

Dutch Government Access-Control Reader

Executive Summary

HID Global's Rijkspas-compliant iCLASS® Reader provides a comprehensive, uniform, efficient and effective access control solution for Dutch government agencies adopting MIFARE DESFire® EV1 smart card technology as required by the Rijkspas program. Built on HID's world-leading iCLASS reader platform, the Rijkspas-compliant smart card reader makes it possible for government entities to easily migrate from existing contactless cards to the new Dutch Government Rijkspas-compliant smart cards.

HID's Rijkspas reader offers the following features and benefits:

- Enhanced reader-to-card security
- Cryptographically hardened reader key security
- Full Rijkspas application processing
- Multi-card population support including Rijkspas, Custom MIFARE and HID Prox
- Quick-turn configuration for reading a variety custom MIFARE cards
- Cost-effective reader configuration and upgrades to new specifications
- Seamless credential migration

Rijkspas Program Background

The goal of the Rijkspas Program is to provide a comprehensive concept for uniform, efficient and effective access control for Dutch government agencies. At the request of the Ministry of the Interior, three chip technologies were evaluated and one was chosen that more than met the security requirements for a new proximity card. This new multi-functional government access control card extends beyond the security of the old MIFARE Classic card. The Rijkspas program security is built based on stringent standards and specifications set by Dutch government agencies.

Based on a very specific implementation of a DESFire EV1 application, the Rijkspas-compliant iCLASS reader is designed to read Rijkspas EV1 specified cards and not other EV1 based technology. The reader is out-of-the-box configured for the Rijkspas application, simply requiring field configuration by an appropriate Government agency to load the keys and test the reader with the installed access control system to read government issued Rijkspas cards with MIFARE DESFire EV1 technology.

Technology Features and Benefits

Security - With more rigorous security measures in place from the Dutch Government, HID iCLASS Rijkspas-compliant readers support the emerging DESFire EV1 technology with Advanced Encryption Standard (AES) providing protection for data transfers between the credential and the reader. Additionally, the HID Rijkspas-compliant iCLASS reader makes use of an embedded SAM (Secure Access Module) performing all cryptographic operations. In addition the SAM is equipped with hardware security measures that allow, for the secure storage of secret keys. Because of this cryptographic device, the credential and card readers are extremely secure and resistant to certain security compromises. Today, the Rijkspas-compliant iCLASS reader is the only Rijkspas-compliant reader utilizing SAM.

Compatibility - When a card is configured with multiple applications, the HID Rijkspas-compliant iCLASS reader ensures the applications are processed individually to provide a true multi-application solution. The reader also enables simultaneous support for MIFARE Classic and HID 125 kHz Prox and is capable of reading legacy cards, as well as the new Rijkspas cards, further simplifying conversion to the new standard by enabling users to migrate to the new Rijkspas over time.

Flexibility - The HID Rijkspas-compliant iCLASS reader can read MIFARE Classic cards, and can be configured to read custom applications or MIFARE Classic card serial numbers (CSN). Additionally, multiCLASS variants of the Rijkspas-compliant iCLASS reader are able to read HID Global 125 kHz Prox credentials with full support for wide range of formats, including existing Corporate 1000® cards enabling customers to easily and seamlessly upgrade from legacy to new technology.

Technology Features and Benefits (cont.)

Customization - The new Rijkspas reader is compatible with legacy credential populations through fully customizable and factory-configurable MIFARE Classic. Customization options for support of existing MIFARE Classic formats include custom key definition, MAD (MIFARE Application Directory), TLV (Tag Length Variable) data reading and fixed location/data length. Because this customization is part of the core Rijkspas reader, its flexibility reduces configuration start-up time compared to competitors requiring custom engineering.

Migration - Migrating from existing smart card technologies is possible with terminal strip connections and flush-mounting accessories combined with Custom MIFARE Classic compatibility. From the start, newly installed readers are able to simultaneously read the new MIFARE DESFire EV1 Rijkspas application and legacy MIFARE Classic applications, including custom and CSN reading. A powerful data-processing engine provides the flexibility to comply with common, pre-existing MIFARE Classic credential field configurations, including custom keys, MAD and TLV formatting. Pigtail connections combined with HID Prox compatibility provide easy migration from existing 125 kHz technologies. Simultaneous support of any HID Prox credentials and MIFARE DESFire EV1 Rijkspas applications allow for migration from legacy Prox installations. Additionally, multi-card populations of HID Prox and MIFARE Classic can be supported simultaneously with government EV1 credentials. Enabling easy migration, the iCLASS Rijkspas readers saves time and money for integrators and end-users.

Summary

Unlike other Rijkspas-compliant readers, only HID Global's Rijkspas-compliant reader provides true iCLASS security and the opportunity for convenient field configuration and upgrading. In conclusion, MIFARE DESFire EV1 support, use a SAM, optimal customization and simple migration capabilities can now be done using a single contactless card solution. Above all, with the Rijkspas-compliant iCLASS Reader, customers experience the confidence of knowing they selected a reader from HID Global, a trusted leader in providing solutions for the delivery of secure identity.