

What's the difference between a Direct-to-Card and Retransfer ID Card Printer?

Direct-To-Card VS Retransfer



What's the difference?

What's the difference between a direct-to-card and retransfer printer? It's one of the most common questions we get asked here at Total ID so we thought we'd take a deeper look at the differences and individual benefits of these two printer types.

In this guide, we'll give you an overview of the key differences between these two printer technologies, and provide a handy table for quick reference

The difference between direct-to-card and retransfer ID card printing lies in the way the different machines print text and detailed images onto the surface of a card.

A direct-to-card printer uses a printer ribbon and printhead which come in direct contact with the card surface to print the card design onto the card.

Conversely, a retransfer printer prints the card design onto an overlay film via the ribbon. The overlay film is then adhered to the card's surface by using a mixture of pressure and heat to create a true over-the-edge printed card.

Sound complicated? It isn't really!

Because of the way reverse transfer printing works, you can confidently print onto the uneven surfaces of access control and smart cards without risking any print errors or damage to the print head. Direct-to-card printing is more cost-effective, with edge-to-edge printing to apply ink directly onto the surface of the card.

Retransfer ID card printers are a newer technology. Using a two-step process, these machines print your ID card design onto an overlay film, this clear film then adheres to the surface of the card itself.

The benefits of using a retransfer printer include the ability to print with full card coverage, meaning no pesky white border. Retransfer printers can also print safely onto access control cards and cards with an uneven surface because the printhead doesn't come into direct contact with the card surface.

For easy reference, we've put together a little table to highlight the key differences. This should give you a good indication of the type of printer you require and which will fit the bill best.

Can it...?	Direct to card printer	Retransfer Printer
Produce over-the-edge printed cards?	✗	✓
Print on to access control cards?	✗	✓
Handle high-definition photos and graphics?	✗	✓
Be easily duplicated or tampered with?	✓	✗
Withstand wear and tear?	✗	✓
Provide highly secure form of identification?	✗	✓

Retransfer printers offer higher print quality and versatility in terms of the card surfaces they are able to print onto, plus enhanced card security. A direct-to-card printer will produce high quality printed cards but, with fewer encoding options available and difficulty printing properly onto access control and smart technology cards they are less secure than retransfer machines.

