# RS-1600/2-FC-SBD 2Gb Fibre Channel SBOD



As the volume of data in today's business environment increases, processing speed is no longer the only concern. The focus has expanded to include reliability, availability and serviceability as data center requirements and drive densities have exploded exponentially.

Xyratex's RS-1600-FC-SBD and extended RS-1602-FC-SBD replace traditional 2G Fibre Channel – Arbitrated Loop (FC-AL) architecture with an integrated advanced switching hub, dramatically improving data availability while reducing the effects of latency, especially in systems with high disk counts. This innovative 2G Switched Bunch of Disks (SBOD) solution offers substantially improved read/write performance levels, and uses embedded technology to create a high performance, point-to-point switched connection between the storage controller and the individual drives.

In addition to enhanced performance, the 1600/1602 enclosures support advanced system diagnostic features that provide users with detailed information on every event, simplifying troubleshooting and providing direct indication of failing components in any environment. This powerful tool allows bottlenecks to be identified quickly and addressed, thereby protecting the overall integrity of the system. Single points of failure that frequently affect larger drive loops and daisy-chained configurations are mitigated.

Designed with hot-swappable data paths, dual power and cooling modules and enclosure management functions, the Xyratex 16 bay RS-1600 family of enclosures is the ideal solution for the performance and reliability demands found in today's 24/7 environment.

# Features

- Point to point disk drive communications
- Bandwidth of up to 1.6 GB/s per enclosure
- Extended SES for advanced management features
- Reduced latency in large disk count systems
- Autonomous FC error monitoring of port management
- ANSI enclosure SES support for management & diagnostics
- Up to 8 non-blocking initiator connections
- Multi-path trunking doubles interconnect performance
- Drive LIP threshold management
- Trunking

# **Technical Specification**

#### **General Information**

Product Code	RS-1600-FC-SBD and RS-1602-FC-SBD
External Interface	1 & 2Gb/s FC-AL external ports (4 x SFP
via IO Modules	Optical)
Supported Hosts	Single/dual active/dual independent bridge
Total Capacity per Unit*	2.336TB (@146GB/drive)
Expansion Chassis	7 enclosures (112 drives maximum)
Total Expansion Capacity*	16.352TB (@146GB/drive)

#### **Disk Drives**

Disk Drives Supported (2Gb)*	<sup>4</sup> 36GB, 73GB, 146GB & 300GB up to 15K RPM
Interface Types	Fibre Channel
Max Drives per Enclosure	16 hot-swappable FC drives with point-to point
	connections (per enclosure)

# **System Availability**

Hot Swappable	PSU/Cooling modules, disk drives, I/O modules
Components	and controllers

#### **Dimensions** (Both enclosures unless stated otherwise)

Height	130mm (5.12") (3 EIA Units)
Width	482.6mm (19.0") (1EC Rack Compliant)
Depth	RS-1600: 500mm (19.7")
	RS-1602: 551mm (21.7")
Weight	35Kg (77.6 lbs)

# **Altitude, Power and Temperatures**

Operational Altitude	0 to 2133m
Non-operational Altitude	-305 to 12,192m
Voltage	110 to 240V AC or -48V DC
Frequency	48 - 62 HZ
Power Consumption	450W
Temperature Range	+5 to +40°C
Humidity	20% - 80%

#### **Shock and Vibration**

Operational Shock	5g 10ms 1/2 Sine
Operational Vibration	Random 0.21grms 5-500Hz
Non-operational Shock	30g 10ms 1/2 Sine
Non-operational Vibration	Random 1.04 grms 2-200 Hz
Relocation Vibration	Swept Sine 0.3g 2-200Hz
Acoustics	Sound Power Operating: < 6.0 LwA @20°C

#### **Approvals**

UL and cUL listed. Tested to UL/IE/EN 60950. Certified Body Certificate & Report to IEC60950.

CE marked to the requirements of the Low Voltage Directive 73/23/EEC and the Electromagnetic Compatibility Directive 89/336/EEC. FCC Class A. EMC: EN55022/EN61000-3-2; EN61000-3-3.

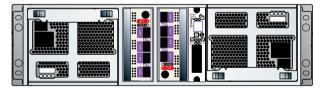
### **Warranty Information**

Enclosures with drives Up to 3 years

Please contact Xyratex for detailed warranty information.

\* Additional drive types and capacities will be qualified as new releases are made. For a full list of supported drives, please contact your account or sales manager.





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