



# Galaxy® Aurora

## 24 bay 8Gbit Fibre Channel / InfiniBand RAID

### The Galaxy Aurora Advantage

The Galaxy Aurora RAID uses patent-pending EOS software built around our multi-thread RAID 6 algorithm which takes advantage of off-the-shelf multi-core CPU processors.

Aurora's adaptable design integrates with the latest hardware options such as processors, network connectivity and solid state drives. Using industry standard server components allows Aurora to "leap-frog" other manufacturers' hardware RAID controller roadmaps.

Backed by Rorke Engineering Services, the Aurora has been tested on rich media applications for video, film, medical imaging and high performance computing in our Interoperability Lab.

### Aurora Advanced Features

Galaxy Aurora can be configured as direct attached or SAN storage in your post production or film editing facility. Aurora's versatile connectivity adds unique capabilities when partnered with SAN management software. Here are just some of the major benefits:

- » 2000+ MB/sec sustained transfer rate
- » 8Gbit Fibre Channel or 20/40Gbit InfiniBand interface
- » Host ports: quad 8Gbit FC, dual 20Gbit IB or single 40Gbit IB
- » Up to 20TB of usable storage at RAID 6
- » Next Generation SAS backplane supports largest/fastest hard drives
- » 16GB of RAM upgradeable to 128GB
- » Failed drive reporting and auto-rebuild while maintaining peak data bandwidth performance
- » RTI (Real Time Initiator) – prioritize I/O bandwidth to specific client stations
- » Direct Attached or SAN storage appliance with embedded MDC option
- » Backward compatible to 2Gbit & 4Gbit FC architecture
- » Supports Windows, Apple OSX, Linux and Solaris

- » EOS software cuts your ongoing operating costs and maximizes uptime by maintaining peak performance during rebuild so you can continue working. EOS completes the RAID rebuild up to 6 times faster than an ASIC-based RAID controller.
- » Embedded web based GUI for monitoring status and trouble shooting
- » Real Time Initiator (RTI) is a quality of service performance tuning feature. RTI allows you to prioritize I/O bandwidth to specific client stations.
- » The LUN Identification Tool (LUN ID) improves overall SAN management for administrators by giving them the ability to assign meaningful names to complicated World Wide Names (WWN) on fibre host ports.
- » Client LUN Management (CLM) allows admin to assign a single writer with multiple readers without additional SAN management tools.
- » Supports multiple host interfaces in the same chassis.
- » Unprecedented Management Tools for tracing I/O commands, graphing real-time bandwidth, and uncovering poor performing drives in the RAID.

# Galaxy<sup>®</sup> Aurora 24 bay 8Gbit Fibre Channel / InfiniBand RAID

## System and Controller Features

Chassis	Compact 4RU Steel and Aluminum Alloy enclosure with rack mount kit. Dual FRU power supplies and fan assemblies and 3Gbit Drive Backplane
Controllers	Aurora RAID 6 Single Controller Configuration based on EOS engine and 16GB of RAM [ upgradeable to 128GB ]
Drive Support	Twenty Four (24) 3.5" x 1" SATA 3Gbit/s hard drives in field replaceable canisters — direct connect in single I/O controller configuration Staggered physical drive spin-up, Drive LED support
External I/O Ports	Four (4) 8Gbit Fibre Channel or Dual 20Gbit or 40Gbit InfiniBand host ports, plus Ethernet for out of band EOS management GUI

## Operational Features

RAID protection	RAID 0, RAID 6
Aurora Capabilities Tuned to your Application / Systems	Galaxy Aurora is specifically designed, pre-configured and tuned to the high bandwidth streaming data rates of your application or system.
SAN ready Galaxy Aurora	Supports most common SAN Management Software: StorNext, CommandSoft, metaSAN, SANmp, Xsan*, Depending on the SAN client configuration, Aurora is powerful enough to support SAN clients with or without Switches and MDCs
Cold Spares	Galaxy Aurora RAID 6 configuration has 2 parity drives and therefore doesn't require a hot spare drive; therefore it will be maintained with a cold spare drive
Background Activities	Rebuild; SMART drive monitoring; Media health monitoring and repair
RAID Robustness	Physical Drive Error Recovery, Replacement drive rebuild and monitoring while maintaining maximized data rates while rebuilding RAID LUN, Bad Sector Re-mapping, SMART, Error recovery mechanisms and automated defect elimination

\*Xsan is supported only with ATTO FC HBA

## System Management

Supported Operating Systems	Windows, MAC OSX, Linux, Solaris
Management Tools	Embedded Web mgmt support — No host agent is needed using standard TCP/IP; Operating System independent; Web based GUI, via Ethernet port; Basic CLI configurator and operational utility with monitor, keyboard; Ethernet, RJ-45; SSH; Easy to user Error logs and status monitoring
Management Interfaces	Embedded Web server and mgmt support — No host agent is needed; Ethernet
Event Notification	Audible (buzzer), and visible (LEDs) alerts for bad drives and power supplies

## Mechanical Specifications

Voltage	100-240 Vac Auto-Ranging
Current (Maximum)	8 A @ 100 Vac; 4 A @ 200 Vac (current rating with two power cords)
Frequency	50-60 Hz
Power Supply	Dual 900W, 100-240 Vac auto-ranging, 50-60 Hz, dual hot swap and redundant with PFC, N+1 design
Power Consumption	523 Watts (under load with SAS HDD)
Operating Temperature	10°- 35°C (-40° +70°C non operational)
Relative Humidity	Maximum 90%
Weight	Net weight (system only): 34.0 kg (75 lbs) without drives, 50.1 kg (111.0 lbs) with 24 drives
[Assume each hard drive 0.67 kg]	Gross weight (including carton): 37.5 kg (82.7 lbs) without drives
Safety	CE, FCC Class A

## Warranty and Support

Warranty	Three years complete system limited warranty
Support	24 x 7 email and phone support options (Americas & EMEA); 24 x 7 access to Rorke Data support site — drivers, firmware, compatibility Advanced replacements program

## Easy to Install and Manage

Since 1985 Rorke Data has been successfully bringing you easy-to-install products, and now continues that effort with the Galaxy Aurora. Pre-configured, tested, and customized in our ISO 9001 integration facility, your Aurora is ready to use out of the box. Setting up minor configuration changes on site is simple.

## Service and Support

Rorke Data's Engineering Services delivers a unique value proposition for our customers. We offer: customized and flexible service agreements, installation and training, call center with online support options, advance parts replacement to onsite 24x7 options, contracted phone, pager and web support, extended equipment warranty options, with US and EMEA customer support centers.