HPE M-series SN2010M Switch

Overview

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

HPE M-series SN2010M Ethernet Switch is ideal for modern server and storage networks. Supporting port speeds of 1, 10, 25, 40, 50, and 100 GbE, 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 SN2010M Switch 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 Hewlett Packard Enterprise M-series switches are fast, reliable, and scalable while also being affordable. This makes these switches ideal for storage, hyperconverged, financial services, Big Data, and media and entertainment deployments.

Features

Unleash Storage Performance and Improve Flash ROI

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

It delivers low latency for 10/25 GbE and 40/100 GbE switching, featuring a robust implementation of data, 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 M-series SN2010M Switch provides a flexible combination of ports, allowing for 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 M-series SN2010M Switch provides high port density in a single rack unit, allowing for 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 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 SN2010M provides one of the industry's lowest power draws, producing less heat than competing products and reducing operating expenses.

Distributed storage, hyper-converged, analytic, and database solutions require the ability to scale out without compromising performance or high availability. The SN2010M is a great fit for these environments with a mix of 10/25 GbE and 40/100 GbE 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 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 1/10 GbE ports and designed to evolve over time to support 25 GbE speeds with uplink ports at 40/100 GbE speeds. This helps protect your network investment and allows for implementing significant speed upgrades to the architecture over time.

Technical specifications	HPE M-series SN2010M Switch
Port speed	1 Gbps, 10 Gbps, 25 Gbps, 40 Gbps, 50 Gbps, 100 Gbps
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)	ONYX and ONIE
Ports	18 SFP28 ports + 4 QSFP28 ports

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

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Hewlett Packard Enterprise

HPE Services

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

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HPE runs your IT operations, giving you unified control, so can focus on innovation.

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- HPE Complete Care Service: a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.
- HPE Tech Care Service: the operational service experience for HPE products. The service provides access to product specific experts, an AI driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.

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Address your specific IT deployment project needs with tailored project management and deployment services.

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Training and certification designed for IT and business professionals across all industries. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.

The Defective Media Retention (DMR) service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction. Comprehensive Defective Material Retention (CDMR) allows you to keep all data retentive components.

HPE GreenLake

HPE GreenLake edge-to-cloud platform is HPE's market-leading 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, 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.

Explore **HPE GreenLake**

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.

Image may differ from the actual product

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