

LASINK™ Helios

Combining color personalization and DOVID* technologies to secure secondary portraits



LASINK
HELIOS

LASINK™ Helios is a full color secondary portrait that displays unique diffractive optical effects. The color portrait combined with Optical Variable Elements (OVE) makes the authentication of polycarbonate ID documents unambiguous even when used remotely. Based on an exclusive personalization software, LASINK™ Helios cannot be reproduced or forged.

Benefits



Easy to inspect

The full color image combined with diffractive visual effects makes LASINK™ Helios instantly verifiable by trained agents and untrained individuals. Verification can be done face-to-face or remotely using the camera of the citizen's smart device.



Resistant to multiple types of fraud

An exclusive software is needed to produce LASINK™ Helios. In the case of theft of blank documents, fraudsters will not be able to personalize the picture or create the optical effects using equipment widely available on the market. For the same reason, it is impossible to create a full reproduction of the document (anti-counterfeit) or modify the portrait (anti-forgery and anti-morphing).



Durable

The LASINK™ Helios holographic matrix is incorporated and laser engraved into the heart of the polycarbonate structure, making it more secure and resistant over time to attacks and daily use.

Trends in document fraud

Fraud remains a major concern for ID document issuing authorities. Fraudsters can purchase sophisticated equipment online that enables them to attempt forgery and/or counterfeiting. In addition, morphing attacks (alteration of the portrait) are increasing, especially post-issuance.

Combining color and OVE in a portrait

When securing ID documents, protecting the holder's portrait is priority. Based on two proven technologies—LASINK™ color portrait and DOVID—LASINK™ Helios offers reinforced protection for the portrait.

LASINK™ Helios is a color portrait embedded into a DOVID that displays striking optical effects. These effects vary depending on the angle of vision and are easily recognizable for both in-person or remote authentication.

The secondary portrait validates the main portrait, thus confirming the identity of the document holder. Interlinking both images makes forgery almost impossible, thereby deterring any fraud attempts.

*Diffractive Optically Variable Image Device



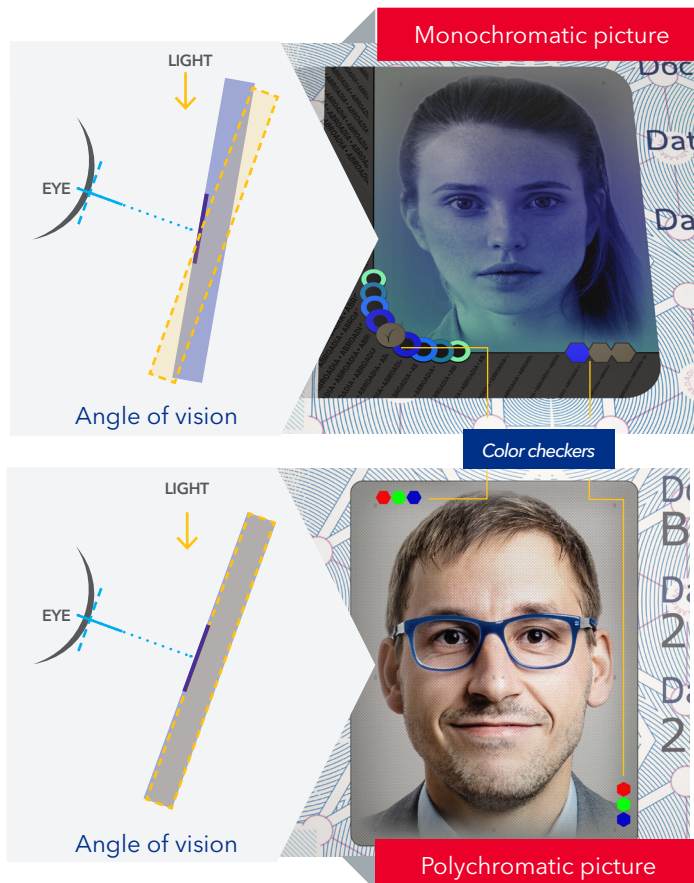
How it works?

LASINK™ technology applied to a DOVID

LASINK™ Helios is based on LASINK™ color technology (a matrix of red, green and blue lines), which is combined with holographic technology that diffracts light. This holographic matrix is then incorporated into the core of the blank document before lamination.

At the personalization stage, an exclusive algorithm will convert the photo of the document holder into a specific representation of the portrait. This will guide the laser engraving and ensure perfect registration with the matrix lines, so that the color portrait is revealed.

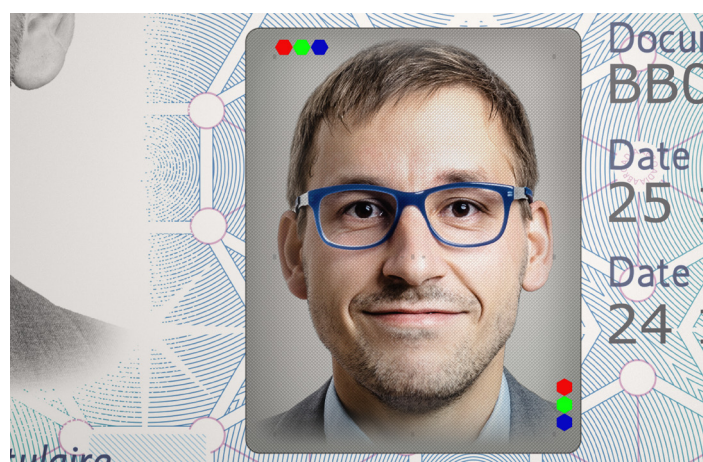
The result is a color portrait showing diffractive effects depending on the angle of view. Additionally, when the ID document is tilted upwards/downwards, the checkers (made of colored dots) positioned on the edge of the portrait will change colors. The full color image is revealed when the color checkers show a combination of red/green/blue.



LASINK™ Helios is available in two versions

A standalone secondary portrait

The secondary portrait is displayed as a standalone image with a sleek design. For maximum flexibility, it can be placed on the front or back of the ID document. To facilitate authentication, we recommend positioning it close to the main portrait.



A combination with a transparent DOVID

LASINK™ Helios has a partially transparent side that covers the portrait, offering an additional layer of security. It also contains a specific DOVID that changes color when rotated at a 90° angle.

