



# How to protect your identity document against forgery

Thousands of identity and travel documents exist worldwide, making it challenging to verify their authenticity easily. To overcome this challenge, IAI industrial systems, one of the most successful pioneers in security documents, offers ImagePerf® and ImagePerf/REV™.

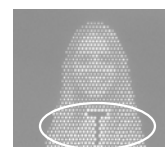
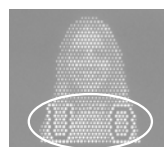
ImagePerf is a repetition of the holder's photograph used to verify the holder's original image, thus guaranteeing its authenticity.

Special laser technology is used to create minute holes right through the document's substrate which are virtually impossible to remove. This leaves forgers no other alternative than to imitate entire documents with all their unique materials and security features — a futile activity.

With ImagePerf, the holes are arranged to form an image that becomes clearly visible when the document is held to the light. Furthermore, the holes are so small that they can overlap with applied personal data and other security elements, and do not interfere with the document's design. This allows the combination of ImagePerf and personalisation information within the limited space available on the document. ImagePerf is a first-line security feature which can be easily verified with the naked eye without special tools.

Additionally, an ICAO standard country prefix is applied in the lower right corner or next to the ImagePerf. This three-letter code is fixed and secured — further increasing the security of the document. For passports

with a thicker polycarbonate data page or polycarbonate ID cards, this prefix can be applied as a Tilted Laser Image (TLI). TLI is an optically variable security feature that perforates the country prefix under two different angles, making it gradually visible under different viewing angles. This effect is easily verified with the naked eye by holding the card or data page to a light and slightly tilting it. For passports with a paper data page, the prefix may be applied as a Variable Laser Image (VLI), having a similar optical variable effect. ImagePerf/TLI and ImagePerf/VLI security features are highly effective in posing an extra threshold against fraud.



ID-card with ImagePerf®/TLI

ImagePerf/REV (REVERSE) goes a step further and combines the holder's photograph applied on the front side of the card or data page to a secondary photo applied on the REVERSE side of the card or data page. In this case the second photo on the back is applied on top of the ImagePerf which is perforated through the body of the card or data page.

This feature protects against manipulation of the main photograph especially when it is attacked from the reverse side of the card or data page. Should a forger attempt to compromise the document by altering the original image, he would have to remove the original ImagePerf which authenticates this main photo and create a new one. For ImagePerf/REV, he would also have to alter the laser engraved reversed image on the back which matches with the perforated image. Because the second photo and the ImagePerf are applied on top of each other, they are virtually impossible to modify without being noticed. ImagePerf/REV allows easy authentication of the main photo on the card or data page, and it connects the back side of the document, carrying the REV image to its front.

In case the original photo in a polycarbonate document is tampered with by adding additional black using inkjet, for instance (removal of black is virtually impossible for laser engraved images), the fraudster would have to perform the reverse action for altering the perforated image, as the perforated image is a negative of the holder's original photo. As the feature is perforated into the document substrate, it is virtually impossible to remove the applied holes as it would mean that the original material would have to be restored. The fact that the secondary image on the back side of the card and

the ImagePerf perforations are matched on top of each other, creates an extra barrier against performing such alterations successfully.

This personalised, first-line security feature can easily be checked with the naked eye and validates that the front and back sides of the card/datapage have not been compromised – and the integrity of the document is intact.

#### Highlights of ImagePerf and its related versions such as ImagePerf/REV:

- High-level, first-line, easy-to-inspect security feature
- Personalises irreversibly and protects against forgery and alterations
- Protects document's front and back sides
- Authenticates the holder's photograph
- Validates document's integrity
- Doesn't interfere with the document design
- Proven performance with more than 25 national documents in use and an excellent reputation

ImagePerf, ImagePerf/TLI, ImagePerf/VLI and ImagePerf/REV are available exclusively for governmental documents such as passports, ID cards, resident permits and driver licenses. The features are available as options on IAI's BookMaster® One and CardMaster® One systems.



ImagePerf®/REV on ID card's front, back and through the light vision

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IMAGEPERF® AND IMAGEPERF®/REV // SECURITY FEATURE

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Empowering Security Documents