

Sun StorEdge™ D240 Media Tray

Just the Facts



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Positioning



Figure 1. The Sun StorEdge™ D240 Media Tray, front view, with bezel



The Sun StorEdge D240 Media Tray, rear view

Introduction

The Sun StorEdge™ D240 Media Tray is a versatile mixed-media storage solution. This system is a compact, scalable and highly flexible storage solution specifically designed to support the latest Sun Fire™ servers as the recommended boot, data load, and data interchange solution.

In a slim, two rack unit (2U) height rackable or server top form factor, the Sun StorEdge D240 Media Tray can accommodate a range of storage devices including hard disk, DVD-ROM, and tape backup. The Sun StorEdge D240 Media Tray features a single or dual bus configuration supporting up to two independent server boot domains per system, and is ideal for installing software patches, file updates, and tape back up of the boot disk drive data. Power availability is optimized with dual hot-swappable, load-sharing power supplies.



Highlights

- Can be used as a boot device, data-storage, data-load and data-interchange, or data-backup device
- Tightly integrated and tested solution for the Sun Fire 3800, 4800, 4810, and 6800 servers
- Compact, 2U height, rack-ready or server-top mixed-media storage solution
- Four-device configurations support hard disk, tape, or DVD-ROM
- Two hot-swappable disk drives (center bays)
- Interchangeable left and right 5.25-inch bays support hard disk, tape, or DVD, (non hot-swap, one device per bay)
- Provides connection options for single or dual bus configurations which helps provide maximum flexibility for one or two domain solutions
- Dual hot-swappable, load sharing power supplies help ensure uninterrupted operation

Product Family Placement

The Sun StorEdge D240 Media Tray is a complementary product to the current Sun storage product line, offering mixed storage devices in a single solution. This system is positioned to provide a two-unit space, rackmount device that supports mixed storage device configurations, providing a broader range of solution options.

	Sun StorEdge UniPack Desktop Drive	Netra™ D130 System	Sun StorEdge D240 Media Tray	Sun StorEdge MultiPack Desktop Array	Sun StorEdge D1000 Array
Space	Desktop	1U	2U	Tabletop/ deskside	4U
Disk Capacity	18 or 36 GB	18 to 109 GB	36 to 72 GB	36 to 218 GB	72 to 436 GB
Devices	1	1 to 3	4	2 to 6	4 to 12
Mixed Media	No	No	Yes, Disk, DVD, DDS-4 Tape	No	No

Key Messages

- Specifically designed, integrated and tested for the Sun Fire 3800, 4800, 4810, and 6800 servers
- Versatile solutions providing server boot device, data storage, data interchange, data backup, one or two domains per system
- Multiple storage solutions supporting hard disk, tape, and DVD-ROM
- 2U height rackmountable and server top configuration

Key Features and Benefits

One of the Sun StorEdge D240 Media Tray's features is its ability to be configured as single or dual path. This enables an optional solution of either one or two domains per device. This feature is important when the Sun StorEdge D240 Media Tray is used as an external, rackmounted boot device where rack space is limited.



Single-path, single-interface configurations provide disk array solutions or mixed-media combinations in a single domain.

Features

- Tightly integrated and tested solution for the Sun Fire 3800, 4800, 4810, and 6800 servers
- Multiple mixed storage device configurations
- One or two bus configuration option
- 2U rack space
- Dual, load-sharing, hot-swappable power supplies
- Center bay supports two hot-swappable disk drives
- Left and right 5.25-inch bays support interchangeable disk drive, tape, or DVD
- Four removable storage devices in a flexible configuration
- Dual redundant cooling fans

Benefits

- Optimized for compatibility, reliability, and availability
- Provides multiple solutions including data storage, software load and interchange, removable storage and external boot device
- Provides one or two server boot domain options per tray
- Consumes a minimal amount of valuable rack space
- Helps optimize system availability and provides easy serviceability
- Provides ease of service and helps maximize system availability
- Provides versatile configuration options
- Helps enable customers to design storage solutions that fit their needs and scale into the future by allowing for different combinations of hard drives, tape, and DVD configurations
- Helps optimize power supply and component availability

Configuration

The Sun StorEdge D240 Media Tray ships fully populated in three base storage device configurations. The three rackmount configurations are available as factory configured to order in a cabinet and as field installed X-options. The three server top version configurations are available only as field-installed X-options. The three basic configurations are:

- Four 18-GB disk drives
- Two 18-GB disk drives, one DDS-4 tape, and one DVD-ROM
- Two 18-GB disk drives, two DDS-4 tapes

Target Markets

The target markets for the Sun StorEdge D240 Media Tray are Sun Fire 3800, 4800, 4810, and 6800 servers requiring a boot device, data-storage, data-load, data-interchange, or data-backup device solution.



Market Value Proposition

The Sun StorEdge D240 Media Tray is a tightly integrated and versatile storage solution for the Sun Fire 3800, 4800, 4810, and 6800 servers.

- Specifically designed, integrated, and tested for Sun Fire 3800, 4800, 4810, and 6800 servers
- 2U rack space height for optimal rack space density
- Flexible device configuration solutions including external server boot disk, DVD-ROM for data load and data interchange, and tape for data backup and archive



Requirements and Configuration

Host Platforms

The Sun StorEdge™ D240 Media Tray is supported on the following host platforms:

- Sun Fire™ 3800, 4800, 4810, and 6800 servers

Software Requirements

The Solaris™ 8 Operating Environment or greater.

Software RAID Support

- Solstice Disk Suite™ software version 3.1.1 or greater
- VERITAS Volume Manager version 4.2.1 or greater

Other Configuration Guidelines

The Sun StorEdge D240 Media Tray ships with the following:

1. Fully configured systems come with a total of four storage devices, a combination of disk drives, DDS-4 tape, or DVD-ROM
2. One 0.8M SCSI jumper cable, (for single SCSI bus configuration)
3. One Installation/Configuration Manual
4. One 2.0M, 68PIN, SCSI-3/SCSI-3 cable, (same as P/N X1139A - supports single bus host configuration) included to support PCI host bus adapter, P/N X1032A - 10/100 BASE-T, F/W Ultra SCSI
5. One 4.0M, 68PIN, SCSI 68PIN to VHDC, (same as P/N X3830 - supports single bus configuration). Included to support Compact PCI host bus adapter P/N X1232A - 10/100 BASE-T, F/W Ultra SCSI
6. Rackmount configurations come with rackmount kit
7. DDS-4 Tape configurations come with the DDS-4 Tape kit which includes one tape cartridge, one cleaning cartridge and manual assembly

Notes*

1. AC POWER CORD COUNTRY KITS MUST BE ORDERED SEPARATELY. TWO AC POWER CORDS ARE REQUIRED to support the two power supplies for each system.
2. Additional SCSI host cables are required to support a two bus configuration for host bus adapter part numbers X1032A and X1232A.
3. SCSI cable configurations for factory configured to order systems may vary.

Refer to the *Sun StorEdge D240 Media Tray Installation, Operation, and Service Guide*. This guide contains detailed information about correct Sun StorEdge D240 Media Tray SCSI cabling and SCSI bus termination requirements.



Panel Indicators and Switches

The following images show the front and rear panel indicators for the Sun StorEdge D240 Media Tray.

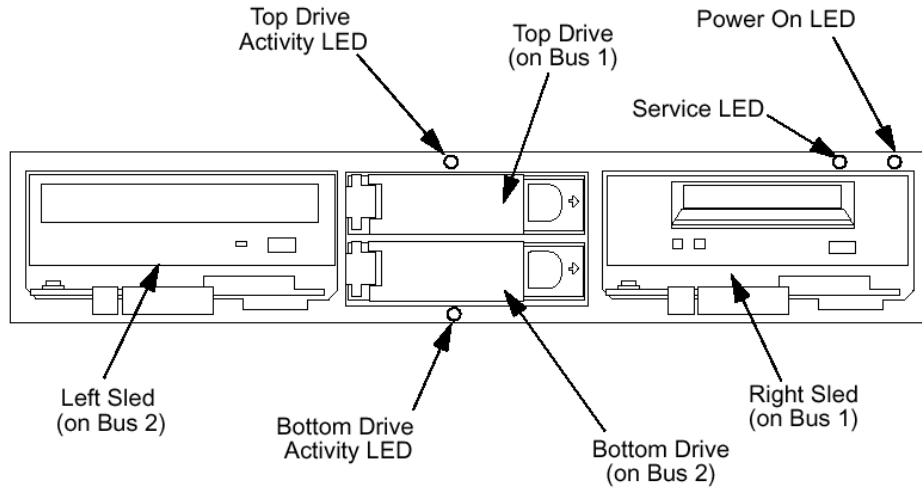


Figure 2. Front panel indicators with front bezel removed and DVD and tape devices installed

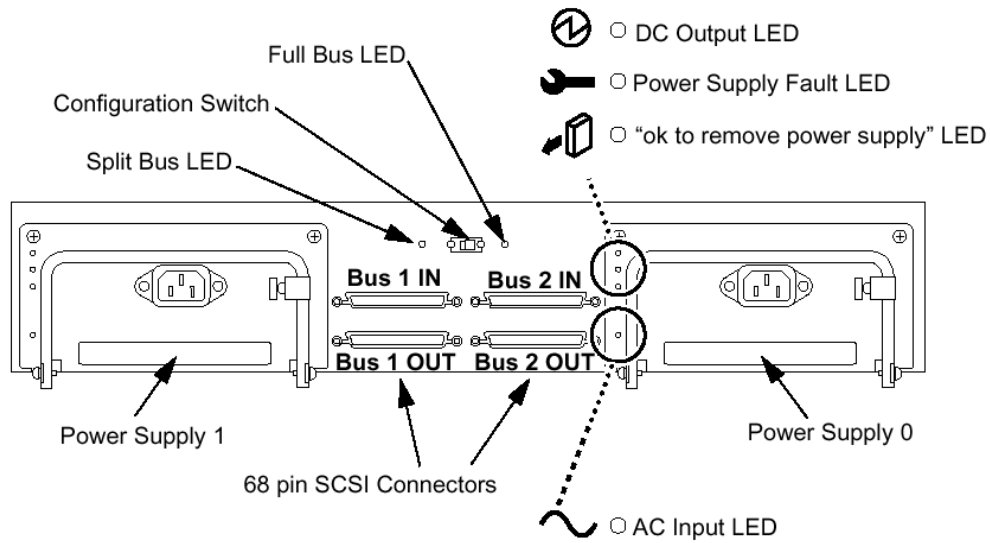


Figure 3. Rear panel indicators

Configurations

The following figures show configuration options for the Sun StorEdge D240 Media Tray.

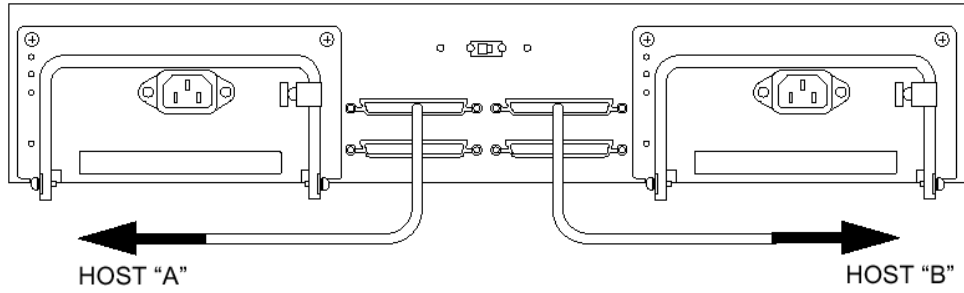


Figure 4. Dual bus, two domain attachment configuration

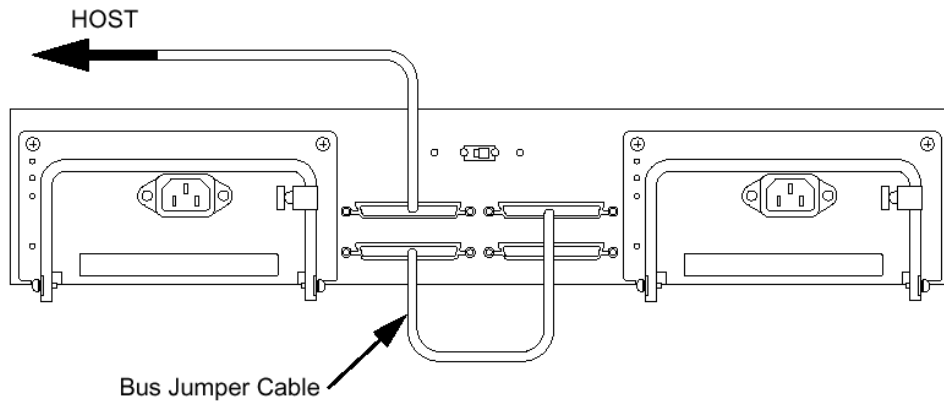


Figure 5. Single bus, one domain attachment configuration

System Architecture

Overview of System Architecture

The Sun StorEdge™ D240 Media Tray is a flexible storage subsystem that provides disk drive and removable media data storage capabilities. It contains two independent SCSI buses, each with up to two devices, that can be chained together to form a single bus with all four devices on the single bus.

Sun StorEdge D240 Array System Architecture

The architecture of the Sun StorEdge D240 Media Tray includes the following features:

- Dual SCSI buses
- Dual load-sharing power supplies
- Two cooling blowers; blowers speed up in response to higher temperatures
- Separate blower power bus allows both blowers to function in the event of a power supply failure
- Two independent, single-ended UltraSCSI channels
- Each SCSI channel supports one hard drive and a sled containing a DVD-ROM, DDS-4, or another hard drive
- The two channels can be daisy-chained together to form a single SCSI bus

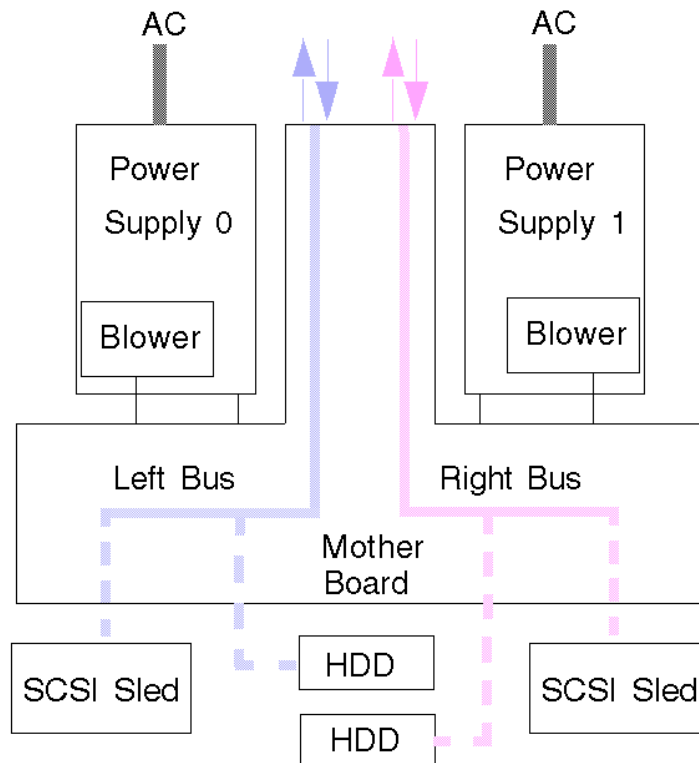


Figure 6. Sun StorEdge D240 Media Tray system architecture

Specifications

Standards and Conformance

Environmental Specifications

Temperature range (dry bulb)	
Operating	5 to 40 degrees C
Non-operating	-20 to 60 degrees C
Relative humidity	
Operating	20 to 80 percent @ 27 degrees C, maximum wet bulb, non-condensing
Non-operating	93 percent non-condensing
Altitude	
Operating	3,000 meters above sea level
Non-operating	12,000 meters above sea level
Heat dissipation	100 Watts (341 BTU per hour)
Operating Acoustic Noise	6.6 B, L _{WAd} (1 B = 10 dB)

Physical Specifications

Rackmount Version

Height	8.5 cm (3.4 inches)
Width (without cabinet kit)	44.6 cm (17.6 inches)
Depth	66.4 cm (26.2 inches)
Weight	50 lb. (22.8 kg) maximum, without cabinet kit

Server Top Version

Height	9.7 cm (3.8 inches)
Width (without cabinet kit)	46.0 cm (18.1 inches)
Depth	67.8 cm (26.7 inches)
Weight	60 lb. (27.2 kg) maximum



Drive Tray Electrical Specifications

Input voltage	100-120/200-240 VAC, 47 to 63 Hz Single Phase
Input current	6 A, Maximum
VA	~116 VA

Regulations

System Regulation	Specifications
Safety	<ul style="list-style-type: none">• UL1950• CSA 950• EN 60950• CB Scheme with Nordic Deviations
RFI/EMI	<ul style="list-style-type: none">• VCCI Class A• FCC Class A• DOC Class A• EN55022 Class A
Immunity	<ul style="list-style-type: none">• EN550024

Ordering Information

Sun StorEdge™ D240 Media Tray Systems

The Sun StorEdge™ D240 Media Tray ships with the following:

The Sun StorEdge D240 Media Tray ships with the following:

1. Fully configured systems come with a total of four storage devices, a combination of disk drives, DDS-4 tape, or DVD-ROM
2. One 0.8M SCSI jumper cable, (for single SCSI bus configuration)
3. One Installation/Configuration Manual
4. One 2.0M, 68PIN, SCSI-3/SCSI-3 cable, (same as P/N X1139A - supports single bus host configuration) included to support PCI host bus adapter, P/N X1032A - 10/100 BASE-T, F/W Ultra SCSI
5. One 4.0M, 68PIN, SCSI 68PIN to VHDC, (same as P/N X3830 - supports single bus configuration). Included to support Compact PCI host bus adapter P/N X1232A - 10/100 BASE-T, F/W Ultra SCSI
6. Rackmount configurations come with rackmount kit
7. DDS-4 Tape configurations come with the DDS-4 Tape kit which includes one tape cartridge, one cleaning cartridge and manual assembly

Notes*

1. AC POWER CORD COUNTRY KITS MUST BE ORDERED SEPARATELY. TWO AC POWER CORDS ARE REQUIRED to support the two power supplies for each system.

Localized Power Cord Kit - Australian	X386L (qty1)
Localized Power Cord Kit - Continental Europe	X312L (qty1)
Localized Power Cord Kit - Danish	X383L (qty1)
Localized Power Cord Kit - Italian	X384L (qty1)
Localized Power Cord Kit - North American/Asian	X311L (qty1)
Localized Power Cord Kit - Swiss	X314L (qty1)
Localized Power Cord Kit - U.K	X317L (qty1)
2. Additional SCSI host cables are required to support a two bus configuration for host bus adapter part numbers X1032A and X1232A.
3. SCSI cable configurations for factory configured to order systems may vary.



Order Number	Configuration	Installation Site	Description
SG-MT1-H4	Rackmount 4 disk drives	Factory	Sun StorEdge D240 Media Tray, rackmount, with four hard disks (2 x 18.2-GB drives, 2 x 18.2-GB drives) factory installed
SG-XMT1-H4	Rackmount 4 disk drives	Field	Sun StorEdge D240 Media Tray, rackmount, with four hard disks (2 x 18.2-GB drives, 2 x 18.2-GB drives) field installed
SG-XMTST1-H4	Server Top 4 disk drives	Field	Sun StorEdge D240 Media Tray, server top, with four hard disks (2 x 18.2-GB drives, 2 x 18.2-GB drives) field installed
SG-MT1-H2D1T1	Rackmount 2 disk drives 1 tape 1 DVD-ROM	Factory	Sun StorEdge D240 Media Tray, rackmount, with two hard disks, one DVD-ROM, and one tape (2 x 18.2-GB drives, 1 x DVD-ROM, 1 x DDS-4 tape) factory installed
SG-XMT1-H2D1T1	Rackmount 2 disk drives 1 tape 1 DVD-ROM	Field	Sun StorEdge D240 Media Tray, rackmount, with two hard disks, one DVD-ROM, and one tape (2 x 18.2-GB drives, 1 x DVD-ROM, 1 x DDS-4 tape) field installed
SG-XMTST1-H2D1T1	Server Top 2 disk drives 1 tape 1 DVD-ROM	Field	Sun StorEdge D240 Media Tray, server top, with two hard disks, one DVD-ROM, and one tape (2 x 18.2-GB drives, 1 x DVD-ROM, 1 x DDS-4 tape) field installed
SG-MT1-H2T2	Rackmount 2 disk drives 2 tape	Factory	Sun StorEdge D240 Media Tray, rackmount, with two hard disks and two tape (2 x 18.2-GB drives, 2 x DDS-4 tape) factory installed
SG-XMT1-H2T2	Rackmount 2 disk drives 2 tape	Field	Sun StorEdge D240 Media Tray, rackmount, with two hard disks and two tape (2 x 18.2-GB drives, 2 x DDS-4 tape) field installed
SG-XMTST1-H2T2	Server Top 2 disk drives 2 tape	Field	Sun StorEdge D240 Media Tray, server top, with two hard disks and two tape (2 x 18.2-GB drives, 2 x DDS-4 tape) field installed

Options

Order Number	Option Description
X5880A	18.2-GB disk drive on media tray sled
X5881A	DDS-4 tape on media tray sled
X5883A	10X DVD-ROM on media tray sled
X1032A	10/100 BASE-T, F/W Ultra SCSI, PCI host adapter 1.0
X1232A	10/100 BASE-T, F/W Ultra SCSI, Compact PCI host adapter 1.0, 3U form factor
X3832A	2.0M, cable, SCSI 68PIN to VHDC
X3830A	4.0M, cable, SCSI 68PIN to VHDC



Upgrade Paths

Customers with boot devices attached to the servers being upgraded to the Sun Fire™ 3800, 4800, 4810, and 6800 servers may want to trade them in for the Sun StorEdge D240 Media Tray. Possible boot devices to be upgraded are the Sun StorEdge D1000 and Netra™ D130 systems. These devices may be upgraded using the Sun Upgrade Allowance Program and existing allowances for upgrading to the Sun StorEdge A1000 or D1000 storage devices.



Service and Support

Contract Maintenance Program Offerings

Support Contracts

SunSpectrumSM program support contracts are available both during and after the warranty program. Customers may choose to uplift the service and support agreement to meet their business needs by purchasing a SunSpectrum contract.

The four levels of SunSpectrum support contracts are outlined below.

SunSpectrum Program Support

Program	Description
Mission-Critical SunSpectrum PlatinumSM Support	Designed to support client-server, mission critical solutions by focusing on failure prevention, rapid recovery and year round technical services planning. Support is provided 24 x 7.
Business-Critical SunSpectrum GoldSM Support	Includes a complete package of proactive and responsive services for customers who require maximum uptime for their strategic business critical systems. Support is provided 24 x 7.
System Coverage SunSpectrum SilverSM Support	Combines the service expertise, responsive on-site support and technical support by telephone and SunSolve TM CD/on-line services. Support is provided 8 a.m. to 8 p.m. Mon. through Fri.
Self-Directed SunSpectrum BronzeSM Support	Provided for customers who rely primarily upon their own in-house service capabilities. Enables customers to deliver high quality service by giving them access to UNIX [®] expertise, Sun certified replacement parts, software releases and technical tools. Support is provided 8 a.m. to 5 p.m. Mon. through Fri.

Warranty

The warranty offering for the Sun StorEdge D240TM Media Tray is two years with first year second day onsite support and second year 15-day return to Sun factory.



Materials Abstract

All materials are available on SunWIN, except where noted otherwise.

Collateral	Description	Purpose	Distribution	Token # or COMAC Order #
Powerpack				
– <i>Sun StorEdge™ D240 Media Tray Storage, Just the Facts</i>	Reference Guide (this document)	Sales Tool	SunWIN, Reseller Web	126284
– <i>Sun StorEdge D240 Media Tray Customer Presentation</i>	Customer Presentation and Slide Notes	Sales Tool	SunWIN, Reseller Web	126283
Product Literature				
– <i>Sun StorEdge D240 Media Tray Data Sheet</i>	Two-page Color Data Sheet	Sales Tool	SunWIN, Reseller Web, COMAC	125464
– <i>Sun StorEdge Product Overview Quick Reference Card</i>	Quick Reference Card	Sales Tool	SunWIN, First Resort, Reseller Web	73691
– <i>Pocket Guide: Sun Enterprise Storage Solutions</i>	Product Brochure	Sales Tool	SunWIN, Reseller Web, COMAC	88967
External Web Site				
– <i>Sun StorEdge D240 Media Tray Information Site</i>	http://www.sun.com/storage/D240/index.html			

