

A photolab in your lap

When all you need are good printouts of your snapshots, compact photo printers are just the ticket. Bruce Buckman sizes some up.



Lexmark P315



HP Photosmart 375

Let's face it, snazzy A4-sized photo prints look cool but they're relatively expensive and don't fit in your photo album. For many people, 4 x 6-inch prints are going to be the most common size popping out of their printers. If that sounds like you, you may not need that big inkjet printer taking up space on your desk; a compact photo printer might be just the ticket.

We checked out five models: three inkjet-based printers from Epson, HP and Lexmark, and two thermal dye models from Kodak and Sony. These printers all restrict themselves to 4 x 6-inch prints and offer ease-of-use for quick prints direct from memory cards or directly from the camera. We tested them all for print quality, speed and economy. Most offer at least the option of normal or best quality output. While draft or normal options can save you ink and speed up print times, we figure most people won't want to waste ink on a photo print that isn't the best quality the printer can offer, so we tested economy and speed using the best quality settings. For quality, we compared the output to the same test images output from online photo services last month (see last month's "The web as photo lab"). To test economy we ran each printer until it either exhausted its ink or print quality showed noticeable degradation due to low ink.

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Lexmark P315

Lexmark's \$329 P315 is a three-colour inkjet printer that uses a standard Lexmark tri-colour cartridge (No 35). Alone among the printers here it offers no PC connectivity options at all; to print from the P315 you either insert your card in its card reader slots or connect a camera to the PictBridge port. If you want to print an image from your archives, you'll have to shift it on to a memory card first. So ultimately, the lack of a USB port and driver for a PC seems a false economy.

The P315 gives you basic controls to adjust your images via its colour LCD. You can adjust brightness, choose to print in black and white and print just a portion of the image by applying cropping.

The P315 turned out best quality prints at a speed of 3 minutes 2 seconds per print, the second slowest time behind the Epson. Image quality was adequate but not up to the standard set by the two dye-sub printers and Epson's six-colour PictureMate. Compared to the PictureMate's output, for example, the prints from the P315 showed more noticeable inkjet "dots" and there was some slight banding evident.

The P315 managed 80 4 x 6-inch prints from a full cartridge before quality began to noticeably degrade. That works out at a quite expensive cost per print of \$1.26, factoring in the \$60.61 cost of the cartridge and the 50 cents per sheet cost of Lexmark Premium Photo Paper.

Although it isn't particularly compact, the P313 does come with a carry handle if you want to take it on holiday. It's easy to use and does a decent job of delivering okay prints in a reasonable amount of time. But it doesn't excel in any particular area, and its lack of PC connectivity makes it cumbersome option for anyone who wants to work on their photos before printing.

Contact: Lexmark, ph 09-359 7474;
www.lexmark.com.au

HP Photosmart 375

HP's dinky \$449 PS375 is the most compact and transportable printer here; it takes an optional internal battery if your holiday plans involve a tent, plus there's a handy carry bag available. The PS 375 is also noticeably smaller than both the Epson PictureMate and the Lexmark P315. Like the Lexmark this is a three-colour inkjet, which runs on a standard HP No 97 tricolour cartridge. While the PS375 couldn't compete with the thermal dye printers or six-colour Epson when it comes to image quality, it did do a better job than the Lexmark, producing clean images without any banding. Close up, you can see the dots, but for a three-colour inkjet the result is pretty darn good.

On the downside, its best quality setting puts quite a bit of ink on the page. With HP Premium Photo Glossy paper this wasn't much of a problem but with HP Everyday Photo Paper, the ink took longer to dry and prints left sitting on top of each other in the output tray were prone to sticking together.

The PS375 has card readers, a PictBridge port and a USB port for connecting to a PC. There is also an optional Bluetooth adapter available for wireless printing. A colour LCD lets you do basic image editing tasks, including red-eye removal, adjusting brightness and rotating the image, colour effects like sepia and black and white, and adding decorative frames.

Best quality photo prints took an average of 1 minute 43 seconds to output, substantially better than the Epson and the Lexmark. The PS375 managed a healthy 119 prints before the quality of the prints showed any degradation. HP sells a Photo Value pack that includes a No 97 ink cartridge and 125 sheets of Premium Plus Photo Paper for \$75. That's a good deal, working out to a very decent 63 cents per print. If you buy the cartridge (\$62) and paper (\$20.25 for 20 sheets) separately you'll end up paying \$1.54 per print, so it pays to get the value pack.

The Photosmart 375 is a handy, well-designed tool if you really need to take a printer on the road, and offers decent economy and good print quality.

Contact: HP, ph 0800 733 547; www.hp.co.nz



Epson PictureMate

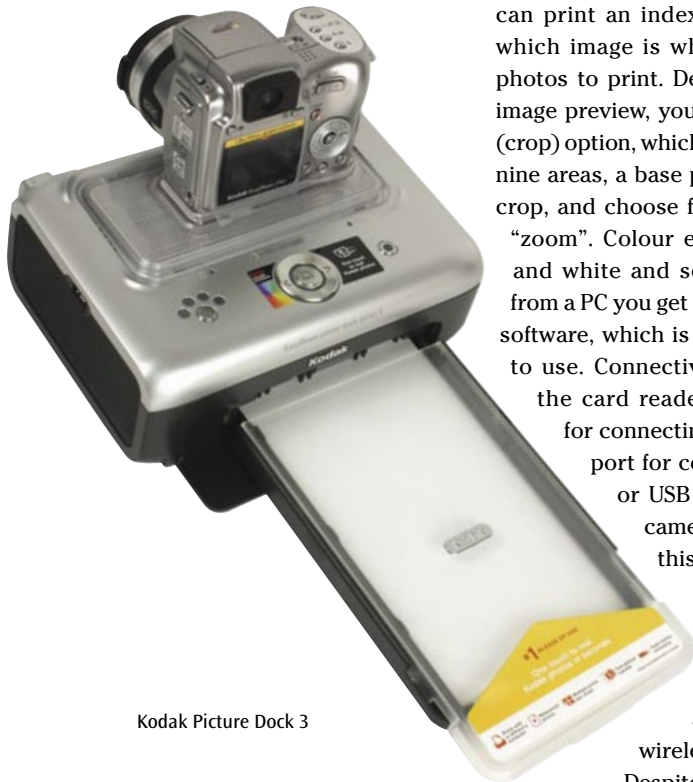
Epson's \$349 PictureMate is the slowest printer here. By default, the auto correction option is set to Enhance, which uses Print Image Matching and/or EXIF Print Information embedded in your images to enhance the quality of the image. This imposes a serious overhead on the printer; the average speed per 4 x 6-inch print over the 15 test prints was a leisurely 5 minutes 53 seconds. There is also a Fix option for auto correction, which ignores Print Image Matching or EXIF data and applies the printer's own enhancements, and this turns in a similar speed. You can turn these auto correction options off, in which case the average per-print speed becomes a more reasonable 2 minutes, 22 seconds. But you'll likely leave either Enhance or Fix on, because both improve print quality significantly. The PictureMate also lacks a colour LCD, so you don't get any image previews without a PC.

Unlike the Lexmark and HP, the PictureMate is a six-colour printer, using a specialised cartridge. The quality of its prints is superb — even without auto correction enabled — with smooth graduations, no sign of banding and you'll need to strain hard to spot the telltale inkjet dots. But that is not this printer's only strong point: the Epson also beats all the printers here hands down when it comes to economy.

The ink cartridge comes in a \$50 kit that includes 100 sheets of glossy 4 x 6-inch paper, and Epson says the cartridge should last for about that many prints. But in our rundown test — which was done with auto correction set to Enhance — the PictureMate revealed itself to be the Eveready Bunny of compact printers. It flew past the 100 print mark and kept on printing with no reduction in print quality until the cartridge finally gave out at 180 prints. Factoring in the cost of the extra 80 sheets of paper, that works out



Epson PictureMate



Kodak Picture Dock 3

at just 44 cents per print — the cheapest cost per print of the five printers by a wide margin.

The controls accessed from the monochrome display are easy to use and you can print an index card so you know which image is which when selecting photos to print. Despite the lack of an image preview, you can choose a zoom (crop) option, which lets you select, from nine areas, a base point to anchor your crop, and choose from 1.2 or 1.5 times “zoom”. Colour effects include black and white and sepia. When printing from a PC you get Sony’s PhotoQuicker software, which is effective and simple to use. Connectivity options include the card reader slots, a USB port for connecting to a PC, and a USB port for connecting PictBridge or USB Direct-Print-enabled cameras. You can also use this port to connect and print from USB external storage devices. There is an optional Bluetooth adapter available for wireless printing.

Despite its slow print speed, the PictureMate is hard to beat in terms of photo quality and economy, and earns our Editors’ Choice for these reasons.

Contact: Epson, ph 09-366 6855; www.epson.co.nz

Kodak Printer Dock 3

Kodak’s range of printer docks are thermal dye printers (also known as dye sublimation printers). That means they lay down solid colour, not dots like an inkjet. The result is an image that is essentially indistinguishable from prints from a commercial photo lab; detail is superb.

Both the Kodak and the Sony pass the paper through the printer four times: once each for the three colours and a fourth time to put a protective coating on the print. The coating protects the print both from handling and the atmosphere, aiding print longevity. The Printer Dock’s dye comes in a cartridge pack along with 40 sheets of paper. The cartridge is keyed to the number of pieces of paper

— there’s no eking out extra prints here. Also, before you insert the cartridge in the printer you must ensure the dye film is taut, which involves winding it on to take up any slack just like an audio cassette. You must be careful not to wind too much, however, as you can reduce the number of prints available.

The Printer Dock is relatively speedy with an average print speed of 1 minute 39 seconds, just a tad faster than the HP PS 375. The downside to the Printer Dock 3’s technology is the expense: the 40-sheet paper/cartridge kit costs \$49.95, which works out at \$1.25 per print.

Kodak’s Printer Docks are primarily designed as docking stations for its range of EasyShare cameras, providing battery charging and image transfer to the PC in addition to printing. Previous versions have allowed you to connect a USB card reader to print an image from non-Kodak cameras (although in theory, only Kodak card readers are supported). The Printer Dock 3, however, is the first in the series to support the new Imagelink system. Imagelink, a standard introduced by a consortium of digital camera manufacturers, allows the Printer Dock to be used with Imagelink-compatible cameras, making it a better option for non-Kodak owners. Currently the Printer Dock 3 is only available as part of a bundle with either the EasyShare Z740 (\$899) or Z700 (\$699) cameras, but Kodak says it will likely be released as a standalone product in August.

The Printer Dock isn’t as compact as the inkjet printers, because when in use its paper cassette sticks out the front and you need to leave some space behind as the paper is passed out the back several centimetres during printing. There’s a USB port for connecting to a PC and another for connecting a PictBridge-capable device (such as a camera) or a USB card reader. You don’t get a LCD screen because the LCD screen of a docked camera operates as your preview screen.

Contact: Kodak, ph 0800 440 786; www.kodak.co.nz

Sony DPP-FP50

The latest in Sony’s line of thermal dye photo printers, the \$399 FP50 is a sleek

little unit designed to look stylish yet unobtrusive in your living room. And why would you want it in your lounge? Because it features an AV port and a remote control, which let you hook it up to your TV to turn it into your own photo lab. Built-in software lets you do basic editing and enhancements on the TV screen, such as red-eye reduction, cropping, rotating and adjusting brightness and sharpness. You can also add text and fancy borders, if you wish, and run slideshows and then print any photo in the slideshow with the remote. In fact, the little Sony has some of the best connectivity options on offer. There are built-in card readers for MemoryStick, CompactFlash and SD cards; a PictBridge port to connect a camera; the TV-out option; and a USB port to connect the printer to a PC (Sony's PictureGear software is supplied). For standalone printing, a control panel with buttons and monochrome LCD lets you navigate options.

All of which makes the FP50 a better option for non-Kodak (or other Imagelink-compatible cameras) owners who want the excellent image quality

of a thermal dye printer. The FP50's print quality is almost identical to the Kodak; the only variation was in the tone of some colours. It printed photos at an average speed of 1 minute 13 seconds, the fastest of all the printers.

Like the Kodak, the Sony's paper cassette sticks out the front and you need to leave some space behind. It also has high print costs: a 40-sheet paper/cartridge kit cost slightly less than Kodak's, at \$44.95, for an average print cost of \$1.12. If you buy the 80-sheet pack for \$79 the cost drops slightly to 99 cents per print.







All told, the Sony's design, features and quality prints make it my next choice behind the Epson PictureMate. If Sony could get the cost per print down to the 70–80-cent mark, it would be a must-have product.

Contact: Sony, 09-488 6188; www.sonymstyle.co.nz



Sony DPP-FP50

COMPACT PHOTO PRINTERS

Product	Price	Type	Cost per print	Print speed (best quality)	Connections
 Epson PictureMate	\$349	Inkjet	\$0.44	 5:53 ¹	Card readers (CF, Microdrive, Memory Stick, SD, MMC, SM, xD); USB for PC; USB for PictBridge or external storage device.
HP Photosmart 375	\$449	Inkjet	\$0.63 ²	 1:43	Card readers (CF, MMC, SD, Memory Stick, xD); USB for PC; PictBridge.
Lexmark P315	\$329	Inkjet	\$1.26	 3:02	Card readers (CF, Microdrive, xD, SD, SM, MMC, Memory Stick); PictBridge.
Kodak Printer Dock 3	³	Thermal Dye	\$1.25	 1:39	Docking port for compatible camera; USB for external card reader or PictBridge device; USB for PC.
Sony DPP-FP50	\$399	Thermal Dye	\$1.12	 1:13	Card readers (CF, SD, MemoryStick); video out; USB for PC; PictBridge.

Notes: ¹Average print speed with auto correct set to Enhance. Average speed with auto correction disabled was 2:22.

²Using the \$75 Value Pack, which includes 125 sheets of Premium Plus Photo paper and a No 97 ink cartridge.

³Not currently available separately. Comes bundled with Kodak EasyShare Z740 (\$899) or Z700 (\$699) cameras.