

DATASHEET

Entrust Datacard DS4 Financial Card Printer

HIGHLIGHTS

DS4: The Next Generation of Instant Card Issuance Comprehensive Capabilities

Entrust® Datacard® (formerly Sigma) Financial Card Printers are specifically designed for today's cloud environments and give you the ability to easily issue the most secure financial cards in the world.

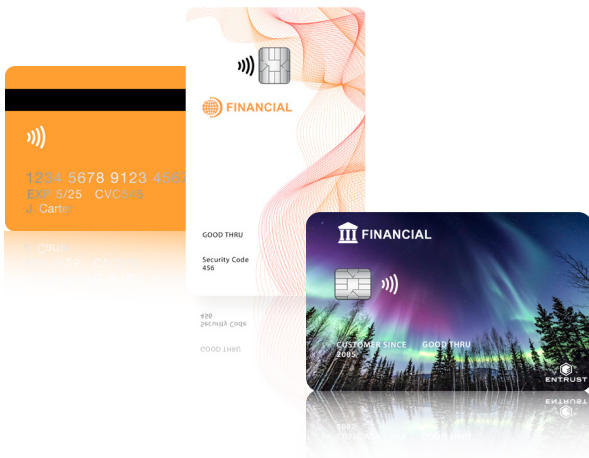
- **Simple:** From unboxing to issuing cards to managing your printer, we made sure Datacard DS4 is the most user-friendly card issuance solution in the world
- **Secure:** Our industry-leading issuance security architecture will keep your cards and your customers' data safe and secure each step of the issuance process
- **Smart:** Forward-thinking technology and scalability allow you to expand your card issuance program as your needs evolve

KEY FEATURES & BENEFITS

The World's Most User-Friendly Financial Card Printer

- Intuitive printer dashboard lets you see printer status, order supplies, check cleaning status, update firmware, or contact help – all from your mobile device
- Seamless self-service lets you access how-to videos and other helpful resources by simply scanning a QR code on the LCD display
- Variable LED light ring lets you incorporate brand colors or other customization into your ambient environment
- Pre-loaded ribbon cassettes make switching ribbons easy
- Optional multi-hopper enables multiple card designs from a single printer
- Removable card cassettes make securing cardstock overnight a breeze

Single-hopper

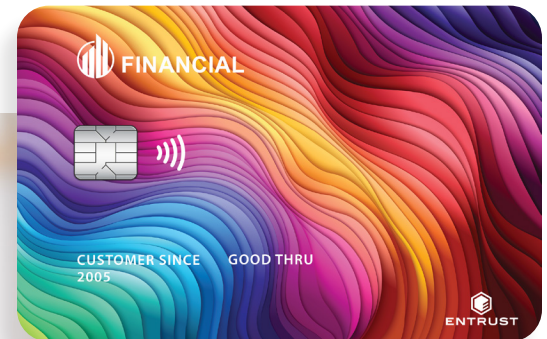


UNMATCHED SECURITY

- Dual-control access with security locks protects cardstock, supplies, and rejected cards, meeting Visa and Mastercard security requirements
- Cardstock is easily removable for secure overnight storage
- Secure Boot cryptographically authenticates firmware, preventing printer operation if unauthorized modifications are detected
- Trusted Platform Module (TPM) secures a factory-installed Entrust-backed TLS certificate
- Network communication in accordance with NIST SP 800-52 Rev. 2 recommendations when using TLS 1.2 or 1.3 with strong cryptographic protocols*
- Zero Trust network support using RADIUS-enabled IEEE 802.1x password or certificate-based authentication
- Secure Ribbon Scramble allows users to specify the card personalization fields that are to be securely printed, making defined personal data difficult to read from the used ribbon supply
- These security features require a properly configured printer with D4.3.2 or newer firmware

Flexible, Scalable, and Easily Integrated Into Your IT Environment

- Issuance capabilities include:
 - Full-color or monochrome direct-to-card printing
 - Magnetic stripe encoding
 - Contact or contactless smart card encoding
- Choose on-premises or cloud-hosted deployment
- Expand your issuance program as your needs change:
 - Add multi-hopper for multiple pre-designed card feeding
 - Add Durable Graphics Module to print cards that are built to last with double the card durability
 - Add Rear Indent Module to enable CVV or CVC to be printed without an embosser
- A full suite of services is available to help ensure your instant issuance program runs smoothly at every one of your branches



TECHNICAL SPECIFICATIONS

Standard Features & Supplies		
Print technology	Dye sublimation/resin thermal transfer	
Print capabilities	Single- or dual-sided edge-to-edge, full-color, and monochrome printing	
Print resolution	Standard mode: 300 dots per inch (dpi) (optional 300 X 600, 300 X 1200 mono) supporting standard text, bar code, and graphics printing Datacard® TrueMatch™ printing technology. Ability to conform to ICC color workflow.	
Print speed	Single-sided color ribbon (YMCKT): up to 250 cards per hour (cph) Double-sided color ribbon (YMCKT-KT): up to 180 cards per hour (cph) Double-sided monochrome ribbon (black): up to 500 cards per hour (cph)	
Card capacity	Input hopper: 125 cards (based on 0.03in. card thickness) Output hopper: 25 cards Reject holding tray: 10 cards Front exception card slot	
Card type supported	Thickness: 0.030 inches (0.762mm) Dimension: ID-1 Card surface material and surface roughness can influence the print quality and durability of any thermal graphics printing. - For best results with durable graphics printing, use glossy PVC cards or glossy cards with PVC overlaminate - PVC cards or cards with PVC overlaminate having average surface roughness (Ra) of 20 microinches (0.5 micron) or less, are also found to be suitable for use - Other card types, such as PETG and varnished cards or cards with Ra greater than 20 micro-inches (0.5 micron) should be tested by the users for quality and durability before making their final selection - PVC, rPVC, PETG, and rPETG cards are supported. Other card types recommend prior testing	
Operating environment	Temperature: 60°F to 95°F (15°C to 35°C) Humidity: 20-80% RH – non condensing	
Magnetic stripe encoding	ISO 7811 three-track support (high- and low-coercivity) JIS Type II single-track option	
Smart card encoding	- Single wire connectivity; supports production of EMV level-1 compliant cards - Contact smart card encoding: ISO 7816 T=0 (T=1), Class A 5V (3V and 1.8V) - Contactless smart card encoding: ISO 14443 – A & B, ISO 15693, MiFare Series, DESFire Series EV1/EV2, HID iCLASS Series, HID Prox (125 KHZ)	
Security features	Device: - Trusted Platform Module - TPM - Secure Boot - Signed Firmware Images Data: - TLS 1.2 and 1.3 (supports AES-256) Network: - IEEE 802.1x network authentication - RADIUS-based authentication - WPA2 enterprise network support Physical: - Secure Ribbon Scramble (optional) - Software-activated lock to secure cardstock, supplies, and reject card hopper - Bolt-down ready - Secure cable lock (sold separately) - Concealed output hopper - Non-resettable card counter for auditing General: - Regular Security Patches	

Entrust Datacard DS4 Instant Financial Issuance System

Secure ribbon scramble	- Instantly encrypts sensitive information in the ribbon, eliminating the need for a shredding process and the risk of information leakage - Software needed: IFI On-prem 6.10 or higher and IFIaaS 8.4 or higher - Available for UV monochrome ribbons (excluding cassette types) and standard black and white ribbons - Only recommended for personalization fields; not recommended for non-personalization information												
LCD display languages	English, French, German, Italian, Portuguese, Spanish, Japanese, Chinese, Korean, Czech, and Arabic												
Physical dimensions	Printer: L 17.4 in x W 8.9 in x H 9.0 in / 44.2 cm x 22.6 cm x 22.9 cm Printer with optional multi-hopper: 31.75 in x 13.4 in x 16.2 in (80.7 cm x 34 cm x 41.1 cm)												
Weight	Printer: 12.1 lbs (5.49 kg) Printer with multi-hopper: 30.9 lbs (14.02 kg)												
Connectivity	Ethernet, Wifi USB options (Driver Only): Direct USB, USB over Ethernet												
Operating systems	- Windows 11 - Windows 10, 32 and 64-bit - Windows Server 2022 - Windows Server 2019 - Linux Ubuntu 20.04 LTS - Linux Kylin 10												
Warranties	36 months												
Multi-hopper	Six-compartment hopper, 125-card capacity each (750 cards total)												
WiFi	Standards: 802.11g/n/ac Frequencies: 2.4GHz & 5GHz Authentication modes: WPA2 Personal, WPA2 Enterprise												
Color ribbons	<table> <tr> <td>YMCKT</td><td>500 images</td></tr> <tr> <td>YMCKT-KT</td><td>350 images</td></tr> <tr> <td>KT</td><td>750 images</td></tr> <tr> <td>ST-KT</td><td>500 images</td></tr> <tr> <td>KT</td><td>1,000 images</td></tr> <tr> <td>WTT</td><td>650 images</td></tr> </table>	YMCKT	500 images	YMCKT-KT	350 images	KT	750 images	ST-KT	500 images	KT	1,000 images	WTT	650 images
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Color ribbon guide: Y=Yellow, M=Magenta, C=Cyan, K=Black, T=Topcoat, S=Silver matte, G=Gold matte, W=White													
Supply yields: Panel ribbon yields stated are typically the maximum number of panel sets per roll. For more supplies information, refer to DS4 Supplies.													

Multi-hopper



Durable Graphics Module



Datacard DS4-ES1

