

DATA SHEET

EnhanceRAID® TS2060 Series Backup Storage System



This product is no longer available; please click here for the current model: R8 Series

Ultimate D2D and D2D2T all-in-one backup storage

The Enhance Technology EnhanceRAID® TS2060™ Series is a flexible and cost-effective solution for organizations looking for a high-volume data backup and archive storage unit. The TS2060™ Series delivers performance, flexibility, reliability, and an easy management storage solution.

Affordable and Flexible

Flexibility starts with the choices of backup devices which meet the requirements of today and tomorrow in terms of data backup and archives for SMBs. Two standard 5.25" open bays allow the TS2060 Series to become an affordable external storage platform for applications such as disk-to-disk or disk-to-disk-to-tape backup. The TS2060 Series provides high-performance, large capacity of SATA disk backup, and reliable off-line tape drive archiving for business-critical data and application. The TS2060 Series is the ultimate D2D/D2D2T backup storage system that combines all of the benefits of high performance, reliability, flexibility and affordable pricing.

Connectivity

With multiple choices of interface such as the iSCSI, SAS and SCSI models, the TS2060 Series enables organizations to choose either a network interconnect or direct-attach that is well fit for their environments. The TS2060 IP with dual GbE iSCSI array, provides cost-effective shared storage by using widely available IP networking components such as Ethernet switches. The TS2060 SS with high-speed SAS connections, supports a wide range of host bus adapters to provide superior performance direct-attach configurations. The TS2060 SC utilizes the VHC (very high density) U320 SCSI connector which allows Interface with legacy SCSI servers or host adapters.

Easy Management

The TS2060 Series includes user-friendly web GUI management which supports a cross platform. With simple internet access and no additional software requirement, users will be able to manage their storage system from virtually anywhere at anytime. Users can also create multiple RAID arrays, check physical system conditions, and easily monitor their system status with automatic event e-mail notification.

Green Power Design

Featuring next generation green power technology, the TS2060 Series is powered by EnhanceRAID® 80+ green power supply to ensure system reliability and available data. With the standard green power supply, it is able to help reduce electricity and cooling cost for the years to come. Optional dual redundant and hot-swappable power supplies are also available to protect systems from an unexpected AC surge.

Applications

The TS2060 Series is widely applied in server direct-attached and network shared data storage within major applications. These applications include backup, archive, data center, and those that require high-performance and reliable transactions.

Feature Highlights

- Full D2D & D2D2T Backup Storage Solution
- Enterprise-class hybrid Serial ATA based storage
- 2U modular rack design easily integrates into existing storage infrastructures
- Removable SATA disk module for Secondary backup
- Half-High DLT/LTO Tape drive ready for off-line archive
- 6 hot-swappable SATA II disks, up to 9.0TB capacities
- Supports 7200RPM 1.0TB and 1.5TB SATA II HDDs
- Web Storage Management makes IT stuff's work earlier
- Supports RAID 0,1,3,5,S & JBOD
- Optional dual hot-swappable redundant power supply
- Excellent venting and cooling design

Service and Support

The TS2060 Series support options offer flexibility and peace of mind. Customers count on Enhance Technology's enterprise-class support and world wide local based service center to keep information available and operations running. The TS2060 Series includes a standard 2-year warranty with a 30-day money back guarantee, 90-day unit exchange. Customers can also choose to upgrade to a premium level of service which includes three years of advanced parts replacement, an emergency loaner unit for populated solutions, and optional 8x5 next-business-day on-site responses.

Specifications

Form Factor: 2U low profile 19" Rackmount

System Components:

- Single EnhanceRAID Controller
- One (1) 512MB DDR DIMM cache memory (default, supports up to 1GB in size)
- One (1) ATX PS2 300W 80+ High Efficiency power (Standard) or Two (2) Redundant, hot-swappable 320W power supply modules (Optional)
- Three (3) high-speed cooling fans
- Six (6) hot-swappable 3.5" HDD drive trays
- One (1) hot-swappable 5.2" IS210™ 1x3.5" HDD heavy duty SATA disk module (Optional)
- One (1) hot-swappable 5.2" Q14™ 4x2.5" HDDs SATA disk module (Optional)

RAID:

- Hardware RAID 5 parity computation
- Supports RAID Level 0, 1, 0+1, 3, 5
- Supports multiple RAID array and volumes
- Supports global hot spare (s)

Host Interface:

- Very High-density U320 SCSI
- GbE iSCSI
- SAS SFF8470

Disk Drives:

- Interface	3.0 Gb/s SATA	3.0 Gb/s SATA	3.0 Gb/s SATA	3.0 Gb/s SATA
- Capacity (RPM)	500 GB (7,200)	750 GB (7,200)	1 TB (7,200)	1.5 TB (7,200)
- Form Factor	3.5"	3.5"	3.5"	3.5"
- Data Buffer	16 MB	16 MB	32 MB	32 MB

Storage Capacity:

- Scalable up to 9TB raw (6x1.5TB) per system

Supported Host Bus Adapters:

- | | | |
|------------------------|------------------------|--------------------|
| SAS SFF8470: | U320 SCSI: | |
| - ATTO ExpressSAS H380 | - ATTO ExpressPCI UL5D | - Adaptec 29320LPE |
| - LSI Logic SAS3801E | - LSI Logic 22320R | |

Management:

- LCD controll panel
- Cross-platform user-friendly web GUI access via an RJ45 Ethernet port
- RS232 DB-9 terminal serial port for advanced users configuration from local access
- E-mail notification for system event and fault

Supported Operating System:

- Windows Server 2000, Windows Server 2003, Windows Server 2008, Windows XP, Windows Vista
- Mac OSX 10.4, Mac OSX 10.5, Xserver

Physical & Environment:

- Operating Temperature 10°C ~ 35°C
- Non-Operating Temperature -10°C ~ 50°C
- Relative Humidity 5% to 95% non-condensing

Power Supply:

- ATX PS2 300W 80+ High Efficiency power (Standard)
- AC Input: 100-240V ~5A 50/60 Hz
- Output: 300W

Cooling:

- Three high-speed cooling fans

Dimension (H x W x D): 3.5" x 17" x 17.75"

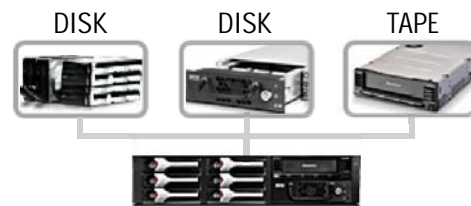
Weight (w/o disks): 42Lbs

Safety Regulations: CE, FCC, UL, RoHS



Innovative Tray Design

- Security key lock prevents drive from accidental pull out
- Activeity light pipe eliminates LED cables
- One-touch unlock button makes easy to use
- Anti vibration design protects drive from external impact
- Excellent airflow cooling ensures drive stays cool



Available Models

Model	TS2060 IP		
Interface	GbE iSCSI		
Drive Bays	6+2*		
Power Supply	80+ ATX PS2 300W or Mini dual redundant 400W		
Part No.	TS2060 IP-4500	TS2060 IP-6000	TS2060 IP-9000
Capacity:	4.5TB	6TB	9TB
HDDs:	6x750GB SATA HDDs	6x1TB SATA HDDs	6x1.5TB SATA HDDs
Optional Backup Devices	IS210: 5.2" hot-swap HDDs module Q14: 4x2.5" hot-swap HDDs module Half-high tape drive or 5.2" DVD Rom		

*Note: 6 hard drives and 2 open bays for optional backup devices

Model	TS2060 SS		
Interface	SAS SFF8470		
Drive Bays	6+2*		
Power Supply	80+ ATX PS2 300W or Mini dual redundant 400W		
Part No.	TS2060 SS-4500	TS2060 SS-6000	TS2060 SS-9000
Capacity:	4.5TB	6TB	9TB
HDDs:	6x750GB SATA HDDs	6x1TB SATA HDDs	6x1.5TB SATA HDDs
Optional Backup Devices	IS210: 5.2" hot-swap HDDs module Q14: 4x2.5" hot-swap HDDs module Half-high tape drive or 5.2" DVD Rom		

*Note: 6 hard drives and 2 open bays for optional backup devices

Model	TS2060 SC		
Interface	VHD U320 SC		
Drive Bays	6+2*		
Power Supply	80+ ATX PS2 300W or Mini dual redundant 400W		
Part No.	TS2060 SC-4500	TS2060 SC-6000	TS2060 SC-9000
Capacity:	4.5TB	6TB	9TB
HDDs:	6x750GB SATA HDDs	6x1TB SATA HDDs	6x1.5TB SATA HDDs
Optional Backup Devices	IS210: 5.2" hot-swap HDDs module Q14: 4x2.5" hot-swap HDDs module Half-high tape drive or 5.2" DVD Rom		

*Note: 6 hard drives and 2 open bays for optional backup devices

Distributed by:

Corporate Headquarter
 Enhance Technology, Inc.
 12221 Florence Ave.
 Santa Fe Springs, CA 90670
 Tel: 1-562-777-3488
 Fax: 1-562-777-3499
 Email: info@enhance-tech.com

Asia Branch
 Enhance Technology, Inc.
 Room 3, 8F., nO.2, Sec. 4,
 Jhongyang Rd. Tucheng City,
 Taipei Country 236, Taiwan
 Tel.: +886-2-2269-1529
 Fax: +886-2-2268-5904

Europe Branch
 Enhance Technology GmbH
 Bayerisch Hofgaeschen 2, 89231 Neu-Ulm
 Tel: +49(0)176/70 10 88 06



Where Storage Begins