



# Overview of the Storage Array 12

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This guide discusses installation and configuration of the Cisco Storage Array 12, Part Number SA12-SHF-12DISK-AC.

The Cisco Storage Array 12 provides storage expansion to increase performance of the Cisco Content Engines. Each disk drive in the Storage Array is enclosed in a special protective casing for durability. A dual-bus option allows two Content Engines to share a single Storage Array—half of the disks are allocated to one Content Engine and the other half are allocated to the other Content Engine.

## Features

- Backplane support for 12 Small Computer System Interface (SCSI) disk drives
- Ultra 2 and Ultra 3 (Ultra 160) SCSI bus operation
- Hot-swappable disk drives (if supported by the host software)
- Automatic split backplane capability
- Storage Array 12 services through in-band SCSI Enclosure Services (SES) and SCSI Accessed Fault Tolerant Enclosure (SAF-TE)
- Up to 12 meters (39.36 feet) of LVD SCSI cabling for single storage enclosure operation
- Three enclosure LEDs: power on, split SCSI bus mode, and enclosure fault
- Redundant and hot-swappable power supplies and redundant power cords

- Redundant and hot-swappable Advanced Cooling Modules (ACMs)
- Three LEDs per disk drive carrier: disk on-line, disk activity, disk fault
- Audible alarm for enclosure events
- Fault LED on all hot-pluggable components
- Maximum configuration of drives supported with one or two power supplies
- System temperature specifications met with two or three ACMs
- 3U enclosure height
- Support for combinations of disk drive carriers and carrier blanks
- Enclosure lock for disk drive carriers
- Support for 3.5-inch disk drives of 1.0-inch (2.54-cm) height
- Support for 7200 rpm and 10,000 rpm disk drives
- Support for any mix of disk drive capacity or rpm

## Disk Drives

Twelve SCA-2 disk drives are supported per enclosure. All disk drives are housed in a disk drive carrier to allow for easy insertion and removal. The disk drive carrier allows for rapid heat dissipation and conforms to all the requirements of CE and FCC standards. A release mechanism ensures the safe and easy insertion and removal of the disk drive carrier. The disk drives are hot-swappable.

## Power Supplies

The Storage Array 12 is configured with two power supplies installed. This provides redundancy of the power supplies and means that the enclosure can continue running if one of the power supplies fails. The power supplies are hot-swappable.

## Advanced Cooling Modules

The Storage Array 12 features three four-speed ACMs installed in the rear. This provides redundancy of the cooling system and means that the system can continue to operate with one failed ACM. The ACMs are hot swappable.

## Storage Array 12 Enclosure

The Storage Array 12 enclosure consists of twelve bays that accept disk drive carriers or carrier blanks. The enclosure forms the housing for the devices within the Storage Array 12. The enclosure can be mounted in any standard 19-inch (48.26-cm) equipment rack, thus providing large data center capabilities.

## Configurations

This section details the standard configuration available. The standard configuration and part numbers are shown below. This configuration is rack mountable and can be mounted in any standard 19-inch (48.26-cm) equipment rack.

## Part Numbers

The following table shows the Storage Array 12 product Part Numbers and descriptions.

Part Number	Description
SA12-SHF-12DISK-AC	Storage Array 12, 12 18-GB disks, dual AC power supplies
SA12-SHF-AC=	Complete disk shelf (no disks) for Storage Array 12 (spare)
SA12-DISK-18GB=	1 18-GB, SCSI drive for Storage Array 12 (spare)
SA12-COOLING=	Cooling module for Storage Array 12 (spare)

Part Number	Description
SA12-PWR-AC=	AC power supply for Storage Array 12 (spare)
SA12-EM=	Environmental monitor module for Storage Array 12 (spare)

# Single Rack-Mounted Storage Array 12

The single rack-mounted Storage Array 12 consists of three ACMs, two power supplies, and two SCSI Management Modules (SMMs). The Storage Array 12 also has support for twelve SCSI disk drives (1.0 inch). The front view of the rack-mounted Storage Array 12 is shown in Figure 1-1.

Figure 1-1 Single Rack-Mounted Storage Array 12—Front View

