Product Guide

Product Introduction

Entrust Sigma ID Card Printers are specifically designed for today's cloud environments – giving you the ability to issue secure identities. From unboxing to issuing cards and mobile flashpasses to managing your printer, we made sure Sigma is the most user-friendly ID card issuance system in the world. And our industry-leading issuance security architecture will help to keep your cards and your customers' data safe and secure each step of the issuance process. We built a system that is designed for the future with forward-thinking technology and scalability that allow you to expand your ID card program as your needs evolve.

Product Overview

Sigma is the next generation Instant ID Solution that is different than anything seen before in the ID solutions industry. We are delivering a solution that is easy to use, from taking the printer out of the box to installation to issuing identities to managing your system. Normally when something is easy to use you have to sacrifice security – not with Sigma. Sigma is a trusted IoT device that helps to ensure that customers and their data are safe from intruders. And Sigma was designed to address the needs you have today as well as the needs you will have in the future due to the industry-leading modular design as well as the ability to deliver a physical ID and mobile flashpass instantly.

Sigma=Simple
- An out of box experience similar to a smart phone, smart speaker or video doorbell that gets you up and running in a matter of minutes.
- An issuance experience that brings together physical and digital into one identity issuance platform that is either on-premise or in the cloud, and can deliver a physical ID and a mobile flashpass instantly.
- Manage you printer from the palm of your hand with our Printer Dashboard. You can see the printer status, order supplies, check cleaning status, update firmware, and contact help.
- Easy to service your printer. Removable skins make it easy to address any issues should they arise. Pre-filled ribbon cassettes make it easy to change the ribbon. The printhead protector provides protection for the printhead while servicing the printer.

Sigma=Secure
- Consumer Data stored in the issuance software database is encrypted
- Secure Boot - a patent pending security features that protects the printer from outside intrusion to limit malware insertion.
- The Trusted Platform Module (TPM=mini HSM) enables you to store and manage user certificates and keys. Customer can change the certificate utilizing RMM.
- The Sigma printer has an identity (SSL/TLS Certificate) that is stored within the Trusted Platform Module (mini HSM)
  - TLS Certificate enables:
    - Mutual Authentication – The connection between the printer and the issuance software is encrypted and secure.
    - Payload (Data) Encryption – The data that is sent between the issuance software and the printer via the connection is encrypted and secure.
- Locks control access to the printers
- Consumer data is not stored in the printer after successful printing is complete

Sigma=Smart
- We ensure customers don't feel locked into a solution, rather customers can modify as they see fit with our industry leading modular design. We offer enhancements like smart card capabilities, wi-fi, lamination, tactile impression, and tactile foil printing.
- Printing cards has never been easier with flexibility to issue ids with software in the cloud or on-premise.
- An issuance experience that brings together physical and digital into one identity issuance platform that is either on-premise or in the cloud, and can deliver a physical ID and a mobile flashpass instantly.

Product Features

Out of Box Experience
An out of box experience that gets you up and running in no time. The ability to open the box and take the printer out of the box with one hand. It also is easy to find everything that you need to get the printer up and running – power cord, network cable, etc. A one-page (front and back) quick start guide that ensures you follow the correct steps to get started with your new printer.

LED Light Ring
Variable LED Light Ring enables customers to match the color to their environment or brand. Additionally, the LED Light Ring will alert you to an issue with your printer.

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Printer Dashboard
Manage you printer from the palm of your hand with our Printer Dashboard. No need to ask somebody for help when you can see the printer status, order supplies, check cleaning status, update firmware, watch how to videos, and contact help (when needed).

Consumables
Offer a choice of eco-friendly color ribbon kits or prefilled ribbon cassettes enable you easily to swap out ribbons in your Sigma DS series card printers.

New Luster Specialty Ribbon
The specialty color panel ribbon allows a user to variably print a security feature that has both a level 1 and a level 2 method of authentication. Luster print features the combination of visible iridescence and UV fluorescing for card authentication. Offers creative eye-catching additions to the card with text and imagery for simplex or duplex cards without the need for additional hardware cost.

Printhead Protector
Innovative patent pending feature shielding the printhead during ribbon replacement or printer servicing and helping to extend the printhead life. Enables you to easily fix the issue at hand without having to worry about damaging the printhead.

Built for the Cloud
Sigma printers work with our new cloud issuance software. Thanks to pre-built certificates in the printer, there's no need for an extra console to connect. Plug in the printer, sign-up for the software, create an ID, and print. It's that easy.

Simultaneous Physical & Digital Issuance
Paired with our cloud issuance software will give you the ability to issue both a physical *and digital* ID simultaneously. When the print job is pushed to your printer it will also be accompanied by an email/SMS message that will open an ID in your mobile's "'wallet." The digital ID issues is a mobile flashpass*, with visual identification and bar code/QR scanning and swiping. Note: At this time Mobile Flashpass does not support smart card capabilities, NFC technology, access control, and POS terminals.

Removable Input Hopper Options
Removable input hopper options help ease day-to-day card management and card handling issues. The hopper easily locks in place at the start of the day and can be easily removed to secure cards in the vault.

Enhanced System Security
The DS Series Card printers provide SSL, 3DES TLS 1.0, TLS and TLS 1.2 encryption to help ensure security of the connection between the software and the printer as well as the data sent from the software to the printer.

Trusted Platform Module (TPM)
In addition, the DS series card printers can integrate with the TPM, using Datacard® Adaptive Issuance™ Remote Monitoring and Management Software to provide a secure location and method to insert, store, manage and remove end user certificates and keys.

Secure Boot
The DS Series card printers are the industry's first direct-to-card printer to provide Secure Boot, a patent pending security feature that protects the printer from outside intrusion to limit malware insertion. If the printer detects malware and memory compromises, it will not boot up until the detected malware and compromises have been removed. Note: Service call is needed to address the issue.

Integrated Solution
The DS Series card printer is designed and tested as an integrated solution, encouraging the harmonious use of the hardware, software, supplies and services, making it ideal for many different card programs. The flexibility and modularity of the system ensures easy upgrade of the system as program needs change. Entrust Datacard has a long history of providing trusted solutions for card printing to end users, and with the DS Series card printers, this tradition continues.

Wi-Fi (Available via Upgrade Kit)
Enables you to use the printer via Wi-Fi – supports the following:
- Wi-Fi types: 802.11g/n
- Authentication Modes: None, WPA2 Personal
- Dual-band 2.4GHz & 5GHz

Tactile Impression Module
An affordable way to add branding to your program via images and text in select colors via tactile foil cassettes. The color tactile feature is very visible and an easily recognizable item on the card that enhances branding as well as brings a low level security feature to your cards.

Modular Design
Additional durability and security options are available by adding the DS3 card printer to an inline lamination module. Secure custom or generic holographic designs can be added at various levels for enhanced security. In addition, the tactile impression feature can be added to provide additional security. The tactile impression feature is very visible and an easily recognizable item on the card.

The DS3 card printer can be upgraded at our partner locations or in the end user locations for magnetic stripe encoding, contact and contactless smartcard encoding, and bar code reader with a wide variety of upgrade kits. The upgrades support ISO 14443 A/B, ISO 7811, MiFare, Felica, Pc Prox, iCLASS, iCLASS SE and iCLASS SEOS smart card protocols.

Inline Card Lamination Module (CLM)
The Sigma DS3 card printer with CLM comes standard with single sided lamination and optional dual-sided lamination capability. This provides the ability to apply two different types of laminates to the card.

Debow System
Card aesthetics are very important to customers, and the patented debow feature in the Sigma DS3 card printer with CLM ensures the delivery of flatter cards. The cards printed on the Sigma DS3 card printer with CLM meet the latest ISO standards.

Market Opportunities

The new DS3 card printer represents the next generation of direct-to-card printing. Built on proven technology, we know that the quality of the cards issued goes a long way towards building positive impressions with the card holder. With the new DS3 printer, end customers can create cards that really stand out from the crowd. The DS3 direct-to-card printer gives customers the power to enhance their brand image, improve the security and durability of their cards, and provide reliable print-on-demand issuance. Cards whenever and wherever they need them.

The DS3 card printer is specifically designed for those applications and/or markets that require any of the following:
- World-class out of box experience
- Physical card security
- Management of printer from a mobile device
- Cloud delivery model for software
- Physical and Digital issuance
- Secure printing environment
- High level of quality and reliability
- An integrated solution incorporating hardware, software and supplies

The DS3 card printer is feature rich yet competitively priced, which opens up new market opportunities.

The Sigma DS3 card printer is ideal for:
- Government-National ID, Driver's Licenses and Voter ID cards
- Universities, Colleges and Higher Education
- State, Local or Municipal Government Authorities
- Ministry of Defense, Military ID and Secure Facility Identification
- Emergency Services: Police, Fire, and Ambulance Services
- Healthcare – Staff ID cards, admissions and health savings account
- Bureaus – Outsource services and support and augment card replacement programs
- Corporate ID and Access Control

Tactile Impression Module (TIM)

There are multiple color options for tactile foil cassettes to choose for adding eye-catching color to your cards:
- White gloss
- Black gloss
- Silver metallic
- Gold metallic

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- Copper metallic

The unique Tactile Impression Module is available as an option with the Sigma DS3 card printer. There are two components to the tactile impression feature: the Tactile Impression Module (hardware) and the tactile impression die (supply). If a tactile impression feature is desired, then the Tactile Impression Module (TIM) should be ordered at the same time as the Sigma DS3 card printer.

Customers have the option to purchase one of the generic tactile impression designs that are available, or have the ability to create a unique, custom design specific for their ID card program.

The TIM will ship with a stock Entrust character. Then, upon receipt of the generic or custom tactile impression ordered, the channel partner will replace the stock character: tactile impression die prior to shipment to the customer.

Tactile Impression Positioning
The tactile impression can be placed in various positions on the cards. There are some key considerations when designing a card with the tactile impression module:

- Position over the Mag Stripe and antenna chip should be avoided
- Following design best practices outlined on the **Tactile Impression Best Practices Guide** will be critical. For example, orientation of the card layout and impresser die feature is critical in order to ensure the proper portrait or landscape design layout is obtained.

- The impression can be made in two distinct areas vertically on the card, but can be moved across the card horizontally and impressed where desired.
- There are specific regions for imprinting set - refer to user guide for information on changing the settings.

Generic Tactile Impressions
Entrust has several generic tactile impressions to choose from.

Custom Tactile Impression Origination Process
The process for requesting a custom impression die will be very similar to that for custom holographic overlays. An Entrust Certified Supplies custom tactile impression guide and order form will be available on Partner Central, outlining the various grades and guidelines for placement of the impression in the design of the card.

Product Installation & Administration

Included with each Sigma series card printer is the following documentation:
- Quick Install Guide

The DS Series card printers are easy to install using the visual step-by-step Quick Install Guide. Following the instructions of the Quick Install Guide, the printer operator should expect to unpack, setup, install, and print a test card.

The product specifications for the DS Series card printers be found on Partner Central.

Inline Card Lamination Module (CLM)

Requirements for instant card issuance are constantly changing as customers look for new ways to increase security, durability and versatility for their cards and credentials. Entrust is pleased to announce a number of unique features that will meet those ever-increasing needs! These new features are available in our new Sigma DS3 printer with Inline Card Lamination Module (DS3 card printer with CLM). The DS3 card printer with CLM is built upon the same great technology as the Entrust Datacard Sigma DS3 card printer, with added features and functionality that will appeal to most customers. In addition, we have improved the quality and the reliability to make this an industry choice for high quality printing and lamination. Entrust is committed to making our channel partners successful by offering the most innovative solutions in the industry. The variety of security and durability features make the Sigma DS3 card printer with CLM the most impressive in the market.

Optional Tactile Impression Feature Available with CLM
The patented tactile impression feature is available as an option with the Sigma DS3 card printer with CLM. There are two components to the tactile impression feature: the tactile impressor module (hardware) and the tactile impression die (supply).

If a tactile impression feature is desired, then the CLM with tactile impressor module option should be ordered at the same time as the Sigma DS3 card printer.
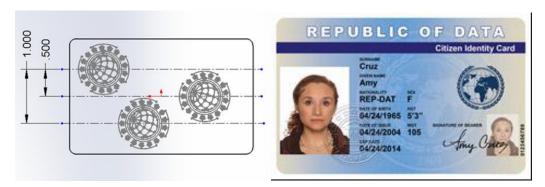
Customers have the option to purchase one of the generic tactile impression designs that are available, or have the ability to create a unique, custom design specific for their ID card program. The tactile impressions can contain text, logos, and outlines of images that will vary in design and complexity.

The laminator will ship with a stock Entrust character. Then, upon receipt of the generic or custom tactile impression ordered, the channel partner will replace the stock character: tactile impression die prior to shipment to the customer.

Tactile Impression Positioning
The tactile impression can be placed in various positions on the cards, and can be impressed multiple times on a single card. There are some key considerations when designing a card with the tactile impression feature:

- Position over the Mag Stripe and antenna chip should be avoided
- Following design best practices outlined on the **Tactile Impression Best Practices Guide** will be critical. For example, orientation of the card layout and impresser die feature is critical in order to ensure the proper portrait or landscape design layout is obtained.

- The impression can be made in three distinct areas vertically in the card, but can be moved across the card horizontally and impressed where desired.
- There are specific regions for imprinting set in the print manager. Refer to user guide for information on changing the settings.

Generic Tactile Impressions
Entrust Datacard will have several generic tactile impressions to choose from. The artwork below shows a variety of examples of potential tactile impressions.

Custom Tactile Impression Origination Process
The process for requesting a custom impression die will be very similar to that for custom holographic overlays. An Entrust Certified Supplies custom tactile impression guide and order form will be available on Partner Central, outlining the various grades and guidelines for placement of the impression in the design of the card.

The tactile impression feature is a great opportunity to increase security and branding on the card during personalization. Below are samples of some tactile dies.

Consumables Supplies Overview

The new Sigma DS3 Card Printer has been designed for high performance with authentic Entrust Supplies. We developed our supplies to ensure superior quality, proven print-on-demand performance and exceptional results with every supply item we offer. Worldwide authorized channel partners provide a fast, direct connection with the supplies and support you need, when and where you need them.

SIMPLE, SECURE AND SMART SUPPLIES
- Our DS3 supplies portfolio includes user friendly supplies with interactive secure RFID communication and supply optimization. This ensures card program system integrity remains secure and offers carefree intuitive card printing with brilliant image quality with every genuine supply loaded into the printer.
- Built-in technology with printer, supplies and software. Saving energy, reducing ribbon waste and saving you money. User supply messaging at your fingertips with Printer Dashboard alerts, for proactive prompts on ribbon replacement, cleaning intervals and supply reordering options.
- Print ribbon kits supplies include a ribbon, an isopropanol cleaning card and an adhesive cleaning roller for easy convenient loading onto the provided ribbon cartridge. Cleaning supplies are designed specifically for keeping your printer at peak performance; helping to prevent card defects.
- Supply loading in seconds is a breeze with optional prefilled print ribbon cassettes or eco-friendly print ribbon kits. Each ribbon option includes easy to follow loading instructions.

Eco-Friendly Products
In support of fostering a sustainable future and an ISO 14001 Certified company, we are dedicated to continuous improvement of operations and our products.
- Biodegradable ribbon cores are made with a material additive to help reduce the impact on the environment. These cores provide performance and reliability with less impact to our environment.
- Biodegradable packaging – made from 100% recycled material and printed with soy inks.

Panel Ribbon Kits

Item Number	Description	Yield**
525100-001*	YMCKT full-color print ribbon kit	250
525100-004*	YMCKT full-color print ribbon kit	500
525150-004*	YMCKT full-color prefilled print ribbon cassette	500
525100-002*	yuck short panel color print ribbon kit	650
525100-005*	YMCKT-KT full-color print ribbon kit	350
525150-005*	YMCKT-KT full-color prefilled print ribbon cassette	350
525100-008	YMCK full-color print ribbon kit	500
525100-009	YMCK-K full-color print ribbon kit	500
525100-011	YMCKF-KT full-color print ribbon kit	300
525100-014	KT black print ribbon kit	1000
525100-010	KTT black print ribbon kit	750
525100-016	YMCKL-KT full-color print ribbon kit	300
525100-021*	YMCKT full-color print ribbon kit PETG friendly	250
525150-012	ST-KT print ribbon kit	500
525150-013	GT-KT print ribbon kit	500

Monochrome Print Ribbon Kits

Item Number	Description	Yield**
525900-001*	Black standard/food safe print ribbon kit	1500
525900-002*	Black high opacity print ribbon kit	1500
525900-003	Royal blue print ribbon kit	1500
525900-004	White high opacity print ribbon kit	1500
525900-005	Red print ribbon kit	1500
525900-006	Silver matte print ribbon kit	1500
525900-007	Gold matte print ribbon kit	1500
525900-008	Green print ribbon kit	1500
525900-009	Scratch-off gray print ribbon kit	1500
525900-014	Silver metallic print ribbon kit	1500
525900-015	Gold metallic print ribbon kit	1500
525900-017	White standard/food safe print ribbon kit	1500

Cleaning Supplies

Item Number	Description	Yield**
552141-002	Isopropanol cleaning cards (20/pack)	N/A
569946-101	Adhesive cleaning rollers (5/pack)	N/A
507377-001	Isopropanol cleaning swabs (5/pack)	N/A
524405-001	Adhesive cleaning cards (10/pack	N/A

Replacement Printhead

Item Number	Description	Yield**
525354-999	Replacement printhead assembly	N/A

Accessories

Item Number	Description	Yield**
524870-999	Replacement ribbon cartridge assembly	N/A
597640-001	StickiCard™ adhesive-backed plastic cards 00/pack)	100

Tactile Foil Cassettes

Item Number	Description	Yield**
525067-013	Silver metallic tactile foil cassette	1000
525067-003	Gold metallic tactile foil cassette	1000
525067-033	Copper metallic tactile foil cassette	1000
525067-002	Black gloss tactile foil cassette	1000
525067-028	White gloss tactile foil cassette	750

Panel ribbon type reference:
Y=Yellow, M=Magenta, C=Cyan, K=Black, T=Topcoat, F=UV fluorescent, L=Luster, y=1/2 panel Yellow, m=1/2 panel Magenta, c=1/2 panel Cyan, S=Silver matte and G=Gold matte.

*Regional supplies suffix may be applicable

Each print kit includes one ribbon, one isopropanol cleaning card and one adhesive cleaning roller. Additional cleaning cards and cleaning rollers available separately.

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**Ribbon yields: monochrome ribbon actual yields may be up to 3 times greater due to Entrust ribbon saver features. Panel ribbon yields stated are typically the maximum number of panel sets per roll.

Laminates (Patches) for the CLM
Listed below in the table are standard clear and generic laminates available for the Inline Lamination Module (CLM).

CLM Supplies

Item Number	Description	Yield**
508832-701	Topcoat, Clear, Full Card	1000
508668-701	DuraGard Laminate, 0.5 mil, Clear, Full Card	350
508668-702	DuraGard Laminate, 0.5 mil, Clear, Full Card with Smart Card Window	350
508668-903	DuraGard Laminate, 0.5 mil, Clear, Mag stripe	350
508785-701	DuraGard Laminate, 1.0 mil, Clear, Full Card	300
523432-701	DuraGard Laminate, 1.0 mil, Clear, Full Card (Economy product)	300
508785-702	DuraGard Laminate, 1.0 mil, Clear, Full Card with Smart Card Window	300
508785-903	DuraGard Laminate, 1.0 mil, Clear, Mag stripe	300
508944-901	DuraGard UV Protective Laminate, 1.0 mil, Clear, Full Card	300
508944-902	DuraGard UV Protective Laminate, 1.0 mil, Clear, Full Card with Smart Card Window	300
508944-903	DuraGard UV Protective Laminate, 1.0 mil, Clear, Magnetic Stripe	300
508808-002	DuraGard, OptiExpress(TM), Laminate, 0.6 mil, "Compass" Full Card	350
508808-001	DuraGard OptiSelect(TM) Laminate, 0.6 mil, "Secure Globe" Full Card	350
508808-301	DuraGard OptiSelect(TM) Laminate, 0.6 mil, "Secure Globe" Full Card for SC	350
508808-401	DuraGard OptiSelect(TM) Laminate, 0.6 mil, "Secure Globe" Magnetic Stripe	350
508808-004	DuraGard OptiSelect(TM) Laminate, 0.6 mil, "Authorized Personnel" Full Card	350
508808-005	DuraGard OptiSelect(TM) Laminate, 0.6 mil, "First Responder" Full Card	350
508808-006	DuraGard, OptiGram(R) Laminate, 0.6 mil, "Geometric Curves" Full Card	350
508808-303	DuraGard, OptiGram(R) Laminate, 0.6 mil, "Geometric Curves" Full Card for SC	350
508982-003	DuraGard(R) OptiSelect(TM) Laminate, 1.0 mil, "Secure Locks" Registered, Full Card	300
508982-302	DuraGard OptiSelect(TM) Laminate, 1.0 mil, "Secure Lock" Registered, Full Card for SC	300
508982-401	DuraGard Optigram(R) Laminate, 1.0 mil, "Utopia" Registered, Magnetic Stripe	300
508982-008	DuraGard Optigram(R) Laminate, 1.0 mil, "Secure Crest" Registered, Full Card	300
508982-305	DuraGard Optigram(R) Laminate, 1.0 mil, "Secure Crest" Registered, Full Card for SC	300
508982-405	DuraGard Optigram(R) Laminate, 1.0 mil, "Secure Crest" Registered, Magnetic Stripe	300
508982-009	DuraGard Optigram(R) Laminate, 1.0 mil, "Genuine Authentic" Registered, Full Card	300
508982-306	DuraGard Optigram(R) Laminate, 1.0 mil, "Genuine Authentic" Registered, Full Card for SC	300
508913-001	DuraGard Optigram(R) UV Protective Laminate, 1.0 mil, "Datacard Certified Supplies" Full Card	300
508913-301	DuraGard Optigram(R) UV Protective Laminate, 1.0 mil, "Datacard Certified Supplies" Full Card for SC	300
508913-401	DuraGard Optigram(R) UV Protective Laminate, 1.0 mil, "Datacard Certified Supplies" Magnetic Stripe	300
508834-701	DuraShield (TM), Clear, Overlay, Full Card (For use in conjunction with T-panel application)	500
508834-702	DuraShield (TM), Clear, Overlay, Smart Card (For use in conjunction with T-panel application)	500

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CUSTOM LAMINATES - DATACARD® DURAGARD® OPTISELECT™ SECURITY FEATURE SET
There is the option for Optiselect security feature set laminates which may have a combination of some (customer's choice) or all of the following overt and covert security features: 2D/3D holographic, OVD security designs up to 1350 DPI, Guilloche security printing of fine line designs elements, kinetic and/or animation, micro text, 2-Channel/Flip image, and UV/Mica Ink. [This section appears to be repeated below.]

CUSTOM LAMINATES - DATACARD® DURAGARD® OPTIGRAM® SECURITY FEATURE SET
There is the option for Optigram security feature set laminates which may have a combination of some (customer's choice) or all of the following overt, covert, and forensic security features: 2D/3D holographic, OVD security designs generated using E-Beam origination technology, Guilloche security printing of fine line designs elements, kinetic and/or animation, micro text - multiple size text available, 2-Channel/Flip image, pseudo color, nano text, Stereogram, matte white text, UV/Mica Ink and additional overt/covert security features available for additional cost.

Authentic Certified Supplies
The Sigma DS3 card printer features Entrust proprietary ribbons which are designed specifically for use in Entrust series card printers. When the printer recognizes that an authentic supply is installed, all enhanced product features are enabled and successful card printing can begin. When genuine supplies are loaded into the DS3 card printer, the driver automatically adjusts printer settings to match the ribbon type and helps ensure the best possible image quality on the cards. The printer and supplies then collectively track ribbon consumption and notify you of an upcoming ribbon replacement.

The printer will only print color or monochrome images when authentic Supplies are installed. Entrust Datacard and our designated partners are your source for Datacard certified ribbons.

Note: the printer does not require supplies to be loaded if printer will only be magstripe and/or smart card encoding.

Bid Specifications

The following are the standard specifications of the Sigma DS3 card printer. These specifications encompass the inline lamination module, the tactile impression module, and the multi hopper module.

Sigma DS3 Card Printer Standard Features
- Single-sided or dual-sided edge-to-edge printing
- Full color printing with dye ink ribbons
- Up to 250 cards per hour with single-sided color printing
- Up to 185 cards per hour with dual-sided color printing with lamination
- USB cable connection, Ethernet connection (TCP-IP 10BaseT, 100BaseT, and 1000BaseT)(IPv4 and IPv6)
- Input hopper holds up to 125 - .030 in. (.76mm) cards
- Output hopper holds up to 25 - .030 in. (.76mm) cards LCD printer panel
- Audible and visual message prompts
- Automatic card feed
- Operator-replaceable print heads
- Color coded supplies and cartridges; matching supplies (preloaded cassettes available as well)
- Encryption: SSL, 3DES, TLS 1.2 – certificates and keys
- Printer security
- TPM module
- Secure boot
- QR code driven error resolution information
- Smart Card
  (Current protocol support per each encoder/reader can be found on encoder matrix posted separately)
  - Single Wire connectivity available
  - Contact smart card protocols supported
    - ISO 7816 T=0 (T=1)
  - Contactless smart card protocols supported
    - ISO 14443 A/B
    - ISO 15693
    - MIFARE®, MIFARE® DESFire® EV1 & EV2
    - HID Prox®, iClass, iClass SE®, iClass Seos®
    - Felica®
- Magnetic Stripe Support

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- o ISO 7811 three-track (high- and low-coercivity)
  - o JIS Type II single-track
- XPS card printer driver Windows operating systems
  (See XPS card printer driver release notes for current operating system support.)
  - o Windows® 10 (32/64 bit)
  - o Windows® 8.1 (32/64 bit)
  - o Windows® Server 2016 - 64-bit

Standard Specifications
- Print capabilities
  - o Edge-to-edge printing
  - o Full-color, photos
  - o Alphanumeric text, logos and digitized signatures
  - o Variety of bar codes, OCR codes, QR codes
  - o Background patterns
- Print resolution
  - o 300 dots-per-inch (dpi) X 300 dpi (color, black, and single color graphics printing)
  - o 300 dots-per-inch (dpi) X 600 dpi (black and single color graphics printing)
  - o 300 dots-per-inch (dpi) X 1200 dpi (black and single color graphics printing)
- Print modes
  - o True Color (ICC) – prints as close as possible to color in the image file
  - o Custom Mode – enables user color adjustment to ICC mode
  - o Legacy – prints as close as possible to the SD and CD series
  - o Vivid – prints colors with higher saturation and contrast
- Electrical requirements: Dual voltage-auto sensing
  - o 100/120V, 50/60 Hz
  - o 220/240V, 50/60 Hz
- Resident memory: 8 GB
- Communications: Bidirectional USB, Ethernet
- Plastic cards accepted:
  - o Size: CR-80 and CR79
  - o Thickness: .01" – 0.04" (.25-1.016mm)
  - o Material: PVC with glossy laminate surface, select key fob, Datacard® StickiCardTM adhesive-backed plastic, Translucent cards that meet ISO7810 IR opacity. PETG and PVC varnished cards or matte/satin finished cards must be tested for compatibility and durability.
- Climate Conditions
  - o Operating Temperature - 60°F to 95°F (15°C to 35°C)
  - o Operating Humidity - 20-80 % RH - non condensing

Physical dimensions Sigma DS3 printer (depth X width X height)
- Dimensions: 17.4 X 8.9 X 9" (44.2 X 22.6 X 22.9 cm)
- Weight: 12.1 lbs (5.49 kg)

Physical dimensions Sigma DS3 printer with modules (depth X width X height)
- Sigma DS3 printer with single sided lamination module
  - o Dimension: 23.8 X 10.6 X 20.4" (60.4 X 27 X 51.9 cm)
  - o Weight: 30 lbs (13.62 kg)
- Sigma DS3 printer with Tactile Impression Module
  - o Dimension: 26.25 X 8.9 X 9.5" (66.7 X 22.6 x 24.1 cm)
  - o Weight: 21.5 lbs (9.75 kg)
- Sigma DS3 printer with Mulit Hopper Module
  - o Dimension: 23 X 13.4 X 16.2" (58.4 X 34 X 41.1 cm)
  - o Weight: 30.9 lbs (14.02 kg)
- Sigma DS3 printer with dual sided lamination module configured with tactile impression option
  - o Dimension: 27.1 X 10.6 X 20.4" (68.9 X 27 X 51.9 cm)
  - o Weight: 37.1 lbs (16.8 kg)

Agency Approvals

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- cULus, FCC, CE, ISED, KCC (Korea), VCCI, RCM, WEEE, RoHS (EU and China), and BIS (India)

Additional Options
- Multi-hopper holds up to 6 hoppers with up to 125 cards per hopper (750 cards total)
- Wi-Fi Connection – Supports the following:
    - Wi-Fi types: 802.11 g/n
    - Authentication Modes: None, WPA2 Personal
    - Dual-Band: 2.4 GHZ & 5GHZ
- ISO Magnetic stripe encoding
    - IAT/JIS capable
    - Dual high and low coercivity
    - Tracks 1,2 and 3 (1 track for NTT)
- Smart card personalization
  (Current protocol support per each encoder/reader can be found on encoder matrix posted separately)
    - Loosely Coupled Identive Contact/Contactless all-in-one encoder/reader
    - DUALi Single Wire Contact/Contactless all-in-one encoder/reader
    - HID OmniKey Single Wire Contactless encoder/reader
- Simplex to Duplex RFID upgrade kit
- Bolt down option
- Locks

Frequently Asked Questions (FAQs)

GENERAL
Q: What encoding protocols are supported by the smart card encoder?
A: The encoder supports ISO 14443 A/B and ISO 7816 protocols.

Q. Is the Sigma DS3 card printer field upgradeable?
A. The Sigma DS3 card printer is field upgradeable for magnetic stripe encoding, smart card options, and the Inline Lamination Module by an Entrust authorized service representative or a trained Entrust Channel Partner. See special notes in upgrade section on what to order.

Q. Can the CLM for the CD800 card printer be used with the Sigma DS3 card printer?
A. No, an existing CLM for the CD800 card printer will not work with the Sigma DS3 card printer. When a Sigma DS3 card printer is ordered, the corresponding CLM that will work with the design of the Sigma DS3 card printer will need to be ordered.

Q: Is smart card encoding field upgradeable for the Sigma DS3 Card Printer?
A: Yes, smart card encoding for the printer can be upgraded in the field by an Entrust Datacard authorized service representative or a trained Entrust Datacard Channel Partner. See special notes in upgrade section on what to order.

Q. How many cards can the output hopper hold?
A. The standard output hopper holds up to 25 cards.

Q. What communication interfaces will the CR805 card printer support?
A. USB & Ethernet connectivity are supported out of the box and Wi-Fi is available via an upgrade kit.

Q. Is there a reject bin in the printer?
A. Yes – it holds up to 10 cards.

Q. How does the card debower work and can it be adjusted?
A. The card debower holds the card in a position to reduce the bow in the card. You can turn the debower off via settings in the printer dashboard.

Q. Is the hardware lock option field upgradeable?
A. No, this must be purchased at time of printer order.

Q: What operating systems support the DS3 card printer?
A: The DS3 Card Printer is supported by the following Microsoft operating systems: Windows 10, (32/64 bit) Windows 8.1 (32/64 bit), Windows 7 (32/64 bit), Windows 2008 R2 Server (64 bit), Windows 2012 R2 Server (64 bit).

Q: Where is the diagnostic program located?
A: The diagnostic tools are accessible through the Printer Dashboard.

Q: Are two different printheads needed to support color printing and monochrome printing?
A: No, a single printhead produces excellent print results for both color and monochrome printed cards.

SUPPLIES
Q: Can the printer use 3rd party supplies?
A: No, the Sigma DS3 printer requires the exclusive use of authentic Entrust Datacard
supplies to enable card printing.

Q: Can I use the supplies from the Datacard SD or CD series printers on the Sigma DS3 printer?
A: No, the Sigma DS3 supplies are a new platform that is not interchangeable with the
previous direct to card printer series.

SOFTWARE
Q: What Entrust software supports the Sigma DS3 printer?
A: Datacard® TruCredential suite software or Entrust Adaptive Issuance Instant ID as a Service is tested to work with the Sigma DS3 Card Printer. It will also work with Entrust Adaptive Issuance™ Remote Monitoring and Management software.

Q: Can the printer be used with 3rd party software?
A: Yes, through use of the driver, 3rd party software can print cards using the Sigma DS3 card printer.

SERVICE & SUPPORT
Q: What is the warranty for the Sigma DS3 card printer?
A: The Sigma DS3 card printer has a 36 month warranty for both the printer and printhead. Complete warranty details can be found on PartnerCentral.

Q: What service and support is available for the Sigma DS3 Card Printer?
A: Please see the Product Announcement on Partner Central for all service options.

ORDERING
Q: How do I order a Sigma DS3 card printer?
A: Please refer to Orders and Pricing on PartnerPageSM, or contact your regional customer service representative, sales manager or sales support representative.

Q: How do I order a Sigma DS3 card printer demo package?
A: To order a DS3 card printer demo package, please see the demo program announcement on Partner Central.

Contact Information

If you have any questions please contact your Entrust channel manager or regional service manager.