



## Pantera Storage Subsystem – Model M200

*Whether you are an enterprise buyer with departmental and remote office requirements, or a mid-size business looking to move out of DAS implementations, Pantera storage subsystem – Model M200 delivers an efficient, reliable and self-administrable consolidated storage solution. While each of these organizations face their own unique storage demands, all of the data requirements of these environments can be satisfied with the affordable, available and high-performance Model M200 storage subsystem.*

### FEATURES/HIGHLIGHTS

- SAS technology ensures reliability with point-to-point architecture and dual-ported drives
- Investment protection with auto-negotiating 4Gb/s FC connectivity
- Support for high-performance SAS and/or high capacity SATA drives addresses the needs of tiered storage and ILM solutions
- 2U-12 drive chassis allows for “start small, grow big” scalability with SAS expansion supporting up to a total of 48 drives
- Simple to implement and manage with an intuitive and familiar user interface
- Integrated, hardware based RAID with support for RAID 0, 1, 3, 5 & 10

### Redefining Flexibility and Availability

The Model M200 storage subsystem adds the most advanced frontend 4Gb/s Fibre Channel (FC) technology. With the FC host connectivity and SAS back-end technology, the Model M200 storage subsystem is designed to improve productivity through data consolidation, availability, performance and scalability. With next-generation SAS drive and expansion technology, growing organizations can take advantage of improved performance, tiered storage and reliable data protection in a storage subsystem that can be shared across an organization's network.

With four auto-negotiating 4Gb/s FC host ports per system, the M200 supports direct attachment of multiple hosts or connectivity to a storage area network. This makes it a great system for environments that want to initially deploy the Model M200 storage subsystem for the standalone fully integrated ONStor Pantera NAS system, and then seamlessly transition to a SAN fronted by ONStor NAS Gateways delivering file services. Additionally, the Model M200 storage subsystem is a great fit for existing SANs as it can easily integrate into 1, 2 and 4Gb/s infrastructures and provide robust and reliable storage at an affordable price.

The Model M200 storage subsystem is also an ideal system for a two server clustering environment. By utilizing two active/active RAID controllers with mirrored cache, redundant components and automated I/O path failover, the storage subsystem is well suited for two-node clusters where continuous application and data availability are key requirements.

### Simple installation and management

Simplicity Storage Manager ensures a friendly user interface from set-up to administration. Its web-like and task-based management interface significantly reduces the complexity of installation, configuration and management. Online capacity expansion, volume creation and host-to-volume mappings, gives the user control of their storage subsystem and the ability to make quick changes when necessary. Email diagnostic alerts and Simplicity Recovery Guru provide valuable trouble shooting assistance by diagnosing the system, alerting the administrator if a problem occurs and then providing the appropriate recovery procedure.

With Simplicity Storage Manager software, SMBs, enterprise departments and remote offices can administer the M200 with minimal IT expertise, allowing them to be self-sufficient and still get the most out of their system.

## TECHNICAL SPECIFICATIONS

<b>General Information</b>	External Interface	Two 4GB/s FC ports per controller
	Supported Operating Platforms	ONStor EverON OS
	Supported Hosts	Max partitions: 64, Max volumes: 1024
	Total Capacity per Unit	12TB (using 1TB drives), 4.8TB (using 400GB drives)
	Expansion Port	One 3Gb/s SAS drive expansion port per controller
	Total Capacity	48TB (using 1TB drives), 19.2TB (using 400GB drives)
<b>Disk Drives</b>	Disk Drives Supported	SAS (300GB, 400GB @ 15K RPM) SATA (500GB, 750GB, 1TB @ 7.2K RPM)
	Max Drives per Enclosure	12
	Max Enclosures per subsystem including controllers	4
	Max Drives supported	48
<b>RAID Controllers</b>	No. RAID Controllers	2 (dual – HA)
	RAID Levels Supported	RAID level 0, 1, 3, 5 & 10 Built in XOR for high speed parity calculations
	Cache	512MB Cache per controller, battery backup
	RAID Protection Features	Automatic drive failure detection and rebuild with global hot spares
<b>System Management</b>	Software	Simplicity Storage Manager
	Interfaces Supported	Ethernet (out-of-band)
<b>System Availability</b>	Hot Swappable Components	Redundant hot-swappable controllers, drives, power supply and cooling fans
	Additional Reliability Features	Supports dual-active controllers with mirrored cache; Optional battery backup (72 hours)
<b>Dimensions</b>	Height	86.1mm (3.39")
	Width	448.6mm (17.66")
	Depth	540mm (21.26")
	Weight	Module: 59.55 lbs Shipping: 88.75 lbs
	Service Clearance	559mm (22") shelf pull-out
<b>Power and Temperatures</b>	Voltage	100-240VAC 5.0A maximum per input
	Frequency	60/50 Hz, single-phase
	Power Consumption	515W
	Temperature Range	10°C to 40°C (50°F to 104°F)
	Humidity	Operating: 10% to 80% (non condensing)
<b>Shock and Vibration</b>	Operational Shock	5g 10ms ½ Sine
	Operational Vibration	Random 0.21grms 5-500Hz
	Non-op. Shock	30g 10ms ½ Sine
	Non-op. Vibration	Random 1.04 grms 2-200Hz
	Relocation Vibration	Swept Sine 0.9g 2-200Hz
	Acoustics	<58 dB LpA @20°C
<b>Approvals</b>	UL60950-1 (with ULc), IEC60950-1, and EN60950-1 CCC, CE, RoHS (R5), WEEE	
<b>Warranty Information</b>	Enclosures with drives	Up to 3 years