

ES4600 DATASHEET

Accelerate data delivery, enhance workflow efficiency and scale to petabyte capacity

Key Features

Enterprise Storage Platform

New ULTRASTOR® GEN⁴ platform delivers over 50% increase in performance, native VAAI support and powerful storage administration capabilities.

Flexible Disk Configuration

Combine disk technologies to meet application demands. Deploy Thin Provisioning strategies to maximize disk utilization and leverage incremental storage expansion, up to petabyte capacity.

Effortless System Administration

Easily configure and provision storage for physical and virtual application workflows.

Simplified Management

Manage ULTRASTOR® systems through an easy-to-use browser-based system.

Recommended for:

- VMware® vSphere 5
- Citrix® XenServer
- Microsoft Hyper-V
- Windows Server 2012
- SQL Database Applications
- Microsoft Exchange
- KOM Compliance Solutions
- ASP & SaaS Providers
- Public/Private Cloud Services
- CRM Solutions
- ERP Solutions
- Archive & Backup Workflows
- Digital Asset Management
- Rich Media Workflows

Capacity, speed, density

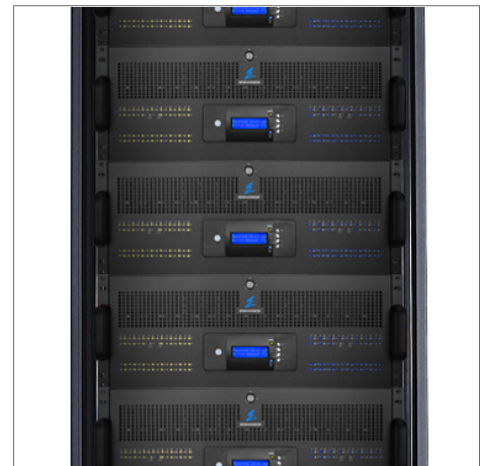
The ULTRASTOR® ES4600 Series is a powerful enterprise SAN storage system with embedded active/active RAID architecture that provides the highest level of performance, reliability and scalability in its class. The ES4600 delivers exceptional performance using 15K enterprise SAS disks, while maintaining the lowest possible cost-per-terabyte. Expand drive density from 60 disks up to 180 disks in a 12U rackspace.

Enterprise solution

The ULTRASTOR® ES4600 offers the highest level of reliability and scalability for mission critical, enterprise applications. Equipped with dual active-active storage controllers and redundant, load-balancing power supplies, the ES4600 is the best choice for 24/7 system availability in the data center. A comprehensive service and support plan includes a standard 3-year warranty, 1st year Advance Replacement (ARP) and optional On-Site Support contracts for added investment protection.

Simple storage management

The ES4600 offers powerful and simple storage management. ULTRASTOR® ES4600's intuitive web based interface offers complete system management and monitoring capabilities via HTTP, HTTPS and SSH. Receive real time system notifications through email without additional software. SNMP support allows integration with existing SNMP-based monitoring environments.



Best-in-class scalability

Available in a broad range of Near-line (2.0TB and 4.0TB) 10K (900GB) and 15K (600GB) enterprise SAS capacities, the ULTRASTOR® ES4600 delivers the industry's lowest cost-per-terabyte. In addition, when deployed with ES4600JS JBOD expansion shelves, ES4600 systems can scale up to petabyte capacity – ideal for applications such as virtualization, SaaS providers, hosting and cloud computing.

Advanced storage platform

New ULTRASTOR® GEN⁴ storage platform that delivers a significant increase in processing power by over 50% and adds full hardware iSCSI offload acceleration - resulting in greater performance when used in high I/O applications. Additionally, the ULTRASTOR® GEN⁴ platform combines essential software updates including VAAI support for tighter VMware integration, writable Snapshots and Thin Provisioning for improved disk utilization and non-disruptive capacity expansion.

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Technical specifications

	ES4600TG	ES4600P6	ES4600FS
Max. Raw Capacity	720TB ^[1]	720TB ^[1]	720TB ^[1]
Max. Drives	180 ^[2]	180 ^[2]	180 ^[2]
Form Factor	Dual (2) Controllers 60-Disk, 4 RU	Dual (2) Controllers 60-Disk, 4 RU	Dual (2) Controllers 60-Disk, 4 RU
Memory	4GB / 8GB	4GB / 8GB	4GB / 8GB
Data I/O Ports	(4) SFP+, 10GbE iSCSI	(6) RJ45, 1GbE iSCS	(8) SFP, 8G FC
Disk Support	<ul style="list-style-type: none"> ● 2TB 7.2K NL-SAS (3.5" Low Profile) ● 3TB 7.2K NL-SAS (3.5" Low Profile) ● 4TB 7.2K NL-SAS (3.5" Low Profile) ● 600GB 15K SAS (3.5" Low Profile) ● 900GB 10K SAS (3.5" Low Profile) 		
Storage Protocols	10GbE iSCSI	1GbE iSCSI	8G Fibre Channel
RAID & Volume	<ul style="list-style-type: none"> ● RAID level 0 (0+1), 3, 5, 6, 10, 30, 50, 60 & JBOD ● Multiple array support ● Up to 4096 logical volumes ● Up to 64 disk drives per volume group ● Hot-swap drive support ● Global & dedicated spare drive assignment ● Non-disruptive online volume migration ● Online volume expansion 		
High Availability	<ul style="list-style-type: none"> ● Dual-active RAID controller ● Cache mirroring through high bandwidth channels ● Flexible RAID group ownership management ● Management port seamless take-over ● Online firmware upgrade, no system down time ● Multi-path & load-balancing support (Microsoft MPIO, MC/S, Trunking, LACP) 		
Host Connections	Up to 32		
Host OS Support	Windows 2000, Windows Server 2003, Windows Server 2008, Windows Server 2012, Windows XP, Linux®, Oracle Solaris, AIX, HP-UX, Mac® OS, VMware®, ESX		
SnapShot Features	<ul style="list-style-type: none"> ● Manual or Schedule ● Up to 32 Snapshots ● Snapshot roll-back mechanism ● Writable Snapshots ● Volume or file-level restore 		
Hot-swap Power	(3) 700W, 80+, load-balancing, hot-swap power modules		
Power Requirements	100~240 VAC, 46Hz~63Hz 12A~6A, 47Hz~63Hz (each module)		
System Cooling	(4) Hot-swap smart fan modules		
Operating Temperature	50°F ~ 104°F		
Relative Humidity	10% ~ 85% Non-condensing		
Weight	190 lbs (110 lbs without disk drives)		
Dimensions	(L) 33.5" x (W) 19" x (H) 7"		
Compliance	RoHS, CE, TUV, FCC		



Microsoft®
Hyper-V Server



Learn more

Go to <http://www.ultrastor.com/> to find out more about ULTRASTOR® SAN products and solutions.



How to buy

Americas

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Outside the US: (562) 777-3488

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[1] Usable capacity will vary with filesystem and RAID settings [2] Based on (1) ES4600 storage system and (2) expansion shelves