



StorTrends 1302i

1U IP-SAN and NAS Storage Appliance

Highlights

- 1U IP-SAN & NAS storage appliance with StorTrends iTX Data Storage Software
- 4 Hot-swappable SATA Drives for a variety of capacity configurations
- Advanced Snapshot
- Redirect on Write (ROW)
- Up to 1022 snapshots (R/O and R/W) per volume
- Up to 8,048 read-only & writeable snapshots per appliance
- Snapshot scheduling for SAN & NAS
- Rollback from any snapshot
- Random snapshot deletion
- Volume Replication
- Asynchronous
- Snapshot-assisted
- WAN-Optimization Data Services (WDS) featuring Deduplication, Encryption, and Link Acceleration
- Software RAID support: RAID levels 10, 5 & 50
- Network Teaming
- Storage Resource Management (SRM) with detailed reporting on usage and performance
- Enhanced Reliability with 300W Redundant Power Supply and Smart UPS Support

The StorTrends 1302i is an affordable 1U rack-mount storage appliance that offers support for both block and file data in a form factor that is perfect for departments or small offices. It merges Ethernet-based Storage Area Networks (IP-SAN) and Network Attached Storage (NAS) on a single storage platform.

Its support for iSCSI enables block applications like Microsoft® Exchange and Oracle® to be deployed or stored on the same server as traditional file services and storage. The StorTrends 1302i is designed with performance in mind, and includes features for advanced storage management such as Advanced Snapshots, Volume Replication, Failover, WAN optimization and much more.

StorTrends products provide true enterprise-level features to departmental and small- to mid-size business (SMB) users. They merge IP-SAN and NAS functionality into one cost-effective and easily deployable storage appliance.

The StorTrends 1302i offers four hot-swappable drive bays with advanced SATA support, as well as highly distinguishing software features. Dual-dialect StorTrends® iTX software enables transfer of both block and file data over the existing Ethernet network, along with a host of advanced features that until now only existed in systems costing many times more than the StorTrends 1302i.

The Volume replication feature of the StorTrends 1302i allows data to be stored on multiple StorTrends appliances at multiple sites, for high availability and disaster recovery in the event of a catastrophe.

StorTrends' Advanced Snapshot capability features Redirect-on-Write (ROW) technology with near-zero performance degradation when writing or rolling back snapshots.

Administrators can schedule up to 1,022 read-write and 1,022 read-only snapshots per volume, and up to 8,048 snapshots per box. A maximum of 256 volumes per appliance is supported.

Asynchronous replication bundles I/Os within snapshots and sends them to the remote server, boosting network utilization efficiency and reducing bandwidth cost. When combined with the revolutionary WAN Data Services (WDS) feature included in the Asynchronous Replication module, the system employs data deduplication, compression and link optimization to reduce data transmission and bandwidth usage by several factors over conventional replication speeds. For improved reliability and disaster prevention, the StorTrends 1302i features redundant power supplies, as well as Smart UPS support, which allows the appliance to seamlessly switch over to UPS power in the event of a power failure and initiate a graceful shutdown.

StorTrends appliances can be managed by the integrated ManageTrends™ web-based GUI, which provides discovery and management of multiple StorTrends appliances deployed across the network.

IP-SAN & NAS 1U Storage Appliance with StorTrends® iTX Data Storage Software

System Features & Highlights:

Transfer block and file data over existing Ethernet network

Sturdy 1U rack mountable chassis
Anti-Virus Scanning for NAS Shares
Redundant Power Supply Modules
Supports major file transfer protocols
WAN-optimization Data Service (WDS)
Network Teaming
Advanced Snapshot Capability
Volume Replication and Expansion
Storage Alerts
Support for 256 volumes per appliance
SATA support with hot swap
UPS Support
ADS/NIS Support

Hardware Specifications:

Form Factor

1U Chassis with 300W Redundant Power Supply

On-Board CPU

Intel Xeon E-2314 Quad-core 2.80 GHz Processor

Memory

16 GB RAM

Network Interface

1G * 2 Port

Drive & Storage Capacity

Four (4) 3.5" Hot-swappable SATA Drive Bays

Status LEDs

5 LED Indicators (Power, Network Activity (x2), HDD Activity, System Information)

Expansion Slots

Two PCI-Express Expansion Slots:

One (x16) PCI-Express Slot

One (x8) PCI-Express Slots

Data Management Ports

2x Single-port Gigabit PCI-Express Ethernet Controller

Other Connectors

Four (4) USB Ports

Power Specifications

300W (1+1) Redundant, AC Power Supply with PFC

AC Voltage (100 - 240V, 60-50Hz, 6.3 - 3.2 Amp)

Cooling Specifications

Four (4) 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 80% (non-cond.)

Physical Characteristics

Dimensions: 1.7" (43 mm) H x 17.2" (437 mm) W x 19.85" (503 mm) D

Weight: 45 lbs. (20.4 kg)

StorTrends® iTX Software Specifications:

Volume Replication

Asynchronous

Snapshot-assisted

- WAN Data Services (WDS) featuring

Deduplication, Encryption, and Link Acceleration

Many-to-One Replication/ Bi-Directional

Replication

Advanced Snapshots

Up to 1,022 read-only and 1,022 writeable snapshots per volume with near-zero performance degradation

Redirect on Write (ROW) Snapshot Technology

Rollback to any snapshot

Snapshot mounting for file recovery Backup

Networking

TCP/IP, FTP, HTTP/HTTPS, SNMP, DHCP, UPnP
Windows® (CIFS) and Linux (NFS) file protocols

iSNS Configuration

Up to 16 iSNS servers are supported

Compatible with MS iSNS Server v3.0 and 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

Multiple levels of authentication: Mutual CHAP,

user name/password CHAP authentication & iSCSI initiator

iSCSI Portal Tag configuration from UI

View iSCSI data and error statistics

Management

Command line interface through RS232 & SSH

Integrated web-based management

Tool for easy customization and themes

Event Management

Detailed Event Log

SNMP, SNMP Traps (up to 4 destinations)

Email Alerts

Email OTP Authentication for Login, Snapshot

Deletion, Volume Deletion, Container Deletion

Anti-Virus Scanner

Supports ClamAV Anti-Virus Scan

Storage Data Management

Storage Resource Management / Storage Reports

LUN (Logical Unit Number) creation & management

LUN dynamic volume expansion

Software RAID levels 10, 5 & 50

Auto RAID rebuild

Remote Management

SNMP, SMIS 1.1, VDS

Remote Management

CLI (SSH)

UPS Support

Universal UPS Support; Supports Windows® OS/ iTX/Linux as UPS slaves and many UPS makes & models

Applications Supported

Oracle®, SQL, Microsoft® Exchange, VMware®, etc.

Advanced Features

Advanced Snapshot Technology

AmZetta's Advanced Snapshot technology enables up to 8,048 snapshots (R/O and R/W) at the block or file level.

It also allows for rapid creation and deletion of a snapshot, permitting faster, more secure back-ups than ever before.

Advanced Snapshot technology is focused on performance, enabling customers to mount, review and instantaneously roll back to a snapshot with near-zero performance degradation of data.

Snapshot-assisted Replication

This technology allows chronological replication of snapshots on a remote machine, with the ability to organize 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, data deduplication and bandwidth throttling.