



Laser Passport Personalization



passcube[®] is ideal suited for secure laser passport personalization in a de-centralized topology.

This secure passport personalization solution uses an advanced fiber laser technology with unrivaled capability of deep penetration and long term stability by photo chemical reaction, laser light induced at ultimate speed. The optional sophisticated positioning system assures correct alignment of the printed text, the images and the machine readable information. Optional upgrades of the tabletop like RFID technology, together with additional security features like CLI, ensure secure best in class passport personalization.

Laser engraving stands synonymously for fast, consumable-free operations, no glued or dried nozzles - for a low cost and relaxed personalization.

tabletop document
by document operations

data sheet

reliable • flexible • economical



Laser Card Personalization

Enhanced System Security and Quality

nanoIsec® not only provides plain printing technology to its customers but sets world class standards when it comes to laser printing quality versus speed and security features in order to guarantee an ideal solution for customer tailored personalization environment.

- A non resettable counter, built into the personalization system, enables the operating facility to exactly trace and track the produced passport volumes.
- An EMV resistant sealed case ensures a problem-free RFID personalization and physically protects the printing process.
- Misusage prevention by hardware locking system.
- Digitized photo-quality of up to 1600 dpi – no fading out over time or sunlight exposure.
- A separate Kensington Security Lock provides secure physical locking of the printer in order to prevent theft of the equipment.
- Security features like 2D barcode or “ghost” images, as well as tactile characters, can be realized easily.
- Optical Camera System (OCR Reader Module) that recognizes preprinted numbers or barcodes on a passport for BAC/EAC algorithm.
- Optical Camera System that detects the position of the legend on the passport holderpage, in order to align the positioning of data and images.
- Each individual module is supplied with optimized specific DLLs.
- Tilted laser beam with glass prism.
- Data interface: Single USB 1.1 or 2.0 port
- MFC Motorized Focus Control
- Factory calibrated with possibility for automatic field re-calibration.
- For central administration SIM card and pinpad based printer authentication*

System Performance

- The printer offers a proven and stable passport handling as well as shock resistant housing.
- Manual loading of the passport.
- System can be fully and easily integrated into user's IT environment.
- Only one document in process same time.



Feature Highlights

Premium Printing Quality

- Print process uses laser light, which is the ultimate choice for high UV stability, preventing from fading out
- Ultrahigh resolution
- No costs for consumables, like ink or ribbons

High System Security

- SIM card / pinpad printer authentication*
- Misusage prevention by hardware locking system
- Non-resettable passport counter
- EMV case protection
- Kensington lock

Modularity & Performance

- Low initial investment and very low operational costs due to consumable-free operations.
- Optional features (additional camera modules for punched number read or RFID module) allow modular upgrade of the system – up to the customers demand for quality and /or security needs.
- Smart desktop office design.
- “Plug & Produce” system setup via USB.

Optional features

The optional modules enhance security, performance and quality to the competitive edge. The standard configuration can be upgraded by adding the following sophisticated options:

- System calibration sensor*
- SIM card and pinpad for printer authentication*
- The RFID Module for secure electronic transfer of data into the passport.
- CLI support with glass prism.
- Camera for reading punched numbers or preprinted numbers.
- Customized graphics and personalized security elements.

Technical data:

Dimensions:	366 x 313 x 470 mm
Weight:	28,5 kg
Electric supply:	AC 110V to 240 V, max. 8 A, 270W

Operating Conditions:

- Ambient temperature: 16°C - 28°C
- Humidity: 35% - 85% relative humidity, not condensing
- Altitude: < 2.500m

Laser:

- Pumped Fiber Laser, 10W cw
- Economic life-time >20.000h
- Air-cooled
- Embedded sandwich-filter, particle-activated charcoal.

Additional Compliances:

- Class 1 Laser Product, DIN EN 60825
- ISO/IEC 7816 (all parts and amendments)
- RoHS
- DIN EN ISO 9001:2008
- CE

*Several patents pending



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