



## Laser Card Personalization



**nanocube<sup>®</sup> is ideal suited for secure laser personalization,**

such as bank cards or National ID's, for smaller runs in a centralized as well as de-centralized topology, either way, stand-alone, or in-line connected to a color card printer.

This secure card 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.

Optionally upgrades of the **nanocube<sup>®</sup>** table-top with ISO 7816 contacts and/or RFID technology, together with additional security features like CLI, ensure secure best in class card personalization.

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

tabletop card by card or  
magazine based operations

data sheet

*reliable • flexible • economical*



## Laser Card Personalization

### Enhanced System Security and Quality

**nanosec** 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.

### System Performance

- Automatic card feeding / Manual card feeding
- Laser and color (in combination with Fargo 5000 series)
- EMV shielding
- Embedded particle/charcoal filter
- Max. card throughput capacity (20W): 120 ISO ID1 cards per hour (depending on beam source and other factors).
- Washable rollers, ca. interval between re-cleaning the rollers: 1000 cards.
- Parallel card processing (optional)
- Digitized photo-quality of up to 1600 dpi – no fading out over time or sunlight exposure.
- Greyscale image 8 bit
- Magazine drawer complete removable for card refilling, ca. 180 cards capacity (ISO ID1)
- The system offers a proven and stable card handling.
- System can be fully and easily integrated into user's IT environment.
- Two feeding options:
  - Card by card feed, manually or from preceding system.
  - Feeding from a magazine drawer.
- Magazine drawer complete removable for card refilling, ca. 180 cards capacity.
- Only one card in process same time.
- No blind spot along card path.
- Each individual module is supplied with optimized specific DLLs.

### System Security

- Kaba Lock
- Non resettable counter
- Kensington lock (optional)
- System access control via pinpad (optional)\*
- System access control via Smart card/SIM card
- Lockable hopper magazine (optional)
- Secure card path (no blind spot)

### Optical Personalization

- Pixel text (Windows True Type Fonts)
- Tactile text
- Vector text (optional)
- Micro text (<0,2mm) (optional)
- CLI by card turning
- Ghost image

### Feature Highlights

- 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
- Smart desktop office design
- High card throughput in a robust system setup with low maintenance effort.
- Low initial investment cost and low operational costs due to consumable-free operations.
- "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:

- Multiple card processing
- Laser alignment to card preprint / card edge
- OCR preprinted number
- Vector text
- Micro text (<0,2mm)
- CLI / MLI by glass prism
- Barcode, 2D barcode
- MFC Motorized Focus Control
- Laser & system calibration\*
- RFID Module
- ISO contacts ISO/IEC 7816
- Magnetic stripe HiCo/LoCo
- Kensington lock
- Lockable hopper magazine
- System access control via pinpad / Smart card/SIM card\*
- Ethernet, embedded Windows 7 stack
- Laser power 20W cw

### Technical data

- Dimensions: 438 x 382 x 430 mm
- Weight: 26 Kg
- Electric supply: AC 110V to 240 V, max. 7 A, < 350 VA, config. dependent
- Ambient temperature: 16°C – 28°C
- Noise: < 65 dB (A)
- Altitude: < 2.500m
- Laser type: Pumped Fiber Laser
- Laser average power: 10W cw (optional 20W cw)
- Economic life-time: >20.000h
- Laser Class: 1, IEC 60825
- Cooling: Air-cooled
- Data interface: Single USB 1.1 or 2.0 port

### Additional Compliances:

- ISO/IEC 7816 (all parts and amendments)
- RoHS
- ISO 9001:2008
- CE

\*Several patents pending



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