



## HIGHLIGHTS

- > 3U IP-SAN storage appliance with StorTrends iTX 2.8 Data Storage Software
- > 16 Hot-swappable SSD, SAS and NL-SAS Drives for a variety of capacity configurations:
  - 8, 16, 32 or 48 TB of raw capacity (NL-SAS drives with 6 Gbps SAS interface)
  - 4.8 TB, 7.2 TB, 9.6 TB (SAS drives)
- > **Dual Controller Configuration:** High Availability (HA) Auto Failover/Failback in Active/Active or Active/Passive configuration
- > **Software RAID with RAID-RT™ Technology:** RAID 0, 1, 5, 6, 50, 60 to protect against disk failure
- > **Data Archiving:** Data Deduplication and Compression for Archiving of Critical Data
- > **Auto Tiering:** Intelligent, hierarchical tiering of Data with Information Lifecycle Management in tiered appliances and across zones
- > **Near-CDP with Data Snapshots:** Advanced Redirect on Write (ROW) Snapshots, with support for 8,048 Snapshots
- > **Data Replication:** Replicate Data to DR (Disaster Recovery) and Remote Sites
- > **WDS Technology:** Compression, Encryption, Data Deduplication and WAN Optimization for fast replication
- > **Vertical Capacity Expansion:** Save hardware and disk costs by expansion up to 256 TB with up to seven StorTrends 3202j JBOD Appliances, with multipathing for increased performance and reliability
- > **Virtualization:** Support for leading virtualization suites including VMware®, Microsoft® Hyper-V and Citrix® Xen™
- > **Multi-Platform Replication:** Lower DR costs by replicating between single and dual controller StorTrends storage appliances



www.stortrends.com

The StorTrends 3400i is a 3U rack mountable Dual Controller IP-SAN Storage solution with sixteen hot-swappable hard drives. It provides up to 48 TB of raw storage capacity and is scalable up to 256 TB with the addition of StorTrends 3202j JBODs. The StorTrends 3400i features the latest 64-bit version of StorTrends iTX Data Storage Software – StorTrends iTX 2.8 – which is optimized for this platform and designed to leverage the power and reliability of its dual controller design.

This highly reliable storage appliance comes at an outstanding price, to provide true enterprise-class performance in an SMB-friendly package. It can be deployed in existing Ethernet networks and has the capacity to support the entire data storage needs of corporations & institutions. The auto-failover capability for its two QuadCore controllers ensures that any disaster or interruption is handled smoothly, making the StorTrends 3400i a solid candidate for mission-critical data that requires “always on” availability and reliability.

## Data Sheet

This newest addition to the StorTrends lineup includes a host of new features, including true Active/Active High Availability with dual controller configuration: if one of the system’s controllers fails, the secondary takes over immediately with no loss of data or uptime. It also can provide outstanding Disaster Recovery from physical and network catastrophes with 8,048 read only/writeable snapshots, thanks to the 64-bit architecture of StorTrends iTX 2.8.

This 3U appliance features sixteen hot-swappable drive bays with SAS & NL-SAS drive support provide multiple options in performance, capacity and cost. The StorTrends 3400i also offers the potential for significant capacity expansion; when used as the storage head for a chain of up to four StorTrends 3202j JBOD units, storage capacity can be increased to 256 TB of raw storage space.

The StorTrends 3400i can provide outstanding Disaster Recovery from physical and network catastrophes with 8,048 read only/writeable snapshots, thanks to the 64-bit architecture of StorTrends iTX 2.8. StorTrends iTX 2.8 also features SMART awareness which provide preemptive alert notifications on drive failure so necessary precautions can be taken.

One of the most powerful features of the StorTrends 3400i is its Advanced Snapshot capability with Redirect on Write (ROW) technology. Administrators

can schedule snapshots and rollback to any snapshot under a second. Snapshot-assisted replication (SAR) replicates delta snapshots from the primary system in chronological order to the secondary. In the event of a failover, the system will recover to the latest available consistent snapshot image.

Data Archiving with Deduplication, which works with the WAN Data Services (WDS) feature of Volume Replication to apply data deduplication on the secondary appliance at the disaster recovery site to conserve storage space and greatly increase data archiving capabilities.

Because the StorTrends 3400i features Asynchronous Replication with WDS, it is also ideally suited for Disaster Recovery (DR) applications requiring a secondary appliance in an offsite location, as WDS provides exceptional savings in bandwidth usage and data transfer times. The Archiving with Deduplication feature adds additional layers of flexibility and functionality to its replication capabilities, and takes it beyond a mere DR role into the realm of true data warehousing.

Finally, integrated web-based management with AMI’s ManageTrends™ interface provides a simple configuration wizard to configure volumes and logical disks, and control the discovery and management of multiple StorTrends appliances.

# StorTrends® 3400i

## 3U Dual Controller IP-SAN Storage Appliance

### Features

#### 3U Dual Controller IP-SAN Storage Appliance

- Sturdy 3U rack mountable chassis
- Dual controllers in High Availability (HA) Active/Active or Active/Passive configuration
- SAS and NL-SAS support for up to 48 TB of raw capacity in a single appliance
- 64-bit StorTrends iTX 2.8, the most advanced version of StorTrends iTX ever
- Near CDP ROW Snapshot Capability with up to 8048 read-only / writeable snapshots
- Robust RAID-RT™ with RAID 5, RAID 50
- WDS Technology with Compression, Encryption, Data Deduplication and WAN Optimization for fast replication
- Data Archiving with Deduplication and Compression for backup of critical data
- Virtualization support for VMware, Hyper-V and Xen
- "Single pane of glass" ManageTrends™ Interface

#### Hardware Specifications

##### Form Factor

3U Chassis with Redundant Power Supply Modules  
Dimensions: 5.2" (132 mm) H x 17.2" (437 mm) W x 25.5" (648 mm) D  
Weight: 96 lbs. (43.5 kg)

##### On-board CPU

Two (2) QuadCore processors with one (1) processor per controller, 4GB RAM

##### Host Interface

Four (4) GbE LAN Ports (2 NICs per controller);  
Two (2) 10 GbE Mid planes for internal connectivity

##### Drive Interface

Sixteen (16) 3.5" Hot-swappable SAS / SATA Drive Bays

##### Drive & Storage Capacity

500 GB, 1 TB, 2 TB, 3 TB per drive (NL-SAS)  
300 GB, 450 GB or 600 GB per drive (SAS)

##### RAID Support

Robust RAID-RT™ Software RAID module with RAID 0, 1, 5, 6, 50, 60  
Online capacity expansion  
Global & dedicated hot-spare

##### Status LEDs

6 LED Indicators (Power, Network / HD Activity, Power Fail, System Overheat)

##### Expansion Slots

One (1) PCI-Express x8  
Two (2) PCI-Express x4

##### Data Management Ports

Four (4) Gigabit Ethernet Data Ports (expandable)  
10 Gigabit Ethernet also available as an option

##### Other Connectors

Three (3) USB Ports

##### Power Specifications

Two (2) Redundant, Hot-swappable 1200W AC  
AC Voltage (100 - 240V, 50-60Hz)

##### Cooling Specifications

Total of 12 fan headers supporting up to 12 fans

##### Operating Environment

Operating Temperature: 50 to 95°F (10° to 35° C)  
Operating Relative Humidity: 8% to 90%

#### StorTrends iTX 2.8 Data Storage Software

##### Volume Replication

Synchronous  
Asynchronous  
- Snap Assisted Replication (SAR)  
- Data Archiving mode on secondary appliance with SAR  
- WAN Data Services (WDS): Deduplication, Compression, Encryption and Link Optimization

##### Advanced Snapshots

Up to 8,048 read-only & writeable snapshots per appliance with near-zero performance degradation  
Redirect on Write (ROW) Snapshot Technology  
Snapshot Scheduling  
Instantaneous rollback to any snapshot  
Mounting snapshots as Read-Only or Read-Write

##### Backup

VSS-based backup support for Windows® Servers  
Backup agents for popular application servers like Microsoft® Exchange Server and Oracle®  
iSCSI Tape Backup Support

##### Storage Appliance Management

Command line interface through RS232 & SSH  
"Single pane of glass" ManageTrends™ web GUI  
Simple customization and theme updates

##### Event Management

Detailed Event Log  
Email Alerts  
SNMP, SNMP Traps (up to 4 destinations)

##### Storage Data Management

*Auto Tiering / ILM* - Intelligent Data Migration across heterogeneous drive tiers (SAS and SATA/NL-SAS)  
Zoned Bit Recording (ZBR) for smart data placement within the same tier  
Storage Resource Management / Storage Reports  
Storage Pool Creation and Management  
LUN (Logical Unit Number) Creation and Management  
LUN Dynamic Volume Expansion  
Software RAID (5, 50) with RAID-RT™ Technology  
Auto RAID Rebuild

##### Applications Supported

Oracle®, SQL Server, Microsoft® Exchange, all major virtualization suites such as VMware®, Microsoft® Hyper-V, Citrix® Xen™ and more.

##### SMART Monitor

Monitors SMART events with continuous recording and analysis  
Periodic SMART checks with short and long DSTs  
Graphical display of vital disk information

##### UPS Support

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

### Advanced Features

#### Auto Tiering / ILM

The sophisticated Auto Tiering/Information Lifecycle Management (ILM) of StorTrends iTX analyzes data for its value, and stores it accordingly - in the fastest, most responsive top-tier storage for the most popular data, and automatically migrates it down the chain to less expensive, less powerful storage as it loses value. For organizations struggling to contain the cost of adding new storage and exploding volumes of data, ILM can manage data growth and accessibility, reduce cost, improve recovery, and remove risk and exposure to data loss.

#### Snapshot Assisted Replication (SAR)

AMI's SAR technology allows chronological replication of snapshots on a remote appliance, with the ability to organize by application-based consistency groups. In failover to a secondary appliance, StorTrends iTX will automatically rollback to the latest consistent snapshot.

#### WAN Optimization Data Services (WDS)

As part of its Asynchronous Replication module, StorTrends iTX utilizes data deduplication, compression and link optimization to maximize the speed of long distance WAN connections. It overcomes the inefficiencies and high latencies of TCP protocols in WANs to boost remote replication performance. StorTrends iTX 2.8 features up to 9 layers of snapshot compression for improved bandwidth utilization and encryption of snapshots for increased data security.

*Windows® is a registered trademark of Microsoft Corporation in the US and other countries. Other trademarks are the property of their respective owners.*



American Megatrends Inc. | [www.ami.com](http://www.ami.com)

5555 Oakbrook Parkway, Suite 200

Norcross GA 30093 | t: 770.246.8600

Sales & Product Information

[sales@ami.com](mailto:sales@ami.com) | t: 800.828.9264

Technical Support

[stortrends-support@ami.com](mailto:stortrends-support@ami.com)

t: 770.246.8761 | 800.892.6625