

# StorTrends® 3100i

## 3U IP SAN & NAS Storage Appliance



StorTrends® 3100i is an affordable 3U, rack-mount storage appliance that offers support for both block and file data. It merges Ethernet-based Storage Area Networks (IP-SAN) and Network Attached Storage (NAS) on a single storage platform. The StorTrends 3100i supports iSCSI which allows block applications like Exchange, SQL Server and ORACLE data to be deployed or stored on the same server as traditional file services and storage. This appliance is designed with performance in mind and includes many enterprise-level features such as hardware RAID, advanced snapshot and thin provisioning.

Data Sheet

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### HIGHLIGHTS

- > 3.75 or 7.5 TB IP SAN & NAS storage appliance
- > Cost-effective and scalable
- > Extreme performance levels
- > Network Teaming
- > Universal UPS Support
- > Hardware RAID support
- > SATA support with hot swap
- > Advanced Snapshot
  - Redirect on Write (ROW)
  - 254 Snaps per volume
  - Snapshot scheduling for SAN & NAS
  - Rollback from any snapshot
  - Random snapshot deletion
- > Adaptive Provisioning
- > Advanced Caching
  - Improves read and write-back performance
  - I/O scheduling and aggregation
- > Backup Support
  - VSS
  - Legacy

StorTrends 3100i features dual dialect StorTrends® iTX 2.1 software, which offers support for both block-based and file-based data on the same storage appliance. Dual dialect enables the end user to transfer both block and file data over the existing Ethernet network. Designed for Enterprise departments and SMB markets, it is cost-effective, scalable and easy to setup.

The StorTrends 3100i offers hot swappable drive bays with advanced hardware RAID features and SATA support. Software features introduced with the StorTrends 3100i are network teaming support, UPS support, thin provisioning, advanced snapshot, snapshot scheduling for SAN and NAS, backup support and advanced caching.

Adaptive provisioning allows the administrator to create and manage storage volumes without restrictions. The provisioned volume size can be significantly larger than the current physical storage capacity.

AMI's Advanced snapshot features Redirect on Write (ROW) with almost zero degradation when writing or rolling

back snapshots. Administrator have the ability to schedule up to 254 read-write and 254 read-only snapshots per volume.

iTX 2.1 supports taking SAN snapshots using Microsoft VSS snapshot technology or through agents specific for application servers like Exchange Server, SQL Server and Oracle. Microsoft VSS-based snapshots support agent-less LAN-free backup.

Advanced caching improves read and write-back performance and efficient IO scheduling. IO aggregation significantly improves snapshot performance.

Management of StorTrends appliances can be done using the integrated web-based GUI or using ManageTrends™. Users that need to manage more than one appliance will use ManageTrends to discover and manage StorTrends appliances deployed across the network. It also analyzes and tracks enterprise wide storage usage. AMI's management software provides event management, a detailed analysis of the storage usage and availability of the storage servers.

# StorTrends

www.ami.com

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## 3U IP SAN & NAS Storage Appliance

### Features

#### Hardware Specifications

##### On-board CPU

Intel Dual Xeon 2.8 GHz Hyper-threaded

##### Host Interface

Dual Gigabit Ethernet

##### Drive Interface and Capacity

15 x 3.5" w x 1" h hot-swap SATA bays  
250 GB or 500 GB drives

##### Storage Capacity per Enclosure

3.75 TB or 7.5 TB

##### Hardware RAID support

RAID levels 0, 1, 1+N, 10, 10+N, 5, 50  
Online capacity expansion  
Online RAID level migration  
Multiple array types per drive  
Distributed sparing  
Read and Write-Back caching  
Auto RAID rebuild

##### Status LEDs

Yes

##### Expansion Slots

Two (x8) PCI-Express slots  
One (x4) PCI-Express slots  
One 64-bit 133/100 MHz PCI-X

##### Data Management Ports

Two, 1 Gigabit Ethernet Data Ports

##### Other Connectors

Two Fast UART 1650 serial ports  
Two USB 2.0/1.1 ports

##### Power Specifications

760W AC power supply module w/PFC  
AC Voltage (100-240V, 50-60Hz, 14/7Amp)  
Triple Redundant

##### Cooling Specifications

Four 4 x 9cm hot-swappable, 5,000RPM fans  
Two 2 x 8cm rear exhaust, hot-swappable fans  
Fan tachometer monitoring

##### Operating Environment

Operating Temperature  
10° to 35°C (50° to 95°F)  
Non-operating Temperature  
-40° to 70°C (-40° to 158°F)  
Operating Relative Humidity  
8% to 90% (non-condensing)  
Non-operating Relative Humidity  
5% to 95% (non-condensing)

##### Physical Characteristics

Dimensions: 5.2" H x 17.7" W x 25.5" D  
Weight: 72 lbs.

#### StorTrends iTX 2.1 Software Specifications

##### Advanced Storage Stack

High performance  
Adaptive provisioning  
Provision tracking  
Storage alerts  
Support for volumes up to 8TB  
Snapshots  
- Redirect(allocate) on Write (ROW)  
- Mounting snapshots as Read-Only or Read-Write  
- Up to 254 Read-Only snapshots and 254 Read-Write per volume  
- Random snapshot deletion  
- Rollback to any snapshot  
Advanced caching  
Caching assisted snapshot  
Support for 32 volumes

##### Backup

VSS-based backup support for Window 2003 Servers  
Backup agents for popular application servers  
- Exchange Server  
- SQL Server  
- ORACLE  
iSCSI tape support

##### Business Continuance

Consistent SAN snapshot scheduling  
NAS & SAN snapshot scheduling  
Easy SAN snapshot management

##### Networking

TCP/IP                      Apple  
Windows (CIFS)        SNMP  
UNIX (NFS)                FTP (HTTP/HTTPS)

##### iSNS Configuration

Up to 16 iSNS servers are supported  
Compatible with MS iSNS Server v3.0 & later  
iSNS client supporting Draft 22 of iSNS specification

##### Security

ACL security implementation supports:  
- Local users  
- Windows NT/2000 Domain users  
- Windows 2003 Active Directory users  
- NIS Domain users

#### iSCSI Target Configurations

iSCSI Qualified Name (iqn) format  
Enable/Disable individual network ports for iSCSI traffic  
iSCSI target supporting iSCSI RFC 3720  
Tight iSCSI and iSNS integration  
iSCSI error recovery level 0 and 1  
Maximum of 4 connections per session  
Maximum of 128 targets per box  
Maximum of 32 LUNs per target  
Maximum of 1,024 LUNs per box  
Multiple levels of authentication:  
- mutual chap, user name/password chap authentication & iSCSI initiator WWN name  
iSCSI Portal Tag configuration from UI  
View iSCSI data and error statistics

#### Management

Command line interface through RS232 & SSH  
Integrated web-based management

#### Event Management

Detailed Event Log  
SNMP Traps (up to 4 destinations)

#### Remote Management

SNMP  
SMIS-1.1

#### Storage Data Management

Storage pool  
LUN (Logical Unit Number) creation & mgt.  
LUN dynamic volume expansion  
Dynamic NAS volume expansion  
Unified RAID Management  
- Software RAID (levels 0, 1, 5)  
- Supports hardware RAID controllers

#### UPS Support

Universal UPS support  
Supports Windows OS/iTX/Linux as UPS slaves and many UPS makes and models



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