

HPE Storage Switch M-series SN2010M



What's new

- The NVIDIA® Cumulus Linux® Network Operating System is now bundled with the HPE Storage Switch M-series SN2010M using SKU S2T75A.

Overview

How can you provide fast, reliable, and cost-effective connectivity in the data center with predictable performance and investment protection?

The HPE Storage Switch M-series SN2010M is ideal for modern server and storage networks. Supporting port speeds of 1, 10, 25, 40, 50, and 100GbE, they deliver predictable performance and zero packet loss at line-rate. Its unique port counts and half-width form factor allows up to two HPE Storage SN2010M units to be deployed side-by-side for increased density and high-availability in a single rack unit making it the perfect top-of-rack (ToR) switch. Storage-specific features combined with an efficient design provides enterprise-level performance with attractive economics and outstanding ROI. Networks built on HPE M-series switches are fast, reliable,

and scalable while also being affordable. This makes these switches ideal for storage, hyperconverged infrastructure, financial services, Big Data, and media and entertainment deployments.

Features

Unleash Storage Performance and Improve Flash ROI

The HPE Storage Switch M-series SN2010M is a half-width 1/10/25GbE and 40/100GbE Ethernet switch designed for primary, secondary storage, and hyperconverged infrastructures. This ToR solution packs 18-ports of 1/10/25GbE and 4-ports of 40/100GbE that can be reconfigured with breakout cables.

It delivers low latency for 1/10/25GbE and 40/100GbE switching, featuring a robust data implementation, control and management planes, and offers a compact form factor and low power consumption.

It provides ultra-low latency of under 300 ns port-to-port. This is advantageous for flash storage which has moved latency bottlenecks from storage access to the network, as well as for the burst nature of today's software-defined and cloud data centers traffic.

The buffering architecture provides superior micro-burst absorption for applications that experience data surges across different parts of the network at random intervals.

Ideal for Demanding Enterprise Data Centers and Storage Environments

The HPE Storage Switch M-series SN2010M provides a flexible combination of ports, allowing great flexibility, efficiency, and simplification of scale-out environments, saving on total cost of ownership.

Unique port configurations allow high-speed rack connectivity to the server at 1/10 GbE or 25 GbE speeds with 40/100 GbE uplink ports that allow for a variety of blocking ratios that suit specific application requirements.

Enhanced for RDMA over Converged Ethernet (RoCE), full buffer utilization, and zero packet loss combined into a small form factor with low latency make it the ideal switch for the Ethernet storage fabric (ESF).

Enhanced for Storage and Hyper Converged Environments

The HPE Storage Switch M-series SN2010M provides high port density in a single rack unit, allowing increased capacity and efficiency, simplifying scale-out environments and saving on total cost of ownership.

With its unique half-width form factor and port counts, this Ethernet switch allows for two HPE Storage SN2010M switch units to be deployed side-by-side, allowing for increased density and high-availability in a single rack unit, making it the ideal ToR switch.

Designed to use less electric power than competing switches, the HPE Storage Switch M-series SN2010M provides one of the industry's lowest power draws, producing less heat than competing products and reducing operating expenses.

Distributed storage, hyperconverged, analytic, and database solutions require the ability to scale out without compromising performance or high availability. HPE Storage SN2010M is a great fit for these environments with a mix of 1/10/25GbE and 40/100GbE ports that are designed for zero packet loss.

High throughput, low latency, and active-active network switching capabilities are crucial when deploying clustered servers and storage. It can deliver connectivity to many clients plus 40/100GbE connectivity to selected servers, storage systems or network uplinks, and all with low latency.



Superior Performance with Future-proof Growth

The HPE Storage Switch M-series SN2010M Switch provides predictability within a storage network with consistent throughput regardless of the packet size being transferred, or the mixture of ports which are sending data, even within mixed speed environments.

It provides wire-rate performance with zero packet loss across frame sizes and avoids any negative impact on applications that could occur with frame loss; in addition to transferring data across both Layer 2 and Layer 3 networks.

Can be deployed to support 1/10GbE ports and designed to evolve over time to support 25GbE speeds with uplink ports at 40/100GbE speeds. This helps protect your network investment and allows for implementing significant speed upgrades to the architecture over time.

Technical specifications

HPE Storage Switch M-series SN2010M

Port speed	Supports speeds of 1/10/25/40/50/100GbE
Aggregate switch bandwidth	1.7 Tbps
Encryption capability	None
Protocol supported	Ethernet
Form factor	1U half-width
Model availability	18 ports of 1/10/25 GbE and 4 ports of 40/100 GbE
Software (required)	NVIDIA® Cumulus Linux®
Ports	18 SFP28 ports + 4 QSFP28 ports



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

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