

StorTrends® 2200n

2U NAS Storage Appliance

HIGHLIGHTS

- 6 or 12 TB NAS storage appliance
- 12 Hot-swappable SATA Drives
- Cost-effective, low TCO
- Scalable up to 60 TB with 3 JBODs
- Network Teaming
- Smart UPS Support
- Failover / Failback
- Advanced Snapshot
 - Redirect on Write (ROW)
 - 1022 read-only/writable snaps per volume
 - 2048 snapshots per box
 - Rollback from any snapshot
 - Random snapshot deletion
- Volume Replication (Snapshot-assisted)
 - Data transfer acceleration with WDS (WAN-Optimization Data Services)
- Supports major file transfer protocols
- Hardware RAID Support
 - RAID levels 0, 1, 5, 6, 10, 50, 60
 - Online capacity expansion
 - Online RAID level migration
 - Multiple arrays per drive
 - Read with write-back caching
 - Global & dedicated hot-spare



The StorTrends® 2200n is an affordable 2U, high-density rack-mount Network Attached Storage (NAS) appliance, perfect for workgroups or departments. It provides a reliable way to manage and store valuable business data without complexity. Easy to install, the StorTrends 2200n enables an administrator to coordinate all functions relating to discovery, management, tracking and planning for future storage growth.

The StorTrends 2200n is a flexible hardware platform that can be coupled with StorTrends iTX software for use as a dedicated network storage appliance (NAS). Built to support Intel® Dual-Core CPU technologies, the StorTrends 2200n offers performance and flexibility.

The StorTrends® 2200n NAS appliance is an ideal alternative to traditional Direct Attached Storage (DAS) environments. StorTrends NAS appliances make it simple to centralize file data storage from Windows®, UNIX, Linux and Mac® clients across an existing Ethernet network.

The StorTrends 2200n offers maximum data protection with RAID levels 5 & 6 and network connectivity to major operating systems, perfect for workgroups or departmental storage that are experiencing rapid data growth.

Administrators can save time and money by deploying StorTrends 2200n NAS appliances instead of inflexible DAS units. Adding capacity in a DAS environment means adding a server, which requires downtime. Adding capacity with AMI's StorTrends 2200n means no downtime for users, and can be implemented for both quick, additional and long-term storage, as well as improved disk utilization when compared to DAS.

The StorTrends 2200n offers twelve hot-swappable drive bays with SATA support, and network teaming support that ensures load balancing across the dual Ethernet ports. UPS support enables the automatic switching of the RAID cache mode to write-through in the event of a power loss.

Data security is enhanced by the advanced snapshot capabilities of the StorTrends

2200n. The administrator has the power to rollback, review, and mount data snapshots to recover lost data quickly and with precision, just moments after a catastrophe.

Management of StorTrends appliances can be done using the integrated web-based ManageTrends™ GUI, AMI's storage management software. Users managing more than one StorTrends appliance can use ManageTrends to discover and manage appliances across the network. Manage Trends also provides event management, a detailed analysis of enterprise-wide storage usage, and storage server availability reporting.



*12 TB NAS 2U Storage
Appliance with StorTrends®
iTX Data Storage Software*

System Features & Highlights:
Transfer file data over existing
Ethernet network
Sturdy 2U rack mountable chassis
Redundant Power Supply Modules
High performance
Cost-effective and scalable
Supports major file transfer
protocols
Network Teaming
Advanced Snapshot Capability
Volume Replication (Snap-assisted)
Storage Alerts
Volume Expansion
Support for volumes up to 60 TB
Support for 64 volumes
SATA support with hot swap
Hardware RAID Controllers
UPS support
ADS/NIS support

Hardware Specifications:

Form Factor
Rack-mountable 2U Chassis
One (1) Slim DVD-ROM Drive
On-Board CPU
Two (2) Dual-Core Intel® Xeon®
5100 series processors, 1066 MHz
FSB with 4 MB of L2 cache
Memory
2 GB of DDR2 SDRAM
Drive & Storage Capacity
Twelve (12) 3.5" Hot-swappable
SATA Drive Bays
500 GB and 1.0 TB capacity hard
drives are supported, for 6.0 TB or
12.0 TB physical storage capacity
per appliance
Two (2) 2.5" Internal Notebook
SATA Flash Drives
4 GB capacity Flash drives for OS
Installation, support for RAID 1
mirroring for OS integrity
RAID Support
LSI Logic MegaRAID® SAS 8888ELP
RAID Controller
Online capacity expansion & RAID
level migration
RAID levels 0, 1, 5, 6, 10, 50, 60
Multiple arrays (same type) per
drive
Read with Write-back caching
Global & dedicated hot-spare
Status LEDs
6 LED Indicators (Power Active, Unit
ID, Unit Fault, Network Activity,
HDD Activity, System Overheat)
Expansion Slots
Three PCI-Express Expansion Slots:
Two (x8) PCI-Express Slots
(via Riser Card)
One (x4) PCI-Express Slot
(via Riser Card)
Data Management Ports
2x Single-port Gigabit PCI-Express
Ethernet Controller
Other Connectors
Two (2) USB Ports (2.0, 1.1)

Power Specifications
450W (1+1) Redundant, AC Power
Supply with PFC
AC Voltage (100 - 240V, 60-50Hz,
6.3 - 3.2 Amp)
Cooling Specifications
Three (3) Cooling Fans with status &
tachometer monitoring
Cooling Air Shroud included
Operating Environment
Operating Temperature: 50 to 95°F
(10° to 35° C)
Operating Relative Humidity: 8% to
90% (non-cond.)
Physical Characteristics
Dimensions: 3.46" (87.9 mm) H x
17.46" (443.4 mm) W x 27.83" (707
mm) D
Weight: 44 lbs. (20 kg) as shipped
(unpopulated); 66 lbs. (30 kg) fully
populated (with 12 drives)

*StorTrends® iTX
Software Specifications:*

Volume Replication
Snap-assisted
Replication Wizard
Failover / Failback
Advanced Snapshots
Up to 1,022 read-only, 1,022
writeable snapshots per volume
2,048 snapshots per box with near-
zero degradation
Redirect (allocate) on Write (ROW)
Random snapshot deletion
Rollback to any snapshot
Mounting snapshots as Read-Only or
Read-Write
Caching-assisted snapshots
Backup
VSS-based backup support for
Windows® 2003 Servers
Networking
TCP/IP, FTP, HTTP/HTTPS, SNMP,
Windows® (CIFS), UNIX (NFS),
Apple®
Security
ACL security implementation
supports: Local users, Windows®
NT/2000 Domain users, Windows®
2003 Active Directory users, NIS
Domain users
Management
Command line interface through
RS232 & SSH
Integrated web-based management
Tool for easy customization,
branding and theme updating
Event Management
Detailed Event Log
SNMP, SNMP Traps (up to 4
destinations)
SMIS 1.1, VDS
Storage Data Management
Storage Resource Management /
Storage Reports
Storage pool
LUN (Logical Unit Number) creation
& management
LUN dynamic volume expansion
Dynamic NAS volume expansion
Unified RAID Management
Hardware RAID controllers
Auto RAID rebuild

Remote Management
SNMP, SMIS 1.1, VDS
UPS Support
Universal UPS Support
Supports Windows® OS/iTX/Linux
as UPS slaves and many UPS makes
& models

Advanced Features

Advanced Snapshot Technology

AMI's Advanced Snapshot
technology enables up to 1,022
Read-Only and Read-Write
snapshots per volume. The module
allows for rapid creation and
deletion of a snapshot with near-
zero degradation, permitting faster
back-ups than ever before - with the
assurance of a complete and secure
back-up. Advanced Snapshot
technology is focused on
performance, enabling users to
mount a snapshot as a volume, read
from a snapshot simultaneously,
instantaneously roll back to a
snapshot, and delete it on demand.

Snap-assisted Replication (SAR)

This technology allows replication of
snapshots in chronological order on
a remote machine. Snapshots can
be organized by application-based
consistency groups. In fail-over to a
secondary appliance, StorTrends iTX
will automatically rollback to the
latest consistent snapshot.

**WAN Optimization Data Services
(WDS)**

StorTrends utilizes several
sophisticated techniques to optimize
the speed of long distance WAN
connections. It uses an intelligent
mix of standards-based transport
protocols to overcome the
inefficiencies and high latencies of
TCP protocols in WANs and provide
excellent bandwidth utilization.
Additional performance gains are
made through data reduction
technologies such as compression
and data deduplication.



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