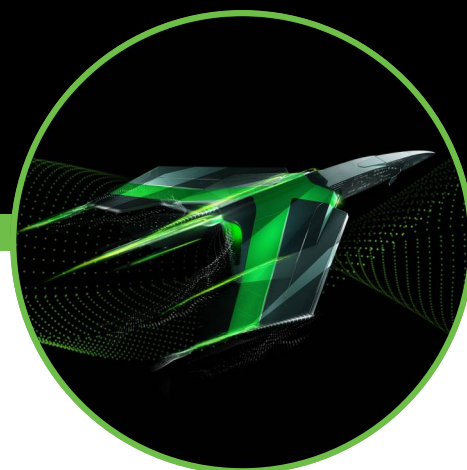


DATA SHEET

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 cryptographic erase.

Specifications	EXOS CORVAULT 4U106	
Standard Model Number	R410612000T002	R410612500T002
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 _{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		
Power Supply	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	R4106I212000001 R4106I2000S002 (EU version)	R4106I2500S002
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 _{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		
Power Supply	Commission Regulation (EU) 2019/424 (Directive 2009/125/EC) 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	Commission Regulation (EU) 2019/424 (Directive 2009/125/EC) 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	R5U8412000S001
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 / 0.54Grms 6Hz to 200 Hz (ISTA 3E)	0.18Grms, 5 Hz to 500 Hz, 30 min per axis / 0.54Grms 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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