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## **HPE StoreFabric SN6500B Fibre Channel Switch - Product Information Reference**

Part Number:

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# HPE StoreFabric SN6500B Fibre Channel Switch - Product Information Reference

## Abstract

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## Revision history

| Part number | Publication date | Edition | Summary of changes |
|-------------|------------------|---------|--------------------|
|             |                  |         |                    |

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## Summary

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## Product description



The HPE StoreFabric SN6500B Fibre Channel Switch meets the demands of hyper-scale, private cloud storage environments by delivering market-leading 16Gb Fibre Channel technology and capabilities that support highly virtualized environments. Designed to enable maximum flexibility and investment protection, the SN6500B Switch is configurable in 48, 72 or 96 ports and supports 4, 8 or 16 Gb/s speeds in an efficiently designed 2U package. It also provides a simplified deployment process and a point-and-click user interface-making it both powerful and easy to use. The SN6500B Switch is ideal for medium- to large-sized organizations that need a scalable, high-availability solution that will facilitate consolidation and the flexibility to meet rapidly evolving storage requirements.

## What's new

- New model with Unique Port Side Intake Air flow mechanism (SKU Number E7X98A): This model pulls cooling air in from the port side of the switch and exhausts it out the non-port side

## Family information



| Features                           | SN6600B 32 Gb FC Switch and<br>SN6600B 32 Gb FC Power Pack+                                                                                                   | SN6000B 16Gb FC Switch and<br>SN6000B 16Gb FC Power Pack+                                                                                                     | SN6500B 16Gb FC Switch and<br>SN6500B 16Gb FC Power Pack+                                                                                                     |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Targeted environment               | Workgroups, Departments                                                                                                                                       | Workgroups, Departments                                                                                                                                       | Workgroups, Departments                                                                                                                                       |
| Fibre channel port bandwidth       | 32 Gb/s                                                                                                                                                       | 16 Gb/s                                                                                                                                                       | 16 Gb/s                                                                                                                                                       |
| Aggregate device bandwidth         | 2 Tb/s                                                                                                                                                        | 384-768 Gb/s                                                                                                                                                  | 768-1536 Gb/s                                                                                                                                                 |
| Storage system support             | <ul style="list-style-type: none"> <li>• 3PAR StoreServ</li> <li>• StoreVirtual 4000</li> <li>• P9000/XP</li> <li>• P6000/EVA</li> <li>• P2000/MSA</li> </ul> | <ul style="list-style-type: none"> <li>• 3PAR StoreServ</li> <li>• StoreVirtual 4000</li> <li>• P9000/XP</li> <li>• P6000/EVA</li> <li>• P2000/MSA</li> </ul> | <ul style="list-style-type: none"> <li>• 3PAR StoreServ</li> <li>• StoreVirtual 4000</li> <li>• P9000/XP</li> <li>• P6000/EVA</li> <li>• P2000/MSA</li> </ul> |
| FC Ports                           | 24 or 48 Enabled 64 maximum                                                                                                                                   | 24 or 48 Enabled 48 maximum                                                                                                                                   | 48 or 96 Enabled 96 maximum                                                                                                                                   |
| SFP                                | B-series (16 Gb or 32 Gb)                                                                                                                                     | B-series                                                                                                                                                      | B-series                                                                                                                                                      |
| Advanced trunking                  | Included with power pack+ or optional upgrade                                                                                                                 | Included with power pack+ or optional upgrade                                                                                                                 | Included with power pack+ or optional upgrade                                                                                                                 |
| Adaptive networking                | Included                                                                                                                                                      | Included                                                                                                                                                      | Included                                                                                                                                                      |
| Form factor                        | 1U                                                                                                                                                            | 1U                                                                                                                                                            | 2U                                                                                                                                                            |
| Zoning software                    | Yes (Included)                                                                                                                                                | Yes (Included)                                                                                                                                                | Yes                                                                                                                                                           |
| Hot plug, redundant power supplies | Yes                                                                                                                                                           | Yes                                                                                                                                                           | Yes                                                                                                                                                           |
| Hot plug fans                      | Yes (Integrated with power supply)                                                                                                                            | Yes (Integrated with power supply)                                                                                                                            | Yes                                                                                                                                                           |

## Standard Models

### Subtopics

[New RoHS compliant part numbers](#)

[Standard models](#)

## New RoHS compliant part numbers

To find the latest RoHS compliance information, please use the HPE PartSurfer ( [Click here to visit the HPE PartSurfer website](#) ) and click on one of the linked model numbers. When locating RoHS information in PartSurfer, you can use the Options part number for the components, the sales order number for a system that the component is used in, or the Spare part number for a specific part.

## Standard models

| Description                                                     | Part Number |
|-----------------------------------------------------------------|-------------|
| HPE StoreFabric SN6500B 16Gb 96/96 Power Pack+ FC Switch        | C8R42B      |
| <a href="#">Click here to obtain parts list for this model.</a> |             |
| HPE StoreFabric SN6500B 16Gb 96/48 FC Switch                    | C8R45B      |
| <a href="#">Click here to obtain parts list for this model.</a> |             |

## Product features

| Feature                                                                                            | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Key features and benefits                                                                          | <ul style="list-style-type: none"> <li>Updated HPE B-series Network Advisor SKUs to the next suffix (A to B) and added 3 Network Advisor E-LTU SKUs (suffix AE)</li> <li>Delivers 16 Gbps performance with up to 96 ports in an ultra-dense, optimized 2U form factor</li> <li>Features Ports on Demand (PoD) capabilities for fast, easy, and cost-effective scaling from 48 to 96 ports in 24-port increments</li> <li>Provides a flexible, simple, and easy-to-use SAN solution with industry-leading technology</li> <li>Supports highly virtualized, private cloud storage with multi-tenancy and non-stop operations</li> <li>Offers best-in-class port density and scalability for high-end enterprise SAN switches, along with redundant, hot pluggable components and non-disruptive software upgrades</li> <li>In-flight compression and encryption included providing efficient link utilization and security Yields exceptional price/performance value</li> <li>Provides Adaptive Networking services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. The Adaptive Networking and Server Application Optimization (SAO) features are included by default in all SN6500B switch models and do not require a separate license</li> </ul> |
| Flexible fabrics support highly virtualized environments for cloud-optimized storage area networks | <ul style="list-style-type: none"> <li>The HPE StoreFabric SN6500B Fibre Channel Switch delivers high-speed 16Gb optimized inter switch links (ISLs) for twice the performance over traditional Fibre Channel switches. The net result is there are fewer links, fewer cables, fewer ports and less power for the same performance</li> <li>Flexible speed options support 4, 8 or 16 Gb/s in an efficiently designed 2U package, protecting your existing SAN fabric investments</li> <li>Configurable with 48, 72, or 96 ports</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Feature                                                                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Designed for Ease-of-Use and simplified administration                    | <ul style="list-style-type: none"> <li>The HPE StoreFabric SN6500B Fibre Channel Switch provides diagnostic Ports (D_Ports) enabling IT to identify and isolate optics and cable problems, reducing fabric deployment and diagnostic times. Use D_Ports to run a variety of tests for ports, SFPs, and cables for faults, latency, and distance</li> <li>Simplified deployment process and point-and-click user interface streamlines management</li> <li>Optional SAN Network Advisor provides comprehensive management of data center SAN fabrics, including configuration, monitoring, diagnostics, best-practices validation, and management of B-series Directors, Switches, and Host Bus Adapters (HBAs)</li> </ul> |
| Improved bandwidth and greater efficiency for cloud-optimized performance | <ul style="list-style-type: none"> <li>The HPE StoreFabric SN6500B Fibre Channel Switch provides unmatched bandwidth with 96 non-blocking 16 Gb/s ports in an efficient 2U form factor. Any eight ports can be trunked for 128 Gb Inter-Switch Links (ISLs)</li> <li>Exchange-based Dynamic Path Selection (DPS) optimizes fabric-wide performance and load balancing by automatically routing data to the most efficient available path</li> <li>Provides frame-based trunking at rates up to 128 Gb/s for greater efficiency than Ethernet LAG</li> <li>Reduces power consumption at 0.33 watts/Gb/s</li> <li>Delivers low-cost access to industry-leading storage area networks (SAN)</li> </ul>                       |
| Enhanced scalability allows for expansion within growing organizations    | <ul style="list-style-type: none"> <li>The HPE StoreFabric SN6500B Fibre Channel Switch enables unmatched, pay-as-you-grow scalability for evolving storage environments</li> <li>Greater Return on Investment (RoI) due to reduced cabling and optics requirements in comparison with 8Gb SAN Infrastructure</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                  |
| SN6500B 16Gb FC Switch                                                    | <ul style="list-style-type: none"> <li>Simplifies enterprise SAN deployment by combining higher edge switch port density with exceptional scalability, performance and reliability</li> <li>Delivers 48, 72, or 96-ports in a 2U enclosure</li> <li>Provides 4 Gb/s, 8 Gb/s, 16 Gb/s performance</li> <li>Employs optional Inter-Switch Link (ISL) Trunking to provide a high-speed data path between switches which enables a high speed data path between 16 Gb/s switches up to 128 Gb/s</li> </ul>                                                                                                                                                                                                                    |
| High-availability features                                                | <ul style="list-style-type: none"> <li>Two integrated redundant, hot swappable power supplies with three hot-swappable redundant cooling fans</li> <li>Enhanced fault detection logic</li> <li>Parity protection on all data paths and system memory</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Feature                    | Description                                                                                                                                                                                                                                                                                                |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Advanced fabric services   | <ul style="list-style-type: none"> <li>• Hardware enforced zoning</li> <li>• Frame filtering</li> <li>• Built-in web browser management tools</li> <li>• Enhanced Group Management (EGM)</li> <li>• HPE B-series SAN Network Advisor software (Optional)</li> </ul>                                        |
| Cabinet support            | <ul style="list-style-type: none"> <li>• HPE (22U, 36U, and 42U) 10000 G2 series racks</li> <li>• HPE (14U, 22U, 36U, 42U, and 47U) 11000 G2 series racks</li> <li>• Intelligent series racks</li> </ul>                                                                                                   |
| Capability                 | Features Ports on Demand (PoD) capabilities for fast, easy, and cost-effective scaling from 48 to 96 ports in 24-port increments                                                                                                                                                                           |
| Port speed                 | 16 Gb/s Fibre Channel                                                                                                                                                                                                                                                                                      |
| Aggregate switch bandwidth | 3072 Gb/s Maximum                                                                                                                                                                                                                                                                                          |
| Encryption capability      | In flight encryption                                                                                                                                                                                                                                                                                       |
| Protocol supported         | Fibre Channel                                                                                                                                                                                                                                                                                              |
| Availability features      | Hot code load Ports on demand with no downtime                                                                                                                                                                                                                                                             |
| FC Ports                   | Switch mode (Default): 48, 72, and 96-port configurations (24-port increments through PoD licenses); universal (E, F, M, D, EX) ports                                                                                                                                                                      |
| Fabric latency             | <ul style="list-style-type: none"> <li>• Latency for locally switched ports is 700 ns</li> <li>• Encryption/compression is 5.5 seconds per node</li> <li>• Forward Error Correction (FEC) adds 400 ns between E_Ports (Enabled by default)</li> </ul>                                                      |
| Port types                 | Diagnostic Port (D_Port), E_Port, EX_Port, F_Port, Mirror Port (M_Port); self-discovery based on switch type (U_Port); optional port type controlaccess gateway mode: F_Port and NPIV-enabled N_Port                                                                                                       |
| Media types                | <ul style="list-style-type: none"> <li>• Hot-pluggable, B-series Branded Small Form Factor Pluggable (SFP), LC connector</li> <li>• Short-Wave Laser (SWL), Long-Wave Laser (LWL)</li> <li>• Distance depends on fiber-optic cable and port speed.</li> <li>• 16/10/8 Gb/s optical transceivers</li> </ul> |
| Management access          | 10/100 Mb/s Ethernet (RJ-45), in-band over FC, serial port (RJ-45), and one USB port                                                                                                                                                                                                                       |
| Data traffic types         | Fabric switches supporting unicast                                                                                                                                                                                                                                                                         |

| Feature                  | Description                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other supported features | <ul style="list-style-type: none"> <li>• Frame filtering</li> <li>• Advanced zoning</li> <li>• EGM</li> <li>• In-flight compression and encryption</li> <li>• Adaptive networking<sup>1</sup></li> <li>• Server application optimization<sup>1</sup></li> <li>• Advanced performance monitor</li> <li>• ISL trunking</li> <li>• Integrated routing</li> <li>• SAN network advisor Enterprise and professional+</li> </ul> |



#### NOTE

1. Adaptive networking and server application optimization features are included by default in all four switch configurations and do not require a separate license.

## Physical specifications

| Feature                    | Description                                          |
|----------------------------|------------------------------------------------------|
| Dimensions (H x W x D)     | 86.74 x 429.25 x 609.75 mm (3.42 x 16.90 x 24.01 in) |
| System weight <sup>1</sup> | 16.92 kg (37.3 lb)                                   |



#### NOTE

1. System weight is with two power supply FRUs, without transceivers.

## System specifications

| Feature             | Description                                                                                                                                                            |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fibre Channel ports | <p>Switch mode (default): 48-, 72-, and 96-port configurations (24-port increments through Ports on Demand [PoD] licenses)</p> <p>Universal (E, F, M, D, EX) ports</p> |

| Feature             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interoperability    | <ul style="list-style-type: none"> <li>• 8/8 SAN switch</li> <li>• 8/24 SAN switch</li> <li>• SN3000B SAN switch</li> <li>• SN6000B SAN switch</li> <li>• SN6500B SAN switch</li> <li>• 1606 Extension SAN switch</li> <li>• SN4000B SAN extension switch</li> <li>• SN8000B 8-Slot SAN backbone director</li> <li>• SN8000B 4-Slot SAN director</li> <li>• Brocade 8Gb SAN switch for HPE BladeSystem c-Class</li> <li>• Brocade 16Gb SAN switch for HPE BladeSystem c-Class</li> <li>• Brocade 16Gb Fibre Channel SAN switch module for HPE Synergy</li> </ul> |
| Performance         | Auto-sensing of 4, 8, and 16 Gb/s port speeds                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| ISL Trunking        | <p>Frame-based trunking with up to eight 16 Gb/s ports per ISL trunk up to 128 Gb/s per ISL trunk. Exchange-based load balancing across ISLs with DPS included in Fabric OS</p> <p>There is no limit to how many trunk groups can be configured in the switch</p>                                                                                                                                                                                                                                                                                                |
| Aggregate bandwidth | 1536 Gb/s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Fabric latency      | <p>Latency for locally switched ports is 700 ns</p> <p>Encryption/compression is 5.5 sec per node</p> <p>Forward Error Correction (FEC) adds 400 ns between E_Ports (Enabled by default)</p>                                                                                                                                                                                                                                                                                                                                                                     |
| Maximum frame size  | 2112-byte payload                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Classes of service  | Class 2, Class 3, Class F (Inter-switch frames)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Port types          | <ul style="list-style-type: none"> <li>• D_Port (Diagnostic Port)</li> <li>• E_Port, EX_Port, F_Port, M_Port (Mirror Port)</li> <li>• Self discovery based on switch type (U_Port)</li> <li>• Optional port type control Access Gateway mode: F_Port and NPIV-enabled N_Port</li> </ul>                                                                                                                                                                                                                                                                          |
| Data traffic types  | Fabric switches supporting unicast                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Media types         | <p>Hot-pluggable, B-Series Branded Small Form Factor Pluggable (SFP), LC connector; Short-Wave Laser (SWL), Long-Wave Laser (LWL)</p> <p>Distance depends on fiber-optic cable and port speed. Supports SFP+ (16/10/8 Gb/s) optical transceivers.</p>                                                                                                                                                                                                                                                                                                            |
| USB                 | One USB port for system log file downloads or firmware upgrades                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Feature         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fabric services | <ul style="list-style-type: none"> <li>• Advanced Performance Monitoring (APM) (Including Top Talkers for E_Ports, F_Ports, and Fabric mode)</li> <li>• Adaptive networking (Ingress Rate Limiting, Traffic Isolation, QoS)</li> <li>• Bottleneck Detection</li> <li>• Advanced Zoning (Default zoning, port/WWN zoning, broadcast zoning)</li> <li>• Dynamic Fabric Provisioning (DFP)</li> <li>• Dynamic Path Selection (DPS)</li> <li>• Extended fabrics</li> <li>• Enhanced BB credit recovery</li> <li>• Brocade fabric watch</li> <li>• FDMI</li> <li>• Frame redirection</li> <li>• Frame-based trunking</li> <li>• FSPF</li> <li>• Integrated routing</li> <li>• IPoFC</li> <li>• ISL Trunking</li> <li>• Management server</li> <li>• NPIV</li> <li>• NTP v3</li> <li>• Port fencing</li> <li>• Registered State Change Notification (RSCN)</li> <li>• Reliable Commit Service (RCS)</li> <li>• Server Application Optimization (SAO)</li> <li>• Simple Name Server (SNS)</li> <li>• Virtual Fabrics (Logical Switch, Logical Fabric)</li> </ul> |
| Extension       | <ul style="list-style-type: none"> <li>• Fibre Channel, in-flight compression (Brocade LZO) and encryption (AESGCM-256)</li> <li>• Integrated 10 Gb/s Fibre Channel for DWDM MAN connectivity</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Options         | SFP media, USB Device                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |



| Feature                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Management software supported | <ul style="list-style-type: none"> <li>• HTTPS, SNMP v1/v3 (FE MIB, FC Management MIB), SSH</li> <li>• Auditing, Syslog</li> <li>• Brocade Advanced Web Tools, APM, Fabric Watch</li> <li>• SAN Network Advisor Enterprise or SAN Network Advisor Professional/Professional Plus</li> <li>• Command Line Interface (CLI)</li> <li>• SMI-S compliant</li> <li>• Administrative Domains</li> <li>• Trial licenses for add-on capabilities</li> </ul>                |
| Management access             | <ul style="list-style-type: none"> <li>• 10/100/1000 Mb/s Ethernet (RJ-45), in-band over Fibre Channel</li> <li>• Serial port (RJ-45)</li> <li>• One USB port</li> </ul>                                                                                                                                                                                                                                                                                          |
| Diagnostics                   | <ul style="list-style-type: none"> <li>• D_Port offline diagnostics, including electrical/ optical loopback, link traffic/latency/distance</li> <li>• POST and embedded online/offline diagnostics, including environmental monitoring, FCping and Pathinfo (FC traceroute), frame viewer, non-disruptive daemon restart port mirroring (SPAN port), optics health monitoring, power monitoring, RAS trace logging, and Rolling Reboot Detection (RRD)</li> </ul> |
| Enclosure                     | Port side Intake and port side exhaust airflow models available<br>Power from back<br>2U                                                                                                                                                                                                                                                                                                                                                                          |

## Environmental specifications

| Feature     | Description                                                                                                                                                          |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature | <ul style="list-style-type: none"> <li>Operating: 0° to 40°C (32° to 104°F)</li> <li>Non-operating: -25° to 70°C (-13° to 158°F)</li> </ul>                          |
| Humidity    | <ul style="list-style-type: none"> <li>Operating: 10% to 85% (non-condensing)</li> <li>Non-operating: 10% to 90% (non-condensing)</li> </ul>                         |
| Altitude    | <ul style="list-style-type: none"> <li>Operating: Up to 3000 m (9,842 ft)</li> <li>Storage: Up to 12 km (39,370 ft)</li> </ul>                                       |
| Shock       | <ul style="list-style-type: none"> <li>Operating: 20G, 6 ms half-sine</li> <li>Non-operating: Half sine, 33G 11 ms, 3/eg Axis</li> </ul>                             |
| Vibration   | <ul style="list-style-type: none"> <li>Operating: 0.5G sine, 0.4 grms random, 5 to 500 Hz</li> <li>Non-operating: 2.0G sine, 1.1 grms random, 5 to 500 Hz</li> </ul> |

## Electrical specifications

| Feature              | Description                                                                                                                                                 |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power supply         | Dual, hot-swappable redundant power supplies                                                                                                                |
| AC input             | 85 to 264 V, ~5 to 2.5 A                                                                                                                                    |
| Input line frequency | 47 to 63 Hz                                                                                                                                                 |
| Power consumption    | <ul style="list-style-type: none"> <li>450 W with all 96 ports populated with 16 Gb/s SWL optics</li> <li>350 W for empty chassis with no optics</li> </ul> |

## Spare Parts

### Subtopics

[New model specific parts lists](#)

[Spare parts](#)

## New model specific parts lists

**IMPORTANT:** To obtain current part number information for a specific product model, use the Standard Models page for this product family.

- The product Standard Models page now links the model SKU numbers to the spare parts list for each model found on the HPE PartSurfer website. (To report missing or incorrect parts information in PartSurfer, please use the "Contact us" and "Missing or incorrect data" links

within the PartSurfer website utility.)

- To look up RoHS-compliant information in PartSurfer, use the component's option part number or the sales order number for a system in which the component is used (Available in the QuickSpecs or Standard Models page).

## Spare parts

| Description                                                                                                                                                                                                                                        | Part Number |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Fan</b>                                                                                                                                                                                                                                         |             |
| Fan assembly - 80 mm (3.14 in) Port side                                                                                                                                                                                                           | 720969-001  |
| <b>Power supply</b>                                                                                                                                                                                                                                |             |
| Power supply - 1100 W ac port side                                                                                                                                                                                                                 | 720968-001  |
| <b>Switch</b>                                                                                                                                                                                                                                      |             |
| 16GB Switch - SN6500B, 96/96, Storage Area Network (SAN)                                                                                                                                                                                           | 720964-001  |
| 16GB Switch - SN6500B, 48/96, Storage Area Network (SAN)                                                                                                                                                                                           | 720966-001  |
| 16Gb Base switch - SN6500B, 48/96, Storage Area Network (SAN)                                                                                                                                                                                      | 720967-001  |
| <b>Transceivers</b>                                                                                                                                                                                                                                |             |
| HP B-series 16Gb SFP+ LC SW transceiver - Small Form-factor Pluggable Plus (SFP+) 16Gb Short Wave transceiver, with 850nm laser that provides 14.025GBd connectivity up to 125-m (410 ft) on 50um OM4 multimode fiber - Has one LC 16Gb port       | 656435-001  |
| HP B-series 8Gb SFP+ LC SW transceiver - Small Form-factor Pluggable Plus (SFP+) 8Gb Short Wave transceiver, with 850nm laser that provides 8Gb connectivity up to 150-m (492 ft) on OM3 multimode fiber - Has one LC 8Gb port                     | 670504-001  |
| HP B-series 16Gb SFP+ LC LW transceiver - Small Form-factor Pluggable Plus (SFP+) 16Gb Long Wave transceiver, with 1310nm laser that provides 16Gb connectivity up to 10-km (6.2 miles) on single-mode fiber - Has one LC 16Gb port                | 656436-001  |
| HP B-series 8Gb SFP+ LC LW transceiver - Small Form-factor Pluggable Plus (SFP+) 8Gb Long Wave transceiver, with 1310nm laser that provides 8Gb connectivity up to 10-km (6.2 miles) on single-mode fiber - Has one LC 8Gb port                    | 504441-001  |
| HP B-Series 8Gb SFP+ LC extended LW transceiver - Small Form-factor Pluggable Plus (SFP+) 8Gb extended Long Wave transceiver, with 1310nm laser that provides 8Gb connectivity up to 25-km (15.5 miles) on single-mode fiber - Has one LC 8Gb port | 582640-001  |
| <b>Fibre adapter</b>                                                                                                                                                                                                                               |             |
| 82B PCIe 2.0 Fibre Channel dual port host bus adapter, 8 Gb/s transfer rate                                                                                                                                                                        | 571521-002  |
| <b>USB Drive</b>                                                                                                                                                                                                                                   |             |
| B-series 4GB USB Drive                                                                                                                                                                                                                             | 849192-001  |

| Description                                                                                                                                                                                                                               | Part Number |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Optical cables</b>                                                                                                                                                                                                                     |             |
| <b>HPE PremierFlex OM4+ fiber optic cables</b>                                                                                                                                                                                            |             |
| Premier Flex Multimode OM4 LC/LC Fiber Optic cable, 1.0-m (3.28 ft) long - Duplex zipcord graded index 50/125um multimode 'bendable' fiber optic cable with LC/MPO connectors on each end (Blue color) - Optical performance: 4700 MHz/km | 656427-001  |
| Premier Flex Multimode OM4 LC/LC Fiber Optic cable, 2.0-m (6.56 ft) long - Duplex zipcord graded index 50/125um multimode 'bendable' fiber optic cable with LC/MPO connectors on each end (Blue color) - Optical performance: 4700 MHz/km | 656428-001  |
| Premier Flex Multimode OM4 LC/LC Fiber Optic cable, 5.0-m (16.4 ft) long - Duplex zipcord graded index 50/125um multimode 'bendable' fiber optic cable with LC/MPO connectors on each end (Blue color) - Optical performance: 4700 MHz/km | 656429-001  |
| Premier Flex Multimode OM4 LC/LC Fiber Optic cable, 15-m (49.2 ft) long - Duplex zipcord graded index 50/125um multimode 'bendable' fiber optic cable with LC/MPO connectors on each end (Blue color) - Optical performance: 4700 MHz/km  | 656430-001  |
| Premier Flex Multimode OM4 LC/LC Fiber Optic cable, 30-m (98.4 ft) long - Duplex zipcord graded index 50/125um multimode 'bendable' fiber optic cable with LC/MPO connectors on each end (Blue color) - Optical performance: 4700 MHz/km  | 656431-001  |
| Premier Flex Multimode OM4 LC/LC Fiber Optic cable, 50-m (164 ft) long - Duplex zipcord graded index 50/125um multimode 'bendable' fiber optic cable with LC/MPO connectors on each end (Blue color) - Optical performance: 4700 MHz/km   | 656432-001  |
| <b>HPE OM3 LC-LC Optical cables</b>                                                                                                                                                                                                       |             |
| Multimode OM3 LC/LC Fiber Optic cable, 0.5-m (1.64 ft) long - Duplex zipcord graded index 50/125um multimode fiber optic cable with LC connectors on each end (Aqua Color) - Optical performance: 2000 MHz/km                             | 491023-001  |
| Multimode OM3 LC/LC Fiber Optic cable, 1.0-m (3.28ft) long - Duplex zipcord graded index 50/125um multimode fiber optic cable with LC connectors on each end (Aqua Color) - Optical performance: 2000 MHz/km                              | 491024-001  |
| Multimode OM3 LC/LC Fiber Optic cable, 2.0-m (6.56 ft) long - Duplex zipcord graded index 50/125um multimode fiber optic cable with LC connectors on each end (Aqua Color) - Optical performance: 2000 MHz/km                             | 491025-001  |
| Multimode OM3 LC/LC Fiber Optic cable, 5.0-m (16.4 ft) long - Duplex zipcord graded index 50/125um multimode fiber optic cable with LC connectors on each end (Aqua Color) - Optical performance: 2000 MHz/km                             | 491026-001  |
| Multimode OM3 LC/LC Fiber Optic cable, 15-m (49.2 ft) long - Duplex zipcord graded index 50/125um multimode fiber optic cable with LC connectors on each end (Aqua Color) - Optical performance: 2000 MHz/km                              | 491027-001  |

| Description                                                                                                                                                                                                  | Part Number |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Multimode OM3 LC/LC Fiber Optic cable, 30-m (98.4 ft) long - Duplex zipcord graded index 50/125um multimode fiber optic cable with LC connectors on each end (Aqua Color) - Optical performance: 2000 MHz/km | 491028-001  |
| Multimode OM3 LC/LC Fiber Optic cable, 50-m (164 ft) long - Duplex zipcord graded index 50/125um multimode fiber optic cable with LC connectors on each end (Aqua Color) - Optical performance: 2000 MHz/km  | 491029-001  |

## Option Parts

### Subtopics

[New model specific parts lists](#)

[Upgrade license](#)

[Fibre Channel \(FC\) transceivers](#)

[USB Drive](#)

[Optical cables](#)

[Optional software](#)

## New model specific parts lists

**IMPORTANT:** To obtain current part number information for a specific product model, use the Standard Models page for this product family.

- The product Standard Models page now links the model SKU numbers to the spare parts list for each model found on the HP PartSurfer web site. (To report missing or incorrect parts information in PartSurfer, please use the "Contact us" and "Missing or incorrect data" links within the PartSurfer web site utility.)
- To look up RoHS-compliant information in PartSurfer, use the component's option part number or the sales order number for a system in which the component is used (available in the QuickSpecs or Standard Models page).

## Upgrade license

| Description                                                                                                                             | Part Number                             |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <b>HPE StoreFabric SN6500B SAN Switch 24-port upgrade E-LTU</b>                                                                         |                                         |
| 24 port upgrade license for SN6500B 16Gb 96/48 power pack+ Fibre Channel (FC) Switch (C8R44A) and SN6500B 16Gb 96/48 FC Switch (C8R45A) | TC440AAE<br>(Physical license - TC440A) |



### NOTE

Some HPE B-series software licenses are now available through the Electronic Delivery (E-Delivery) mechanism. The EDelivery software licenses with new part numbers listed in this document are functionally equivalent to the corresponding physical licenses with different part numbers. Some software licenses in this document are represented by two part numbers, the first of which is the E-Delivery version (ending with AE) and the second is the physical version.

## Fibre Channel (FC) transceivers

| Description                                                                     | Part Number         |
|---------------------------------------------------------------------------------|---------------------|
| HPE B-series 16Gb SFP+ Short Wave (SW) transceiver                              | QK724A              |
| HPE 8Gb short wave B-series FC SFP+ 1 Pack                                      | AJ716B <sup>1</sup> |
| HPE B-series 16Gb Long Wave (LW) 25 km FC SFP 1-pack transceiver                | H6Z29A              |
| HPE B-series 16Gb SFP+ long wave 10 km transceiver                              | QK725A              |
| HPE 8Gb long wave B-series 10 km fibre channel 1 Pack SFP+ transceiver          | AJ717A              |
| HPE B-series 8Gb extended long wave 25 km fibre channel SFP+ transceiver 1 Pack | AW538A              |
| HPE B-series 16Gb SFP+ Short Wave 1-pack Secure Transceiver                     | R6B10A              |
| HPE B-series 16Gb SFP+ Short Wave 8-pack Secure Transceiver                     | R6W28A              |
| HPE B-series 16Gb SFP+ Long Wave 10km 1-pack Secure Transceiver                 | R6B11A              |
| HPE B-series 16Gb SFP+ Extended Long Wave 25km 1-pack Secure Transceiver        | R6B21A              |



### NOTE

1. AJ716A is not supported with the SN6000B and SN6500B 16Gb FC switches.

## USB Drive

| Description                        | Part Number |
|------------------------------------|-------------|
| HPE B-series 4G USB drive          | N9Y63A      |
| HPE B-series switch rack-mount kit | A7511A      |



### NOTE

When any of the SN6500B switch models is ordered, an accessory kit which contains the rack mount kit is included in the package by default. A7511A is required when the original accessory kit or rack mount kit is unavailable.

## Optical cables

| Description                                                       | Part Number |
|-------------------------------------------------------------------|-------------|
| <b>HPE PremierFlex OM4+ fiber optic cables</b>                    |             |
| HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1 m cable           | QK732A      |
| HPE Premier Flex LC/LC Multimode OM4 2 fiber 2 m cable            | QK733A      |
| HPE Premier Flex LC/LC Multimode OM4 2 fiber 5 m cable            | QK734A      |
| HPE Premier Flex LC/LC Multimode OM4 2 fiber 15 m cable           | QK735A      |
| HPE Premier Flex LC/LC Multimode OM4 2 fiber 30 m cable           | QK736A      |
| HPE Premier Flex LC/LC Multimode OM4 2 fiber 50 m cable           | QK737A      |
| <b>HPE OM3 LC-LC optical cables</b>                               |             |
| HPE LC to LC Multimode OM3 2-fiber 0.5 m 1-pack fiber optic cable | AJ833A      |
| HPE LC to LC Multimode OM3 2-fiber 1 m 1-pack fiber optic cable   | AJ834A      |
| HPE LC to LC Multimode OM3 2-fiber 2 m 1-pack fiber optic cable   | AJ835A      |
| HPE LC to LC Multimode OM3 2-fiber 5 m 1-pack fiber optic cable   | AJ836A      |
| HPE LC to LC Multimode OM3 2-fiber 15 m 1-pack fiber optic cable  | AJ837A      |
| HPE LC to LC Multimode OM3 2-fiber 30 m 1-pack fiber optic cable  | AJ838A      |
| HPE LC to LC Multimode OM3 2-fiber 50 m 1-pack fiber optic cable  | AJ839A      |

## Optional software

| Description                                             | Part Number       |
|---------------------------------------------------------|-------------------|
| <b>Software for SN6500B 16Gb FC switch <sup>1</sup></b> |                   |
| HPE SANnav management portal base 1 year E-LTU          | R3P45AAE          |
| HPE SANnav management portal base 1 year LTU            | (TC352C - R3P45A) |
| HPE SANnav management portal enterprise 1 year E-LTU    | R3P46AAE          |
| HPE SANnav management portal enterprise 1 year LTU      | R3P46A            |
| HPE SANnav global view 1 year E-LTU                     | R3P47AAE          |
| HPE SANnav global view 1 year LTU                       | R3P47A            |
| HPE SANnav management portal base 3 year E-LTU          | R3P48AAE          |
| HPE SANnav management portal base 3 year LTU            | R3P48A            |
| HPE SANnav management portal enterprise 3 year E-LTU    | R3P49AAE          |
| HPE SANnav management portal enterprise 3 year LTU      | R3P49A            |
| HPE SANnav global view 3 year E-LTU                     | R3P50AAE          |
| HPE SANnav global view 3 year LTU                       | R3P50A            |

| Description                                                                | Part Number |
|----------------------------------------------------------------------------|-------------|
| HPE SAN Network advisor enterprise software E-LTU                          | TC352CAE    |
| HPE SAN Network advisor enterprise software LTU                            | TC352C      |
| HPE SAN Network advisor professional plus software E-LTU                   | TC353CAE    |
| HPE SAN Network advisor professional plus software LTU                     | TC353C      |
| HPE SAN Network advisor professional plus upgrade E-LTU                    | TC354CAE    |
| HPE SAN Network advisor professional plus upgrade LTU                      | TC354C      |
| HPE SN6500B SAN Switch power pack+ E-LTU <sup>2</sup>                      | TC441BAE    |
| HPE SN6500B SAN Switch power pack+ LTU                                     | TC441B      |
| HPE 8/16Gb High end switch fabric vision E-LTU                             | TC511AAE    |
| HPE 8/16Gb High end switch fabric vision LTU                               | TC511A      |
| HPE B-series Mid/High end extended fabric E-LTU                            | J4V63AAE    |
| HPE B-series Mid/High end extended fabric LTU                              | 313458-B21  |
| HPE B-series Mid/High end SAN switch fabric Watch E-LTU                    | J4V62AAE    |
| HPE B-series Mid/High end SAN switch fabric Watch LTU                      | 313454-B21  |
| HPE B-series Mid/High end SAN switch advanced performance monitoring E-LTU | J4V60AAE    |
| HPE B-series Mid/High end SAN switch advanced performance monitoring LTU   | 313450-B21  |
| HPE B-series Mid/High end SAN switch ISL trunking E-LTU                    | J4V61AAE    |
| HPE B-series Mid/High end SAN switch ISL trunking LTU                      | 313452-B21  |
| HPE B-series Integrated routing E-LTU                                      | T5529BAE    |
| HPE B-series Integrated routing LTU                                        | T5529B      |



#### NOTE

1. The Base edition of HPE SANnav Management Portal does not support management of director class switches. HPE SANnav Management Software License-to-Use (LTU/E-LTU) includes maintenance and support for the duration of the license. At the end of the license period, user will need to purchase a new license to continue using the software. Software renewal via HPE PointNext is not allowed/supported. A 90-day, full-featured trial license for SANnav Management Portal and SANnav Global View is available.
2. The power pack+ Software Bundle kit includes Fabric Vision, Fabric Watch, ISL Trunking, Extended Fabric and Advanced Performance Monitor.

Adaptive Networking and Server Application Optimization features are included by default in all four switch configurations and do not require a separate license.

Some HPE B-series software licenses are now available through the Electronic Delivery (E-Delivery) mechanism. The E-Delivery software licenses with new part numbers listed in this document are functionally equivalent to the corresponding physical licenses with different part numbers. Some software licenses in this document are represented by two part numbers, the first of which is the E-Delivery version (ending with AE) and the second is the physical version.

HPE SAN Network Advisor software will no longer be shipped as a DVD to customers. Instead, customers will be able to access and download the software from The HPE Product Download web site.

Universal Temporary Licenses (UTLs) are available for trial usage or to test select features before purchasing permanent licenses. These UTLs enable optional features on B-series Directors and Switches on a temporary basis for one-time usage.

## OS Compatibility

| Feature                                    | Description                                                                                                                                                                                                                                                                              |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Software components, standard, base models | <ul style="list-style-type: none"> <li>• Frame filtering</li> <li>• Advanced zoning</li> <li>• Web tools</li> <li>• Enhanced Group Management (EGM)</li> <li>• In-flight compression and encryption</li> <li>• Adaptive networking</li> <li>• Server application optimization</li> </ul> |
| Operating System (OS) support              | Refer to the SAN design guide: <ul style="list-style-type: none"> <li>• <a href="#">Click here to view the information on HPE SAN manuals.</a></li> </ul>                                                                                                                                |
| Software components                        | SN6500B 16Gb Switch Power Pack+ software bundle <ul style="list-style-type: none"> <li>• Fabric Vision</li> <li>• Fabric watch</li> <li>• Advanced performance monitorem</li> </ul>                                                                                                      |

## Useful Links

| Descriptions         | Links                                                                                                                                                                         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alerts               | <a href="#">Click here to view " Advisories, Alerts and Bulletins and Notices of HPE StoreFabric SN6500B Fibre Channel Switch".</a>                                           |
| Drivers and Software | <a href="#">Click here to view "Drivers and software of HPE StoreFabric SN6500B Fibre Channel Switch".</a>                                                                    |
| Knowledge article    | <a href="#">Click here to view" Knowledge articles, Troubleshooting, FAQ, How to , Information document of HPE StoreFabric SN6500B Fibre Channel Switch".</a>                 |
| Manuals              | <a href="#">Click here to view "Manuals, Guides,Release notes, Troubleshooting articles and other related document of HPE StoreFabric SN6500B Fibre Channel Switch".</a>      |
| Videos               | <a href="#">Click here to access " Videos of Remove/Replace, Setup/Installation, Troubleshooting, Management/Operations of HPE StoreFabric SN6500B Fibre Channel Switch".</a> |