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Reviews & Rankings

Affordable Storage on the Go

We tested five fast and fairly roomy portable hard drives, and found some compelling differences—both in features and in performance.

BY JON L. JACOBI

FOR BACKING UP, archiving, or transporting lots of data, 2.5-inch portable hard drives rule the roost. Competing flash drives are convenient, but they top out at 128GB; and at larger capacities, they cost a whopping \$1 per gigabyte.

The five portable hard drives we tested for this story cost about 10 cents (or less) per gigabyte. And USB 3.0 interfaces make them much faster than previous-generation drives.

While any of the models we tested will fit easily in a jacket pocket, they vary considerably in dimensions and storage capacity. The My Passport Edge and Seagate Slim are much thinner than the other drives, but



Rocstor Lancer LX

Seagate GoFlex Satellite

PHOTOGRAPHS: ROBERT CARDIN



43 Toshiba LX835-D3230



46 Motorola Droid Razr HD



48 Linksys WUMC710 Wireless Media

offer only 500GB of storage. The standard My Passport is thicker, but is available in a 2TB size. Seagate's 500GB Satellite uses its size to pack internal Wi-Fi electronics and a battery for creating a mobile hotspot. The 500GB Lancer LX is ruggedized and has dual FireWire 800 ports and one USB 3.0 port.

Let's take a look at each of these drives individually.

Rocstor Lancer LX

The 500GB Lancer LX (\$115) offers both USB 3.0 and FireWire 800 ports for good performance on both PCs and Macs. In our tests (using USB 3.0), the ruggedized Lancer LX finished in third place overall, behind the two Western Digital drives and slightly ahead of the Seagate Slim.

The Lancer LX wrote our 10GB mix of files and folders at 48.2 megabytes per second, and read them at 61.6

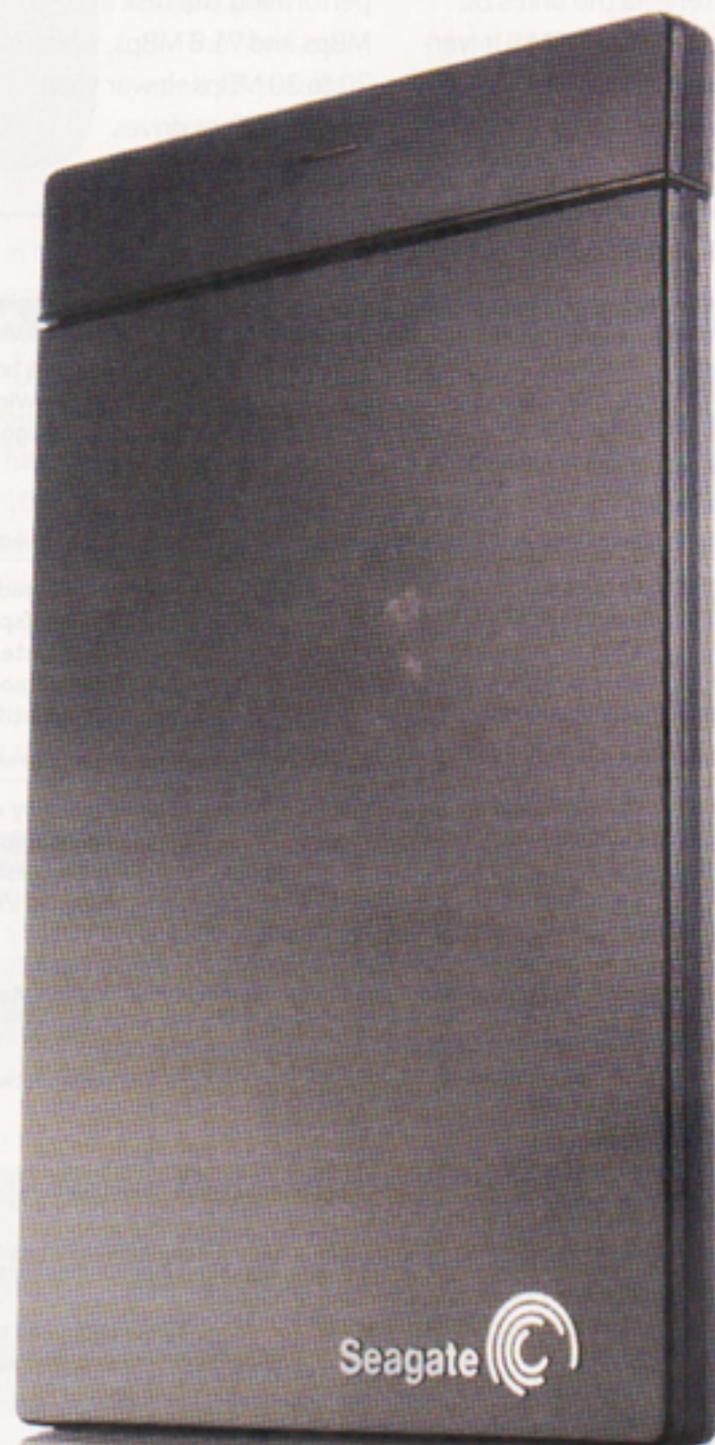
MBps. On our large single 10GB file, the drive's write speed jumped to 92.5 MBps and its read speed increased to 103.7 MBps.

Rocstor provides no software with the Lancer LX, but many free programs, such as TrueCrypt (for security) are available for download, and both Windows and the Mac OS have built-in drive management utilities. FBackup, another download that Rocstor's website offers, can help with backup chores.

The Lancer LX is the best drive in this roundup for cross-platform work with PCs and Macs. If you need more than 500GB of space, you can get the Lancer LX in 750GB and 1TB configurations.

Seagate GoFlex Satellite Mobile Wireless

While it's a good all-around portable drive, the 500GB Seagate GoFlex Satellite Mobile Wireless's forte is serving files and multimedia via Wi-Fi. The drive creates its own local hotspot that you can log on to with just about any device sporting a Web >>



Seagate Slim

MORE ONLINE

For full reviews of the five portable hard drives covered here, see go.pcworld.com/hdportable.

Seagate 

Seagate 

browser to view documents, video, music, and photos stored on the drive. Seagate also provides dedicated GoFlex Media clients for Android and iOS devices.

The GoFlex Satellite's internal battery can keep the drive going for about 7 hours, Seagate says. You can use the included USB wall charger or cigarette lighter adapter to power the unit or to charge its battery via the unit's DC jack. As a GoFlex USM (Universal Storage Module), the Satellite also has a USB 3.0 bridge

adapter that attaches to the bottom to allow direct connection to a PC.

The Satellite wrote our 10GB mix of files and folders at 38.5 MBps and read them at 60.8 MBps—about the same as the Seagate Slim, but roughly 9 MBps slower than the WD and Rocstor drives. The Satellite lost ground in reading and writing our single large 10GB file, performing the task at 79.5 MBps and 71.8 MBps, which is 20 to 30 MBps slower than the other four drives.

The drive's hotspot feature lets you connect your Wi-Fi-enabled device to an easy-to-use Web interface, which then catalogs the files. The Satellite itself can't connect to the Web, however. A PC-based utility permits you to register the drive via the Internet.

Besides providing access to music, video, photos, and documents, the Satellite lets you define a password, reset the drive, and more. Seagate's downloadable Media Sync application will transfer files to the Satellite for you, as well

as optionally filter out files not playable on Apple products. You may, of course, copy using normal methods: cut and paste or drag and drop.

Seagate Slim

Seagate's \$120, 500GB Slim is so svelte that several *PCWorld* staffers at first mistook it for a phone. The 9mm-thick Slim's downside is its limited capacity: It's available only with 500GB of storage space.

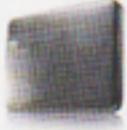
Fortunately, there's no need to go in for the old "beauty is only skin deep" truism, as the Slim is also a very good performer. It read our 10GB mix of files and folders at 62.2 MBps, which landed it in first place in the roundup; but it fell off the pace slightly when writing those files: 39.5 MBps—about 9 MBps slower than the WD My Passport and My Passport Edge. It read our large 10GB file at 104.1 MBps and wrote it almost as fast: 94.6 MBps; again, slightly off the pace set by the WD drives, but faster than both its Satellite stablemate and the Rocstor Lancer LX.

The Seagate Dashboard software provided with the Slim lacks the utilities and security features of WD's SmartWare bundle, but it does offer local and cloud backup support. It can also interface to Facebook, Flickr, and YouTube for uploads. A 4GB, 12-month subscription to Seagate's Cloud Storage service comes with the drive.

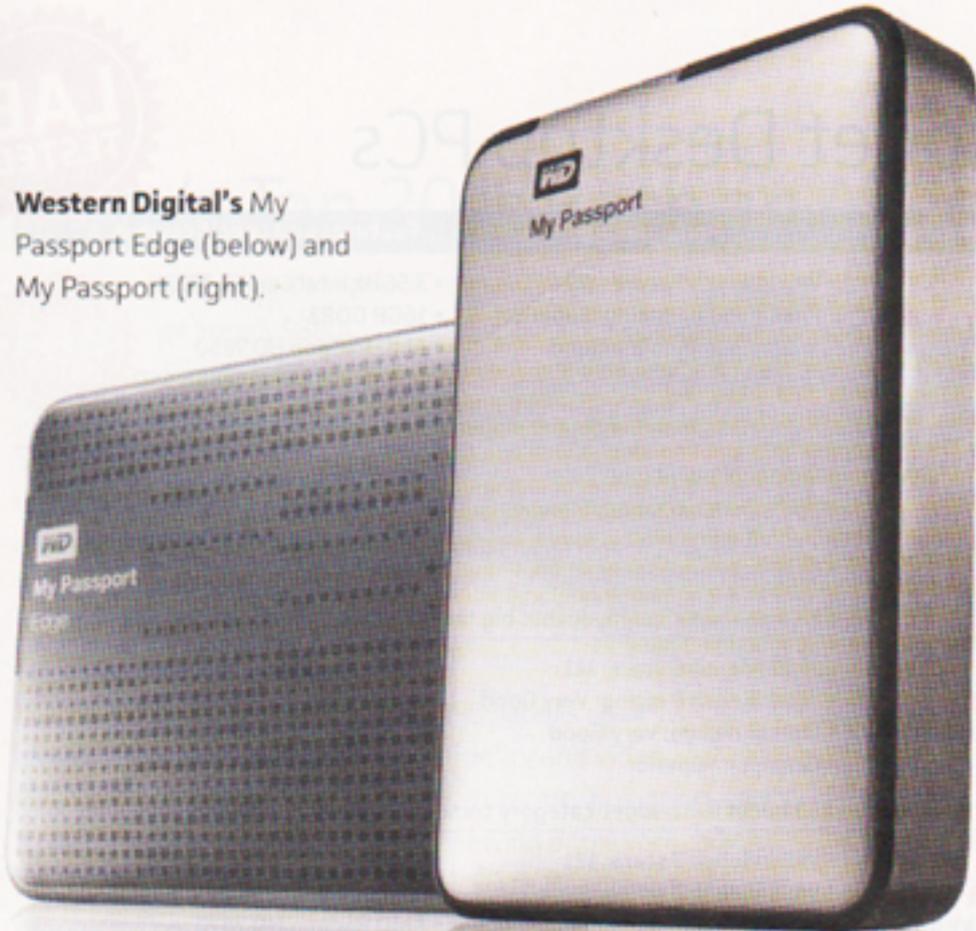
The Slim is a USM (Universal Storage Module), so you can use bridge adapters other than the USB 3.0 adapter that

FIVE PORTABLE USB 3.0 HARD DRIVES



MODEL	Rating	Pros	Cons
 Rocstor Lancer LX (500GB) \$115 go.pcworld.com/lancerlx	★★★★★ SUPERIOR	<ul style="list-style-type: none"> • Supports both USB 3.0 and FireWire 800 • Mildly ruggedized 	<ul style="list-style-type: none"> • Largish in comparison to the competition
<p>▶ With both USB 3.0 and FireWire interfaces, the rugged Lancer LX works equally well on Windows PC and Macs.</p>			
 Seagate GoFlex Satellite (500GB) \$200 go.pcworld.com/goflexsatellite	★★★★★ FAIR	<ul style="list-style-type: none"> • Shares media via its own Wi-Fi hotspot • Much faster than older USB 2.0 model • DLNA certified 	<ul style="list-style-type: none"> • A tad pricey • Middle-of-the-road performance
<p>▶ The GoFlex Satellite acts as a highly portable Wi-Fi hotspot that you can share files and stream media from.</p>			
 Seagate Slim (500GB) \$120 go.pcworld.com/seagateslim	★★★★★ GOOD	<ul style="list-style-type: none"> • Extremely svelte • Good performer • GoFlex design allows for different I/O modules 	<ul style="list-style-type: none"> • Superthin case seems fragile • Not much room for shock protection
<p>▶ A good performer, the stylish Slim features Seagate's Universal Storage Module for non-USB 3.0 interfaces.</p>			
 Western Digital My Passport Edge (500GB) \$100 go.pcworld.com/wdedge	★★★★★ GOOD	<ul style="list-style-type: none"> • Fast • Good software bundle 	<ul style="list-style-type: none"> • Model line maxes out at 500GB
<p>▶ The good-looking My Passport Edge is speedy and well appointed, but its storage space tops out at 500GB.</p>			
 Western Digital My Passport (2TB) \$180 go.pcworld.com/mypassport2tb	★★★★★ VERY GOOD	<ul style="list-style-type: none"> • Fast • Up to 2TB of capacity • Good software bundle 	<ul style="list-style-type: none"> • Stodgy looking
<p>▶ This excellent line of portable drives offers plenty of capacity (from 500GB to 2TB) and top-notch performance.</p>			

Western Digital's My Passport Edge (below) and My Passport (right).



comes with the drive, as well as Seagate's GoFlex Net dock. However, no other adapters seem to match the drive's styling as closely as the bundled USB 3.0 adapter does. This drive turned in a good performance, but the reason for buying the Satellite Slim is its undeniably eye-catching

looks. Just be careful handling it: That superthin case likely won't provide a lot of shock absorption if you drop it. **Western Digital My Passport Edge** The \$100, 500GB Western Digital My Passport Edge is thinner and more attractive

than the standard WD My Passport, but it can't compete with Seagate's Slim in either regard. And while it's an excellent performer and sports a nice software utility bundle, it isn't available in larger capacities. The My Passport Edge fell a mere 0.3 MBps shy of the regular My Passport

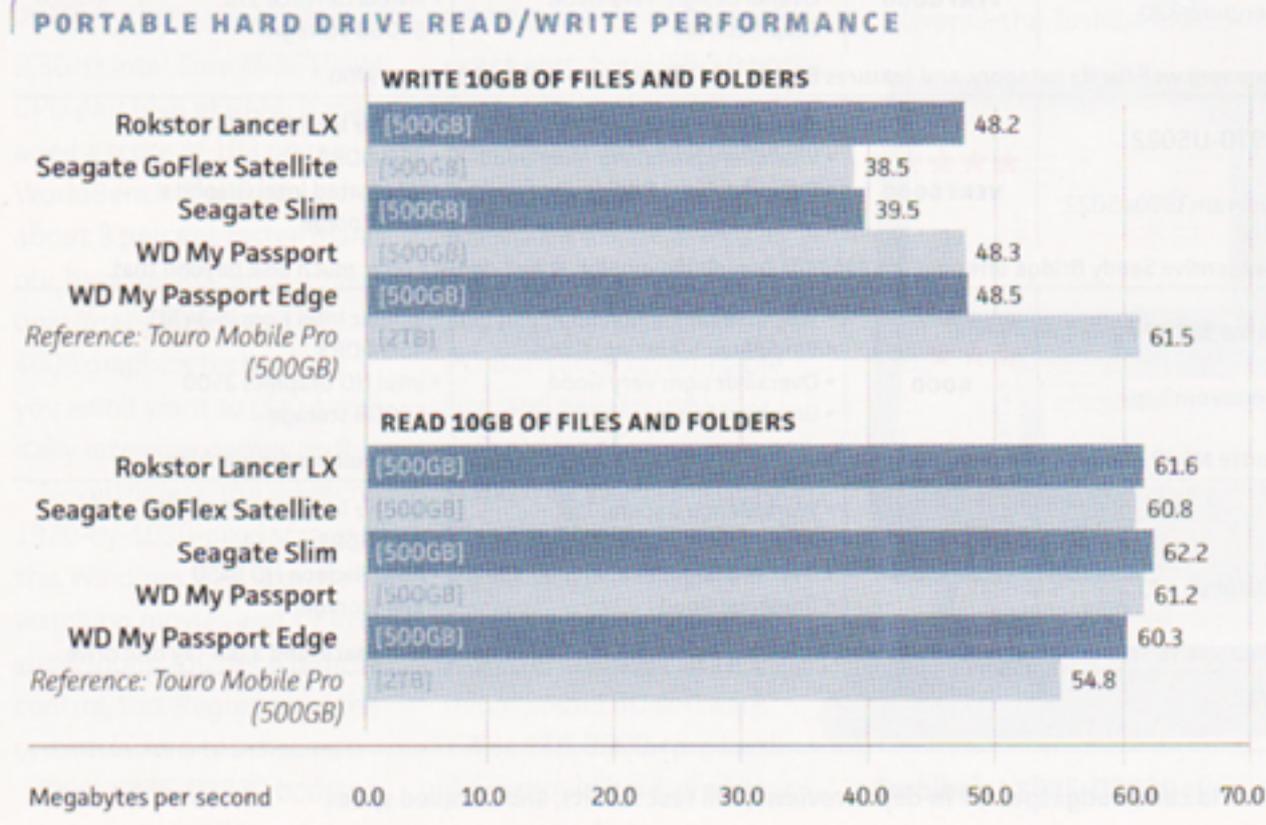
SmartWare software bundle, which provides drive-level password protection, secure erase, drive testing, SMART status, sleep-timer adjustment, and backup. It's attractive and easy to use. If 500GB covers your needs, the My Passport Edge may offer the best combination of looks, performance, and portability among the drives we tested.

Western Digital My Passport (2TB)

The My Passport is Western Digital's mainstream line of portable hard drives. The best performer in the roundup, it's available in 500GB to 2TB flavors for up to four times the capacity of any of the other four drives we tested.

The 2TB My Passport (\$180) that WD sent us took the top spot by a very slight margin over its slimmer My Passport Edge cousin. It read our 10GB mix of files and folders at 61.2 MBps, and it wrote them at 61.2 MBps. The same operations with our large 10GB file registered 113.2 MBps and 104.2 MBps. That's more than adequate for streaming HD movies, backing up client PCs, or performing any other chore you can think of.

WD's SmartWare software bundle comes preloaded on the My Passport. The package supports PCs and Macs, offering secure erase, Smart status, drive-level password protection, sleep timer adjustment, and backup. It isn't the smallest, sexiest, or ruggedest drive in this roundup, but the My Passport may be the best all-around product.



PHOTOGRAPH: ROBERT CARDIN