

HID® FARGO® INK1000

Desktop Inkjet Card Printer



July, 2020

1. What is the HID® FARGO® INK1000?

The HID® FARGO® INK1000 is the latest printer innovation to join HID Global's family of desktop-based card printers.

Bringing the simplicity and affordability of inkjet printing to personalized cards and IDs, the HID FARGO INK1000 is unmatched in its ease-of-use and lower TCO (Total Cost of Ownership).

Ultra-reliable, low maintenance and less expensive than many standard card printers on the market today, the HID FARGO INK1000 features exclusive inkjet printing technology, eliminating the hassles of print ribbons or the need for specialized card media.

Why, it's as simple to use as the inkjet printer in your home or office! Easy-to-use, affordable and dependable, the INK1000 featuring exclusive inkjet technology is the next revolution in card printing.

2. What makes the HID FARGO INK1000 so revolutionary?

- The HID FARGO INK1000 is the very first and ONLY of its kind!
- It is a **highly specialized** thermal inkjet printer that has been specifically engineered to be compatible with standard, off-the-shelf PVC cards – an industry first!
 - Supports standard PVC card types: PVC, press polished PVC, composite (PET/PVC with PVC as an outer layer), laminated PVC (credit card construction) – NO SPECIALIZED CARD MEDIA REQUIRED (no expensive, specially-coated card stock required!)
 - Specialized printer design includes card heating technology to allow improved acceptance/adherence of ink to card substrate and aid in rapid drying
 - Exclusively formulated ink to promote adherence to card and support enhanced UV-stability (fade prevention)

3. Why hasn't desktop inkjet previously become mainstream in the card printing world?

Quite simply, previous attempts at desktop inkjet card printing all had one thing in common – they all fell short with regards to “the almighty card”:

- Our industry is driven by cards and the printing solution MUST work with standard, inexpensive, off-the-shelf cards
- Up until now, this was not available in the market

4. What are the features/capabilities and available optional encoding that is available with the HID FARGO INK1000 card printer?

- Thermal inkjet card printing (single-side)
- Full-color, true “edge-to-edge” printing in 600 dpi x 1200 dpi
- Single ink cartridge (YMC) - *Composite black is barcode-readable*
- Printing on standard PVC card types—no special card media required!
- Contactless card encoding (optional) - *Contactless (OMNIKEY® 5127CK-Mini)*

5. What is Inkjet printing and what is DOD (Drop on Demand)?

Inkjet card printing is a type of card printing that recreates text and digital images by propelling droplets of ink onto the card. **HID FARGO INK1000 offers an inkjet card printing capability.**

- There are two inkjet printing methods. These are **Continuous Inkjet (CIJ)** and **Drop on Demand (DOD)**:
 - As the name implies, **continuous inkjet technology** ejects drops continuously from the printhead. These drops are then either directed to the printing surface as printing drops or to a collector for recirculation and re-use. This methodology is very old and not typically used in card printing.
 - **Drop on Demand** technology ejects drops from the printhead only when required. **HID FARGO INK1000 inkjet printing uses the Drop on Demand method.**
- There are two approaches to the DOD method. These are **Thermal DOD** and **Piezoelectric (or Piezo) DOD**.
 - **Thermal DOD** essentially relies on heat and vaporization to force ink from the print head to the substrate. **HID FARGO INK1000 inkjet printing uses Thermal DOD.**
 - **Piezoelectric DOD** uses an electrical charge to force precise amounts of ink onto the substrate.

6. What are the Drop on Demand (DOD) benefits over ribbon-based printing?

- Less physical waste!
 - No used ribbon panel waste
- More secure than ribbon-based printing!
 - No used ribbon panels from which sensitive data can be derived
- No ribbon issues!
 - No more color panel misregistration/misalignment issues or ribbon breaks
- True “edge-to-edge” printing
 - No white borders around card edge as seen with typical DTC printers
 - Able to print on technology cards without voids/white areas
- No expensive printheads to replace! (cartridge serves as the “printhead”)
 - Should the equivalent of a “pixel-out” arise, simply snap in a new ink cartridge!

- Potentially more cost effective (potential lower Cost-per-Card)!
 - Ribbon-based printing requires that you run through an entire set of ribbon panels even if your card design does not utilize all panels
 - Depending on your card design, a single ink cartridge may yield significantly more cards at a fraction of the cost of ribbon-based printing



7. What type of ink is used and how does the printing process work?

HID FARGO INK1000 inkjet printing uses solvent ink

- Solvent ink (alcohol-based ink) is used during the printing process
- As a specially formulated, alcohol-based ink, it easily adheres to standard PVC and eliminates the need for special-coated card media (Note: this is a MAJOR competitive differentiator!)
- Supports standard PVC card types: PVC, press polished PVC, composite (PET/PVC with PVC as an outer layer), laminated PVC (credit card construction)
- During the printing process, the card is also slightly heated to promote adherence of solvent ink
- The thermal “printhead” (ink cartridge) then expels liquid solvent ink droplets onto the card substrate – “biting” into card surface
- As the **solvent** evaporates (evaporating all excess liquid), only a hard layer of **ink** remains
- As this reaction happens so rapidly, card text and images dry virtually instantly

8. What is the delivery mechanism for HID FARGO INK1000 ink?

- A single cartridge contains all three colors: YMC (Yellow, Magenta, Cyan) for printing full color card designs
- A blend of YMC is used to create composite black
 - Unlike composite black created by ribbon-based printing, inkjet composite black is significantly bolder, darker
 - HID FARGO INK1000 inkjet composite black is barcode-readable!
 - The composite black created by the HID FARGO INK1000 can accurately reproduce even complex characters, such as Kanji, Arabic and Cyrillic.

9. What card types are supported with the HID FARGO INK1000 Inkjet Card Printer?

The HID FARGO INK1000 card printer accepts CR-80 size cards and supports the following card types: Supports standard PVC card types: PVC, press polished PVC, composite (PET/PVC with PVC as an outer layer), laminated PVC (credit card construction)

10. Is there anything special I should keep in mind regarding PVC card compatibility?

Yes. As stated previously, the HID FARGO INK1000 was designed to support standard, off-the-shelf PVC card types: PVC, press polished PVC, composite (PET/PVC with PVC as an outer layer), laminated PVC (credit card construction)

- However, depending on the manufacturer, some PVC cards may have a slight variation in the formulations of their PVC layer
- Different PVC cards use different PVC blends in their construction. For example: PVC vs PVC/ABS
- Could affect the ink's ability to properly adhere to the card substrate
- Although HID has done extensive testing both with HID UltraCard™ cards and off-the-shelf PVC cards produced by other manufacturers, not every available card on the market could be tested/validated
- HID recommends HID UltraCard-brand cards (UltraCard and UltraCard Premium)
- If the intent is to use non-HID-branded PVC cards, we invite partners to validate their specific card stock
- End customers can arrange for a card sample test with their HID partner to ensure card compatibility prior to purchase

11. How does the HID FARGO INK1000 fit within HID Global's secure issuance portfolio?

As a small, easy-to-use and inexpensive card printer, the HID FARGO INK1000 offers many benefits to both entry-level markets AND current, standard DTC/retransfer customers:

- Entry Level - The HID FARGO INK1000 supports entry-level markets where standard DTC/retransfer printers could be considered but may be too cost-prohibitive (both hardware and ongoing consumables) or too complex for the customer
 - The HID FARGO INK1000 offers entry-level markets a new solution for users that have been previously satisfied with printing/creating IDs and cards from contact sheets
- Any customer (entry-level or other) – Seeking the ease-of-use of a home-based printer, lower cost, and has lower volume needs
 - A perfect option for cost-conscious customers that want quality printing without the hassles and complexity of ribbon-use (misalignment/ribbon breaks)
 - A perfect option for those seeking a higher resolution than most low-cost DTC printers (C50 or DTC1250e and competitive comparable offerings that only offer 300 dpi)
 - A perfect solution for printing simple card designs at a lower cost-per-card
 - A perfect solution for those with limited IT resources and/or user skills wherein most operators will be non-technical and value ease-of-use, minimal maintenance and ongoing reliability

12. What are the key features of the HID FARGO INK1000?

Easy-to-install, snap-in ink cartridges

- Ink cartridge contains specially formulated ink that naturally adheres to standard, off-the-shelf PVC cards
- Because inks are inherently UV-stable, images and text exhibit improved fade resistance over DTC-printed cards—even without expensive overlay protectants
- Dependent on the complexity of your card design, a single ink cartridge has the potential to produce hundreds more cards than would be possible with print ribbons—bringing your card designs to life with significantly less waste and at a fraction of the cost!
- No expensive printheads – “Pixel-out” issues are easily addressed by snapping in a new cartridge

600 x 1200 dpi resolution

- Short side of card printed in 600 dpi, long side of card printed in 1200 dpi
- At 600 x 1200 dpi, the HID FARGO INK1000 provides much higher resolution than many desktop printers
- Composite black is barcode-readable!
- Can accurately reproduce even complex characters, such as Kanji, Arabic and Cyrillic

True “edge-to-edge” printing

- *Can accommodate full card coverage designs, eliminating those pesky white border edges left behind by standard Direct-to-Card printers*
- *Able to print on technology cards without voids/white areas*

Small Footprint

- *Same-side input/output*
 - *Input: 100 cards*
 - *Output: 30 cards*
- *Easily fits on countertop or within office environments where counter/desk space for issuance is limited*
- *Features convenient underside compartment for power supply and excess cord*
 - *No tangled cords*
 - *No power supply taking up excess space within work area*

Optional Encoding

- *Optional contactless card encoding module may be purchased*
 - *OMNIKEY® 5127CK-Mini*
- *Can be used for the following applications:*
 - *Employee/Faculty or K-12 student badging - contactless door entry*
 - *Cashless vending*
 - *Time & Attendance*
 - *Gift/Loyalty stored value cards that utilize barcodes/ QR codes*
 - *Entry-level market financial cards that utilize QR codes (as seen in the Philippines, for example)*
- *NOTE: The optional encoder upgrade kit is available as a standalone item that is ordered and purchased separately from the printer. There are no factory-installed configurations. Installation of the encoding module would be performed by the integrator/partner or by the end user. A simple “how to” video has been created and is available. Please see the HID FARGO INK1000 Resource Kit for a link to this easy-to-follow video tutorial.*

13. Will the HID FARGO INK1000 replace any current FARGO printers?

No. However, the HID FARGO C50 card printer will likely eventually be discontinued.

14. With regards to basic functionality, how does the HID FARGO INK1000 compare with existing, lower cost HID Secure Issuance offerings?

Attribute	HID FARGO INK1000	HID FARGO C50 or DTC1250e
Print Technology	600 x 1200 dpi inkjet	300 dpi dye sublimation
Throughput Speed	Up to 100 cph	Up to 220 cph
Print Capability	Single-side	Single-side versions
Card Size	CR-80 / 30 to 40 mil	CR-80 / 20 to 40 mil
Input Hopper Capacity	100 cards	100 Cards
Output Hopper Capacity	30 cards	30 cards
Encoder Options	None or Contactless	None or Contact-Contactless-Mag
MSRP	\$1499	\$1799 / \$2099
MSRP Cost-per-Card	MSRP as low as \$0.15/card	MSRP as low as \$0.30/card

15. Generally speaking (with regards to target customer attributes), how do HID FARGO INK1000 target customers compare with those that purchase/need DTC/HDP HID Secure Issuance offerings?

HID FARGO INK1000 Target Customer Attributes	HID DTC/HDP Printer Target Customer Attributes
Ease-of-use and reliability is critical (desire no ribbon hassles)	Ease-of-use not as critical
Desires inkjet printing and/or higher resolution not offered by DTC/HDP	Initial investment (initial hardware purchase price) is not cost-prohibitive
Standard DTC/retransfer units are too cost-prohibitive or "over the top" – exceeds speed/volume/feature requirements	Higher speed/volume needs overall

16. What are the key benefits of the HID FARGO INK1000 Inkjet Printing over both HID and competitive DTC/Retransfer (ribbon-based) printers?

Benefit	Description
Ease-of-use, no training required	As simple/easy-to-use as a home-based inkjet printer! Snap-in cartridges / novice users can start printing virtually right out of the box!
No ribbon issues	No potential for misregistration/misalignment issues or ribbon breaks
True “edge-to-edge” printing	No white borders around card edge as seen with typical DTC printers, able to print on technology cards without voids/white areas
Lower TCO and potential lower cost-per-card	Much lower up-front hardware cost, no expensive printheads to replace, depending on card design – CPC can be much lower
Higher resolution	At 600 x 1200 dpi, much higher resolution than many desktop printers
More sustainable & secure	No used ribbon panels resulting in waste or security risk
Small footprint	Same-side input/output, easily fits on countertop or office environments where counter/desk space for issuance is limited

17. What is the most *CRITICAL KEY SELLING POINT* I should focus on when selling HID FARGO INK1000 over DTC/Retransfer printers?

Ease-of-Use!

- Bringing the simplicity and affordability of inkjet printing to personalized cards and IDs, the HID FARGO INK1000 is unmatched in its ease-of-use
- Ultra-reliable, low maintenance and less expensive than many standard card printers on the market today, the HID FARGO INK1000 features exclusive inkjet printing technology, eliminating the hassles of print ribbons or the need for specialized card media
- Easy-to-install, snap-in ink cartridges contain specially formulated inks that naturally adhere to standard, off-the-shelf PVC cards
- Intuitive operation: it’s as simple to use as the inkjet printer in your home or office!
 - No special training required
 - Even novice users can be up and running/printing cards within minutes!

18. What are the target market verticals and example applications for HID FARGO INK1000?

Target Verticals and Applications (may or may not include encoding):

- Retail: Employee ID or Badge/Membership/Gift/Loyalty
- Small/Med Business: ID or Badge (Employee/Temp and/or Visitor Management)
- K-12 (IDs/Badges for Faculty/Staff/Contractors/Students and/or Visitor Management)

Specific applications where contactless encoding will be applicable:

- Employee/Faculty or K-12 student badging – contactless door entry
- Cashless vending
- Time & Attendance
- Gift/Loyalty stored value cards that utilize barcodes / QR codes
- Entry-level market financial cards that utilize QR codes (as seen in the Philippines, for example)

19. At a high level, what do the typical buyer personas look like?

- Decision-makers/decision influencers/buyers and/or printer operators/card issuers
- Most operators will be non-technical and value ease-of-use, minimal maintenance
- Most operators will be issuing cards at retail counters or within office environments where counter/desk space for issuance is limited
- Card image quality (reflecting end user's brand) is important but these buyers will have budget constraints that limit buying choices and influence them to place high value on "affordable" & lower TCO

20. What does the competitive landscape look like (desktop inkjet printing)?

There are no “apples-to-apples” feature-comparable competitive offerings on the market today – HID FARGO INK1000 is in a class by itself

COMPETING WITH EXISTING DESKTOP INKJET:

- With HID FARGO INK1000, HID Global is the FIRST to bring inkjet innovation to the global desktop card printer market that:
 - Can print on standard PVC without special-coated card media
 - Offers a contactless encoding option
- There are some desktop inkjet printers on the market but none are even comparable to HID FARGO INK1000
- In some entry-level markets, use of inkjet PHOTO paper printers has been observed with the use of specialized trays

21. What is HID Global’s overall Product Strategy with regards to the HID FARGO INK1000 now and in the future?

Today

HID FARGO INK1000 is a viable and VERY competitive option to traditional, ribbon-based DTC/retransfer desktop (based on individual customer needs and card designs)

- HID FARGO INK1000 provides the opportunity to more aggressively compete with desktop on cost-per-card (depending on design)
- HID FARGO INK1000 provides the opportunity to effectively compete with either desktop on Total Cost of Ownership (lower initial investment / lower CPC depending on card design / no printhead replacement costs)
- HID FARGO INK1000 is a complementary offering to our existing secure issuance portfolio

Future

- The HID FARGO C50 will eventually be discontinued

2021 and Beyond

- For those markets where desktop inkjet becomes the “go to” standard, HID Global will be optimally poised to deliver successfully with HID FARGO INK1000

22. What is the process for purchasing the HID FARGO INK1000?

HID FARGO INK1000 will be available via a new sales program

- **Program Name:** INK Series Product Purchasing Program
- **Program Overview:** HID FARGO INK1000 Printers and Ink will be sold through a distribution channel to two Focused Tiers of HID Advantage Partners as well as non-HID Partners. Varying levels of discount will apply to each.
- **Program Details:** Distribution-focused fulfillment route:
 - Distributor sells to Tier I HID Partner and receives largest rebate
 - Distributor sells to Tier II HID Partner and receives smaller rebate
 - Distributor sells to non-HID partner and receives no rebate
- **Program Benefits:**
 - A core benefit to using a strong distribution network affords the ability to maintain stable and reliable inventory of printers and consumables (ink) around the world with quick access to most locations.
 - Leveraging our distribution network will enable partners consistent access to quick order fulfillment and fresh ink cartridges without having to manage ink inventories on each and every partner shelf.
 - Wet ink cartridges (as required for inkjet printing) have a different lifecycle than dry print ribbon
 - This program ensures consistent, supportive access to fresh ink (ensuring ink quality remains high and is ready for user installation)

23. What are the INK Series Purchasing Program Guidelines?

The INK Series products will be distributed through distributors, OEMs, system integrators and resellers that adhere to HID Global INK Series Purchase Program Requirements. INK Series Product Accreditation/Authorization requirements and guidelines are as follows:

- At this time, the INK Series category of products currently include the HID FARGO INK1000 inkjet card printer, INK1000 ink cartridge, and INK1000 optional contactless encoder upgrade kit. These products be distributed through product authorized dealers and system integrators.
- Like our Professional Select program, all sellers must complete a business plan that must be reviewed/approved by HID Global.
- A Demo purchase will be required for NAM Tier I Partners, NAM Tier II Partners and EMEA Tier I Partners only: Must purchase at least one INK Series Demonstration (Demo) Printer for each printer model they plan to promote and sell. (At this time, the purchase of a single HID FARGO INK1000 Demo printer is all that is required). Please note that a Demo purchase is NOT required in LAM or APAC regions nor for Tier II Partners in EMEA.

- All appropriate personnel representing HID Global Secure Issuance products and solutions must complete online HID Academy product training module(s) for the INK Series products they intend to promote and sell. Please discuss your specific training requirements with your HID Sales Representative/Account Manager.
- Must adhere to inventory and/or volume commitments as applicable to your Tier and/or region. May also be required to sign the HID FARGO INK1000 Addendum to your existing Sales Contract. As these requirements vary by Tier and region, please inquire directly with your HID Sales Representative/Account Manager for additional information.
- Recommended: Although not required, it is highly recommended that those that wish to sell INK Series Products are either an HID® FARGO Authorized Service Provider (ASP) OR have a contractual agreement with an HID-approved 3rd Party HID Secure Issuance ASP.

24. What are the first steps towards becoming authorized to sell and placing an order?

- **First Steps Towards Placing an Order:**
 - **Distributors:** Work with your HID Sales Representative/Account Manager for access to purchase printer and ink direct (purchase will be made directly from HID Global)
 - **Tier I and Tier II Partners (NAM/EMEA):** Work with your HID Sales Representative/Account Manager to set up volume agreements and understand discount expectations (purchases will be made through Distribution)
 - **Partners where Tiers do not apply (LAM/APAC):** Work with your HID Sales Representative/Account Manager to set up/learn more about volume commitments (as applicable) and understand discount expectations (purchases will be made through Distribution)
 - **Non-HID Partner:** Purchase product from distribution
- **For all HID Partners:** Work with your HID Sales Representatives/Account Managers to learn which distribution options are available for your area, and how to gain the best discounts based on your specific volume commitments. Where applicable, your Account Manager will assist you with completing a Business Plan and obtaining a Demo unit.

25. What is the pricing for HID FARGO INK1000?

Part Number	Item	USD MSRP
062000	HID FARGO INK1000 Card Printer	\$1500
062100	YMC Ink Cartridge	\$190
062050	Upgrade Kit – Contactless Encoder for INK1000	\$500

26. What does the warranty cover?

Printer - Three years*

**Three-year warranty available on printers with completion of online printer registration. (Two-year warranty standard on printer without online printer registration.)*

27. How do I contact HID Global Technical Support?

North America & Corporate	Asia Pacific
611 Center Ridge Drive Austin, TX 78753 USA Phone: 866-607-7339 Fax: 949 732 2120	19/F 625 King's Road North Point, Island East Hong Kong Phone: 852 3160 9833 Fax: 852 3160 4809
Europe, Middle East and Africa	Brazil
Green Meadow Springs Business Park 3 Cae Gwyrdd, Cardiff CF15 7AB UK Phone: 44 (0) 1440 711 822	Condomínio Business Center Av. Ermano Marchetti, 1435 Galpão A2 CEP 05038001 Lapa - São Paulo/SP Brazil Phone: 55 11 5514-7100
HID Global Support: www.support.hidglobal.com	

For additional global office location and contact information, please visit us at: www.hidglobal.com