



SATA-SATA RAID 1/0 Box

InneRAID® Duo

Overview

InneRAID® Duo is a robust and easy-to-use internal RAID solution for protecting data and ensuring system availability. It offers a turn-key solution by a rugged disk enclosure with hot-swappable trays, durable fan cooler and reliable RAID controller. Users can easily install the InneRAID Duo to a system with two standard 5.25-inch drive bays, and link it to the motherboard by single SATA cable. Users can start enjoying RAID instantly without being bothered by installing add-on card or software. InneRAID is truly a reliable, easy-to-use, cross-platform, and low-cost solutions. InneRAID is well proven to fit, for example, onto rugged computing systems, networking or telecom devices, medical equipments, and industry automation control systems.

Effortless System Integration

Emulating a standard SATA disk drive by hardware, transparently to the host computers, InneRAID can protect data of all types and of any operating systems. Powered by the Accusys RAID SOC and intelligent disk control logic, InneRAID offers not only reliability but also streamlined performance. System integrators can use single RAID solution on a variety of heterogeneous platforms and applications without technical difficulty. This largely simplifies product portfolio maintenance and reduces support efforts.

Non-Stop Availability

InneRAID automatically detects disk failure or unstableness, and notifies users immediately. With the RAID 1 configuration users can online replace the faulty disk without causing any impact being aware by the applications. Also with InneRAID on-line fast disk rebuilding, the system will be back to the protected state in a short time.

Worry-Free Reliability

As the capacity of disks grows, the risk of losing data due to bad sectors become more probable, and that could lead to system crash

if system files or critical data resides on the bad sectors but also to recover the bad sectors. When the same location is accessed again, the data can be timely and reliably delivered. This significantly prevents data loss and system downtime.

Full-Disk Data Mirroring

InneRAID implements RAID 1 by full-disk mirroring, needing no any RAID setting stored on disks. The disks can be directly used with InneRAID or normal systems. Users can easily add InneRAID to a system with the existed disk drive. Users can also take disk drives from an InneRAID to a normal system. By transferring the disk drives to another site, InneRAID becomes a simple disk-based backup or disaster recovery solution.

Speed and Capacity

Supporting data striping (RAID 0), InneRAID improves the system performance by utilizing two disk drives simultaneously to serve host I/O. RAID 0 also delivers doubled capacity of single disk drive. By the 100% hardware-based RAID processing, the system can enjoy the better performance and large capacity without any overhead incurred.

Easy Management

InneRAID is equipped with LED indicators on the front panel and buzzer for visual and audible alert. It also supports StorConn™ RAID GUI, by which users can easily monitor the status of the RAID and disk drives. StorConn GUI can be accessed remotely by web browsers. In addition, StorConn records event history and notifies users by displaying pop-up warning windows and sending out notification email. The API of InneRAID is also available for system integrators to develop proprietary GUI or to integrate the RAID monitoring functions with other management frameworks.

PRODUCT HIGHLIGHTS

- Support SATA2 compatible host/disk interfaces
- Support RAID 1/0
- 100 % hardware RAID processing
- Driverless and host transparent
- Hot swappable disks
- Online fast disk rebuilding
- Event logging and notification
- Remote RAID monitoring by web-based GUI
- Support in-band and out-band API
- RoHS-compliant

Technical Specifications

Host/Disk Interfaces

- SATA2 compatible host interface
- SATA2 compatible disk interface for 3.5-inch drives

RAID Functions

- Support RAID 1 and RAID 0
- 100% hardware RAID processing
- High-speed data cache
- Automatic online fast data rebuilding
- Automatic disk failure detection
- Online bad sector recovery
- Hot swappable hard disks

Management

- Driverless: need no driver on host side
 - LED indicators for disk status
 - Support GPIO
 - NVRAM for preserving disk status
 - Good heat dissipation by durable fan cooler
 - Continuous disk and fan monitoring
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- Audible alarm for event alert
 - Support in-band API via SATA interface
 - Support out-band API via RS232
 - Firmware update through RS232
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StorConn™ RAID GUI

- Java-based GUI, support web-based remote monitoring
 - Event logging to a text file with an event viewer
 - Email and popup windows for event notification
 - RAID communication via RS232 or SATA
 - Support up to four RAID devices
 - Automatic RAID device discovery
 - Monitoring server auto-startup
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Physical and Environment Specifications

Dimensions:

- **Two 5.25-inch external drive bays**
8.29 (L) x 5.75 (W) x 3.31 (H) inch
203 (L) x 146 (W) x 84 (H) mm

Power Requirement

- **Power connector**
Dual big 4-pin connector
- **Power consumption**
+ 5.0V dc, tolerance : ±5%
+12.0V dc, tolerance : ±5%

Acoustic

< 36 dB

MTBF

100,000 HRs

Humidity

Operation mode : 5% to 85% non-condensing
Non-operation mode : 5% to 95% non-condensing

Temperature

Operation mode : 0°C to 40°C
Non-operation mode : -25°C to 60°C

Certification Compliance

FCC, CE, UL, and RoHS compliant

Warranty

1 year limited warranty

Ordering Information

InneRAID Pro

- ACS-75200 SATA-2 BW1 : 2-bay white RAID Box
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