

# ACTIVESTOR 3000 PRODUCT FAMILY

## High-Performance Parallel Storage For Linux Clusters

*The growth of Linux clusters being used to tackle high-performance computing challenges has led to the need for data storage systems capable of servicing fully-parallel compute systems. The object-based Panasas® ActiveScale® operating environment is the only storage architecture that is specifically designed to accelerate the performance of applications deployed on Linux clusters.*

*The Panasas ActiveStor Parallel Storage Cluster with its embedded parallel file system meets the demands of massively parallel data movement by offering scalable performance and capacity. With their exceptional ease-of-management and a single global namespace, Panasas solutions are truly accelerating time to results for engineers and scientists.*



### Panasas ActiveStor 3000 Parallel Storage Clusters

*Unsurpassed performance and capacity*

The ActiveStor 3000 family of parallel storage clusters delivers industry-leading storage performance and ease-of-management for High Performance Computing batch applications. These applications typically run on large Linux clusters and access very large files in a sequential fashion. They demand both high capacity and very high bandwidth in order to deliver results as quickly as possible.

The latest addition to this product family is the ActiveStor 3200 parallel storage cluster. It packs a robust 20TB into a 4U shelf and delivers up to 350MB/s of throughput. With linear scalability of capacity and throughput, that means it provides up to 200TB of storage and 3.5GB/s of throughput from a standard 42U rack. For environments not requiring the maximum available storage capacity, the ActiveStor 3100 storage cluster delivers the same outstanding performance at a lower capacity.

This industry-leading storage solution for HPC cluster environments also includes the ActiveScale® Operating Environment.

### Panasas ActiveScale Operating Environment

*Maximum application performance with PanFS™ parallel file system*

The third generation of the industry-leading parallel storage architecture brings additional capabilities to the Panasas ActiveStor clustered storage solution. At the heart of the ActiveScale OS is the PanFS parallel file system which turns files into smart data objects and then dynamically distributes data activity across Panasas StorageBlade® modules. This object-based storage clustering architecture enables parallel data paths between StorageBlade modules and client nodes, eliminating the inherent performance and capacity bottlenecks of traditional file systems.

The ActiveScale operating environment also dramatically lowers the cost of managing data storage by supporting Terabytes (TBs) to Petabytes (PBs) of data capacity growth all within a single, easily managed namespace.

Recent enhancements to the object-based file system and memory architecture significantly improve performance, and offer even faster time to results. ActiveScale operating environment provides many

### FEATURES AND BENEFITS

#### DirectFLOW® Protocol:

- **Maximizes Performance**  
Provides faster time to results due to faster application runtime.
- **Increases Productivity**  
Ensures maximum application utilization since jobs run in parallel and more jobs are completed in less time.

#### Single Global Namespace:

- **Reduces IT Support**  
Simplifies storage management and provides seamless scalability as the size and number of jobs to be processed increases.

#### Scalable NFS and CIFS:

- **Easy to Integrate**  
Supports existing Unix and Windows environments.

new proactive self-management features that make it the most robust storage operating environment available today.

ActiveScan software ensures continuous system performance by monitoring the data objects, data parity, the disk media and the disk drive attributes. If a potential problem is detected, then data can be moved to other StorageBlade modules to eliminate the need for reconstruction.

## Accelerate Time to Results and Maximize ROI from Your HPC Environment

Panasas offers comprehensive storage solutions for all HPC environments and delivers the highest bandwidth and I/O performance; scalable performance and capacity; and simple unified management.



Built on an object-based architecture and optimized to meet the unique needs of Linux cluster customers, the Panasas integrated hardware and software solution has been deployed in hundreds of Linux cluster installations around the globe, helping organizations accelerate their time to results and maximize ROI from their clustered high performance computing environments.

*For more information, contact us today at [www.panasas.com](http://www.panasas.com) or 1-888-PANASAS.*

Model	Capacity per 4U Shelf	Max Cache per Shelf Included	per Shelf Optional	Capacity per 42U Rack
3100	10 TB	5 GB	20 GB	100 TB
3150	15 TB	5 GB	20 GB	150 TB
3200	20 TB	5 GB	20 GB	200 TB

### PANASAS SHELF ENVIRONMENTAL

- **Ambient Temperature**
  - ◇ Operating Temperature +10C to +35C
  - ◇ Non-Operating Temperature -20C to 70C
- **Relative Humidity**
  - ◇ Operating Relative Humidity 10% to 90%
  - ◇ Non-operating Relative Humidity 5% to 95%
- **Altitude**
  - ◇ -150m to 2440m

### PANASAS SHELF POWER SPECIFICATIONS

- **Power Rating**
  - ◇ Output rating 950W
  - ◇ Input Power Rating 12001W
- **AC Power**
  - ◇ Typical operating current 4.4A @208VAC
  - ◇ Maximum in rush current 30A
  - ◇ Maximum Current 7A @208VAC
- **Thermal Rating**
  - ◇ 4000 BTU/max
- **Weight 150 lbs**

### PANASAS RACK SYSTEM SPECIFICATIONS

- **Configuration**
  - ◇ Supports up to 10 Panasas shelves max
  - ◇ Can be configured from a 1 shelf to 10 shelves
- **Power Distribution Units**
  - ◇ 4 Pre-wired PDU units 208/240 volts
  - ◇ Support redundant power grids
- **Rack Physical**
  - ◇ 42U high
  - ◇ 1800 lbs

### PANASAS SHELF PHYSICAL SPECIFICATION

- Height 17.78 cm/7 in/4U
- Width 48.26 cm/19 in
- Depth 66.04 cm/26 in
- Weight 150lbs



Accelerating Time to Results™

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