

2U 24-BAY ABILITY® EBOD SSD/SAS JBOD (FLASH ARRAY)

Cost-Effective Enterprise-Class Flash Array

The Ultra-Dense 2U 24-Bay 12 Gb/s Ability EBOD (Enterprise-Class JBOD) supports SAS/SATA 2.5 SSDs and has the ability to deliver 24GB/s over [12] 12Gb SAS wide ports while ingesting data. With the addition of a 12 Gb SAS back plane in the Ability Flash appliance, the increased performance of 12Gb SAS SSD can be delivered. The throughput and IOPs performance is governed by the speed and the number of SSDs used, not by any limitation imposed by the EBOD.

**2U (24) 2.5" NCM/PCIe Drives**

The RAID Inc., 2U 24-Bay NVMe/PCIe Ability Flash Array has twenty-four (24) 2.5" drive bays supporting 25W SSDs. The 2U 24-Bay NVMe/PCIe Ability Flash Array can provide high bandwidth/low latency access for up to 24 servers. The 2U 24-Bay NVMe/PCIe Ability Flash Array also provides support for dynamic configuration of SSDs to servers when supported by drivers, OS, and processors.

Developed as a high performance, flexible system for tier-one primary storage applications requiring high I/O, high-bandwidth and/or sub-millisecond latency in a small form-factor.

Flash Storage Array Offers Unparalleled Performance

Fully leverages the greater speed of PCIe SSDs compared to SAS / SATA SSDs, the 2U 24-Bay NVMe/PCIe Ability Flash Storage Array is the first product in its class to achieve greater than 15M IOPs with sub-millisecond latency in a 2U form factor (4K read blocks). Provides full bandwidth up to 24 servers (x4 PCIe gen3 – 768 Gb/s full duplex).

Dual-Port Access to NVMe Drives

The 2U 24-Bay NVMe/PCIe Ability Flash Array's unique architecture provides dual-port access to NVMe/PCIe drives providing redundant paths to the SSD.

Flash Array w/Hot-Swap Functionality NVMe Drives

The 2U 24-Bay NVMe/PCIe Ability Flash Array architecture supports drive hot-swap without taking the unit or any other drives off-line.

Dual I/O Modules

Dual I/O Modules provide switching to configure the SSDs in the 2U 24-Bay NVMe/PCIe Ability Flash Array. The I/O Modules provide redundancy for both data plane and data center management connectivity.

Product Highlights

- 2U (24) 2.5" NVMe/PCIe Drives
- (6) 12Gb/sec high performance SAS ports per enclosure
- Performance of 15M IOPS
- Dual-port Access
- Hot Swap Functionality NVMe Drives
- Flexibility to choose SSD or SAS to achieve the right performance, reliability and price
- Robust enterprise-grade availability, reliability and serviceability

2U Rackmount Enclosure	<ul style="list-style-type: none"> • Dimensions: 89mm (2U) h x 446mm (19" rack) W x 650mm D) • Weight for RAID, Inc. 2U 24-Bay NVMe/PCIe Ability Flash Array w/ 24 SSDs Single Shipping Pack: 80 lbs. typical • Weight for RAID, Inc. 2U 24-Bay NVMe/PCIe Ability Flash Array w/o SSDs for Rack Installation: 65 lbs. typical (no rail kit, drives, or carriers)
Power Requirements	<ul style="list-style-type: none"> • Input voltage: Auto raging, 90-264V AC 47-63 Hz
Environmental/Temperature Ranges	<ul style="list-style-type: none"> • Temperature: 5° to 35°C • Temperature gradient: 20°C per hour • Relative humidity: 10 to 80 percent
Hot-Swap Field Replaceable Units	<ul style="list-style-type: none"> • 24 independent PCIe gen3 NVMe SSDs with interposer and carrier • 1+1 redundant 1100W power supplies • 7+1 redundant fans
Monitoring and Reporting	<ul style="list-style-type: none"> • Monitoring for temperature, power supplies and fans including fan speed control, SSDs and I/O Modules • Automatic enclosure management failover between redundant Service Processors • 1GbE datacenter management connection – RJ45 • Web-based (HTTPS) host interface
Safety Standards	<ul style="list-style-type: none"> • Web-based (HTTPS) host interface
Drive Configuration	<ul style="list-style-type: none"> • Three logical groups of eight SSDs • Flexible configuration • Full bandwidth: Each SSD on an individual 2U 24-Bay NVMe/PCIe Ability Flash Array x4 port • Maximum Capacity: Eight SSDs on a 2U 24-Bay NVMe/PCIe Ability Flash Array x4 port • One to eight ports to a single server
Host Adaptor Card	<ul style="list-style-type: none"> • 2U 24-Bay NVMe/PCIe Ability Flash Array: 24 x2 PCIe gen3 x4 ports • 24 on each IO Module • Mini-SAS HD cables • HHL PCIe x8 card for host server • Four x4 Mini-SAS HD ports • Allows full bandwidth or over provisioned configurations
Other	<ul style="list-style-type: none"> • Individual SSD power control

About



RAID Inc. was founded in 1994 to deliver end-to-end performance-driven technical computing and storage solutions. The company has earned industry praise for providing platform agnostic technical guidance in high performance computing (HPC), big data, cloud and software-defined data centers—in the most efficient, reliable and cost effective manner. The world’s leading research facilities, government, life science, financial, healthcare, energy, and cloud service providers can leverage our team of engineers’ extensive academic, research lab and commercial expertise that makes RAID Inc. a trusted industry leader. For more information, visit our website www.raidinc.com or call 1.800.330.7335.