HID ELEMENT™
Laser Engraver System

Industrial Laser Engraver/Encoder

HID

HID ELEMENT Laser Engraver System —

Taking secure ID and financial card personalization to the next level

HIGHLY SECURE, LASER-SHARP PERSONALIZATION

For robust, industrial-level ID and financial card personalization, organizations need look no further than the HID ELEMENT Laser Engraver System. Leveraging proven DPSS (diode-pumped solid-state) laser technology, unique identifying data, images and security features are permanently engraved into the card body resulting in highly secure, durably personalized and tamper-resistant cards and IDs.

Beyond precision black marking for standard text, MRZ (Machine Readable Zone) text, barcodes and QR codes — and the ability to produce high-quality images in true grayscale — the HID ELEMENT Laser Engraver System accommodates high-security feature applications such as CLI/MLI (Changeable/Multiple Laser Image), sub-surface image, tactile surface relief and custom microtext.

HIGH-VOLUME PERFORMANCE MEETS FLEXIBLE MODULARITY

Desktop-based yet heavy-duty, the HID ELEMENT Laser Engraver System is especially suited for the high-cycle requirements of large government ID card programs, financial institutions, laborious service bureaus and demanding large enterprises.

Modular and scalable, the system boasts an array of encoding options to meet a broad range of credential program needs and easily integrates within the HID ELEMENT architecture. As such, the system can optionally be used in conjunction with the HID ELEMENT UV ink printing system — providing the ability to combine laser with color to accommodate even the most unique card designs.

HIGH-VOLUME VERSATILITY

Highly versatile, HID ELEMENT is ideal for a variety of high-volume applications for today's large organizations and service bureaus, including:

- Government-to-Citizen (G2C) Personalization — national IDs, driver's licenses, vehicle registration cards, border crossing cards, voter IDs and health cards
- Government-to-Employee (G2E) and Corporate Enterprise Personalization — employee photo IDs and badges
- Financial Card Personalization — credit cards, debit cards, pre-paid cards and more

SUPERIOR IMAGE QUALITY

Beyond standard marking and support for a wide range of customizable security features, the HID ELEMENT Laser Engraver System supports true grayscale imaging.

Because the system's DPSS laser employs variable power to achieve multiple shades of gray, resulting HID ELEMENT laser images are highly defined and of superior visual quality.

SAFEGUARD CREDENTIALS WITH DIFFERENTIATING LASER PERSONALIZATION

The most secure credentials are highly differentiated, employing multiple visual, digital and unalterable engraved elements such as MRZ text and tactile surface relief among others. Distinguishing features such as these ensure the accurate identification of each individual cardholder while establishing impenetrable barriers to fraud and counterfeiting.

ENGRAVE SECURITY INTO EVERY CARD

HID ELEMENT precision laser engraving enables the etching of multi-faceted security elements into identification cards. Laser-engraved data and images are permanent and secure. Any attempts to alter engraved information will destroy the integrity of the image, and tampering will be immediately evident — lending a whole new level of security to finished credentials.

The optional camera vision system ensures accurate placement and registration of data on the card surface, and reproduction is so precise that it even allows the engraving of microtext — microscopic type that cannot be read without a loupe or magnifying glass.

HID ELEMENT precision lasers can also perform lenticular personalization to produce multiple laser images (MLI) or changeable laser images (CLI), providing additional barriers against counterfeiting attempts via desktop printers.

Because laser engraving produces raised lettering, authenticity is easily verified with the touch of a finger, making it ideal for card issuance programs that bear an elevated risk of forgery or identity misrepresentation such as voter or worker registration cards, driver's licenses and citizen identity permits.

BUILT-IN SYSTEM SECURITY

From its lockable housing, input modules and output stacker modules to its locking reject bin and optional, user-programmable PIN access, the HID ELEMENT Laser Engraver System is built to protect credentials and sensitive data while safeguarding against unauthorized use. Moreover, the system's integrated counter tracks card production ensuring that both accepted and rejected credentials are accounted for.

SAFE AND RELIABLE OPERATION

Certified as a Class 1 Laser Product, the HID ELEMENT Laser Engraver System complies with the laser safety standards set forth by the International Electrotechnical Commission (IEC) — ensuring safe and reliable operation.

For additional user safety, built-in carbon filtration is standard on every unit. Also included is a built-in connection for adding an optional third-party extraction and filter unit for removing other particulates and fumes generated during the laser process.

Custom Microtext
Microscopic type of less than 1 point font size, readable only with a loupe, enables covert authentication.

MLI/CLI - Multiple/ Changeable laser image
Engraved images or data change with the viewing angle to permit convenient identity verification.
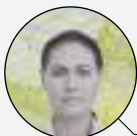
Sub-surface image
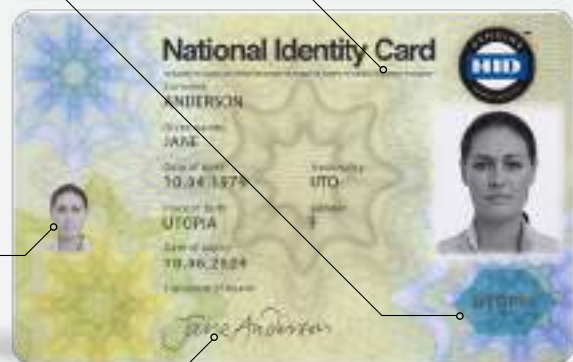Laser engraving below the card's top surface, such as this ghost image, delivers the highest durability.

Tactile Surface Relief
Raised lettering provides evidence of authenticity at the touch of a finger.

National Identity Card

SIMPLIFY INLINE PERSONALIZATION OF SECURE CREDENTIALS IN A SINGLE STEP

HID ELEMENT card encoding modules enable organizations to print and encode credentials in a one-step, inline process — saving both time and money when producing secure IDs and financial cards. Using inline card personalization, users have greater flexibility and end-to-end control over their card procurement, inventory management and card issuance processes.

HID ELEMENT card encoding modules also extend the value of the laser engraving system by allowing organizations to create cards that are compatible not only with HID products but also with other card/physical access control systems and third-party applications. This technology-agnostic approach to card personalization offers organizations more flexibility in selecting access control systems and greater control over their credentials.

Offering a wide array of inline card encoding technologies, HID ELEMENT can meet the needs of virtually any secure credential issuance program. Further, because modules are fully field-upgradeable, encoding can be added or changed at any time to support new card personalization or evolving security needs as your requirements change over time.

Select one or more HID ELEMENT card encoding modules to extend read/write capability for third-party applications such as physical access, time and attendance and cashless vending, among others. With the HID ELEMENT programmer card encoding module, users can also create and program cards that are specifically compatible with HID physical access solutions. This can prove especially beneficial to organizations desiring to upgrade existing card populations for use with higher-security platforms.

- Contactless encoding — supports low and high frequency credentials simultaneously, such as iCLASS Seos®, HID Prox®, iCLASS SE® MIFARE Classic® and MIFARE® DESFire® EV1/EV2

- Contact encoding — integration is quick and easy, with unparalleled support and compatibility with ISO 7816 standards

- Standard magnetic stripe encoding — delivers ISO 7811, dual high- and low-coercivity compatibility

- Programmer encoding — affords users the ability to encode the HID Access Control Application area of either Genuine HID® or third-party credentials with ease

- Third-party encoding support — leverages Smartware® encoding technology for simultaneous contactless and contact encoding in a single, expedient pass

FLEXIBLE ENCODING OPTIONS

Fully field-upgradeable and easy-to-install encoding can be added or changed at any time to support new card personalization or evolving security needs.

HID ELEMENT Laser Engraver System with single input module and output stacker module

HID ELEMENT Laser Engraver System with multiple input modules and output stacker modules

HID ELEMENT Laser Engraver and UV Ink Printer Systems with multiple input modules and output stacker modules

SIMPLICITY AT YOUR FINGERTIPS

Simplicity and ease of use are at your fingertips with the large, 10-inch, full color, touch-screen display. The display is system-mounted and easily adjustable to accommodate operators whether they are sitting or standing. Easy-to-understand prompts provide general diagnostics, operational procedures and walk users through initiation sequences for routine maintenance. HID ELEMENT takes the complexity out of industrial, laser card personalization.

UNPRECEDENTED MODULARITY IN A DESKTOP

HID ELEMENT breaks with convention and offers the flexibility to purchase laser engraver and UV inkjet printer systems either together or as separate, stand-alone units to meet unique card program requirements. HID ELEMENT also offers a host of optional modules to meet a variety of program requirements and scale throughput as needed. We match HID ELEMENT's design to suit your business needs.

SCALABLE THROUGHPUT

Select up to four lockable input modules and output stacker modules to scale production as needed. Each high-capacity input and output module allows for up to 400 cards for a total of up to 1600 cards per HID ELEMENT unit — facilitating high-volume card throughput for continuous runs and maximum yields per shift.

VERIFY WITH CONFIDENCE

With the registration and verification capabilities of HID ELEMENT's optional camera systems and supporting software integration via SDK (Software Development Kit), all applied visual data and features can be cross-checked for accuracy and precise placement — ensuring credentials are engraved as intended and are consistent over large batch runs. Cards that do not pass verification can be sent to a secured reject bin. Individual camera systems are available for both the HID ELEMENT Laser Engraver and UV Ink Printer Systems.

ENGINEERED FOR INDUSTRIAL, CONTINUOUS OPERATION

Designed for continuous operation, the HID ELEMENT Laser Engraver System was built to produce millions of cards over its lifetime. With its optional 1600-card capacity, even unattended runs are managed with ease. Even if your volume needs dictate uninterrupted production 24 hours per day, seven days a week, 365 days per year — the HID ELEMENT Laser Engraver System delivers.

Due to its size and portability, the HID ELEMENT Laser Engraver System is ideal for decentralized organizations. Moreover, multiple units can easily and cost-effectively meet industrial volume needs while providing redundancy benefits. Additional units can also be geographically dispersed at remote sites to support risk management initiatives.

LEARN MORE

With its reliable operation, minimal maintenance, highly configurable functionality and scalable throughput — the HID ELEMENT Laser Engraver System is an ideal solution for superior-quality, high-volume, laser-based ID and financial card personalization.

To find an integrator or HID Advantage Partner near you, visit **hidglobal.com**

HID

hidglobal.com

North America: +1 512 776 9000
Toll Free: 1 800 237 7769
Europe, Middle East, Africa: +44 1440 714 850
Asia Pacific: +852 3160 9800
Latin America: +52 (55) 9171-1108

For more global phone numbers click here

2022-09-23-si-hid-element-laser-engraver-system-br-en
PLT-06734

Part of ASSA ABLOY