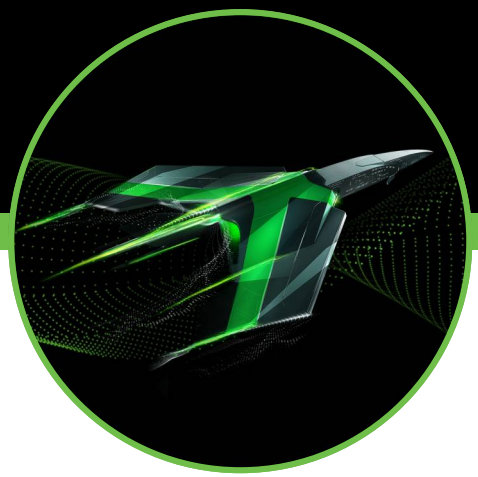
EXOS CORVAULT™

SEAGATE

DATA SHEET

Transforming Data Centre Storage

Exos CORVAULT



Seagate Exos® CORVAULT™ is a multi-petabyte capacity block storage system that is self-healing and brings five-nines availability to storage infrastructure and data centre deployments. CORVAULT's breakthrough technology provides hyperscale efficiency, rapid deployment, and automatic hard drive renewal for less e-waste and operational costs.

Product Highlights

- Effortlessly deploy petabyte storage
- Lower TCO with maximum space utilisation
- The most-efficient petabyte-capacity block storage
- Minimise Infrastructure costs and reduce data centre carbon footprints
- Superior data availability, durability and performance
- Seagate Autonomic Distributed Allocation Protection Technology (ADAPT)
- Seagate Autonomous Drive Regeneration (ADR)
- Breakthrough Hard Drive Technology: Seagate Mozaic 3+™ in 4U106 models

Key Advantages

Hyperscale Efficiency: Lower on-premise infrastructure costs with intelligent controllers, and multi-petabyte capacity built into Exos CORVAULT.

Sustainability and Cost Savings: Exos CORVAULT has built-in data management, reducing your data centre overhead, minimising carbon footprint and saving costs.

High Capacity Enclosures: Maximum data densities for optimal infrastructure space utilisation.

Breakthrough Hard Drive Technology: Exos CORVAULT 4U106 uses Seagate Mozaic 3+ areal density technology, delivering more capacity for less power.

Superior Data Availability: Provides five-nines data availability and durability needed to promote reliable data storage with redundant hardware and distributed erasure coding.

System Data Protection: Protects data via Seagate Autonomic Distributed Allocation Protection Technology (ADAPT) for automatic uptime rebuilds without compromising performance, storage utilisation and availability.

Self-Healing Hard Drive: Autonomous Drive Regeneration (ADR) minimises downtime, service intervention, and e-waste by renewing errant drives.

Simplicity: Allows simple installation, configuration, and management with GUI, CLI and Redfish API.

Grouped Disk 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 secure cryptographical erase.

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Specifications	EXOS CORVAULT 4U106 (Mozaic 3+ ™)	
Standard Model Number	R4106I2000T002	R4106I2500T002
System Capacity (raw)	2.0 PB	2.5 PB
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 Mozaic 3+ ™ hard drives	Exos® self-encrypting Mozaic 3+ ™ 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: 176.4 mm/6.94 in | Width: 441 mm/17.36 in | Depth: 1139 mm/44.84 in | Weight: 131.5kg/290 lb	4U: Height: 176.4 mm/6.94 in | Width: 441 mm/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 | non-disruptive updates |	Seagate Systems storage management console | One-button configuration | remote diagnostics | non-disruptive updates |
Power Requirements — AC Input		
Input Power Requirements	200V-240V AC, 50 Hz - 60 Hz	200V-240V AC, 50 Hz - 60 Hz
Power Consumption	Power supply max: 2000W operational: 1200 -1600W (workload dependent)	Power supply max: 2000W operational: 1200 -1600W (workload dependent)
Environmental/Temperature Ranges		
Operating/Non-operating 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/Non-operating 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/Non-operating 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/Non-operating 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

EXOS CORVAULT™

Specifications	EXOS CORVAULT 4U106
Standard Model Number	R4106I212000001 | R4106I2000S002 (EU version)
System Capacity (raw)	2.1 PB
Limited warranty	5 Years
System Performance	12 GB/s sequential read throughput, 10 GB/s sequential write throughput
Device Support	Exos® self-encrypting SAS Hard Drives
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	4U: Height: 176.4 mm/6.94 in | Width: 441 mm/17.36 in | Depth: 1139 mm/44.84 in | Weight: 131.5kg/290 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 | non-disruptive updates |
Power Requirements — AC Input	
Input Power Requirements	200V-240V AC, 50 Hz - 60 Hz
Power Consumption	Power supply max: 2000W Operational: 1400 -1800W (workload dependent)
Environmental/Temperature Ranges	
Operating/Non-operating Temperature	5°C to 35°C (41°F to 95°F) / –40°C to +70°C (–40°F to +158°F)
Operating/Non-operating Humidity	–12°C DP/10 to 80% / –12°C DP/5 to 100%
Operating/Non-operating Shock	3.0 g, 11 ms (per axis)/20.0 g, 7ms, 10 shock pulses, ISTA 3H
Operating/Non-operating Vibration	$0.18G_{rms}$, 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
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

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Specifications	EXOS CORVAULT 5U84
Standard Model Number	R5U84I1500S001
System Capacity (raw)	1.68 PB
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: 222.3 mm/8.75 in | Width: 444.5 mm/17.5 in | Depth: 981 mm/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 | non-disruptive updates |
Power Requirements — AC Input	
Input Power Requirements	200V-240V AC, 50 Hz - 60 Hz
Power Consumption	Power supply max: 2200W operational: 1200 -1400W (workload dependent)
Environmental/Temperature Ranges	
Operating/Non-operating Temperature	5°C to 35°C (41°F to 95°F) / –40°C to +70°C (–40°F to +158°F)
Operating/Non-operating Humidity	–12°C DP/10 to 80% / –12°C DP/5 to 100%
Operating/Non-operating Shock	3.0 g, 11 ms (per axis)/20.0 g, 7ms, 10 shock pulses OR ISTA 3H
Operating/Non-operating Vibration	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
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

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