



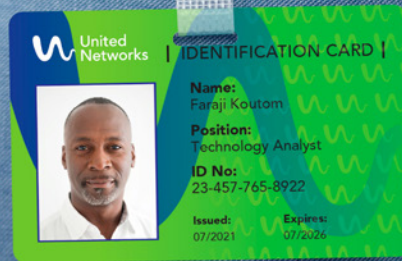
Card Services Capabilities

Physical & Digital Customization



At HID we deliver end-to-end customization and support services that elevate your brand experience. From physical product transformation to innovative digital personalization and robust service offerings, we empower clients with flexible, scalable and high-quality solutions.





Physical Customization

All capabilities under physical customization will illicit a minimum order quantity of 500 cards

All submitted artwork designs are subject to review to ensure they meet quality, technical, and brand standards. This review process allows us to verify that the artwork is production-ready and aligns with the intended specifications. Final approval must be granted before any design can proceed to production.

Printing

- 1. Black Only:** Black offset printing is a high-precision, cost-effective printing method ideal for producing sharp, consistent monochrome graphics and text.



- 2. CMYK:** CMYK offset printing uses four-color process printing — cyan, magenta, yellow and black (key) — to produce full-color, high-resolution images with exceptional accuracy and vibrancy.

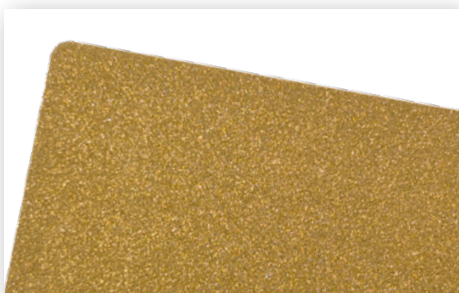


- 3. Pantone:** Pantone offset printing utilizes the Pantone Matching System (PMS) to achieve precise, spot-color accuracy for brand-critical applications. Unlike CMYK, which blends colors during printing, Pantone inks are pre-mixed to deliver exact, repeatable colors — Ideal for logos and branding where color consistency is important. This process ensures uniformity and the preferred choice for premium, color-specific branding.

Important Note: There is an iterative process if the customer would like to match Pantone colors against a previous card sample.



- 4. Metallic:** Metallic ink printing uses specialized inks mixed with metallic particles to create a subtle, reflective sheen directly on the printed surface. Metallic inks are printed like standard inks. This technique is ideal for enhancing logos, accents or entire backgrounds with a sophisticated metallic finish — available in colors like gold, silver and bronze and in custom blends.



Important Note: An additional charge may be added if more metallic particles are request to produce a higher reflective sheen.

- 5. Clamshell:** Clamshell access control cards are durable, RFID-enabled credentials designed for secure facility entry and identity verification. Constructed from rigid PVC, these cards are ideal for high-frequency use in office buildings, campuses and industrial environments. Clamshell cards are customized using a screen printing and curing process. Screen printing is a versatile and time-tested printing method that involves pushing ink through a mesh stencil (screen) onto a substrate, creating bold, vibrant designs with excellent durability.

Important Note: We recommend a maximum of two pantone colors for clamshells.



- 6. Key Fob / Tag:** Key fob printing involves applying custom branding, identification, or decorative elements onto RFID or proximity key fobs used for access control and authentication. Using specialized techniques such as pad printing, UV printing or screen printing, we ensure high-resolution, wear-resistant results on plastic, silicone or composite surfaces.

Important note: Please reach out to our Card Services Team Members on different options available for information on options. Please note, there is a minimum order quantity of 10K custom tags and an origination fee to setup a production line to build said custom tags.

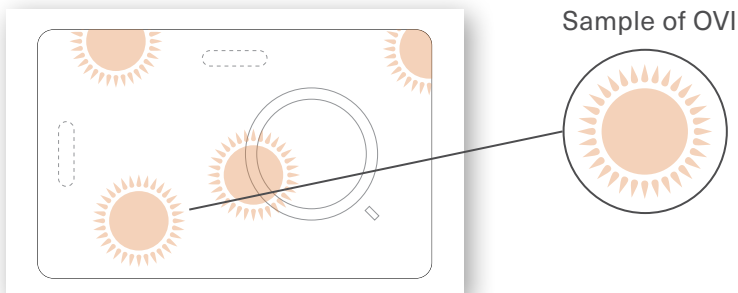


Anti-Counterfeiting

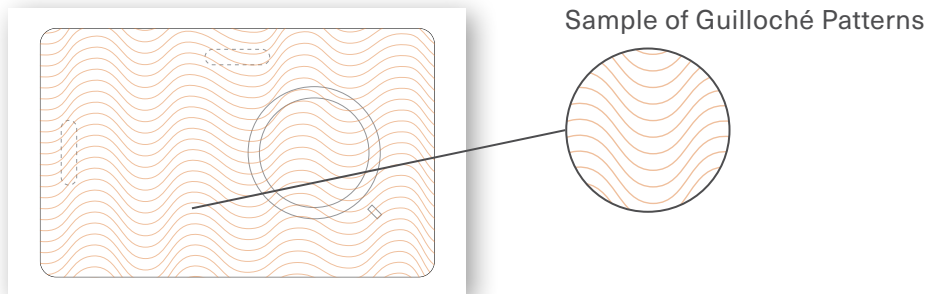
- 1. Invisible Inks:** This process utilizes specially formulated inks that are invisible to the naked eye but reveal hidden messages, graphics or security features when exposed to UV light. Commonly used for anti-counterfeiting, authentication, event access and promotional intrigue, invisible ink adds a covert layer of protection or interactivity to printed materials. Ideal for use on plastic cards, this technology supports both security applications and creative brand storytelling.



- 2. Optically Variable Ink (OVI):** OVI printing uses specialized pigments that change color when viewed from different angles or under varying lighting conditions. This dynamic visual effect not only enhances aesthetic appeal but also serves as a powerful security feature against counterfeiting. Commonly used in banknotes, government IDs and access control cards, OVI is nearly impossible to replicate with conventional printing methods — making it ideal for high-security and authenticity-critical applications.



3. Guilloché Patterns: Guilloché printing involves the use of intricate, mathematically generated patterns — typically composed of fine interwoven lines — to create visually complex and highly detailed designs. Originally used in engraving, this technique is now employed in security printing for items such as access control cards, currency, certificates and passports. The precision of guilloché patterns makes them extremely difficult to replicate without specialized software and equipment, providing both aesthetic sophistication and a strong anti-counterfeiting safeguard.

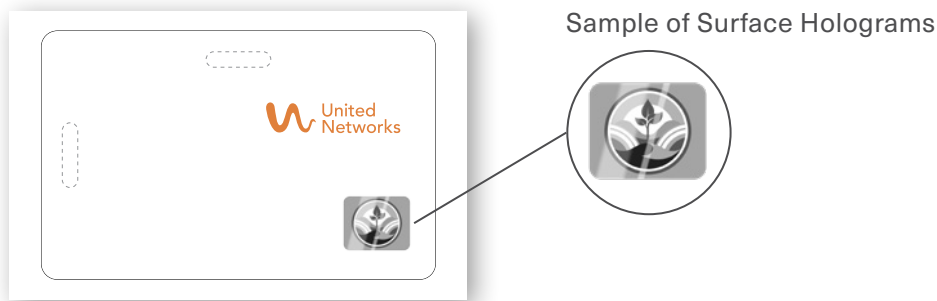


4. Microtext: Microtext printing uses ultra-small text — often only legible under magnification — as a covert security feature in printed materials. Commonly integrated into borders, backgrounds or complex design elements, microtext is virtually undetectable to the naked eye and extremely difficult to reproduce without specialized printing technology. It's widely used in secure documents such as access control cards, banknotes and certificates to prevent counterfeiting and verify authenticity.



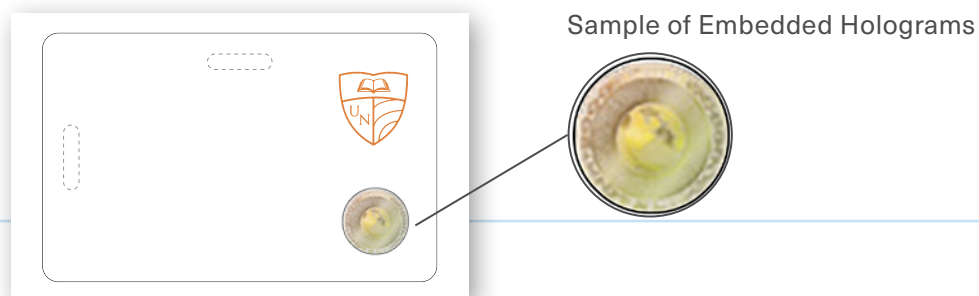
5. Surface Holograms: Surface holograms are security or decorative elements that display dynamic, three-dimensional visual effects when viewed from different angles. Created using film transfer techniques, these holograms can incorporate images, logos, serial numbers or complex optical patterns that are nearly impossible to duplicate. Widely used in access control cards and government documents, surface holograms enhance visual appeal while providing a high level of anti-counterfeiting protection. Surface holograms are applied on the top surface of the access control card.

Important note: HID offers standards stamp sizes and foils. Custom stamps and foils are available, but have a higher cost and longer lead times. Please inquire with your HID representative.



6. Embedded Holograms: Embedded holograms are integrated directly into the substrate of a product or document during the manufacturing process, providing a high-security, tamper-resistant authentication feature. Unlike surface-applied holograms, embedded holograms cannot be removed or transferred without destroying the material, making them ideal for access control cards, official documents and banknotes.

Important note: HID offers standards stamp sizes and foils. Custom stamps and foils are available, but have a higher cost and longer lead times. Please inquire with your HID representative.





Personalization

1. **Variable Black Printing:** Variable black printing allows for the dynamic customization of access control cards with unique information such as names, ID numbers or barcodes. Applied via thermal transfer, variable black printing ensures sharp legibility and durability, making it a go-to choice for access control corporate badges.



Sample of Variable

Nicole Mena

2. **Variable Color Printing:** Variable color printing combines full-color process printing with dynamic data capabilities, enabling each printed piece to feature unique images, text or graphics in vibrant, high-resolution color. Using thermal transfer technology, this method is ideal for access control corporate badges — where every item can be tailored to an individual recipient. With seamless integration of names, photos, QR codes or branding elements, variable CMYK printing delivers a powerful blend of customization, scalability and visual impact.



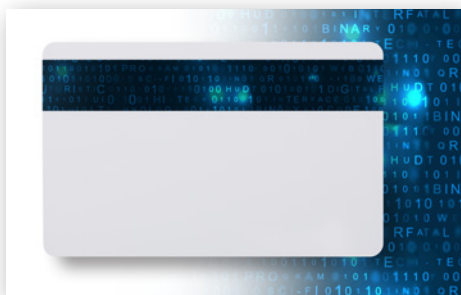
Sample of Variable



- 3. Clear Laminate:** Clear laminate is a transparent overlay applied to access control cards to enhance durability and extend lifespan. This protective layer shields against physical wear, moisture, UV exposure and tampering — preserving printed information and card functionality over time. Ideal for high-traffic environments and long-term use, clear laminate ensures that access control corporate badges maintain their professional appearance and structural integrity, even with daily handling.

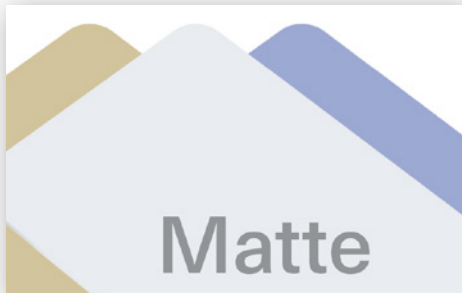


- 4. Magnetic Stripe Encoding:** Magnetic stripe encoding involves writing data onto the magnetic stripe of a card, enabling it to store and transmit information for access control, payment, identification or tracking purposes. Commonly used in access control badges, key cards, hotel room keys and membership cards, this process allows for secure integration with card readers and backend systems. The encoded stripe can contain multiple tracks of data and is compatible with both high-coercivity (HiCo) and low-coercivity (LoCo) formats, depending on the security and durability needs of the application.



Other

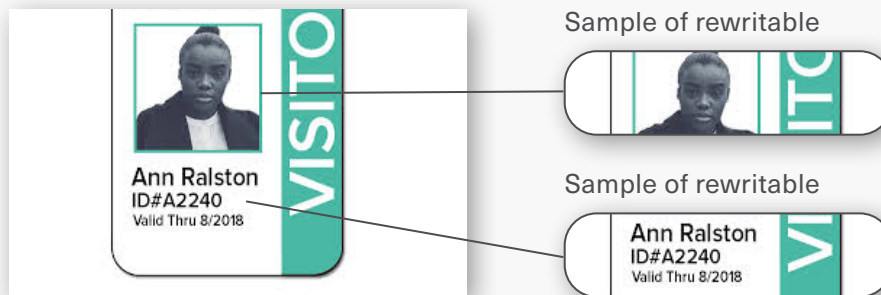
- 1. Matte Finish:** Matte finish on access control cards feature a smooth, non-glossy surface that reduces glare and fingerprints while providing a sophisticated, professional look. This finish enhances the tactile feel of the card, making it easier to handle and read under various lighting conditions. Ideal for corporate environments and secure facilities, matte coatings help maintain the card's appearance over time by resisting scratches and smudges, ensuring durability without compromising print quality or functionality.



- 2. Signature Panel:** A signature panel is a designated writable area on access control or ID cards, allowing cardholders to personally sign their credentials for added security and identity verification. Typically made with a matte or slightly textured finish, the panel is compatible with permanent or ballpoint pens and ensures signatures remain clear and durable over time. Including a signature panel enhances card authenticity and supports compliance with security protocols in corporate, educational and government settings.



- 3. Thermal Rewriteable Overlay:** Thermal rewriteable access control cards utilize specialized materials that allow card information to be printed, erased and reprinted multiple times using thermal print technology. This eco-friendly and cost-effective solution is ideal for temporary badges, event credentials, or situations where cardholder data changes frequently. These cards maintain high-quality print clarity and durability while enabling quick updates without the need to issue new physical cards, streamlining access management and reducing waste.



- 4. Slot Punch:** A slot punched credential features a precision-oval opening designed to facilitate easy attachment to lanyards, badge reels or clips. This slot ensures that the credential can be worn securely and visibly, supporting seamless identification and access control.

Important Note: Not available on all technologies, please inquire with your sales representative



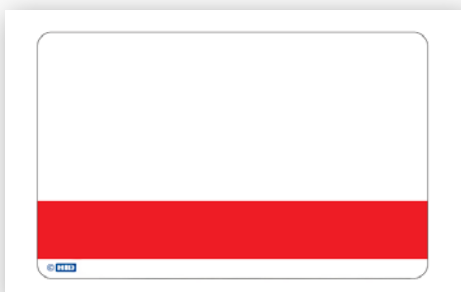
5. Standard Magstripe: High coercivity (HiCo) magnetic stripes are designed for enhanced durability and security, capable of withstanding frequent use and exposure to harsh environments. With a stronger magnetic charge compared to low coercivity (LoCo) stripes, HiCo stripes provide reliable data retention and resistance to accidental erasure or damage. Ideal for access control cards, payment cards and secure ID badges, high coercivity magnetic stripes support longer card life and improved performance with most standard card readers.

Important Note: HID offers both 4000 Oersted and 2750 Oersted magstripes. Oersted refers to the magnetic strength (or coercivity level) of a magnetic stripe, specifically indicating how resistant the stripe is to being erased or demagnetized.



6. Custom Magstripe: Custom color magnetic stripes offer the same reliable data encoding as traditional black or brown stripes, with the added benefit of enhanced visual branding and card design flexibility. Available in a variety of colors — such as silver, gold, red, blue or white — these stripes allow organizations to align access control cards or ID badges with brand colors or functional color-coding systems.

Important Note: There might be an additional fee and a minimum order quantity for origination of the custom magnetic stripe.



7. Custom Thickness: Custom thickness access control cards are designed to meet specific functional, aesthetic or technical requirements beyond standard card dimensions. Available in a range of materials — including PVC, composite and polycarbonate — these cards can be manufactured in non-standard gauges to support branding, security or ergonomic needs.





Digital Customization

Personalization

- 1. Custom Programming:** Custom programming for access control cards involves encoding specific data — such as facility codes, card numbers and encryption keys — onto proximity, RFID or smart cards to ensure seamless integration with your access control system. This process ensures each card is uniquely configured to meet security protocols, user permissions and system compatibility. Whether using proprietary formats, HID, MIFARE® or other technologies, custom programming provides a turnkey solution for secure, ready-to-use credentials tailored to your organization's infrastructure.

Important Note: Custom programming will incur a per card fee.

2. Cross Reference Report: A Cross Reference Report provides a comprehensive digital record of all access control cards delivered to the customer, including each card's unique encoded data such as serial numbers, facility codes, card IDs and custom programming details. This report ensures full transparency and traceability, allowing the customer to validate, manage and integrate the card data with their internal access control or identity management systems. Delivered in a secure digital format (e.g., Excel, CSV or PDF), the Cross Reference Report supports efficient card deployment, troubleshooting and long-term system maintenance.

Important Note: A standard Cross Reference Report will be provided at no cost, however if a custom cross reference is requested or if a job with personalization is requested, there will be a small fee for this service.

3. Custom Application Support: Custom Application Support provides tailored technical assistance and integration services for customers with unique access control or credentialing requirements. Whether you're deploying advanced encoding schemes, integrating with third-party systems or developing proprietary workflows, our expert team collaborates with you to ensure seamless compatibility, functionality and performance. From card data formatting and software configuration to specialized hardware support, our custom application support ensures your solution is optimized to meet your operational and security goals.

Important Note: Custom Application Support will incur an hourly fee dependent upon the custom requirements.

4. Technology Encoding Samples: These are pre-programmed access control cards provided to customers for testing and validation purposes prior to full-scale production. These samples are encoded using your specified technology and configured to match your system's format, including facility codes, card numbers and encryption keys. Encoding samples help verify compatibility, functionality and performance within your access control environment, reducing risk and ensuring a smooth deployment.

- 5. HID Corporate 1000 Fee:** HID's Corporate 1000 Program offers a fully-managed solution for RFID card formatting and card number tracking by providing a card configuration that is developed specifically for each individual, end user. Within the assigned format, HID delivers more than eight million individual card numbers. Card numbers are tracked in the manufacturing process to ensure that they are not duplicated. The program is very beneficial to organizations with multiple locations and/or decentralized decision making for card purchases.
- 6. HID Elite Key Fee:** The HID Elite Program provides end-user customers with a unique authentication key to increase their existing security. The custom authentication key protects the card number within the access control application of the card. Only matching cards and readers will work together, prohibiting cards and readers from foreign populations to enter and function within the company's Elite secured population.

Other Services

- 1. Artwork Proofing:** Artwork proofing is a critical step in the production process that ensures the visual design of your access control cards meets your exact specifications before printing begins. This service includes the creation and review of a digital proof — showing layout, branding elements, variable data placement, color accuracy and any custom features such as signature panels or magnetic stripes. By approving a detailed proof, you can verify that all design elements are correct and aligned with your branding and functional needs, minimizing errors and ensuring a high-quality final product.

Important Note: A charge will be applied for any customized credential being ordered so that it can be industrialized.

Important Note: This charge will also apply whenever there is a technology migration as well. The first 3 iterations will be free of charge, but any further changes to the design might incur an additional per hour fee

- 2. Card Reprogramming:** Card reprogramming allows existing access control cards to be securely updated with new credentials, data formats or system configurations — extending the lifecycle of your cards without the need for full replacement. Whether transitioning to a new access control platform, updating user permissions correcting encoding errors, reprogramming ensures your credentials remain functional and aligned with current system requirements. Compatible with a range of technologies including proximity, RFID and smart cards, this service provides a cost-effective, efficient way to maintain secure and flexible access management.

Important Note: Not available for all technologies

- 3. Custom Laser Engraving:** Custom laser engraving location allows you to specify the exact area on an access control card where laser engraving will be applied. This tailored placement ensures that variable information — such as names, ID numbers, barcodes or security marks — is engraved precisely without interfering with other card elements like magnetic stripes or printed graphics. Designed for permanent, high-resolution marking, the custom engraving location supports enhanced personalization and security, perfectly aligned with your organization's branding and functional requirements.

- 4. Custom Packaging:** Custom packaging offers tailored solutions for the presentation, protection and organization of access control cards and related materials. Designed to meet your specific branding, distribution and logistical needs, our packaging solutions help reinforce your brand identity and streamline inventory management.

Important Note: Standard Products have a packaging of 200 cards/box, with 4 packs of 50 cards. Personalized projects will have a packaging of 500 cards/box

- 5. Custom Sorting:** HID offers sorting services for Personalized projects if cards need to be shipped to different locations. HID can sort based on the variable fields provided by the customers. If additional handholding such as inserts/packaging are required and additional fee may be incurred.



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