



Sun StorEdge™ 6120 Array Site Preparation Guide

Sun Microsystems, Inc.
4150 Network Circle
Santa Clara, CA 95054 U.S.A.
650-960-1300

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Preparing the Site

This document provides facilities requirements for preparing and installing Sun StorEdge™ 6120 array and 6120 high availability (HA) array configurations. To determine the total components and arrays your shipment will include, consult your local Sun sales representative.

This document is organized as follows:

- “Sun StorEdge 6120 Array Configurations” on page 1
 - “Safety Information” on page 3
 - “Environmental Requirements” on page 4
 - “Cabling Specifications and Requirements” on page 7
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Sun StorEdge 6120 Array Configurations

The Sun StorEdge 6120 array is a high-performance, modular, scalable storage device that contains an internal RAID controller and up to 14 disk drives with Fibre Channel connectivity to the data host. In a Sun StorEdge 6120 HA array configuration, two array controller units are paired using interconnect cables for back-end data and administrative connections. The HA array configuration provides redundant hardware RAID controllers with mirrored caches, and redundant host channels for continuous data availability for host applications.

The array is available either rackmounted in a Sun StorEdge Expansion Cabinet or rack ready for installation in a supported Sun cabinet, as shown in FIGURE 1. You can install up to 10 arrays in one cabinet.

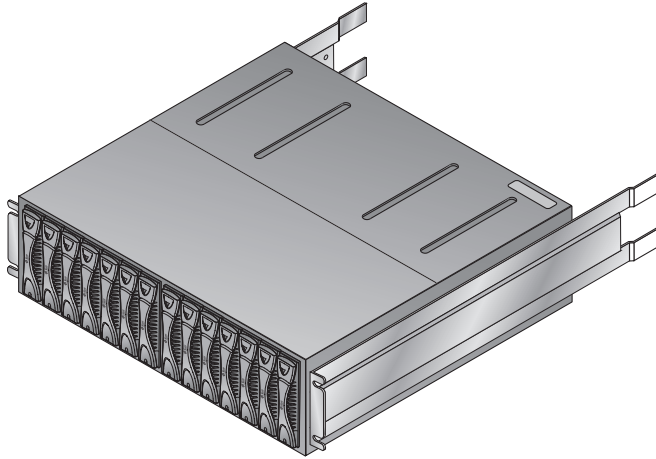


FIGURE 1 Rack-Ready Sun StorEdge 6120 Array

For a detailed product overview and installation instructions, refer to the following Sun StorEdge 6120 array documents available at the Sun documentation web site:

<http://www.sun.com/documentation>

TABLE 1 Sun StorEdge 6120 Array Documentation

Application	Title	Part Number
Late-breaking information	<i>Sun StorEdge 6120 Array Release Notes</i>	817-0201
Installation and documentation reference	<i>Start Here</i>	817-0198
Safety requirements	<i>Sun StorEdge 6120 Array Regulatory and Safety Compliance Manual</i>	817-0961
Install procedures	<i>Sun StorEdge 6120 Array Installation Guide</i>	817-0199
CLI administration, configuration, service, and reference	<i>Sun StorEdge 6020 and 6120 Arrays System Manual</i>	817-0200

Safety Information

Install Sun StorEdge 6120 arrays in accordance with the local safety codes and regulations at the facility site. Make sure you read and follow the safety precautions in the *Sun StorEdge 6120 Array Regulatory and Safety Compliance Manual* before installing an array configuration.

The following sections contain additional safety information for the local facility:

- “Handling Precautions” on page 3
- “Placement of a Sun Product” on page 4

Note – Do not make mechanical or electrical modifications to the equipment. Sun Microsystems, Inc. is not responsible for regulatory compliance of a modified Sun product.

Handling Precautions



Caution – A fully configured rackmounted array system in a cabinet can weigh in excess of 1400 pounds (627 kg). Ensure that all surfaces this system will move over can withstand this load.

The cabinet is equipped with wheels so that you can move it. Use enough personnel when moving the cabinet, especially on sloping loading docks and ramps, to gain access to a raised computer room floor. Move the cabinet slowly and deliberately, and make sure that the floor is free from foreign objects and cables that the cabinet could roll over.



Caution – To avoid injury, wear protective footwear when moving a cabinet.

Install the cabinet on a level surface. At each corner, on the base of the cabinet, are adjustable non-skid pads. These must be extended when the cabinet is installed to stop the cabinet from rolling around. These pads are not to be used to level the cabinet.

For more information on moving and installing a Sun StorEdge Expansion Cabinet, refer to the cabinet documentation available on the Sun documentation web site:

<http://www.sun.com/documentation>

Placement of a Sun Product

Do not block or cover the openings of your Sun product. Never place a Sun product near a radiator or heat register. Failure to follow these guidelines can cause overheating and affect the reliability of your Sun product.

Secure Installation Requirements

The array rackmounted configuration can exceed 1400 pounds (627 kg).

The floor surface must be level. The cabinet is equipped with wheels, for ease in installation, and moveability of the system prior to installation. At each corner, on the base of the cabinet, are adjustable non-skid pads. These must be extended when the cabinet is installed to stop the cabinet from rolling around. These pads are not to be used to level the cabinet.

To minimize personal injury in the event of a seismic occurrence, securely fasten the cabinet to a rigid structure extending from the floor to the ceiling or from the walls of the room in which the cabinet is located.

Environmental Requirements

This section describes facilities environmental requirements for the Sun StorEdge 6120 array, and includes the following sections:

- “Environmental Specifications” on page 5
- “Electrical and Power Specifications” on page 5
- “Physical Specifications” on page 6

Environmental Specifications

TABLE 2 Facility Environmental Specifications

Specifications	Operating	Nonoperating
Temperature	41°F to 104°F (5° to 40°C), noncondensing	-40°F to 149°F (-40°C to 65°C), noncondensing
Relative humidity	10 to 90% RH noncondensing, 27C maximum wet bulb	93% RH noncondensing, 38C maximum wet bulb
Altitude	-1,000 to +10,000 feet (-305 to + approx. 3 km)	-1,000 to +40,000 feet (-305 to + approx. 12 km))
Shock (from any axis X, Y, Z)	4g for maximum duration of 11 ms	10g for maximum duration of 11 ms
Vibration (from any axis X, Y, Z)	5 to 500 Hz at .25g	5 to 500 Hz at 1.0g

Electrical and Power Specifications

All Sun StorEdge 6120 arrays require two independent power sources. Each array cabinet has two power conditioners (distribution), for redundancy, mounted in the base of the cabinet. Each array has two power and cooling units, and each power and cooling unit on the array connects to a different conditioner. To maintain the power redundancy, each conditioner must be connected to independent power sources. TABLE 3 lists the power required for *each* conditioner.

TABLE 3 Power Specifications for Each Cabinet

Specification	Rating
AC voltage and frequency	100 to 240 VAC
Frequency range	47 to 63 Hz
Input current	5.0A max
Input power	500W maximum

The following is recommended for all installations:

- All AC mains and supply conductors to power distribution boxes for both the cabinet must be enclosed in metal conduit or raceway, when specified by local, national, and/or other applicable government codes and regulations. The supply conductors and power distribution boxes (or equivalent metal enclosure) must be grounded at both ends.

- The supplied arrays require voltages within minimum fluctuation. The facilities voltage supplied by the customer/end user must maintain a voltage of not more than (+/-) 5%.
- The customer facilities must provide suitable surge protection.

Physical Specifications

The section contains the physical requirements for Sun StorEdge 6120 arrays.

Physical Dimensions

TABLE 4 Array and Cabinet Physical Specifications

Array Configuration	Height	Width	Depth	Weight
Sun StorEdge 6120 array rack-ready unit	5.25 inches 13.3 cm	17.5 inches 44.5 cm	18.9 inches 48 cm	90 lbs 41 kg
Sun StorEdge 6120 arrays maximum storage cabinet configuration	74 inches 188 cm	24 inches 61 cm	36.5 inches 93 cm	1,400 lbs 627 kg

Clearance and Service Access

TABLE 5 Clearance and Service Access for Rackmounted Sun StorEdge 6120 Arrays

Location	Clearance Access Required
Front	24 inches (61 cm)
Back	21 inches (53 cm)
Left and right sides	36 inches (92 cm) for service only

Cabling Specifications and Requirements

TABLE-6 Cable Specifications

Cable Type	Connector	Maximum Length
Host interface (FC-AL) LC-SFF to LC fiber-optic cable	LC-SFF	82.021 ft (25 m)
Shielded Ethernet: 10/100BASE-T, category 5	RJ-45	328.084 ft (100 m)
Serial (Available only to qualified field service representatives.)	RJ-45	82.021 ft (25 m)
Power (110V)	Standard	n/a
Power (220V)	Standard	n/a
Array interconnect cable	HSSDC2+2	1.64 ft (.5 m)

