



TERASTACK[®]
The SOLUTION for Extended Data Storage
Active Archive™

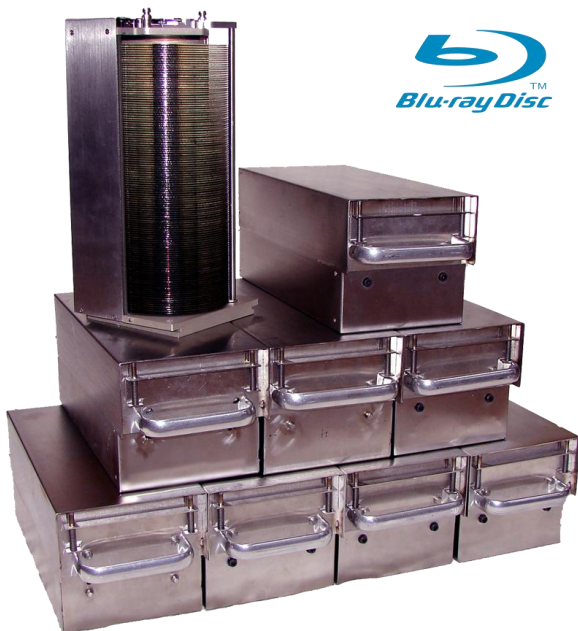
TBYTe[®] Storage

- 50TB of extendable randomly accessible nearline data storage, scalable into petabytes with multiple systems in a clustered architecture
- Unlimited transportable offline storage
- Enterprise application/storage server with up to 42 TB (RAW) RAID-capable online capacity per TBYTe[®]
- Active Archive™ with automated business rule-based hierarchical data movement
- Seamless integration with commercially available software
- Up to 90% reduction in total cost of ownership and operational overhead
- Each TBYTe[®] requires less than 600 watts; up to 70% reduction in energy cost
- Minimal floor space requirements



Standalone TBYTe[®] (2) Shown in 42U Rack

Standalone 15U cabinet
or 19" rack-mount options
(modifications will be required to mount in customer provided equipment rack)



TeraStack[®] Cartridge

- 50 to 100 years media data integrity
- Energy passive, non-mechanical media increases reliability and reduces cost
- Automated media handling eliminates human contact with media
- Hot-swappable media volume for added capacity and long-term storage
- COTS components; media, burners, and server components follow industry road map for long-term compatibility
- 125 Blu-ray discs in each TeraStack[®]

Features

Application Server

Operating System	Microsoft Windows Server 2003 / Linux environment
Processor	Dual AMD Opteron 2214HE 2.0GHz Dual-core
Memory	Optional 4, 8, or 16GB DDR2 667MHz ECC RAM
Online Cache	Up to 42TB (RAW) storage buffer, RAID 5 or 6 capable, Serial-ATA, Hot-swappable
RAID Controller	Areca ARC-1680-ix
Network Interface	Gigabit Ethernet, Fiber compatible with expansion card (10GigE, FC optional)
PCI Expansion	PCI, PCI-X, or PCIe x16, SCSI compatible

TBYTe® Storage

15U Cabinet Physical Dimensions w/ Server	Width 22in/56.5cm Height 33in/84cm Depth 35.5in/90cm Weight ~470lbs/214kg
Rack-mount Unit Physical Dimensions w/ Server	Width 19in/48.3cm Height 31in/79cm Depth 33in/84cm Weight ~400lbs/181kg
Max. Capacity (per TBYTe®)	Online Application Storage Server Nearline 50TB (8 TeraStack®) Offline Unlimited
Burners (per TBYTe®)	6 to 14 Dual layer Blu-ray; hot-swappable; expandable in pairs
Operating Environment	Temperature 50-95°F, 10-35°C Humidity 20-80%, non-condensing
Warranty	Standard 1-year hardware
Robotic Sensor Type	Class 2 Laser
Power (per TBYTe®)	Power Supplies 2+1 redundant and hot-swappable Power Rating 100-240VAC auto-sensing Power Usage 600 W typical, 800 W max Heat Generation 2047 BTU per hour typical
Data Rate (per TBYTe®)	Peak 400MB/second Sustained 121.8MB/second max

TeraStack® Cartridge

Capacity	6.25TB (125 50GB Blu-ray discs) (RAW)
Media	50GB Blu-ray write once (WORM) or re-writable
Cataloging	Embedded with flash media to allow operation with any TBYTe®
Data Integrity	Write Once 100 years Re-Write 50 years
Storage Environment	Temperature 50-131°F, 10-55°C Humidity 5-90%, non-condensing

8 Series TBYTe® (Customizable options available)

Base Models	866	81428	81442
Number of TeraStacks® Supported	8	8	8
Capacity (Nearline / Online)	50TB / 6TB	50TB / 28TB	50TB / 42TB
Blu-ray Burners	6	14	14
Data Rate	Peak 400 MB/sec Sustained 52.2 MB/sec	Peak 400 MB/sec Sustained 121.8 MB/sec	Peak 400 MB/sec Sustained 121.8 MB/sec

Nomenclature Legend: TBYTe 81428

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