

2U Ion Accelerator Flash Storage Array

FEATURES

- Ultra-low latency with Ion Accelerator 6.1.0 software
- 2U rackmount design
- 24 2.5" hot-swap NVMe drive bays
- System health monitoring
- 1600W redundant power supplies



With game-changing performance, density and fault tolerance, this 2U NVMe storage array offers flexible capacity while maintaining the high-bandwidth and low-latency pedigree of Ion Accelerator™ arrays deployed in hundreds of global installations. This OSS Shared Flash Storage Array boasts the latest Ion Accelerator 6.1.0 software, NVMe drives, networking options and CPU options. Include PCIe 4 single socket AMD Epyc or dual Intel® Xeon® Scalable Processors needed to support the most demanding applications. Multiple high-speed networking options allow this array to fit seamlessly into Fibre Channel (up to 32 Gbps), iSCSI (up to 100 Gbps) or InfiniBand (up to 100 Gbps) deployments. Twenty-four 2.5" NVMe drives expand the capacity of the Ion Accelerator up to 307TB. The low overhead of the Ion software allows the system to deliver near bare-metal performance from the latest NVMe technology flash drives along with the reliability and data integrity required in mission-critical enterprise applications.

Ion Accelerator Architecture

Developed over the last 8 years for pure performance, OSS Ion Accelerator 6.1.0 design incorporates a streamlined, innovative software stack that eliminates bottlenecks, taking advantage of near-native NVMe flash performance.

- Enables NVMe flash to be shared storage for database acceleration
- Delivers sub 100 microseconds latency for random workload acceleration
- Efficient density with incremental scalable storage of up to 307TB of front removable NVMe capacity in 2U space
- Balanced PCIe internal switched fabric architecture scales performance with capacity by directing data from network interface slots to flash without protocol translation used by other systems

Accelerated Support

The Ion Accelerator 6.0 FSA comes with full systems support from a single point of contact under a single contract.

- 24/7 support for the server, drives, NICs and Ion Accelerator software with 1 hour response times for Severity 1 issues.
- One to 5 year support and warranty contracts with advanced replacement available.
- Inquire about custom support services and OEM server Ion Accelerator options from the world's most popular server OEMs. To learn which servers are compatible, please contact your OSS sales representative.

SPECIFICATIONS

System	
Enclosure	2U rackmount (17.2" x 3.5" x 27.76") Net weight 36 lbs. Supports up to 24 total 2.5" NVMe hot-swap main-storage drives
Networking Options	iSCSI via 4x 100Gbps Ethernet ports SRP via 4 x 100Gbps Infiniband ports FC via 8 x 32Gbps Fibre Channel ports IPMI via 1x 1Gbps Ethernet port NVMeOF-TCP/IP and RDMA
CPU	Dual socket P+ (LGA 4189) Intel® Xeon® Scalable Processors Supports Embedded CPUs AMD Socket SP3 supports AMD EPYC™ 7003 and 7002 series Processors
Software	Ion 6.1.0 Storage Accelerator Software <ul style="list-style-type: none"> • Sub 100 µs latency • Over 5M IOPS (4KB) • High Availability option with synchronous replication • RAID 0, 5, 6, 10 IPMI 2.0 with virtual media over LAN, KVM over LAN
Power/Cooling	1600W 1+1 redundant power supplies with PMBus 4 heavy duty 8cm PWM fans with tachometer, status monitoring
Ordering Options	OSS-FSAn-2D-Ion-026TB-xx 26TB Ion Accelerator FSA OSS-FSAn-2D-Ion-103TB-xx 103TB Ion Accelerator FSA OSS-FSAn-2D-Ion-307TB-xx 307TB Ion Accelerator FSA xx = Networking option FC, IB or EN

CPU	Intel 3rd Gen Xeon Ice Lake Processor up to 270W TDP, LGA 4189 dual socket P+
Memory	DDR4, ECC, 4TB MAX, 64Gb, 128Gb, 256Gb, 512Gb, 1TB, 2TB 2933MHz, 2666MHz, 2400MHz, 2133MHz
Slots	6x PCIe 4.0 x16 HHFL slots, 1 x PCIe 4.0 x8 HHFL slot
USB	5 USB 3.0 with 2 on rear panel, 2 on front panel and 1 Type A internal, 4 USB 2.0 with 2 on rear panel and 2 internal headers
Ethernet	iSCSI via 4x 100Gbps Ethernet ports, SRP via 4 x 100Gbps Infiniband ports, FC via 8 x 32Gbps Fibre Channel ports, IPMI via 1x 1Gbps Ethernet port , NVMeOF-TCP/IP and RDMA
Main Storage	NVMe configuration: 24x hot-swap NVMe x4 2.5" x 15mm drive carriers
Storage Sub system	2x M.2 x4, 4x NVMe internal drive connections possible with jumper option
GPU	
Size	3.45" H x 17.2" (19" with rack ears) W x 28" D
Construction	Steel
Weight	33-48lbs
Cooling	Four 80mm x 38mm PWM hot-swap Cooling fans
Hold-down Bar	No
Fan Filters	Yes
Link Speed	Up to 128 GB/s
Power Supplies	Dual 1000W 90-264VAC, 47-63Hz Input
Power Consumption	
Operating Temperature	5°C to 35°C (41°F to 95°F)
Operational Humidity	5% to 90% non-condensing relative humidity, max dew point 21°C, max rate of change 5°C/hr
Operational Altitude	0 to 915m (3,000ft) altitude
Storage Temperature	20°C to 60°C (-40°F to 140°F)
Storage Humidity	5% to 90% non-condensing relative humidity, max dew point 21°C, max rate of change 5°C/hr
Configurations	OSS-FSA-2D-Ion-026TB-xx 26TB Ion Accelerator FSA OSS-FSA-2D-Ion-103TB-xx 103TB Ion Accelerator FSA OSS-FSA-2D-Ion-307TB-xx 307TB Ion Accelerator FSA xx = Networking option FC, IB or EN
Regulatory	Tested to conform to the following standards: FCC - Verified to comply with Part 15 of the FCC Rules, Class A Canada ICES-003, issue 4, Class A CE Mark (EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3) CISPR 22, Class A