

ARC-5020 RAID BOX

Hi-Speed eSATA & USB 2.0

Compact 4-Disk RAID

- True 3.0Gbps eSATA
- Multiple Volumes (up to 4)



Highlights

The ARC-5020 RAID box offers a truly innovative eSATA(3.0Gbps)/USB2.0 solution for use with your PC and Mac workstation. Designed and leveraged with Areca existing high performance solution, this RAID box delivers high-capacity performance at the best of cost/performance value. With RAID box technology, it allows one HDD failure without impact on the existing data and failed drive rebuild is transparent to the host. The Mac pro internal hard drive backplane mounting system is a very nice feature support up to four internal 3.5" SATA connector. Users simply add internal extension cable from those empty backplane to ARC-5020-3 re-driver board to have eSATA connector for ARC-5020.

Unparalleled Performance

ARC-5020 RAID box unleashes the power of 3.0Gbps performance and NCQ support on the eSATA host port. The eSATA port delivers in excess of 210MB/s sustained RAID 5 reads and over 176MB/s RAID 5 sequential writes. The result is superior overall performance compared to other 4 bay eSATA solution. High transfer rates make ARC-5020 RAID box well suited for audio/video application, especially the rapidly growing demand from the Mac Video Editing markets. With the target mode multiplier emulation, both eSATA and USB2.0 host channel (with port multiplier function) can support multiple volumes (up to 4).

Unsurpassed Data Availability

The ARC-5020 RAID box provides RAID levels 0, 1, 10, 3, 5, Single Disk or JBOD RAID configurations. Its high data availability and protection derives from the following capabilities: Online RAID Capacity Expansion, Array Roaming, Online RAID Level / Stripe Size Migration, Global Online Spare, Automatic Drive Failure Detection, Automatic Failed Drive Rebuilding, Disk Hot Swap, Online Background Rebuilding, Instant Availability/Background Initialization, Auto Reassign Sector and Redundant Flash Image. Areca greater than Two TB support allows for very large volume set application in 64-bit environment such as data-mining and managing large databases.

Easy RAID Management

Manual configuration and monitoring can be done through the LCD Control Panel, RS-232 and LAN port. The LCD Hot-Key supports one-step easy RAID configuration to simplify the firstly setup of ARC-5020 RAID box. It's API library supports customer to write its own monitor utility. The hardware monitor can monitor system voltage, temperature and fan. Enclosure management features include fault indicators and status LEDs, event notification and user configurable audio alarms via eSATA in-band signal.

Features

- 400MHz storage I/O processor
- Unleash the power of 3.0Gbps and NCQ on the eSATA host port
- NVRAM for RAID event & transaction log
- Write-through or write-back cache support
- Redundant flash image for controller availability
- RAID level 0, 1, 10, 3, 5, Single Disk or JBOD
- Multiple RAID selection
- Up to 4 volumes (Target mode multiplier emulation)
- Online array roaming
- Online RAID level/stripe size migration
- Online capacity expansion and RAID level migration simultaneously
- Online dynamic volume set capacity expansion
- Instant availability and background initialization
- Automatic insertion/removal detection and rebuild
- Greater than Two TB per volume set
- Support SMART, NCQ, and OOB staggered spin-up capable drives

Monitors/Notification

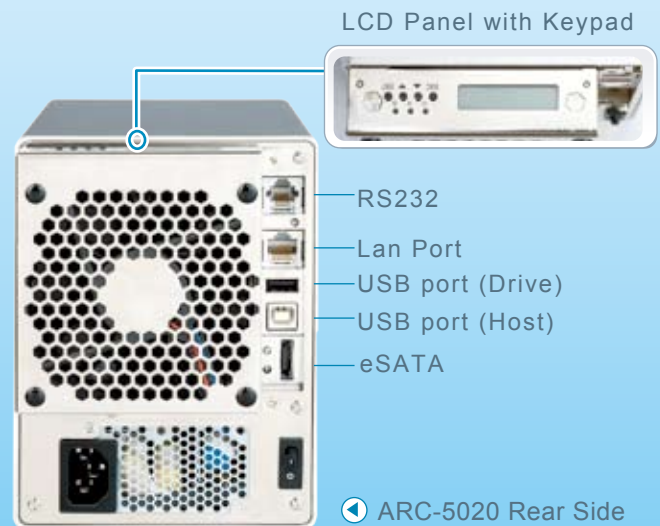
- Push Buttons and LCD Display Panel for setup and status
- Environment and drive failure indication through LCD, LED and alarm buzzer
- Keep silent and adequate air flow and cooling by intelligent cooling fan speed controller

RAID Management

- Field-upgradeable firmware in flash ROM via RS-232 and LAN port
- LCD Hot-Key supports one-step easy RAID configuration
- Firmware-embedded manager via RS-232 port
- Firmware-embedded Browser-based RAID manager, SMTP manager, SNMP agent and Telnet function via LAN port
- Support RAID box's API library for customer to write its own AP

Accessory

- ARC-5020-3 (Internal SATA to eSATA redriver board)
- ARC-1300-4e (4 port eSATA host adapter)



ARC-5020 RAID Box

Host Interface	1 x eSATA (SATA II 3.0Gbps) 1 x Hi-Speed USB 2.0
Host Interface Transfer Rates	eSATA : Up to 3.0Gbps (300MB/s) USB 2.0: Up to 480Mbps (60MB/s)
Host Burst Transfer Rates	eSATA (RAID 0) : Up to 212MB/s (read); Up to 184MB/s (write) eSATA (RAID 5) : Up to 210MB/s (read); Up to 176MB/s(write) (Tested by Silicon Image 3124 PCI-X, it depends on host controller performance)
Disk Interface	SATA II Compatible: Up to 3.0Gbps (300MB/s)
System Requirements	Computer with USB or eSATA connection
OS Compatibility	OS Independent
Power Supply / Input /Output	180W / 90 - 265V AC / +5V/9A, +12V/9A, +3.3V/4.5A
Dimensions	123(L) x 165.6(W) x 232(H) mm
Weight	9.0 lbs / 4.0 kg
Warranty	3 years limited

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8F., No.22, Lane 35, Ji-Hu Rd., 114 Taipei, Taiwan, R.O.C.
TEL: 886-2-87974060 FAX: 886-2-87975970
<http://www.areca.com.tw>
Technical Support: support@areca.com.tw
Sales Information: sales@areca.com.tw

