

SAS & SATA JBOD

4U x 42 Disk SAS & SATA, up to 84TB per single box

HiPerDisk-42

Dual IO Modules Ready !

Integrated Diagnostic LCD Display

Top access to Hard Disks



The HiperDisk-42 subsystem leverages multiple LSI SAS Expander chips to provide maximum drive capacity / density and maximum throughputs. The series features high-capacity/high-density with 42 hot-swappable SAS/SATA II hard disk drive bays in a 19-inch 4U rackmount unit, scaling to a maximum storage capacity in near the 100 terabyte range, and capable of providing up to 4000MB/sec.

Feature Hi-Lites

- 🔧 Cable-less IO module and backplane(bottom-plane)
- 🔧 Menu-driven front panel display
- 🔧 Innovative Modular architecture
- 🔧 Broad range of SAS RAID controllers support.
- 🔧 Very High Capacity Density Solution yet the most cost-effective solution - best rack space and power economy and efficiency
- 🔧 Solid mechanical design and making eliminates harmonic vibration, which enhances the over all reliability and availability
- 🔧 Optional Dual IO Modules for redundant-path/path-failover, or share the box between two systems.
- 🔧 Include Interposer/MUX adapters for SATA II disks to utilize Dual IO Modules for redundant-paths.



HiPerDisk-42 Technical Specifications

Model	HiPerDisk-42	HiPerDisk-42D
Category	SAS JBOD	SAS JBOD
Form Factor	4U Rackmount	4U Rackmount
Number of IO Modules	Single IO Module	Dual / Redundant IO Modules
Host Interface (the In Port)	1 x 8088 mini-SAS Connector (4x mini SAS 3Gb/s)	2 x 8088 mini-SAS Connector, 1 on each module. (4x mini SAS 3Gb/s)
Expansion Interface (the Out Port)	1 x 8088 mini-SAS Connector (4x mini SAS 3Gb/s)	2 x 8088 mini-SAS Connector, 1 on each module. (4x mini SAS 3Gb/s)
DISK & Capacity		
- Disk Types	3Gb SAS or SATA II disks	
- Interposer/MUX	HiPerDisk-42 comes with interposer/MUX adapters for SATA II disks to support Redundant IO Modules.	
- Number of Disk	42 Disks per enclosure	
- Capacity Expansion	Up to 84 Disks using expansion chassis	
RAID Controller Architecture		
No RAID. RAID functions will be provided by the host RAID adapters, such as: LSI, Areca-1680, etc.		
Enclosure / Chassis		
Form Factor	4U Rackmount	
# of Hot Swap Trays	42	
Tray Lock	Yes	
Disk Status Indicator	Access / Fail LED	
# of PS/Fan Modules	1200W x 2 w/PFC	
# of Fans	10	
Power requirements	AC 90V ~ 254V Full Range 50Hz~60Hz	
Environmental		
Relative Humidity	10% ~ 85% Non-condensing	
Operating Temperature	10°C ~ 40°C (50°F ~ 104°F)	
Physical Dimension	810(L) x 482.6(W) x 176(H) mm	
Weight (Without Disk)	48.5 / 50 Kg	



Typical Applications for Dual IO Modules

Application-1: Redundant Path-Failover.

With SAS disks installed, when used with LSI SAS MegaRAID such as 8880EM2 or 8888ELP, it supports redundant path-failover between two SAS connections from a single SAS RAID adapter. Such function does not require any special configuration; it is natively supported by the SAS RAID adapters and the Dual IO Modules.

Application-2: Share Device between multiple controllers.

With SAS disks installed or SATA disks installed with interposer/MUX adapters, the In-port of each IO Module can connect to a different SAS RAID adapter, so some of the 42 disks can be assigned to one SAS RAID adapter and the rest be assigned to the other SAS RAID Adapter.

Be aware, this is "sharing the device", but not "sharing the disks". There is no disk that can belong to both SAS RAID adapters.

Application-3: Bandwidth Aggregation for Extreme Performance

Each IO Module can be configured as 1 x In-port or 2 x In-port. When, the IO Module is configured as "2 x In-Ports", the JBOD has total of 4 x In-Ports, and you can use up to 4 x SAS RAID Adapters in a single Host Computer, with each SAS RAID controller owns about 10 or 11 disks, and delivers about 1000MB/sec transfer rate per controller. Then, use the OS to stripe across all volumes from 4 SAS RAID controllers to achieve the extreme performance by bandwidth aggregation.