

# L-120™

small batch production  
desktop laser engraver



***NBS is revolutionizing the card industry through the use of laser engraving technology. Now small batch production of secure ID cards is convenient and secure, all in desktop sized printer footprint.***

The latest innovation from NBS, the L-Series of laser engravers brings secure ID to a whole new level. The L-120 laser engraver is ideally suited for a de-centralized environment where small batch production of secure cards such as bank cards, health cards, drivers licenses, national ID cards, etc. is required. With features such as a 150 card input hopper as well as no need for traditional consumable products (ink or ribbon), the L-120 laser engraver is both easy to use and cost effective to meet all your small batch production engraving needs.

The L-120 uses an advanced fiber laser technology with unrivaled performance leveraging a high-speed induced laser light. And with the ever-growing sophistication of criminal elements in the arena of fraudulent identification production, laser engraving provides an additional, and near impossible to duplicate, level of security. Since text, micro text, barcodes and images are effectively “etched” into the card, rather than like the traditional card printing methods whereby ink is imprinted onto the surface of the card, laser engraving is becoming one of the leading security features of choice for many secure ID programs.

Available security features such as MLI/CLI and micro text makes the L-120 laser engraver one of the most powerful small batch production laser engravers with one of the smallest footprint available on the market today. The sophisticated positioning system assures correct alignment of the printed text, images and machine readable information.

The entire range of L-Series laser engravers is powered by NBS SmartSys™ software providing users with a simple PC interface while ensuring superior operational reliability. Additionally, the L-Series engravers can optionally accommodate magnetic stripe encoding, ISO 7816 contacts and/or RFID technology to produce the highest level of secure identification cards available today.

### ***Ideal for***

- national ID programs
  - financial cards
  - driver licenses
  - health cards
- ... and more!

**... fast, secure  
& consumables-free ...**



# L-120™

## desktop laser engraver

### Technical Specifications

#### LEADING EDGE TECHNOLOGY

The L-120 laser engraver fulfills the latest requirements for security documents. The engraved text, high-resolution gray scale photo, bar codes, signatures, tactile characters quality is excellent on Poly Carbonate cards. The L-120 laser engraver has an internal illumination and camera system which reads printed or punched numbers or identifies certain registration marks on the blank card. It automatically aligns the engraving variable text and images with the captions. Offering state-of-the-art features as well as optional smart card modules and/or magnetic stripe encoding, makes the L-120 laser engraver one of the most powerful and versatile small batch production, secure ID personalization solution on the market today.

#### FEATURES

##### Premium Printing Quality

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

##### Modularity & Performance

- Low initial investment cost and low operational costs due to consumable-free operations
- Modularity of the product allows for optional features such as magnetic stripe, RFID or smart card contact modules to be easily added as the customer's demands for quality and/or security change
- Smart desktop office design
- Powered by SmartSys™ Tabletop software
  - > gives users the ability to access and use a wide variety of data file types
  - > user-friendly graphical interface allows for easy card design

#### PERFORMANCE

- Printer offers proven and stable card handling as well as a shock resistant housing
- 150 card input hopper with a throughput of up to 120 cph of typical ID format with 10W laser
- System can be fully and easily integrated into users' IT environment

#### SECURITY & QUALITY

The L-120 not only provides plain engraving technology to its customers but sets world class standards when it comes to laser engraving speed.

- A non-re-settable counter built into the personalization system enables the operating facility to exactly trace and track the produced card volumes
- Unauthorized use is prevented with a hardware locking system
- Digitized photo-quality of up to 1600 dpi – no fading out over time or sunlight exposure
- Ability to use an off-the-shelf Kensington Security Lock to prevent theft
- 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 card for BAC/EAC algorithm
- Optical Camera System that detects the position of the legend on the card, in order to align the positioning of data and images
- Ability to engrave both sides of the card using mirrors instead of flipper - less moving parts
- Tilted laser and MLI/CLI functionality is achieved with the use of a glass prism

#### OPTIONS

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

- Magnetic stripe (HiCo and LoCo)
- Smart Card ISO contacts
- RFID Module for secure electronic transfer of data into the RFID chip
- 20W or 30W laser

#### DIMENSIONS

- Dimensions: 438mm x 382mm x 430mm (17.2" x 15" x 16.9")
- Weight: 26 Kg (57.3 lbs)

#### ELECTRIC SUPPLY

- AC 110V to 240 V, max. 7 A, < 0,75 kW, config. defend

#### OPERATING CONDITIONS

- Ambient temperature: 15°C – 40°C (59°F - 104°F)
- Humidity: 35% - 85% relative humidity, not condensing
- Altitude: < 2500m (8200 feet)

#### LASER

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

#### ADDITIONAL COMPLIANCES

- CE
- FCC
- UL
- ISO/IEC 7816 (all parts & amendments)
- RoHS
- ISO 9001:2008



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