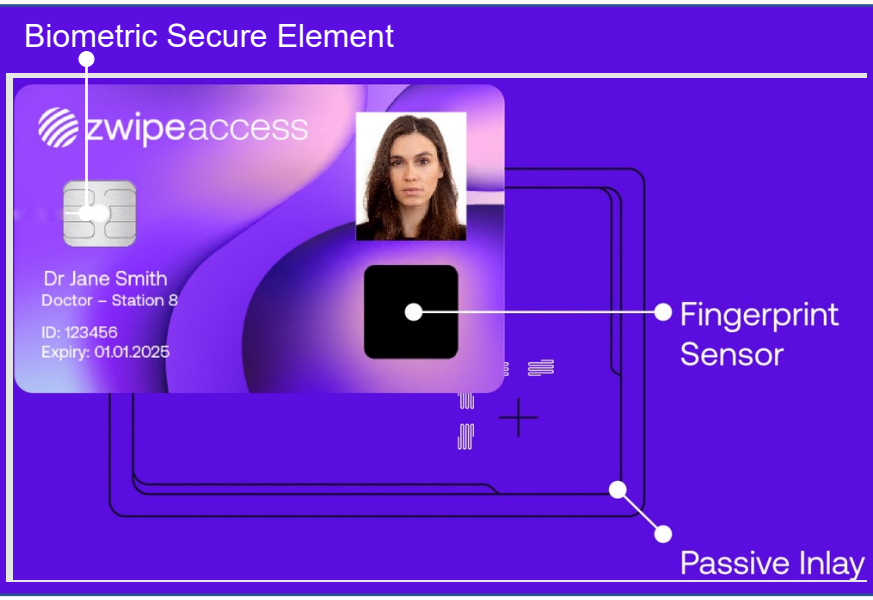
Zwipe Access

HID® Seos®



Zwipe Access is a card-based fingerprint access control solution. Fingerprint capture, extraction, and comparison are performed within the Zwipe Access card. This means that the cardholder's biometric data never leaves the card providing increased data privacy to the cardholder.

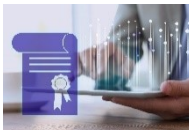
Zwipe Access enables two-factor authentication with biometrics without the need of an additional fingerprint reader, where the card verifies the cardholder identity, and the access control system verifies the card's authenticity and integrity.

Zwipe Access is based on Java Card infrastructure that allows Java Card-based applications (applets) to be run securely within the platform. With **Zwipe Access,** HID® Seos® applications such as access control, time & attendance, network login and secure printing can be virtualized and combined with strong fingerprint authentication. Customers may also run their own Java Card applications, such as FIDO, PKI, Crypto wallets, secure storage, or any other applications on the Zwipe Access platform.

Zwipe Access shares a platform with our payment product, called **Zwipe Pay,** which has undergone the security and durability testing mandated by payment schemes (Visa & Mastercard) for the daily usage of payment cards. **Zwipe Access** also undergone Interoperability testing performed by HID®, following their standard procedures.

✓ JavaCard based multi-application support

✓ Secure on-card capture & storage of fingerprint data.



✓ Share same platform with certified payment product.

✓ Secure data transfer between FP sensor and SE.

✓ Integrates into existing physical and logical access.

✓ Batteryless and card harness power from RF field.

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Specifications

Product Name	Zwipe Access
Order through	sales@zwipe.com
Biometric Secure Element	
Secure Element	Idemia Starchip® SCR496U
Architecture	CORTUS® APS3cd 32-bit core with RISC Architecture.
Interfaces	ISO/IEC 7816-3, Class A&B, ISO/IEC 14443, Type A
Fingerprint sensor	
Fingerprint Sensor	IDEX Biometrics IDX3405
Fingerprint sensing technology	Off-chip capacitive
Fingerprint active sensing area	9.5 mm x 9.5 mm
Functional	
Operating Frequency	13.56 MHz with ISO/IEC 14443 Type A
Communication	ISO/IEC 7816-3, ISO/IEC 14443 Type A
Communication speed	848 kb/s (ISO/IEC 14443 Type A)
Typical Maximum Read Range	2-5 cm (depending on the reader used)
NVM Memory Type	FLASH
Write Endurance / Data Retention	Min 500,000 cycles / 10 years
Platform	Oracle Java Card Platform, Classic Edition 3.0.4 and Global Platform Card Specification, v2.3 with Global Platform Financial Configuration, v1.0.2
Security Certification	EMVCo certified Hardware platform
Durability Certification	Mastercard CQM & Visa Biometric Card Body Innovation Testing
Multi-application support	Yes
Available platform memory	200 kBytes
HID® Seos®	
Application Specific Memory	8 kBytes
Typical Transaction Time	~1-1.5 s (@ 1.5 A/m).
Multi-Application on card	Yes, multiple logical records & data groups.
SIO Data Object	Yes, default.
Elite Customer Key	Yes
Supported PACS format	H10301, H10302, H10304, Corporate 1000(35 bit & 48 bit)
HID® Format	Yes (wrapped in SIO).
HID® Global SIO Data Object	Yes, default.
HID® iCLASS® Legacy Data Formats	N/A.
Extended Privacy	Yes.
Static UID	Yes, optional[1].
Security Features	Mutual authentication and diversified keys based on AES128.
Physical & Operational	
Dimensions	ISO/IEC 7810 ID1 size - 85.6 × 53.98 × 0.68 mm^3
Material Composition	5-layer symmetrical laminated PVC with embedded copper wire inlay
Operating Temperature	0 °C - 45 °C
Operating Humidity	20% - 80% RH, non-condensing
Operating lifetime	5 years (normal use conditions)
Printing Options	
Printable	Yes (glossy white front avoiding fingerprint and contact pad area /glossy white back). For more details, contact support@zwipe.com.
Slot Punch	Not available

[1] Not recommended, negates privacy. Provides ISO/IEC 14443 Type A 7 Byte UID interoperability.

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