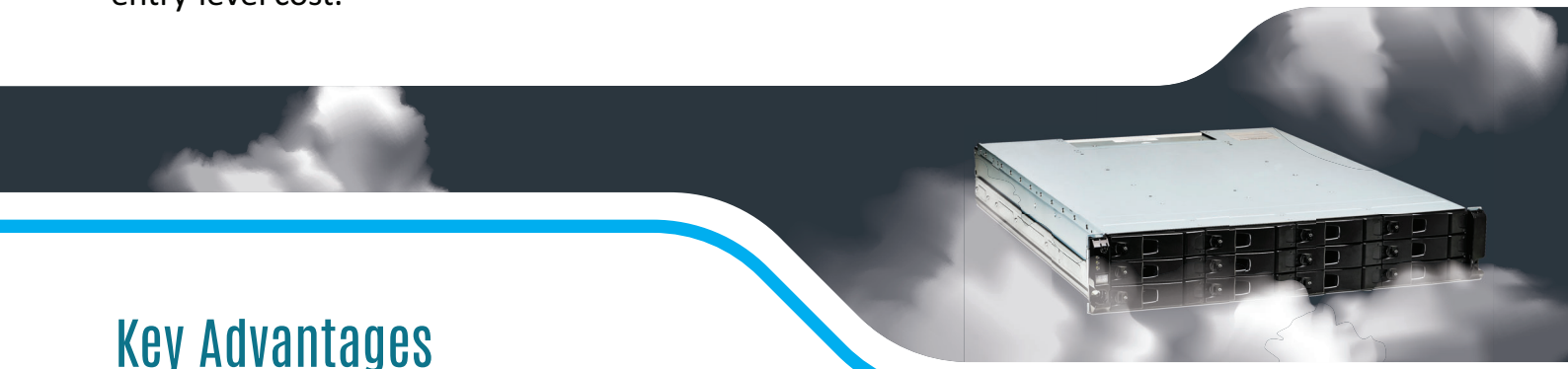
Kumulus S 2U12

Powered by Seagate

DATA SHEET

Efficient. Agile. Scalable.

kloudStor Kumulus S 2U12 delivers advanced data protection, capacity, and performance at an entry-level cost.



Key Advantages

Maximise Capacity and Consistent High Performance.
Leverage both speed and performance at a budget-friendly price. This system enables even the smallest business to get data to applications fast. Additionally, businesses can expand the system as data requirements grow, with up to 168 TB of storage capacity in only a 2U rack mount.

Deliver Versatile Architecture Built to Scale.
Use this flexible solution for cost conscious businesses that require high read and write throughput as well as more storage. Application access to data is virtually instantaneous, and purpose-built modularity makes it easy to set up, maintain, and expand via interchangeable FRUs and hot-swappable components.

Ensure Applications Have Access to Critical Data.
Take advantage of features that enable extreme cost efficiency while also providing up to 99.999% data availability. Parallel architecture, data replication, and fast streaming make access to data unfettered. In addition, exclusive data protection technology supports fast and efficient drive rebuilds that virtually eliminate system downtime.

Reduce Cost and Resources.
Meet stringent worldwide requirements for recycling and environmental friendliness with a nimble system that flexes as use cases evolve and capacity needs increase. It is perfectly suited for small and medium businesses due to high capacity and efficient management capabilities, and can help you minimise environmental impact and recognise cost savings through high performance.

Build In Security at the Foundation of the Data Life Cycle.
Protect the most valuable business assets with cybersecurity features and intelligent firmware—such as SFTP, SED support, and administrator access controls—that provide built-in security measures for reliable and safe file access, transfer, and management.

Product Highlights

- Save space but maximise capacity by expanding up to 48 drives
- Simplify overall product portfolio with this versatile storage building block
- Safeguard data with intelligent fault diagnosis, resolution capabilities, persistent error logging, and monitoring
- Deliver data fast using hard drives, SSDs or a combination of both
- Rebuild drives faster than ever and reduce downtime with ADAPT data protection technology
- Opt for replication and snapshot features to meet critical enterprise requirements

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Specification	
3000-Series Controller Performance	3.5 GB/s read throughput | 3 GB/s write throughput
4000-Series Controller Performance	Up to 320,000 IOPS | 7GB/s read throughput | 5.5GB/s write throughput
5000-Series Controller Performance	Up to 600,000 IOPS | 7GB/s read throughput | 5.5GB/s write throughput
Expansion BODs	Maximum of 3x 2U12 EBODs
Advanced Features	Thin provisioning | Snapshots | Asynchronous replication
High-Availability Features	Redundant hot-swap controllers | Redundant hot-swap devices, fans, power | Dual power cords | Hot standby spare | Automatic failover | Multi-path support
Device Support	NL-SAS HDD, SAS HDD, SAS SSD, SATA SSD
Data Protection	ADAPT | RAID levels supported: 0, 1, 3, 5, 6, 10, and 50
System Configuration	Up to 12 drives per chassis | 168 TB max capacity per chassis (based on 14 TB HDDs)
Physical	Height: 87.9 mm / 3.46 in | Width: 443 mm / 17.44 in | Depth: 630 mm / 24.8 in | Width w/ear mounts: 483 mm / 19.01 in | Weight: 17 kg / 38 lb | Weight (with drives): 32 kg / 71 lb
Hosts	
External Ports	Up to 8 per system
Fibre Channel Models	Host speed: 16Gb/s, 8Gb/s Fibre Channel | Interface type: SFP+
iSCSI Models	Host speed: 10Gb/s, 1Gb/s iSCSI | Interface type: SFP+
System Configuration	
System Memory	Up to 32GB per system
Volumes per System	1,024
Cache	Mirrored cache: Yes | Supercapacitor cache backup: Yes | Cache backup to flash: Yes – nonvolatile
Management	
Interface Types	10/100/1000 Ethernet, Mini USB
Protocols Supported	SNMP, SSL, SSH, SMTP, HTTP(S)
Management Consoles	Web GUI, CLI
Management Software	Storage management console | Remote diagnostics | Nondisruptive updates | Volume expansion
Power Requirements—AC Input	
Input Power Requirements	100V-200V AC 50Hz/60Hz (346W maximum continuous)
Heat Dissipation	1181 BTUs/hour | Gold-rated power supplies
Environmental/Temperature Ranges	
Operating/Nonoperating Temperature	RBOD: 5°C to 35°C (41°F to 95°F), EBOD: 5°C to 40°C (41°F to 104°F) / –40°C to +70°C (–40°F to +158°F)
Operating/Nonoperating Humidity	20% to 80% noncondensing / 5% to 100% noncondensing
Operating/Nonoperating Shock	5.0 Gs, 10ms, half sine pulses (Y-axis) / 30.0 Gs, 10ms, half sine pulses
Operating/Nonoperating Vibration	0.21 Gs rms 5Hz to 500Hz random / 1.04 Gs rms 2Hz to 200Hz random
Standards/Approvals	
Safety Certifications	UL 60950-1 (United States) | CAN/CSA-C22.2 No.60950-1-07 (Canada) | EN 60950-1 (European Union) | IEC 60950-1 (International) | CCC (China PRC – CCC Power Supplies) | BIS (India – BIS Power Supplies)
Emissions (EMC)	FCC CFR 47 Part 15 Subpart B Class A (United States) | ICES/NMB-003 Class A (Canada) | EN 55032 Class A, EN 55024, EN 61000-3-2, EN 61000-3-3 (Europe) | AS/NZS CISPR 32 Class A (Australia/New Zealand) | VCCI Class A (Japan) | KN 32 Class A/KN 35 (S. Korea) | CNS 13438 Class A (Taiwan)
Harmonics	EN 61000-3-2 (EU)
Flicker	EN 61000-3-3 (EU)
Immunity	EN 55024 (EU) | KN 24/KN 35 (S. Korea)
Environmental Standards	The RoHS Directive (2011/65/EU) | The WEEE Directive (2012/19/EU) | The REACH Directive (EC/1907/2006) | The Batteries Directive (2006/66/EC)
Standard Marks/Approvals	Australia/New Zealand (RCM), Canada (cUL/ICES/NMB-003 Class A), China (CCC – PSU only), European Union (CE), Japan (VCCI), South Korea (KC), Taiwan (BSMI), United States (FCC/UL)