



# The CardMaster® One card personalisation system

The CardMaster® One system is an automated high volume card personalisation system for the complete graphical and electronic personalisation of ID-1 sized cards.

**System philosophy.** The CardMaster® One system is designed for high quality and secure card personalisation. The system has a modular setup, highly configurable functionality and scalable throughput to accommodate each project's specific requirements. Field upgradable modules ensure smooth integration of future innovations. The CardMaster® One system has been specifically designed for high-speed and high volume industrial use, intuitive and user-friendly operation, and requires only minimal maintenance.

**Suits your project demands.** The CardMaster® One system is suitable for personalising and securing government cards such as identity cards, driver licenses and residence permits. You simply choose the functionalities and throughput required for your project.

**Additional Benefits.** The system has an open software interface allowing you to use and integrate the personalisation software of your choice without being required to make additional investments in software licenses.

## Highlights

- Scalable in speed up to approximately 1500 cp/h
- High volume card personalisation system
- Personalised high level security features such as LCI, ImagePerf®, ImagPerf®/rev and Imagepref®/TLI
- Modular design
- Easy operation and minimal maintenance
- Open software system
- Field upgradable



# What functionalities do you require?



## INPUT

The input unit can be equipped with 2 to 8 input stackers and fully supports high production batch runs – including those where multiple types of cards must be produced in a single run. For greater production security, lockable cassettes are available as an option.



## CARD IDENTIFICATION

Pre-numbered cards can be identified by either reading a number, barcode or QR code on the card, reading data from the encoded chip contained within the card – or both.



## CHIP ENCODING

The CardMaster One can be equipped with up to 16 contact and/or contactless encoding heads within a single chip encoding module. If needed, several



## CLEANING

The cleaning module cleans your cards from dust and debris even before production begins to ensure your finished cards are flawless.



## LASER ENGRAVING

The laser engraving module applies personal information to the front and back of the card using laser technology wherein each laser uses a camera to align the data. This unit can apply both subsurface and tactile engraving as desired. The engraving unit can contain multiple engraving heads, depending on desired speed and functionality.



## INKJET PRINTING

A full colour industrial inkjet engine prints the holder's photograph, also known as LCI in short for Laser Colour Inkjet, on the laser engraved photo in the card body. A camera reads the position of a pre-printed mark to align the data. The resolution of the print is adaptable to obtain more speed. After printing, UV light dries the ink instantly. Optionally, translucent varnish ink is applied on top of the colour image to increase surface abrasion resistance, which is also completely cured with a high power UV light.



## IMAGEPERF®

The cardholder's image is perforated through the card with a laser and is authenticated against the original image, providing an additional layer of security to your finished cards. ImagePerf®/TLI is offered as an optional module for the CardMaster One solution. In addition, several ImagePerf® units can be installed on a single

“Our customers benefit from our years of laser-based security feature innovation experience and system design expertise.”

encoding modules can be installed. What's more, CardMaster® One's open system allows organizations to use the encoding software of their choice.

machine for increased production speed. ImagePerf® can be matched with a second laser engraved image on the backside of the card to form the so called ImagePerf®/REV feature, where REV stands for reverse. This feature protects against manipulation of the main photograph especially when attacked from the reverse side of the card.



## MAGSTRIPE ENCODING

The CardMaster® One platform offers an optional magstripe encoding module for encoding multi-function IDs.



## VERIFICATION

Cameras cross check all applied visual data and features for accuracy, while a chip reader verifies the electronic data to ensure that it has been encoded correctly. Cards that do not pass verification are automatically sent to a secured reject bin.



## OUTPUT

Finished cards are conveyed to output stackers for retrieval. The system can be equipped with up to 8 stackers that are accessible and can be emptied as needed during production. For greater production security, lockable cassettes are available as an option.



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