

HOT SWAP SATA HOUSING

FirmTek SeriTek/1EN2



\$260 (£139) Fit your own disks to this external hard-drive housing

CONTACT INFO

Telephone
001 510 315 3077
URL www.firmtek.com

KEY SPECS

Compatibility: RAID or non-RAID Drive:
dual 3.5-inch SATA, Cable: 1m, Burst
transfer: 150 MB/s, Size: 269x87x141mm

FOR AND AGAINST

- ⊕ Fast transfer speeds
- ⊕ RAID compatible
- ⊕ Bootable
- ⊕ Includes cables and card
- ⊕ Hot swappable, even on RAID
- ⊖ Price excludes hard drives

VERDICT



"The SeriTek is blisteringly fast – a flexible storage unit that offers vast scope for expansion. We liked it a lot."

You'll hear plenty of figures being bandied around about the transfer speeds of interfaces. The fans of USB 2.0 is faster than FireWire 400; and FireWire 800 aficionados will tell you that their favourite interface is faster than, say, a SATA drive.

We decided to look at how the various interfaces work in real-world situations. To this end, we have a SeriTek/1EN2 dual 3.5-inch SATA drive enclosure. The enclosure houses two SATA drives, which we have loaded up with two Western Digital 160GB models with Time-Limited Error Recovery, making them ideal for RAID use. Both drives are formatted and formed into a RAID, having connected them via two SATA cables and the supplied SATA PCI card.

And, the real-world speeds are astounding! A respectable 43MB/s sustained transfer – our 2.6GB folder of files zipped across in just 58 seconds, compared to the sluggish three minutes and 40 seconds that our FireWire 400 drive managed. It was even faster than a FireWire 800 dual disk from Miglia.

So why would you buy a SeriTek housing? Well, for one reason the drives are hot swappable. You can remove a drive and replace it with another without powering your Mac down. Secondly, the housing is very quiet and solidly built. Drawbacks include a limit on the cable length and having to use two connections to your housing, but it's considerably easier than trying to fit another two drives inside a G5.



Having two swappable drives in one housing also makes for a very good method of backing up. If you mirror the drives and simply remove one "off site" each evening, you have your Mac protected. Of course, you don't get networkable storage as you

would with a Network Attached Storage solution.

Each drive bay has a lock so you can secure the swappable drives in situ, just in case anyone thinks they might like to swap a drive while it's writing.

Mark Sparrow

HIGH-PERFORMANCE SATA DRIVES

Western Digital Caviar RE 160GB



£79 The best hard drive solution for building high-speed RAIDs

CONTACT INFO

Telephone
01372 360 055
URL www.westerndigital.com

KEY SPECS

Speed: 7,200RPM, Buffer: 8MB, Average
latency: 4.20ms Buffer to host: 1,200
Mbits/s, Buffer to disk: 748Mbits/s (max)

FOR AND AGAINST

- ⊕ Great price
- ⊕ Superb performance
- ⊕ Low noise
- ⊕ Cool running
- ⊕ 8MB cache
- ⊖ Only for RAID use

VERDICT



"These excellent drives are incredibly well built and perfectly tuned for RAID use. Fast, quiet and cool."

A redundant array of inexpensive disks is fast becoming a popular way of running a server or backup system, even in home situations. A year or two ago, most people would have cringed in terror at the thought of setting up a large cluster of disks acting as a single entity – but not now.

Fortunately, Mac OS X now makes setting up a RAID as simple as firing up the *Disk Utility*, dragging disks into the RAID window and clicking on 'Done'. Once set up, you have two or more hard drives that will appear as one unit on your desktop, which work at very high speeds. RAIDs can be striped or mirrored and vastly reduce the possibility of losing data; the disks spread the data between themselves in such a

way that if one disk fails, the others will step in and take over.

You can organise a RAID in an external disk cluster using the SeriTek SATA disk housing reviewed above. But when it comes to finding a suitable hard drive to go in it, you need to choose carefully.

Western Digital produces a range of Caviar RE drives that are not only fast and blessed with an 8MB cache, but also have Time-Limited Error Recovery (TLER). All hard drives encounter errors, and before they can continue as normal they undertake repairs to their structure. A RAID doesn't expect such long interruptions and if a disk doesn't check in for more than eight seconds, the RAID can mark the drive as faulty and ignore it. With TLER, the drive



reports itself as being okay even when it's repairing. This means it can go on being a part of the RAID. The errors get corrected, but the RAID is kept happy with a confirmation signal.

We tested the 160GB Caviar RE drives with the SeriTek SATA

housing and found them to be fast, quiet and cool. In fact, they're the ideal drives if you're thinking of setting up your own RAID – although for that very reason they're not suitable for single desktop use.

Mark Sparrow