D A T A S H E E T

Brick Storage Enclosures

Pillar Axiom Storage System

Brick Storage Enclosures provide the highly available storage pool for a Pillar Axiom® storage system. Bricks are available with either Serial ATA or Fibre Channel disk drives to meet your budget and performance demands.

Brick Benefits:

- Allow any-to-any relationships between Slammer Storage Controllers and Bricks through connection to the high-speed switched interconnect Storage System Fabric
- Efficiently manage I/O read operations with dual RAID controllers, each featuring 256 MB of local cache
- Active/active redundant RAID controllers
- High redundancy in case of connection failure through multiple Fibre Channel routes to the Slammer Storage Controllers

SATA Brick Storage Enclosures

Serial ATA (SATA) Brick Storage Enclosures provide highly available disk storage for the common SAN/NAS storage pool.

- Effective throughput in excess of 1000 random IOPS and 350 MBps
- Two RAID controllers manage 12 drives as two pools of RAID 5 5+P arrays or as two distributed RAID 10 arrays
- The thirteenth drive is a shared hot spare that may be accessed by either controller in case of disk failure

Fibre Channel Brick Storage Enclosures

Fibre Channel Brick Storage Enclosures deliver highly available, high-performance disk storage for the common SAN/NAS storage pool.

- Effective throughput of 2500 random IOPS and 400 MBps
- Each Fibre Channel Brick may be cascaded to three additional Fibre Channel Bricks, scaling capacity and IOPS and reducing acquisition costs
- Two RAID adapters manage 12 drives as a single array of 10+P+S RAID 5 or manages 11 drives as a single array of distributed RAID 10
- Configure with Port Bypass Controller that cascades off Fibre Channel Bricks with the RAID Controller

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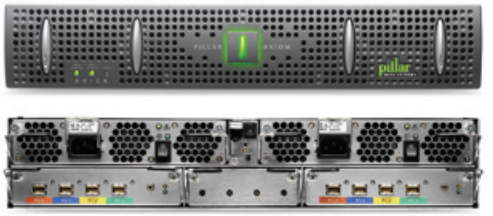
SATA Brick Storage Enclosure



Fibre Channel Brick Storage Enclosure

(With RAID or Port Bypass Controller)

Storage Enclosure

Interface to Slammer or Cascaded Bricks
Four Fibre Channel interfaces per controller,
200 MB/s (2 Gb) with port bypass

Disk Drive Interface
Dual-ported Serial ATA

Performance
350 MBps, in excess of 1000 random IOPS

RAID Controller Specifications
400 Mhz XScale ARM
128 MB ECC memory per controller
4 MB flash memory

Features
Two RAID controllers per Brick (active/active)
Automatic, transparent failover
Two RAID 5 5+P arrays
Distributed RAID 10

Interface to Slammer or Cascaded Bricks
Four Fibre Channel interfaces per controller,
200 MB/s (2 Gb) with port bypass

Disk Drive Interface
Fibre Channel

Performance
400 MBps, 2500 random IOPS

RAID Controller Specifications
600 Mhz XScale ARM
256 MB ECC memory per controller
4 MB flash memory

RAID Controller Features
Two RAID controllers per Brick
Automatic, transparent failover
One RAID 5 10+P+S array
Distributed RAID 10

Features and Specifications

13-drive enclosure

Redundant and Hot-Swappable Components
Two RAID controllers
13 disk drives (one hot spare)
Two load-balancing power supplies
Enclosure Services Module

Enclosure Dimensions

Height	3.5 in	8.89 cm (2U)
Width	17.7 in	45 cm
Depth	22 in	55.5 cm
Weight	59 lbs	26 kg

12-drive enclosure

Redundant and Hot-Swappable Components
Two RAID controllers (if specified)
12 disk drives (one hot spare)
Two load-balancing power supplies
Enclosure Services Module

Enclosure Dimensions

Height	3.5 in	8.9 cm (2U)
Width	17.7 in	45 cm
Depth	22 in	55.5 cm
Weight	70 lbs	32 kg

Disk Drive Information

Capacity	500 GB, 750 GB, 1 TB
Rotational Velocity	7,200 RPM
Standard	SATA II

Capacity	146 GB, 300 GB
Rotational Velocity	15,000 RPM
Standard	FC

Power Requirements

Power Frequency	50 – 60 Hz
AC Voltage	90 – 264 VAC
Max Power Consumption	257 VA
Max Heat Dissipation	877 BTU/hr
AC Plug Type	2 IEC 320 C13 connections

Power Frequency	50 – 60 Hz
AC Voltage	90 – 264 VAC
Max Power Consumption	400 VA
Max Heat Dissipation	1,370 BTU/hr
AC Plug Type	2 IEC 320 C13 connections

Environmental

Operating	
Temperature	10 – 40 degrees C
Temperature Gradient	10 degrees C/hr
Relative Humidity	10 – 85 percent non-condensing
Humidity Gradient	10 percent/hr non-condensing
Non-Operating	
Temperature	-40 – 70 degrees C
Temperature Gradient	30 degrees C/hr
Relative Humidity	5 – 95 percent non-condensing
Humidity Gradient	10 percent/hr non-condensing

Operating	
Temperature	10 – 40 degrees C
Temperature Gradient	20 degrees C/hr
Relative Humidity	10 – 85 percent non-condensing
Humidity Gradient	10 percent/hr non-condensing
Non-Operating	
Temperature	-40 – 70 degrees C
Temperature Gradient	30 degrees C/hr
Relative Humidity	5 – 95 percent non-condensing
Humidity Gradient	10 percent/hr non-condensing

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