

Prints charming

Quick, hassle-free photos printed in the comfort of your own home – we put small photo printers to the test, and explain how to get the best from them

Most people who own a digital camera don't bother getting their photos printed because it seems like hard work.

If this sounds familiar, buying a small photo printer might be the ideal solution. These compact devices allow you to print postcard-sized (6x4-inch) photos directly from your digital camera, memory card or computer. Because they only print photos, they're easier to set up than a full-sized printer.

Most models can print from memory card, digital camera (via a technology called PictBridge) and computer, but not all, so check this before you buy.

You should look out for flexible editing features included in the printer, such as red-eye reduction. You'll be able to use these options only when printing from a memory card, but we think this is the easiest way to print, so you may find yourself relying on them.

It's wise to check for good-sized LCD screens to allow you to preview photos before you print from memory card. Tilttable screens help avoid glare from nearby windows and lights. Some models are designed to be transportable – look for printers that can operate on batteries, have a carry handle and aren't too heavy.

Tilttable screens help avoid glare from windows and lights

However, small photo printers aren't very versatile – you can't print documents on A4 paper, for example. If space is at a premium, you'd be better off opting for a good-quality, full-sized inkjet device or all-in-one rather than buying an additional small photo printer.

Convenience does come at a cost – 'Cut printing costs', opposite, reveals that it's cheaper to use an online photo processor such as Snapfish or a high-street store than a small photo printer.

That said, small photo printers are a fun way of printing your photos at home quickly and easily.

WHICH? ONLINE

See www.which.co.uk/printers for reviews of more than 60 models and seven Best Buys. This information is regularly updated with new models, prices and availability.

Contacts

Canon 0800 2266 6767
www.canon.co.uk

Epson 0871 222 6702
www.epson.co.uk

HP 0844 369 0369; www.hp.com

Kodak 0870 243 0270
www.kodak.co.uk

Lexmark 0870 444 0044
www.lexmark.co.uk

Panasonic 0844 844 3852
www.panasonic.co.uk

Sony 0870 511 1999
www.sony.co.uk

Jargon buster

Understand printing terms

■ **DITHER** Inkjet printers use a series of nozzles to shoot tiny droplets of ink directly on to the paper in patterns to build up images. When you can see a distinct and distracting pattern of dots that make up your photo, this is known as dither.

■ **DPI (dots per inch)** This figure refers to the number of dots an inkjet printer places on a page within a square inch. Don't rely solely on this figure as an indication of print quality, as it doesn't take into account other factors, such as problems with colour banding caused by poor-quality print drivers.

■ **DYE-SUBLIMATION** This type of printer comes with a large ribbon cartridge that contains three panels of colour film. The paper runs in and out of the printer three times and the colours are transferred to the paper separately on each pass.

■ **INKJET** These use a series of nozzles to shoot tiny droplets of ink directly on to the paper to build up an image.

Step-by-step guide to perfect prints

How to get the best prints from our Best Buys using built-in editing features

1



Choose a photo

Insert your camera's memory card into the slot on the front of the printer. The images stored on the card will appear on screen. Scroll through the images using the arrow keys and select those you want to print by pressing OK.

2



Edit the image

To edit images, click Menu > Edit. To reduce red eye in your images, scroll to Red-Eye and press OK. Use the arrow keys to select On, and press OK. You will now be given the option of applying this edit to all the photos you have selected to print, or just one image.

3



Print your photo

Once you're ready to print, just click on the green Print button once to preview and again to start printing. If you wish to cancel the print just click on the red Stop/Clear button.



76% Epson PictureMate 290 £200

This top-of-the-range printer from Epson combines good print quality with excellent speeds. It's the only model we tested that has integrated Bluetooth, so you can print directly from your mobile phone. It features a tiltable display, and can print to CDs.

WORTH KNOWING The integrated CD writer and Bluetooth connectivity are the only major differences between our two Best Buys. If you have a computer with a CD burner, opt for the cheaper 260 model (right) and save £100.

Available Comet, Jessops Size when open 29x23x37cm Weight 3.3kg Handle Yes



74% Epson PictureMate 260 £100

Like its sibling, the 290 (left), this model produces great prints really quickly. The 290 and 260 both come with some brilliant editing options, such as red-eye reduction, cropping functions and the ability to change images from colour to black and white. For increased portability, both models have a handle and can run on an optional battery pack (which costs about £40).

WE FOUND Starting fully charged, the optional battery pack printed just over 100 photos before it ran out of power.

Available Comet, Jessops Size when open 26x23x37cm Weight 2.7kg Handle Yes

How we test

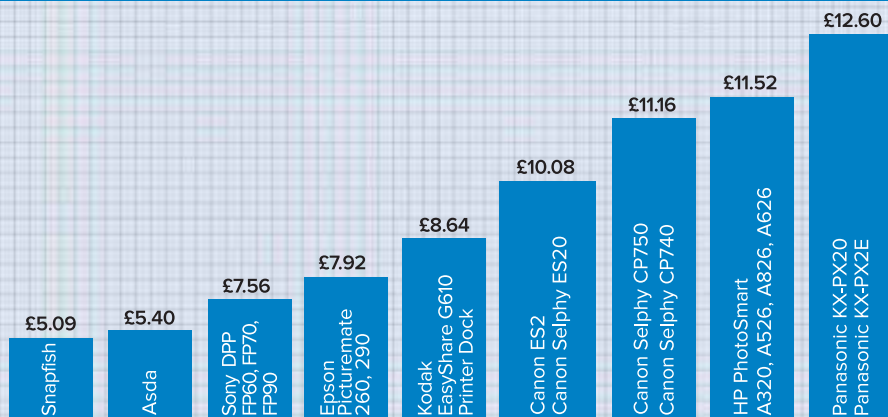
Our tests reproduce typical prints that you make at home

Our panel of experts assesses images of people and landscapes for print quality. Prints are analysed for colour bias and imperfections. We print a technical chart to highlight problems the printer might have with gradual colour graduations and dither (see 'Jargon buster', opposite). We assess all types of printing, including printing from a digital camera, memory card and computer. We print in colour and in black and white, and our experts review the statistics to determine how each printer fared.

Cut printing costs

The varying prices of prints

The cost of printing can soon stack up, so it's worth giving it some serious thought before you buy. Our chart compares the cost of printing 36 photos on all of the printers we tested, along with a Best Buy high-street and online processor. We haven't included the upfront cost of the printer. There are further ways to save money on prints from online stores – see our report on photo processing on p51 for more details.



YOUR QUESTIONS ON PHOTO PRINTING ANSWERED

We find the answers to common printing questions – from choosing the right paper to printing from a digital camera

Q Are there any advantages in picking a dye-sublimation printer instead of an inkjet?

A Our tests haven't found any difference in print quality between inkjet and dye-sublimation printers, but there are other factors that might lead you to prefer one technology over the other. Dye-sublimation technology (see 'Jargon buster', opposite) means that your printer will produce exactly the number of photos that is claimed on the cartridge

pack. This makes it easier to predict when you need to buy new supplies. But dye-sub devices make a whining noise when printing that some may find irritating.

Q How do I print directly from my digital camera?

A If the printer you choose supports PictBridge, printing from a digital camera is easy. This technology lets you print directly from a digital camera to a printer. All you need to do is connect the two devices using an

appropriate cable – this is often supplied with your camera – with no computer needed.

Q What sort of paper should I use in a small photo printer?

A This type of printer takes 6x4-inch photo paper as standard (and some models will also take a few other small sizes, such as 7x5 or 10x8-inch), so you can't use standard A4 inkjet paper in it. Most of this paper comes combined with the ink in a 'value pack' – for some

printers, it can be difficult to purchase the ink or paper separately.

Q My camera uses xD memory cards. Why don't some of the small photo printers support this format?

A xD cards are not as widely supported by accessories manufacturers as other cards such as Secure Digital (SD) and Compact Flash (CF). But you can buy an adaptor for your xD card that will make it compatible with an SD card slot.

Which should you choose?



Best for bargain hunters

HP PHOTOSMART A320 £40 This bargain HP printer (3) may have running costs that are higher than some of the other models', but we found that that if you print up to ten photos a month over three years, you'll save money compared with other printers. You can't print from memory card, but it does print well from computer and PictBridge.



Best for small spaces

CANON ES2 £130 The ES2 (6) takes up less desk space than any other printer on test and has a retractable power cable that automatically coils up inside the printer for neat storage. It has a carrying handle, and will run using an optional battery pack.



Best for the computer-phobic

HP A826 £150 The A826 (5) is operated in a similar way as a high-street store photobooth. It has several editing options and will hold up to 100 sheets of paper. It prints several paper sizes, including 6x4 inch and 7x5 inch. We found it easy to use, and its intuitive touchscreen functions will appeal to those who don't like using a computer.

USING THE TABLE

The more stars the better.

Specifications

Price For Best Buys we give the cheapest widely available high-street price. Prices for other models are a guide to what to pay. See www.which.co.uk/shopping for latest prices. **Ink type** The ink cartridge used by the printer. D = dye sublimation, I = inkjet.

Features

Memory cards Whether the printer accepts the following types of memory card; Compact Flash (CF), MultiMedia Card (MMC), Memory Stick (MS), Secure Digital (SD), xD Picture Card (xD) and Mini SD (mSD).

Bluetooth Whether the printer can print wirelessly from a compatible device. Opt indicates that the printer takes a Bluetooth accessory

that must be bought separately. **Optional battery** Whether the printer can operate from a battery pack and mains power. Battery packs are bought separately.

Test performance

Cost per print Costs are for one 6x4-inch print in pence, taking into account the cost of ink and photo paper recommended by the manufacturer. **Print quality** The quality of the picture as judged by our experts. **Print speed** How long it takes to print one colour 6x4-inch photo. A photo must print in less than 60 seconds to achieve ★★★★★.

Score

This ignores price and is based on:
 Print quality and time **65%**
 Ease of use **20%**
 Versatility **10%**
 Environmental impact **5%**

MODEL	SPEC		FEATURES				WHICH? TEST PERFORMANCE			SCORE %
	PRICE (£)	INK TYPE	MEMORY CARDS	BLUETOOTH	OPTIONAL BATTERY	LCD SCREEN	COST PER PRINT (p)	PRINT QUALITY	PRINT SPEED	
1 EPSON PictureMate 290	200	I	CF, MS, SD, MMC, xD	✓	✓	✓	28	★★★★★	★★★★★	76
2 EPSON PictureMate 260	100	I	CF, MS, SD, MMC, xD	Opt	✓	✓	28	★★★★★	★★★★★	74
3 HP PhotoSmart A320	40	I	n/a	Opt			32	★★★★★	★★★★★	68
4 HP PhotoSmart A526	60	I	CF, MS, SD, MMC, xD	Opt		✓	32	★★★★	★★★★★	67
5 HP PhotoSmart A826	150	I	CF, MS, SD, MMC, xD	Opt		✓	32	★★★★	★★★★★	67
6 CANON Selphy ES2	130	D	CF, MS, SD, MMC, mSD	Opt	✓	✓	28	★★★★★	★★★★★	65
7 HP PhotoSmart A626	100	I	CF, MS, SD, MMC, xD	Opt	✓	✓	32	★★★★	★★★★★	65
8 CANON Selphy ES20	120	D	CF, MS, SD, MMC, mSD	Opt		✓	28	★★★★★	★★★★★	64
9 SONY DPP-FP70	126	D	CF, MS, SD, MMC, mSD			✓	21	★★★★★	★★★★★	64
10 SONY DPP-FP90	90	D	CF, MS, SD, MMC, mSD			✓	21	★★★★	★★★★★	62
11 CANON Selphy CP750	120	D	CF, MS, SD, MMC, mSD	Opt	✓	✓	31	★★★★	★★★★★	58
12 CANON Selphy CP740	80	D	CF, MS, SD, MMC, mSD	Opt		✓	31	★★★★	★★★★★	58
13 PANASONIC KX-PX20	188	D	SD, MMC			✓	35	★★★★	★★★★★	58
14 SONY DPP-FP60	100	D	MS, SD, MMC	Opt		✓	21	★★★★	★★★★★	57
15 KODAK EasyShare G610 Printer Dock ^a	130	D	n/a				24	★★	★★★★★	56
16 PANASONIC KX-PX2E	112	D	SD, MMC, mSD			✓	35	★★	★★★★★	54

a Not PictBridge compatible