

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.



# mozqic 3+

#### **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+<sup>™</sup> 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.



Specifications	EXOS CORVAULT 4U106		
Standard Model Number	R4106l2000T002	R4106l2500T002	
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 hard drives with Mozaic 3+ ™technology	Exos® self-encrypting hard drives with Mozaic 3+ ™technology	
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 <sub>rms</sub> , 5 Hz to 500 Hz, 30 min per axis / 0.54G <sub>rms</sub> 6Hz to 200 Hz (ISTA 3E)	0.18G <sub>rms</sub> , 5 Hz to 500 Hz, 30 min per axis / 0.54G <sub>rms</sub> 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 4U106		
Standard Model Number	R4106l212000001   R4106l2000S002 (EU version)	R4106l2500S002	
System Capacity (raw)	2.1 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 X20® self-encrypting SAS Hard Drives	Exos X24® 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: 176.4 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: 1400 -1800W (workload dependent)	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)	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 <sub>rms</sub> , 5 Hz to 500 Hz, 30 min per axis / 0.54G <sub>rms</sub> 6Hz to 200 Hz (ISTA 3E)	0.18G <sub>rms</sub> , 5 Hz to 500 Hz, 30 min per axis / 0.54G <sub>rms</sub> 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	R5U84I1500S001	R5U84I2000S001	
System Capacity (raw)	1.68 PB	2.02 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 X20® self-encrypting SAS HDDs	Exos X24® self-encrypting SAS HDDs	
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	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	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	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: 2200W operational: 1200 -1400W (workload dependent)	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)	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 OR ISTA 3H	3.0 g, 11 ms (per axis)/20.0 g, 7ms, 10 shock pulses OR ISTA 3H	
Operating/Non-operating Vibration	0.18Grms, 5 Hz to 500 Hz, 30 min per axis / 0.54G rms 6Hz to 200 Hz (ISTA 3E)	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	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	



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