

## Features

- FC-to-SATA JBOD
- Highest density, 16 drives in 3U rack space
- Redundant data paths for dual-ported connection to RAID controllers or servers
- Can be connected to Comet RAID subsystems or Caen controller heads
- Expansion ports for redundant connectivity to external JBODs
- A total of seven (7) JBODs can be cascaded and connected to a RAID subsystem



## Highlights

- Two 2Gbps Fibre Host Channels per controller; Transfer rate up to 200MB/sec for each channel
- 128MB pre-installed SDRAM
- Off Line Roaming
- Sixteen, hot-swappable, drive trays
- Drive side Fibre channel for expansion JBODs
- Hub embedded for JBOD cascading. Cascade up to seven JBODs
- DIP switch for hardware ID setting
- Host-side S.E.S emulation
- Pass-through command facility for drive FW downloading and other special functions
- HDD Plug-and-Play automatically scans drives on insertion, maps them to a proper ID and then generates a LIP on the loop
- Enhanced HDD-like SCSI command emulation includes the following commands: Format, which restores controller-maintained defect list to the default list, Write-Verify, Verify and SMART

## Overview

The Comet SCSI 16 JBOD is the latest in Caen's highly acclaimed line of FibreChannel (FC) -to-serial ATA (SATA) products. Designed to accommodate a massive sixteen SATA hard drives, the ES A16F is a durable, high capacity, versatile JBOD that can be easily integrated with a large variety of other premier Caen FC-to-FC RAID devices and controllers.

The Comet SCSI 16 JBOD comes with a single Caen FC-to-SATA JBOD controller and sixteen drive trays. The controller has two 2Gbps (FC-2G) host channels that are routed

through two onboard hubs to four external SFP connectors, two per channel. While two SFP connectors can be connected to FC-2G host computers, the remaining two connectors can be cascaded to a second expansion JBOD. A total of seven ES A16F JBODs can be cascaded for unprecedented scalability.

The JBOD controller also comes with sixteen SATA channels that connect to the sixteen SATA drives installed in the front of the JBOD. The availability of separately purchased and individually installed SATA-to-PATA dongle kits enables the installation of PATA drives. This provides a less expensive option for an economic yet reliable JBOD.

With two redundant dual fan cooling modules and two redundant 460W power supply units, the ES A16F JBODs have been designed to operate with extreme reliability in today's most demanding storage environments.

## High Performance

Featuring a 64-bit 133MHz memory bus, the unparalleled bandwidth makes the JBOD's high data throughput more than sufficient for small-to-medium sized servers or workstations. Data can be distributed at the burst rate up to 1066MB/sec. The dual independent PCI bus design virtually eliminates all imminent bottlenecks on IO traffic, providing sufficient throughput for a wide range of applications on workstations, Windows 2000/NT/XP, Linux, or Unix-based servers. These applications include disk-to-disk backup, Video on Demand, CCTV, stream editing and others.

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## Fault Tolerant Features

### Hot-swappable active components:

All the active components; including the power supply unit (PSU) module, the cooling fan modules and the hard-drives are hot-swappable. If any of these components fail, they can be replaced without turning off the JBOD and disrupting the smooth operation of the JBOD.

### Hot-Swapping of Drives:

A failed drive in the Comet SATA JBOD can be exchanged without turning off or interrupting the smooth operation of the JBOD. Once the failed drive is replaced the data will be rebuilt in the background. Hot-swapping is supported through the automatic disconnection from a failed drive and the detection of a reserve drive. All these failure recovery procedures are completely transparent to the host.

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## SPECIFICATIONS

### JBOD CONTROLLER

- Standard 128MB cache memory in one SDRAM module.
- System Fan speed/Voltage/Temperature self-monitoring
- 32KB NVRAM with RTC (Real Time Clock)
- Beeper

### JBOD OPERATION

Drive hot-swapping

### HOST INTERFACES

Two 2Gbps Fibre Channels

### EXTERNAL CONNECTIONS

Four SFP ports for optical Fiber connection

One RS-232C (Audio Jack) serial port connector (38400, n, 8, 1) (Diagnostic port. Used by technical support)

### ENCLOSURE DIMENSIONS

Without Handles: 446.2W x 131H x 500Dmm

With Handles: 485W x 131H x 532Dmm

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