

# Sun StorEdge™ 9990 System



The ultimate storage platform

*Industry-leading scalability and connectivity optimize application performance*

Delivers two million I/Os per second and unifies data and storage services across as much as 330 TB of internal storage and up to 32 PB of externally attached storage.

*Unparalleled capacity, connectivity, and host support allows massive consolidation and aggregation*

Easily supports industrial-strength consolidation, virtualization, replication, and migration across disparate platforms, maximizing resource utilization.

*Single console simplifies storage management*

HiCommand Storage Area Management software puts hundreds of storage systems under centralized management, simplifying your infrastructure.

*Extreme availability*

Fault-tolerant system with no single point of failure ensures access to continuously protected data.

With capabilities well beyond those of any other storage system, including the industry's highest performance, connectivity, and scalability, the Sun StorEdge™ 9990 system helps you match your IT investment to your business requirements, so you can tame the data explosion and manage an increasingly complex infrastructure. Thanks to its unparalleled storage consolidation and virtualization capabilities, the Sun StorEdge 9990 system provides you with an application-oriented solution that helps improve efficiencies and simplify management, increasing ROI, and reducing TCO.

The industry's most scalable storage system, the Sun StorEdge 9990 system delivers two million I/O's per second, and is designed to unify data and storage services across as much as 330 TB of internal storage and up to 32 PB of externally attached storage systems. The system's unparalleled performance supports massive storage consolidation and aggregation, unifying data and storage services across its own storage and attached storage, improving productivity. Multiple storage systems appear as more internal storage in the common pool, enabling you to maximize resource utilization and simplify management. What's more, the system's single console HiCommand Storage Area Management software provides centralized management across hundreds of storage systems, simplifying your infrastructure and lowering the total cost of storage ownership. And with no single point of failure, proactive maintenance service with call-home capability, and prompt support by mission-critical centers worldwide, the Sun StorEdge 9990 system delivers the extreme availability required to keep your business up and running.



# Sun StorEdge™ 9990 System Specifications

## System Capacity

Number of disks (with spares)	5 to 1152
Hot spares (maximum)	1-16
<b>Total raw capacity</b>	
300 GB, 10,000-rpm drive	330 TB
146 GB, 10,000-rpm drive	165 TB
73 GB, 15,000-rpm drive	85 TB
<b>Usable raw capacity for RAID 5 (max.)</b>	<b>with 146 GB 10K HDD</b>
Open systems	143.9 TB
zOS compatible	135.2 TB
<b>Usable capacity for RAID 1+ (max.)</b>	<b>with 146 GB 10K HDD</b>
Open systems	82.5 TB
S/390 compatible, 73 GB, 10,000-rpm drive	71.8 GB

## Data Cache

Maximum	128 GB
Minimum	4 GB
Increments	4 GB

## Control Memory

	Up to 6 GB
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## Logical Device Support (theoretical)

Number of devices	Up to 16,384
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## Front End Directors

Number of Front End Directors	6
Number of simultaneous data transfers	Up to 16 or 32 per Front End Director
Interface speed (Fibre Channel)	2 Gb/sec

## Physical Interfaces

Maximum (redundant pairs)	
Fibre Channel	32, 64, 96, 128, 160, 192
ESCON	16, 32, 48, 64, 80, 96
FICON	8, 16, 24, 32, 40, 48

## Back End Directors

Number of Back End Directors	Up to 4
Disk Drives per Back End Director	Up to 256 HDDs

## Bandwidth

Per fully configured system	81 GB/sec aggregate system bandwidth (consisting of 68 GB/sec data bandwidth, and 13 GB/sec control bandwidth)
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	Sun StorEdge 9990 Control Frame	Sun StorEdge 9990 Array Frame
Heat	8.68 kW	7.07 kW
Power	9.077 kVA	7.636 kVA

## Dimensions and Weight

	Control Frame (DKC)	Array Frame (DKU)
Height	186.0 cm (73.2 in.)	186.0 cm (73.2 in.)
Width	78.2 cm (30.77 in.)	65.0 cm (25.59 in.)
Depth	92.5cm (36.42 in.)	92.5 cm (36.42 in.)
Weight	590.0 kg (1300.73 lb.)	430.0 kg (947.99 lb.)

## Operating System Support

	Control Frame (DKC)	Array Frame (DKU)
<b>Open systems</b>	Solaris™ Operating System HP-UX IBM AIX Novell NetWare Red Hat Linux SuSe Linux SGI IRIX Microsoft Windows 2000 Microsoft Windows NT Compaq Tru64 UNIX	
<b>Mainframe</b>	OS/390 MVS/ESA MVS/XA TPF/MPLF VM/ESA VM/XA VM/HPO VSE/ESA VSE/SP Z/OS Linux for Z Series	
<b>Host failover and alternate path</b>	Sun™ Cluster 3.2 VERITAS Cluster Server (VCS)-Solaris HP MC/ServiceGuard IBM HACMP Microsoft Cluster Server (MSCS) Compaq TruCluster Novell Cluster Services VMS Cluster Sun StorEdge™ 9900 SDLM Sun StorEdge Traffic Manager Software (SSTM) VERITAS Volume Manager/DMP	

Get the details.

For more information on this product, go to:

[www.sun.com/storage/highend/9990/](http://www.sun.com/storage/highend/9990/)