

HPE SN8600B 4-SLOT POWER PACK+ DIRECTOR SWITCH (Q0U83B)

B-series Switches



WHAT'S NEW

- The HPE B-series SN8700B 64Gb SAN
 Director is offered with the flexibility of both Non-Port side Intake (NPI) and with Non-Port side Exhaust (NPE).
- HPE SN8700B Director blades are available and fully-integrated with 48 64Gb short wave, 48 32Gb short wave, or 48 32Gb long wave transceivers.
- The HPE SN8700B Director offers reduced latency compared to the previous generation.
- Up to 384 64Gbps line rate ports or up to 512 32Gbps line rate ports for device connectivity. Along with 32 ICL connections for an additional 128 ports for chassis-to-chassis interconnect.
- Core blade upgrades for the HPE SN8600B Director Switch allow customers to upgrade and unlock the features and

OVERVIEW

Are you looking to modernize your storage-networking infrastructure to efficiently meet the dynamic and growing demands of your business?

With more reliable data access and procedures to reduce human error, the HPE SAN Director Switch portfolio delivers a powerful Fibre Channel (FC) and multiprotocol switching infrastructure that can massively scale in a smaller footprint and unleash the full performance of flash and emerging NVMebased storage.

It provides a mission-critical, scalable, and high-performance foundation for enterprise data centers with private and hybrid-cloud deployments and highly virtualized environments. The HPE SAN Director Switch portfolio contains the HPE B-series SN8700B 64Gb FC Switch and HPE B-series SN8600B 32Gb FC Switch. The HPE SAN Director is offered in 8-slot and 4-slot chassis providing up to 384 64Gb/s ports or up to 512 32Gb/s with up to 32 QSFP based ICLs equivalent to 128 FC ports.

Data sheet Page 2

64Gb port bandwidth of the HPE SN8700B Director Switch without replacing their chassis.

FEATURES

Improved Performance

HPE SAN Director Switch features up to 64Gbps FC performance and up to 31Tbps chassis bandwidth to address I/O and bandwidth-intensive applications for private cloud storage and highly virtualized environments.

Supports flash-based storage workloads with up to 1 billion IOPS utilizing 48-port 64Gb FC blade, 64-port 32Gb QSFP blade, 48-port 32Gb FC blade, and 32Gb SAN extension blade.

Increase scalability with up to 2X throughput for high-density virtual machine (VM) deployments and larger fabrics, allowing organizations to support more storage devices using the same number of FC links. [1]

HPE SAN Director family provides higher chassis, slot-to-slot, and port performance, enabling faster deployment of applications.

HPE B-series SAN Director Switches offer local switching capabilities to verify that data traffic within the same port group does not consume slot bandwidth, increasing the number of line-rate ports.

Simplified Management

HPE SAN Director simplifies monitoring, management, and diagnostics to avoid problems before they impact operations and it dramatically reduces total cost of ownership (TCO).

HPE SN8700B and SN8600B SAN Directors integrated with HPE Network Orchestrator (NetO) offer greater visibility into your SAN fabric.

The HPE I/O Insight software with 64Gb and 32Gb FC technology enhances visibility into the health of your SAN.

Enables pro-active monitoring of I/O performance and behavior through integrated network sensors, allowing real-time monitoring of NVMe workloads, providing deep insight into problems, and improving service-level agreements (SLAs)

With new automation, organizations can quickly and reliably perform resource intensive tasks, such as provisioning, and enable uninterrupted SAN monitoring, so that tasks can be completed in less time. With automation, organizations can automate repetitive daily tasks and deliver consistent results.

Improves Business Continuity and Disaster Recovery Solutions

The HPE SAN Director delivers high bandwidth, port density, and throughput required for application performance over WAN connections addressing demanding disaster recovery (DR) requirements through 64Gb, 32Gb FC, and 1GbE/10GbE/40GbE ports.

Reduces bandwidth costs with in-flight data compression at wire speed and increases security with in-flight data encryption.

Provides native 10Gbps FC support on the 32Gb and 64Gb blade.

Lower TCO

HPE HPE SN8600B 8-slot Power Pack+ Director Switch, HPE SN8600B 4-slot Power Pack+ Director Switch, HPE SN8700B 8-slot Power Pack+ Director Switch, and HPE SN8700B 4-slot Power Pack+ Director Switch seamlessly integrate with NVMe throughout the fabric.

Data sheet Page 3

Enables high-density, core-edge, and active-active mesh chassis topologies reducing inter-switch cabling by up to 75%. [2]

To meet ever-increasing demands for faster, more reliable data access, it is essential for organizations to deploy a modernized infrastructure that reduces latency, increases bandwidth, and helps ensure near-continuous availability. Unprecedented performance is not enough on its own.

Technical specifications

HPE SN8600B 4-slot Power Pack+ Director Switch

Port speed 32Gbps Fibre Channel Aggregate switch bandwidth Up to 2048 Tbps depending on blades selected Encryption capability In-flight encryption, data at rest encryption, depending on model Protocol supported Fibre Channel, FCIP, FICON, FCOE Availability features High availability with redundant hot swappable components, redundant power and cooling subsystems, automatic control processor failover non-disruptive "hot" software code loads, and activation concurrent hardware upgrades. Form factor 9U Management features B-series SAN Network Advisor Integration with Storage Essentials, HPE OneView 12, HPE Intelligent Infrastructure Analyzer Software, PowerPack+ Software, Fabric Vision Software, ClearLink diagnostics. Upgradability HPE SN8700B SAN Director is upgradable with 64Gb and 32Gb capable FC port blades and the HPE SN8600B SAN Director is upgradable with 32Gb FC port blades. The HPE SN8600B SAN Director is upgradable with 32Gb FC port blades. The HPE SN8600B SAN Directors providing FC extension (16×32Gb/s FC ports) and IP extension over IP networks (16×1GbE/10GbE and 2×40GbE ports). Software (required) HPE Power Pack+ is required FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric) 3445 x 43.74 x 61.04 cm		
Aggregate switch bandwidth Up to 20.48 Tbps depending on blades selected In-flight encryption, data at rest encryption, depending on model Protocol supported Fibre Channel, FCIP, FICON, FCOE Availability features High availability with redundant hot swappable components, redundant power and cooling subsystems, automatic control processor failover non-disruptive "hor" software code loads, and activation concurrent hardware upgrades. Form factor 9U Management features B-series SAN Network Advisor Integration with Storage Essentials, HPE OneView 1.2, HPE Intelligent Infrastructure Analyzer Software, PowerPack+ Software, Fabric Vision Software, ClearLink diagnostics. Upgradability The HPE SNB700B SAN Director is upgradable with 64Gb and 32Gb capable FC port blades and the HPE SNB600B SAN Director is upgradable with 32Gb FC port blades. The HPE SNB600B SAN Extension Blade is supported on both the HPE SNB600B SAN Directors providing FC extension (16×32Gb/s FC ports) and IP extension over IP networks (16×1GbE/10GbE and 2×40GbE ports). Software (required) HPE Power Pack+ is required FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric)	Product Number	Q0U83B
Encryption capability In-flight encryption, data at rest encryption, depending on model Fibre Channel, FCIP, FICON, FCOE Availability features High availability with redundant hot swappable components, redundant power and cooling subsystems, automatic control processor failover non-disruptive "hot" software code loads, and activation concurrent hardware upgrades. Form factor 9U Management features B-series SAN Network Advisor Integration with Storage Essentials, HPE OneView 1.2, HPE Intelligent Infrastructure Analyzer Software, PowerPack+ Software, Fabric Vision Software, ClearLink diagnostics PowerPack+ Software, Fabric Vision Software, ClearLink diagnostics The HPE SN8700B SAN Director is upgradable with 64Gb and 32Gb capable FC port blades and the HPE SN8600B SAN Director is upgradable with 53Gb FC port blades. The HPE SN8600B SAN Extension Blade is supported on both the HPE SN8700B and HPE SN8600B SAN Directors providing FC extension (16×32Gb/s FC ports) and IP extension over IP networks (16×1GbE/10GbE and 2×40GbE ports). Software (required) HPE Power Pack+ is required FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric)	Port speed	32Gbps Fibre Channel
Protocol supported Fibre Channel, FCIP, FICON, FCoE High availability with redundant hot swappable components, redundant power and cooling subsystems, automatic control processor failover non-disruptive "hot" software code loads, and activation concurrent hardware upgrades. Form factor 9U Management features B-series SAN Network Advisor Integration with Storage Essentials, HPE OneView 1.2, HPE Intelligent Infrastructure Analyzer Software, PowerPack+ Software, Fabric Vision Software, ClearLink diagnostics. Upgradability The HPE SN8700B SAN Director is upgradable with 496b and 32Gb capable FC port blades and the HPE SN8600B SAN Director is upgradable with 32Gb FC port blades. The HPE SN8600B SAN Extension Blade is supported on both the HPE SN8700B and HPE SN8600B SAN Extension (16×32Gb/s FC ports) and IP extension over IP networks (16×1GbE/10GbE and 2×40GbE ports). Software (required) HPE Power Pack+ is required FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric)	Aggregate switch bandwidth	Up to 20.48 Tbps depending on blades selected
Availability features High availability with redundant hot swappable components, redundant power and cooling subsystems, automatic control processor failover non-disruptive "hot" software code loads, and activation concurrent hardware upgrades. Porm factor 9U Management features B-series SAN Network Advisor Integration with Storage Essentials, HPE OneView 1.2, HPE Intelligent Infrastructure Analyzer Software, PowerPack+ Software, Fabric Vision Software, ClearLink diagnostics. Upgradability The HPE SN8700B SAN Director is upgradable with 64Gb and 32Gb capable FC port blades and the HPE SN8600B SAN Director is upgradable with 32Gb FC port blades. The HPE SN8600B SAN Extension Blade is supported on both the HPE SN8700B and HPE SN8600B SAN Directors providing FC extension (16×32Gb/s FC ports) and IP extension over IP networks (16×1GbE/10GbE and 2×40GbE ports). Software (required) HPE Power Pack+ is required FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric)	Encryption capability	In-flight encryption, data at rest encryption, depending on model
automatic control processor failover non-disruptive "hot" software code loads, and activation concurrent hardware upgrades. PowerPacks SAN Network Advisor Integration with Storage Essentials, HPE OneView 1.2, HPE Intelligent Infrastructure Analyzer Software, PowerPacks Software, Fabric Vision Software, ClearLink diagnostics. Upgradability The HPE SN8700B SAN Director is upgradable with 64Gb and 32Gb capable FC port blades and the HPE SN8600B SAN Director is upgradable with 32Gb FC port blades. The HPE SN8600B SAN Extension Blade is supported on both the HPE SN8700B and HPE SN8600B SAN Directors providing FC extension (16×32Gb/s FC ports) and IP extension over IP networks (16×1GbE/10GbE and 2×40GbE ports). Software (required) HPE Power Packs is required FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric)	Protocol supported	Fibre Channel, FCIP, FICON, FCoE
B-series SAN Network Advisor Integration with Storage Essentials, HPE OneView 1.2, HPE Intelligent Infrastructure Analyzer Software, PowerPack + Software, Fabric Vision Software, ClearLink diagnostics. The HPE SN8700B SAN Director is upgradable with 64Gb and 32Gb capable FC port blades and the HPE SN8600B SAN Director is upgradable with 32Gb FC port blades. The HPE SN8600B SAN Extension Blade is supported on both the HPE SN8700B and HPE SN8600B SAN Directors providing FC extension (16×32Gb/s FC ports) and IP extension over IP networks (16×1GbE/10GbE and 2×40GbE ports). Software (required) HPE Power Pack+ is required FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric)	Availability features	automatic control processor failover non-disruptive "hot" software code loads, and activation concurrent
Integration with Storage Essentials, HPE OneView 1.2, HPE Intelligent Infrastructure Analyzer Software, PowerPack+ Software, Fabric Vision Software, ClearLink diagnostics. Upgradability The HPE SN8700B SAN Director is upgradable with 64Gb and 32Gb capable FC port blades and the HPE SN8600B SAN Director is upgradable with 32Gb FC port blades. The HPE SN8600B SAN Extension Blade is supported on both the HPE SN8700B and HPE SN8600B SAN Directors providing FC extension (16×32Gb/s FC ports) and IP extension over IP networks (16×1GbE/10GbE and 2×40GbE ports). Software (required) HPE Power Pack+ is required FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric) 34.45 x 43.74 x 61.04 cm	Form factor	9U
HPE SN8600B SAN Director is upgradable with 32Gb FC port blades. The HPE SN8600B SAN Extension Blade is supported on both the HPE SN8700B and HPE SN8600B SAN Directors providing FC extension (16×32Gb/s FC ports) and IP extension over IP networks (16×1GbE/10GbE and 2×40GbE ports). Software (required) HPE Power Pack+ is required FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric) 34.45 x 43.74 x 61.04 cm	Management features	Integration with Storage Essentials, HPE OneView 1.2, HPE Intelligent Infrastructure Analyzer Software,
Software (optional) FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software Product Dimensions (metric) 34.45 × 43.74 × 61.04 cm	Upgradability	HPE SN8600B SAN Director is upgradable with 32Gb FC port blades. The HPE SN8600B SAN Extension Blade is supported on both the HPE SN8700B and HPE SN8600B SAN Directors providing FC extension
Product Dimensions (metric) 34.45 x 43.74 x 61.04 cm	Software (required)	HPE Power Pack+ is required
	Software (optional)	FICON CUP, MP Blade Performance Extension, Enterprise ICL License, and Fabric Vision Software
Weight 24.5 kg	Product Dimensions (metric)	34.45 x 43.74 x 61.04 cm
	Weight	24.5 kg

For additional technical information, available models and options, please reference the QuickSpecs

Make the right purchase decision. Contact our presales specialists.





HPE POINTNEXT SERVICES

HPE Pointnext Services brings together technology and expertise to help you drive your business forward and prepare for whatever is next.

Operational Services from HPE Pointnext Services

<u>HPE Pointnext Tech Care</u> provides fast access to product-specific experts, an Al-driven digital experience, and general technical guidance to help enable constant innovation. We have reimagined IT support from the ground up to deliver faster answers and greater value. By continuously searching for better ways to do things—as opposed to just fixing things that break—HPE Pointnext Tech Care helps you focus on achieving your business goals.

<u>HPE Pointnext Complete Care</u> is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment, and achieving agreed upon IT outcomes and business goals through a personalized and customercentric experience. All delivered by an assigned team of HPE Pointnext Services experts.

HPE Integration and Performance Services help you customize your experience at any stage of your product lifecycle with a menu of services based on individual needs, workloads, and technologies.

- Advise, design, and transform
- Deploy
- Integrate and migrate
- Operate and improve
- Financial Services
- Greenlake Management Services
- Retire and sanitize
- IT Training and personal development

Other related services

<u>HPE Education Services</u> delivers a comprehensive range of services to support your people as they expand their skills required for a digital transformation. Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and support options.

Defective Media Retention is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

HPE GREENLAKE

<u>HPE Greenlake</u> is HPE's market-leading IT as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model. HPE GreenLake delivers public cloud services and infrastructure for workloads on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please explore them here.

[1] https://docs.broadcom.com/doc/X7-Director-PB

[2] Two 64-port blades support 32 Inter-Switch Link (ISL) cable connections versus 128 FC cables required using the 48-port blades to achieve the same ISL connectivity, a 75% reduction in cable connectivity.



© Copyright 2022 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

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 quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.