

DATA SHEET

XANADU 510EL HIGH PERFORMANCE STORAGE FOR LUSTRE

Ultimate Performance and Scale

RAID's Xanadu 510EL solution, optimized for Lustre, increases high performance storage capacity for the most mission-critical applications across industries. RAID Inc. unleashes the performance and scalability of the Lustre parallel file system for HPC workloads, including technical 'big data' applications.

Our high-performance file-system solutions help you manage your data at scale with the distinctive ability to perform IO with faster speeds while being reliable along with options like archiving and analytics in place.

The Xanadu 510EL is designed to simplify and deliver high performance computing storage at an optimized price/performance ratio. With companies and organizations increasing their IT infrastructure to accommodate Big Data and Analytics at record magnitudes, it is imperative that their storage systems are appropriately sized.

Accelerate Time to Results

Because of its proficiency, the system drastically reduces the time spent on a task, thus resulting in reduced operating costs. The Xanadu 510EL will allow your business to get more done in a workday than ever before, allowing you to maximize your company's potential, growth, and earnings.

Modular Configurations

The Xanadu 510EL is a 4U modular hybrid Big Data appliance that delivers 20 GB/s of raw bandwidth. Redundancy to applications and data is achieved through high performance dual controllers. At entry level, you have the ability to add 90 drives in the modular base enclosure. Fully configured, you can add up to four additional enclosures.



Common Use Cases

The flexibility and capabilities of the X510 lends itself to a wide variety of applications:

- Artificial Intelligence
- Genomic Research

Surveillance

AnalyticsDeep Learning

Benefits

- Embedded / Converged: Lower TCO with converged storage and network and improve latency with converged file system.
- Installation / Configuration Tools: Simplify the move to Lustre with data migration, installation, and configuration tools.
- Enterprise Features: High availability, security, strong authentication, multi-tenancy, quotas.
- Directory Level Quotas: Flexibility in project level quotas
- Data on Metadata: Improved small file performance

- Spindle to File Management: DDN Insight configuration and monitoring solution simplifies admin of the entire appliance from drives to file system.
- Single Name Space: Single application and end user view of data regardless of whether it resides on flash, or HDD – in file or object storage, local or remote.
- Improved Client Performance: Improved client performance for both small and large I/O
- Lustre Monitoring: Fine-grained file system monitoring with Lustre Jobstat



XANADU 510: HYBRID STORAGE APPLIANCE for Lustre

Dimensions`	Height: 4RU Rack Mount 7" (178 mm)
	Width: 19" rack (482.6 mm)
	Depth: 46.06" (1170 mm)
	Weight: Approximately 140 lbs (63 kg) without drives installed;
	Approximately 295 lbs (134 kg) with 90 drives
System -+	Active/Active Storage Controllers
Features	Declustered RAID (DCR) supports erasure coding schemas:
	Raid 6 8+2, 4+2
	Raid 5 8+1, 4+1
	Raid 1 1+1
	Large block sequential read performance up to 20GB/s
	Large block sequential write performance up to 16GB/s
	Small block I/O up to 700,000 IOPS per appliance
Active/Active Controller Storage	(4) IB EDR/100GbE ports for 4 virtual machines or
Host Ports	(2) Omni-Path ports for 2 virtual machines
Cache	64 GB per controller – mirrored, power-fail safe
Client Support	Windows, Linux and Mac OSX
Drive Support	90 x 3.5" drive slots support Enterprise-grade SSDs and HDDs
Supported Expansion Drive	Ability Enclosure 4U, 90 drive enclosure (one, two, or four enclosures)
Enclosures	Supported Drive Types: NL SAS or SSD
Safety	Agency Certifications UI, cUI, CE, FCC
Standard Software Features	LUN mapping and masking, intelligent write striping, read QoS, port zoning detection, data integrity
	check/correction, interface options (SSH to CLI, web-based GUI, Python API), state change messages
	(via email, SNMP trap and syslog).
Optional Software Features	Data-At-Rest Encryption
Power/Cooling	Input Voltage: 200 to 240 VAC, 50/60 Hz
	Nominal Power: 1,250 W (empty); 2,330 W (max)
	Nominal Heat: 4,265 BTU/hr (empty); 7,950 BTU/hr (max)
	Power Supplies: 4 hot swappable, redundant
	Fan Modules: 5 hot swappable, redundant
Environment	Op Temp, Sea Level: 10-35 degC; Op Temp, 3000m: 10-28 degC; 20%-80% Humidity Range

About



RAID Inc. was founded in 1994 to deliver end-to-end performance-driven technical computing and storage solutions. The company has earned industry praise for providing platform agnostic technical guidance in high performance computing (HPC), big data, cloud and software-defined data centers—in the most efficient, reliable and cost effective manner. The world's leading research facilities, government, life science, financial, healthcare, energy, and cloud service providers can leverage the our team of engineers' extensive academic, research lab and commercial expertise that makes RAID Inc. a trusted industry leader. For more information, visit our website <u>www.raidinc.com</u> or call 1.800.330.7335.