

S/F-1630 3U-16Bays

Ultra320 SCSI-to-SATA2.0 RAID



U320 SCSI – SATA RAID System 2.0/4.0Gb Fibre – SATA RAID System

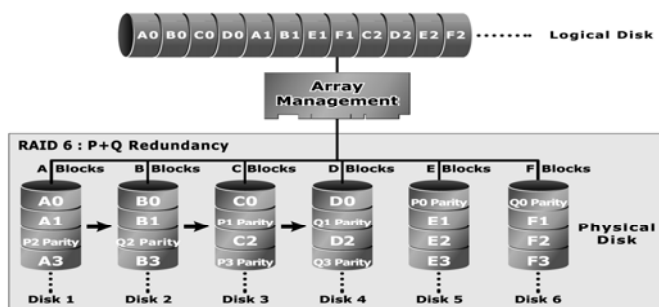
- RAID-6 / ADG, protected up to 2 disks failure
- Native & True SATA Architecture
- > 2TB for Single Volume Support (Windows 2000/XP/2003)
- ON-Line Volume Expansion (same volume)
- Fast Initialization & Fast RAID-Rebuild
- Allow Capacity Truncation for less than 1GB.
- Remote email notification for events

APPLICATIONS & MARKETS

- On-Line Mission Critical Database Server Storage
- Storage Server
- Disk-to-Disk Backup Server
- Storage for NAS & iSCSI
- Servers/Application Fail-Over Clustering
- VOD (video-on-demand), MOD (movie-on-demand), and AOD (audio-on-demand), Multimedia Streaming Server
- DVR: Security Surveillance Video Recording
- High-Definition Video recording and editing, and for Broadcasting and Entertaining business

ADG (RAID-6) offers the highest degree of data protection by dual active parity blocks (Pi & Qi) distributed on 2 different disks for each stripe while still supports HotSpare disks.

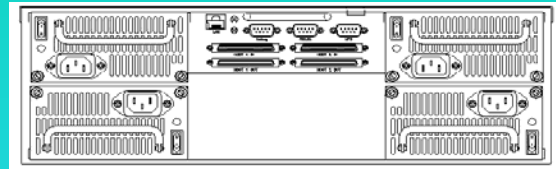
Data is safe and Operation is uninterrupted for up to **Any Two** Disks failure at the same period of time. RAID-5 has no such feature, and RAID-10 will survive only if 2 failing disks are not in the same pair.



FEATURES & BENEFITS

- 3U x 16 Bay provides highest capacity, density, and spindles per U.
- Intel 80321, 400Mhz/64bit RISC processor, 256MB DDR Cache memory, upgradeable to 1GB.
- Ultra 320 SCSI / 2Gb Fibre + SATA + DDR cache offers the very best combination of affordability, technologies and performance.
- Modular/Cable-less design for backplane, power, controller – eliminating human errors & bad workmanship; easy to maintain; consistency and quality guaranteed by design.
- **ADG** – Advanced Data Guardian (Dual Parity RAID Scheme – RAID-6) with built-in 2 separate XOR engine for mission critical server storage, **survives up to 2 disks failure at the same period of time.**
- Dual Flash ROMs with redundant firmware images guarantee the RAID controller to function.
- Support large size HDDs, up to 400GB, and +; Support all Brand Names; Support all RPMs: 5400 RPM, 7200 RPM, and 10K RPM
- **Fast RAID Initialization and Fast Rebuilt process**
- Foreground and background Initialization selectable.
- RAID array & disks Roaming between RAID subsystems
- RAID array recover function for temporary data recover
- Greater than 2TB for single volume (LUN) support for Windows 2000/XP/2003
- On-line RAID-Level Migration & On-line Volume Expansion.
- Full RAID functions – RAID level 0, 1, 3, 5, 6, 10, + HotSpare, JBOD, Multiple RAID arrays/LUNs, and supports HotSwap & Auto-Rebuild.
- Allow HDD capacity truncation after the decimal point for RAID array creation.
- OS Independent & Host Transparent.
- Email Event Notification/Alerts.
- Dual SCSI/Fibre Hosts for Server Fail-Over Clustering Support
- Utilizes **S.M.A.R.T.** features embedded with every disk from any manufacturers for bad sector and disk error handling.
- RJ-45 LAN port & RS-232 for setup & management connectivity. Web Browser UI for local & remote configuring and monitoring. No application program to install, pure Web base.
- Intuitive / Self-Explaining User Interface for ease of use
- Smart LCD display with buttons to setup and environment monitoring
- Support **SNMP traps & SNMP 2.0 MIBs with get and set commands**, allowing it to be easily incorporated into existing enterprise management infrastructures (such as HP OpenView, etc)
- **Multi-layer power conversion: AC-to-DC & DC-to-DC**; eliminating disk bad sector caused by power input fluctuation.

S/F-1630 TECHNICAL SPECIFICATION



SPECIFICATIONS	
Model Number	Ultra320-to-SATA2.0 2Gb Fibre-to-SATA2.0
Form Factor	3U, 19" Rackmount Chassis
RAID Engine	Intel 80321 Processor (64 bit/400MHz)
RAID Levels & Functions	0, 1, 3, 5, 6(ADG) & 0+1, JBOD, plus Hot-Spare, Hot-Swap, and Auto-Rebuild
Multiple RAID's / Volumes / LUNs Support	Yes, Up to 16 Array groups
RAID Foreground & Background Initialization	Yes, both are supported and selectable
Cache Memory	256GB ECC DDR Standard, Upgradeable to 1GB ECC DDR 1 x 184 pin DDR DIMM Socket
Host Channels	2 x Ultra 320 SCSI, 68 pin (2012-U3SA, SCSI model) Dual Loop 2Gb optical SFP LC connectors (2012-FSA, Fibre model)
SCSI Tagged Command Queuing	Up to 255 commands
SCSI ID Selectable	Yes
Number of Drive Bays	12 Disks
Disk Type & Interface	Serial-ATA
Large Size Disk & RPM Support	Yes, 200GB, 250GB, 300GB, 400GB and up; Support All Brand Names; Support 5400RPM, 7200RPM, and 10K RPM
Bad Sector & Disk Error Handling	Utilize S.M.A.R.T. – S elf M onitoring A nalysis and R eporting T echnology, which is implemented on all the SATA disks from all disk manufacturers.
> 2TB for Single LUN Support	Yes, for both 32Bit & 64Bit LBA OS support
On-Line Migration & Volume Expansion	Yes, support on-line RAID Level Migration and Volume Expansion
System LED Indicators & Environment Detection	RAID Busy, Power supply, Fan, Temperature & FAN, Temperature, Voltage
Individual Disk LED Indicators	Power On & Access & Error LED Indication
E-mail Events Alert	Yes, (Support all the OS base)
Remote TCP/IP Configuration and Management	Yes , built-in RJ-45 Ethernet Port, Use any Web Browser for GUI Setup and Management Support SNMP traps & SNMP 2.0 MIBs with get and set commands
Power Supply	400W, 1+1 Redundant Hot-Swap Power Supply, PFC, AC 90 ~ 260V 2 Layer Power Conversions: AC-to-DC & DC-to-DC
Cooling System	2 x Blower Fans, Individual Temperature Sensor for each Disk
Operating Temperature	5° to 55 ° C
Dimension	5.19" H x 19.13" W x 23.23" D / 88mm (H) x 486mm (W) x 590mm (D)
Weight	66LB / 30 Kg (Without H.D.D.)



Monitor- IEDC
(Intelligent Environment Detection Control)



Modularized (Unique back-plane design – no need extra cable to connect Power supply and Controller)



Easy Plug In and Out
(Convenient sliding rail design)

Function: ◀New disk auto spare ◀Host independent ◀Environment monitor ◀Online expansion
◀Continuous rebuild ◀Online consistency check ◀Failed drive auto-rebuild ◀Failed drive indicators
◀Audible alarm ◀Password protection ◀Automatic Bad-Sector & Error recovery ◀Multiple RAID selection
◀Array roaming ◀Online RAID level migration ◀Online RAID Strip Size Migration ◀Array Management
Support ◀Audible alarm, Pager and Fax, E-mail Notification ◀Monitor /GUI Port Support ◀Dual ROM-Map for
Controller Availability ◀Battery Backup Module (option)