Envisionware Printer Documentation

Printer : Recommended printers

KB1173

EnvisionWare does not recommend any specific brand or model of printer for use with the LPT:One™ print management.   When purchasing a new printer for use with LPT:One™ you should ensure that it meets the guidelines outlined below. The brand and model that best suits your environment will be based upon those guidelines. This information is specific to printer choice and not suitable for MFD choice as copy control also requires the appropriate cable for that make/model. Check with your sales team for MFD options.

Network Connectivity

The printer should have an in-built Network Interface Card and be directly connected to a network with a static (Fixed) IP Address. Bottom range printers and "host-based" printers generally do not have an integrated Network Interface Card and generally only have a Parallel or USB connection. Stay away from these printers. Medium range printers and above will have a Network Interface Card or a Network Interface Add-On Card that can be installed as an option. Ensure that the printer has a Network Interface Card or is purchased with an Add-On Card.

Monochrome or Color

The purchase and operating costs of Color Laser Printers are decreasing at a fast rate. It is quite affordable for most libraries to offer both Monochrome and Color printing. Color Laser printing costs can be even lower than some Inkjet printing costs. Even the "cost per page" of printed Monochrome pages are cheaper on some modern Color Laser Printers than on Monochrome Only printers from 5 years ago. Stay clear of Inkjet printers – they have a high failure/maintenance rate and the ink price per page can be very high. Also most Inkjet printers do not have a Network Interface Card or use "host-based" drivers that are explained further below.

Many libraries are now making use of modern Color and/or Monochrome Multi-Function Devices that provide both the Photocopying and Printing needs for the library from the one device that lowers the cost of both equipment and consumables over an extended period of time. These would generally be purchased through a photocopier specialist as opposed to a printer specialist.

We recommend that you look for printers/devices that have individual color toner cartridges. This allows for individual colors to be changed which eliminates waste and actually reduces the cost of toner supplies.

Printer Memory

It is important that any printer/copier has sufficient Internal Memory. It is recommended that the printer have a minimum of 128Mb of memory. Some print jobs (like PDF's, graphics including CAD, or print jobs with a large number of pages, etc.) can be very large in size. Print Jobs spool to the printer which must then render the page image before it can be printed. If insufficient printer memory is available then you may find that some print jobs will fail to print completely. You may receive an OutOfMemory error on the printer itself.

Printer Languages and Drivers

LPT:One makes use of international standard printing languages. Using LPT:One Print Driver optimisation generates smaller print job sizes which can be both rendered and spooled quicker to the printer. The printer must natively support PostScript Level 2 and/or 3, or PCL6, to make use of the optimisation features. This is one of the most important features to request from your Printer/Copier vendor. Check with the vendor that the supported languages are "native" and not "emulated", as seen in some printers on the market recently. Verify that PostScript and/or PCL6 drivers are available from the manufacturer.

Inkjet and some bottom range printers use "host-based" drivers and do not support PostScript or PCL languages. Manufacturers produce printers in this fashion as is it extremely cheap for them to produce the printer itself. Printers that use "host-based" drivers have little processing power or memory themselves. They move all the processing of print jobs from the printer itself to perform this processing "virtually" through software on the "host" (directly connected) computer. Processing is usually very slow compared to the dedicated processing capabilities of most printers. They do not work well in network environments and Windows Printer Sharing does not normally work for all printer features when shared. Also the host "processed" print jobs are sent to the printer in its own proprietary "non-standard" format as it does not need processing to be done by the printer. Purchasing a printer that conforms to the international language (PostScript and PCL) standards will ensure that you have a printer that works and prints from all applications across any platform you currently use or will use in the future.

Printer and Operating Costs

Many libraries try to minimise the cost of purchasing a new printer by only looking at the "upfront" cost of the printer itself. It is important to look at the feature/functions listed above and to ensure that any printer you are considering for purchase meets all recommendations. The ongoing cost of both maintenance and consumables can be excessive on some printers. A more expensive printer may in fact save you money even over a very small time period (6 – 12 months) but this will depend on the volume of printing/photocopying that users are using. Consider the toner costs and how many pages per toner cartridge can be printed. (Manufacturers rate yield based on 5% page coverage which is roughly

equivalent to simple text. Today's graphics impact the real numbers measurably. A $1000 printer may print 2000 pages from a $150 replaceable toner cartridge, where a $3000 printer may produce 5000 pages from a $100 replaceable toner cartridge. If you printed between 4000 and 5000 pages per month then the $3000 printer plus operating costs would be cheaper to purchase and operate than the $1000 printer in less than 12 months of operation.

The majority of libraries that invest in Multi-Function Devices generally lease them. Most photocopier specialists will be able to provide leasing options for their units. Some of the leasing agreements available from some vendors also include the supply of toner cartridges. The library is billed on a "per page cost" which can be marked up and passed onto library users. Some agreements offer as little as 2.5c US/4c AUD per monochrome and 5c US/8c AUD per color page printed through the leasing agreement. As the toner is included in the agreement, it allows you control of the fixed cost and also exactly what charges are to be passed onto the library users.

Warranty and Maintenance

Ensure that any Printer/Copier is purchased from a reputable vendor with a local service centre. Fast fault resolution is imperative to a satisfactory library user experience. Fast same day or next business day repairs are favourable. Incorporate written penalties for failure to adhere to a Service Level Agreement. When leasing equipment, repairs and maintenance are usually covered under the leasing agreement but ensure that the response and resolution times are adequate.