

Tech Talk

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USB Flash Drives

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What is a USB flash drive, and why would I want one?

A USB flash drive is a device, smaller than a pack of chewing gum, which connects to your computer's USB port and provides you with a portable device onto which you can save files. An overwhelming majority of computers sold over the past five or ten years have USB connections. This makes these drives nearly universally useful.

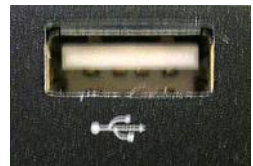
In addition, compared to the old-fashioned floppy disks they have all but replaced, USB drives have much greater capacity. This extra space is more important than in years past because of the emergence of media files like photos, music and videos take up much more room than common documents and files of years past.



A typical USB flash drive.

How much do I need to spend?

The price of flash memory drives has dropped steadily over the past few years, and they can be found at bargain prices today. For example, at *Newegg.com*, a large online computer retailer, more than 25 different models of one-gigabyte (1GB) USB flash drives cost less than \$10 each. Just two or three years ago, drives of the same capacity would have run well over \$50.



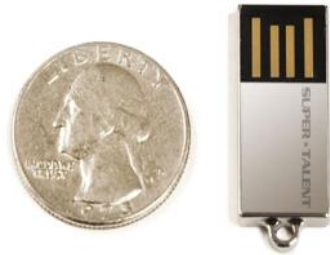
If your computer has a rectangular USB port like this one, you can benefit from a USB flash drive.

Incredibly, just one of those \$10 flash drives can hold as much information as nearly *seven hundred* floppy disks. But even these capacious drives don't represent the largest ones available. Four gigabyte (4GB) USB flash drives are easy to find, and 8GB, 16GB and even 32GB models are available. For the amount of storage space you get, flash drives can be a real bargain.

Should I just get the cheapest one, or are there other things to consider?

While price is an important factor in selecting a USB flash drive, it is not the only one. You might consider these features as well:

- **Styling:** Flash drives come in a variety of colors, textures and materials. Look for one which reflects your taste and personality.
- **Speed:** Make sure the flash drive you're considering is USB 2.0 capable, rather than limited to the tortoise-like USB 1.1.



- **Size:** A physically small flash drive may be preferable to a large one in that you're more likely to have it on your person at all times. Many people keep them attached to their key chains. The Pico series of flash drives by Super Talent are among the smallest available.

- **Ruggedness:** If you buy based on price alone, chances are good that your drive will be enclosed by a simple plastic case. While a plastic case is unlikely to break during normal use, breakage all but guaranteed if you step on it or back over it with your SUV. To address durability concerns such as these, manufacturers use upgraded materials such as



For the ultimate in physical protection, consider a flash drive encased in a water-tight aluminum cylinder, such as this one from Corsair.

metal cases or shock-resistant rubber coatings. Corsair's Flash Survivor series of drives takes this a step further by encasing electronics in a screw-off water-resistant cylinder made of aircraft-grade aluminum. By all accounts, this will take a lot of abuse without losing any of your important documents or media files.

- **USB Connector Protection:** The most delicate part of a flash drive is its USB connection. Many flash drives come with a simple cap which covers the USB connection. Unfortunately, these caps, which must be removed each time the drive is used, are easily misplaced. Some companies tether caps to drives with small cords, but this approach is somewhat inelegant. Better solutions are retractable USB connectors or shells which swing into place to cover the USB connector when the drive isn't plugged in.

- **Data Security:** Many people use their flash drives to save financial documents, personal correspondence, and other sensitive materials. If you're concerned about your files inadvertently falling into the wrong hands, there are some options which can prevent the wrong people from accessing your information.



This Ivation flash drive swivels closed when not in use.



The USB connection of the SanDisk Cruzer Micro retracts into its case.

- **(Data Security Continued)**

- **Physical:** Corsair has developed a product called the Flash Padlock, which requires the user to enter a combination before it will function. This should help to minimize the possibility of identity theft or other forms of fraud based on the information contained in your flash drive.
- **Encryption:** A more common form of keeping your data safe from prying eyes is by scrambling the information on the drive through a process called encryption. Unless you possess the correct key (often generated by a password or passphrase), the data on the drive is essentially irretrievable. Flash drive manufacturer Iron Key (www.ironkey.com) enhances their encryption with another impressive feature. If a hacker enters an incorrect password into the flash drive several times in a row, the data on the drive will be irreversibly destroyed, protecting your sensitive files.



Corsair's Flash Padlock uses a novel type of physical data security.

If you have questions, comments or suggestions, you can visit me at the Reference Desk, contact me via email (moetting@hinsdalelibrary.info), or call me at 630-986-1976.

Mike Oetting, Reference Librarian
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