

ES4100 DATASHEET

Combine enterprise disk technologies to deliver unparalleled IOPS, capacity and reliability

Key Features

Enterprise Storage Platform

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

Optimized Disk Configurations

Combine ultra-dense 2.5" disk technologies to meet I/O demands. Deploy Thin Provisioning strategies to maximize disk utilization and leverage incremental storage expansion using cost-effective JBOD shelves.

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

Performance, density, reliability

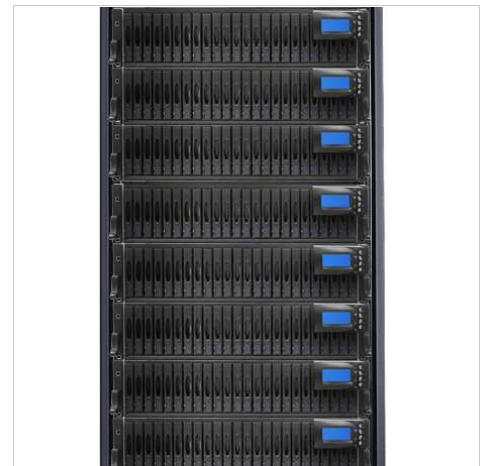
The ULTRASTOR® ES4100 series is space-saving, 2.5" SFF-based SAN storage system with embedded active-active RAID architecture, providing the highest level of performance, reliability and scalability in its class. The ES4100 series delivers exceptional IOPS utilizing 10K SAS and SSD disks. Optimized for lower power consumption and thermal reduction, the ES4100 supports up to 24 (2.5") disks in a 2U rack. The ES4100 can be easily expanded using cost-effective expansion shelves.

Data center solution

The ULTRASTOR® ES4100 Series is a Virtualization certified SAN solution with snapshot and thin provisioning capabilities, ready to meet the demands of today's complex physical and virtual computer environments. The ES4100 is powered by the industry's highest rated 80 PLUS "Green" power supplies. Keep your workloads and critical applications running without interruption while saving up to 25% in energy costs compared to traditional "Big Data" systems.

Simple storage management

The ES4100 offers powerful and simple storage management. ULTRASTOR® ES4100'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 reliability

ULTRASTOR® ES4100 delivers the highest level of reliability for critical enterprise applications. The ES4100 features a next generation active-active controller design adding full hardware redundancy and flawless fail-over capabilities for continuous system up-time. 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.

Advanced storage platform

New ULTRASTOR® GEN⁴ storage platform that delivers a significant increases 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

	ES4100TG	ES4100P6	ES4100FS
Max. Raw Capacity	768TB ^[1]	768TB ^[1]	768TB ^[1]
Max. Drives	192 ^[2]	192 ^[2]	192 ^[2]
Form Factor	Dual (2) Controllers 24-Disk, 2 RU	Dual (2) Controllers 24-Disk, 2 RU	Dual (2) Controllers 24-Disk, 2 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"> ● 1TB 7.2K NL-SAS (2.5" SFF) ● 600GB 15K SAS (2.5" SFF) ● 900GB 10K SAS (2.5" SFF) ● 800GB SSD SAS (2.5" SFF) ● 1TB SSD SAS (2.5" SFF) 		
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	(2) 400W, 80 PLUS, load-balancing, hot-swap power modules		
Power Requirements	90~264 VAC 7.5A~4A, 47Hz~63Hz (each module)		
System Cooling	(2) Hot-swap smart fan modules		
Operating Temperature	50°F ~ 104°F		
Relative Humidity	10% ~ 85% Non-condensing		
Weight	44 lbs (32 lbs without disk drives)		
Dimensions	(L) 22" x (W) 19" x (H) 3.5"		
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

Inside the US: (866) 537-5140
Outside the US: (562) 777-3488

International

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