

The Innovation NLL 10



NanoSec Label Laser prints **Highly durable labels and adds security,**

such as laser marking foils, foils with embedded aluminum layer or colored layers.

NLL 10, fast and easy in-house production of extremely durable labels for a wide range of applications.

Text, graphics and linear or 2D bar codes can be laser engraved onto the adhesive-backed label materials. Finished labels are extremely robust and do not require lamination to withstand extended exposure to UV light, chemicals, liquids and temperatures of up to 300C.

Lower cost,

less than half of competitive devices

Simple mechanics,

highly innovative beam steering & control

Ease of operation,

installs on a PC as standard Windows printer

Applications for NLL 10 include:

UDI labels for medical devices and healthcare equipment

Automobile VIN and under-hood part numbers

Warning and instruction labels

Aerospace and solar panel labels

Serial tags for outdoor equipment

Automobile parts

Building materials

Enhanced System Security and Quality

nano|sec not only provides plain printing technology to its customers but sets world class standards when it comes to laser printing quality versus speed and price in order to guarantee an ideal solution for customer tailored marking applications

System Performance

- Manual material feeding, optionally automatic.
- Special Diode, high precision and matched optics.
- EMV shielding.
- Laser Engraving Speed Raster Mode: up to 0.2 cm²/s.
- Laser Engraving Speed Vector mode: up to 100 mm/s.
- Print Resolution > 500 dpi.
- Working field: max. 45 mm x 45 mm.
- The system offers a proven and stable material handling.
- System can be fully and easily integrated into user`s IT environment via USB.

System Security

- Class 1 Laser Product
- Safety Window (optional)
- Kensington lock (optional)

Marking

- Pixel text (Windows True Type Fonts)
- Vector text (optional)
- Micro text (<0,2mm) (optional)
- Dithered Images

Materials

- Laser Marking Foil, engraving and cutting
- Embedded Aluminum Layers
- Marking of Color Prints
- Marking of Plastics

Feature Highlights

- Print process uses laser light, which is the ultimate choice for marking applications.
- Suited for marking applications of color layers which cannot be altered by standard marking lasers without material burning.
- Highly durable labels marking.
- Ultrahigh resolution.
- Hard to fake labels with suitable material (Al foil, etc.).
- No costs for consumables, like ink or ribbons.
- Smart desktop office design.
- 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 performance in endless production runs and quality to the competitive edge. The standard configuration can be upgraded by adding the sophisticated options:

- Embedded particle/charcoal filter.
- Automatically materials feeding, roll to roll, stack.
- Vision supported alignment of laser engraving.
- Vision processing for object identification.
- RFID.
- Vector text.
- Micro text (<0,3mm).
- Barcode, 2D barcode.
- Kensington lock.
- Safety Window.
- Others on request.



Technical data

- Dimensions (T,B,H): 200 x 200 x 200 mm
- Weight: 5 Kg
- Electric supply: AC 110V-240V, max. 2A, fully equipped, config. dependent
- Ambient temperature: 16°C – 28°C
- Noise: < 65 dB (A)
- Altitude: < 2.500m
- Laser type: Diode
- Laser average power: 1 W cw
- Laser Class: 1, IEC 60825
- Cooling: Air-cooled
- Data interface: Single USB 2.0 port

Additional Compliances:

- RoHS
- ISO 9001:2008
- CE

