

TechBytes – Digital Camera buying guide

Some important issues to consider:

- 1. What do you want to use the digital camera for?** If you are mostly going to put the pictures you take on the web or send as email attachments, you don't need a high megapixel camera. If you mostly want to have traditional prints made, then you need to know how megapixel size corresponds to print size and quality. Digital photos are really composed of tiny dots (called pixels). The more of these dots that can fit in a one-inch space, the tinier the dots and the sharper the image. One Megapixel is made of one million pixels/dots.

2-3 megapixel cameras will do Internet and email photos well 2"x3" and 5"x7" ok
3-4 megapixel cameras will do up to 8x10 pretty well
4-5 megapixel cameras will do up to 11x14 well pretty well
6 and above megapixel cameras is getting into professional grade and will handle your pictures great
- 2. What size of camera are you comfortable with?** Do you want a compact camera that will fit in your pocket? Compact size is convenient but the buttons are smaller, the screen is smaller and the megapixels are usually lower. Standard sized cameras are easier to hold and easier for most people to use. SLR-like cameras are larger and look and feel more like standard 35mm film cameras. They often have the most features and the highest megapixels.
- 3. Do you want point and shoot or manual controls?** If you are familiar with f-stop, aperture priority and shutter speed then a camera with manual controls may be what you want. If you just want to press the button and have the camera take a good picture, then don't worry about buying a camera with lots of manual controls. One of the most common things people do is purchase a camera that has more features than they will ever use.
- 4. Will you want to zoom or take macro (close-up) photos?** If you want to zoom to take photos from a distance, make sure the camera you choose has sufficient **optical** zoom. 3-5x optical zoom is common and this might not be enough for some users. Digital zoom is a poor substitute for optical and it basically just enlarges the image and crops off the edges. Make sure you notice the level of optical zoom. If you want to take close up images of insects, flowers, etc, then check the cameras **macro** features.
- 5. How does the camera connect to your computer?** Do you need a camera that connects to your computer via USB or Firewire (sometimes called IEEE1394 or i-Link)? Do you want the convenience of a camera 'dock' that is permanently connected to your computer and you just place the camera in? Once you have taken the photos, you need to get them on your computer or a CD to edit, e-mail, rename them etc. You can do this by connecting your camera with a cable or you can remove the memory/storage card and connect that to your computer.
- 6. What kind of memory/storage does it use?** Storage/memory cards are digital camera film, that's where the digital camera stores photos you take. The advantage is of course you can use them over and over again and a lot more photos can be stored (depending of course on the capacity of the card). You may want to have extra cards on hand (like extra rolls of film) in case you run out of space. The most common formats are:
Compact Flash: This is the most common and is pretty cheap. It is also the largest sized card.
SD cards: These are becoming the most popular storage format and are about the size of a postage stamp.
XD cards: These are similar to SD cards but faster, a bit more expensive, and only work in some cameras.
Memory Stick: These are the size of a stick of chewing gum and are particularly for Sony cameras.

The larger the number of megabytes a storage/memory card has, the more pictures it can hold. Most cameras will come with a small card in the box (8-64 MB). These are good for storing some pictures but most people will want to purchase another card in the 128-512 MB range. Depending on megapixel resolution and options set on your camera, cards this size can usually hold over 100 pictures. The photos can then be removed to a computer or CD, or deleted and the card reused for the next round of photos. Prices on storage cards have begun to drop rapidly lately and a 256 MB compact flash or SD card can easily be had for under \$50.

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