kStore Corvault

kStore 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
- Autonomic Distributed Allocation Protection Technology (ADAPT)
- Autonomous Drive Regeneration (ADR)
- Breakthrough Hard Drive

Key Advantages

- **Hyperscale Efficiency**: Lower on-premise infrastructure costs with intelligent controllers, and multi-petabyte capacity built into Corvault.
- **Sustainability and Cost Savings**: kStore 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**: kStore Corvault uses 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 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 using Seagate Secure™ for maximum protection, reduced privacy concerns, and secure cryptographical erase.

ABOUT KLOUDSTOR

With extensive experience in enterprise data protection and storage management, KloudStor focuses on serving and meeting the growing data needs of customers with innovative and highly scalable 'On-Premise as-a-Service' solutions. With a flexible pay-per-consumption monthly subscription model, we provide the best of on-premise performance and security with cloud flexibility.

KloudStor's fully managed solutions are supported by a team of highly skilled and experienced data management experts. Our partnerships with Quantum and Seagate, leading technology companies in the field of data storage and backup, enable us to provide proven, robust and trusted as-a-Service solutions for our customers ensuring that their operations and businesses are running continuously without compromise.

KloudStor
www.kloudstor.asia
enquiry@kloudstor.asia

133 New Bridge Road #08-03
Chinatown Point
Singapore 059413

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	CORVAULT 4U106
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 X20® self-encrypting SAS Hard Drives
System Data Protection	ADAPT erasure coding
Disk Drive Self healing technology	Autonomous Drive Regeneration (ADR)
Controllers	Redundant, active-active, VelosCT Controllers
Hot-SwappableComponents	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	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	3.0g,11ms(per axis)/20.0g,7ms,10 shock pulses,ISTA3H
Operating/Non-operating Vibration	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
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
EnvironmentalStandards	The RoHS Directive (2011/65/EU) | The WEEE Directive (2012/19/EU)|TheREACHDirective(EC) No.1907/2006and 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

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	CORVAULT 5U84
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 X20® self-encrypting SAS HDDs
System Data Protection	ADAPT erasure coding
Disk Drive Self healing technology	Autonomous Drive Regeneration (ADR)
Controllers	Redundant, active-active, VelosCT Controllers
Hot-SwappableComponents	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)
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