

# Galaxy® Aurora LS

## 12 bay 8Gbit Fibre Channel RAID



- » Up to 1000+ MB/s
- » Ultra quiet desk-side or 4RU chassis with 12 drive bays
- » 36TB raw capacity
- » RAID 0, 1, 6 or 10
- » Up to 24GB allocatable RAM
- » 6x faster rebuild times than ASIC RAIDs maintains peak data performance
- » Eight 8Gbit Fibre Channel
- » Backward compatible with 4Gbit and 2Gbit Fibre Channel
- » Nehalem Multi-Core Processor
- » Web-based GUI for monitoring status and troubleshooting
- » Supports Windows, Apple OSX, Linux and Solaris clients

### The Galaxy Aurora Advantage

The Aurora RAID family is a purpose-built, feature-rich RAID that can be used as a direct-attached system or as a SAN appliance. The Aurora LS's performance and unique adaptable design integrates our RAID 6 engine technology (EOS™) with the latest industry-standard hardware components. This design allows Aurora LS to “leap-frog” other manufacturers' hardware ASIC-based RAID controller roadmaps. Our engineers have developed Aurora LS with a unique set of tools to simplify your storage environment and deliver industry leading performance. The resulting solution is affordable cross-platform storage for Mac, Windows and Linux users while delivering reliable and sustained high bandwidth performance.

### Unique Set of Features

#### Zero Impact Drive Rebuild

- » Description: Aurora LS is robust enough to process failed RAID sets in the background, during production while ensuring full bandwidth to all users on the SAN.
- » Benefit: Aurora LS's Zero Impact Drive Rebuild feature keeps your facility running at full bandwidth despite occasional drive failure. This feature not only protects your data, but also your project deadlines and budget. Aurora LS also manages drive rebuilds up to 6x faster than traditional hardware RAID controllers.

#### Real-Time Initiator RTI (QoS)

- » Description: RTI is a quality of service (QoS) performance tuning feature. RTI allows you to prioritize I/O bandwidth to specific client stations depending on their individual application requirements.
- » Benefit: The RTI QoS feature delivers prioritized bandwidth to systems that really require it, while lower performance apps only utilize what they need.

#### SAN Client Naming

- » Description: SAN Client Naming allows to assign meaningful names to complicated World Wide Names (WWN) of Fibre Channel clients.
- » Benefit: Provides the foundation for simplified SAN management. Client naming makes RTI and Bandwidth graphing simpler.

#### Real-Time Bandwidth Graphing

- » Description: Identify and graphically present network storage performance such as: MB/s, I/O response time, and I/O request size.
- » Benefit: A unique storage management tool that gives users a quick view of overall storage utilization. Therefore users can identify and correct bandwidth problems on the SAN.

#### Drive Performance Tracking

- » Description: Identify and graphically presents individual drive storage performance.
- » Benefit: This allows users to pro-actively identify and replace poorly performing drives in the RAID set before these drives can cause data integrity problems.

#### Trace I/O Command Tracking

- » Description: Identify and graphically present every I/O command that an Aurora LS will process.
- » Benefit: A unique technical set up and trouble shooting feature. This allows engineers to monitor, trace and tune the Aurora LS storage system for your applications.

#### LUN Tracking

- » Description: LUN Naming allows users to assign meaningful names to RAID partitions.
- » Benefit: Naming LUNs such as Aurora1, Aurora2 enables simplified SAN management. LUN Naming makes SAN set-up, SAN troubleshooting, and Bandwidth graphing simpler.

# Galaxy<sup>®</sup> Aurora LS

## 12 bay 8Gbit Fibre Channel RAID

### System and Controller Features

Chassis	Ultra Quiet Designed, Rack Mountable or desktop, Compact 4RU Steel and Aluminum Alloy enclosure with 3Gbit Drive Backplane
Controllers	Aurora LS RAID Single Controller Configuration based on EOS engine and 6GB of RAM [ upgradeable to 24GB ]
Drive Support	Twelve (12) 3.5" x 1" SAS / 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	1, 2, 4, or 8 8Gbit Fibre Channel, Ethernet for out of band EOS management GUI

### Operational Features

RAID Protection	RAID 0, RAID 1, RAID 6, RAID 10
Cold Spares	Aurora LS RAID 6 configuration has 2 parity drives and therefore doesn't require a hot spare drive; and can be maintained with a cold spare drive on the shelf
Background Activities	Rebuild; SMART; 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

### 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/ Protocols	Embedded Web server and mgmt support — No host agent is needed; Ethernet
Event Notification	Email and visible (LEDs) alerts for bad drives and power supplies

### Mechanical Specifications

Voltage	100-240 VAC Auto-Ranging 50-60 Hz
Current (Maximum)	12 A @ 100 VAC; 6 A @ 200 VAC (current rating with two power cords)
Dimensions	Height 7.0" (178mm), Width 17.8" (452mm), Depth 25.5" (648mm)
Power Supply	Single 865W, 100-240 VAC auto-ranging, 50-60 Hz
Power Consumption	275 Watts (under load with SATA HDDs)
Operating Temperature	10° - 35°C (-40° +70°C non operational)
Relative Humidity	Maximum 90%
Weight	Net weight (system only): 25.0 kg (55 lbs) without drives, 32.1 kg (67.0 lbs) with 12 drives
[Assume each hard drive 0.67 kg]	Gross weight (including carton): 28.6 kg (63 lbs) without drives
Safety	CE, FCC Class A

### 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.