



DATA SHEET—FINAL VERSION

Resilient. Fast. Efficient.

# Exos<sup>®</sup> CORVAULT Self Healing Storage



Exos<sup>®</sup> CORVAULT Self Healing Storage redefines petabyte-scale storage infrastructure with industry-leading innovation in every aspect of the system.



## Product Highlights

- Effortlessly expand capacity with 1.9PB (raw) in a maximum-density enclosure.
- Accelerate data access with performance up to 14GB/s sequential read, 12GB/s sequential write and 17,680 IOPS.
- Specially-tuned modular chassis maximizes drive performance and longevity by protecting against vibrational and acoustic interference, heat, and power irregularities.
- Engineered and manufactured by Seagate for tightly-integrated, highly-compatible and predictable performance.
- Capacity, reliability and speed - perfect for any macro-edge or core data center.

## Key Advantages

**Introducing a new category of intelligent storage.** Exos CORVAULT delivers sophisticated data protection, security and streamlined management to tackle the challenges of an exascale world.

**Reliable and Self-healing.** Field-proven design with five-nines (99.999%) availability. Autonomous Drive Regeneration (ADR) reduces human intervention and e-waste by automatically renewing hard drives "in situ" and on the fly.

**Hyperscale-class efficiencies.** Combining maximum data density of 1.9PB in 4U with the latest hard drive technology delivers storage efficiencies similar to cutting-edge cloud service providers.

**Architected for speed and resilience.** Redundant active-active controllers powered by the 6th gen VelosCT ASIC and ADAPT erasure code data protection software dramatically streamline overhead, throughput, management and recovery.

**Powerful configuration and management.** One-button configuration accelerates deployment while informative remote diagnostics and non-disruptive system updates simplify maintenance.

**Seagate Secure built in.** Hard drives are self-encrypting (SED) for maximum security without controller-level overhead. SFTP for secure file transfer. Optional FIPS 140-3 configuration.



Specifications	
Controllers	Redundant, active-active, hot-swappable controllers powered by 6th gen VelosCT ASIC
System Performance	14 GB/s sequential read throughput, 12 GB/s sequential write throughput, 17,680 IOPS
Device Support	Up to 106 Exos <sup>®</sup> X18 self-encrypting SAS HDDs
Data Protection	Seagate ADAPT erasure coding -or- RAID 5, 6
Self healing technology	Autonomous Drive Regeneration (ADR)
Hot-Swappable Components	Eight removable expander cards, two per 24 HDD baseplane   Redundant hot-swap drives, fans, power supplies
System Capacity	1.908PB raw
Physical	Height: 176.4mm / 6.94 in   Width (excluding ears and rails): 441mm / 17.36 in   Depth (including handles, excluding cables): 1139 mm / 44.84 in   Weight: 44.9kg / 99 lb   Weight (with drives): 131.5kg / 290 lb
Host I/O Ports	Four mini-SAS HD Ports per controller (8 total)
Management	
Interface Types	10/100/1000 Ethernet
Protocols Supported	SNMP, SSL, SSH, SMTP, HTTP(S)
Management Consoles	Web-based GUI or Command Line Interface (CLI)
Management Software	Seagate Systems storage management console   One-button configuration   Remote diagnostics   Nondisruptive updates
Power Requirements—AC Input	
Input Power Requirements	200V-240V AC, 50Hz-60Hz
Max Power Output per PSU	2000W
Environmental/Temperature Ranges	
Operating/Nonoperating Temperature	5°C to 35°C (41°F to 95°F, derated by 1°C per 300m above 900m) / -40°C to +70°C (-40°F to +158°F) (max rate of change: 20°C)
Operating/Nonoperating Humidity	-12°C DP/10 to 80% (max) (noncondensing) / -12°C DP/5 to 100% (max) (noncondensing)
Operating/Nonoperating Shock	3.0 g, 11 ms (per axis) / 20.0 g, 7ms, 10 shock pulses (2 shocks per axis X, Y in positive and negative direction, and 2 shocks in positive Z axis) OR ISTA 3H (mounted in a rack, horizontal impact on all sides, 4-in drop tests)
Operating/Nonoperating Vibration	0.18Grms, 5 Hz to 500 Hz, 30 min per axis / 0.54 Grms 6Hz to 200 Hz (ISTA 3E)
Standards/Approvals	
Safety Certifications	UL 60950-1 (United States)   CAN/CSA-C22.2 No.60950-1-07 (Canada)   EN 60950-1 (European Union)   IEC 60950-1 (International)   CCC (China PRC – CCC Power Supplies)   BIS (India – BIS Power Supplies)
Ecodesign	Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)
Emissions (EMC)	FCC CFR 47 Part 15 Subpart B Class A (USA)   ICES/NMB-003 Class A (Canada)   EN 55032:2012 Class A (EU)   AS/NZS CISPR 22/CISPR 32 Class A (Australia/New Zealand)   VCCI Class A (Japan)   KN 22/KN 32 Class A (S. Korea)   CNS 13438 Class A (Taiwan)
Harmonics	EN 61000-3-2 (EU)
Flicker	EN 61000-3-3 (EU)
Immunity	EN 55024 (EU)   KN 24/KN 35 (S. Korea)
Environmental Standards	The RoHS Directive (2011/65/EU)   The WEEE Directive (2012/19/EU)   The REACH Directive (EC) No. 1907/2006
Standard Marks/Approvals	United States, Canada, European Union (EU), Australia/New Zealand, Japan, China (PRC), Russia, Mexico, Germany, South Korea, Taiwan, India

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