

RDL-AS42S3 RAID Subsystem RDL-JS42S3 JBOD

RAID DELUXE



4U SAS-SAS RAID Subsystem

The RDL-AS42S3 RAID Subsystem features 3 Gbit/s SAS host performance to increase system efficiency and performance. It features high capacity expansion, with 42 hot-swappable SAS/SATA II hard disk drive bays in a 19-inch 4U rackmount unit.

RAIDdeluxe's enclosure is designed for maximum expandability and flexibility. RAIDdeluxe uses only common modules. For any system to be able to meet the needs of future requirements, expandability is essential. RAIDdeluxe was designed for future expandability. Connecting one RDL-JS42S3 JBOD to the subsystem, additional 42 hot-swappable SAS/SATA II hard disk drives are possible.

With RAIDdeluxe, the power supply and fan units are enclosed within the same module. Combined with a larger module volume and a larger fan unit, a more powerful power supply can be used because of better airflow. This eliminates pockets of dead air to prevent overheating of the subsystem.

RAIDdeluxe incorporates a cableless design which means less connectors are used. Less connectors result in better signal stability. In addition, RAIDdeluxe uses high-quality connectors for maximum signal integrity. RAIDdeluxe uses an environmental control system to regulate the internal environment of the subsystem, called SES. This is useful for an easy installation and management.

Exceptional Manageability:

- The firmware-embedded Web Browser-based RAID manager allows local or remote management and configuration
- The firmware-embedded SMTP manager monitors all system events and user notification automatically
- The firmware-embedded SNMP agent allows remote to monitor events via LAN with no SNMP agent required
- Menu-driven front panel display
- Innovative modular architecture

Features:

- Areca SAS-to-SAS High-Performance RAID-Controller
- Up to 784 MB/s Data-Transfer-Rate (write)
- Supports RAID levels 0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD
- RAID level 6 provides the highest level of data protection
- 2x miniSAS x4 host ports (3Gbit/s)
- SAS-Expansion port for additional JBOD
- Supports online array roaming
- Online RAID level/stripe size migration
- Online capacity expansion and RAID level migration simultaneously
- Online volume set expansion
- Supports multiple array enclosures per host connection
- Supports greater than 2TB per volume set
- Supports up to 128 LUNs
- Transparent data protection for all popular operating systems
- Instant availability and background initialization
- Supports S.M.A.R.T. NCQ and OOB staggered spin-up capable drives
- Local audible event notification alarm
- Supports password protection and UPS connection
- Serial port interface for remote event notification
- Redundant flash Image for high availability
- Low power consumption (425W with 42x Seagate ST3500320NS)

Technical Specifications

RAID DELUXE

Model	RDL-AS42S3	RDL-JS42S3
RAID Controller	Areca SAS-SAS (up to 784 MB/s write)	JBOD
Controller	Single	Single
Host Interface	Two miniSAS x4 (3Gbit/s)	miniSAS x4 (3Gbit/s)
Disk Interface	SAS 3Gbit/s or SATA II	SAS 3Gbit/s or SATA II
SAS expander	miniSAS x4 (3Gbit/s)	miniSAS x4 (3Gbit/s)
Capacity		
- Direct Attached	42 Disks	42 Disks
- Expansion	Up to 84 Disks	Refers to Controller specification
Processor Type	Intel IOP341 64-bit	-
Cache Memory	512MB ~ 4GB DDR-II ECC SDRAM	-
Battery Backup	Optional	-
Management Port support	Yes	-
Monitor Port support	Yes	Yes
RAID Features		
RAID level	0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD	-
Array Group	Up to 128	-
LUNs	Up to 128	-
Hot Spare	Yes	-
Drive Roaming	Yes	-
Online Rebuild	Yes	-
Variable Stripe Size	Yes	-
E-mail Notification	Yes	-
Online capacity expansion, RAID level /stripe size migration	Yes	-
Online Array roaming	Yes	-
Online consistency check	Yes	-
SMTP manager and SNMP agent	Yes	-
Redundant Flash image	Yes	-
Instant availability and background initialization	Yes	-
S.M.A.R.T. support	Yes	-
Bad block auto-remapping	Yes	-
Enclosure		
Platform	Rackmount	Rackmount
Form Factor	4U	4U
# of Hot Swap Trays	42	42
Tray Lock	Yes	Yes
Disk Status Indicator	Access /Fail LED	Access /Fail LED
Backplane	SAS / SATA II Single BP	SAS / SATA II Single BP
# of PS/Fan Modules	1 100W x 2 w/PFC	1 100W x 2 w/PFC
# of Fans	11	10
Power requirements	AC 90V ~ 254V Full Range 50Hz~60Hz	AC 90V ~ 254V Full Range 50Hz~60Hz
# 42 x Seagate ST3500320NS	425W	410W
# 42 x Hitachi HDE721010SLA330	460W	440W
# 42 x Seagate ST3600002SS	510W	485W
Environmental		
Relative Humidity	10%~85% Non-condensing	10%~85% Non-condensing
Operating Temperature	10°C~40°C (50°F~ 104T)	10°C~40°C (50°F~ 104T)
Physical Dimension	810(L) x 482.6(W) x 176(H) mm	810(L) x 482.6(W) x 176(H) mm
Weight (Without Disks)	50kg	50kg

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