

multiCLASS SE™ Readers



iCLASS SE Platform

HIGHLY ADAPTABLE AND SECURE HIGH FREQUENCY ACCESS CONTROL SOLUTION

- **Powerfully Secure** – Provides multi-layered security beyond the card technology, providing added protection to identity data using SIOs.
- **Technology-independent** – Supports multiple technologies (iCLASS® Seos™ and iCLASS SE credential platforms, standard iCLASS, MIFARE®, and MIFARE DESFire® EV1).
- **Adaptable** – Interoperable with a growing range of technology environments and form factors including NFC smartphones via Seos.
- **Standardized Communications** – Open Supervised Device Protocol (OSDP) for secure, bidirectional communication.
- **Streamlined Migration** – Simultaneous support for 125 kHz HID Prox®, Indala®, AWID and EM4102 for seamless migration; field programmable for secure upgrades and extended lifecycle.

HID Global's iCLASS SE access control platform goes beyond the traditional smart card model to offer a secure, standards-based and flexible platform that has become the new benchmark for highly adaptable, interoperable and secure access control solutions.

Additionally, multiCLASS SE readers support Near Field Communication (NFC) smartphones via Seos, enabling a new class of portable identity credentials that can be securely provisioned and safely embedded into both fixed and mobile devices.

multiCLASS SE readers include Open Supervised Device Protocol (OSDP), a new Security Industry Association (SIA) standard that together with Secure Channel Protocol (SCP) provides secure communications and central management.

multiCLASS SE readers simplify migration projects from legacy technologies with support 125 kHz for HID Prox, Indala, AWID and EM4102, and provide customers the assurance that their existing investments can be leveraged to enhance their system as business requirements change. The technology-independent readers also support iCLASS® Seos™ and iCLASS SE credential platforms, as well as standard iCLASS, MIFARE, MIFARE DESFire EV1 and other leading technologies.

As part of HID Global's iCLASS SE platform – based on HID's Secure Identity Object™ (SIO) data model and Trusted Identity Platform® (TIP™) – the powerfully secure multiCLASS SE readers offer advanced features such as multi-layered security beyond the card technology and tamper-proof protection of keys/cryptographic operations using EAL5+ secure element hardware.

POWERFULLY SECURE:

- Multi-Layered Security – Ensures data authenticity and privacy through the multi-layered security of HID's SIO.
- EAL5+ Certified Secure Element Hardware – Provides tamper-proof protection of keys/cryptographic operations.
- SIO Data Binding – Inhibits data cloning by binding an object to a specific credential.
- Secured communications using OSDP with Secure Channel Protocol.
- Expanded iCLASS Elite™ Program – Extends private security by protecting uniquely keyed credentials, SIOs and programming update keys.

HIGHLY ADAPTABLE:

- Near Field Communication (NFC) Card Emulation – Enables migration to HID access control on mobile devices.
- SIO Portability – Provides technology independence and portability to other smart card technologies.
- Upgradeable Hardware Connection – Allows all Wiegand-based communication readers to expand communication capabilities to OSDP, Hi-O and other bi-directional protocols.

- Customization and management from a central location – Using OSDP make changes and manage all attached OSDP readers over RS485 wiring.
- Simultaneous support for 125kHz HID Prox, Indala, AWID and EM4102.
- Allows for support of future technologies.

SUSTAINABILITY AND MANAGEMENT:

- Intelligent Power Management (IPM) – Reduces reader power consumption by as much as 75% compared to standard operating mode.
- Recycled Content – Contributes toward building LEED credits.
- Central management of connected readers using OSDP.

PERFORMANCE:

- SIO Media Mapping – Simplifies deployment of third-part objects to multiple types of credentials.
- Field Programmable Readers – Provides secure upgrades for migration and extended lifecycle.
- RGB LEDs – Delivers increasing capability to notify users and troubleshooters regarding system state.



SPECIFICATIONS

	RP10	RP15	RP30	RP40	RPK40
Base Part Number	900P 900L	910P 910L	930P 930L	920P 920L	921P 921L
Typical Read Range* (inches)	13.56 MHz Single Technology ID-1 Credentials (Cards) – SIO Model Data				
	iCLASS® SE™: 2.6" (6.6 cm) SE for DESFire® EV1: 1.2" (3.0 cm) SE for MIFARE® Classic: 1.5" (3.8 cm)	iCLASS SE: 2.9" (7.4 cm) SE for DESFire® EV1: 1.4" (3.6 cm) SE for MIFARE Classic: 2.5" (6.4 cm)	iCLASS SE: 3.0" (7.6 cm) SE for DESFire® EV1: 1.5" (3.8 cm) SE for MIFARE Classic: 2.3" (5.9 cm)	iCLASS SE: 3.5" (8.9 cm) SE for DESFire® EV1: 1.6" (4.1 cm) SE for MIFARE Classic: 2.7" (6.9 cm)	iCLASS SE: 3.3" (8.4 cm) SE for DESFire® EV1: 1.4" (3.6 cm) SE for MIFARE Classic: 2.9" (7.4 cm)
	13.56 MHz Single Technology Tags/Fobs – SIO Data Model				
	iCLASS SE: 1.1" (2.8 cm) SE for MIFARE Classic: 0.8" (2.0 cm)	iCLASS SE: 1.3" (3.3 cm) SE for MIFARE Classic: 0.9" (2.3 cm)	iCLASS SE: 1.4" (3.6 cm) SE for MIFARE Classic: 0.9" (2.3 cm)	iCLASS SE: 1.5" (3.8 cm) SE for MIFARE Classic: 0.6" (1.5 cm)	iCLASS SE: 1.4" (3.6 cm) SE for MIFARE Classic: 0.7" (1.8 cm)
	125 kHz Single Technology ID-1 Credentials (Cards) – Respective Prox Data Model				
	HID Prox / AWID: 2.5" (6.4 cm) Indala Prox: 1.5" (3.8 cm) EM4102: 1.5" (3.8 cm)	HID Prox / AWID: 2.8" (7.1 cm) Indala Prox: 1.7" (4.3 cm) EM4102: 2.2" (5.6 cm)	HID Prox / AWID: 2.7" (6.9 cm) Indala Prox: 1.0" (2.5 cm) EM4102: 2.0" (5.1 cm)	HID Prox / AWID: 2.5" (6.4 cm) Indala Prox: 1.2" (3.0 cm) EM4102: 1.8" (4.6 cm)	HID Prox / AWID: 1.4" (3.6 cm) Indala Prox: 0.8" (2.0 cm) EM4102: 0.8" (2.0 cm)
	125 KHz Single Technology Tags/Fobs – Respective Prox Data Model †				
	HID Prox / AWID: 0.8" (2.0 cm)	HID Prox / AWID: 0.9" (2.3 cm) EM4102: 0.7" (1.8 cm)	HID Prox / AWID: 0.8" (2.0 cm) Indala Prox: 0.8" (2.0 cm) EM4102: 0.8" (2.0 cm)	HID Prox / AWID: 0.8" (2.0 cm) EM4102: 0.7" (1.8 cm)	N/A
Mounting	Mini-Mullion Size; physically HID's smallest iCLASS readers and are ideally suited for mullion-mounted door installations, U.S. single-gang J-box (with mud ring) or any flat surface	Mullion Size; physically HID's second smallest iCLASS readers and are ideally suited for mullion-mounted door installations, U.S. single-gang J-box (with mud ring) or any flat surface	EU / APAC Square Size: 83.8 mm (3.3") square reader is designed to mount to and cover standard European and Asian back boxes	Wall Switch Size; designed to mount and cover single gang switch boxes primarily used in the Americas and includes a slotted mounting plate for European and Asian back box spacing	
Color	Black or Gray				
Keypad	No				Yes (4x3)
Dimensions	1.9" x 4.1" x 0.9" 4.8 cm x 10.3 cm x 2.3 cm	1.9" x 6.0" x 0.9" 4.8 cm x 15.3 cm x 2.3 cm	3.3" x 3.3" x 0.9" 8.4 cm x 8.4 cm x 2.3 cm	3.3" x 4.8" x 1.0" 8.4 cm x 12.2 cm x 2.4 cm	3.3" x 4.8" x 1.1" 8.5 cm x 12.2 cm x 2.8 cm
Product Weight (Pigtail)	4.0oz (114g)	5.2oz (149g)	5.3oz (151g)	7.8oz (222g)	9.1oz (258g)
Product Weight (Terminal Strip)	3.0oz (85g)	4.3oz (124g)	4.1oz (118g)	7.6oz (216g)	8.0oz (228g)
Operating Voltage Range	5-16 VDC, Linear supply recommended				
Current Draw - Standard Power Mode*** (mA)	60	60	75	75	110
Current Draw - Intelligent Power Management (IPM) Mode*** (mA)	35	35	35	35	65
Peak Current Draw - Standard Power or IPM Mode*** (mA)	100	100	110	110	130
NSC** Power Consumption - Standard Power Mode (W @ 16VDC)	1	1	1.2	1.2	1.8
NSC** Power Consumption - w/ IPM (W @ 16VDC)	0.6	0.6	0.6	0.6	1
Operating Temperature	-31° to 150° F (-35° to 65° C)				
Storage Temperature	-67° to 185° F (-55° to 85° C)				
Operating Humidity	5% to 95% relative humidity non-condensing				
Environmental Rating	IP55				
Transmit Frequency	13.56 MHz & 125 kHz				
13.56 MHz Card Compatibility	Secure Identity Object™ (SIO) on iCLASS SE/SR, SE for MIFARE DESFire EV1 and SE for MIFARE Classic (On by Default) Non-default programmable options include: additionally support - standard iCLASS Access Control Application (order with Standard interpreter) -ISO14443A (MIFARE) CSN, ISO14443B CSN, ISO15693 CSN -ISO14443A/B (FIPS-201 Transparent FASC-N Read) (order -F model with FIPS interpreter)				
125 kHz Card Compatibility†	HID, AWID, Indala, EM4102				
Communications	Optional OSDP with SCP over RS485 Wiegand/Clock-and-Data Interface 500ft (150m) (22AWG) - Use Shielded cable for best results				
Panel Connection	Pigtail or Terminal Strip				
Certifications	UL294/cUL**** (US), FCC Certification (US), IC (Canada), CE (EU), C-tick (Australia, New Zealand), SRRC (China), MIC (Korea), NCC (Taiwan), iDA (Singapore), RoHS , FIPS-201 Transparent FASC-N Reader				
Crypto Processor Hardware Common Criteria Rating	EAL5+				
Patents	US7180403, US7439862, US7124943, US5952935, US6058481, US6337619				
Housing Material	UL94 Polycarbonate				
Manufactured with % of recycled content (Pigtail)	10.5%	11.0%	11.0%	10.5%	10.9%
Manufactured with % of recycled content (Terminal Strip)	10.5%	11.0%	10.0%	11.0%	12.3%
UL Ref Number	RP10D	RP15D	RP30D	RP40D	RPK40D
Warranty	Limited Lifetime				

* Typical read range achieved in air. Different types of metal will cause some degradation (typically up to 20%).
Use spacers to space product off metal and improve read range if required.

** NSC = Normal Standby Current

*** Measured in accordance with UL294 standards

**** UL294 functionally certified for Wiegand output only

† If a technology read range is not listed, the compatibility is not currently available in the associated reader model.

North America: +1 949 732 2000

Toll Free: 1 800 237 7769

Europe, Middle East, Africa: +44 1440 714 850

Asia Pacific: +852 3160 9800

Latin America: +52 55 5081 1650

ASSA ABLOY

An ASSA ABLOY Group brand

© 2012 HID Global Corporation. All rights reserved. HID, the HID logo, iCLASS SE, iCLASS, Secure Identity Object and iCLASS Elite are trademarks or registered trademarks of HID Global in the U.S. and/or other countries. All other trademarks, service marks, and product or service names are trademarks or registered trademarks of their respective owners.
2012-09-06-hid-multiclass-se-readers-ds-en