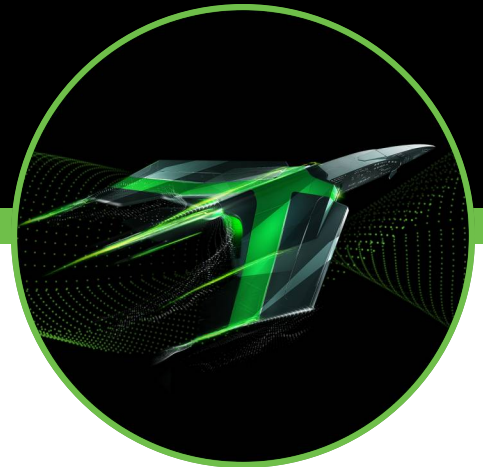


EXOS™ CORVAULT™

DATA SHEET

Transforming Data Center Storage Exos CORVAULT



Seagate Exos® CORVAULT™ is a high-performing, efficient, durable multi-petabyte capacity block storage system that is self-healing and brings five-nines availability to scale out storage for data center deployments. CORVAULT breakthrough technologies provide hyperscale efficiencies, rapid deployment, and automatic hard drive renewal for less e-waste and operational costs.

EXOS™
CORVAULT™



HAMR

Product Highlights

- Effortlessly deploy petabyte storage
- Lower TCO with maximum space utilization
- The most-efficient petabyte-capacity block storage
- Minimize Infrastructure costs and reduce data center carbon footprints
- Superior data availability, durability and performance
- Seagate Autonomic Distributed Allocation Protection Technology (ADAPT)
- Seagate Autonomous Drive Regeneration (ADR)
- Backed by Seagate's 40+ years of demonstrated data storage innovation, expertise, and supply chain.

Key Advantages

Hyperscale Efficiency: Hyperscale capacity and sustainability while lowering TCO with maximum space usage and less power per petabytes.

Sustainability and Cost Savings: Reduces the carbon footprint of data centers with architectures requiring less compute and networking resources.

High Capacity: Most-efficient petabyte-capacity block storage —maximum data density for optimal data center usage.

Superior Data Availability: Provides five-nines data availability, durability, and performance needed for reliable data storage.

System Data Protection: Protects data via Seagate Autonomic Distributed Allocation Protection Technology (ADAPT) for automatic rebuilds without performance degradation, storage efficiency, improved sustainability, and reduced downtime.

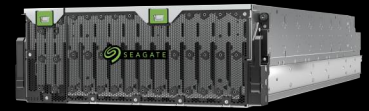
Self-Healing Hard Drives: Minimizes e-waste, maintenance, and human intervention by renewing errant drives with ADAPT and autonomous drive regeneration (ADR).

Simplicity: Allows simple installation, configuration, and management with enterprise storage that's like a single hard drive with petabytes capacity.

High Disk System Performance: Ensures continuous data access with responsive low latency performance.

Maximum Security: Self-encrypts data via Seagate Secure™ for maximum protection, reduced privacy concerns, and supports cryptographic erase.

Dependable Technology: Provides a well-designed data storage solution with Seagate's proven innovation, expertise, and supply chain.



Specifications	EXOS CORVAULT 4U106	
Standard Model Number	R4106I212000001	R4106I190800002
System Capacity (raw)	2.1PB, no expansion	1.9PB, no expansion
System Capacity	—	—
Limited warranty	5 Years	5 Years
System Performance	12 GB/s sequential read throughput, 10 GB/s sequential write throughput	12 GB/s sequential read throughput, 10 GB/s sequential write throughput
Device Support	Exos® self-encrypting SAS Hard Drives	Exos® self-encrypting SAS Hard Drives
System Data Protection	Seagate ADAPT erasure coding	Seagate ADAPT erasure coding
Disk Drive Self healing technology	Autonomous Drive Regeneration (ADR)	Autonomous Drive Regeneration (ADR)
Controllers	Redundant, active-active, VelosCT Controllers	Redundant, active-active, VelosCT Controllers
Hot-Swappable Components	Hard Drives, controllers, fans, power supplies, expander cards	Hard Drives, controllers, fans, power supplies, expander cards
Host I/O Ports	Four mini-SAS-3 HD ports on each controller	Four mini-SAS-3 HD ports on each controller
Physical	4U: Height: 176.4mm / 6.94 in Width: 441mm / 17.36 in Depth: 1139 mm / 44.84 in Weight: 131.5kg / 290 lb	4U: Height: 176.4mm / 6.94 in Width: 441mm / 17.36 in Depth: 1139 mm / 44.84 in Weight: 131.5kg / 290 lb
Management		
Interface Types	10/100/1000 Ethernet	10/100/1000 Ethernet
Management Consoles	Web-based GUI or Command Line Interface (CLI)	Web-based GUI or Command Line Interface (CLI)
Management Software	Seagate Systems storage management console One-button configuration remote diagnostics nondisruptive updates	Seagate Systems storage management console One-button configuration remote diagnostics nondisruptive updates
Power Requirements—AC Input		
Input Power Requirements	200V-240V AC, 50Hz-60Hz	200V-240V AC, 50Hz-60Hz
Power Consumption	Power supply max: 2000W Random r/w: 1750W = 0.83W/TB	Power supply max: 2000W Random w/r: 1750W = 0.92W/TB
Environmental/Temperature Ranges		
Operating/Nonoperating Temperature	5°C to 35°C (41°F to 95°F) / -40°C to +70°C (-40°F to +158°F)	5°C to 35°C (41°F to 95°F) / -40°C to +70°C (-40°F to +158°F)
Operating/Nonoperating Humidity	-12°C DP/10 to 80% / -12°C DP/5 to 100%	-12°C DP/10 to 80% / -12°C DP/5 to 100%
Operating/Nonoperating Shock	3.0 g, 11 ms (per axis) / 20.0 g, 7ms, 10 shock pulses, ISTA 3H	3.0 g, 11 ms (per axis) / 20.0 g, 7ms, 10 shock pulses, ISTA 3H
Operating/Nonoperating Vibration	0.18G _{rms} , 5 Hz to 500 Hz, 30 min per axis / 0.54G _{rms} 6Hz to 200 Hz (ISTA 3E)	0.18G _{rms} , 5 Hz to 500 Hz, 30 min per axis / 0.54G _{rms} 6Hz to 200 Hz (ISTA 3E)
Standards/Approvals		
Standard Marks/Approvals	United States, Canada, European Union (EU), Australia/New Zealand, Japan, China (PRC), Russia, Mexico, Germany, South Korea, Taiwan, India	United States, Canada, European Union (EU), Australia/New Zealand, Japan, China (PRC), Russia, Mexico, Germany, South Korea, Taiwan, India
Safety Certifications	UL 62368-1 CAN/CSA-C22.2 No.62368-1- 19 CE to EN 62368-1 CB IEC 62368-1 Power Supplies CCC & BIS	UL 62368-1 CAN/CSA-C22.2 No.62368-1- 19 CE to EN 62368-1 CB IEC 62368-1 Power Supplies CCC & BIS
Emissions (EMC)	FCC CFR 47 Part 15 Subpart B Class A ICES/NMB-003 Class A EN 55032:2015 Class A AS/NZS CISPR 22/CISPR 32 Class A VCCI Class A KN 32/KN 35 Class A CNS 15936 Class A	FCC CFR 47 Part 15 Subpart B Class A ICES/NMB-003 Class A EN 55032:2015 Class A AS/NZS CISPR 22/CISPR 32 Class A VCCI Class A KN 32/KN 35 Class A CNS 15936 Class A
Harmonics & Flicker	EN 61000-3-2 EN 61000-3-3	EN 61000-3-2 EN 61000-3-3
Immunity	EN 55032 KN 32/KN 35	EN 55032 KN 32/KN 35
Environmental Standards	The RoHS Directive (2011/65/EU) The WEEE Directive (2012/19/EU) The REACH Directive (EC) No. 1907/2006 and WFD Directive (EU) 2018/815	The RoHS Directive (2011/65/EU) The WEEE Directive (2012/19/EU) The REACH Directive (EC) No. 1907/2006 and WFD Directive (EU) 2018/815
Power Supply Units	Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)	
Power Supply	Redundant Ecodesign (Model 700-014575-0800) – Platinum Power Efficiency 230VAC50/Hz; 10% Load = >80%; 20% Load = >90%; 50% Load = >94%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.90	Redundant Ecodesign (Model 700-014575-0800) – Platinum Power Efficiency 230VAC50/Hz; 10% Load = >80%; 20% Load = >90%; 50% Load = >94%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.90
Power Supply	Ecodesign (Model SPASGAT-02) – Titanium Power Efficiency 230VAC50/Hz; 10% Load = >90%; 20% Load = >94%; 50% Load = >96%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.95	Ecodesign (Model SPASGAT-02) – Titanium Power Efficiency 230VAC50/Hz; 10% Load = >90%; 20% Load = >94%; 50% Load = >96%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.95



Specifications	EXOS CORVAULT 4U106	
Standard Model Number	R4106I2000T001 R4106I2000T002 (EU version)	R4106I2500T001 R4106I2500T002 (EU version)
System Capacity (raw)	-	-
System Capacity	2.0PB, no expansion	2.5PB, no expansion
Limited warranty	5 Years	5 Years
System Performance	12 GB/s sequential read throughput, 10 GB/s sequential write throughput	12 GB/s sequential read throughput, 10 GB/s sequential write throughput
Device Support	Exos® self-encrypting HAMR hard drives	Exos® self-encrypting HAMR hard drives
System Data Protection	Seagate ADAPT erasure coding	Seagate ADAPT erasure coding
Disk Drive Self healing technology	Autonomous Drive Regeneration (ADR)	Autonomous Drive Regeneration (ADR)
Controllers	Redundant, active-active, VelosCT Controllers	Redundant, active-active, VelosCT Controllers
Hot-Swappable Components	Hard Drives, controllers, fans, power supplies, expander cards	Hard Drives, controllers, fans, power supplies, expander cards
Host I/O Ports	Four mini-SAS-3 HD ports on each controller	Four mini-SAS-3 HD ports on each controller
Physical	4U: Height: 176.4mm / 6.94 in Width: 441mm / 17.36 in Depth: 1139 mm / 44.84 in Weight: 131.5kg / 290 lb	4U: Height: 176.4mm / 6.94 in Width: 441mm / 17.36 in Depth: 1139 mm / 44.84 in Weight: 131.5kg / 290 lb
Management		
Interface Types	10/100/1000 Ethernet	10/100/1000 Ethernet
Management Consoles	Web-based GUI or Command Line Interface (CLI)	Web-based GUI or Command Line Interface (CLI)
Management Software	Seagate Systems storage management console One-button configuration remote diagnostics nondisruptive updates	Seagate Systems storage management console One-button configuration remote diagnostics nondisruptive updates
Power Requirements—AC Input		
Input Power Requirements	200V-240V AC, 50Hz-60Hz	200V-240V AC, 50Hz-60Hz
Power Consumption	Power supply max: 2000W Random w/r:	Power supply max: 2000W Random w/r:
Environmental/Temperature Ranges		
Operating/Nonoperating Temperature	5°C to 35°C (41°F to 95°F) / -40°C to +70°C (-40°F to +158°F)	5°C to 35°C (41°F to 95°F) / -40°C to +70°C (-40°F to +158°F)
Operating/Nonoperating Humidity	-12°C DP/10 to 80% / -12°C DP/5 to 100%	-12°C DP/10 to 80% / -12°C DP/5 to 100%
Operating/Nonoperating Shock	3.0 g, 11 ms (per axis) / 20.0 g, 7ms, 10 shock pulses, ISTA 3H	3.0 g, 11 ms (per axis) / 20.0 g, 7ms, 10 shock pulses, ISTA 3H
Operating/Nonoperating Vibration	0.18G _{rms} , 5 Hz to 500 Hz, 30 min per axis / 0.54G _{rms} 6Hz to 200 Hz (ISTA 3E)	0.18G _{rms} , 5 Hz to 500 Hz, 30 min per axis / 0.54G _{rms} 6Hz to 200 Hz (ISTA 3E)
Standards/Approvals		
Standard Marks/Approvals	United States, Canada, European Union (EU), Australia/New Zealand, Japan, China (PRC), Russia, Mexico, Germany, South Korea, Taiwan, India	United States, Canada, European Union (EU), Australia/New Zealand, Japan, China (PRC), Russia, Mexico, Germany, South Korea, Taiwan, India
Safety Certifications	UL 62368-1 CAN/CSA-C22.2 No.62368-1-19 CE to EN 62368-1 CB IEC 62368-1 Power Supplies CCC & BIS	UL 62368-1 CAN/CSA-C22.2 No.62368-1-19 CE to EN 62368-1 CB IEC 62368-1 Power Supplies CCC & BIS
Emissions (EMC)	FCC CFR 47 Part 15 Subpart B Class A ICES/NMB-003 Class A EN 55032:2015 Class A AS/NZS CISPR 22/CISPR 32 Class A VCCI Class A KN 32/KN 35 Class A CNS 15936 Class A	FCC CFR 47 Part 15 Subpart B Class A ICES/NMB-003 Class A EN 55032:2015 Class A AS/NZS CISPR 22/CISPR 32 Class A VCCI Class A KN 32/KN 35 Class A CNS 15936 Class A
Harmonics & Flicker	EN 61000-3-2 EN 61000-3-3	EN 61000-3-2 EN 61000-3-3
Immunity	EN 55032 KN 32/KN 35	EN 55032 KN 32/KN 35
Environmental Standards	The RoHS Directive (2011/65/EU) The WEEE Directive (2012/19/EU) The REACH Directive (EC) No. 1907/2006 and WFD Directive (EU) 2018/815	The RoHS Directive (2011/65/EU) The WEEE Directive (2012/19/EU) The REACH Directive (EC) No. 1907/2006 and WFD Directive (EU) 2018/815
Power Supply Units	Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)	Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)
Power Supply	Redundant Ecodesign (Model 700-014575-0800) – Platinum Power Efficiency 230VAC50/Hz; 10% Load = >80%; 20% Load = >90%; 50% Load = >94%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.90	Redundant Ecodesign (Model 700-014575-0800) – Platinum Power Efficiency 230VAC50/Hz; 10% Load = >80%; 20% Load = >90%; 50% Load = >94%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.90
Power Supply	Ecodesign (Model SPASGAT-02) – Titanium Power Efficiency 230VAC50/Hz; 10% Load = >90%; 20% Load = >94%; 50% Load = >96%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.95	Ecodesign (Model SPASGAT-02) – Titanium Power Efficiency 230VAC50/Hz; 10% Load = >90%; 20% Load = >94%; 50% Load = >96%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.95



Specifications	EXOS CORVAULT 5U84
Standard Model Number	R5U8411500S001
System Capacity (raw)	1.68PB, no expansion
System Capacity	1.5PB, no expansion
Limited warranty	5 Years
System Performance	12 GB/s sequential read throughput, 10 GB/s sequential write throughput
Device Support	Exos [®] self-encrypting SAS HDDs
System Data Protection	Seagate ADAPT erasure coding
Disk Drive Self healing technology	Autonomous Drive Regeneration (ADR)
Controllers	Redundant, active-active, VelosCT Controllers
Hot-Swappable Components	Hard Drives, controllers, fans, power supplies, expander cards
Host I/O Ports	Four mini-SAS-3 HD ports on each controller
Physical	5U: Height: 222.3mm / 8.75 in Width: 444.5mm / 17.5 in Depth: 981mm / 38.63 in Weight: 135kg / 298 lb
Management	
Interface Types	10/100/1000 Ethernet
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
Power Consumption	Power supply max: 2200W Random r/w: 1400W = 0.83W/TB
Environmental/Temperature Ranges	
Operating/Nonoperating Temperature	5°C to 35°C (41°F to 95°F) / -40°C to +70°C (-40°F to +158°F)
Operating/Nonoperating Humidity	-12°C DP/10 to 80% / -12°C DP/5 to 100%
Operating/Nonoperating Shock	3.0 g, 11 ms (per axis) / 20.0 g, 7ms, 10 shock pulses OR ISTA 3H
Operating/Nonoperating Vibration	0.18Grms, 5 Hz to 500 Hz, 30 min per axis / 0.54G rms 6Hz to 200 Hz (ISTA 3E)
Standards/Approvals	
Standard Marks/Approvals	United States, Canada, European Union (EU), Australia/New Zealand, Japan, China (PRC), Russia, Mexico, Germany, South Korea, Taiwan, India
Safety Certifications	UL 62368-1 CAN/CSA-C22.2 No.62368-1-19 CE to EN 62368-1 CB IEC 62368-1 Power Supplies CCC & BIS
Emissions (EMC)	FCC CFR 47 Part 15 Subpart B Class A ICES/NMB-003 Class A EN 55032:2015 Class A AS/NZS CISPR 22/CISPR 32 Class A VCCI Class A KN 32/KN 35 Class A CNS 15936 Class A
Harmonics & Flicker	EN 61000-3-2 EN 61000-3-3
Immunity	EN 55032 KN 32/KN 35
Environmental Standards	The RoHS Directive (2011/65/EU) The WEEE Directive (2012/19/EU) The REACH Directive (EC) No. 1907/2006 and WFD Directive (EU) 2018/815
Power Supply Units	
Commission Regulation (EU) 2019/424 (Directive 2009/125/EC)	
Power Supply	Redundant Ecodesign (Model 700-014575-0800) – Platinum Power Efficiency 230VAC50/Hz; 10% Load = >80%; 20% Load = >90%; 50% Load = >94%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.90
Power Supply	Ecodesign (Model SPASGAT-02) – Titanium Power Efficiency 230VAC50/Hz; 10% Load = >90%; 20% Load = >94%; 50% Load = >96%; 100% Load = >91% Power Factor Conditions (PFC) 50% Loading = >0.95