

**8 Gb Fibre-Channel to SAS / SATA II**

**3 Gb SAS to SAS / SATA-II**

## **RDL-AD24/AS24 RAID Subsystem**

**with dual / single controller and SAS expansion port**



The RDL-AD24(dual controller)/AS24(single controller) RAID Subsystem features high host performance to increase system efficiency and performance. It features 24 hot-swappable 2.5 SFF SAS/SATA II hard disk/SSD drive bays in a 19-inch 2U rack-mount unit. The ability to mix drives allows the RAIDdeluxe to be used for a range of applications that require different price/performance characteristics. Cost-effective SATA drives can be selected for capacity oriented storage. Higher specification SSD/SAS drives can be employed for I/O intensive applications.

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. By connecting one or more RDL-JD24/ JS24 JBODs to the subsystem, additional 24 hot-swappable SAS/ SATA II hard disk/SSD drives are possible per JBOD.

With RAIDdeluxe, the power supply is directly cooled for 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.

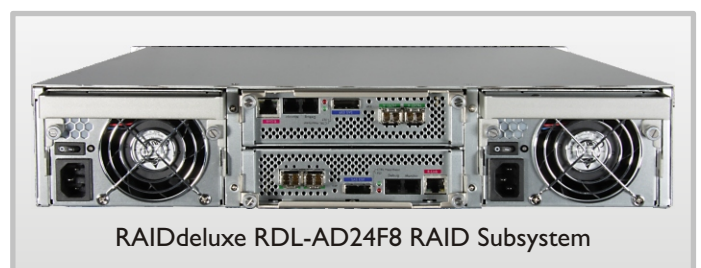
### **Exceptional Manageability:**

- 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 RAID-Controller
- 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
- Host ports (depends on model):
  - 4x 8 Gb Fibre-Channel (dual controller)
  - 2x 8 Gb Fibre-Channel
  - 4x 3 Gb SAS x4 (dual controller)
  - 2x 3 Gb SAS x4
- SAS-Expansion ports for additional JBODs
- 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 2 TB 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
- Supports MAID 2.0 for 20%~60% power savings
- 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



## Technical Specifications

# RDL-AD24/AS24 RAID Subsystem

## with dual / single controller and SAS expansion port

Model	RDL-AD24F8-R2/AS24F8-R2	RDL-AD24S3-R2/S24S3-R2	RDL-JD24S3-R2/JS24S3-R2
Areca RAID Controller	Fibre-Channel-to-SAS	SAS-to-SAS	JBOD
Controller	Dual/Single	Dual/Single	Dual/Single
Host Interface	4/2x 8 Gb FC	4/2x 3 Gb SAS x4	4/2x miniSAS x4 (3 Gb)
Disk Interface	3 Gb SAS/SATA II	3 Gb SAS/SATA II	3 Gb SAS/SATA II
SAS expander	2/1x miniSAS x4	2/1x miniSAS x4	2/1x miniSAS x4
Capacity			
- Direct Attached	24x 2.5 SFF Disks/SSDs	24x 2.5 SFF Disks/SSDs	24x 2.5 SFF Disks/SSDs
- Expansion	Up to 96 Disks	Up to 96 Disks	Refers to Controller specification
Processor Type	Intel IOP341 64-bit	Intel IOP341 64-bit	-
Cache Memory DDR-II SDRAM	512 MB~4 GB	512 MB~4 GB	-
Battery Backup	Optional	Optional	-
Management Port support	Yes	Yes	-
Monitor Port support	Yes	Yes	-
RAID Features			
RAID level	0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD	0, 1, 0+1, 3, 5, 6, 30, 50, 60 and JBOD	-
Array Group	Up to 128	Up to 128	-
LUNs	Up to 128	Up to 128	-
RAID Sets	Up to 32 Disks	Up to 32 Disks	-
Multiple RAID Selection	Yes	Yes	-
Hot Spare	Yes	Yes	-
Drive Roaming	Yes	Yes	-
Online Rebuild	Yes	Yes	-
Variable Stripe Size	Yes	Yes	-
E-mail Notification	Yes	Yes	-
Online capacity expansion, RAID level /stripe size migration	Yes	Yes	-
Online Array roaming	Yes	Yes	-
Online consistency check	Yes	Yes	-
SMTP manager and SNMP agent	Yes	Yes	-
Redundant Flash image	Yes	Yes	-
Instant availability and background initialization	Yes	Yes	-
S.M.A.R.T. support	Yes	Yes	-
MAID 2.0	Yes	Yes	-
Bad block auto-remapping	Yes	Yes	-
Operating System			
OS independent	Yes	Yes	-
Enclosure			
Platform	Rackmount	Rackmount	Rackmount
Form Factor	2U	2U	2U
# of Hot Swap Trays	24	24	24
Tray Lock	Yes	Yes	Yes
Disk Status Indicator	Access/Fail LED	Access/Fail LED	Access/Fail LED
Single Backplane	SAS/SATA-II	SAS/SATA-II	SAS/SATA-II
# of PS with Fan Modules	2x 400 W	2x 400 W	2x 400 W
Power requirements	AC 90 V~265 V 47Hz~63Hz	AC 90 V~265 V 47Hz~63Hz	AC 90 V~265 V 47Hz~63Hz
Environmental			
Relative Humidity, non condensing	10%~85%	10%~85%	10%~85%
Operating Temperature	10°C~40°C	10°C~40°C	10°C~40°C
Physical Dimension (WxHxL)/mm	448 x 89 x 559	448 x 89 x 559	448 x 89 x 559
Weight (Without Disks)	15/14 kg	15/14 kg	15/14 kg