OceanStor SNS3096&5192&5384 FC Storage Switches









OceanStor SNS3096/5192/5384

HUAWEI OceanStor SNS3096, SNS5192, and SNS5384 are proven and dedicated network infrastructure oriented to data centers. These switches meet storage requirements and provide unparalleled reliability, ease of use, and 16 Gbit/s performance. Using Gen 5 Fibre Channel, the SNS3096, SNS5192, and SNS5384 unleash the full potential of high-density server virtualization, cloud architecture, and the next-generation storage architecture.

Product Features

Superb Cost-Effectiveness and Efficiency

- Provides "pay-as-you-grow" flexibility and Ports on Demand (PoD) capabilities for port expansion, with speeds up to 16 Gbit/s.
- Unleashes the full potential of private cloud with unmatched scalability, performance, and reliability.
- Simplifies and centralizes end-to-end SAN management with comprehensive diagnostics, monitoring, and automation.

Excellent Reliability and Ease-of-Use

Uses enterprise-class Gen 5 Fibre Channel technology to deliver robust reliability and support non-stop running of mission-critical tasks. Advanced monitoring, diagnostics, and RAS functions improve availability, optimize performance, and simplify management to the maximum extent. Enterprise features are as follows:

- Critical diagnostic and monitoring capabilities: Help ensure early fault detection and recovery.
- Non-intrusive and non-disruptive monitoring on every port: Provides a comprehensive end-to-end view of the entire fabric.
- Forward Error Correction (FEC): Enables recovery from bit errors in links, enhancing transmission reliability and performance.
- Extra buffer: Helps overcome performance deterioration and congestion due to buffer credit loss.

Real-time monitoring of bandwidth consumption by hosts/applications on ISLs: Helps easily identify hot spots and potential network congestion.

Simplified Deployment

- Automated and simplified SAN management enables data centers to quickly adapt to changes, preventing service interruption in the private cloud infrastructure. Advanced diagnostics, monitoring, and management capabilities simplify end-to-end SAN management and reduce costs.
- Simpler server configuration and modification management, advanced cable/optical module diagnostics, and comprehensive management capabilities reduce operational costs.
- Diagnostic Ports (D_Ports) help identify and isolate faults in optical modules and cables, accelerating fabric architecture deployment and fault diagnosis.
- Network Advisor software provides comprehensive capabilities to manage the fabric architecture of a data center, such as configuring, monitoring, and managing Brocade backbone networks, switches, and adapters, thereby minimizing service interruption.

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Technical Specifications

Model	SNS3096	SNS5192	SNS5384
Hardware Specifications	<u>'</u>		<u>'</u>
Number of ports	A maximum of 96 ports At a 24-port increment, the number of general-purpose ports can be increased to 48, 72, or 96 using PoD licenses.	A maximum of 256 ports A fully populated chassis includes four blades, where each blade supports 32, 48, or 64 ports.	A maximum of 512 ports A fully populated chassis includes eight blades, where each blade supports 32, 48, or 64 ports.
Port types	D_Port, E_Port, EX_Port, F_Port, M_Port		
Port rates	Auto-sensing of 2, 4, 8, and 16 Gbit/s		
Maximum fabric latency	Latency for locally switched ports is 700 ns.		
Aggregate bandwidth	1536 Gbit/s (96 ports x 16 Gbit/s data rate)	5.1 Tbit/s (256 ports x 16 Gbit/s data rate + 1.024 Tbit/s ICL bandwidth)	10.2 Tbit/s (512 ports x 16 Gbit/s data rate + 2.048 Tbit/s ICL bandwidth)
Media types	SFP+, LC connector; 16 Gbit/s SWL, LWL, ELWL		
Maximum frame size	2112-byte payload		
Frame buffers	8192 frames 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 downloading system log files or upgrading firmware	One USB port per service control blade for downloading firmware, saving information, and uploading/downloading configuration	
Software Features			
GUI	LED indicators for key components, Web-based management page, and fault location messages		
Manageability	Telnet, HTTP, SNMP v1/v3 (FE MIB, FC Management MIB); auditing, Syslog, change management and tracking; SMI-S compliant; SMI-S script toolkit; administrative domains; trial licenses for add-on capabilities		
Physical Specifications			
Power	AC 85 V to 264 V, 5 A to 2.5 A	AC 85 to 264 V, auto-volt	
Power consumption	464 W with all 96 ports populated with 16 Gbit/s SWL optics 183 W for empty chassis with no optics	Minimum: 32-port configuration, 618 W Maximum: 192-port configuration, 1195 W	Minimum: 32-port configuration, 873 W Maximum: 384-port configuration, 2242 W
Dimensions	Height: 86.74 mm (3.42 in.) Width: 429.25 mm (16.90 in.) Depth: 609.75 mm ((24.01 in.)	Height: 350 mm (13.78 in., 8 U) plus 43.7 mm exhaust shelf (1.72 in, 1 U) Width: 437.4 mm Depth without door: 611.9 mm (24.09 in.) Depth with door: 732 mm (28.82 in.)	Height: 612.4 mm (24.11 in., 14 U) Width: 437.4 mm (17.22 in.) Depth without door: 611.9 mm (24.09 in.) Depth with door: 732 mm (28.82 in.)
Weight	16.92 kg (37.3 lb) with two power supply FRUs, without SFP/SFP+ media	69 kg (152 lb) for 256-port configuration fully populated 25.4 kg (56 lb) for chassis	103.38 kg (227.9 lb) for 512-port configuration fully populated 37.3 kg (82.20 lb) for chassis

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