

# Raidtec CS3102

## ULTRA 320 SCSI TO SERIAL ATA RAID SYSTEM

### Exceptional Performance, Capacity and Value

The Raidtec CS3102 is a mid-range SCSI attached RAID solution designed for use with medium sized servers and workstations. The CS3102 combines higher duty cycle, professional<sup>2</sup> Serial ATA (SATA) drives and a dual port Ultra 320 SCSI host interface in a high-density 2U enclosure. This unique combination delivers a scalable RAID subsystem with excellent value and an impressive 265MB/sec data transfer rate.

At the heart of the CS3102 is a new generation CS RAID controller designed and developed by Plasmon. This new controller technology is focused on performance and reliability with SATA II compatible backplane that supports both SATA I and SATA II disk drives. The CS3102 is manufactured using a cable-free architecture to improve overall reliability and simplify system maintenance.

Enclosed in a high-density 2U, 12 bay rackmount subsystem, a single CS3102 scales up to 9TB<sup>3</sup> of total storage capacity. Standard features include hot-swap disks, dual / redundant power supplies and three redundant cooling modules using low dB fan technology that dramatically reduces ambient system noise.

The CS3102 has dual, high performance Ultra 320 SCSI channels that can be connected to two independent servers. An additional level of optimisation can be realised by configuring separate RAID configurations that match the performance characteristics of applications running on attached servers. One of the greatest strengths of the CS3102 is the ability to dynamically allocate additional capacity as storage requirements grow.

The CS3102 is easy to install, configure and monitor, making it an ideal choice for a wide variety of server based applications including disk-to-disk backup, reference database environments, server attached storage for the digital media industry (video editing, video on-demand, etc.), audio industry (call centres), security / CCTV and medical imaging.

### Raidtec Manager™

The CS3102 comes standard with Plasmon's Raidtec Manager GUI for the remote configuration, management and monitoring of one or more subsystems. Raidtec Manager provides a combination of advanced configuration tools for IT professionals and easy-to-use wizards for the less experienced.

Using Raidtec Manager, drives can be easily configured into RAID configurations assigning RAID 5 or RAID 0, 1, 10. The configuration of the RAID configurations can be customised or rapidly assigned by selecting a predefined profile that automatically sets an appropriate stripe size and cache for the selected application. For resilience, Hot Spare disks can be assigned as Local (dedicated to a RAID) or Global.

Raidtec Manager's powerful storage provisioning capabilities offer flexible allocation of the total subsystem capacity through dynamic Logical Volume expansion. This capability allows system capacity to be quickly added to attached servers without interruption of service. Raidtec Manager also provides remote monitoring of the environmental condition of the CS3102 that includes the status of the controller, disk drives, power supplies and fans and delivers event log "alerts" by SNMP and SMTP / email.

### Key Features

- High performance dual port Ultra 320 SCSI host interface
- Plasmon CS RAID controller with 533MHz PowerPC processor
- Up to 265 MB/sec sustained read transfer rate
- Maximum possible subsystem density - 12 bay in 2U
- Out-of-the-box RAID ready with simple installation
- High duty cycle professional<sup>2</sup> SATA drives
- Easy-to-use Raidtec Manager™ remote management
- Application profiles for rapid RAID configuration
- Port allocation and volume management
- Low noise fan technology
- 1 year free on-site service included in 3 year warranty covered by Kodak Service<sup>1</sup>

Free 1 Year On-site Service<sup>1</sup>



### Product Review

PC Pro Magazine - RATING ★ ★ ★ ★ ★ ☆

"A massive 217 MB/sec".... "The CS3102 won't disappoint"....

<http://www.pcpro.co.uk/reviews/72932/plasmon-raidtec-data-cs3102.html>

### Raidtec at-a-glance

Host Interface	SATA Drives	FC Drives
NAS	SNAZ S4, SNAZ S8	-
SCSI	CS3102	-
FC	FS3102	X3000

#### Notes

1. Service and warranty terms are limited to specific geographic territories in EMEA. Contact Plasmon for full details.
2. The term "professional<sup>2</sup> SATA" is used by Plasmon to differentiate high duty cycle SATA drive products from lower specification desktop products.
3. 9TB system capacity is based on 750GB disk drives.



# Raidtec CS3102 Specifications

## Features

GENERAL	
Host Interface	Dual port Ultra 320 SCSI (VHDCI with internal termination)
Controller Configuration	Single CS RAID controller
Cache Memory	256MB Standard. 1GB optional with 250GB and 500GB, standard with 750GB disk drives
Read Transfer Performance	Up to 265MB/sec (IOMeter Read performance test)
OS Platform Support	Windows 2000 Advanced Server, Windows Server 2003
ENCLOSURE CONFIGURATION	
Number of Disks	Maximum of 12
Total System Capacity	9TB (using 500GB drives)
Rackmount Form Factor	2U
Rackmount Hardware	Fixed rails
DRIVE CONFIGURATION	
Disk Drive Type	SATA I or SATA II
Supported Drive Capacity	250GB / 500GB / 750GB
RAID CONFIGURATION	
RAID Levels	0, 1, 10, 5
Maximum Number of RAIDs	6x RAID 0 / 6x RAID 1 / 3x RAID 10 / 4x RAID 5
Predefined RAID Profiles	File server, database, CAD workstation, media server
On-line RAID Expansion	Dynamic addition of disk(s) to a RAID enabled by Raidtec Manager
LOGICAL VOLUME CONFIGURATION	
Typical Usable Storage	7.5TB (12x 750GB RAID 5 including hot spare)
Number of Logical Volumes	Up to 960
On-line Volume Expansion	Dynamic expansion up to maximum available capacity of the RAID enabled by Raidtec Manager
ADMINISTRATION	
Remote Administration Interface	Raidtec Manager - an OS independent Java application
Management Port	10 / 100 / 1000 Ethernet auto sensing
Alert Notification	SNMP and SMTP / email
LED Notification	PSU, fans, temperature, drive (presence, activity, fault)
Audible Alarm	Controller, fans, temperature and drive faults
HOT SWAP AND REDUNDANCY	
Global / Local Hot Spare	Background auto-rebuild option with priority control
Cooling Fans	3 (2+1 redundant)
Power Supplies	2 (1+1 redundant, load sharing)
ELECTRICAL AND ENVIRONMENTAL	
AC Inlets	Dual IEC power connectors
Maximum Power Supply Load	350W
Universal AC Input	90 VAC - 264 VAC (50-60Hz)
Operating Temperature	10°C to 40°C (50°F to 104°F)
Non-Operating Environmental Temperature	-30°C to 60°C (-22°F to 140°F)
Relative Humidity - Operating & Non-Operating	Non-condensing, 10% to 90%
DIMENSIONS	
Enclosure Dimensions HxWxD	8.8 x 44 x 55 (cm) / 3.5 x 17.5 x 21.7 ( inches)
Shipping Dimensions HxWxD	38 x 57 x 79 (cm) / 15 x 22.5 x 31 (inches)
Actual Weight	18Kg (40lbs) (excluding disks) / 25Kg (55lbs) (including 12 disks)
Shipping Weight	24 - 34.5Kg (53 to 76lbs) / weight dependant on number of drives included
AGENCY	
Safety	UL60950-1, CSA 22.2 No. 60950-1-03, EN60950, IEC 60950-1:2001
Emissions	EN55022 Class A, FCC Class A CFR47 Part 15
Immunity	EN55024, EN6100-3-2, EN6100-3-3
Quality	ISO 9001:2001

### In the Box - CS3102

- Quick Start Installation Guide
- CS3102 chassis
- Disk drives installed in drive shuttles
- Preconfigured with RAID 5 + Hot Spare
- Rackmount rail kit
- VHDCI or HD68 SCSI cable for host connection
- Ethernet cable for remote management
- Raidtec Manager and User Guide on CD



Rear View - CS3102



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