



# iCLASS SE<sup>®</sup> Reader Module



## EMBEDDED READER MODULES BUILT TO SUPPORT GROWING DEMAND FOR MOBILITY, SECURITY AND PRIVACY

- **Flexible** – Simultaneously supports low and high frequency credentials, including iCLASS<sup>®</sup> Seos<sup>®</sup>, HID Prox<sup>®</sup>, iCLASS SE<sup>®</sup>, MIFARE<sup>®</sup> Classic and MIFARE DESFire<sup>®</sup> EV1; supports NFC and Bluetooth for mobile devices.
- **Manageable** – Firmware is field-upgradable to extend the lifecycle of customer installations.
- **Compliant** – Supports strictest security standards such as EAL5+ to ensure regulatory compliance and restricted access to corporate resources.
- **Versatile** – Offers third-party products the ability to securely interoperate with the iCLASS SE<sup>®</sup> platform, connecting access control across the organization.

### FEATURES:

- Host-driven commands enable read/write to secure areas of smart devices
- Flexible configuration fits a variety of applications
- Ultra low power mode for battery-operated devices
- Adjustable Bluetooth Smart read settings control overall power and read range of Mobile IDs, enabling flexibility for both close proximity “tap” and longer range “Twist and Go” activation
- Directional antenna enables long-range reading distances up to 2m in correct orientation

In an increasingly mobile-first world, the need to integrate mobile connectivity into products and services is rapidly growing. iCLASS SE<sup>®</sup> Reader Modules allow integrators to design third-party solutions that support mobility via near field communications (NFC) or Bluetooth Smart, alongside a full range of contactless card technologies.

The iCLASS SE Reader Module's dual frequency capability allows the simultaneous use of both high and low frequency credentials on the same reader for mixed credential applications. The updated modules also provide new features including enhanced autonomous mode functions for easier host integration and low temperature capabilities for use in harsh environments.

To simplify and speed integration, HID Global provides an iCLASS SE Reader Module Developer Tool Kit (DTK) containing the necessary tools, documentation and developer resources to shorten integration cycles and reduce time to market with finished products.

The iCLASS SE Reader Modules, together with other iCLASS SE platform products, enable interconnected identity management. Built on open, standard technologies, the iCLASS SE platform, powered by Seos<sup>®</sup> allows organizations to leverage existing credentials for broader workplace solutions and the move them toward a connected environment built around mobility.

### MORE SECURE, TRUST-BASED SECURITY

- Tamper Proof – EAL5+ certified Secure Element hardware provides tamper-proof protection of keys and cryptographic operations to guard against cloning and other breaches.
- Multi-layered security model with secure key management system, breach resistant technology and enhanced privacy protection.
- Operates under HID Global's open iCLASS SE® platform, which creates a secure and trusted framework within which all cryptographic keys governing system security can be delivered with end-to-end privacy and integrity.

### ENHANCED LIFECYCLE MANAGEMENT

- Field programmable and featuring open and configurable Secure Identity Object® (SIO®) enabling a smart card technology upgrade path.

### iCLASS SE® READER MODULE DEVELOPER TOOLKIT (DTK)

- Provides a complete set of resources, allowing the immediate start of development.
- Includes a development board, allowing easy access to all iCLASS SE Reader Module interfaces, iCLASS SE Reader Modules in different form factors and test cards to speed the development process.
- A secure, online developer portal provides access to development documents, tools and utilities to accelerate the time to market.

### SUPPORTS NEXT-GENERATION SIO CREDENTIALS

- Enables a new class of portable identity credentials that can be securely provisioned and safely embedded into smart cards, and smartphones and other mobile devices using HID Global's iCLASS SE platform.



iCLASS SE Reader Modules



iCLASS SE Reader Module BT Xtender

## SPECIFICATIONS

Base Part Numbers	SE3200B	SE3210B
<b>Dimensions</b>	1.1" x 1.2" x 0.36" (28 x 30 x 9.2 mm)	1.3" x 1.7" x 0.36" (33 x 43 x 9.2 mm)
<b>Weight</b>	0.28 oz (8 g)	0.34 oz (9.7 g)
<b>Power Requirements</b>	Supply voltage 3.6 to 10V - HF and HF+BLE (No LF Prox) Supply voltage 5 to 10V - HF+LF and HF+LF+BLE (For optimised LF prox performance 5.25 to 10V, 6.0V typical)	
<b>Power Consumption</b>	<120 mA during card polling <10 uA in ultra low power mode Note: An additional 75mA is drawn by the heater circuit in temperatures below -13°F (-25°C)	
<b>Storage Temperature</b>	-49 to 185°F (-45 to +85°C)	
<b>Operating Temperature</b>	-31 to 149°F (-35 to +65°C)	
<b>Contactless Smart Card Interface</b>		
<b>RF Transmit Frequency</b>	13.56 MHz +/- 50 ppm	
<b>Smart Card Technologies</b>	ISO14443A/B ISO15693, FeliCa™ (IDm)	
<b>Supported Credentials &amp; IC's</b>	MIFARE® Classic, MIFARE DESFire® 0.6, MIFARE DESFire EV1, HID: iCLASS® Standard/SE/SR/Seos; PIV II, Secure Identity Object® (SIO®)	
<b>Transmission Rate</b>	Up to 848 kb/s (depending on IC & OS)	
<b>Antenna Support</b>	External antenna x 2 (1 x LF + 1 x HF)	
<b>Contactless Prox Card Interface</b>		
<b>RF Transmit Frequency</b>	125 kHz +/-1 kHz	
<b>Supported Credentials</b>	HID Prox, Indala Prox, EM4102, AWID Prox	
<b>iCLASS SE Reader Module Contactless Bluetooth Smart Interface</b>		
<b>RF Transmit Frequency</b>	2.4GHz - 2.48GHz	
<b>Supported Devices</b>	Mobile devices featuring Bluetooth 4.x (or higher), Android 4.3 (or higher), iOS 7 (or higher)	
<b>General Features</b>		
<b>I/O</b>	Green LED/Card Present, Red LED, Buzzer, Data Hold, Reset	
<b>Firmware Upgrade</b>	Local or remote upgrade of firmware providing firmware upgrade and feature enhancement capability	
<b>Connectors</b>	1 x 30 Pin - General Purpose (Serial I/F, I/O and PSU) Solder pads also available	1 x 8 Pin - Serial I/F 1 x 9 - Pin I/O and PSU 1 x 4 Pin - Antenna 1 x 30 Pin - General Purpose (Serial I/F, I/O and PSU)
<b>Hardware Interface</b>	Wiegand, Clock-and-Data, UART	
<b>Global Certifications</b>	UL Recognition (Recognized Component) to UL294 for the USA and CSA C22.2 No. 205 for Canada. CE, FCC 47 Part 15 modular approval, RoHS, WEEE	



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