Galaxy® 3G

12 / 16 Bay RAID Storage

- 12 or 16 hot-swap drive bay rackmount RAID and JBOD add-on storage
- Single or dual RAID controllers with dual 4Gb FC or SAS host connections
- Supports RAID 0,1,3,5, 6 dual parity and NRAID
- Expansion 16 Bay JBOD support on most models up to 80 HDDs
- Backplane supports SAS and SATA HDDs
- Media Patrol, background synchronizing, disk array rebuild, Redundancy Check, SMART condition pooling, Online Capacity Expansion, RAID Level Migration.
- Error modes monitored by LEDs, audible alarm; Event notification methods include email, LAN broadcast, fax, SNMP traps
- Hot swap drives, fans, PSUs and controller modules for easy maintenance
- Built-in, Galaxy Array Manager browser-based management software as well as Command Line Interface and Command Line Utility via RJ-11 Serial Port or Telnet

The Galaxy 3G Advantage

The Galaxy 3G RAID storage system is designed to operate in small to medium business where performance at a value is most important. The 3G's intelligent, high availability SAS/SATA based RAID storage system fundamentally changes storage economics. Choose the system that fits your requirements today with the confidence that you have the flexibility to change the interface (FC and SAS) simply by changing the controllers and also increase your available storage by adding JBOD systems to meet your future capacity needs. With the 3G's high availability modular design that includes hot-swappable drives, fans, redundant power supplies and controller modules, maintenance is simple without service interruption. The built-in browser based Galaxy Array Manager provides easy to use set-up, diagnostic and monitoring capabilities. The 3G easily scales using add-on JBODs up to 80 HDDs.

Galaxy 3G supports any operating system, as a direct-attached or networked storage appliance, making it a flexible and powerful solution. Keeping data safe is paramount and the Galaxy 3G supports all RAID levels, yet it can also satisfy even the most demanding bandwidth requirements. Available in 4Gb FC and SAS host interfaces, the 3G supports today's latest enterprise class hard drives. The Galaxy 3G is positioned to provide economy without sacrificing performance, capacity or data protection.

3G Application Ready Solution

Rorke Data's Galaxy 3G RAID combines a high availability design, industry accepted data protection methods, and latest hard drive technologies. With over 10,000 Galaxy units in the field, this application ready solution provides the performance, protection and expansion capabilities for diverse customer environments. The Galaxy 3G is ready for optimal performance in your application:

- HD Post Production and 2K Film
- Medical Imaging
- Digital Video Security
- Rich Media Content Creation and Distribution
- Broadcast and Streaming
- SAN and multi-OS sharing
- Backup & Disaster Recovery
- OEM-application specific custom configurations

Galaxy® 3G 12 / 16 Bay RAID Storage

System and Controller Features

Chassis	12 Bay or 16 Bay Rack mountable, compact 2RU and 3RU steel and aluminum alloy enclosure, dual hot swap power supplies and cooling modules
Controllers	Hot swap single / dual controllers with 512MB of RAM [upgradeable to 2GB], hot swap RAM backup battery, add on SAS JBOD options
Drive Support	Twelve (12) or Sixteen (16) 3.5" x 1" SAS / SATA 3Gb/s hard drives in hot swap field replaceable canisters, staggered physical drive spin-up, drive fault / activity LED support
Host I/O interfaces per controller	Two (2) 4Gbit Fibre Channel or two (2) 3Gbit SAS
Management interfaces	Ethernet for out of band management GUI, fault and activity LED support

Operational Features

RAID protection	RAID 0, 1, 0+1, 3, 5, 6, 10, 30, 50, 60 and NRAID
RAID Configurations	3G is designed, pre-configured and tuned to high bandwidth streaming data rates. The RAID will be preconfigured to provide these data rates or to your specific user defined settings. Configuration options include up to 64 LUNs and 32 logical drives
RAID Robustness	Supports RAID Migration; Global, Dedicated or Enclosure-specific hot drive spares; Bad Sector re-mapping, SMART and NCQ support, scheduled intelligent data scans or while idling, error recovery mechanisms and automated defect elimination
Mapping LUN Configurations	Flexible easy to use LUN mapping provides portions of the RAID storage to be used by multiple hosts exclusively and simultaneously
Host Command Handling	Multiple host concurrent queuing of up to 1024 commands
SAN Ready	Supports most common SAN Management Software: Xsan, StorNext, CommandSoft, metaSAN

System Management

Supported Operating Systems	Windows, MAC OSX, Linux, Solaris, VMware
Management Tools	Embedded Web browser GUI, Telnet and SSH management support via Ethernet port; Embedded terminal management accessed thru RS232 audio style connector; Front panel LCD panel provides same utility and setup capabilities as Telnet. Easy to use error logs and status monitoring; Available reset of factory defaults; SSH monitoring via ethernet
Status Indicators	Operator panel: Power/Busy/Attention ; Drive: Fail/Activity ; Power Supply: Fail ; BBU: Fail ; Cooling Module: Fail Fan1/Fail Fan2 Controller: Status / Cache Dirty / Hot Temp / BBU Link / Host Busy / Drive Busy FC or SAS I/O Status: Linked
Event Notification	Email ; LAN broadcast ; SMS ; SNMP traps, and MSN

Mechanical Specifications

Voltage	100-240 Vac Auto-Ranging
Current (Maximum)	12 Bay: 8 A @ 100 Vac; 4 A @ 200 Vac (current rating with two power cords) ; 16 Bay: 9 A @ 100 Vac; 4.5 A @ 200 Vac (current rating with two power cords)
Frequency	50-60 Hz
Power Supply / Cooling Module	12 Bay: Redundant 500W, Power Supplies and Cooling Modules w/replaceable fans ; 16 Bay: Redundant 530W Power Supplies and Cooling Modules w/replaceable fans
Power Consumption	12 Bay: 141.68 Watts (under load w/o HDD) /452.68 Watts (under load w/SAS HDD) ; 16 Bay: 108.38 Watts (under load w/o HDD) /523.91 Watts (under load w/SAS HDD)
Operating Temperature / Humidity	5° to 35°C (-40° to 60°C non operational) Humidity: Maximum 95%, non condensing
Dimensions	12 Bay: 2U Rackmount 8.8 x 44.4 x 56.1 cm (3.5 x 17.5 x 22.1in) ; 16 Bay: 3U Rackmount 13.1x 44.65x 56.1 cm (5.2 x 17.6 x 22.1in)
Weight [Assume each hard drive 0.67 kg]	12 Bay; Net weight (system only): 26 kg (57 lbs) without drives, 32 kg (71 lbs) with 12 drives** Gross weight (including carton): 29kg (64 lbs) without drives 16 Bay: Net weight (system only): 30.5 kg (67.2 lbs) without drives, 38.5 kg (84.9 lbs) with 16 drives* Gross weight: 37.5kg (82.7 lbs) without drives
Safety / EMC	CE, FCC, BMSI, UL RoHS, Microsoft WHQL- Windows Server 2003 EMC

Warranty and Support

Warranty	Three years limited warranty ; drives: five years limited warranty
Support	24 x 7 Email and phone support options (Americas & EMEA) ; 24 x 7 access to Rorke Data support site ; Advanced replacements program

Easy to Install and Manage

Since 1985 Rorke Data has been successfully bringing you easy-to-install products. Pre-configured, tested, and customized to your needs before it leaves our ISO 13485 and ISO 9001 certified integration facility, your system is ready to use out of the box. Setting up minor configuration changes on site is simple. Our technical support staff is well versed and can help with any installation issues you may incur.

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.

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