



Horizon™ Evolution HD

The best just gets better.

The Horizon Evolution HD offers a line-up of features that includes a complete range of card personalization elements designed & industry-proven to perform in the most demanding production environments.

Buy the HD or upgrade your current Horizon Evolution & take advantage of enhancements that deliver increased up-time & reduced cost of ownership - it's that simple.

The Horizon Evolution HD is the expandable, modular solution designed to be both scalable and flexible. The vast array of card personalization elements offered on the Horizon Evolution HD platform meet the current and future needs of three major markets – Financial/EMV, GSM, and Secure ID. The built-in flexibility of this one solution allows for seamless customization as production requirements change. The Horizon Evolution HD platform includes all the latest card personalization elements offered by NBS and will be the platform that all future developments and enhancements will be built upon.

True Flexibility

When we say “flexibility,” we mean flexibility in both our hardware and software offerings. Our Horizon Evolution HD flagship hardware platform coupled with the EMV software packages when applicable support all three target markets – Financial/EMV, GSM, and Secure ID. From start to finish, from market to market, NBS designs customizable, highly reliable, cost effective solutions to take you where you need to be.

Shifting Markets, Shifting Needs

The leading markets for the Smart Card industry include the GSM, Financial/EMV, and Secure ID markets – each with their own highly specific technological requirements. The cutting-edge Card Personalization Elements (“CPEs”) offered in the Horizon Evolution HD system are designed to be configured to meet your market-specific needs and provide the capability to be reconfigured in the field seamlessly as needs change over time.

Cost of Ownership is the Bottom Line

This fully customizable, modular system is proven to provide one of the lowest cost of ownership and of the highest level of reliability in the industry results in the one of the lowest cost per card solutions available on the market today. The Horizon Evolution HD is the ideal all-in-one solution for high-speed Smart Card issuance. There is no longer a need to buy one Smart Card system exclusive to Financial/EMV, another system for Secure ID, and yet another limited to GSM. When your production demands shift, be ready to stay ahead of the competition. NBS designed the fully expandable modular Horizon Evolution HD system to grow with you as your needs change. Our Horizon Evolution HD is the cost-effective system designed to transform into multiple revenue-generating solutions.



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Technical Specifications

NBS brings you the next evolution in card issuance. Unsurpassed speed, superior reliability and unparalleled flexibility allows you meet the needs of your customers now and in the future.

The following details the Card Personalization Elements ("CPE") available on the Horizon Evolution HD platform.

Your NBS representative can help you customize the Horizon Evolution HD solution that is right for your business.

Input CPE: Includes two removable quick-change magazines each with a 500 card capacity meaning faster and easier card handling including preloading of blank cards. Each magazine also has a unique mechanical design that prevents any marking of cards during the picking process. The Horizon Evolution HD has the flexibility to be configured with up to three input CPE's (6 magazines total).

Magnetic Stripe Encoder CPE: Several different encoding types are offered such as, 300 & 2750 Dualco and 600 Oe (for JIS A, B, C options). Other coercivity values may be available on a special order basis for an additional charge. Multiple encoder CPEs can be installed for user flexibility.

High Speed Smart Card CPE: Uses an elegant, elevator mechanism to simultaneously personalize up to 24 smart cards in a single CPE. The assembly can be configured with up to 24 contact stations and/or up to 12 contactless stations. The cycle time for personalizing is reduced by the number of stations. The selection of the number of stations is dependent upon the maximum anticipated programming time per card as well as the throughput rate of the particular Horizon Evolution HD configuration. As an option, the Smart Card personalization elevator can be fitted with the latest generation of Smartware couplers: Ultrasmart or NBS proprietary couplers.

High Speed Top Mono Printer CPE: Provides the ability to print monochrome on the top side of the card at a throughput speed of up to 2,000 cards per hour with the highest of print quality. Mechanically designed for increased working life and reliability, the top mono printer CPE can be combined with the bottom mono printer CPE to print both sides of the card without requiring a flipper in between.

High Speed Bottom Mono Printer CPE: Provides the ability to print monochrome on the bottom side of the card at a throughput speed of up to 2,000 cards per hour with the highest of print quality. Mechanically designed for increased working life and reliability, the bottom mono printer CPE can be combined with the top mono printer CPE to print both sides of the card without requiring a flipper in between.

Colour Graphics (D2T2) Printer CPE: Prints clear, crisp (300 dpi) photo quality colour images at a throughput rate of 500 cards per hour for 1"(2.54cm) x 1"(2.54cm) colour photo utilizing panelized dye sublimation ribbons. Additional capabilities include: monochrome ribbon support as well as applying overlay to multiple selected areas for each run or the entire card. It also includes a redesigned card transport system that delivers increased reliability with a significant reduction in the cost of ownership.

High Speed Colour Graphics (D2T2) Printer CPE: Prints clear, crisp (300 dpi) photo quality colour images at a throughput rate of up to 700 cards per hour for 1"(2.54cm) x 1"(2.54cm) colour photo utilizing panelized dye sublimation ribbons. Additional capabilities include: monochrome ribbon support as well as applying overlay to multiple selected areas for each run or the entire card. It also includes a redesigned card transport system that delivers increased reliability with a significant reduction in the cost of ownership.

High Speed Split CMY Colour (D2T2) Printer CPE: Prints clear, crisp (300 dpi) photo quality colour images at a throughput rate of 800 cards per hour for a full card colour image or 1500 cph for a 1"(2.54cm) x 1"(2.54cm) colour photo. This printer utilizes mono colour ribbons thus greatly increasing the yield per roll and greatly reducing the cost per card. It also includes a redesigned card transport system that delivers increased reliability with a significant reduction in the cost of ownership.

Laminator CPE: The heated roller laminate CPE enables a laminate material to be applied to the surface of a card to provide additional security and durability. A special laminate material is applied to the card surface using pressure and heat. The speed and temperature required is determined by the composition of the card being used.

High Speed Laser Engraving CPE: Supplies durable, tamper resistant card personalization with no consumable costs. The laser engraver is fully integrated into the Horizon Evolution HD and is controlled by the Windows®-based SmartSys™ software and the plug-in Link software. The incorporation of the new flipper mechanism provides the capability to do both front and rear engraving with just one CPE. If higher throughput speed is required, additional CPEs can be added.

Heavy Duty Embosser CPE: The Horizon Evolution HD will support up to 4 separate embosssers. Software automatically divides work between multiple embosssers for optimal throughput. A throughput rate of up to 1900 cph (45 characters per card) with 4 embosssers. Front or rear indenter available tailor the system to the user's requirements. This new embosser features the ability to dynamically adjust character height on a character by character basis. It also includes a redesigned card transport system that delivers increased reliability with a significant reduction in the cost of ownership.

Tipper CPE: The Horizon Evolution HD supports multiple tippers for faster and easier production. The tipper reliable plate design is good for all 11 lines on a card and it has an integrated low foil sensor.

Card Labeler CPE: Applies labels to the front of a card. It will work with any activation label designed for use with plastic cards -- on a 3-inch core, an outside diameter no larger than 8 inches in diameter and with bottom-off-first orientation. The labeler is designed to excel in most demanding production environments. It also includes a redesigned card transport system that delivers increased reliability with a significant reduction in the cost of ownership.

Card Flipper CPE: Adds a greater degree of flexibility to the Horizon Evolution HD. Adding a flipper right before the stacker correctly orients the cards for placement into down stream equipment. The flipper CPE also enables the application of both front and rear laminates (Polyester Patch).

Card Stacker CPE: Configurable to include either one, two or three removable quick-change magazines each with a 250 embossed card capacity. The Horizon Evolution HD has the flexibility to be configured with up to three stacker CPE's (9 Magazines total).

Optional Mailer: The addition of the mailer solution gives you the complete functionality of card personalization from start to envelope! Now you can personalize your cards and have them inserted into mail ready format giving you a totally automated card personalization solution.



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