

How Do Receipt Printers Work?

Receipt printers, when connected to a computer via a cable interface, receive data from the point of sale software application running on the computer. The data is interpreted through the printer's device driver and subsequently printed.

What Kind of Receipt Printer Do I Buy?

Important Considerations:

Software Requirements & Device Drivers:

Some software applications only work with specific printer drivers, so it is advisable to check with the software manufacturer to determine the compatibility of a specific receipt printer with your software. Some point of sale applications will require OLE for Point of Sale (OPOS) drivers to properly print receipts, while others may use generic Windows drivers. If your software requires OPOS drivers, an [Epson](#) or [POS-X](#) receipt printer is a fine choice.

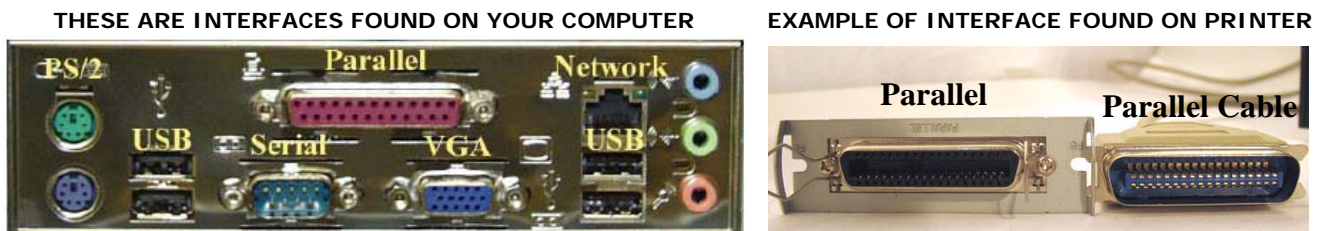
If you are replacing an existing POS receipt printer, you don't necessarily have to purchase the same brand because many printers, such as POS-X receipt printers, are made to emulate other brands. Changing emulations, however, may require advanced manufacturer support.

Cable Interfaces:

A receipt printer will connect to your PC via a Serial, Parallel, USB, or Ethernet connection.

It is important to know the types of cable interfaces available and what they look like.

Use the following diagram to determine which connections are available on your computer so you can select the type of interface for the receipt printer you plan to order:



Receipt Cutting:

Most receipt printers are available with options for either a manual tear bar or an auto cutter for delivering the paper receipt. This is purely a personal preference.

Environmental Restrictions & Additional Functionality:

Consider the environment where the printer will be used — at a pos register, in a kitchen, in a quiet area such as a library or waiting room, etc. Different printing methods are suitable/unsuitable for various environments. For example, impact printers are recommended for kitchens because the receipts they produce are not heat-sensitive.

Is speed a factor? Speed varies by printing method. Do you need color? Will your printer travel with a mobile sales force processing orders in the field? Would you like your receipt printer to also read MICR codes and endorse checks? Do you need to print duplicate receipts?

Answers to these questions will prepare you for selecting from the main types of receipt printers on the market, as described in the [next section](#) of this Guide.

Receipt Printers Types:

Impact:

Impact printers are the most flexible and economical of all receipt printers on the market. They use ink ribbons to imprint the receipt paper like a standard dot matrix printer. They can print 2-ply receipts (one copy is retained by the vendor, the other by the customer). Most impact printers have the option to print up to two colors — the standard colors are black and red, but this requires purchase of separate ribbons. Receipts are not affected by heat.

Recommended Use: In kitchens/heat-intensive environments; in any retail pos environment where duplicate receipts or two-color printing are required.

Models to Try: [POS-X Xr200](#) or the [Epson TM-U220](#)

Direct Thermal:

Direct thermal printers use heat to create an image on paper. A direct thermal receipt printer does not use a ribbon to print the image on the paper - it uses special paper. The printer head activates the heat-sensitive coating on this paper to create the image. Direct thermal printers offer a low total cost of ownership (no ribbon to replace) and are our most popular type of receipt printer. Direct thermal printers are fast, quiet, and you can even upload images (ex. your company logo) directly to the firmware for increased printing speed (other types of printers require image files to be uploaded with every print job).

Recommended Use: Any point of sale environment where exposure to kitchen heat is not a factor.

Models to Try: [POS-X Xr500](#) or the [Epson TM-T88III](#)

Ink Jet:

Ink jet receipt printers are quiet, fast, and typically offer two-color (black and red) printing. They provide an avenue for graphic-intensive designs — you can print coupons and color logos on your receipts for a one-of-a-kind look.

Recommended Use: Any point of sale environment where direct marketing on receipts is desired.

Models to Try: [Ithaca POSJet 1000](#) or [KitchenJet 1000](#)

POS Multi-function:

Multi-function POS printers offer combined features such as receipt printing, slip printing, MICR font reading and check endorsement. These feature combinations vary by model, and the print methods range from thermal and inkjet to impact. Of course, combination printers are more expensive than single-function receipt printers.

Recommended Use: In point of sale set ups where slip printing or validation of checks or other documents is required and not handled by existing POS hardware.

Models to Try: [Epson TM-H6000II](#) or [TM-J7100](#)

Portable:

Portable POS receipt printers are mobile units that run on rechargeable batteries. Depending on the model, a portable POS printer will print receipts using Bluetooth wireless technology, or will attach directly to a PDA-style handheld device to receive the printable data. The technology and mobility advantages of these devices dictate their higher price.

Recommended Use: Mobile sales forces taking orders on PDA devices in the field, busy or large-scale floor sales environments; outdoor operations.

Models to Try: [Epson Mobilink](#) or [Datecs PP-50](#)