

DATASHEET

Sigma DS2

Direct-to-Card Printer

HIGHLIGHTS

Sigma: The next generation of direct-to-card printing

Entrust Sigma ID Card Printers are specifically designed for today's cloud environments and give you the ability to easily issue secure identities.

- **Simple:** From unboxing to issuing ID cards and mobile flashpasses 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 help protect your cards and your customers' data during 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 world's most user-friendly ID 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
- Optional pre-loaded ribbon cassettes make switching ribbons easy
- Innovative patented printhead protector feature shields the printhead during ribbon replacement or printer servicing, which helps to extend the printhead life. Enables you to easily fix the issue at hand without having to worry about damaging the printhead.

Unmatched security

- 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
- Optional locks protect card stock and supplies
- Security features added to cards protect from tampering and counterfeiting:
 - UV printing
 - Holographic laminates
 - Luster printing

Flexibility and scalability built for the future

- Issuance capabilities include physical cards and digital mobile flashpass
- Choose on-premises or cloud-hosted deployment
- Expand your ID program as your needs change by adding smart card capabilities, WiFi connectivity, and more
- Print anytime, anywhere with your mobile device (iOS, Android, Windows)



TECHNICAL SPECIFICATIONS

Standard Features & Supplies			
Print technology	Dye-sublimation / resin thermal transfer		
Print capabilities	Single or dual-sided		
Print resolution	300 dots per inch (dpi) (300 x 600, 300 x 1200)		
Print speed	Single-sided color ribbon: up to 225 cards per hour (cph) Double-sided color ribbon: Up to 140 cards per hour (cph) Monochrome printing: Up to 880 single-sided cards per hour (cph)		
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	11.3 lbs (5.49 kg); will vary 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 2022 Windows Server 2019	Linux Ubuntu 20.04 LTS Linux Kylin 10



Optional Features & Supplies

Magnetic stripe encoding	ISO 7811 three-track support (high- and low-coercivity) JIS Type II single-track option																				
WiFi	Standards: 802.11g/n/ac Frequencies: 2.4GHz & 5GHz Authentication modes: WPA2 Personal, WPA2 Enterprise																				
Smart card encoding*	Single wire or loosely coupled: <ul style="list-style-type: none"> • 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 PLUS, MIFARE® DESFire EV1/EV2/EV3, HID Prox, iClass, iClass SE, iClass Seos, Felica 																				
Prefilled print ribbon cassettes	<table> <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>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	ST-KT	500 images	GT-KT	500 images										
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Monochrome ribbons	Black, white, blue, red, green, scratch-off, silver matte, gold matte, silver metallic, and gold metallic: 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, S=Silver matte, G=Gold matte.

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

Monochrome print ribbon yields stated at 2,500 is the estimated image yield per roll for industry average personalization of 1.95 in (49mm) print length. Actual yields may vary based on print length and other factors.