

# 4U Flash Storage Array (FSAn-4R)

## FEATURES

- 4U MIL-STD ruggedized system
- Supports high-density PCIe NVMe flash, up to 400TB usable
- Four lightweight removable data canisters with capacities up to 100TB
- Each data canister weighs less than 6.5lbs
- Supports up to 5 million IOPS
- Provides up to 25 GB/second throughput
- Supports four 100Gb/s EDR Infiniband, 100Gb/s Ethernet or 32Gb FC interfaces
- Supports iSCSI, FC and SRP protocols
- IPMI system management
- Supports OSS ION Accelerator™ SAN software



The high-performance, field-ready FSAn-4R (Ruggedized) NVMe All-Flash Array provides a new level of performance for applications such as real-time HPC, high-speed data recording, analytics and big data. The storage system is used for acceleration of mission-critical, high-performance databases, Hadoop clusters and HPC applications with large data sets. The FSAn-4R can be deployed in harsh environments such as broadcast trucks, ground stations and surveillance aircraft. It provides a quantum leap in performance and application flexibility by integrating the highest performance PCIe NVMe flash with PCIe 3.0 x8 lanes for double the bandwidth of today's 2.5" U.2 NVMe drives. In addition, it includes features such Follow Me technology to allow RAID volumes to be hot swapped and migrated across systems using the four, front-loadable, removable data canisters. Each canister has a capacity of up to 100TB and weighs under 6.5 lbs.

## SPECIFICATIONS

System	
Dimensions	7"H x 17"W (19" rackmount) x 24"D
System Weight	76lbs
Form Factor	4U rack mount, front rack ears, rear dagger pins
System Useable Capacity*	Up to 400TB PCIe NVMe flash
Data Canister Capacity:	0TB, 25TB, 50TB or 100TB using x4 or x8 PCIe Gen3 HDDL NVMe drives
Data Canister Weight:	2.5 lbs (0TB), 4.6 lbs (25TB) or 6.5 lbs (50/100TB)
Ancillary Drives	Up to 6 x 2.5" SATA SSDs, front loaded, hot-swap capable
Controller	Dual Intel Xeon™ E5 or Intel Gold Scalable Architecture Processors
Software	OSS Ion Accelerator SAN loaded on internal, secure disk-on-module Other SAN/NAS software options available (such as read-only Operating Systems & NVMe-oF)
Chassis	Anodized Aluminum
Power	Rear Power Supply Input: 100-250VAC (47-63 or 400Hz) or 200-370VDC 2+1, hot-swap power system up to 1600W
LEDs	Front Status LEDs displaying SSD drive activity
Network Inputs	4x Ethernet & Infiniband up to 100Gb, 4x FibreChannel up to 32Gb Other sensor inputs available using FPGA input modules for sensors, radar, digital, analog I/O, etc.

## SPECIFICATIONS CONTINUED

System Monitoring	IPMI system monitoring capabilities
Environmental Temperature	Operating: 0°C to 35°C Storage (non-operating): -40°C to 71°C -500 to 10,000ft Altitude with rapid decompression
Environmental Humidity	Operating: 5% to 95% non-condensing Storage (non-operating): 5% to 100% condensing, after drying
Shock	Transport (non-operating): ±10g, 11msec, half-sine pulse, 3 shocks per axis each direction
Vibration	Operational: 5-2000 Hz, .00004-.015 g2/Hz Non-Operational: 5-2000 HZ, .00015-.06 g2/Hz Transportation in optional transport case: 15-2000 Hz, .01-.3 g2/Hz
Standards	Tested to MIL-STD-810F, MIL-STD-461E, MIL-STD-464A, MIL-STD-704E, conformal coated

\* Usable capacity refers to the approximation of the storage capacity that users can have. The accurate usable capacity may vary depending on software configurations and other factors.