S-Class Flash Memory Platform

Breakthrough storage performance and efficiency for virtualization, databases, HPC, and cloud







Highlights

- 100% Flash Memory (solid state storage)
- Up to 50x faster than conventional disk arrays
- Consumes up to 80% less power and rackspace
- Unified multi-protocol SAN and NAS platform
- Comprehensive data management software
- Ethernet, Fibre Channel, and/or Infiniband ports
- Redundant power, cooling, and IO controllers

Advantages

- Performance: Up to 800,000 4K IOps
- Throughput: Up to 8,000 MBps
- Latency: As low as 0.1 ms
- Efficiency: As low as 14 W per TB
- Scalability: From 2.5 TB to 100 TB
- Density: Up to 5 TB per rack U
- Simplicity: All-inclusive HALO software

Next-generation Intelligent Solid State Storage Platform

Featuring up to 240 enterprise flash modules and Nimbus' comprehensive HALO operating system, the S-Class offers up to 50x greater performance while consuming up to 80% less energy and rackspace than traditional 15K rpm disk arrays. Designed for the rigorous storage requirements of virtualization, databases, HPC, and cloud infrastructure, the S-Class offers non-disruptive scalability to 100 TB of solid state storage in a modular design that supports Ethernet, Fibre Channel, and Infiniband networks. The Nimbus S-Class simplifies the consolidation of both block (SAN) and file (NAS) storage by supporting iSCSI, FCP, SRP, NFS, and CIFS protocols.

With point-in-time snapshots, async/sync replication, thin provisioning, and inline deduplication, the S-Class delivers complete management and data protection in one simple interface, without complex software licensing. Nimbus' innovative flash modules deliver exceptional durability with hot-swap, RAID, wear-leveling, and ample NAND reserve. Winner of numerous awards, the S-Class is the foundation of Nimbus' Sustainable Storage[®] vision for enabling greener, more agile datacenters.

Nimbus S-Class Specifications

	S255M / S255X (expansion)	2.5 TB: 24 x 100 GB Enterprise Flash Modules
Models	S505M / S505X (expansion)	5.0 TB: 24 x 200 GB Enterprise Flash Modules
	S1005M / S1005X (expansion)	10.0 TB: 24 x 400 GB Enterprise Flash Modules
Connectivity	Network Ports	Up to 16 ports of Gigabit Ethernet
		Up to 16 ports of 10 Gigabit Ethernet
		Up to 8 ports of 8 Gbps Fibre Channel
		Up to 8 ports of 56 Gbps FDR Infiniband
	Management Ports	2 x GbE (RJ-45)
Storage	Maximum Flash Modules	240
	Maximum Capacity	100 TB
	NAND Configuration	Enterprise-grade flash with 28% reserve provision
System	Software	Nimbus HALO operating system
	Processor Cores	12
	Redundant Components	Flash modules, power supplies, fans, and IO modules
Platform Support	Operating System Support	Windows Server 2003/2008, Windows 7, Linux, Solaris, HP/UX, Netware, AIX
	Virtualization Support	VMware ESX Server, Citrix XenServer, Microsoft Hyper-V, Virtual Iron
Dimensions	Height	2 RU Units (3.46 in or 87.9 mm)
	Width	17.49 in or 443.7 mm
	Depth	25.18 in or 639.6 mm
	Weight (maximum)	65.0 lbs or 29.5 kg
Power	Voltage	100 - 240 VAC
	Frequency	48 - 62 Hz
	Electrostatic Discharge	15 KV per test specification
Environmental	Ambient Temperature	Operating: 5 to 35 ℃, Non-operating: 1 to 50 ℃
	Relative Humidity	Operating: 10% to 80% non-condensing
	Altitude	Operating: 0 to 2,133 m, Non-operating: -305 to 12,192 m
	Acoustics	$<$ 7.0 BA in idle state at 23 $^\circ\!C$ ambient temperature
Shock & Vibration	Operational Shock	5G for 10ms
	Operational Vibration	Random 0.21 grms 5-500 Hz
	Non-operational Shock	30G for 10ms
	Non-operational Vibration	Random 1.04 grms 2-200 Hz
Agency Approvals	UL and cUL listed. Tested to UL 60950. FCC Class A. Certified Body Certificate and Report to IEC60950. CE marked to requirements of Low Voltage Directive 73/23/EEC and Electromagnetic Compatibility Directive 89/336/EEC.	
Warranty & Support	One (1) year warranty standard, extendable to five (5) years.	
2	Premium onsite service options and spares kits available.	

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