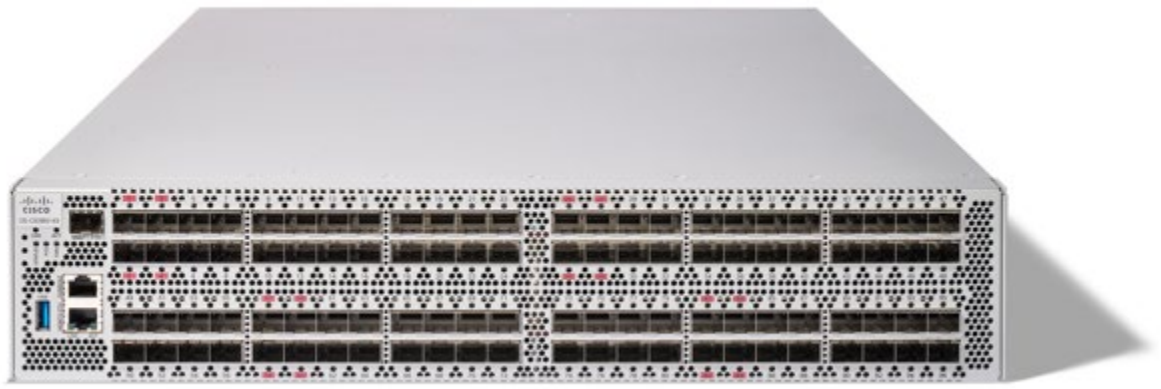
Overview

HPE Storage Fibre Channel Switch C-Series SN6730C

The HPE Storage Fibre Channel Switch C-Series SN6730C (MDS 9396V) is the next generation 96-port 64Gbps Fibre Channel Switch providing high-speed Fibre Channel connectivity between the server and storage. It empowers small, midsize and large enterprises that are rapidly deploying cloud-scale applications providing the benefits of greater bandwidth, scale, and consolidation. The switch allows seamless transition to Fibre Channel Non-Volatile Memory Express (NVMe/FC) workloads.

The HPE Storage Fibre Channel Switch C-Series SN6730C can be provisioned, managed, monitored, and troubleshot using Nexus Dashboard Fabric Controller (NDFC) (previously called Data Center Network Manager (DCNM)), which currently manages the entire suite of Cisco data center products. Powered by C-series MDS 9000 NX-OS Software, it includes storage networking features and functions and is compatible with C-series SN8700C (MDS 9700) Series Multilayer Directors, C-series SN6610C (MDS 9132T), C-series SN6620C (MDS 9148T) Multilayer Fabric Switches, C-series SN6630C (MDS 9396T) Multilayer Fabric Switches, C-series SN6710C (MDS 9124V) Multilayer Fabric Switches, C-series SN6720C (MDS 9148V) and C-series SN6640C (MDS 9220i) Multi-service Fabric Switches, providing transparent, end-to-end service delivery in core-edge deployments.



HPE Storage Fibre Channel Switch C-Series SN6730C

Standard Features

Key Features and Benefits

- **High Performance for AFA and virtualized workloads**
  - Up to 6 Tbps of aggregate bandwidth in a 2-rack unit (RU)
  - Up to 96 autosensing Fibre channel ports capable of speeds of 8/16/32/64 Gbps
  - Offered with 48/96 ports half/fully populated with either 32Gb or 64Gb FC optics. This switch is also offered with 48 active ports without optics/license by default.
  - Offering ultimate flexibility, from forty-eight to ninety-six ports in 16-port increments and configurable with 16, 32 or 64 Gb FC SFP+ optics.
- **Intelligent network services for modern SAN**
  - N-Port ID Virtualization (NPIV) technology to provide independent management for each virtual machine.
  - N-Port Virtualization (NPV) and fabric-port (F-port) channelling features to enable scaling of SANs without reaching Fibre Channel domain ID limits.
  - Representational State Transfer (REST) and NX-API capabilities to enable flexible and rapid programming of utilities for the SAN.
- **High Availability Platform**
  - Designed for environments where downtime is unacceptable.
  - Non-disruptive software upgrades, dual hot swappable power supplies, and back to front port-side exhaust hot swappable fans
  - VSANs for fault isolation and PortChannels for Inter-Switch Link (ISL) resiliency
- **Simplified Management**
  - Supports SAN plug and play capability.
  - Centralized management tool with task-based wizards that simplifies management of a standalone switch or multiple switches and fabrics. Reduced total cost of ownership

Industry leading 64Gb Performance Capability

The switch offers non-blocking, non-oversubscribed, line-rate 64-Gbps Fibre Channel performance at an aggregate bandwidth of 6 Tbps in each direction in a 2-rack unit form factor.

Scalability

The HPE Storage Switch C-series SN6730C is offered with 48/96 ports half/fully populated with either 32Gb or 64Gb FC transceivers. The switch is also offered with 48 active ports without optics/license by default. For ultimate flexibility, the HPE SN6730C Switch scales from forty-eight ports to ninety-six ports using a 16-port FC upgrade license.

Cost Effective Intelligent Storage Networking

The HPE Storage Switch C-series SN6730C comes standard in a compact, extremely cost-effective design that simplifies deployment and administration of small, medium, and enterprise-scale storage-area networks (SANs) and as an edge switch in a larger enterprise.

N-Port ID Virtualization (NPIV)

N-Port ID Virtualization (NPIV), a standard Fibre Channel protocol feature, individual virtual machines assume a full identity on the SAN so that Fibre Channel services such as zoning, Quality of Service (QoS), performance monitoring, and security can be provided to each virtual machine.

Standard Features

VSANs

VSAN, an industry standard for fabric virtualization capabilities, enables more efficient storage network use by creating hardware-based isolated environments within a single physical SAN fabric or switch. Up to 80 VSANs are supported per physical fabric. Each VSAN can be zoned as a typical SAN and maintains its own fabric services for added scalability and resilience. VSANs allow the cost of SAN infrastructure to be shared among more users, while helping ensure segregation of traffic and retaining independent control of configuration on a VSAN-by-VSAN basis.

PortChannels

PortChannels allow users to aggregate up to 16 physical ISLs into a single logical bundle, providing optimized bandwidth use across all links. The bundle can consist of any port from the switch, helping ensure that the bundle remains active even in the event of a port failure.

High Availability

The HPE Storage Switch C-series SN6730C is designed to provide industry leading redundancy and high availability. It offers:

- Non-disruptive software upgrades, In-Service Software Upgrade (ISSU)
- Process monitoring and stateful process restart
- Hot-swappable C-series SFP+ optics
- Hot-swappable, dual redundant power supplies
- Hot-swappable fan tray with switch integrated temperature and power management
- Any port configuration for port channels
- Port tracking

Simplified Storage Management

Single-pane management

The HPE Storage Switch C-series SN6730C can be provisioned, managed, monitored, and troubleshot using Nexus Dashboard Fabric Controller (NDFC*) (previously called Data Center Network Manager (DCNM), which currently manages the entire suite of Cisco data center products.

Notes: *Please note that NDFC is fully integrated with Nexus Dashboard (ND) as of ND 3.2.1.

Interoperability

Offers compatibility with a broad range of Hewlett Packard Enterprise servers and operating systems, as well as disk and tape storage devices; see current compatibility matrix. Please refer to the Single Point of Connectivity Knowledge (SPOCK) website for more details: **https://h20272.www2.hpe.com/spock/**

Diagnostics

- Embedded diagnostics
- Online Diagnostics
- Link diagnostics (E port and F Port)
- Fibre Channel traceroute

Software Components, Included

NX-OS

HPE Storage Switch C-series SN6730C includes the Cisco MDS 9000 NX-OS Software operating system version 9.4(1) or higher, and a set of configuration, maintenance, and diagnostics tools. It also includes VSAN support, Port Channels, extended fabrics, and hardware-enforced zoning.

Advanced traffic management features, such as zone-based quality of service (QoS) and Inter-VSAN Routing (IVR), among others, are included with the optional HPE SN6730C Advantage or Premier Licenses shown below.

Standard Features

Software Components, Optional

HPE 64Gb 16-port Fibre Channel Upgrade SN6730C E-LTU

The flexibility of the HPE Storage Switch C-series SN6730C is provided by the 64Gb 16-port FC Upgrade SN6730C E-LTU which enables upgrades from 48 to 96-ports in 16-port increments.

Cisco Smart Licensing and Subscription Licenses

Starting from Cisco NX-OS 9.2(2), Smart Licensing Using Policy is available for HPE C-Series switches. This enables the customer to purchase and utilize subscription-based licenses.

For more information, refer to Cisco MDS Licensing Guide, Smart Licensing Using Policy:
https://www.cisco.com/c/en/us/td/docs/dcn/mds9000/sw/9x/configuration/licensing/cisco-mds-9000-nx-os-licensing-guide-9x/smart-licensing-using-policy.html?dtid=osscdc000283

Cisco Nexus Dashboard Fabric Controller

Cisco Data Center Network Manager (DCNM) is renamed as Cisco Nexus Dashboard Fabric Controller (NDFC*) from Release 12.0.1a. Cisco NDFC is designed with an HTML-based web User Interface (UI) which is the main interface for the product. There is also a fully integrated device manager used for visualizing and managing each individual switch or director.
Notes: *NDFC is fully integrated with Nexus Dashboard (ND) as of ND 3.2.1; this comment extends throughout this document.

The day-to-day SAN operations, such as In-Service Software Upgrades (ISSU), Zoning, Event management, Port Monitoring (PMON), etc., are managed and maintained from the simplified web UI. The application is a platform providing historical data that can be used to help during day-to-day troubleshooting, viewing analytics data, and looking for SAN congestion through slow-drain analysis. NDFC is also critically important for reviewing event data, SNMP traps, syslogs, and consolidated auditing and reporting.

These features are available with the HPE SN6730C Advantage and Premier E-LTU/Licenses shown below.

HPE SN6730C Advantage E-LTU

The HPE SN6730C Advantage E-LTU (for the HPE C-series SN6730C switch) is a combination of Nexus Dashboard Fabric Controller (NDFC) and Enterprise Package license features. This Advantage License is offered in 1-, 3-, or 5-year terms and is provisioned through Cisco Smart Licensing.

NDFC includes advanced features such as historical performance data collection for network traffic hot-spot analysis, centralized management services and advanced application integration. NDFC is available for download from the **HPE Support Center.**
The Enterprise package license includes a set of advanced traffic engineering and advanced security features that are recommended for all Enterprise SANs.

HPE SN6730C Premier E-LTU

The HPE SN6730C Premier E-LTU (for the HPE C-series SN6730C switch) is a combination of Nexus Dashboard Fabric Controller (NDFC), Enterprise Package, and SAN Analytics license features. This Premier License is offered in 1-, 3-, or 5-year terms and is provisioned through Cisco Smart Licensing.

NDFC and Enterprise package license features are described above. SAN Analytics offers end-to-end visibility into Fibre Channel block storage traffic. The solution is natively available on the storage area network due to its integrated-by-design architecture with the HPE Storage Switch C-series SN6730C. SAN Analytics delivers deep visibility into I/O traffic between the compute and the storage infrastructure. This information is in addition to the already-available visibility obtained from individual ports, switches, servers, virtual machines, and storage arrays that are integrated with Nexus Dashboard Fabric Controller (NDFC).

Service and Support

Warranty

(1-1-1) Hardware Warranty; 1-year parts; 1-year on-site (8x5, next business day response) and 1-year labor.
Notes: The hardware warranty covers firmware and embedded non-saleable software. Hardware or Software product installation is not included in the warranty but is available and highly recommended.

HPE Services

No matter where you are in your transformation journey, you can count on HPE Services to deliver the expertise you need when, where, and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.
https://www.hpe.com/services

Consulting services

No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.
https://www.hpe.com/services/consulting

SAN Fabric Integration and Migration service

HPE Data Storage Services - SAN Fabric Integration and Migration simplifies the introduction of and migration to new HPE C-series SAN fabric devices. It helps maximize the value of your investment in your new HPE C-series SAN fabric devices by leveraging HPE Services expertise and best practices.
https://www.hpe.com/psnow/doc/a50011015enw

HPE Managed Services

HPE runs your IT operations, providing services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.
HPE Managed Services | HPE

Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources. Meet service-level targets and business objectives with features designed to drive better business outcomes.
https://www.hpe.com/services/operational

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

Service and Support

HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

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

Other related services from HPE Services

HPE Lifecycle Services

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

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

- For a list of the most frequently purchased services using service credits, see the **HPE Service Credits Menu**

HPE SAN Deployment Service

Hewlett Packard Enterprise delivers complete design and implementation services for Fibre Channel, FCoE, FCIP, SAS, and iSCSI SAN connectivity components.

Learn more: **https://www.hpe.com/psnow/doc/5981-8527enw?jumpid=in_lit-psnow-red**

HPE Installation Service

Provides for the basic hardware installation of HPE branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner.

Learn more: **https://h20195.www2.hpe.com/v2/Getdocument.aspx?docname=5981-9356enw**

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.

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

Service and Support

Defective Media Retention

An option available with HPE-Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and services options.

Parts and Materials

HPE will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product QuickSpecs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

How to purchase services

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at **https://ssc.hpe.com/portal/site/ssc/**

AI Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a digital and data driven customer experience.

Sign into the HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts and powerful troubleshooting support through an intelligent virtual agent with seamless transition when needed to a live support agent.

https://support.hpe.com/hpesc/public/home/signin

Consume IT on your terms

HPE GreenLake edge-to-cloud platform brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, HPE GreenLake edge-to-cloud platform accelerates digital transformation in a distributed, edge-to-cloud world.

- Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

To learn more about HPE Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at "Contact HPE" **https://www.hpe.com/us/en/contact-hpe.html**

For more information: **http://www.hpe.com/services**

Configuration Information

The HPE Storage Switch C-series SN6730C comes preconfigured with a maximum of 96 autosensing Fibre Channel ports capable of 64, 32, 16, and 8Gb speeds in a compact 2RU form factor chassis. HPE Storage Switch C-series SN6730C comes in seven preconfigured models: 48 ports active with 0 SFPs, 48-ports with 32Gb SFPs and 3-year Premier license bundled, 48-ports with 64Gb SFPs bundled, 48-ports with 64Gb SFPs and 3-year Premier license bundled, 96-ports with 32Gb SFPs and 3-year Premier license bundled, 96-ports with 64Gb SFPs bundled or 96-ports with 64Gb SFPs and 3-year Premier license bundled. The SN6730C model can grow by 16 ports up to 96 ports by installing the 16-port FC Upgrade License (additional SFPs required). All HPE Storage Switch C-series SN6730C are port side exhaust.

Step 1 - Base Configuration (Select one)

Description	SKU
HPE Storage 64Gb 96/48 Fibre Channel Switch C-series SN6730C	S2S03A
• 96-Port Fabric Switch with 48 active ports, Dual Power Supplies, Power Cords (configurable by ship-to country) and 3 Fans, VSANs, PortChannels, firmware, accessory kit and documentation. SFPs not included; supported transceivers listed below.	
HPE Storage 64Gb 96/48 64Gb Short Wave SFP+ Fibre Channel Switch C-series SN6730C	S6G55A
• 96-Port Fabric Switch with 48 active ports with 48x64Gb SW SFP+, Dual Power Supplies, Power Cords (configurable by ship-to country) and 3 Fans, VSANs, PortChannels, firmware, accessory kit and documentation.	
HPE Storage 64Gb 96/96 64Gb Short Wave SFP+ Fibre Channel Switch C-series SN6730C	S6G57A
• 96-Port Fabric Switch with 96 active ports with 96x64Gb SW SFP+, Dual Power Supplies, Power Cords (configurable by ship-to country) and 3 Fans, VSANs, PortChannels, firmware, accessory kit, and documentation.	
HPE Storage 64Gb 96/48 32Gb Short Wave SFP+ Fibre Channel Premier Switch C-series SN6730C	S2R99A
• 96-Port Fabric Switch with 48 active ports with 48x32Gb SW SFP+, 3-year Premier License, Dual Power Supplies, Power Cords (configurable by ship-to country) and 3 Fans, VSANs, PortChannels, firmware, accessory kit and documentation.	
HPE Storage 64Gb 96/48 64Gb Short Wave SFP+ Fibre Channel Premier Switch C-series SN6730C	S2S00A
• 96-Port Fabric Switch with 48 active ports with 48x64Gb SW SFP+, 3-year Premier License, Dual Power Supplies, Power Cords (configurable by ship-to country) and 3 Fans, VSANs, PortChannels, firmware, accessory kit and documentation.	
HPE Storage 64Gb 96/96 32Gb Short Wave SFP+ Fibre Channel Premier Switch C-series SN6730C	S2S01A
• 96-Port Fabric Switch with 96 active ports with 96x32Gb SW SFP+, 3-year Premier License, Dual Power Supplies, Power Cords (configurable by ship-to country) and 3 Fans, VSANs, PortChannels, firmware, accessory kit, and documentation.	
HPE Storage 64Gb 96/96 64Gb Short Wave SFP+ Fibre Channel Premier Switch C-series SN6730C	S2S02A
• 96-Port Fabric Switch with 96 active ports with 96x64Gb SW SFP+, 3-year Premier License, Dual Power Supplies, Power Cords (configurable by ship-to country) and 3 Fans, VSANs, PortChannels, firmware, accessory kit, and documentation.	

Notes: S2R99A, S2S00A, S2S01A, and S2S02A include a 3-year Premier License bundled in by default. This HPE Premier license is offered with a bundle of software maintenance and support including access to software updates for the duration of the license; customers will not be able to purchase additional software support for these configurations. At the end of the 3-year license period, the customer will need to purchase a new software license to continue using the software. Software support renewal via HPE Services is not allowed/supported. Alternately, S6G55A and S6G57A offer identical configurations to S2S00A and S2S02A, respectively, but without the bundled Premier License. The Advantage or Premier license may be ordered separately.

Configuration Information

Step 2 - Optional Software

Description	SKU
On Demand Port Activation License	
HPE Storage 64Gb 16-port Fibre Channel Upgrade C-series SN6730C E-LTU	S2R44AAE
Notes: SFPs not included with Port Activation License. Supported transceivers listed below.	
Management Software	
HPE Storage Premier 1-year C-series SN6730C E-LTU	S2R37AAE
HPE Storage Premier 3-year C-series SN6730C E-LTU	S2R38AAE
HPE Storage Premier 5-year C-series SN6730C E-LTU	S2R39AAE
HPE Storage Advantage 1-year C-series SN6730C E-LTU	S2R40AAE
HPE Storage Advantage 3-year C-series SN6730C E-LTU	S2R41AAE
HPE Storage Advantage 5-year C-series SN6730C E-LTU	S2R42AAE

Notes: Advantage license is a combination of Nexus Dashboard Fabric Controller (NDFC) and Enterprise Package license features. Premier license is a combination of Nexus Dashboard Fabric Controller (NDFC), Enterprise Package, and SAN Analytics license features. HPE Premier and HPE Advantage licenses are offered with a bundle of software maintenance and support including access to software updates for the duration of the license; customers will not be able to purchase additional software support for these configurations. At the end of the license period, the customer will need to purchase a new software license to continue using the software. Software support renewal via HPE Services is not allowed/supported.

Step 3 – Options

These switches can be configured with 16Gb, 32Gb or 64Gb transceivers. Supported transceivers listed below:

Description	SKU
64Gb FC Transceivers*	
HPE C-series 64Gb SFP+ Short Wave Fibre Channel Transceiver	S0W91A
HPE Storage C-series 64Gb SFP+ Long Wave Fibre Channel Transceiver	S6G53A
32Gb FC Transceivers*	
HPE C-series 32 Gb Fibre Channel Short Wave SFP+ Transceiver	Q9D30A
HPE C-series 32 Gb Fibre Channel Long Wave SFP+ Transceiver	Q9D31A
Notes: *Compatible with SFP28 MSA spec	
16 Gb FC Transceivers	
HPE C-series 16 Gb Fibre Channel SW SFP+ Transceiver	C8S72A
HPE C-series 16 Gb Fibre Channel LW SFP+ Transceiver	C8S73A

Notes: Current bundles are configured with short wave SFP optical transceivers. Please use only the above Cisco SFP optical transceivers; no substitutions allowed. Using other transceivers may void product warranty.

Configuration Information

Installation and Deployment Services
For complete design and implementation of Fibre Channel connectivity components, select **HPE SAN Deployment Service**
http://h20195.www2.hpe.com/V2/GetPDF.aspx/5981-8527ENW.pdf

For basic hardware installation, select **HPE Installation Service**
https://h20195.www2.hpe.com/v2/Getdocument.aspx?docname=5981-9356enw

Recommended Cables

HPE PremierFlex OM4+ Fiber Optic Cables

Description	SKU
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 OM3 LC-LC Optical Cables

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

HPE PremierFlex MPO to 4xLC Splitter Cables

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

Technical Specifications

Family Information

	Switch Type	Maximum ports	Number of slots per chassis
HPE Storage Director Switch C-series SN8700C	Multilayer Director	4-slot: 192 16/32/64 Gbps Fibre Channel ports 8-slot: 384 16/32/64 Gbps Fibre Channel ports 16-slot: 768 16/32/64 Gbps Fibre Channel ports	Four/Eight/Sixteen
HPE Storage Fibre Channel Switch C-series SN6730C	Multilayer Fabric Switch	Ninety-six 64 Gbps Fibre Channel ports	One fixed
HPE Storage Fibre Channel Switch C-series SN6720C	Multilayer Fabric Switch	Forty-eight 64 Gbps Fibre Channel ports	One fixed
HPE Storage Fibre Channel Switch C-series SN6710C	Multilayer Fabric Switch	Twenty-four 64 Gbps Fibre Channel ports	One fixed
HPE Storage Multiservice Switch C-series SN6640C	Multilayer Fabric Switch	Up to 12 32-Gbps Fibre Channel ports, four 1/10-, two 25- and one 40- Ethernet IP storage services ports	One fixed
HPE Storage Fibre Channel Switch C-series SN6630C	Multilayer Fabric Switch	Up to 96 32 Gbps Fibre Channel ports	One fixed
HPE Storage Fibre Channel Switch C-series SN6620C	Multilayer Fabric Switch	Up to 48 32 Gbps Fibre Channel ports	One fixed
HPE Storage Fibre Channel Switch C-series SN6610C	Multilayer Fabric Switch	Up to 32 32 Gbps Fibre Channel ports	One fixed and one expansion slot

Notes: For additional switch support information, refer to the C-series FC Switch Connectivity Stream on the Single Point of Connectivity Knowledge (SPOCK) website at: **https://h20272.www2.hpe.com/spock/**. You must sign up for a Hewlett Packard Enterprise Passport to enable access. Once logged in, click Switches under Other Hardware in the last navigation panel of the window to access the Fibre Channel Switch Streams. Click on the C-Series FC Switch Connectivity Stream to open the document.

Minimum software requirements

MDS 9000 NX-OS Software Release 9.4(1)

Performance and port configuration

- Port speed: 64, 32, 16 and 8 Gbps autosensing with 64 Gbps of dedicated bandwidth per port
- Buffer credits: Up to 24000 for a group of 24 ports, with a default of 1000 buffer credits per port and a maximum of 16000 buffer credits for a single port in the group
- Ports per chassis: Up to 96 64-Gbps ports
- Base configuration of 48 ports; additional configurations up to 96 ports
- PortChannel: Up to 16 load balanced physical links in a PortChannel

Technical Specifications

Security

- VSAN fabric isolation
- Intelligent packet inspection at port level
- Hardware zoning by Access Control Lists (ACLs)
- FC-SP for host-to-switch and switch-to-switch authentication
- Port security

Fabric Services

- Name server
- Registered state change notification (RSCN)
- Login services
- Fabric Configuration Server (FCS)
- Broadcast
- In-order delivery

Compatibility

Fibre Channel protocols

- FC-PH, Revision 4.3 (ANSI INCITS 230-1994)
- FC-PH, Amendment 1 (ANSI INCITS 230-1994/AM1-1996)
- FC-PH, Amendment 2 (ANSI INCITS 230-1994/AM2-1999)
- FC-PH-2, Revision 7.4 (ANSI INCITS 297-1997)
- FC-PH-3, Revision 9.4 (ANSI INCITS 303-1998)
- FC-PI, Revision 13 (ANSI INCITS 352-2002)
- FC-PI-2, Revision 10 (ANSI INCITS 404-2006)
- FC-PI-3, Revision 4 (ANSI INCITS 460-2011)
- FC-PI-4, Revision 8 (ANSI INCITS 450-2008)
- FC-PI-5, Revision 6 (ANSI INCITS 479-2011)
- FC-PI-6 (INCITS 512-2015)
- FC-PI-7 (INCITS 543-2019)
- FC-FS, Revision 1.9 (ANSI INCITS 373-2003)
- FC-FS-2, Revision 1.01 (ANSI INCITS 424-2007)
- FC-FS-2, Amendment 1 (ANSI INCITS 424-2007/AM1-2007)
- FC-FS-3, Revision 1.11 (ANSI INCITS 470-2011)
- FC-FS-4 (INCITS 488-2016)
- FC-FS-5 (INCITS 545-2019)
- FC-LS, Revision 1.62 (ANSI INCITS 433-2007)
- FC-LS-2, Revision 2.21 (ANSI INCITS 477-2011)
- FC-LS-3 (INCITS 487-2018)
- FC-LS-4 (INCITS 553-2020)
- FC-SW-2, Revision 5.3 (ANSI INCITS 355-2001)
- FC-SW-3, Revision 6.6 (ANSI INCITS 384-2004)
- FC-SW-4, Revision 7.5 (ANSI INCITS 418-2006)
- FC-SW-5, Revision 8.5 (ANSI INCITS 461-2010)
- FC-SW-6 (INCITS 511-2016)
- FC-SW-7 (INCITS 547-2020)

Technical Specifications

- FC-GS-3, Revision 7.01 (ANSI INCITS 348-2001)
- FC-GS-4, Revision 7.91 (ANSI INCITS 387-2004)
- FC-GS-5, Revision 8.51 (ANSI INCITS 427-2007)
- FC-GS-6, Revision 9.4 (ANSI INCITS 463-2010)
- FC-GS-7, Includes revision 10.8
- FC-GS-7 (INCITS 510-2017)
- FC-GS-8 (INCITS 548-2020)
- NVMe/FC (INCITS 540-2018)
- NVMe/FC (INCITS 556-2020)
- FCP, Revision 12 (ANSI INCITS 269-1996)
- FCP-2, Revision 8 (ANSI INCITS 350-2003)
- FCP-3, Revision 4 (ANSI INCITS 416-2006)
- FCP-4, Revision 2b (ANSI INCITS 481-2011)
- FC-SB-2, Revision 2.1 (ANSI INCITS 349-2001)
- FC-SB-3, Revision 1.6 (ANSI INCITS 374-2003)
- FC-SB-3, Amendment 1 (ANSI INCITS 374-2003/AM1-2007)
- FC-SB-4, Revision 3.0 (ANSI INCITS 466-2011)
- FC-SB-5, Revision 2.00 (ANSI INCITS 485-2014)
- FC-BB-2, Revision 6.0 (ANSI INCITS 372-2003)
- FC-BB-3, Revision 6.8 (ANSI INCITS 414-2006)
- FC-BB-4, Revision 2.7 (ANSI INCITS 419-2008)
- FC-BB-5, Revision 2.0 (ANSI INCITS 462-2010)
- FC-BB-6, Revision 2.00 (ANSI INCITS 509-2014)
- FC-VI, Revision 1.84 (ANSI INCITS 357-2002)
- FC-SP, Revision 1.8 (ANSI INCITS 426-2007)
- FC-SP-2, Revision 2.71 (ANSI INCITS 496-2012)
- FAIS, Revision 1.03 (ANSI INCITS 432-2007)
- FAIS-2, Revision 2.23 (ANSI INCITS 449-2008)
- FC-IFR, Revision 1.06 (ANSI INCITS 475-2011)
- FC-FLA, Revision 2.7 (INCITS TR-20-1998)
- FC-PLDA, Revision 2.1 (INCITS TR-19-1998)
- FC-Tape, Revision 1.17 (INCITS TR-24-1999)
- FC-MI, Revision 1.92 (INCITS TR-30-2002)
- FC-MI-2, Revision 2.6 (INCITS TR-39-2005)
- FC-MI-3, Revision 1.03 (INCITS TR-48-2012)
- FC-DA, Revision 3.1 (INCITS TR-36-2004)
- FC-DA-2, Revision 1.06 (INCITS TR-49-2012)
- FC-MSQS, Revision 3.2 (INCITS TR-46-2011)
- Fibre Channel classes of service: Class 2, Class 3, and Class F
- In-band management using IP over Fibre Channel (RFC 2625)
- IPv6, IPv4, and Address Resolution Protocol (ARP) over Fibre Channel (RFC 4338)
- Extensive IETF-standards-based TCP/IP, Simple Network Management Protocol Version 3 (SNMPv3), and Remote Monitoring (RMON) MIBs

Fibre Channel ports

- Supports 64G, 32G and 16G Optics
- Fibre Channel standard port types: E and F
- Fibre Channel enhanced port types: SD, ST, TE, TF, NP, and TNP

Technical Specifications

Advanced Services

Please note that some services require the optional HPE SN6730C Advantage or Premier License.

- NPIV
- VSAN
- PortChannels
- NPV mode
- Flow-based and zone-based QoS
- IVR

Diagnostic and Troubleshooting

- SPAN
- POST (Power-on-Self-Test) diagnostics
- Online Health Management System (OHMS) diagnostics
- Internal loopbacks
- Fibre Channel traceroute
- Fibre Channel ping
- Syslog
- Port-level statistics
- Link diagnostics (E-port and F-port links)
- Read Diagnostic Parameter

Management

- Access methods
  - Out-of-band 10/100/1000 Ethernet port
  - RS-232 serial console port
  - USB power-on auto-provision port
- Access protocols
  - Command-Line Interface (CLI) using the console and Ethernet port
  - SNMPv3 implementing AES using the Ethernet port and in-band IP over Fibre Channel access
  - NX-API for HTTP/HTTPS Programmability
- Security
  - Per-VSAN RBAC using LDAP, RADIUS, and TACACS+-based AAA functions
  - VSAN-based roles
  - SSHv2 implementing AES
  - SNMPv3 implementing AES
  - Secure File Transfer Protocol (SFTP)

Management Applications

- Cisco MDS 9000 Family CLI
- C-series Nexus Dashboard Fabric Controller (requires optional Advantage or Premier license)

Availability

- Non-disruptive software upgrades
- Process monitoring and stateful process restart
- Per-VSAN fabric services
- Hot-swappable SFP+ optics
- Up to 16 load balanced physical links in a PortChannel
- Any port configuration for port channels

Technical Specifications

Safety

- CE Marking
- UL 60950
- CAN/CSA-C22.2 No. 60950
- EN 60950
- IEC 60950
- TS 001
- AS/NZS 3260
- IEC 60825
- EN 60825
- 21 CFR 1040

EMC

- FCC Part 15 (CFR 47) Class A
- ICES-003 Class A
- EN55022 Class A
- CISPR22 Class A
- AS/NZS 3548 Class A
- VCCI Class A
- EN55024
- EN50082-1
- EN61000-3-2
- EN61000-3-3
- EN61000-6-1

Serviceability

- Configuration file management
- Port beaconing (Link Cable Beaconing)
- System LEDs
- SNMP traps for alerts

Environmental

- Physical dimensions (H x W x D) of 2RU: (3.4 x 17.4 x 23.9 in [8.64 x44.23 x 60.73cm]. excluding Power Supply Unit (PSU) and fan-tray handles)
- Weight of fully configured chassis: 44 lb. (20 kg)
- Ambient operating temperature: 32 to 104°F (0 to 40°C)
- Ambient non-operating temperature: -40 to 158°F (-40 to 70°C)
- Humidity (RH), ambient (noncondensing) operating: 10 to 90%
- Humidity (RH), ambient (noncondensing) non-operating and storage: 5 to 95%
- Operating altitude: -197 to 6500 ft (-60 to 2000 m)

Technical Specifications

Power and Cooling

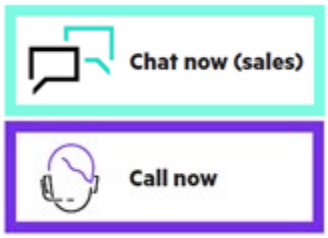
- Power supplies (1400W AC) (2 per switch)
- AC Input:
  - 1400W PSU AC Low Line Input: 90V to 140V (+/-10% for full range)
  - 1400W PSU AC High Line Input: 180V to 264V (+/-10% for full range)
- Frequency: 50 to 60 Hz nominal (+/-3 Hz for full range)
- Typical power consumption:
  - 420W for 96-Port switch in idle status with no optics modules
  - 540W for 96-Port switch with 48 64G SW optics modules at 50% line rate
  - 650W for 96-Port switch with 96 64G SW optics modules at 50% line rate
  - Airflow: Rear to front (toward ports)
- HPE recommends maintaining a minimum air space of 2.5 in. (6.4 cm) between walls and chassis air vents and a minimum horizontal separation of 6 in. (15.2 cm) between two chassis to prevent overheating

Summary of Changes

Date	Version History	Action	Description of Change
02-Sep-2025	**Version 4**	Changed	Overview and Standard Features sections were updated - Added 2 new SN6730C switch SKUs, new SFP, 2 new splitter cables; updated notes on NDFC/ND Configuration Information – New Base SKUs were added Technical Specifications section was updated - HPE Storage Fibre Channel Switch C-series SN6610C information was removed.
		Added	New SKUs were added - S6G53A, S6G55A, S6G57A, K2Q46A, K2Q47A
03-Sep-2024	**Version 3**	Changed	Service and Support section was updated
15-Apr-2024	**Version 2**	Changed	Rebranding Series Name applied
08-Jan-2024	**Version 1**	New	New QuickSpecs

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