

ARC-73xx SAS JBOD Storage Enclosures

To meet growing needs for storage capacity and performance, Areca Enterprise-class 12Gb/s SAS JBODs solutions add capacity quickly, and easily to meet growing storage demand. It can scale and expand host system configurations on your existing storage systems to support an on demand environment by helping to enable storage to grow as demands increase. The intelligent cooling continuously adapts to environmental conditions by automatically controlling the speed of cooling fans. As a result, the fan reduces noise to a minimum, almost imperceptible level. Whisper-Quiet Low Sound Levels operation, make the ARC-73xx series JBOD well suited for video/audio applications, without impacting the work environment.



Key Features

- 2U-12, 3U-16 and 4U-24 form factor featuring hot-swappable drives bays
- Redundant hot-swappable fan modules, power modules
- Activity / Fault LEDs for each individual drive carrier
- Three 12Gb/s SFF-8644 connectors for connection to host or expansion to additional JBOD enclosures
- LCD Control Panel support for easy interactive with module
- CLI through out-of-band RS-232 serial port
- SES-3 over in-band SAS for enclosure management
- Supports any mix of 12Gb/s, 6Gb/s and 3Gb/s SATA and SAS hard drives and SSDs for greater flexibility

Scalable and Expandable Storage for Data Demands

This JBOD storage enclosure solution delivers industry-leading data performance, availability, storage density, and upgradeability to meet customers' demanding and growing storage needs. Daisy-chains longer than the limitation of subsystems are not supported even if it may be workable. And because these JBOD enclosures are managed by the SAS RAID controller or SAS host adapter in the primary server, they give IT administrators a flexibility way to respond and meet their storage demands. The 12Gb/s SAS JBOD storage from Areca is always affordable for customers to scale up and down rapidly, handle rich data, and have always-on capability. Simply connect ARC-73xx JBODs to the external interface and offer the benefits of more storage. To scale further, cascade additional JBODs to your host controller to continue to increase storage capacity and performance, all without powering down your system. It is especially useful for large data applications, such as video surveillance, data archiving, and TV broadcast storage.

SAS for Maximum Scalability

The ARC-73xx series JBOD incorporates LSI DataBolt bandwidth optimizer technology to buffer 6Gb/s data and then transfers it out to the host at 12Gb/s speeds in order to match the bandwidth between faster hosts and slower SAS or SATA devices. Applications can be optimized for cost/performance through the use of both SAS and SATA drive types. High performance architecture sets new boundaries of industry performance expectations: 12Gb/s SAS (1.2 GB/s

bandwidth per physical link) 6.0Gb/s SATA (600MB/s bandwidth per physical link). Each ARC-73xx JBOD enclosure supports three 12Gb/s SFF-8644 connectors for SAS host and expansion connections. Configuration and environmental information is accessible either via in-band SAS or out-of-band serial port.

Rack-Optimized Enterprise-level Storage Enclosure

The ARC-73xx JBOD enclosures provides a 2U/3U/4U rack-mounted external storage enclosure capable of accommodating up to 12, 16 or 24 12.0Gb/s, Serial-Attached SCSI (SAS) drives or 6.0Gb/s Serial ATA (SATA) drives. The ARC-72xx series JBODs support both 2.5" and 3.5" drives and offer a high-quality, cost-effective alternative for adding more storage to existing servers. The ARC-73xx JBOD enclosures are designed with an integrated ARM Cortex-R4 processor for topology management functions such as discovery, enclosure and drive management, and LED management. Constant access to critical data is available with fully redundant, power supplies and cooling fans, which are all field replaceable by the customer. Also, with LED status on the expander module and each individual drive carrier, all system components are closely monitored to help your business continuity and running in the event of a component failure or disruption. An intuitive LCD control panel at ARC-73xx JBOD enclosures allow users and administrators to easy do enclosure monitoring, expander configuration, troubleshooting and maintenance.

Model Name	ARC-7312R2	ARC-7316R3	ARC-7324R4
			
Form Factor	2U-12 bays 19-inch rackmount chassis	3U-16 bays 19-inch rackmount chassis	4U-24 bays 19-inch rackmount chassis
Single Ctrl Model No.	ARC-7312JS-TR2	ARC-7316JS-TR3	ARC-7324JS-TR4
I/O Interface			
External Interface	Three 12Gb/s SFF-8644 connectors; connection to host or expansion to additional JBOD enclosures		
Drive Channel per Enclosure	Up to 12 x 3.5"/2.5" HDDs or SSDs	Up to 16 x 3.5"/2.5" HDDs or SSDs	Up to 24 x 3.5"/2.5" HDDs or SSDs
Disk Bus Interface	<ul style="list-style-type: none"> • 12Gb/s SAS or 6Gb/s and 3Gb/s SAS/SATA HDDs/SSDs • Supports any mix of SATA and SAS HDD or SSDs for greater flexibility 		
Enclosure Management			
Expander Processor	ARM Cortex-R4 processor		
Management Interface	CLI through out-of-band RS-232 serial port		
LED Indicators	<ul style="list-style-type: none"> • Activity / Fault for each individual drive carrier • Activity/ Link for each external I/O port • Normal / Fault for each power supply 		
Enclosure Management Protocols	SES 3.0 via inband SAS SMP protocol		
Mechanical Specification			
Power Supply/In/out	<ul style="list-style-type: none"> • Redundant and hot-swappable 550W x2 with PFC and energy-efficient 80Plus Platinum Compliant. • Supports 100-240VAC input at 47 and 63Hz frequency 		
Cooling	Dual cooling fans		Quad cooling fans
Environment	<ul style="list-style-type: none"> • Temperature: 0 to 40°C Operating: -40 to 60°C non-operation • Relative humidity: 5 to 95% non-condensing, operating and non-operating 		
Dimensions (H x W x D)	<ul style="list-style-type: none"> • Without handles 88.2 x 445 x 448 mm (3.5 x 17.5 x 17.6 in) • With handles 88.2 x 482 x 484 mm (3.5 x 18.9 x 19.0 in) 	<ul style="list-style-type: none"> • Without handles 132.6 x 445 x 448 mm (5.2 x 17.5 x 17.6 in) • With handles 132.6 x 482 x 484 mm (5.2 x 18.9 x 19.0 in) 	<ul style="list-style-type: none"> • Without handles 176.4 x 445 x 448 mm (6.9 x 17.5 x 17.6 in) • With handles 176.4 x 482 x 484 mm (6.9 x 18.9 x 19.0 in)
Weight (W/O Drives)	26.5 kg (58.4 lb)	30.5 kg (67.2 lb)	34 kg (74 lb)