

iCLASS[®] Readers (Dutch Rijkspas-Compliant)

- ▶ **Rijkspas-Compliant** – Fully tested and compliant 13.56 MHz Smart Card readers with Dutch Government Rijkspas Specifications
- ▶ **MIFARE[®] DESFire[®] EV1 Support** – meets strict Rijkspas technology specifications
- ▶ **Proven Architecture** – Built on HID's world leading & flexible iCLASS[®] reader architecture
- ▶ **SAM Ready** – Highly secure embedded SAM (Secure Access Module) stores key information and process encryption and key diversification algorithms
- ▶ **Multi-technology Support** – Simultaneous support of Rijkspas, MIFARE Desfire EV1, MIFARE Classic and HID Prox for migration purposes.
- ▶ **Life-time warranty**



ACCESS flexibility.

Built on the world leading iCLASS[®] reader architecture, HID Global's Rijkspas-compliant smart card readers are designed for Dutch Government agencies adopting MIFARE[®] DESFire[®] EV1 smart card technology as required by the Rijkspas specification. Featuring a wide range of mounting methods and accessories, coupled with simultaneous support of MIFARE Classic and HID Prox, HID's Rijkspas-compliant smart card readers offer easy migration from existing contactless card populations.

MIFARE DESFire EV1 & SAM Support

Designed to support the emerging DESFire EV1 technology with the Advanced Encryption Standard (AES) per the Rijkspas specification, the reader makes use of an embedded SAM (Secure Access Module) for all cryptographic operations. The SAM is equipped with hardware security measures that allow the safe and secure storage of secret keys. In a typical application, the SAM is used to authenticate the DESFire EV1 card and decrypt all data read from the card using the AES cryptographic standard with 128-bit keys. The embedded SAM is environmentally secure from weather and upgrade requires only the use of a configuration card.

Migration

Terminal strip connections and flush mounting accessories, combined with MIFARE Classic compatibility, provides easy migration from existing smart card reader technologies. From the start, the newly installed readers simultaneously read new Rijkspas specification 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, provides easy migration from existing 125 kHz technologies. Simultaneous support of any HID Prox credentials data formats and Rijkspas specification allows for migration from legacy Prox installations. Additionally, multi-card populations of HID Prox and MIFARE Classic can be supported simultaneously with government EV1 credentials.

Field Configuration and Upgrade

Reader firmware cards make field upgrading of the entire reader firmware simple and convenient. Following a reader reboot, placing the secured firmware cards in front of the reader will load upgraded firmware in less than one minute. Additionally, configuration cards can change the various reader behaviors, including beeper/LED operation and custom MIFARE Classic configurations

Extended Product Lifecycle

The iCLASS Rijkspas reader can be easily reconfigured to support additional or substitute applications, including traditional iCLASS credentials, allowing installations the flexibility to address a change in tenancy.

Features

Security

AES encryption protects DESFire® EV1 credentials and data transfer between the credential and reader. The reader has an embedded SAM (Secure Access Module) that performs all cryptographic operations and is equipped with hardware security measures that allow the safe and secure storage of secret keys. In a typical application the SAM is used to authenticate the DESFire EV1 card and decrypt all data read from the credential using the AES cryptographic standard with 128-bit keys.

Easily Installed and Interfaced

Terminal strips are available on most models, providing simple re-wiring from existing terminal strip MIFARE Classic readers. Additionally a spacer accessory is available for any model. This allows for flush mounting where necessary. The reader's Wiegand output easily interfaces with most existing Wiegand protocol access control panels.

Indoor/Outdoor Design

Rugged, weatherized polycarbonate enclosure, designed to withstand harsh environments, provides reliable performance and resistance to vandalism.

Options

Colors - Black
Programmable LED/Beeper operation
Accessory - Security Tool; 04-0001-03

MIFARE Classic

Rijkspas, MIFARE DESFire EV1 and HID Prox (RSP40 only) simultaneously operate to allow easy migration from legacy credential technologies existing in the field to Dutch Government Rijkspas standard. Fully customizable and factory configurable MIFARE Classic provides reader compatibility with a legacy credential population. Customization options include custom key definition, MAD, TLV data reading and fixed location/data length.

Audiovisual Indication

Audio sounder provides various tone sequences to signify access granted, access denied, power up and diagnostics. Visually impaired cardholders can easily distinguish between access granted and access denied. A high-intensity light bar provides a clear visual status indication in red, green or amber.

	RS10	RS40	RSK40	RSP40
* Model Numbers	7100C	7120C	7130C	7125C
** Read Range	DESFire EV1 / MIFARE Classic Card: Up to 5.1 cm	DESFire EV1 / MIFARE Classic Card: Up to 6.4 cm	DESFire EV1 / MIFARE Classic Card: Up to 5.1 cm	DESFire EV1 / MIFARE Classic Card: Up to 6.4 cm HID Prox ISO Card: Up to 9.0 cm HID Prox Clamshell Card: Up to 10.0 cm
Mounting	The RS10 is physically our smallest reader and is ideally suited for mullion mounted door installations	The RS40, RSK40 & RSP40 are designed to mount and cover square and circular junction boxes. Mounting plate comes slotted with both European square and US single gang mounting holes.		
Keypad	No	Yes		No
Dimensions	4.8 cm x 10.3 cm x 2.3 cm	8.4 cm x 12.2 cm x 2.4 cm	8.5 cm x 12.2 cm x 2.8 cm	8.4 cm x 12.2 cm x 2.4 cm
Termination	Terminal Strip			Pigtail
Power Supply	5-16 VDC, Linear supply recommended			
*** Current Requirements	55mA AVG, 116mA PEAK	55mA AVG, 121mA PEAK	85mA AVG, 116mA PEAK	55 mA AVG, 141 mA PEAK @ 12 VDC
Operating Temperature	-25 to 65 C			
Operating Humidity	5% to 95% relative humidity non-condensing			
Transmit Frequency	13.56 MHz			125 kHz and 13.56 MHz
Cable Distance	Wiegand 500ft (150m) 22 AWG			
Card Compatibility	I4443A - read only; DESFire EV1 Application/File (Rijkspas), MIFARE Classic Sector, CSN ISO 15693 - Read only: iCLASS 2k bit, 16kbit, 32k bit: CSN****			125 kHz Proximity • HID proximity cards, keyfobs, and tags 13.56 MHz contactless smart cards • I4443A - read only; DESFire EV1 Application/File (Rijkspas), MIFARE Classic Sector, CSN ISO 15693 - Read only: iCLASS 2k bit, 16kbit, 32k bit: CSN****
Environmental	IP55			
Certifications	CE (EU), FCC Certification (US), IC (Canada), C-tick (Australia, New Zealand), SRRC (China), MIC (Korea), NCC (Taiwan), iDA (Singapore), RoHS			
Housing Material	UL94 Polycarbonate			
Warranty	Warrantied against defects in materials and workmanship for life. (See complete warranty policy for details.)			

* Consult How to Order Guide for specific ordering instructions.

** Dependent upon installation conditions.

*** Add 40mA current draw for USB expansion module. Add 10mA current draw for RS232, RS485 and UART expansion modules.

**** Requires Re-configuration for iCLASS® credential Support

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ACCESS experience.

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