



The Next Generation in High Density RAID Subsystems

Storageflex™ FF 1124U is Storageflex's High Performance Fibre/SCSI-SATA2 RAID for mission critical applications. Designed with redundancy throughout all components, Storageflex FF 1124U provides maximum Uptime for un-interrupted computing. Single or Dual Hot Swappable Active-Active Mirrored Cache RAID Controllers connects via SCSI or FC and provides Multiple Host Connectivity for up to 24 Hot Swap SATA2 Drives. Fault Tolerance Storage of up to 24TB is possible via Fibre Channel or SCSI.

Storageflex™ FF 1124U

- RAID 6 Support*
- Multi Host Connectivity – Unix, Intel & MAC Platforms
- 4 x 4Gbit Fibre Channel or 2 x Ultra320 SCSI Host Interface
- Optional Redundant Hot Swappable Active-Active RAID Controllers (Fibre Host Model only)
- Hot Swap SATA2 Disks
- Scalable Capacity up to 24TB
- Clustering Ready for Server Failover
- Online RAID Expansion
- Redundant Hot Swap Power Supplies**
- Redundant Hot Swap Cooling Fans**
- LCD panel for power, activity and fault indications**
- Remote Management with TCP-IP/SNMP/VT100
- Operating System Independent
- Rack Mountable into standard 19" Wide Rack



Entry level 1U 4 Bay Low Cost Single Power SCSI Host RAID also available in 2U 8 Bays, 2U 12 Bays or 3U 16 Bays with Redundant Hot Swap Power and Fans.



Highest Density today. 24TB in 4U! All disks can safely be removed from the front without moving the chassis! Safe to be rack mounted anywhere in the rack cabinet.

Completely Fault Tolerant!

Storageflex™ FF 1124U comes in various sizes starting from 1U 4 Bay with Single Power Supply to Redundant Hot Swappable Power Supplies and Fans in 2U 8 Bay, 2U 12 Bay, 3U 16 Bay or our highest density of 4U 24 Bays! Choice of two RAID Controllers are offered: either Single Dual Ultra320 SCSI Host Channel RAID Controller or Redundant 512MB Hot Swappable 4 x 2Gbit FC Channels RAID Controllers*. Imagine 4 servers sharing the raid without the need for a Fibre Channel Switch!

Highest Density today!

Storageflex™ FF 1124U packs up to 24 Hot Swappable SATA2 Drive Bays in as little as 4U of rack mount space. Designed for front removal of disk drives without the need to slide the unit forward at all. Storageflex FF 1124U can be safely rack mounted in even the very top portion of the rack cabinet.

*4U 24 Bay Model only, ** Not available in 1U 4 Bay Entry Level Model



Storageflex™ FF 1124U Specifications

Operating Systems:	Fibre Host Configurations: Multiple Simultaneous Operating Systems Support including Windows, VMWare, Netware 3.x/4.x/5.0/6.0, OS/2, SCO Unix, Linux (Redhat, Debian, Caldera, Turbo), BSD Unix, MAC, Sun Solaris, HP/UX, AIX, SGI IRIX and Tru64 Digital Unix. Supports all Fibre Channel hosts that adheres to the ANSI T11 Fibre Channel Specifications in Point-Point, Loop and Full Fabric Mode.
RAID Controllers:	SCSI: Single Dual Ultra320 SCSI Host Channel RAID Controller Fibre Channel: Redundant Hot Swappable 2 x 4Gbit FC Channels per RAID Controllers
RAID Controller Memory:	SCSI Host: 1U/2U: 256MB, 3U/4U 512MB expandable to 2GB ECC Fibre Channel Host: 512MB – 2GB ECC (Error Correction Code) Cache for Read and Write Operations per RAID Controller. Total of 4GB Cache Maximum with Redundant RAID Controllers
RAID Sets and Levels Supported:	Up to 16 RAID Sets in varying levels including RAID levels 0, 1 (0+1), 3, 5, 6, 10, 30, 50, 60, NRAID and JBOD
Standard Features:	Online RAID Expansion, Automated Disk Rebuild to Multiple Hot Spare Disks, Automated Disk Rebuild upon Insertion of replaced disk without user intervention, Disk Cloning, Alerts through SNMP Traps, SMTP email or to dial out to pager
Optional Features:	HBA Load Balancing and Active-Active HBA Failover Support with Host Based Software, Redundant Paths including Redundant Fibre Channel Ports, Fibre Channel Switches and Fibre Channel Host Bus Adapters, Clustering Support including Microsoft Cluster Server for NT 4.0, Microsoft Cluster Services for Windows 2000 Advanced Server, Novell High Availability Server, HPUX with MC Service Guard, AIX with HACMP, Veritas Cluster for Solaris, HP/UX, AIX and Windows, Legato Clustering for Windows, Netware and Solaris, 72 Hour Battery Backup for Mirrored Cache
System and Remote Monitoring:	Windows based software with GUI Interface for real time monitoring, configuration and reporting of RAID Controllers, Caches, Interfaces, Disks, RAID Sets, LUNs, Permissions to Logical Drives, Power Supplies and Fans' failures and degraded components over in-band Fibre Channel
Host Interface:	SCSI 1U: 1 x Ultra320 SCSI, SCSI 2U/3U/4U : 2 x Ultra320 SCSI 4U Fibre Channel: 2 x 4Gbit Fibre Channel Host Interface per RAID Controller
Drive Capacity and Performance:	SATA2: 250GB, 400GB, 500GB, 750GB or 1TB 7,200RPM with 16MB Onboard Cache SATA: 150GB 10,000RPM with 16MB Onboard Cache
Hot Swap Drive Bays:	1U: 4 Hot Swap, 2U: 8 or 12 Hot Swap, 3U: 16 Hot Swap, 4U: 24 Hot Swap
Maximum Capacity:	56TB using Hot Swap SATA2 Disks: 24 in Main FC-SATA Chassis with 2 x 16 Bay JBOD Expansion
Maximum Hosts:	SCSI 1U: 1 x Ultra320 SCSI Host, SCSI 2U/3U/4U : 2 x Ultra320 SCSI Hosts Fibre Channel: Up to 1,024 Simultaneous Hosts comprised of 8 partitions per logical drive maximum. 16 Logical Drives Maximum
Dimensions:	1U: 17.6" W x 1.75" H x 19.6" L (447mm x 45mm x 514mm) 2U: 17.6" W x 3.5" H x 19.6" L (447mm x 89mm x 514mm) 3U: 17.6" W x 5.15" H x 19.6" L (447mm x 131mm x 514mm) 4U: 17.6" W x 6.86" H x 19.6" L (447mm x 174mm x 514mm)
Power Voltage:	1U: 1 fixed power supply w/ PFC, 90 to 260VAC, 47 to 63Hz, 2V/32A 2U/3U/4U: 2 redundant hot-swappable power supplies w/ PFC, 90 to 260VAC, 47 to 63Hz, 2V/32A
Fans:	Redundant Fans per chassis. Hot Swappable on 2U/3U/4U
Temperature and Humidity:	Operating: 0°C - 40°C, 10 - 95% Humidity, Non Operating: -20°C - 60°C @ 8 – 90% Humidity
Operating Altitude & Shock:	Sea Level – 3,048 Meters Operating: 10 G or less Non Operating: 175 G or less
MTBF:	1,200,000 Hours
Safety Approvals:	CUL, FCC Class A, CE
Warranty:	90 Days Technical Support. Optional Upgrade with extended warranty backed by Advance Parts Replacement, Onsite Service 9 x 5 x Next Business Day or 24 x 7 x 4 Onsite Service.