

All the features and performance of true Storage-over-IP (SoIP)

Z-Series Storage Solutions - Z-Rack

Product Positioning

Hammer Z-Rack storage solutions are designed specifically for Small & Medium Businesses, delivering the highest performance and virtually unlimited scalability, at the lowest price point in the market.

Target Customer

- Small and medium business' with 25-250 seats using Windows, Linux* or Mac** operating systems
- Increasing data and fault tolerance requirements but sensitive to high upfront expenditures
- Organizations without specialized IT resources

Likely Competitor Products

- Iomega 400r
- Dell AX100i
- IBM DS300

Value Proposition

- Easy to use and manage with local and remote management suite - No specialized IT resources
- Ultra efficient use of capacity via Z-SAN file sharing and block access on same array
- Up to 3 TB*** of capacity in a single unit. Scales fluidly up to 128 PB per volume across enclosures
- Data throughput of 80 MB/sec outperforms all other competitor products in the segment
- Protect critical data with integrated native RAID rather than external hardware controllers
- 20%-50% lower price point than Fibre Channel, iSCSI and NAS solutions at each capacity point

Unique Features

- Aggregates for performance of 10+ GB/sec across multiple enclosures
- Supports file/volume sharing and block-level applications on single device
- Build volumes and RAID constructs across multiple physical enclosures
- Z-SAN "non-disruptive" architecture facilitates changes without system downtime
 - o Additional units can be added at will
 - o Volumes can be increased/decreased at will
 - o RAID structures can be modified at will

Storage Architecture Application Guide

End-User Application	Hammer Z-SAN	NAS Storage	SAN Storage
Email Servers	✓		✓
Databases and ERP	✓		✓
Web and content servers	✓	✓	
Networked storage	✓	✓	
Imaging & multimedia	✓	✓	✓
Archives, disk backups	✓	✓	✓

*Linux will be available beginning Q4 '06

**Mac OS X will be available beginning Q3 '06

***Max HDD size currently 750 GB.

Use of larger HDDs will increase enclosure capacity

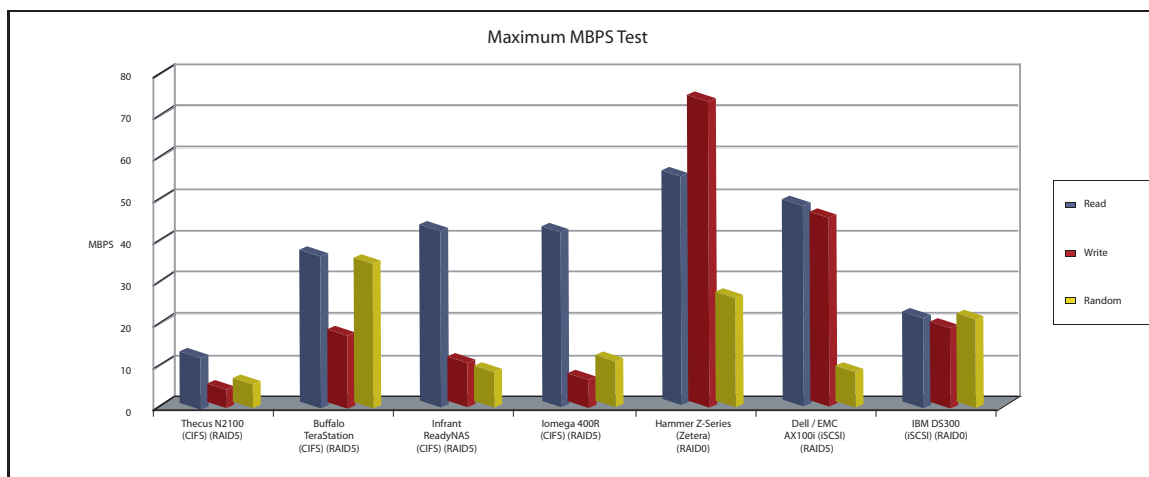
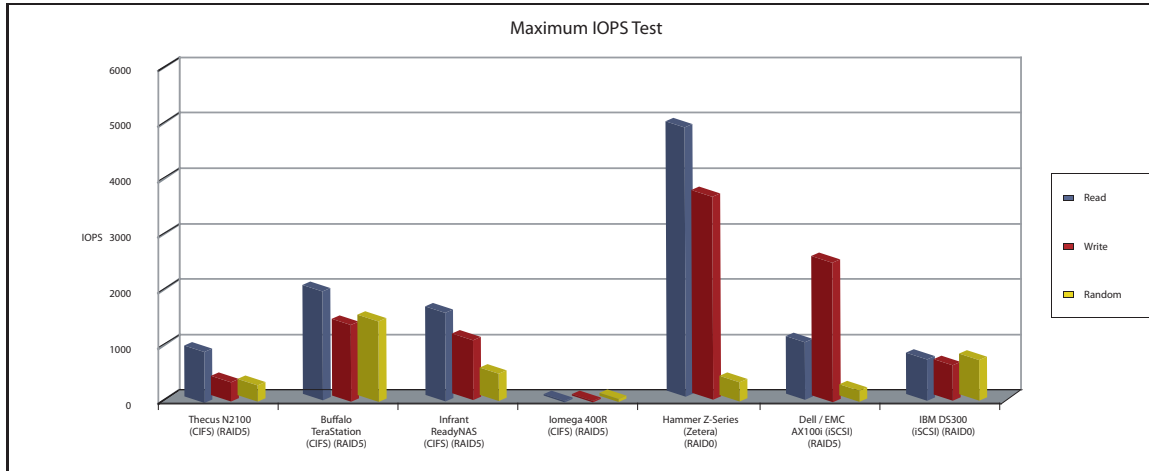
Only Z-Series is optimized for all types of applications providing the most flexible solution in the industry



Z-rack™ HZR1U

Toigo Partners International performed independent product testing of the Hammer Z-Series in order to validate performance claims. The results demonstrate decisively that Z-Rack offers the best performance at the lowest price point in its segment.

Toigo Partners International Performance Results



Rack Mount Models

Product Specifications	Hammer Z-Rack	Iomega NAS400r	Dell AX100i	Snap 4200
Suggested List Price (1 Terabyte)	\$3,999	\$4,499	\$6,038	\$5,500
Storage Architecture	SAN	NAS	SAN	SAN
File Storage Type	File & Block	File Only	Block Only	File & Block
Unit Storage Capacity	3 Terabytes	1 Terabytes	3 Terabytes	1.6 Terabytes
Total System Capacity	Up to 128 petabytes	1 Terabytes – NAS doesn't scale	3 Terabytes – AX100i doesn't scale	2 Terabytes – Add 1 Terabyte
Redundant/Hot Swap Drives	Yes	No	No	Yes
Single Unit Performance	~80 Mbytes/sec	~34 Mbytes/sec	~75 Mbytes/sec	~34 Mbytes/sec
Max System Performance	Limited only by the network	~34 Mbytes/sec	~75 Mbytes/sec	~34 Mbytes/sec
Configuration changes without downtime	Yes	No	No	No