

DATA SHEET

Exabyte-Scale Hardware

Lyve Rack Release One



Seagate® Lyve™ Rack is the object storage component for the Lyve data platform.



Product Highlights

- Lyve Rack R1
- CORTX Object Storage software
- Low-cost S3-compatible private cloud
- Application-level load balanced
- Seagate 5U84 storage enclosure with 84 HDDs (1.3PB raw capacity with 16TB drives)
- Ready for highest-capacity HDDs
- Active-Active HA

Key Advantages

CORTX™ Object Storage System is an open source, software-defined object storage with vibrant community support.

Designed for maximum scalability, resiliency, and hardware efficiency. CORTX was conceived and built by high-performance computing architects.

CORTX **distributes metadata management across all servers** for maximum scalability and concurrency.

Vertical integration benefits. Seagate's largest and newest drives (including HAMR) will be supported by CORTX as soon they become generally available.

CORTX functionality is available for enterprise customers as part of the Lyve Rack offering powered by 100% open source CORTX.

Easy to set up, maintain, and deploy.

CORTX Object Storage Solution with **high capacity and high performance.**

ADAPT Technology. Protect the most valuable business assets with Seagate Secure™ cybersecurity features and intelligent firmware. Rebuild drives faster and reduce downtime with Seagate ADAPT data protection technology.





Specifications	
Capacity	
Configuration Capacity (raw)	up to 1.3PB (with 16TB drives)
Max Number of Objects	Billions
Max Object Size	5TB
Software	
Object Store	CORTX™ v1.0
Management Interface	Cloud Storage Manager with WebUI, CLI, and RESTful API
Data Protection	Seagate ADAPT Erasure Coding
Connectivity	
Protocols	S3-compatible
Client Connectivity	2x50Gb/s
Physical Dimensions	
Rack Space (rack units)	7U
Rack Depth	1M
Physical (servers, x2)	Height (1U): 43mm / 1.7 in Width: 437mm / 17.2 in Depth: 754mm / 29.7 in Weight: 18.6kg / 41lb
Physical (5U84 storage enclosure)	Height (5U): 222.3mm / 8.75 in Width: 444.5mm / 17.5 in Width (w/ear): 483mm / 19.01 in Depth: 981mm / 38.63 in Weight (empty): 64kg / 141 lb Weight (loaded): 135kg / 298 lb
Power	
Power Characteristics	100-240vAC (compute), 208-240vAC (storage)
Environmental	
Temperature, operating	10°C to 35°C (50°F to 95°F)
Temperature, nonoperating	-40°C to +65°C (-40°F to +149°F)
Airflow	System must be operated with low pressure rear exhaust installation. Back pressure created not to exceed 5Pa (~0.5mm H ² O).
Altitude, operating	-100m to 3000m (-330 ft to 10,000 ft) Maximum operating temperature is de-rated by 1°C above 900m (3000 ft)
Altitude, nonoperating	-100m to 12,192m (-330 ft to 40,000 ft)
Shock, operating	5.0 Gs, 10ms, ½ sine pulses, Y-axis
Shock, nonoperating	30.0 Gs, 10ms, ½ sine pulses (Z-axis); 20.0 Gs, 10ms, ½ sine pulses (X- and Y-axes)
Vibration, operating	0.21 Grms, 5Hz to 500Hz random
Vibration, nonoperating	1.04 Grms, 2Hz to 200Hz random
Acoustics	Operating Sound Power ≤ LWAd 8.0 Bels (re 1 pW) @ 23°C

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