

DATASHEET

Sigma DS4-ES1 Instant Issuance System with Embosser

HIGHLIGHTS

Sigma: The Next Generation of Instant Card Issuance

Entrust Sigma Instant Issuance Systems 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 Sigma was 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 at each step of the issuance process
- **Smart:** Forward-thinking technology and scalability allow you to expand your card issuance program as your needs evolve



Single-hopper with embosser

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



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*

* 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
- Embossed text with metallic tipping foil for an elegant look
- Add multi-hopper for multiple pre-designed card feeding
- 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 | <ul style="list-style-type: none"> • Standard mode: 300 dots per inch (dpi) (300 X 600, 300 X 1200) standard text, bar code, and graphics printing • TrueMatch™ printing technology. Ability to conform to ICC color workflow. |
| Print speed | <ul style="list-style-type: none"> • 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 HQ): up to 500 cards per hour (cph) • 60 seconds to encode mag stripe, indent, emboss, and top the card • 64 seconds to print monochrome graphics, encode mag stripe, indent, emboss, and top the card • 78 seconds to print color graphics, encode mag stripe, indent, emboss, and top the card |
| Card capacity | Input hopper: 125 cards (based on 0.03 in. card thickness) Output hopper: 25 cards Reject holding tray: 10 cards Front exception card slot |
| Card sizes | Thickness: 0.010 inches to 0.040 inches (0.25mm - 1.016mm) Dimension: ID-1, CR-79 |
| Embossing/Indenting | <ul style="list-style-type: none"> • 75-character embossing/indenting wheel, financial format per ID-1 ISO 7811-3 • Single- or dual-sided • Mastercard security characters Helvetica® characters OCR-A1, OCR-B1 |
| 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 personalization | <ul style="list-style-type: none"> • Contact and contactless smart card encoding for ISO 14443 A/B, ISO 15693, MIFARE®, MIFARE PLUS, MIFARE DESFire EV1/EV2/EV3* • Single-wire connectivity Supports production of EMV® level-1 compliant card *Compatibility with specific features of new card technologies should always be confirmed. |
| Security features | <ul style="list-style-type: none"> • Software-activated lock to secure cardstock, supplies, and reject card hopper • TLS/SSL encryption, supports AES-256 • Bolt-down ready • Secure cable lock (sold separately) • Concealed output hopper • Password-protected cabinet • Non-resettable card counter for auditing |
| Secure Ribbon Scramble | Allows users to specify the card fields that are to be securely printed, making defined personal data difficult to read from the used ribbon supply <ul style="list-style-type: none"> • Software needed: IFI on-prem 6.10 or higher and IFIaaS 8.3 or higher • Available for UV monochrome ribbons (excluding cassette types) and standard black and white ribbons • Recommended only for personalization fields; not recommended for non-personalization information |
| LCD display languages | English, Spanish, German, Italian, and Japanese |

TECHNICAL SPECIFICATIONS

| Optional Features | Supplies | | | | | | | | | | | | |
|---------------------------------|---|-------|------------|----------|------------|-----|------------|----------|------------|-------|------------|-------|------------|
| Physical dimensions | <ul style="list-style-type: none"> • 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: 23 in x 13.4 in x 16.2 in (58.4 cm x 34 cm x 41.1 cm) • Bottom module (indenting, embossing, topping, card output): 15 in. x 27.5 in. x 10.5 in. (38.1 cm x 69.9 cm x 36.8 cm) | | | | | | | | | | | | |
| Weight | Printer: 12.1 lbs (5.49 kg) Printer with multi-hopper: 30.9 lbs (14.02 kg) | | | | | | | | | | | | |
| Connectivity | Ethernet | | | | | | | | | | | | |
| Driver operating system support | <ul style="list-style-type: none"> • 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) | | | | | | | | | | | | |
| Color ribbons | <table border="0"> <tr> <td>YMCKT</td> <td>500 images</td> </tr> <tr> <td>YMCKT-KT</td> <td>350 images</td> </tr> <tr> <td>KTT</td> <td>750 images</td> </tr> <tr> <td>YMCKL-KT</td> <td>300 images</td> </tr> <tr> <td>ST-KT</td> <td>500 images</td> </tr> <tr> <td>GT-KT</td> <td>500 images</td> </tr> </table> | YMCKT | 500 images | YMCKT-KT | 350 images | KTT | 750 images | YMCKL-KT | 300 images | ST-KT | 500 images | GT-KT | 500 images |
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| GT-KT | 500 images | | | | | | | | | | | | |
| Monochrome ribbons | Black, blue, red, green, silver matte, gold matte, silver metallic, and gold metallic: 1,500 images | | | | | | | | | | | | |

Color ribbon guide: Y=Yellow, M=Magenta, C=Cyan, K=Black, T=Topcoat, S=Silver matte, G=Gold matte



Multi-hopper
with embosser

Learn more about the MX Series at [entrust.com](https://www.entrust.com)

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