



**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

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

FUNCTIONAL		
	Seos*	iCLASS SE*
<b>Operating Frequency</b>	13.56 MHz	13.56 MHz
<b>Communication Protocol Compliance</b>	ISO14443A	ISO15693
<b>Communication Speed</b>	Up to 848kbps	26kbps
<b>Memory Type</b>	EEPROM	EEPROM
<b>Memory size</b>	8 KBytes	2k bit/ 32k bit
<b>Multiple Applications On-card Support</b>	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
<b>HID Global SIO Data Object Support</b>	Yes, default	Yes, optional
<b>HID iCLASS Legacy Data Formats Support</b>	N/A	Yes, optional
<b>HID Prox and Indala® Format Support</b>	N/A	N/A
<b>Write Endurance / Data Retention</b>	MIN 500,000 CYCLES / 20 YEARS	Min 100,000 cycles / 10 years
<b>Typical Transaction Time</b>	Data size dependant	<100ms
<b>Extended Privacy Support</b>	Yes	No
<b>Static UID</b>	Yes, optional <sup>1</sup>	N/A

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

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

THERMAL RESISTANCE, OPERATION AND STORAGE CONDITIONS	
<b>Operating Temperature</b>	-40°F to + 158 °F (- 40 °C to + 70 °C)
<b>Storage Temperature</b>	-31°F to + 122°F (- 35 °C to + 50 °C) for 1000h
<b>Thermal Shock</b>	-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	
<b>Card Marking</b>	©HID iCLASS Seos® iCLASS® Px XT
<b>Printable</b>	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.
<b>Slot Punch</b>	Not available
<b>Magnetic Stripe</b>	Optional
<b>Custom Graphics</b>	Optional

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

<sup>1</sup> Not recommended, negates privacy. Provides ISO14443A 7 byte UID interoperability  
<sup>2</sup> 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.  
<sup>3</sup> Results reflect mounting on a dry wall or other non-metallic surface and with no metal in vicinity of the reader.  
<sup>4</sup> 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)  
<sup>5</sup> 1" R40/RP40 spacer part number = **6132AKE** 1" RK40/RPK40 spacer part number = **6132AK**  
<sup>6</sup> 0.5" RP10 spacer part number = **6132AKB** 0.5" RP15 spacer part number = **6132AKC**