DATA SHEET

Sigma DS3 with 600 dpi

Direct-to-Card Printer

HIGHLIGHTS

Sigma DS3 printer with 600 dpi: Next-generation, **pixel-perfect precision**

Industry-leading, high-resolution direct-to-card printing and issuance security solution.

- **True high-resolution 600 x 600 dpi printing** for incredibly crisp, detailed character and photo definition.
- Fast ID, high-resolution, patent-pending card issuance solution with color card printing up to 210 cards per hour.

Entrust Sigma ID Card Printers are specifically designed to give you the ability to easily issue secure identities.

- **Simple:** From unboxing to issuing ID cards and mobile flash passes to managing your printer, we made sure Sigma was the most user-friendly ID 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 ID card program as your needs evolve.

KEY FEATURES & BENEFITS

The new standard in highest quality desktop printing – **brilliance and clarity**

- The new capabilities of the Sigma DS3 printer with 600 dpi offer amazing high-fidelity printing of characters far beyond Latin character writing systems.
- Small accents, smooth execution of printed signatures, and the ability to **render a true encyclopedia of global languages** make the Sigma DS3 printer with 600 dpi stand out among direct-to-card printers
- Entrust has elevated our sophistication and innovation with leading-edge, patent-pending technology in the Sigma DS3 with 600 dpi, enabling remarkably high-quality desktop direct-to-card printing.
- Intuitive printer dashboard lets you see printer status, order supplies, check cleaning status, update firmware, or contact help – all from your mobile device.
- Variable LED light ring allows you to incorporate brand colors or other customization into your ambient environment.

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Unmatched security

- The DS3 printer with 600 dpi supports rendering complex fonts, **miniature QR codes, and micro-sized security printing**.
- Enhanced security remains a cornerstone with Secure Boot and TLS/SSL encryption as well as enhanced durability options.
- UV printing, holographic laminates, luster printing, and tactile impressions can be added to cards to protect against tampering and counterfeiting.
- 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.

Flexibility and scalability built for the future

- Enhanced issuance capabilities for card issuance to meet your business needs
- Expand your ID program as your needs change by adding multi-hopper, smart card capabilities, color tactile printing, and more.
- Seamless self-service lets you access how-to videos and other helpful resources by simply scanning a QR code on the LCD display.
- Innovative **patented "printhead protector" feature shields the printhead** during ribbon replacement or printer servicing, which helps to extend the printhead life. This enables you to easily fix the issue at hand without having to worry about damaging the printhead.
- Optional locks protect card stock and supplies.

300 x 300 dpi printing
Common market print resolution

Industry-leading Sigma DS3 printer with
600 dpi high-fidelity print resolution

TECHNICAL SPECIFICATIONS

Standard Features & Supplies	
Print technology	Dye-sublimation / resin thermal transfer
Print capabilities	Single- or dual-sided, rewritable technology
Print resolution	600 dots per inch (dpi): 600 x 600 for color and monochrome (600 X 300 color selectable)
Print speed	YMCK ribbon with laminate: front side YMCK with lamination via CLM: Up to 150 CPH (600x600 dpi) 210 CPH (600x300 color & 600x600 dpi K) YMCKT ribbon: front side YMCKT: Up to 120 CPH (600x600 dpi) & 160 CPH (600x300 color & 600x600 dpi K) YMCK-K ribbon: front side YMCK with lamination via CLM & back side K with lamination: Up to 115 CPH (600x600 dpi) & 185 CPH (600x300 color & 600x600 dpi K) YMCKT-KT ribbon: front side YMCKT & back side KT: Up to 85 CPH (600x600 dpi) & 100 CPH (600x300 color & 600x600 dpi K) Mono ribbon: simplex, front side K: Up to 500 CPH (600x600 dpi K) Mono ribbon: duplex, front side K & back side K: 255 CPH (600x600 dpi K) Note: Printer modules such as CLM laminator process cards in batch printing, allowing the cards to print at top speeds then pass through to the modules, reducing throughput impact.
Card capacity	Input hopper: 125 cards Output hopper: 25 cards
Card sizes	Thickness: 0.010 inches to 0.040 inches (0.25mm - 1.016mm) Dimension: ID-1 (CR-79, CR-80) Reject hopper: 10 cards
Operating environment	Temperature: 60°F to 95°F (15°C to 35°C) Humidity: 20-80% RH – non condensing
Physical dimensions	L 17.4 in x W 8.3 in x H 9 in / 44.2 cm x 22.1 cm x 22.9 cm
Weight	12.1 lbs (5.49 kg); varies with options
Connectivity	USB and Ethernet
Warranty	36 months
Web browser support for Instant ID as a Service	Chrome (preferred) Edge/Internet Explorer Safari
Operating system support for printer driver	Windows 11 Windows 10, 32- and 64-bit Windows Server 2019 Windows Server 2022

Optional Features & Supplies		
Magnetic stripe encoding	ISO 7811 three-track support (high- and low-coercivity) JIS Type II single-track option	
Multi-hopper	Six compartment multi-hopper (six 125-card hoppers, 750-card total capacity)	
WiFi	Standards: 802.11g/n/ac Frequencies: 2.4GHz & 5GHz Authentication modes: WPA2 Personal, WPA2 Enterprise	
Smart card encoding*	Single wire or loosely coupled: • 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, MIFARE DESFire EV1/EV2, HID Prox, iClass, iClass SE, iClass Seos, Felica	
Panel Print Ribbons**	**Refill options:** YMCKT 500 images YMCKT-KT 350 images KTT 750 images YMCKT 250 images ymcKT 650 images YMCKT-KT 350 images ymcKT-KT 435 images KT 1,000 images YMCKF-KT 300 images YMCKL-KT 300 images	**Overlays and films** Clear or holo topcoat: 1,000 images DuraGard® clear or holo laminate (0.5, 0.6, or 1 mil): 350 images DuraGard® clear or holo laminate (1.0 mil): 300 images Clear DuraShield™ overlay***: 500 images **Tactile foil cassettes** Silver metallic, gold metallic, copper metallic, and black gloss: 1,000 images White gloss: 750 images
Monochrome ribbons	Black, white: 2,500 average images	

*Compatibility with specific features of new card technologies should always be confirmed.

** Color ribbon guide: 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.

***For use in conjunction with in-line T-panel print ribbon and laminator overlay.

Panel print ribbon yields stated are typically the maximum number of panel sets per roll.

Average image per roll. Actual ribbon yields may vary due to user individual image printing. Yield may be greater with Entrust monochrome ribbon saver features.

Actual yields may vary based upon print length and other factors.

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