



Shopping for the Perfect Printer

A Printer Primer

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Tech Tip 82 - Shopping for the Perfect Printer - A Printer Primer

By Kimmy Powell



These days, technology is getting cheaper, but the cost required to maintain technology can end up costing more than you had budgeted. Take for example a brand new car. Maybe you've experienced this...getting a great deal on the car of your dreams, only to find that the cost to change the oil and perform maintenance checks is many times more than you are used

to paying for your old car. Now imagine the car is the printer you just purchased from your local electronics retailer, rebate included so that the cost of the printer justifies the gas necessary get you to the store. You are a happy camper and humming along nicely until the ink runs out after just a hundred pages, and you find yourself running down to your local electronics retailer for another cartridge. To boot you haven't even received the rebate you sent in six weeks ago! If you print in color, one cartridge turns into two, which equates to two times the cost. Sound familiar?

Arming yourself with a few basics can save you more than you'll know. Prevent the post-sticker-shock blues by keeping the following tips in mind when you shop for your next printer.

Do Your Research

First, figure out what your printing needs are and how much you're willing to spend. A good quality inkjet printer can be found for under \$100 while a laser printer can run several hundred, and high-volume or color laser systems thousands.

Make notes on one-time costs and then calculate the costs of ongoing essentials – ink and toner cartridges and paper (especially if you opt for a photo printer). Another thing to look into is whether the printer will require swapping out a single ink cartridge or the entire unit when an individual color runs dry. A printer that requires all cartridges to be changed at the same time will be costlier in the long run than swapping out individual cartridges. Single ink jet cartridges cost around \$10 (Canon) to over \$40 (Hewlett Packard (HP)). Laser toner cartridges average between \$50 and \$100, but have the added benefit of producing higher page counts (in the thousands) than inkjet printers which will produce in the hundreds.

Select Technology That Serves Your Purpose

After you've figured out how you're planning to use your printer, you'll need to select the appropriate type that meets your individual needs. There are four major types of printers.

Inkjet Printers



The most commonly used printer is the [inkjet printer](#). Inkjet printers work by spraying drops of ink through tiny holes on the print head directly onto the page. Inkjets produce quality output at fairly cheap prices (\$30 for selected Lexmark models; over \$600 for higher-end models) and are perfect for everyday home use, students, and those not concerned with professional quality printing. The drawback to the inkjet, however, is the cost associated with replacing cartridges. While that inexpensive inkjet printer may seem like a bargain, the economics won't extend to the actual costs of the cartridge itself or the printing mileage you'll get out of that single cartridge. The moderately-priced inkjet that uses less expensive cartridges and has higher page outputs may be a better bet than the cheaper model. Before you buy, check out the reviews and ratings from trusted sources such as [PC World](#) or [CNET](#).

Photo Printers



[Photo printers](#) are glorified inkjet printers specializing in printing images from digital cameras. Photo printers operate much like inkjets; however, photo printers use a piezo-electric nozzle which bends and twists in response to electric currents to control the precision of ink droplets onto the page for crisper images. Cheap photo printers can cost around \$50. Dedicated photo printers (\$150-\$400) have broader color spectrums and use thermal ink

dyes to generate the added photographic “feel.” Professional quality photo printers will cost around \$1500.

Laser Printers



If you create high volume, copier-quality black and white text, you might consider purchasing a [laser printer](#). Laser printers are suitable for office (or home-office) environments that endure high workloads and require professional output. Like its cousin the copier, these printers use laser beams to sketch out a text and/or graphics image onto a rolling drum. The drum then attracts toner and uses it to place the image on paper. A good-quality monochrome laser printer will cost between \$300 and \$500 with color lasers digging a deeper hole in your wallet. Among the best on the market are the

trusted LaserJet series by Hewlett Packard. Samsung and Dell also have decently-priced systems that appeal to many users.

All-In-One Printers



[All-in-one printers](#) are multifunctional printers that serve as scanner, fax machine, copier and printer. Using inkjet technologies, all-in-one printers make sense if storage is an issue. However, with a multifunction printer, you’ll sacrifice some print quality for the ability to access other features.

Features That Make or Break the Printer

The features that come with a particular printer should rank just as high as price on any scale. Some of the features you should consider when selecting your next printer purchase are:

- *Speed* – how many pages per minute does it print? Don’t go by the manufacturer’s claims; test the printer at your local electronics retailer once you’ve narrowed down your selections.

- *DPI, or dots per inch of paper* – the higher the dpi, the better and crisper the text quality. You'll want to aim for printers with a resolution of at least 600 dpi, although many quality printers today will create outputs of at least 1200 dpi.
- *Connection type* – most printers come pre-built with universal serial bus (USB) ports, although some models still come with parallel ports. USB connections are easy to set up and use. When selecting a USB printer, check the speed of the USB connection; if your computer uses USB 1.1, you won't get any added speed from a faster USB 2.0 printer. Also, most printers require the purchase of an accompanying cable, no matter what the connection, so be sure to take that into consideration as well.
- *Duplex capabilities* – looking for double-sided printing? Check for printers that offer duplex capabilities.
- *Capacity of paper trays or availability of additional paper trays* – how much paper does the tray hold? Some low-cost printers will require you to constantly add paper. If you plan on printing volumes, look for a printer that has capacity for at least half a ream, if not a ream of paper.
- *Networking ports* – if you need to share your printer with other workstations in the home or office, look for printers that come with built-in wireless or wired networking ports.
- *Cost of cartridges/toners and paper for the particular printer* – Prices will vary a little from store to store, but you can use one store for comparison purposes.
- *Warranty* – how long is the printer guaranteed to work, and what form of support can you expect?

Remember, your printer doesn't have to cost you a fortune to maintain. Take the effort to do your research and pick a printer that serves your purposes rather than what's hot on the market. Not only will you be prepared on what to expect, but you'll have a little pocket change for that next great gadget.