







### iCLASS SE® Platform

### Meeting the Needs of Today and Tomorrow

Organizations today are continually tasked to keep up with ever-changing security technologies. As requirements continue to evolve, this presents unique challenges to security directors with currently-deployed ID badges and existing systems for building access management and control.

In order to address this issue, there are key questions that may be asked by those responsible for physical access control systems, including:

- Will my current access control system work with the new directives and requirements?
- If not, what can I do to comply?
- How do I take advantage of enhanced security technologies for credential management to improve my organization's security profile?

The answers to these questions will vary depending on an organization's systems, policies and structure. At the same time, there has been a fundamental shift in access control that also significantly impacts how secure identities are created,

used and managed. With advancements in access control, you no longer need to choose a technology for your system that you are locked into down the road. Instead, the latest solutions have made it possible for customers to dynamically enhance and change your technology over time to meet the evolving needs of your business.

As the new standard in access control, HID Global's iCLASS SE® platform positions you for the future with an open and adaptable solution that allows you to easily integrate your system for:

- Higher security
- Enhanced privacy
- Interoperability
- Flexibility and performance
- Increased portability



### **iCLASS SE SOLUTIONS**

Next generation access control solutions for increased security, adaptability, and enhanced performance. Supports multiple card technologies including iCLASS\*, MIFARE\* Classic and MIFARE DESFire\* EV1.



# Creating, Using & Managing Identities Made Simple

#### iCLASS SE® Solutions

The award-winning iCLASS SE platform features a broad portfolio of eco-friendly, field-upgradeable readers, credential encoding solutions, microprocessor-based cards, smart cards, and digital credentials for mobile access. The platform also includes a comprehensive set of tools that simplify third-party product development.

#### Adding Mobile Access with iCLASS® Seos™

Organizations large and small are becoming more mobile each day and security to support them must be also. The platform's iCLASS Seos credentials are portable for use on Near Field Communications (NFC)-enabled mobile devices, which allows customers to use NFC smartphones, USB tokens, and other devices for access control and other applications.

### The Right Choice in Access Control

Supporting a full range of legacy, current and future technologies, iCLASS SE is a standards-based platform that makes it possible for you to use the technology of your choice within your access control system. The platform simplifies how identities are created, used and managed,

enabling you to implement the right combination of technology, mobile devices, and traditional cards and badges that meets your organization's specific needs.

Whether you're introducing a new access control system in your organization, migrating to a higher level of security, or incorporating the use of NFC smartphones for mobile access, the iCLASS SE platform provides customers with the assurance that your investment in today's technologies can be leveraged into the future.





# More Powerful, More Secure



### SIO Enabled (SE)

The Secure Identity Object\* (SIO\*\*) is a technology-independant, standards-based data model for securely storing and transporting identity information in a single object. SIOs consist of a number of independent but associated data objects for physical access control (such as card numbers), biometric fingerprint templates, cash-on-card, and other applications.

### **Highly Secure, Strong Privacy**

The iCLASS SE® platform make access control more powerful and more secure by going beyond the traditional smart card model with multi-layered security that is independent of the card technology. Based on HID Global's Secure Identity Object® (SIO™) data model, the platform delivers added protection to identity data, as well as additional key diversification, authentication and encryption. These features bring enhanced card-to-reader security, increased privacy and maximum security to your access control system.

### **Trust-Based Security**

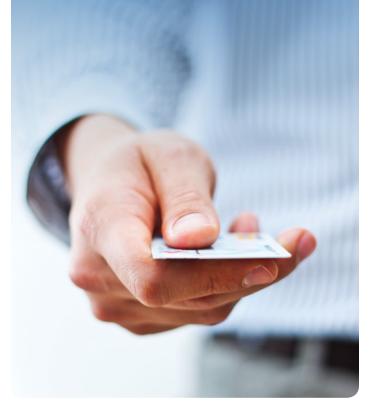
The iCLASS SE platform utilizes state-of-the-art cryptography and a secure messaging protocol for trust-based communication that operates with HID Global's Trusted Identity Platform® (TIP™). TIP further ensures trusted identities within a secure ecosystem of interoperable products.

#### iCLASS® Seos™

Continuing to raise the bar for security, the platform's breakthrough iCLASS Seos credentials enable multiple SIOs to be embedded into a single credential or device. This provides individual protection for each application's identity data, in addition to the high security already provided as part of the iCLASS SE platform.

### **Additional Security Features:**

- EAL5+ certified Secure Element hardware for readers for tamper-proof protection of keys and cryptographic operations
- SIO Data Binding that inhibits data cloning by binding an object to a specific credential
- Secured communications using Open Supervised Device Protocol (OSDP) with Secure Channel Protocol
- Expanded iCLASS Elite™ Program for extended security by protecting uniquely keyed credentials, SIOs and programming update keys
- Mutual authentication, encrypted data transfer, and 64-bit diversified keys for read/write capabilities





## Interoperability and Migration

The iCLASS SE® platform offers the broadest portfolio of multi-technology readers and smart cards that are adaptable to a wide array of card populations. This makes it easier and more cost-effective to migrate to more secure and flexible technology on your schedule and to your specific requirements.

#### **Easy Upgrades**

With the industry constantly changing, the iCLASS SE platform supports future technologies and applications to ensure your access control system is interoperable with the latest advances in the market. Ideal for mixed technology environments, iCLASS SE platform readers support iCLASS® Seos™, iCLASS SE, standard iCLASS, MIFARE®, and MIFARE DESFire® EV1. They also support 125 kHz HID Prox, Indala®. AWID and EM4102 for customers moving from low frequency to high frequency technology. The readers enable the use of both low and high frequency technologies simultaneously and also support the use of digital credentials on NFC-enabled smartphones and other mobile devices.

### **Encode Credentials Locally, On Demand**

Migrating current systems to operate with iCLASS SE readers has never been easier with the platform's credential encoding solutions. Customers are empowered to encode an extensive range of credential technologies, on demand, through an easy and straightforward process. You can simply extract access control data from an existing card and write it to a new card, or you can wrap the existing credential data in an SIO<sup>™</sup> for higher security and write it back to the same card. Customers can encode both Genuine HID® and third-party credentials, such as MIFARE, in order to upgrade existing card populations for use within the iCLASS SE platform.



### SEOS

#### Sen

The Seos ecosystem provides a highly secure, standards-based ecosystem for the generation, delivery and revocation of digital keys to open doors and authenticate identities using mobile devices, while providing the industry a single point of entry for mobile access adoption and global interoperability of locks, readers and cards. Seos keys on mobile phones replace mechanical keys and access cards for opening doors to homes, hotels, offices, hospitals and more.

## HID Global's iCLASS SE® Platform Positions You



Safely and securely embed digital credentials into NFC-enabled smartphones and other mobile devices for use in a wide range of applications with Seos™.



### **ASSA ABLOY Locks**

Enable the use of NFC locks from HID Global's parent company ASSA ABLOY. The platform also supports ASSA ABLOY's Seos digital keys and the Seos ecosystem for issuing, delivering and revoking digital keys on NFC mobile phones.



### **Authentication**

Manage secure logon to IT resources and identity verification with ActiviD® solutions and one time password (OTP) tokens.



Future-proof access control system investments by enabling the use of multiple technologies and easy migration to the latest technologies over time.





### FARGO® Printers & Encoders

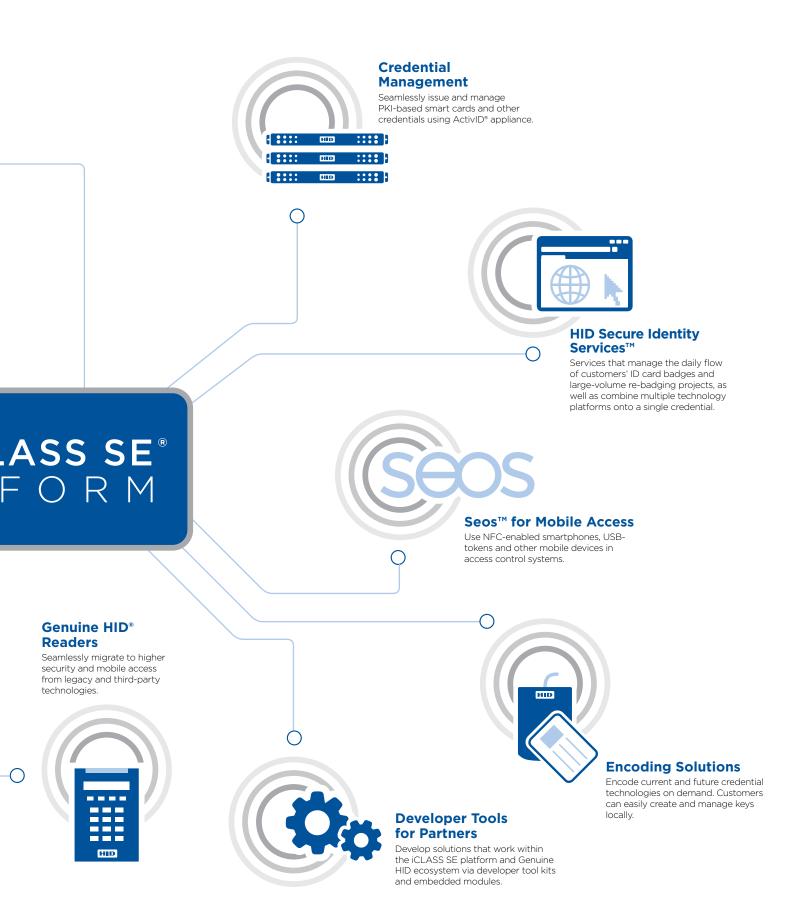
Create, design, program, encode and print fully encrypted cards.



### **Applications**

Use a single smart card or smartphone for physical access control, PC logon, biometrics, building automation, time and attendance, secure print authentication, cashless payment, and more.

## ou for the Future with a Complete Ecosystem





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