**
  - Ports 1,2,15,16 Power Class 7 (5W)
  - Ports 3-14 Power Class 4 (3.5W)

Safety

EN/IEC 62368-1 2nd, & 3rd, Edition. UL 62368-1 3rd, Edition. CSA C22.2 No. 62368-1:19, 3rd. Edition.

EMC

EN 55032: 2015/CISPR 32, Class A FCC CFR 47 Part 15: Class A VCCI-CISPR 32, Class A CNS 15936, Class A KS C 9832, Class A AS/NZS CISPR 32, Class A EN 55035, CISPR 35, KS C 9835 ETSI EN 301 489-1 ETSI EN 301 489-19 TEC/EMI/TEL-001/FEB-09 TEC-SD-DD-EMC-221-05-OCT-16

Technical Specifications

Acoustic

- High-speed fan: 73.7dB(A)

Typical power with passive cables (ATIS):

- SN8325H 18 SFP28 4 QSF28 ports
  - Idle: 100W
  - Typical: 127W
- SN8325H 16 QSF28 ports
  - Idle: 114W
  - Typical: 138W

HPE Power Advisor

To address a need to accurately estimate power requirements and to ensure the appropriate levels of power and cooling and power-related operating costs, HPE created the **HPE Power Advisor utility**. The HPE Power Advisor utility provides accurate and meaningful estimates of the power needs for HPE servers, storage, and switches including H-series Ethernet switches.

Summary of Changes

Date	Version History	Action	Description of Change
02-Jun-2025	Version 1	New	New QuickSpecs.

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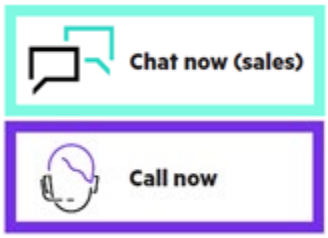

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