



DATA SHEET

Resilient. Fast. Efficient.

Exos CORVAULT



Exos[®] CORVAULT Self Healing Storage redefines petabyte-scale storage infrastructure with industry-leading innovation in every aspect of the system.



Product Highlights

- Effortlessly deploy capacity with 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.

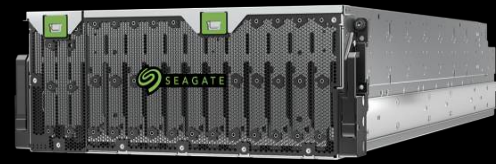
Hyperscale-class efficiencies. Combining maximum data density in 4U with the latest hard drive technology delivers storage efficiencies similar to cutting-edge cloud service providers.

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.

Reduce power consumption 80 PLUS Titanium and 80 PLUS Platinum power supply options, with certified adaptive cooling technology.



| Specifications | | | | | | | | | | | |
|------------------------------------|--|------------------------------|-----------------------------|----------------|---------------------|----------------|--|----------------|--|-----------------|--|
| Controllers | Redundant, active-active, hot-swappable controllers powered by gen 6 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® 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 | Varies with the drives used: (I.e. 2 PB raw with 20 TB Drives) | | | | | | | | | | |
| 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, no expansion | | | | | | | | | | |
| 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 62368-1 (United States) CAN/CSA-C22.2 No.62368-1- 19 (Canada) EN 62368-1 (European Union) IEC 62368-1 / IEC 60950-1 (International) CCC (China PRC - CCC Power Supplies) BIS (India - BIS Power Supplies) | | | | | | | | | | |
| 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 | | | | | | | | | | |
| Ecodesign | Commission Regulation (EU) 2019/424 (Directive 2009/125/EC) | | | | | | | | | | |
| Power Supply Units | | | | | | | | | | | |
| Power Supply | <p>Ecodesign (Model 700-014575-0800) - Platinum</p> <table border="0"> <tr> <td>Power Efficiency 230VAC50/Hz</td> <td>Power Factor Condition(PFC)</td> </tr> <tr> <td>10% Load =>80%</td> <td>50% Loading = >0.90</td> </tr> <tr> <td>20% Load =>90%</td> <td></td> </tr> <tr> <td>50% Load =>94%</td> <td></td> </tr> <tr> <td>100% Load =>91%</td> <td></td> </tr> </table> | Power Efficiency 230VAC50/Hz | Power Factor Condition(PFC) | 10% Load =>80% | 50% Loading = >0.90 | 20% Load =>90% | | 50% Load =>94% | | 100% Load =>91% | |
| Power Efficiency 230VAC50/Hz | Power Factor Condition(PFC) | | | | | | | | | | |
| 10% Load =>80% | 50% Loading = >0.90 | | | | | | | | | | |
| 20% Load =>90% | | | | | | | | | | | |
| 50% Load =>94% | | | | | | | | | | | |
| 100% Load =>91% | | | | | | | | | | | |
| Power Supply | <p>Ecodesign (Model SPASGAT-02) - Titanium</p> <table border="0"> <tr> <td>Power Efficiency 230VAC50/Hz</td> <td>Power Factor Condition(PFC)</td> </tr> <tr> <td>10% Load =>90%</td> <td>50% Loading = >0.95</td> </tr> <tr> <td>20% Load =>94%</td> <td></td> </tr> <tr> <td>50% Load =>96%</td> <td></td> </tr> <tr> <td>100% Load =>91%</td> <td></td> </tr> </table> | Power Efficiency 230VAC50/Hz | Power Factor Condition(PFC) | 10% Load =>90% | 50% Loading = >0.95 | 20% Load =>94% | | 50% Load =>96% | | 100% Load =>91% | |
| Power Efficiency 230VAC50/Hz | Power Factor Condition(PFC) | | | | | | | | | | |
| 10% Load =>90% | 50% Loading = >0.95 | | | | | | | | | | |
| 20% Load =>94% | | | | | | | | | | | |
| 50% Load =>96% | | | | | | | | | | | |
| 100% Load =>91% | | | | | | | | | | | |