

Types of Computer Printers

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What is a Computer Printer?

A printer is an external hardware output device that takes the electronic data stored on a computer or other device and generates a hard copy of it. For example, if you created a report on your computer, you could print several copies to hand out at a staff meeting. Printers are one of the most popular computer peripherals and are commonly used to print text and photos.

What can a printer be used for?

A printer is a device that accepts text and graphic output from a computer and transfers the information to paper, usually to standard size sheets of paper. Printers vary in size, speed, sophistication, and cost. In general, more expensive printers are used for higher-resolution color printing.

Examples of Impact Printers:

Dot-Matrix Printers.

Daisy-wheel printers.

Line printers.

Thermal printers.

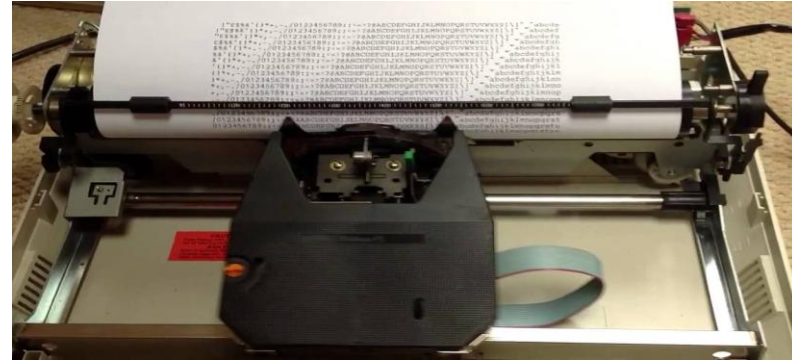
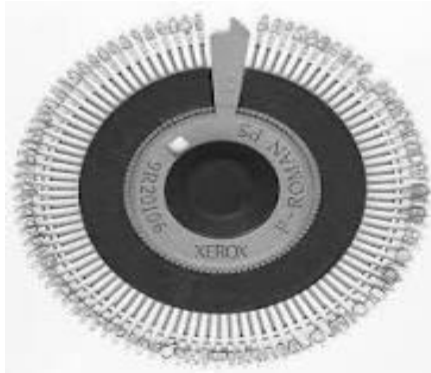
Ink-jet printers.

Laser printers.



Dot Matrix Printer

Dot matrix printing, sometimes called impact matrix printing, is the process of computer printing from a collection of dot matrix data to a device, which can be one of: Impact dot matrix printers non-impact dot matrix printers, such as inkjet, thermal, or laser printers.



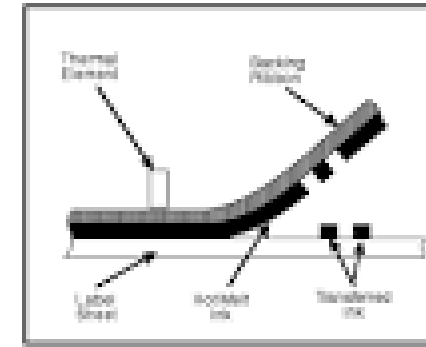
Daisy Wheel Printer

Daisy wheel printing is an impact printing technology invented in 1970 by Dr Andrew Gabor at Diablo Data Systems. It uses interchangeable pre-formed type elements, each with typically 96 glyphs, to generate high-quality output comparable to premium typewriters such as the IBM Selectric, but two to three times faster.



Line printer

A line printer prints one entire line of text before advancing to another line. Most early line printers were impact printers. Line printers are mostly associated with unit record equipment and the early days of digital computing, but the technology is still in use.



Thermal Transfer Printing

Thermal Printing

Thermal printing is a digital printing process which produces a printed image by selectively heating coated thermochromic paper, or thermal paper as it is commonly known, when the paper passes over the thermal print head. The coating turns black in the areas where it is heated, producing an image.

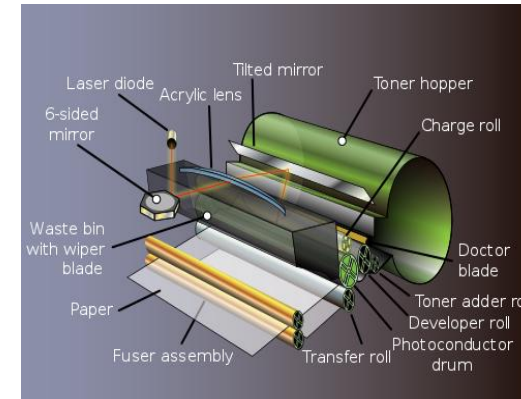


Diagram of a laser printer

Laser Printing

Laser printing is an electrostatic digital printing process. It produces high-quality text and graphics (and moderate-quality photographs) by repeatedly passing a laser beam back and forth over a negatively charged cylinder called a "drum" to define a differentially charged image. The drum then selectively collects electrically charged powdered ink (toner), and transfers the image to paper, which is then heated in order to permanently fuse the text, imagery, or both, to the paper. As with digital photocopiers, laser printers employ a xerographic printing process. Laser printing differs from traditional xerography as implemented in analog photocopiers in that in the latter, the image is formed by reflecting light off an existing document onto the exposed drum.



LED printers

An LED printer is a type of computer printer similar to a laser printer. Such a printer uses a light-emitting diode array as a light source in the printhead instead of the laser used in laser printers and, more generally, in the xerography process

Printer Distinguished by its Type:

Print Resolution

Understanding the resolution of a printer is the printer's ability to create a number of dots in a square inch. For example, a resolution of 720x 720 dpi (dot per inch) means that the printer can make 720 points per 1 inch vertical, and 720 points per 1 inch horizontal.

The higher the resolution of the printer, the faster and sharper is the resulting display.

Details on the print resolution in a printer is usually given in the printer's manual or a patch on a sticker on the back of the printer.

Speed

Printer speed is expressed in PPM (Pages Per Minute). Speed of a printer also depends on the memory contained in the mainboard and media types.

Media Printer

Ribbon

A printer ribbon is used as an ink transfer medium in the dot matrix printer. These printers usually use the head with the system needles in accordance with the view to be printed. The head is called the dot matrix type, because the needle shape in the form of dot matrix following the results to be printed. A head consists of 9 pin and 24 pin. The pin is available in a needle head. The more needles there (24 pin) getting better print results.

Ink

This type of printer uses ink as a printing medium. The head used is a type of head that regulates the release of ink according to the printout. Head types are usually called cartridges.

Toner

This type of printer uses toner as the print media. Toner is a powder used as a means of "sprinkle" in the print media (such as paper) in accordance with the results to be printed, and then heated using light. The principle of this kind of work is also done by a photo copy machine.

Print Technique

Based upon printing techniques, there are two kinds of printers: impact and non-impact. Impact is a printer that performs the printing technique by hitting the needle head to the tape, while the non impact printer is done in a printing technique by spraying, including most types of printer inkjet and toner cartridges.

Connectivity Type

This type of printer connectivity consists of:

1. Parallel Port

Parallel port connectivity is kind of the beginning first provided by the computer to connect to the printer. Parallel port consists of a port that has a 25 pin (DB25) configuration. Each of the pins have different functions. Some of which are: voltage, ground, input data and output data.

Including in this type of printer is the older generation of printers and dot matrix printers.

2. USB Port

USB or Universal Serial Bus is a type of port that is used for various purposes, as the name suggests. With USB, the printer connection can be done with better speed.

Connectivity Type

3. Others

Printing technology, as well as other technologies, run in accordance with the changing times. Various forms of connectivity are done, not only for the printer, but also other peripherals, such as mobile phones. Also, infrared connectivity can also be selected, as with many Bluetooth devices. So it's not impossible, if the current printer technology uses parallel and USB ports as connectivity. In time a much better connectivity will be used in printing technology.

Print Media

Paper

Copy Paper is commonly used as the print media. Copy Paper is used almost always for all the printing needs of business papers, theses, and office work.

Almost all types of copy paper is used as the print media.

Photo Paper

In the development of computer technology, there was a demand for development in printing technology for residential use. With photo printing technology, we do not bother to print from a mobile phone or digital photo. Several types of printers include the latest release of almost all the photo printing features. When we buy photo paper, then we can do photo printing at home.

For better results in photo printing, typically we are using 5 cartridges of ink, i.e., Black, Cyan, Magenta, Light Cyan, and Light Magenta.

Printer

What we mean here is we use a common printer that is also used in offices and schools. Printers generally use office (8½ x 11) and legal-sized (8½ x 14) paper. Many color printers have adjustable feeds for the various photo papers.

What Type of Printer Is Right for You?

Picking the right printer can be tough, with so many features to choose from, and individual printers with almost any possible combination of those variations available. Here are some pointers to help you find both the right category of printer and the right model within that type.

The three most useful ways to categorize printers are by purpose (general or special), intended use (home or office), and technology. Define your needs by all three categories, and you're well on your way to finding the right printer.

Most printers, including most inkjets that manufacturers market as photo printers, are general-purpose models, meant for printing text, graphics, and photos. Special-purpose printers include portable printers, dedicated and near-dedicated photo printers, and label printers. (Even among specialty printers, 3D printers are a unique case, and beyond the scope of this discussion.) If you're looking for a model to print, say, photos, consider whether you want to print only photos or want a printer that can also produce other kinds of output.

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buying a printer, go to:**

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