OceanStor SNS2248 Data Sheet

OceanStor SNS2248

Huawei OceanStor SNS2248 is an intelligent Fibre Channel storage switching platform featuring flexible, easy-to-use, enterprise-Class SAN Switch for Private Cloud Storage. With its unprecedented scalability, small footprint, easy management and maintenance, and low total cost of ownership (TCO), the SNS2248 intelligent switch offers enterprises and datacenters the best choice.

Highlights

HIGHLIGHTS

- Inter-Switch Link (ISL) Fiber Expansion: Based on frame link aggregation, multiple ISL links is combined into one logical link, in order to achieve efficient bandwidth utilization and load balancing.
- Ports Auto-sensing: auto-sensing 2, 4, 8, and 16 Gbps capabilities, future-proofs investments by enabling organizations to use 8 Gbps SFPs today and upgrade to 16 Gbps SFPs when required.
- Dual Functionality: Offers dual functionality as either a full-fabric SAN switch or as an NPIV-enabled Access Gateway that simplifies server connectivity in heterogeneous enterprise fabrics.
- pay-as-you-grow: Enable pay as you grow expansion with Ports On Demand scalability from 24 to 48 ports in 12-port increments.

EXCEPTIONAL PRICE/PERFORMANCE FOR GROWING SAN WORKLOADS

The SNS2248 delivers exceptional price/performance for growing SAN workloads through a combination of market-leading throughput and an affordable switch form factor. The 48 ports produce an aggregate 768 Gbps full-duplex throughput; any eight ports can be trunked for 128 Gbps Inter-Switch Links (ISLs). Exchange-based Dynamic Path Selection (DPS) optimizes fabric-wide performance and load balancing by automatically routing data to the most efficient available path in the fabric. It augments ISL trunking to provide more effective load balancing in certain configurations.

Moreover, a 24-port base configuration, easy administration, 1U footprint, and low-energy consumption — 0.14 watts per Gbps and 2.3 watts per port — provide a low Total Cost of Ownership (TCO). Enterprise-class capabilities combined with a low TCO yield 40 percent higher performance compared to 10 Gigabit Ethernet (GbE) storage alternatives at a similar cost.

A BUILDING BLOCK FOR VIRTUALIZED, PRIVATE CLOUD STORAGE

The SNS2248 provides a critical building block for today's highly virtualized, private cloud storage environments. It simplifies server virtualization and Virtual Desktop Infrastructure (VDI) management while meeting the high-throughput demands of Solid State Disks (SSDs). The SNS2248 also supports multi-tenancy in cloud environments through Virtual Fabrics, Quality of Service (QoS), and fabric-based zoning features. The SNS2248 enables secure metro extension to virtual private or hybrid clouds with 10 Gbps Dense Wavelength Division Multiplexing (DWDM) link support, as well as in-flight encryption and data compression. The switch also features on-board data security and acceleration, minimizing the need for separate acceleration appliances to support distance extension. Internal fault-tolerant and enterprise-class RAS features help minimize downtime to support mission-critical cloud environments.

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Technical Specifications

Model	SNS2224
Hardware Specifications	
Number of Ports	Switch mode:Total 24 ports 12-port increments through Ports on Demand licenses to universal(E, F, M, FL) ports
Port Type	D_Port (Diagnostic Port), E_Port, EX_Port, F_Port, M_Port Self-discovery based on switch type (U_Port)
Port Rate	Auto-sensing of 2, 4, 8, and 16 Gbps port speeds
Switching Latency	Latency for locally switched ports is 700 ns
Aggregate Bandwidth	384 Gbps end-to-end full duplex
Medium Type	Hot-pluggable, industry-standard SFP+, LC connector; Short-Wavelength (SWL), Long-Wavelength (LWL); Extended Long-Wavelength (ELWL); Distance depends on fiber optic cable and port speed. Supports SFP+ (8 and 16 Gbps) optical transceivers
Maximum Frame Size	2112 byte payload
Frame Buffers	8192 dynamically allocated
Scalability	Full-fabric architecture with a maximum of 239 switches
Classes of Service	Class 2, Class 3, Class F (inter-switch frames)
USB	One USB port for system log file downloads or firmware upgrades
Software Feature	
Visualized User Interface	Indicators for key components, Web-based management and fault location indication
Interoperability and Certification	Compatible with FC-SW-2 compliant devices, including servers, storage systems, HBAs, and application software of mainstream vendors Certified by FCIA SANmark and SNIA SMI-S
Manageability	HTTP, SNMP v1/v3 (FE MIB, FC Management MIB), SSH; Auditing, Syslog; SMI-S compliant; Administrative Domains; trial licenses for add-on capabilities
Physical Specifications	
Power Supply	AC 85 V to 264 V ~5 A to 2.5 A
Power Consumption	80 watts with all 24 ports populated with 16 Gbps SWL optics 60 watts for empty chassis with no optics
Dimensions (H x W x D)	1U, 43mm (H)* 438mm(W)*443mm(D)
Weight	7.82 kg (17.25 lb) with one power supply, without transceivers 9.16 kg (20.19 lb) with two power supply FRUs, without transceivers

HUAWEI TECHNOLOGIES CO., LTD.

Huawei Industrial Base
Bantian Longgang
Shenzhen 518129, P.R. China
Tel: +86-755-28780808

www.huawei.com