



# HPE SN6650B 32GB 128/96 POWER PACK+ 96- PORT 32GB SHORT WAVE SFP+ INTEGRATED FIBRE CHANNEL SWITCH (Q9V96C)

## B-series Switches



### WHAT'S NEW

- Port On Demand (PoD) Kits including a PoD upgrade license, activating 24 ports, and 24 32Gb Fibre Channel optics.

### OVERVIEW

Is there a need to modernize your storage network? The all-flash data center and emerging NVMe storage requires a modern storage network that can keep up with pace of innovation seen with compute and storage resources. The HPE B-series SN6650B Fibre Channel Switch is a high-port density building block with 128 Fibre Channel ports that provides the tools to help optimize NVMe storage and automate SAN management tasks. It provides 32Gb SAN connectivity with up to 4 Tbps of total system bandwidth for data center consolidation, capable of supporting the most demanding all-flash workloads. New automation capabilities enable DevOps resources to automate operations to increase productivity with simple and open automation through open APIs and the Ansible automation engine. The HPE B-series SN6650B Fibre

Channel Switch enables new insight into NVMe storage fabrics with modern I/O traffic visibility and VM-level granularity to validate and fine-tune performance for better efficiency.

## FEATURES

### Flash-Ready Performance

The HPE B-series SN6650B Fibre Channel Switch supports up to 4 Tbps bandwidth with very low latency < 780 ns (including FEC) through the use of cut-through switching.

Shatters application performance barriers with up to 200 million IOPS utilizing up to 566 million frame switching per second.

Delivers up to 384 Gbps of combined in-flight encryption and 192 Gbps of in-flight compression to improve bandwidth and help minimize the risk of unauthorized access.

Built-in ASIC enables I/O insight into NVMe/FC storage traffic with VM-level granularity to validate and fine-tune performance for better efficiency.

Internal fault-tolerant and enterprise-class RAS features help minimize downtime to support growing mission-critical environments.

### Easy Manageability with Simple and Open Automation

The HPE B-series SN6650B Fibre Channel Switch provides tools to simplify and automate operations enabling DevOps resources to orchestrate SAN resources through open APIs and the Ansible automation engine.

Easier integration into third-party tools utilizing a library of templates and scripts (REST APIs) to help deploy applications faster.

Supports I/O Insight and VM Insight (included in HPE Power Pack+ software) to provide deeper visibility into FC/NVMe traffic.

### Enterprise-class Scalability

HPE B-series SN6650B Fibre Channel Switch delivers industry-leading port density with 128 Fibre Channel ports in an elegant 2U form factor.

Provides 96 32Gb SFP+ ports and eight 4×32Gb QSFP ports to enable data centers to scale efficiently and deliver more connectivity with fewer switches.

Offers cost-effective pay-as-you-grow scalability, expanding from 48 to 128 ports with flexible Ports on Demand (PoD).

Supports 32/16/10/8/4 Gb Fibre Channel.



## Technical specifications

## HPE SN6650B 32Gb 128/96 Power Pack+ 96-port 32Gb Short Wave SFP+ Integrated Fibre Channel Switch

<b>Product Number</b>	Q9V96C
<b>Port speed</b>	32 Gb
<b>Aggregate switch bandwidth</b>	4.096 Tbps
<b>Encryption capability</b>	Security types: DH-CHAP (between switches and end devices), FCAP switch authentication, HTTPS, IPsec, IP filtering, LDAP with IPv6, OpenLDAP, Port Binding, RADIUS, TACACS+, user-defined Role-Based Access Control (RBAC), Secure Copy (SCP), Secure RPC, Secure Syslog, SFTP, SSH v2, SSL, Switch Binding, Trusted Switch. The HPE B-series SN6650B Fiber Channel Switch provides up to 12 in-flight encryption and compression ports.
<b>Protocol supported</b>	Fibre Channel
<b>Availability features</b>	Hot plug and redundant: Two power supply (FRUs) with integrated power module, three FAN FRUs with two fans each. Enhanced fault detection, Forward error correction (FEC) on 16Gb (configuration dependent) and 32Gb (FEC on full time) for all data paths and system memory.
<b>Form factor</b>	2U
<b>Upgradability</b>	HPE SN6650B 24-port SFP upgrade E-LTU (Port on demand) HPE SN6650B 32-port QSFP upgrade E-LTU (Port-on-demand)
<b>Software (optional)</b>	HPE Power Pack+ software (Includes Fabric Vision, Extended Fabric, ISL Trunking, IO Insight and VM Insight) HPE Network Advisor Professional Software (free), HPE SAN Network Advisor Professional Plus Upgrade, HPE SAN Network Advisor Enterprise software, HPE Smart SAN for 3PAR, HPE B-series Integrated Routing
<b>Product Dimensions (metric)</b>	440 x 86.7 x 609.6 mm
<b>Weight</b>	21.31 kg with two power supply FRUs, and three fan FRUs without transceivers



For additional technical information, available models and options, please reference the [QuickSpecs](#)

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### Operational Services from HPE Pointnext Services

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HPE Pointnext Complete Care 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 customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts.

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

### Other related services

HPE Education Services 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.

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