



MULTI-TECHNOLOGY CARD FOR UPGRADING TO HIGHER SECURITY AND FUNCTIONALITY

- **Versatile** - Supports iCLASS® and advanced credential technology powered by Seos®, allowing seamless migration to a higher standard of security and functionality.
- **Robust** - In addition to supporting physical access, this single card solution powered by Seos also supports secure, private network access via one-time password (OTP).
- **Convenient** - Save time and resources by managing a one card credential solution instead of two separate cards.

HID Global's iCLASS® Seos®/iCLASS® dual-technology smart card is the perfect solution for environments where multiple legacy reader technologies are in place and the move to advanced, more secure technology is desired.

This versatile smart card, interoperable with all iCLASS and iCLASS SE® readers, facilitates the move to more secure access control. Conveniently replace readers gradually as time and budget allow. The benefits of enhanced security, privacy and functionality powered by Seos® can be fully realized as you transition to the new standard.

Features enabled through Seos technology include the ability to use mobile devices for secure access and efficiently managing multiple applications.

Convenience beyond the door

In addition to physical access applications, the robust multi-technology card supports secure, private access to IT resources (networks, computer login, cloud applications, and more) via a one-time-password (OTP).



Dual Technology Card

Base Part Numbers	52260 Seos® 8K + iCLASS® 2k bit (2k2) 52263 Seos 8K + iCLASS 32k bit (16k2/16k1) 52264 Seos 8K + iCLASS 32k bit (16k16/16k1)
Further options	Available factory programmed, or prepared for field encoding - see HID How to Order Guide for details
Order through	Local HID Sales support / HID How To Order Guide

FUNCTIONAL		
	Seos*	iCLASS SE*
Operating Frequency	13.56 MHz	13.56 MHz
Communication Protocol Compliance	ISO14443A	ISO15693
Communication Speed	Up to 848kbps	26kbps
Memory Type	EEPROM	EEPROM
Memory size	8 KBytes	2k bit/ 32k bit
Multiple Applications On-card Support	Yes, multiple logical records & data groups	2k bit (256 Bytes) - 1 application area 32k bit (4K Bytes) - 2 or 16 application areas plus 16k bits user configurable
HID Global SIO Data Object Support	Yes, default	Yes, optional
HID iCLASS Legacy Data Formats Support	N/A	Yes, optional
HID Prox and Indala® Format Support	N/A	N/A
Write Endurance / Data Retention	MIN 500,000 CYCLES / 20 YEARS	Min 100,000 cycles / 10 years
Typical Transaction Time	Data size dependant	<100ms
Extended Privacy Support	Yes	No
Static UID	Yes, optional ¹	N/A

TYPICAL READ RANGE ²				
Reader Environment	Standard ³	On-Metal ⁴	Standard ³	On-Metal ⁴
SE R10/R15 (including BLE)	1.4-2.2" (3.5-5.5cm)	0.8-1.4" (2-3.5cm)	1.4-1.8" (3.5-4.5cm)	1-1.4" (2.5-3.5cm)
SE R40/RK40 (including BLE)	1-2.2" (2.5-5.5cm)	Use a 1" Spacer ⁵	1-1.8" (2.5-4.5cm)	Use a 1" Spacer ⁵
SE RP10/RP15(including BLE)	0.4-1" (1-2.5cm)	Use a 0.5" Spacer ⁶	0.4-1" (1-2.5cm)	Use a 0.5" Spacer ⁶
SE RP40/RPK40 (including BLE)	0.8-1" (2-2.5cm)	Use a 1" Spacer ⁵	0.6-1" (1.5-2.5cm)	Use a 1" Spacer ⁵

PHYSICAL	
Dimensions	2.12" x 3.35" x 0.315" (54 mm x 85mm x 0.8mm)
Card Construction	Composite with 60% PVC / 40% PET, laminated card
Weight	About 5.5 g

THERMAL RESISTANCE, OPERATION AND STORAGE CONDITIONS	
Operating Temperature	-40°F to + 158 °F (- 40 °C to + 70 °C)
Storage Temperature	-31°F to + 122°F (- 35 °C to + 50 °C) for 1000h
Thermal Shock	-31°F to + 176°F (- 35 °C to + 80 °C), 50 cycles of 5 minutes, 30s transition time

CHEMICAL RESISTANCE AT ROOM TEMPERATURE (APPROX. 25°C), AS SPECIFIED IN ISO/IEC 10373	
	The card can withstand exposure salt water (5%) salt mist, acetic acid water (5%), carbonated sodium water (5%), sugared water (10%), fuel B and ethylene glycol (50%) for at least 24 hours

PRINTING OPTIONS	
Card Marking	©HID iCLASS Seos® iCLASS® Px XT
Printable	Yes (glossy white front /glossy white back) for best results use an HDP printer Direct-to-card printing not recommended. Contact your HID sales representative or find more information about FARGO® printers on the HID Global website.
Slot Punch	Not available
Magnetic Stripe	Optional
Custom Graphics	Optional

INTEROPERABILITY & WARRANTY	
Standards Compliance	ISO/IEC7810, ISO14443, ISO10373, ISO60529, ISO7816
Operates With	iCLASS SE* and iCLASS readers
Warranty	Lifetime Warranty

¹ Not recommended, negates privacy. Provides ISO14443A 7 byte UID interoperability
² Dual technology card performance is lower than single technology cards. Ensure a suitable reader is selected to match the installation environment to achieve desired performance. Actual results may vary based on environment. A spacer may be required.
³ Results reflect mounting on a dry wall or other non-metallic surface and with no metal in vicinity of the reader.
⁴ Results reflect mounting directly to a metal surface, a metal back box or dry wall with metal in close proximity to the rear of the reader.
 Spacer Part Numbers (for BLE enabled readers add "-M" to the below spacer part numbers)
⁵ 1" R40/RP40 spacer part number = **6132AKE** 1" RK40/RPK40 spacer part number = **6132AK**
⁶ 0.5" RP10 spacer part number = **6132AKB** 0.5" RP15 spacer part number = **6132AKC**