

12Gb/s SAS JBOD Storage Enclosures

To meet growing needs for storage capacity and performance, Areca simple modular 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. Areca ARC-92xx series JBODs support both 2.5" and 3.5" drives and offer mix-and-match SAS and SATA hard drives, lets you deploy drive technology as needed to fit your computing environment.



Keyfeatures

- 2U-12, 3U-16 and 2U/4U-24 form factor featuring hot-swappable drives bays
- Redundant hot-swappable SAS expander I/O modules, power with cooling fan modules
- Activity / Fault LEDs for each individual drive carrier
- Single JBOD I/O module with optional upgrade to dual SAS I/O modules
- Three 12Gb/s SFF-8644 connectors for connection to host or expansion to additional JBOD enclosures
- Hot swap and redundant components for increased system availability
- 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. The total drive numbers depend on the RAID controller or the host adapter firmware ability. 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 flexibilities way to respond and meet their storage demands. New 12Gb/s SAS JBOS storage from Areca is always affordable for customers to scale up and down rapidly, handle rich data, and have always-on capability.

SAS for Maximum Scalability

The ARC-92xx 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-92xx 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 SAS-to-SAS 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 enclosure can support 3.5-inch disk drives with capability for 2.5-inch disk drives. The dual active/active models provide fault-tolerant links across separate SAS domains, while the Single JBOD I/O module provides a single, straight-through data path. If your enclosure has two expander modules and you are installing SATA disk drives, an interposer board is required so that both expander modules can access the SATA disk drives. Constant access to critical data is available with fully redundant, hot-swappable expander module and power supplies with two 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.

Model Name	ARC-9212R2	ARC-9216R3	ARC-9224R2	ARC-9224R4
				
Form Factor	2U-12 bays 19-inch rackmount chassis	3U-16 bays 19-inch rackmount chassis	2U-24 bays 19-inch rackmount chassis	4U-24 bays 19-inch rackmount chassis
Single Ctrl Model No.	ARC-9212JS-TR2	ARC-9216JS-TR3	ARC-9224JS-TR2	ARC-9224JS-TR4
Dual Ctrl Model No.	ARC-9212JD-TR2	ARC-9216JD-TR3	ARC-9224JD-TR2	ARC-9224JD-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 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				
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"> • Dual 595W hot swap and redundant with PFC, N+1 design • AC voltage: 120VAC @ 6.18A to 230VAC @ 3.23A with PFC (auto-switching) • Supports 100-240VAC input at 47 and 63Hz frequency 			
Cooling	Two Cooling fans housed within each power supply unit			
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 506 mm (3.2 x 17.5 x 19.9 in) • With handles 88.2 x 482 x 542 mm (3.2 x 22.9 x 21.3 in) 	<ul style="list-style-type: none"> • Without handles 132.6 x 445 x 506 mm (5.2 x 17.5 x 19.9 in) • With handles 132.6 x 482 x 542 mm (5.2 x 22.9 x 21.3 in) 	<ul style="list-style-type: none"> • Without handles 88.2 x 445 x 470 mm (3.2 x 17.5 x 18.5 in) • With handles 88.2 x 482 x 506 mm (3.2 x 22.9 x 19.9 in) 	<ul style="list-style-type: none"> • Without handles 176.4 x 445 x 506 mm (6.4 x 17.5 x 19.9 in) • With handles 176.4 x 482 x 542 mm (6.4 x 22.9 x 21.3 in)
Weight (W/O Drives)	<ul style="list-style-type: none"> • Single: 26.5 kg (58.4 lb) • Dual: 27 kg (59.5 lb) 	<ul style="list-style-type: none"> • Single: 30.5 kg (67.2 lb) • Dual: 31 kg (68.3.5 lb) 	<ul style="list-style-type: none"> • Single: 27.5 kg (60.6 lb) • Dual: 28 kg (61.7 lb) 	<ul style="list-style-type: none"> • Single: 34 kg (74 lb) • Dual: 35 kg (77 lb)



▲ Front Side of ARC-9224-24bays



▲ Rear Side of ARC-9224-24bays

areca® 8F., No.22, Lane 35, Ji-Hu Rd., 114 Taipei, Taiwan, R.O.C.
 TEL: 886-2-87974060 FAX: 886-2-87975970
<http://www.areca.com.tw>
 Technical Support: support@areca.com.tw
 Sales Information: sales@areca.com.tw



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