

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
- 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
- Configure with Port Bypass Controller that cascades off Fibre Channel Bricks with the RAID Controller

SATA Brick Storage Enclosure



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

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

Disk Drive Information

Capacity	250 GB, 500 GB
Rotational Velocity	7,200 RPM

Power Requirements

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