

How to Choose the Right ID Card Printer

The Complete
7-Step
GUIDE

With such a wide range of ID card printers on the market, evaluating the options can become an overwhelming task. This guide will walk you through all the important considerations and help you select the best ID card printer for your organization.



Selection Worksheet

This checklist contains an overview of all the features to consider when selecting an ID card printer that are covered in this guide. Each question on this checklist corresponds to a page in the guide. Once you have completed this checklist, you will be equipped with the knowledge necessary to compare printers.

1. Determine Your Budget pg. 3

- Low (\$878 - \$1,400)
- Mid (\$1,198 - \$2,298)
- High (\$1,898 - \$6,165+)

2. Single or Dual-Sided pg. 4

- Single-Sided
- Single-Sided (with field upgrade option)
- Dual-Sided

3. Select Printing Method pg. 5

- Dye Sublimation
- Rewritable Mode
- Reverse Transfer

4. Volume Requirements pg. 6

- Manual Feed
- Batch Print
- Min. Hopper Capacity _____
- Min. Print Speed _____
- Min. Ribbon Yield _____

5. Lamination, Visual Security & Encoding pg. 7

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- AlphaGuard
- Encoding Requirements _____

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- Wi-Fi

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- Preferred Warranty Duration _____
- Loaner Coverage
- Maximum Printer Dimensions _____
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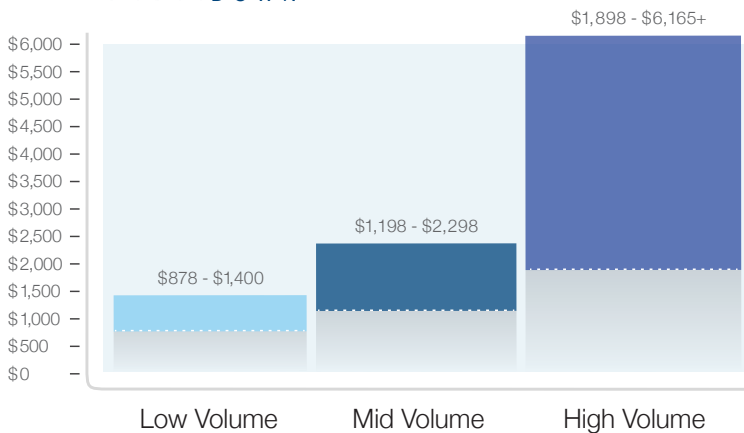
Notes/Comments _____

Step 1. Determine Your Budget

It's very helpful to have a pre-established budget range in mind when evaluating printers, since an organization's budget can be the most limiting factor. Pricing for complete ID card systems starts at \$898 and goes up to \$6,165+ based on your organization's needs.

A complete ID card system includes a printer, software, supplies, and lifetime AlphaCare support. These components usually add \$200-\$1,350 to the base printer price.

BASE Single Sided PRINTER PRICING BREAKDOWN



**STARTING AT
\$998**

**AlphaCard PRO 100
Starter ID Card System**

Volume determinations can vary depending on company usage, needs, and other factors. See page 6 for more information, or contact one of our ID card experts today for help! www.IDCardGroup.com/free-recommendations.

Additional Options PRICING

	Additional Cost per Printer price ranges depend on printer make & model	Additional Supply Cost per Card cost per card includes: ribbon, film, overlaminate and blank card costs
Dual-Sided	\$200 - \$750	\$0.05 - \$0.31
Magnetic Encoding	\$400 - \$750	\$0.08 - \$0.25
Lamination	\$1,200 - \$3,000	\$0.22 - \$0.65
AlphaGuard	\$0.00 (Free with AlphaCard systems)	\$0.00 (No extra supply cost)

Step 2. Single or Dual-Sided

Determine what you will need to print on the cards and whether all of the content will fit on a single side. Dual-sided printers automatically flip and print on the backside of a card in a single pass. Most printers are available in a dual-sided version, which usually adds \$200-\$750 to the base printer price (dual-sided printing is not available on some entry level printers). Also keep in mind that dual-sided printing increases the supply price per card by \$0.05-\$0.31.



Need Dual-Sided on a Budget?

You can manually print a batch of cards, then feed them back through and print the back sides. This method is only recommended when one side of the card is exactly the same on all cards, without personalization, or if you plan to print one card at a time without using batch printing functionality. Since this method is much more time consuming, it is only recommended for a low volume program, but can be an affordable way to print dual-sided cards.

Field Upgrade Option for Future Growth

If you are unsure about needing dual-sided printing, select a printer with a field upgradable dual-sided printing module. This option allows you to purchase the dual-sided hardware at a later date and self-install onsite to upgrade a single-sided printer to a dual-sided printer. It makes your printer more flexible and prevents it from being obsolete as your organization's needs change. Upgrade modules usually cost \$200-\$750, which is slightly more than the cost of choosing the dual-sided option when you first buy a printer.



AlphaCard PRO 100
Single-Sided ID Card Printer
\$1,095 ▶



AlphaCard PRO 500
Dual-Sided ID Card Printer
\$1,595 ▶



Field Upgrade Kit for PRO 500 & PRO 700 Single-Sided Printers
\$598 ▶

The mid-level AlphaCard PRO 500 printer is one of our most popular ID card printers and is available in both single-sided and dual-sided versions. The single-sided printer can easily be upgraded on-site with a field upgrade kit.

Step 3. Printing Method

Dye Sublimation Printers:

- More Economical
- Average Quality
- Faster Print Speeds
- Thin White Border
- Average Durability



Dye Sublimation (Direct-to-Card) Printers

Most ID card printers use dye sublimation printing, also known as direct-to-card (DTC). These types of printers infuse the color from the printer ribbon into the card using heat from the printhead. When the cards come out they are never wet and do not smear like they can from ink jet or laser printers. Dye sublimation printers feature marginless edge-to-edge printing, but sometimes leave a tiny white border around the card edge.

Dye sublimation printers are the most common type, and are more affordable than reverse transfer printers, starting at just \$878. If your organization doesn't need high definition cards, doesn't mind a tiny white border, and doesn't need to print on specialty format cardstock, then this type of printer is your best option.

Rewritable Printing Mode

In addition to their standard printing mode, some dye sublimation printers have a monochrome rewritable mode which can print on special rewritable cards without using any additional supplies. Rewritable cards are thermo-sensitive, and can be printed, erased, and re-printed up to 500 times. This type of printing is best for text and simple graphics since it will only print monochrome blue or black without any gradients or shades. Organizations that print temporary badges can save resources and money by using this economical printing method.

Not all dye sublimation printers have a rewritable printing mode, so be sure to check the printer specs if this is a feature your organization needs.



Reverse Transfer Printers

Reverse transfer printing (also known as retransfer printing) is a higher-end printing technology that produces crisper, high definition resolution, and true over-the-edge printing without any white borders. Reverse transfer printers use both a printer ribbon as well as transfer film to print. The card image is first printed onto the film, and then the film is fused over the entire surface of the card. Because the printhead never touches the card, it is ideal for specialty format cards that could damage the printhead on a dye sublimation printer, such as technology cards. The reverse transfer film also adds an extra layer of durability and protection that isn't present on cards printed with dye sublimation printing.

Reverse transfer printers are more expensive than dye sublimation printers, starting at about \$2,800. If your organization requires higher quality prints, true borderless printing, extra durability or printing on specialty cards, this may be your best option.



Reverse Transfer Printers:

- More Expensive
- Highest Quality
- Slower Print Speeds
- True Over-the-Edge Printing
- Higher Durability

Step 4. Volume Requirements

Knowing the estimated daily and annual printing volume is very important in helping you choose the right printer. This section will help you consider saving upfront with a lower level printer, compared to saving in the long run on production time and supplies cost. Organizations with medium to high volume printing requirements may prefer to invest in a more expensive printer upfront in order to save on labor and supply costs.

Handfed vs. Batch Printing

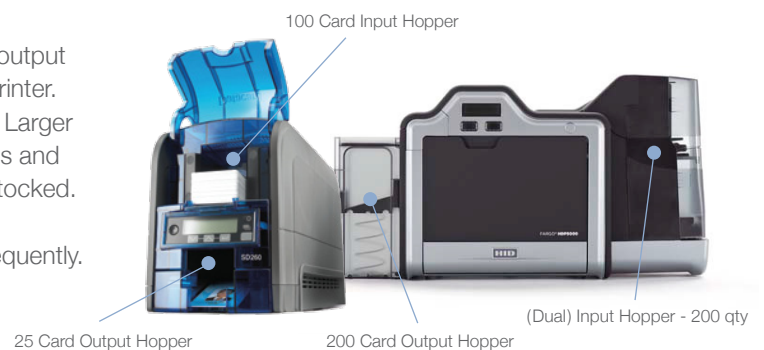
Some entry-level printers only offer handfed printing since they don't have input or output hoppers. Handfed printers require each card to be manually loaded one at a time, and are ideal for organizations that only print a few cards per day. Organizations that need to print a higher volume of cards should select a printer with input and output hoppers since they allow for batch printing.



The AlphaCard PRO 100 only offers handfed printing.

Input & Output Hopper Capacity

Input hoppers hold the blank cards before printing, while output hoppers hold the printed cards as they come out of the printer. Hoppers limit the maximum batch size that you can print. Larger hoppers save time and labor by allowing larger batch sizes and reducing the number of times the hoppers have to be restocked. Some printers allow you to upgrade the hopper size to accommodate larger batches, or to refill the cards less frequently.



Print Speed

A full colored print can take 12-35 seconds per card depending on which printer you use. Organizations with high volume print requirements can save time and production costs by selecting a faster printer. Organizations with low to medium volume programs will be impacted less dramatically by printer speeds, and should focus on other factors.

Max Ribbon Yield

Instead of ink or toner, ID card printers use ribbons to print. Each ribbon has a set number of prints that it can produce, which is called the ribbon yield. Larger ribbons need to be changed less often, saving time and labor, and tend to have a lower cost per print. Remember that every time you change a ribbon, you should also use a cleaning kit and run a printer cleaning cycle. Printer ribbons usually yield between 250-350 prints, but some printers have high capacity ribbons available that can yield 750-1500 prints. If your organization has high volume printing needs, make sure to compare max ribbon yields available for each printer.



Step 5. Lamination, Security & Encoding

Lamination (Clear or Hologram)

Lamination increases ID card durability and extends lifespan. It is especially useful for cards in high impact environments, cards used outdoors, or cards that are swiped through a reader. Laminates can be ordered with embedded holograms, adding an extra layer of security to prevent fraudulent duplication.

Most printers do not have lamination as an option, so if your organization needs this feature, be sure to check the available options for the printer. Lamination usually adds \$1,200-\$3,000 to a printer's price, and also increases the supply cost per card by about \$0.22-\$0.65.



AlphaGuard Secure Example

AlphaGuard

AlphaGuard is a technology that adds a hologram-like watermark over an ID card without requiring a lamination unit or any additional supplies. This extra layer of visual security helps prevent unauthorized ID card duplication, but unlike lamination doesn't add additional durability to the card. AlphaGuard is only available for AlphaCard printers, and is not available with any other brand of printer. AlphaGuard comes built-in to all AlphaCard printers and doesn't add any cost to the printer or supply cost per card.

Other Security Options

There are several other options for visual security including specialty cardstock, manually applied holograms, or design elements which prevent fraudulent duplication. Most of these techniques can be used with any ID card printer, so they won't directly impact your printer selection.

Encoding Options

Barcodes, magnetic stripe, proximity cards, and other smart card technologies allow cards to be used with existing programs for access control, time and attendance tracking, membership, or cashless payment. Almost all printers have similar encoding options, so this requirement won't usually impact the decision about which printer is best. We recommend you select the best printer for your organization separate from a decision about what encoding need you may have.

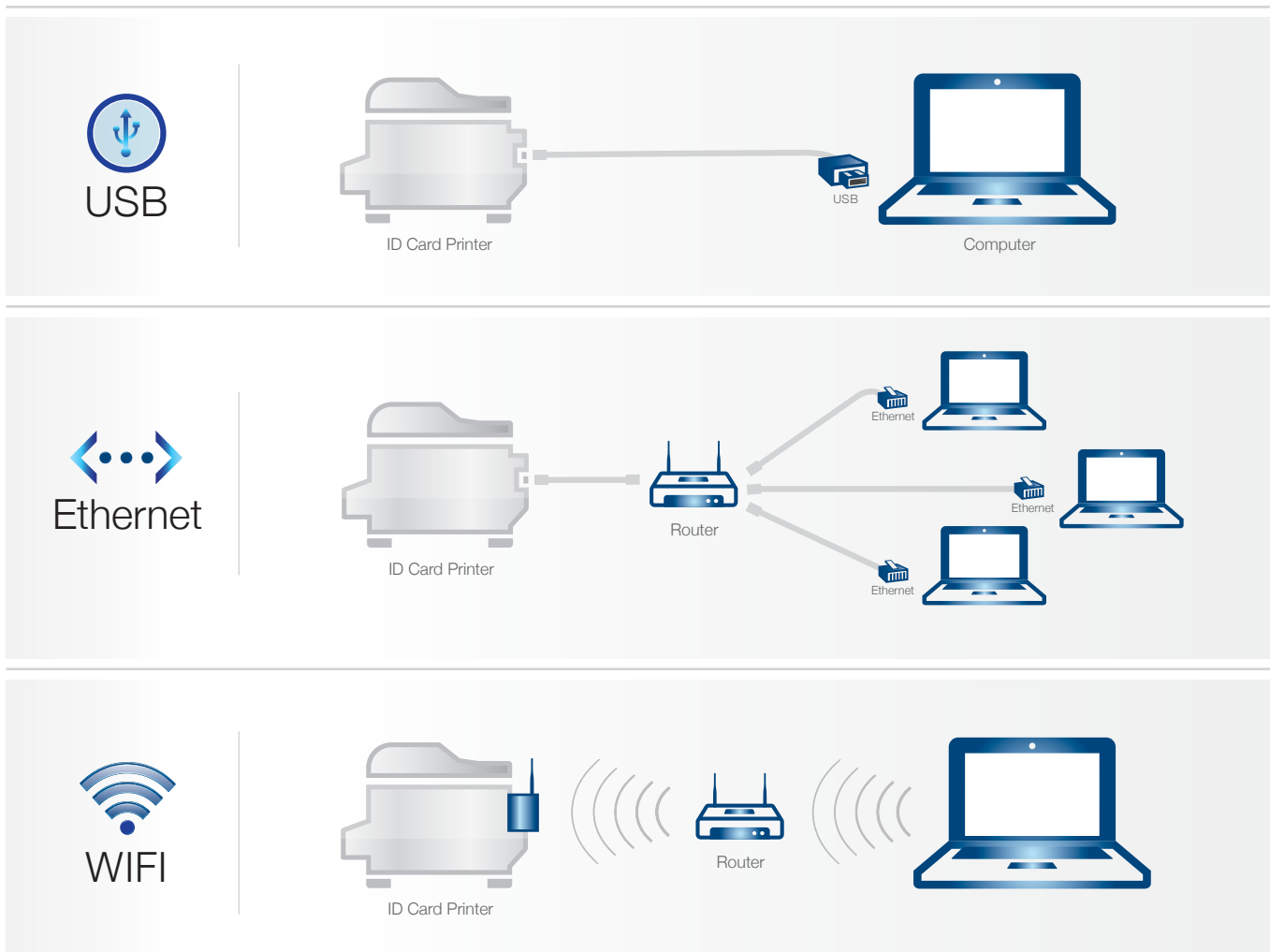


Step 6. Connection Type

USB, Ethernet, Wi-Fi

Will you need to connect your printer to a single computer, or to a network so multiple computers can print to it? USB cables connect printers to a single computer and come standard with all printers. Ethernet connections are required to connect the printer to a network. Ethernet comes standard with some printers, is an optional upgrade for other printers, and is not available on some entry level printers. Wi-Fi is also an available option on a few printers, and allows you to remotely send print commands to your printer.

Since not all printers have Ethernet or Wi-Fi, be sure to check the printer specs if your organization needs these features. Also take into consideration if you are using multiple computers to print ID cards, you will either need multiple licenses of ID software or a Secure USB Key that allows you to move a single license between multiple PCs, one at a time.



Step 7. Other Considerations

Printer Size

If you have limited space, you may need to take into consideration the footprint and overall size of the ID card printer. Adding options like encoding, lamination, or dual-sided printing may add modules to your printer that will take up more space. You may also want to consider the location of the input and output hoppers. Some printers offer the option of same side input and output hoppers that work great in small spaces.

The smallest ID card printers measure around 8"W x 9"H x 11"L. The largest printers are those with encoding, lamination modules and upgraded hoppers, and are significantly larger.

Field Upgrades

Some printers offer field upgrades so that an organization can add functionality at a later date. Field upgrade modules can usually be self installed onsite; the most common types include dual-sided printing, Ethernet, and magnetic stripe encoding. If you are unsure of the future needs of your organization, field upgrades make your printer more flexible and prevent it from being obsolete if your organization's needs change. Upgrade modules usually cost \$200-\$750, which is slightly more than the cost of choosing the option when you first buy a printer.



Operating System Compatibility

Be sure to check the printer for operating system compatibility if you use a retired, newly released, or Mac OSX operating system. Most, but not all, manufacturers offer Mac OSX compatibility, and all offer a wide range of PC OS compatibility. The options for Mac compatible ID card software are much more limited, so talk to your sales rep if this is something your organization needs.

Warranty & Loaner Coverage

All printers come with a manufacturer warranty that generally lasts between one and three years. Some models also provide a free loaner if your printer needs to be sent in for repairs. In addition to the manufacturer's warranty, you also get AlphaCare, the industry's best FREE support plan. Among other benefits, AlphaCare includes system setup assistance and training and lifetime technical support. See complete details at www.AlphaCard.com/alphacare.

AlphaCard PRO ID card printers come with the industry's best warranty and include our unique Pro-Xchange program to take the hassle out of repairs by sending you a replacement printer instead of making you wait for a repair or loaner. All PRO series printers also get a free year of AlphaCarePlus service and support, a \$298 value! AlphaCarePlus is our VIP support program and includes advanced configuration assistance, annual printer maintenance, and a priority phone line. Learn more at www.AlphaCard.com/pro-support.