

XANADU™ 200 SERIES

Enterprise Modular Storage Solution

Unparalleled Scalability and Performance

RAID Inc. is pleased to announce the next generation Xanadu 200 series. These systems offer unprecedented scalability in the market today, supporting over 2,700 drives in the Xanadu 230 model and over 1,000 drives in the Xanadu 220. Both versions combine the best attributes of monolithic and modular storage systems which enables dynamic scalability in the following areas:

- **Intelligent and Proactive Cache Management.**

Advanced caching algorithms work to dynamically detect and predict application access trends to stage the necessary data in memory to eliminate delays associated with backend disk retrieval. These algorithms also work to optimize the use of cache in providing consistent performance.

	<u>Xanadu 220</u>	<u>Xanadu 230</u>
• I/O Processing	Up to 4 Intel Quad-Core CPUs	Up to 8 Intel Quad-Core CPUs
• Cache	Up to 256GB	Up to 512GB
• Hosts	Up to 64 in 8Gb FC and 1Gb iSCSI	Up to 128 in 8Gb FC and 1Gb iSCSI
• Drives	SATA, FC, and SSD	SATA, FC, and SSD

Key Features

- **Data Integrity prevents silent drive failures.**

Integrated features like ECC, parity protection on reads and writes, cache mirroring, disk scrubbing, and BlockGuard, continuously confirms the validity of your data. Recent academic studies have identified the surprising frequency of silent read failures that are not identified or resolved in enterprise SATA disk arrays despite the typical integrity functions. Such errors result in corrupt data being provided by the disk array to the application without any notification or warning, potentially leading to erroneous operations and results.

This "silent data corruption" includes misdirected writes, partial writes, and data path corruption with evidence pointing to the errors being uncaught in 1 in 90 drives. By using an extended data integrity feature, silent data corruption can be identified and handled so that corrupt data is not sent to the application. Furthermore, data that otherwise would be lost can be recovered. The Xanadu 200 series' Extended Data Integrity Feature detects and addresses silent data corruption, while also preventing parity pollution.

- **Self-Healing Technology.**

By continually monitoring all hard drives, a problem can be detected before an actual drive fails. When a potentially faulty hard drive is detected, the Xanadu 200 series system automatically duplicates the data onto a global hot-spare device, averting major problems.



- **Dynamic Capacity Expansion.**

Through this function, storage capacity of a protection group can be added without stopping the operation of the storage system. This enables the capability to add more LUN's to the group. Drives can be added to any existing RAID group for true on-the-fly, on-demand capacity growth.

Key Features (Contd.)

- **Hot-Change RAID Configuration.**

The Xanadu 200 series storage systems have a feature called RAID Migration, which enables users to nondisruptively relocate a LUN and its data to another RAID group. This allows users to dynamically adapt the RAID level to best meet the demands of an application. LUNs can be migrated on the fly to other drives, different RAID groups, other drive types (e.g. SAS to SSD).

- **Cyclic Cache Mirroring.**

Controllers are arranged in a cyclical organization to support the mirroring of write data. If a controller fails, the system degrades itself, and reconfigures the cyclical organization of the remaining controllers so that write data continues to be mirrored. Data is assigned cyclically across the controllers in a round robin approach that doesn't rely on fixed pairs.

- **Native Data Encryption.**

Protect your critical data from unauthorized access to drives that have been removed from the storage system. Native 128-bit AES encryption delivers electronic shredding of your data when drives are removed from the storage system and unauthorized access is attempted, helping to ensure the highest levels of data security.

- **MAID Technology.**

The Xanadu 200 series features MAID energy-saving technology, which is an eco-friendly mode providing lower power consumption and overall TCO. Drive rotation can be halted when data is not being accessed, which is done at specific time intervals and is adjustable. A stopped drive take less than one minute to reactivate for access.

Optional Features

- **Advanced Copy Manager**
- **Remote Replication**
- **Performance Optimization**
- **Thin Provisioning**

- **Data Protection Within Cache.**

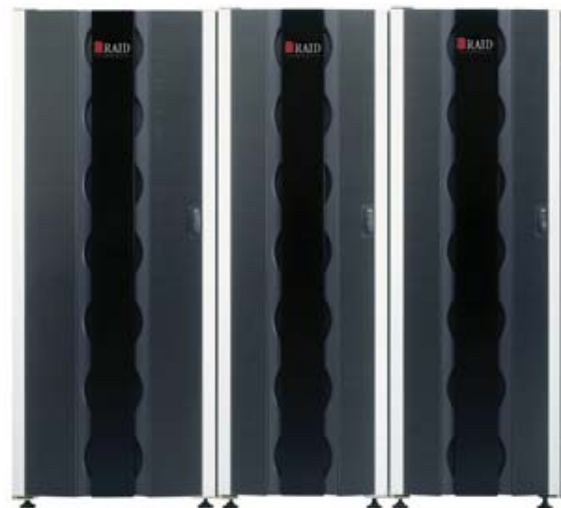
All new data is cyclically replicated in two cache memories until destaged to the drives. Cache coherency after a catastrophic power failure is maintained with the use of battery power to destage write data to special system drives. When power returns the data is returned to cache.

- **Component Redundancy.**

The Xanadu 200 series has redundant controllers, routers, internal pathing, cache, disks, power supplies, and fans. A failure of any of these components causes an automatic and transparent failover. Since all of these components are hot-swappable, no downtime is required for servicing.

- **iSCSI and Fibre-Channel Support.**

By supporting both Fibre-Channel and iSCSI host interfaces, the Xanadu 200 series lends itself very well to storage system consolidation. In a SAN environment, data can be consolidated with a Fibre-Channel interface and over an IP network with the iSCSI interface.



This product is available with:
STORAGEWATCH®

All Xanadu systems are StorageWatch® capable allowing users to reduce both infrastructure TCO and organizational operating costs associated with today's business of data assets and intelligence ensuring long term organizational growth.