The most current version of this document is available for download at:

To check order status go to:

For Contact cards, 3rd Party Contact-Chips and embeddable cards with or without contact chip, see the Logical Access How to Order Guide.

For Embedded products, see the Embedded How to Order Guide.

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Document History

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<th>Date</th>
<th>Author</th>
<th>Description</th>
<th>Version</th>
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<tr>
<td>11/28/12</td>
<td>SA / MB</td>
<td>Added references to MIFARE DESFire EV1 &amp; iCLASS 32k /HITAG1, iCLASS 32k/HITAG2, Removed references to MIFARE DESFire 0.6, Added MIFARE Classic + DESFire EV1 combination</td>
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<td>SA / DD</td>
<td>Add references to MIFARE DESFire combination card. Updated the Corporate 1000 form to include new Table 1 Heading Description. Update to multiCLASS with EM4102 page, correcting MIFARE CSN &amp; EM4102 options.</td>
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<td>Update description for 232/242 and 252/262</td>
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<td>SA</td>
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<td>Added (iCLASS SE (SIO-Enabled) Card Overview Changed)</td>
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## Overview

Welcome to 13.56 MHz by HID. HID Global offers a variety of reader families that are compatible with most 13.56 MHz technologies existing in the market today. HID’s primary 13.56 MHz product lines include iCLASS and SmartID.

iCLASS is the first advanced contactless smart card technology designed by and for the access control professional. iCLASS readers and cards offer your customer the highest quality card and reader system. The access control system is designed to both pass card data to an access control host, and perform read/write functionality in card non-access control areas.

SmartID is a highly customizable ISO14443 (MIFARE / MIFARE DESFire) reader platform enabling the dynamic application fit new and existing populations of custom defined card data structures. Customize authentication keys, communication encryption, data location and length, data output and much more.

Making it easy for you to offer your customers exciting new products with enhanced benefits, HID has prepared this 13.56 MHz How to Order Guide.

This How to Order Guide provides information for:
- 13.56 MHz reader and module products
- 13.56 MHz credentials

### iCLASS Reader Identifiers

The alpha designator within the product model indicates whether the reader is:
- READ ONLY (R)
- READ/WRITE (RW)
- READ ONLY/PROXIMITY (RP)
- READ ONLY WITH KEYPAD (RK)
- READ ONLY WITH KEYPAD/PROXIMITY (RPK)
- READ/WRITE WITH KEYPAD (RWK)
- READ ONLY WITH KEYPAD/LCD (RKL)
- READ/WRITE WITH KEYPAD/LCD (RWKL)
- READ ONLY WITH KEYPAD/LCD/BIOMETRICS (RKLB)
- READ/WRITE WITH KEYPAD/LCD/BIOMETRICS (RWKLB)
- READ ONLY WITH MAGNETIC (RM)
- READ ONLY WITH MAGNETIC/PROX (RMP)
- READ ONLY WITH MAGNETIC/KEYPAD (RMK)
- READ ONLY WITH MAGNETIC/PROX/KEYPAD (RMPK)
- READ ONLY WITH EV1 & MIFARE CLASSIC CAPABILITY (RS)
- READ ONLY WITH EV1 & MIFARE CLASSIC/PROX CAPABILITY (RSP)
- READ ONLY WITH EV1 & MIFARE CLASSIC/KEYPAD CAPABILITY (RSK)
- READ ONLY WITH EV1 & MIFARE CLASSIC/PROX/KEYPAD CAPABILITY (RSPK)

### SmartID Reader Identifiers

The alpha designator indicates whether the reader is:
- READ ONLY (S)
- READ ONLY/PROXIMITY (SP)
- READ ONLY WITH KEYPAD (SK)
- READ ONLY WITH KEYPAD/PROXIMITY (SPK)

The following numeric designator signifies the physical size of the unit. (The smaller the number, the physically smaller the unit.)
13.56 MHz Reader

iCLASS Read Only Readers
When your application requires the ability to read card numbers and output data using the standard Wiegand or Clock and Data protocols, use a read only (R series) iCLASS product.

**R10** - Physically the smallest reader, the R10 is ideal for **mullion mounted** door installations. The R10 will read HID card formats from iCLASS cards, or the card serial number (CSN) from a MIFARE card, and delivers the information to an existing access control panel using industry standard Wiegand protocol.

**R15** - The R15 is ideal for **mullion mounted** door installations. The R15 will read HID card formats from iCLASS cards, or the card serial number (CSN) from a MIFARE card. Delivering the information to an existing access control panel, the R15 uses industry standard Wiegand protocol.

**R30** - This 8.5 cm (3.3”) square reader is designed to mount to and cover standard **EU and APAC back boxes**. This reader has the same read only abilities as the R10 with the added features of a longer read range and built-in tamper magnet.

**R40** - The R40 is designed to mount and cover **single gang switch boxes** primarily used in the United States and includes a slotted mounting plate for European and Asian back box spacing. It contains all the features of the R30 and offers longer read range.

**iCLASS Keypad Readers**

**RK40** - This reader is the same size and shape as the R40. The 12-position weatherproof keypad features vandal-resistant metal keycaps and backlit numbering. The RK40 supports dual authentication of identity by combining card presentation and entry of a PIN. The PIN can be verified either at the access control panel or locally by the keypad reader. When verified locally, the PIN must be programmed into the iCLASS Card.

**RKL55 / RWKL550** – This LCD/Keypad reader allows for dual-factor authentication in addition to user messages displayed on an LCD screen. The reader is designed to fit on a **single gang switch box** for US, EU or APAC usage. The reader is available in read only or read/write configuration.

**iCLASS Multi-Technology Readers (multiCLASS)**

**RP15** - The RP15 reader simultaneously supports HID and AWID or Indala proximity, iCLASS, MIFARE (CSN), and HID multi-technology credentials. The RP15 is ideal for **mullion mounted** door installations.

**RP40** - The RP40 reader simultaneously supports HID and AWID or Indala proximity, iCLASS, MIFARE (CSN), and HID multi-technology credentials. The RP40's mounting plate attaches to **US, EU or APAC back boxes** with 52-60 mm screw hole spacing (vertical or horizontal), or to any flat surface. The reader body snaps onto the mounting plate and the cover snaps over the reader body, and then secured with a screw.

**RPK40** – The RPK40 simultaneously supports HID and AWID or Indala proximity, iCLASS, MIFARE (CSN), and HID multi-technology credentials. Additionally, the RPK40 supports dual factor authentication of identity by combining card presentation and PIN entry. Either verify the PIN at the access control panel or locally by the keypad reader. When verified locally, program the PIN into the iCLASS Card. The RPK40's mounting plate attaches to **US, EU or APAC back boxes** with 52-60 mm screw hole spacing (vertical or horizontal), or to any flat surface. The reader body snaps onto the mounting plate and the cover snaps over the reader body, and then secured with a screw.

**iCLASS Multi-Technology Readers with Magnetic Swipe Reader (multiCLASS)**

All magnetic swipe multiCLASS readers consist of two-piece including cover/electronics and mounting plate. The mounting plate has a built-in vertical swipe magnetic reader. Mount the magnetic swipe to the reader left or right. Mounting plate attaches to U.S. back box, 52-60 mm screw hole spacing (vertical or horizontal), or to any flat surface. Reader cover/electronics is secured to the mounting plate with a security screw. After the magnetic card migration has completed, increase security by replacing the built-in vertical swipe magnetic reader mounting plate with a standard mounting plate.
RMK40 – The RMK40 simultaneously supports magnetic stripe, iCLASS, and HID multi-technology credentials. Additionally, the RMK40 supports dual factor authentication of identity by combining card presentation and PIN entry. Either verify the PIN at the access control panel or locally by the keypad reader using specially enrolled iCLASS credentials.

RMPK40 – The RMPK40 simultaneously supports magnetic stripe, Genuine HID Prox, AWID Prox, iCLASS, and HID multi-technology credentials. Additionally, the RMPK40 supports dual factor authentication of identity by combining card presentation and PIN entry. Either verify the PIN at the access control panel or locally by the keypad reader using specially enrolled iCLASS credentials.

iCLASS Biometric Readers (bioCLASS™)
RLB57 / RWKLB575 – This biometric LCD/Keypad reader allows for three-factor authentication using biometric finger authentication, keypad and card. User messages are displayed on an LCD screen. The reader is designed to fit on a single gang switch box for US, EU or APAC usage. The reader is available in read only or read/write configuration.

iCLASS Long Range Readers
R90 - The R90 is the largest size (12” or 30.5 cm square) and longest read range iCLASS contactless smart card reader in the iCLASS product line. The R90 will read HID card formats from iCLASS cards, delivering the information to an access control panel using industry standard Wiegand protocol.

iCLASS Reader/Writers
When your application requires the ability to read and write data to the card, use a read/write (RW series) iCLASS product. The four standard iCLASS reader/writers are:

RW100 - Physically the smallest reader/writer, the RW100 is ideal for mullion mounted door installations. The RW100 contains all the features of the R10, with the added features of read/write capability via RS232, RS485, UART or USB.

RW150 - The RW150 is ideal for mullion mounted door installations. The RW150 contains all the features of the R10, with the added features of read/write capability via RS232, RS485, UART or USB.

RW300 - This 80 mm (3.15”) square reader is designed to mount to and cover standard EU and APAC back boxes. The RW300 contains all the features of the R30, with the added features of read/write capability via RS232, RS485, UART or USB.

RW400 - The RW400 is designed to mount to and cover single gang switch boxes primarily used in the US. The RW400 contains all the features of the R40, with the added features of read/write capability via RS232, RS485, UART or USB.

RWK400 - This reader/writer offers the same features as the RK40, with the extended ability to read/write user data to iCLASS credentials via RS-232, RS485, UART or USB.

SmartID Readers
S10 – The S10 is ideal for mullion mounted door installations. Reading MIFARE (sector) or MIFARE DESFire (application/file), card data, the S10 delivers the card data to an access control system using industry standard protocols, including Wiegand. Mount the reader on a single gang switch box for US, EU or APAC usage by ordering an additional mounting accessory.
SmartID Keypad Readers

SK10 - The SK10 is ideal for **mullion mounted** door installations. The SK10 offers dual-factor authentication using keypad and card. Reading MIFARE (sector) or MIFARE DESFire (application/file) card data, the SK10 delivers the card data to an access control system using industry standard protocols, including Wiegand. The reader can be mounted on a **single gang switch box** for US, EU or APAC usage by ordering an additional mounting accessory.

SmartID Multi-Technology Readers (SmartTRANS)

SP10 - The SP10 is ideal for **mullion mounted** door installations. The SP10 reads either 125 kHz HID Prox and AWID card formats in addition to MIFARE (sector) or MIFARE DESFire (application/file) card data. The SP10 delivers the card data to an access control system using industry standard protocols, including Wiegand. Mount the SP10 on a **single gang switch box** for US, EU or APAC usage by ordering an additional mounting accessory.

SPK10 - The SPK10 is ideal for **mullion mounted** door installations. The SPK10 offers dual-factor authentication using keypad and card. The SPK10 reads either 125 kHz HID Prox and AWID card formats in addition to MIFARE (sector) or MIFARE DESFire (application/file) card data. The SPK10 will deliver the card data to an access control system using industry standard protocols including Wiegand. Mount the reader on a **single gang switch box** for US, EU or APAC usage by ordering an additional mounting accessory.

SmartID Biometric Readers (SmartTOUCH)

SB10 / SBK10 – This biometric reader comes with or without keypad and offers three-factor authentication using biometric finger authentication, keypad and card. The reader is designed for a **mullion mount**, but mount the biometric reader on a **single gang switch box** for US, EU or APAC usage by ordering an additional mounting accessory.

SmartID Reader/Writers

SW100 – The SW100 is ideal for **mullion mounted** door installations. Read/Write application supports T=CL (or legacy 3964) bi-directional serial protocol implemented over RS232, RS485 or RS422 physical link. Enables read/write to MIFARE and ISO14443-4 credentials (MIFARE DESFire, SmartMX).

SWK100 – The SWK100 is ideal for **mullion mounted** door installations. Read/Write application supports T=CL (or legacy 3964) bi-directional serial protocol implemented over RS232, RS485 or RS422 physical link. Enables read/write to MIFARE and ISO14443-4 credentials (MIFARE DESFire, SmartMX).

SWD100 – Desktop reader/writer connects to a computer through a USB or RS232. The hosts send commands to SWD100 in order to read/write data to MIFARE, MIFARE DESFire and any other ISO14443-4 card through T=CL (RS232) or PC/SC (USB Only) protocols.

SmartID Programmer (SmartTOOLS)

SmartTOOLS is a card programming software suite providing custom access cards and configuration card programming of MIFARE cards.

ProxBurn is an access card programming component of SmartTOOLS. ProxBurn programs custom MIFARE cards for use on SmartID access control readers. The ProxBurn package includes a CD with software application and manuals, RS232 cable and SWD100 with RS232 interface.

ReaderTOOLS is a configuration card programming component of SmartTOOLS. ReaderTOOLS creates configuration cards configuring SmartID readers to perform custom access control applications against existing and new card populations with custom requirements. The ReaderTOOLS package includes a CD with software application and manuals, USB cable and SWD100 with USB interface.
iCLASS Credentials

HID offers a full line of iCLASS credentials. When choosing a credential, there are several important decision points:

1. Which form factor (for example, card, key or tag) of credential best meets my needs?
2. Do I have a heavy duty card application or will I be laminating a patch to the card, which will require a composite card for best results?
3. Do I need a multi-technology credential (for example, iCLASS and proximity or iCLASS and Wiegand) to help leverage investments in existing access control systems while transitioning to new technologies or applications?
4. How much memory do I need (for example, 2k bits, 16k bits or 32k bits)?
5. How many application areas (2 or up to 16) do I need?

To help simplify the purchase of iCLASS credentials, all credentials are delivered pre-personalized with the default memory allocation and protection for the access control application. Within the part number, the numeric model number defines the technology, number of application areas and memory size.

All credentials come in two memory sizes, 2k bits (256 Bytes) with two application areas or 16k bits (2k Bytes) with two or sixteen application areas or 32k bits (4k Bytes) in two separate books. Application Area 1 is reserved by HID for access control use. The remaining application areas can be defined. Review the HID Application Note # 28 for more information about memory size and application areas.

Credentials are available in several form factors. You may request the correct memory size and/or application area configuration on any form factor. The form factor is not limiting. Offered form factors include:

- **iCLASS Clamshell cards** – iCLASS Clamshell cards offer single-coil, read/write 13.56 MHz contactless smart card technology in a value-priced and highly-durable, molded ABS shell with customizable PVC label. The card is available in the 2k bit (256 byte) memory size only.

- **iCLASS Cards** – Standard, 13.56 MHz single-coil, iCLASS cards will be manufactured to meet ISO standard dimensions. Personalize these cards by adding a photo ID, or barcode (These cards are also available with an optional magnetic stripe). For the iCLASS embeddable card, see the Logical Access How to Order Guide.

- **iCLASS SE (SIO-Enabled)** – Extension of regular iCLASS Card with higher security. Refer to the iCLASS SE How to Order Guide

- **iCLASS Prox Cards** – iCLASS Prox cards offer a dual technology solution in a single card (for example, 13.56 MHz contactless smart card technology and 125 kHz proximity technology, such as HID Prox, Indala or HITAG 1/2 1/2). Personalize these cards by adding a photo ID, or barcode (these cards are also available with an optional magnetic stripe). For the iCLASS Prox embeddable card, see the Logical Access How to Order Guide.

- **iCLASS Wiegand Cards** – iCLASS Wiegand cards offer a dual technology solution in a single card (13.56 MHz contactless smart card technology and Wiegand strip technology). Personalize these cards by adding a photo ID, or barcode (these cards are also available with an optional magnetic stripe). These cards are not offered as embeddable cards.

- **iCLASS Key II** – To enhance the read range and overall performance of the iCLASS key fob, the iCLASS Key has been redesigned. The iCLASS Key II has a solid black case with a blue molded plastic HID insert. The iCLASS Key II was designed to fit on your existing key ring or used with a standard badge-clip.

- **iCLASS Tags** – An adhesive tag can be placed onto an existing credential to allow for an easy transition from legacy technologies to iCLASS. The tag can also be placed onto any non-metallic object. However, HID recommends that every application be tested before purchase to ensure compatibility.
Basics of Ordering iCLASS Contactless Smart Credentials

Each part number consists of a base number, to indicate the type of credential, and a number or letter to indicate each credential option. Each credential has a standard part number which includes default options, as indicated on the attached credential guides. When an order is placed for a credential, the base number and all options must be specified. If you require any options that are different from the default options, you must also indicate those options at the time the order is placed. All part numbers must be complete to be accepted by HID’s order entry system.

All reader orders must have the following information:

- BASE MODEL NUMBER
- STYLE
- READ RANGE
- TYPE
- COLOR
- OUTPUT FORMAT (reader’s format or format number must also be given at time of order)

All credential orders must have the following information:

- Base Part Number - Indicates type of credential
  - Standard PVC
  - Composite 40% Polyester/PVC (Recommended for long life applications or when applying an over-laminate)

- Memory Size and Allocation -
  0 - 2k Bits (256 Bytes) with 2 Application Areas
  1 - 16k Bits (2k Bytes) with 2 Application Areas
  2 - 16k Bits (2k Bytes) with 16 Application Areas
  3 - 32k Bits (4K Bytes) Application areas 16k/2+16k/1
  4 - 32k Bits (4K Bytes) Application areas 16k/16+16k/1

- Programming - Indicates whether the credential is programmed at the factory by HID or programmed by you with an HID iCLASS card programmer. If the credential is ordered non-programmed, an HID iCLASS card programmer must be used for programming. (Contact an HID sales representative for iCLASS card programmer eligibility).

- Front Packaging - Indicates standard or custom artwork and type of finish.
- Back Packaging - Indicates standard or custom artwork and type of finish.
- iCLASS Credential Numbering - Internal 13.56 MHz programmed number and visible external credential number.
- Slot Punch
- Optional 125 kHz Proximity or Wiegand Credential Numbering - Internal 125 kHz Proximity or Wiegand programmed number and visible external credential number.

All orders for custom artwork credentials must have the following information:

- Custom Artwork Number (Call your Customer Service Representative if number is not available)

In addition, all credential orders must have the following programming information:

- Bit Format(s)
- Facility Code(s)
- Internal and External Start Numbers
- Internal PIN Code (Length: 2 – 12 Digits)
- iCLASS Elite Programming Information (If Applicable)
- Any Special Instructions
200/210 - iCLASS Card Ordering Guide

The 200/210 iCLASS contactless smart card offers read/write capability. Personalize the card with a photo ID, magnetic stripe, barcode, or anti-counterfeiting element.

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

<table>
<thead>
<tr>
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<th>200 Standard PVC</th>
<th>210 Composite 40% Polyester / PVC*</th>
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<td>iCLASS Memory Size and Allocation (Check One)</td>
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<tr>
<td>0</td>
<td>2k Bits (256 Bytes) with 2 Application Areas</td>
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<tr>
<td>1</td>
<td>16k Bits (2K Bytes) with 2 Application Areas</td>
<td>4</td>
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<tr>
<td>2</td>
<td>16k Bits (2K Bytes) with 16 Application Areas</td>
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Programming (Check One)

- C - Configured, Non-Programmed iCLASS. Programming Information Not Required.
- P - Programmed iCLASS. Specify Programming Information.

Front Packaging (Check One)

- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number

Back Packaging (Check One)

- G - Plain White with Gloss Finish 2
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number
- 1 - Plain White with Gloss Finish with Magnetic Stripe
- 3 - Custom Artwork with Gloss Finish with Magnetic Stripe - Specify Custom Artwork Number

Card Numbering (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Laser Engraved)
- B - Sequential Internal/Sequential Non-Matching External (Laser Engraved)
- C - Random Internal/Non-Matching Sequential External (Laser Engraved)

Slot Punch (Check One)

- N - No Slot Punch (Printed location of vertical slot punch will remain)
- V - Vertical Slot Punch
- B - No Slot Punch - Horizontal Punch compatible (Printed location of Vertical and Horizontal slot punch will remain). 6
- H - Horizontal Slot Punch

Option - Custom Artwork

(Specify Artwork Number – Refer to the Custom Artwork Forms for new artwork)

Enter your final card options from check boxes above. Example: 2001CGGNN

Final Part Number | - (Options #)

iCLASS Card Programming Information

Bit Numbers (example: 26 bit) Format Number (example: H10301)

Facility Code

iCLASS Elite ICE Number (if applicable) -

(Custom Formats) Site Code City Code OEM Code

Internal Card # Start Stop External Card # Start Stop

PIN (2-12 digits): Sequential: Start # Random: Length

Special Instructions: 1 For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost. 2 Cards ordered with plain white front and back packaging, or custom artwork, will still have a small “HID logo” and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card. 3 The external card number is placed in the bottom right-hand corner on the back of the card. 4 For Laser Engraved external numbers, consult factory for lead times and cost. 5 Cards are provided with an optional slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards. 6 The ability to add a horizontal slot punch requires a different iCLASS antenna design. Users can expect a read range reduction of approximately 20% if they order options B or H for the Slot Punch.

* The composite construction is recommended for all cards with over-laminate applied. Consult with the printer manufacturer prior to ordering.

12345 = Card ID Number YYYYYYYYYY-YY = Sales Order Number
202/212 - Combination Card (iCLASS / Prox) Ordering Guide

The iCLASS Prox contactless smart card offers read/write and proximity (HID Prox, Indala, HITAG1 or 2) capability in a single card. Add new applications while leveraging your investment in existing access control systems. Personalize the card with a photo ID, magnetic stripe, barcode, or anti-counterfeiting element.

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

Base Model

- 202 Standard PVC
- 212 Composite 40% Polyester / PVC

* HITAG based cards are not available with composite or as embeddable cards. Those cards are only available with iCLASS 32k memory size.

iCLASS Memory Size and Allocation (Check One)

- 6 - 2k Bits (256 Bytes) with 2 Application Areas
- 1 - 16k Bits (2k Bytes) with 2 Application Areas
- 2 - 16k Bits (2k Bytes) with 16 Application Areas
- 3 - 32k Bits (4k Bytes) Application area 16k+2+16k/1
- 4 - 32k Bits (4k Bytes) Application areas 16k/16+19k/1

iCLASS Programming (Check One)

- B - Both iCLASS and Prox Technology programmed. Specify Programming Information
- P - iCLASS Programmed, Prox technology blank. Specify Programming Information.
- C - iCLASS configured field programmable, Prox technology blank. Specify Programming Information.
- A - iCLASS configured field programmable, Prox technology programmed. Specify Programming Information.
- K - iCLASS Programmed, HITAG1 blank. Specify Programming Information.
- M - iCLASS Programmed, HITAG2 blank. Specify Programming Information.
- R - iCLASS configured field programmable, HITAG1 blank.
- I - iCLASS configured field programmable, HITAG2 blank.
- S - iCLASS blank, Prox technology programmed. Specify Programming Information.

Front Packaging (Check One)

- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number

Back Packaging (Check One)

- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number
- I - Plain White with Gloss Finish with Magnetic Stripe

iCLASS Card Numbering (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)

Slot Punch (Check One)

- N - No Slot Punch (Printed location of vertical slot punch will remain)
- V - Vertical Slot Punch

125 kHz Card Numbering (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)

Option - Custom Artwork

(Specify Artwork Number – Refer to the Custom Artwork Forms for new artwork)

Enter your final card options from the above selections. Example: 2022LGGNNM

Final Part Number

(Options #)

iCLASS Programming Information

|-------------|---------------|---------------|------------------------|---------------------------|----------|---------|------------------------|------------------------|---------------|---------------|

125 kHz Programming Information

<table>
<thead>
<tr>
<th>Bit Numbers</th>
<th>Format Number</th>
<th>Facility Code</th>
<th>(Custom Formats) Site Code</th>
<th>City Code</th>
<th>OEM Code</th>
<th>Internal Card No. Start</th>
<th>External Card No. Start</th>
<th>Special Instructions:</th>
</tr>
</thead>
</table>

1 For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost.  
2 Cards ordered with plain white front and back packaging, or custom artwork, will still have a small "HID logo" and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card.  
3 The external card number is placed in the bottom right-hand corner for iCLASS 13.56 MHz and in the bottom center for 125 kHz Proximity on the back of the card.  
4 For Laser Engraved external numbers, consult factory for lead times and cost.  
5 Cards are provided with an optional slot punch at no additional charge.  
6 HITAG combination cards are only available with iCLASS 32k Bits.

Some video imaging printers cannot accommodate pre-slot punched cards.

* The composite construction is recommended for all cards with over-laminate applied. Consult with the printer manufacturer prior to ordering.

ASSA ABLOY Group program

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204 - iCLASS Wiegand Card Ordering Guide

The iCLASS Wiegand contactless smart card offers read/write and Wiegand strip capability in a single card. Add new applications and/or use a transition card during upgrades from Wiegand to iCLASS.

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

**Base Model**

- [X] 204 Standard PVC

**iCLASS Memory Size and Allocation (Check One)**

- [ ] 0 - 2k Bits (256 Bytes) with 2 Application Areas
- [ ] 16k Bits (2k Bytes) with 2 Application Areas
- [ ] 2 - 16k Bits (2k Bytes) with 16 Application Areas

**Programming (Check One)**

- [ ] C - Configured, Non-Programmed iCLASS. Programming Information Not Required.
- [ ] P - Programmed iCLASS. Specify Programming Information.

**Front Packaging (Check One)**

- [ ] G - Plain White with Gloss Finish
- [ ] C - Custom Artwork with Gloss Finish – Specify Custom Artwork

**Back Packaging (Check One)**

- [ ] G - Plain White with Gloss Finish
- [ ] C - Custom Artwork with Gloss Finish – Specify Custom Artwork

**iCLASS Card Numbering (Check One)**

- [ ] M - Sequential Matching Internal/External (Inkjetted)
- [ ] S - No External Card Numbering
- [ ] R - Random Internal/Non-Matching Sequential External (Inkjetted)
- [ ] A - Sequential Matching Internal/External (Laser Engraved)
- [ ] B - Sequential Internal/Sequential Non-Matching External (Laser Engraved)
- [ ] C - Custom Artwork with Gloss Finish with Magnetic Stripe – Specify Custom Artwork

**Slot Punch (Check One)**

- [ ] N - No Slot Punch (Printed location of vertical slot punch will remain)
- [ ] V - Vertical Slot Punch

**Wiegand Card Numbering (Check One)**

- [ ] M - Sequential Matching Internal/External (Inkjetted)
- [ ] S - No External Card Numbering
- [ ] R - Random Internal/Non-Matching Sequential External (Inkjetted)
- [ ] A - Sequential Matching Internal/External (Laser Engraved)

**Wiegand Style & Bit**

- [XX] Strip toward left edge of card
- [XX] Strip toward right edge of card

**Option - Custom Artwork**

- [ ] (Specify Artwork Number – Refer to the Custom Artwork Forms for new Artwork)

Enter your final card options from check boxes above. Example: 2042PGGMNM26A1

<table>
<thead>
<tr>
<th>Final Part Number</th>
<th>204</th>
<th></th>
<th></th>
<th></th>
<th>Options #</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS Programming Information</td>
<td>Bit Numbers</td>
<td>Format Number</td>
<td>Facility Code</td>
<td>iCLASS Elite ICE Number</td>
<td>(Custom Formats) Site Code</td>
</tr>
<tr>
<td>Wiegand Programming Information</td>
<td>Bit Numbers</td>
<td>Format Number</td>
<td>Facility Code</td>
<td>iCLASS Elite ICE Number</td>
<td>(Custom Formats) Site Code</td>
</tr>
</tbody>
</table>

1 For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost. 2 Cards ordered with plain white front and back packaging, or custom artwork, will still have a small ‘HID logo’ and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card. 3 The external card number is placed in the bottom right-hand corner for iCLASS 13.56 MHz and in the bottom center for Wiegand on the back of the card. 4 For Laser Engraved external numbers, consult factory for lead times and cost. 5 Cards are provided with an optional slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards. Consult with the printer manufacturer prior to ordering.
205 - iCLASS Key Ordering Guide

The iCLASS contactless smart Key offers read/write capability. Attach to a key ring or badge clip for convenient use.

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

☐ 205 Base Model

iCLASS Memory Size and Allocation (Check One)

☐ 0 - 2k Bits (256 Bytes) with 2 Application Areas
☐ 1 - 16k Bits (2k Bytes) with 2 Application Areas
☐ 2 - 16k Bits (2k Bytes) with 16 Application Areas
☐ 3 - 32k Bits (4K Bytes) Application areas 16k/2+16k/1
☐ 4 - 32k Bits (4K Bytes) Application areas 16k/16+16k/1

Programming (Check One)

☐ C - Configured, Non-Programmed iCLASS. Programming Information Not Required.
☐ P - Programmed iCLASS. Specify Programming Information.

Front Packaging

☒ N – iCLASS Key II - Black with blue insert. Includes HID Standard Artwork

Back Packaging

☒ N - None

Key Numbering

☐ M - Sequential Matching Internal/External (Inkjetted)
☐ N - No External Key Numbering
☐ S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
☐ R - Random Internal/Non-Matching Sequential External (Inkjetted)
☐ A - Sequential Matching Internal/External (Engraved)2
☐ B - Sequential Internal/Sequential Non-Matching External (Engraved)2
☐ C - Random Internal/Non-Matching Sequential External (Engraved)2

Additional Options

☒ N - None

Enter your final card options from the above selections. Example: 2052PNNM

Final Part Number

| 205 | N | N | N |

iCLASS Key Programming Information

Bit Numbers ___________. (example: 26 bit) Format Number ___________. (example: H10301)
Facility Code ___________.
iCLASS Elite Ice Number (if applicable) (Custom Formats) Site Code ___________. City Code ___________. OEM Code ___________.
Internal Card # Start ___________. Stop ___________. External Card # Start ___________. Stop ___________.
PIN: ☐ Sequential: Start # ___________. ☐ Random: Length ___________.

Special Instructions:

1 The external key number is placed on the back of the key.
2 For Laser Engraved external numbers, consult factory for lead times and cost.
3 Key Ring sold separately (Part Number: 57-0001-02).
206 - iCLASS Tag Ordering Guide

The iCLASS contactless smart Tag offers read/write capability. iCLASS enable existing credentials or non-metallic devices such as cell phones or PDAs by adhering the iCLASS Tag.

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

### 206 Base Model

#### iCLASS Memory Size and Allocation (Check One)
- **0** - 2k Bits (256 Bytes) with 2 Application Areas
- **1** - 16k Bits (2k Bytes) with 2 Application Areas
- **2** - 16k Bits (2k Bytes) with 16 Application Areas
- **3** - 32k Bits (4K Bytes) Application areas 16k/2+16k/1
- **4** - 32k Bits (4K Bytes) Application areas 16k/16+16k/1

#### Programming (Check One)
- **C** - Configured, Non-Programmed iCLASS. Programming Information Not Required.
- **P** - Programmed iCLASS. Specify Programming Information.

#### Front Packaging (Check One)
- **S** - Gray with HID Standard Artwork
- **K** - Black with HID Standard Artwork
- **C** - Custom Artwork – Specify Custom Artwork Number²

#### Back Packaging
- **S** - Adhesive Backing

#### Tag Numbering (Check One)
- **M** - Sequential Matching Internal/External (Inkjetted)
- **N** - No External Tag Numbering
- **S** - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- **R** - Random Internal/Non-Matching Sequential External (Inkjetted)

#### Slot Punch
- **N** - None

#### Option - Custom Artwork¹
- **☐** — (Specify Artwork Number – Refer to the Custom Artwork Forms for new artwork)

Enter your final Tag options from check boxes above. Example: 2062CSSNN

<table>
<thead>
<tr>
<th>Final Part Number</th>
<th>206</th>
<th>S</th>
<th>N</th>
<th>-</th>
<th>(Options #)</th>
</tr>
</thead>
</table>

### iCLASS Tag Programming Information

- **Bit Numbers** — (example: 26 bit)
- **Format Number** — (example: H10301)

- **Facility Code**

- **iCLASS Elite ICE Number (if applicable)** — (Custom Formats) Site Code, City Code, OEM Code

- **Internal Card # Start** — Stop

- **External Card # Start** — Stop

- **PIN:**
  - **Sequential:** Start # — Stop
  - **Random:** Length

**Special Instructions:**

¹ The external tag number is placed on the back of the tag. ² For new artwork files, contact Customer Service for custom artwork number, lead-times, minimum order quantities, and cost. ³ The iCLASS Tag is not for use on cards that use full insertion or tractor feed type readers.

Do not adhere to metal surfaces. Metal shields the RF, making the tag inoperable. Due to variations in cards and reading devices, HID does not claim that the iCLASS Tag will work in every situation. Functional and non-functional iCLASS Tags are available for compatibility testing with existing credential and reader technologies. Compatibility should be confirmed prior to ordering.
208 - iCLASS Clamshell Card Ordering Guide
The iCLASS contactless smart card offers read/write capability.
Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

208 Base Model

iCLASS Memory Size and Allocation (Check One)
☐ 0 - 2k Bits (256 Bytes) with 2 Application Areas

Programming (Check One)
☐ C - Configured, Non-Programmed iCLASS. Programming Information Not Required.
☐ P - Programmed iCLASS. Specify Programming Information.

Front Packaging (Check One)
☐ M - Plain White Vinyl with Matte Finish
☐ G - Plain White with Gloss Finish
☐ A - iCLASS Clamshell - Adhesive Front1
☐ C - Custom Artwork - Specify Custom Artwork Number2

Back Packaging (Check One)
☐ S - Base with Molded HID Logo
☐ C - Custom Artwork - Specify Custom Artwork Number2

Card Numbering3 (Check One)
☐ M - Sequential Matching Internal/External (Inkjetted)
☐ N - No External Card Numbering
☐ S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
☐ R - Random Internal/Non-Matching Sequential External (Inkjetted)

Slot Punch5 (Check One)
☐ V - Vertical Slot Punch

Option - Custom Artwork2
☐ ___________________________ (Specify Artwork Number – Refer to the Custom Artwork Forms for new Artwork)

Enter your final card options from check boxes above. Example: 2080PGSMV

| Final Part Number | 208 | 0 | V | - | (Options #) |

iCLASS Card Programming Information

Bit Numbers ______________ (example: 26 bit) Format Number ____________ (example: H10301)

Facility Code ____________.

iCLASS Elite ICE Number (if applicable) ____________.

(Custom Formats) Site Code ______________ City Code ______________ OEM Code ______________.

Internal Card # Start __________. Stop __________. External Card # Start __________. Stop __________.

PIN (2-12 digits): ☐ Sequential: Start # ____________ ☐ Random: Length ____________.

Special Instructions: ____________________________.

1 The part numbers for non-adhesive labels to be used with the iCLASS Clamshell with the adhesive front are 1324GGN31 without slot and 1324GGV31 with slot.
2 For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost.
3 The external card number is placed in the top left-hand corner on the back of the card. HID logo molded into base on back.
### 13.56 MHz How to Order Guide – D00529, E.2

#### 232 / 242 - iCLASS / Other HF - Combination Card Ordering Guide

The iCLASS with MIFARE or MIFARE DESFire contactless smart card offers multiple High Frequency technologies to simplify card issuance for diverse systems or migration projects. Add new applications while leveraging your investment in existing access control systems. Personalize the card with a photo ID, magnetic stripe, barcode, or anti-counterfeiting element.

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

<table>
<thead>
<tr>
<th>Base Model</th>
<th>232 Standard PVC</th>
<th>242 Composite 40% Polyester / PVC</th>
</tr>
</thead>
</table>

**iCLASS Memory Size and Allocation (Check One)**

- 0 - 2k Bits (256 Bytes) with 2 Application Areas (only available with MIFARE CLASSIC 1K)
- 3 - 32k Bits (4K Bytes) Application areas 16k+16k/1
- 4 - 32k Bits (4K Bytes) Application areas 16k/16k/1

**Card Programming (Check One)**

- B - Programmed iCLASS & 2nd Technology. Specify Programming Information –
- P - Programmed iCLASS only not 2nd Technology. Specify Programming Information.
- C - Configured, Non-Programmed iCLASS. Non-programmed 2nd Technology. Programming Information Not Required.

**2nd High Frequency Technology (Check One)**

- M – MIFARE 1K Bytes (only available with iCLASS 2k bits)
- N – MIFARE 4K Bytes
- K – MIFARE DESFire EV1 8K Bytes

**Front Packaging (Check One)**

- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number

**Back Packaging (Check One)**

- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number

**iCLASS Card Numbering**

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)

**Slot Punch**

(IMPORTANT – Dual High Frequency credentials do not allow a slot punch due to the antenna design. HID recommends using a badge holder to attach this card to a lanyard or badge clip.)

- N - No Slot Punch

**2nd High Frequency Technology Card Numbering**

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)

**Option - Custom Artwork**

- Specify Artwork Number – Refer to the Custom Artwork Forms for new artwork

Enter your final card options from the above selections. Example: 2324PNGGNNN

<table>
<thead>
<tr>
<th>Final Part Number</th>
<th>N</th>
<th>(Options #)</th>
</tr>
</thead>
</table>

**iCLASS Programming Information**

<table>
<thead>
<tr>
<th>Bit Numbers</th>
<th>Format Number</th>
<th>Facility Code</th>
<th>iCLASS Elite ICE Number (if applicable)</th>
<th>(Custom Formats) Site Code</th>
<th>City Code</th>
<th>OEM Code</th>
<th>Internal Card No. Start</th>
<th>Stop</th>
<th>External Card No. Start</th>
<th>Stop</th>
<th>PIN</th>
</tr>
</thead>
</table>

**2nd 13.56 MHz Programming Information**

<table>
<thead>
<tr>
<th>Bit Numbers</th>
<th>Format Number</th>
<th>Facility Code</th>
<th>iCLASS Elite ICE Number (if applicable)</th>
<th>(Custom Formats) Site Code</th>
<th>City Code</th>
<th>OEM Code</th>
<th>Internal Card No. Start</th>
<th>Stop</th>
<th>External Card No. Start</th>
<th>Stop</th>
<th>PIN</th>
</tr>
</thead>
</table>

1 For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost. 2 Cards ordered with plain white front and back packaging, or custom artwork, will still have a small “HID logo” and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card. 3 The external card number is placed in the bottom right-hand corner for iCLASS 13.56 MHz and in the bottom center for 125 kHz Proximity on the back of the card. 4 For Laser Engraved external numbers, consult factory for lead times and cost. 5 Cards are provided with an optional slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards.

* The composite construction is recommended for all cards with over-laminate applied. Consult with the printer manufacturer prior to ordering.
13.56 MHz How to Order Guide – D00529, E.2

252 / 262 - iCLASS / Other 13.56MHz / Prox - Combination Card Ordering Guide

The iCLASS with MIFARE or MIFARE DESFire contactless smart card as well as HID Proximity offers multiple High Frequency technologies to simplify card issuance for diverse systems or migration projects. Add new applications while leveraging your investment in existing access control systems. Personalize the card with a photo ID, magnetic stripe, barcode, or anti-counterfeiting element.

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

**Base Model**

252 - Standard PVC  
262 - Composite 40% Polyester / PVC *

### iCLASS Memory Size and Allocation (Check One)

- 0 - 2k Bits (256 Bytes) with 2 Application Areas (only available with MIFARE CLASSIC 1K)
- 3 - 32k Bits (4K Bytes) Application areas 16k/16k/1
- 4 - 32k Bits (4K Bytes) Application areas 16k/16k/1

### 13.56 MHz Technology Card Programming (Check One)

- B - Programmed iCLASS & 2nd Technology. Specify Programming Information –
- P - Programmed iCLASS only not 2nd Technology. Specify Programming Information.
- C - Configured, Non-Programmed iCLASS. Non-programmed 2nd Technology. Programming Information Not Required.

### 2nd High Frequency (13.56 MHz) Technology (Check One)

- M – MIFARE 1K Bytes (only available with iCLASS 2k bits)
- N – MIFARE 4K Bytes
- K – MIFARE DESFire EV1 8K Bytes

### 125 kHz Technology Card Programming (Check One)

- P – “HID Prox” Programmed 125 kHz Technology. Specify Programming Information –
- C – “Indala/Casi Prox” Programmed 125 kHz Technology. Specify Programming Information –
- N – Initialized 125 kHz Technology. Programming Information Not Required

### Front Packaging (Check One)

- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number

### Back Packaging (Check One)

- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number
- 1 - Plain White with Gloss Finish with Magnetic Stripe
- 3 - Custom Artwork with Gloss Finish with Magnetic Stripe - Specify Custom Artwork Number

### iCLASS Card Numbering (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)

### Slot Punch (Check One)

(Important – Dual High Frequency credentials do not allow a slot punch due to the antenna design. HID recommends using a badge holder to attach this card to a lanyard or badge clip).
- N – No Slot Punch

### 2nd 13.56 MHz Card Numbering (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)

### 125 kHz Card Numbering (Check One)

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)

### Option - Custom Artwork

(Specify Artwork Number – Refer to the Custom Artwork Forms for new artwork)

Enter your final card options from the above selections. Example: 2524PNGGNNN

<table>
<thead>
<tr>
<th>Final Part Number</th>
<th>N</th>
<th>(Options #)</th>
</tr>
</thead>
</table>

Continued...
# 13.56 MHz How to Order Guide – D00529, E.1

## iCLASS Programming Information

<table>
<thead>
<tr>
<th>Bit Numbers</th>
<th>Format Number</th>
<th>Facility Code</th>
<th>iCLASS Elite ICE Number (if applicable)</th>
<th>(Custom Formats) Site Code</th>
<th>City Code</th>
<th>OEM Code</th>
<th>Internal Card No. Start</th>
<th>Stop</th>
<th>External Card No. Start</th>
<th>Stop</th>
<th>PIN: Sequential: Start #</th>
<th>Random: Length</th>
</tr>
</thead>
</table>

## 2nd 13.56 MHz Programming Information

<table>
<thead>
<tr>
<th>Bit Numbers</th>
<th>Format Number</th>
<th>Facility Code</th>
<th>(Custom Formats) Site Code</th>
<th>City Code</th>
<th>OEM Code</th>
<th>Internal Card No. Start</th>
<th>Stop</th>
<th>External Card No. Start</th>
<th>Stop</th>
<th>Special Instructions:</th>
</tr>
</thead>
</table>

## 125 kHz Programming Information

<table>
<thead>
<tr>
<th>Bit Numbers</th>
<th>Format Number</th>
<th>Facility Code</th>
<th>(Custom Formats) Site Code</th>
<th>City Code</th>
<th>OEM Code</th>
<th>Internal Card No. Start</th>
<th>Stop</th>
<th>External Card No. Start</th>
<th>Stop</th>
<th>Special Instructions:</th>
</tr>
</thead>
</table>

---

1. For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost.
2. Cards ordered with plain white front and back packaging, or custom artwork, will still have a small “HID logo” and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card.
3. The external card number is placed in the bottom right-hand corner for iCLASS 13.56 MHz and in the bottom center for 125 kHz Proximity on the back of the card.
4. For Laser Engraved external numbers, consult factory for lead times and cost.
5. Cards are provided with an optional slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards.

* The composite construction is recommended for all cards with over-laminate applied. Consult with the printer manufacturer prior to ordering.
272 / 282 – MIFARE Classic / DESFire EV1 - Combination Card Ordering Guide

The MIFARE + DESFire contactless card offers multiple High Frequency technologies to simplify card issuance for diverse systems or migration projects. Personalize the card with a photo ID, magnetic stripe, barcode, or anti-counterfeiting element.

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

<table>
<thead>
<tr>
<th>Base Model</th>
<th>272 Standard PVC</th>
<th>282 Composite 40% Polyester / PVC</th>
</tr>
</thead>
</table>

**MIFARE High Frequency Technology**

- N – MIFARE Classic 4K Bytes

**Card Programming (Check One)**

- B - Programmed MIFARE and DESFire Technologies. Specify Programming Information.
- P - MIFARE Programmed only not DESFire Technology. Specify Programming Information.
- N - Non-Programmed MIFARE and DESFire

**DESFire High Frequency Technology (Check One)**

- K – DESFire EV1 8K Bytes

**Front Packaging (Check One)**

- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number

**Back Packaging (Check One)**

- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number
- 1 - Plain White with Gloss Finish with Magnetic Stripe
- 3 - Custom Artwork with Gloss Finish with Magnetic Stripe - Specify Custom Artwork Number

**MIFARE High Frequency Card Numbering**

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Laser Engraved)

**Slot Punch**

*(IMPORTANT – Dual High Frequency credentials do not allow a slot punch due to the antenna design. HID recommends using a badge holder to attach this card to a lanyard or badge clip.)*

- N – No Slot Punch

**DESFire High Frequency Technology Card Numbering**

- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Laser Engraved)

**Option - Custom Artwork**

(Specify Artwork Number – Refer to the Custom Artwork Forms for new artwork)

Enter your final card options from the above selections. Example: 272NBKG1MNM

<table>
<thead>
<tr>
<th>Final Part Number</th>
<th>N</th>
<th>K</th>
<th>N</th>
<th>-</th>
<th>(Options #)</th>
</tr>
</thead>
</table>

**MIFARE 13.56 MHz Programming Information**

- Bit Numbers ___________________________ (example: 26 bit)
- Format Number __________________________ (example: H10301)
- Facility Code __________________________
- (Custom Formats) Site Code _____________, City Code ____________
- OEM Code ____________________________

<table>
<thead>
<tr>
<th>Internal Card No. Start</th>
<th>Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Card No. Start</td>
<td>Stop</td>
</tr>
<tr>
<td>Special Instructions:</td>
<td></td>
</tr>
</tbody>
</table>

**DESFire 13.56 MHz Programming Information**

- Bit Numbers ___________________________ (example: 26 bit)
- Format Number __________________________ (example: H10301)
- Facility Code __________________________
- (Custom Formats) Site Code _____________, City Code ____________
- OEM Code ____________________________

<table>
<thead>
<tr>
<th>Internal Card No. Start</th>
<th>Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Card No. Start</td>
<td>Stop</td>
</tr>
<tr>
<td>Special Instructions:</td>
<td></td>
</tr>
</tbody>
</table>

1 For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost. 2 Cards ordered with plain white front and back packaging, or custom artwork, will still have a small “HID logo” and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card. 3 The external card number is placed in the bottom right-hand corner for MIFARE 13.56 MHz and in the bottom center for DESFire on the back of the card. 4 For Laser Engraved external numbers, consult factory for lead times and cost.

* The composite construction is recommended for all cards with over-laminate applied. Consult with the printer manufacturer prior to ordering.
### 13.56 MHz How to Order Guide – D00529, E.2

#### 1430/1440/1436/1446 – MIFARE Card Ordering Guide

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

<table>
<thead>
<tr>
<th>Base Model</th>
<th>1430 (1K) Standard PVC</th>
<th>1440 (4K) Standard PVC</th>
<th>1436 (1K) Composite 40% Polyester / PVC</th>
<th>1446 (4K) Composite Polyester 40% / PVC</th>
</tr>
</thead>
</table>

#### Programming (Check One)
- M - Programmed, HID MIFARE \(^6\) (Specify HID format, for example H10301).
- N - Non-Programmed \((13.56\ MHz)^6\). Programming Information Not Required.
- S - Custom Programmed, Specify Programming Information.

#### Front Packaging (Check One)
- G - Plain White with Gloss Finish
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number\(^1\)

#### Back Packaging (Check One)
- G - Plain White with Gloss Finish\(^2\)
- S - Standard HID MIFARE Artwork\(^2\)
- 1 - Plain White with Gloss Finish with Magnetic Stripe\(^2\)
- 2 - Standard HID MIFARE Artwork with Magnetic Stripe
- C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number\(^1, 2\)
- 3 - Custom Artwork with Gloss Finish with Magnetic Stripe - Specify Custom Artwork Number\(^1, 2\)

#### Card Numbering (Check One)
- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- U - UID (CSN) HEX card numbering only (Inkjetted)
- V - UID (CSN) Decimal card numbering only (Inkjetted)
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Laser Engraved)\(^4\)
- B - Sequential Internal/Sequential Non-Matching External (Laser Engraved)\(^4\)
- C - Random Internal/Non-Matching Sequential External (Laser Engraved)\(^4\)

#### Slot Punch\(^5\) (Check One)
- N - No Slot Punch (Printed location of vertical slot punch will remain)
- V - Vertical Slot Punch

#### Option - Custom Artwork\(^1\)
- (Specify Artwork Number – Refer to the Custom Artwork Forms for new Artwork)

**Enter your final card options from check boxes above. Example: 1430NGGNN**

#### Final Part Number

**Final Number**

#### 13.56 MHz Card Programming Information

- **Bit Numbers** (example: 26 bit)
- **Format Number** (example: H10301)

- **Facility Code**
- **(Custom Formats)** Site Code __________, City Code __________, OEM Code __________.

- **Internal Card No. Start** __________, Stop __________
- **External Card No. Start** __________, Stop __________.

**Special Instructions:**

For Contact Smart Chip selection, refer to Logical Access How to Order guide. Standard configuration does not include a contact smart chip module.

\(^1\) For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost.  
\(^2\) Cards ordered with plain white front and back packaging, with no HID artwork or with custom artwork, will still have a small “HID logo” and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card.  
\(^3\) The external card number is placed in the bottom right-hand corner on the back of the card on Proximity Format Programming only.  
\(^4\) For Laser Engraved external numbers, consult factory for lead times and cost.  
\(^5\) Cards are provided with an optional slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards. Consult with the printer manufacturer prior to ordering.  
\(^6\) Includes a permanent Unique MIFARE 32 Bit Serial number.  
\(^*\) The composite construction is recommended for all cards with over-laminate applied.

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**13.56 MHz How to Order Guide – D00529, E.2**

### 1431/1441/1437/1447—Combination (MIFARE/Prox) Card Ordering Guide

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

<table>
<thead>
<tr>
<th>Base Model</th>
<th>1431 (1K) Standard PVC</th>
<th>1441 (4K) Standard PVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1437 (1K) Composite 40% Polyester / PVC *</td>
<td>1447 (4K) Composite 40% Polyester / PVC *</td>
<td></td>
</tr>
</tbody>
</table>

#### MIFARE Programming (Check One)
- **L** - Programmed, (125 kHz only with H10301). Specify Programming Information.
- **M** - Programmed, H10301. Specify HID Format, for example H10301.
- **B** - Programmed, (125 kHz and 13.56 MHz with HID Format). Specify Programming Information.
- **N** - Non-Programmed (125 kHz & 13.56 MHz without HID Format). Programming Information Not Required.
- **S** - Custom Programmed, (13.56 MHz only). Prox configured Specify Programming Information.
- **R** - Custom Programmed, (125 kHz and Custom 13.56 MHz with HID Format). Specify Programming Information.

#### Front Packaging (Check One)
- **G** - Plain White with Gloss Finish
- **C** - Custom Artwork with Gloss Finish - Specify Custom Artwork Number

#### Back Packaging (Check One)
- **G** - Plain White with Gloss Finish
- **S** - Standard HID Proximity & MIFARE Artwork
- **1** - Plain White with Gloss Finish with Magnetic Stripe
- **2** - Standard HID MIFARE Artwork with Magnetic Stripe
- **3** - Custom Artwork with Gloss Finish with Magnetic Stripe - Specify Custom Artwork Number
- **C** - Custom Artwork with Gloss Finish - Specify Custom Artwork Number

#### 13.56 MIFARE Card Numbering (Check One)
- **N** - Sequential Matching Internal/External (Inkjetted)
- **U** - UID (CSN) HEX card numbering only (Inkjetted)
- **V** - UID (CSN) Decimal card numbering only (Inkjetted)
- **G** - Random Internal/Non-Matching Sequential External (Engraved)
- **R** - Random Internal/Non-Matching Sequential External (Inkjetted)
- **A** - Sequential Matching Internal/External (Engraved)
- **S** - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- **B** - Sequential Internal/Sequential Non-Matching External (Engraved)

#### Slot Punch (Check One)
- **N** - No Slot Punch (Printed location of vertical slot punch will remain)
- **V** - Vertical Slot Punch

#### 125 kHz Proximity Card Numbering (Check One)
- **M** - Sequential Matching Internal/External (Inkjetted)
- **N** - No External Card Numbering
- **S** - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- **R** - Random Internal/Non-Matching Sequential External (Inkjetted)
- **A** - Sequential Matching Internal/External (Engraved)
- **B** - Sequential Internal/Sequential Non-Matching External (Engraved)
- **C** - Random Internal/Non-Matching Sequential External (Engraved)

#### Option - Custom Artwork
- (Specify Artwork Number – Refer to the Custom Artwork Forms for new artwork)

Enter your final card options from check boxes above. Example: 1441NGGNNN

**Final Part Number**

**13.56 MHz**

<table>
<thead>
<tr>
<th>Bit Numbers</th>
<th>(example: 26 bit)</th>
<th>Bit Numbers</th>
<th>(example: 26 bit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format Number</td>
<td>(example: H10301)</td>
<td>Format Number</td>
<td>(example: H10301)</td>
</tr>
<tr>
<td>Facility Code</td>
<td>(Custom Formats) Site Code</td>
<td>Facility Code</td>
<td>(Custom Formats) Site Code</td>
</tr>
<tr>
<td>City Code</td>
<td>City Code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OEM Code</td>
<td>OEM Code</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**125 kHz**

<table>
<thead>
<tr>
<th>Internal Card No. Start</th>
<th>Stop</th>
<th>Internal Card No. Start</th>
<th>Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Card No. Start</td>
<td>Stop</td>
<td>External Card No. Start</td>
<td>Stop</td>
</tr>
</tbody>
</table>

**Pin**

- **Sequential**: Start #
- **Random**: Length

**For Contact Smart Chip selection**, refer to Logical Access How to Order guide. Standard configuration does not include a contact smart chip module.

1 For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost. 2 Cards ordered with plain white front and back packaging, with no HID artwork or with custom artwork, will still have a small “HID logo”). 3 HID and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card. 4 The external card number is placed in the bottom left-hand corner and in the bottom right-hand corner (13.56 MHz) on the back of the card on Proximity Programming only. 5 For Laser Engraved external numbers, consult factory for lead times and cost. 6 Cards are provided with an optional slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards. Consult with the printer manufacturer prior to ordering. 7 Includes a permanent Unique MIFARE 32 Bit Serial number. 8 The composite construction is recommended for all cards with over-laminate applied.

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Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

**Base Model**
- **1434 (1K)**
- **1444 (4K)**

**Programming (Check One)**
- M - Programmed, HID MIFARE® (Specify HID format, for example H10301).
- N - Non-Programmed (13.56 MHz). Programming Information Not Required.
- S - Custom Programmed, Specify Programming Information.

**Front Packaging (Check One)**
- S - Standard HID Artwork
- C - Custom Artwork - Specify Custom Artwork Number1

**Back Packaging**
- S - Standard

**Key Numbering1 (Check One)**
- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)
- A - Sequential Matching Internal/External (Laser Engraved)4
- B - Sequential Internal/Sequential Non-Matching External (Laser Engraved)4
- C - Random Internal/Non-Matching Sequential External (Laser Engraved)4

**Slot Punch2**
- N - None

Enter your final Key options from check boxes above. Example: 1434NSSNN

<table>
<thead>
<tr>
<th>Final Part Number</th>
<th>S</th>
<th>N</th>
</tr>
</thead>
</table>

**13.56 MHz Card Programming Information**

Bit Numbers ___________ (example: 26 bit)  Format Number ___________ (example: H10301)

Facility Code ___________.

(Custom Formats) Site Code ___________. City Code ___________. OEM Code ___________.

Internal Card # Start ________, Stop ________. External Card # Start ________, Stop ________.

Special Instructions: ____________________________________________________________________________

---

1 The external key number is placed on the back of the key.
2 Key Ring sold separately (Part Number: 57-0001-02).
3 Includes a permanent Unique MIFARE 32 Bit Serial number.
4 For Laser Engraved external numbers, consult factory for lead times and cost.
13.56 MHz How to Order Guide – D00529, E.2

1435/1445 – MIFARE Adhesive Tag Ordering Guide
Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

**Base Model**

- □ 1435 (1K)
- □ 1445 (4K)

**Programming (Check One)**

- □ M - Programmed, HID MIFARE 6 (Specify HID format, for example H10301).
- □ N - Non-Programmed (13.56 MHz). Programming Information Not Required.
- □ S - Custom Programmed, Specify Programming Information.

**Front Packaging (Check One)**

- □ S - Standard HID Artwork
- □ C - Custom Artwork - Specify Custom Artwork Number1

**Back Packaging**

- ☑ S - Standard

**Tag Numbering1 (Check One)**

- □ M - Sequential Matching Internal/External (Inkjetted)
- □ N - No External Card Numbering
- □ S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- □ R - Random Internal/Non-Matching Sequential External (Inkjetted)

**Slot Punch2**

- □ N - None

Enter your final Tag options from check boxes above. Example: 1435NSSNN

<table>
<thead>
<tr>
<th>Final Part Number</th>
<th>S</th>
<th>N</th>
</tr>
</thead>
</table>

**13.56 MHz Card Programming Information**

Bit Numbers  __________. (example: 26 bit)  Format Number  __________ (example: H10301)

Facility Code  __________

(Custom Formats) Site Code  __________.  City Code  __________.  OEM Code  __________.

Internal Card # Start  __________.  Stop  __________ External Card # Start  __________ Stop  __________.

Special Instructions:

1 The external tag number is placed on the back of the tag.

2 For new artwork files, contact Customer Service for custom artwork number, lead-times, minimum order quantities, and cost.

3 The Tag is not for use on cards that use full insertion or tractor feed type readers.

4 Includes a permanent Unique MIFARE 32 Bit Serial number.

* Up to 1.14in (29mm) read range in free air.

Do not adhere to metal surfaces. Metal shields the RF, making the tag inoperable. Due to variations in cards and reading devices, HID does not claim that the Tag will work in every situation. Functional and non-functional Tags are available for compatibility testing with existing credential and reader technologies. Compatibility should be confirmed prior to ordering.

* = Actual read range performance affected by mounting location, environment and the tags tuned resonant frequency.
13.56 MHz How to Order Guide – D00529, E.2

1450/1456 – MIFARE DESFire EV1 Card Ordering Form Guide
Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

Base Model  □  1450 Standard PVC  □  1456 Composite 40% Polyester / PVC *

MIFARE DESFire EV1 Memory Size
☑  C - 8K Bytes MIFARE DESFire EV1

Programming (Check One)
☐  N - Non-Programmed (13.56 MHz)\(^6\). Programming Information Not Required.
☐  S - Custom Programmed, (13.56 MHz only)\(^6\), Specify Programming Information.

Front Packaging (Check One)
☐  G - Plain White with Gloss Finish
☐  C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number\(^1\)

Back Packaging (Check One)
☐  G - Plain White with Gloss Finish\(^2\)
  1. Plain White with Gloss Finish with Magnetic Stripe\(^2\)
☐  C - Custom Artwork with Gloss Finish – Specify Custom Artwork Number\(^1, 2\)
  3. Custom Artwork with Gloss Finish with Magnetic Stripe - Specify Custom Artwork Number\(^1, 2\)

Card Numbering\(^3\) (Check One)
☐  M - Sequential Matching Internal/External (Inkjetted)
☐  N - No External Card Numbering
☐  S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
☐  R - Random Internal/Non-Matching Sequential External (Inkjetted)
☐  A - Sequential Matching Internal/External (Laser Engraved)\(^4\)
☐  B - Sequential Internal/Sequential Non-Matching External (Laser Engraved)\(^4\)
☐  C - Random Internal/Non-Matching Sequential External (Laser Engraved)\(^4\)
☐  U - UID (CSN) HEX card numbering only (Inkjetted): 7 bytes UID
☐  V - UID (CSN) Decimal card numbering only (Inkjetted): 7 bytes UID

Slot Punch
(IMPORTANT – MIFARE DESFire EV1 credentials do not allow a slot punch due to the antenna design, use a badge holder to attach this card to a lanyard or badge clip.)
☑  N - No Slot Punch

Option - Custom Artwork\(^1\)
☐  __________________________ (Specify Artwork Number – Refer to the Custom Artwork Forms for new Artwork)

Enter your final card options from check boxes above. Example: 1450CNGGNN

Final Part Number □  □  □  N -  (Options #)

13.56 MHz Card Programming Information

Bit Numbers __________ (example: 26 bit)  Format Number __________ (example: H10301)
Facility Code __________________________.
(Custom Formats) Site Code __________, City Code __________, OEM Code __________.
Internal Card No. Start __________, Stop __________.
External Card No. Start __________, Stop __________.
Special Instructions: __________________________.

For Contact Smart Chip selection, refer to Logical Access How to Order guide. Standard configuration does not include a contact smart chip module.

\(^1\) For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost.  
\(^2\) Cards ordered with plain white front and back packaging, with no HID artwork or with custom artwork, will still have a small “HID logo” 
\(^6\) and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card.  
\(^3\) The external card number is placed in the bottom right-hand corner on the back of the card on Proximity Format Programming only. Permanent Unique MIFARE 56 Bit serial # cannot be printed on cards.  
\(^4\) For Laser Engraved external numbers, consult factory for lead times and cost.  
\(^5\) The composite construction is recommended for all cards with over-laminate applied.
13.56 MHz How to Order Guide – D00529, E.2

1451/1457 – Combination (MIFARE DESFire EV1 solution / PROX) Card Ordering Guide

The MIFARE DESFire contactless smart card offers read/write and proximity (HID Prox, HITAG1) capability in a single card. Add new applications while leveraging your investment in existing access control systems. Personalize the card with a photo ID, magnetic stripe, barcode, or anti-counterfeiting element.

Ensure each required option has been checked with the appropriate choice to fulfill a completed order form.

### Base Model
- [ ] 1451 Standard PVC
- [ ] 1457 Composite 40% Polyester / PVC*

MIFARE DESFire EV1 Memory Size
- [ ] C - 8K Bytes MIFARE DESFire EV1

MIFARE DESFire Programming (Check One)
- [ ] L - Programmed, (125 kHz only)*, Specify Programming Information.
- [ ] N - Non-Programmed (125 kHz & 13.56 MHz)*, Programming Information Not Required.
- [ ] S - Custom Programmed, (13.56 MHz only)*, Prox Configured Specify Programming Information.
- [ ] R - Custom Programmed, (125kHz and Custom 13.56 MHz)*, Specify Programming Information.
- [ ] F - Non-Programmed (HITAG1 & 13.56 MHz)*, Programming Information Not Required.
- [ ] G - Custom Programmed, (13.56 MHz only)*, HITAG1 Configured only. Specify Programming Information for MIFARE DESFire.

### Front Packaging (Check One)
- [ ] G - Plain White with Gloss Finish
- [ ] C - Custom Artwork with Gloss Finish - Specify Custom Artwork Number

### Back Packaging (Check One)
- [ ] G - Plain White with Gloss Finish
- [ ] 1 - Plain White with Gloss Finish with Magnetic Stripe
- [ ] 3 - Custom Artwork with Gloss Finish with Magnetic Stripe - Specify Custom Artwork Number
- [ ] C - Custom Artwork with Gloss Finish - Specify Custom Artwork Number
- [ ] D - Glossy White with Debtek Mag Stripe

13.56 MHz MIFARE DESFire Card Numbering (Check One)
- [ ] M - Sequential Matching Internal/External (Inkjetted)
- [ ] N - No Card Numbering
- [ ] S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- [ ] R - Random Internal/Non-Matching Sequential External (Inkjetted)
- [ ] A - Sequential Matching Internal/External (Engraved)
- [ ] B - Sequential Internal/Sequential Non-Matching External (Engraved)
- [ ] G - Random Internal/Sequential Non-Matching External (Engraved)
- [ ] U - UID (CSN) HEX card numbering only (Inkjetted): 7 bytes UID
- [ ] V - UID (CSN) Decimal card numbering only (Inkjetted): 7 bytes UID

125 kHz Proximity Card Numbering (Check One)
- [ ] M - Sequential Matching Internal/External (Inkjetted)
- [ ] N - No Card Numbering
- [ ] S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- [ ] R - Random Internal/Non-Matching Sequential External (Inkjetted)

Option - Custom Artwork
- [ ] (Specify Artwork Number – Refer to the Custom Artwork Forms for new Artwork)

Enter your final card options from check boxes above. Example: 1457CNGGNNN

<table>
<thead>
<tr>
<th>Final Part Number</th>
<th>N</th>
<th>Options #</th>
</tr>
</thead>
</table>

### 13.56 MHz Programming Information
- Bit Numbers
- Format Number
- Facility Code
- (Custom Formats) Site Code
- City Code
- OEM Code
- Internal Card No. Start
- External Card No. Start
- PIN: Sequential: Start # Random: Length

#### For Contact Smart Chip selection, refer to the Logical Access How to Order guide.

1 For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost. 2 Cards ordered with plain white front and back packaging, with no HID artwork or with custom artwork, will still have a small "HID logo" and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card. 3 The external card number is placed in the bottom left-hand corner (125kHz) and in the bottom right-hand corner (13.56 MHz) on the back of the card on Proximity Programming only.

Permanent unique MIFARE DESFire 56 Bit serial # cannot be printed on cards. 4 For Laser Engraved external numbers, consult factory for lead times and cost. 5 The composite construction is recommended for all cards with over-laminate applied.
### FlexSmart to HID Credential Cross Reference

<table>
<thead>
<tr>
<th>Old Indala Part Number</th>
<th>New HID Part Number</th>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MXISO</td>
<td>1430</td>
<td>HID MIFARE Contactless Smart Card - Utilizes MIFARE 13.56 MHz Internal Smart Chip, Standard S50, 1 K Memory with 16 Sectors</td>
<td></td>
</tr>
<tr>
<td>MXKEY</td>
<td>1434</td>
<td>HID MIFARE Contactless Smart Keyfob - Utilizes MIFARE 13.56 MHz Internal Smart Chip, Standard S50, 1 K Memory with 16 Sectors</td>
<td></td>
</tr>
<tr>
<td>MXTAG</td>
<td>1435</td>
<td>HID MIFARE Contactless Smart Adhesive Tag - Utilizes MIFARE 13.56 MHz Internal Smart Chip, Standard S50, 1 K Memory with 16 Sectors</td>
<td></td>
</tr>
<tr>
<td>MXISO</td>
<td>1440</td>
<td>HID MIFARE Contactless Smart Card - Utilizes MIFARE 13.56 MHz Internal Smart Chip, Standard S70, 4 K Memory with 40 Sectors</td>
<td></td>
</tr>
<tr>
<td>MXKEY</td>
<td>1444</td>
<td>HID MIFARE Contactless Smart Keyfob - Utilizes MIFARE 13.56 MHz Internal Smart Chip, Standard S70, 4 K Memory with 40 Sectors</td>
<td></td>
</tr>
<tr>
<td>MXTAG</td>
<td>1445</td>
<td>HID MIFARE Contactless Smart Adhesive Tag - Utilizes MIFARE 13.56 MHz Internal Smart Chip, Standard S70, 4 K Memory with 40 Sectors</td>
<td></td>
</tr>
<tr>
<td>DXISO</td>
<td>1450</td>
<td>HID MIFARE DESFire Contactless Smart Card - Utilizes MIFARE DESFire 13.56 MHz Internal Smart Chip, Standard D40, 4K memory with flexible file system</td>
<td></td>
</tr>
<tr>
<td>FPMXI</td>
<td>1451</td>
<td>HID Combination MIFARE DESFire/Prox Contactless Smart Card - Utilizes MIFARE DESFire 13.56 MHz Internal Smart Chip, Standard D40, 4K memory with flexible file system</td>
<td></td>
</tr>
</tbody>
</table>
## Custom Credentials
### Artwork Checklist

**Company Name:**
**PO No.:**
**Date:**

**Quantity:**
Card/Key/Tag and Artwork File No.

Minimum order quantity for Custom Artwork is 500 cards per order. Some Custom Artworks may be higher. Minimum order quantity for Custom Artwork Tags/Keys is 10,000 tags per order.

This form, accompanied with the “Custom Artwork placement and Inkjet Location Form” MUST be filled out, SIGNED and returned to HID so that your order can be processed.

<table>
<thead>
<tr>
<th>Credential Type: Standard PVC Cards or Keys/Tags</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 200 - iCLASS Card</td>
</tr>
<tr>
<td>☐ 206 - iCLASS Tag</td>
</tr>
<tr>
<td>☐ 1431/1441 - HID Proximity &amp; MIFARE</td>
</tr>
<tr>
<td>☐ 1450 - MIFARE DESFire</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credential Type: Composite PVC/Polyester Cards</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ 210 - iCLASS Card</td>
</tr>
<tr>
<td>☐ 1436/1446 - MIFARE</td>
</tr>
<tr>
<td>☐ 1457 - MIFARE DESFire &amp; Proximity</td>
</tr>
</tbody>
</table>

**Artwork Placement, Font styles and Colors:**

- Artwork Placement on **Front** Side of card
- Artwork Placement on **Back** Side of card.
- Font Style(s):
- Front Side Colors:
- Back Side Colors:

**Do you plan to print over or around the custom artwork with a dye sublimation printer?**
- Yes
- No

**“Surface”** or **“Laminated”**
**Lithographic Printing** (Refer to the “Anti-Counterfeiting Descriptions” page in this guide for details)

**Card Options:**

- **Slot Punch**: ☐ Yes ☐ No
- **Signature Panel**: ☐ Yes ☐ No
- **Front Card Finish**: ☐ Gloss ☐ Matte
- **Back Card Finish**: ☐ Gloss ☐ Matte
- **Magnetic Stripe Coercivity**: ☐ HID Standard (4000 OE) ☐ (2750 OE)
- **Magnetic Stripe Type**: ☐ Standard 3 Track ☐ Debitek 1/8" ☐ Other:

**Anti-Counterfeiting Options:**

- **Invisible Ink**: ☐ Red ☐ Blue ☐ Green
- **Micro-fine Print**: ☐ Yes ☐ No
- **Hologram**: ☐ Surface

**Notes:**

1. Standard Composite Card is 40% Polyester and 60% PVC.
2. Some cards will have printed “indicators” on the back of the card to show the vertical slot punch location.
3. Some cards will have a small “HID logo” and reference number, custom artwork file number, and external number (optional) printed on the card.
4. Do not order slot punched cards for use in dye sublimation printers. Slot edge may damage the printer ribbon. Slot should be punched after dye sublimation printing.
5. Some video imaging printers cannot accommodate pre-slot punched cards. Consult with the printer manufacturer prior to ordering.
6. Surface Holograms cannot be placed over internal electronics.
7. *Representation, Warranty and Indemnity*. Customer represents and warrants to HID that it owns, controls, or otherwise has the full and unrestricted right to use the custom artwork provided to HID for use in connection with this Custom Artwork Checklist Form (the “Custom Artwork”) and to authorize and license HID to use and apply the Custom Artwork to the cards in the manner provided in this Custom Artwork Checklist Form. Customer agrees to indemnify HID and hold it harmless from and against any claims, liabilities, losses and/or expenses (including reasonable attorney fees and costs of suit) arising out of the use by HID of the Custom Artwork in the manner provided by this Custom Artwork Checklist Form or by any custom artwork proofs approved by the Customer.
8. HID does not recommend placing custom graphics on either side of the Contact Smart Chip area.

**Name:**
**Signature:**
**Date:**
Electronic Artwork Checklist

This document gives digital artwork specifications from our press department. Use these guidelines and your project should go smoothly through the pre-press department.

☐ MEDIA:
Submit files via E-Mail or on CD. Compressed files should be self extracting. Submitted media will not be returned to the customer. FTP site available upon request.

☐ PLATFORM: MS WINDOWS®/Macintosh®
Projects that are set up in any of the major applications (listed below under "Graphic Applications") generally translate to Macintosh® smoothly. Save your final file with pictures embedded, outlined fonts and EPS Vector editable file.

☐ FONTS:
Use Type 1 fonts and include screen and printer fonts on disk. Type may be converted to paths or outlines, but we cannot make copy changes to text submitted in this form. In addition, converted type loses the benefits of PostScript font definitions; hence, type quality may suffer. This is more noticeable in small type (-18 point).

☐ PLACED GRAPHICS:
All placed graphics, saved as TIFF or EPS, should be included in their native program. If a Photoshop image is placed in a Quark document, we need the Photoshop image to produce the job. Sizing, cropping, rotation, etc. should all be done to the element in its native program and placed in Quark. Color images should be converted from RGB to CMYK. Special colors should be designated using PMS or provide color sample to be matched. Resolution of color images, B&W halftones, or duotones should be 300 dpi.

☐ GRAPHIC APPLICATIONS (latest version):
Adobe Photoshop® - Adobe Illustrator® - QuarkXpress®

☐ BITMAPS AND TRACING:
Scanned line art converted to bitmaps should have a resolution of 1200 - 2400 dpi. Lower resolutions will result in jagged curves. Many programs can convert (trace) bitmaps to vector drawings. Smoothing a traced image can be time consuming, but once completed yields a resolution independent graphic that will provide crisp reproduction for all future uses. We can provide this service for you at our regular file intervention rate. Minimum required DPI (dots per inch) is 300.

☐ BLEEDS:
Incorporate 0.125" of overwork for all bleed images. Any portion of the image that extends to the edge of the product is considered a bleed. Minimum required size with bleed is 2.227" x 3.477" for standard card size file.

☐ MARGINS:
Elements that do not bleed should be at least 0.125" from the edge.
Anti-Counterfeiting Descriptions

Printing Types

1) **Laminated Lithographic Printing:** High resolution (>3600 dpi) offset printing technology yields photographic quality images. Laminated printing places the ink layer under a rigid clear plastic overlay which protects the printed image from abrasion and allows you to re-print over the existing artwork on the card. The cards are compatible with all Photo ID printing methods: dye-sub, reverse transfer and resin transfer.

2) **Surface Lithographic Printing:** This process is identical to the Laminated Lithographic Printing, but the ink layer is applied to the outer surface of the finished card and may include a clear coat. You may not be able to re-print on the card. The inks and clear coat are not compatible with D2T2 printing (Dye Diffusion Thermal Transfer, AKA dye-sublimation) but may be compatible with reverse transfer printing methods. The surface printing is durable enough for normal handling and use, but may wear more quickly in heavy use or swipe (magnetic stripe) applications. It is not recommended for high use applications, or for printing critical data such as emergency information. This process is often used for quick turnaround of simple text and graphics on card backs.

**Surface Hologram**

Holograms are one of the most recognizable anti-counterfeiting devices on the market. The optically variable image cannot be duplicated with standard printing. Surface holograms are applied via hot stamping to the exterior of the card surface. This style of application is common to all financial transaction cards.

**Embedded Hologram**

Embedded holograms are positioned under the rigid clear outer layer of the card surface. Unlike surface holograms, embedded holograms are amenable to dye sublimation – allowing the entire card surface to be personalized. This application style furthers the effectiveness of the anti-counterfeiting feature by requiring expensive specialized equipment during manufacture.

**OVI (Optical Variable Ink)**

Color-shifting inks reflect various wavelengths in white light differently, depending on the angle of incidence to the surface. An unaided eye observes this effect as a change of color while the viewing angle is changed. This anti-counterfeiting method is commonly used on currency and travel documents.

**Invisible Ultra-Violet (UV) Fluorescing Images**

Common on credit card, currency and travel documents, invisible ink images provide a covert anti-counterfeiting mechanism. Though blue/violet fluorescing ink is readily available and inexpensive, red, green, yellow and orange fluorescing pigments remain difficult to acquire. This covert anti-counterfeiting device remains popular because of its relatively easy implementation in the field.

**Micro-fine Printing**

Very small spot color printing that exploits the limitations of inkjet, toner based (laser) and dye sublimation printers. Counterfeit reproductions can be determined with a handheld magnification tool.

**Guilloche Printing**

Fine line interlocking spot color patterns that are extremely difficult to scan and reproduce. These design elements are often multicolor and are commonly used on currency and travel documents.

**Composite Formulations**

Composite formulations are designed for durable applications and for use in dye sublimation printers that employ re-transfer technology and/or polyester laminate patches. Composite cards will minimize the warping caused by such processes. These formulations derive their strength from combining biaxial oriented polyester (OPET) with traditional polyvinyl chloride (PVC).
1. **External Number:**
- **Standard Location:** The standard external # location is shown on the template below. The external # can only be printed on the back of the card. The external # will be printed in the standard location, unless otherwise specified.
- **Custom Location:** Indicate the desired external # location by writing "12345" on the appropriate template. The external # can only be printed on the back of the card.

2. **An Artwork File Number** is placed on each card. The standard location is indicated by the "CCCCC". The standard location for the custom artwork number is on the back side of the card. Indicate/incorporate the artwork number on the artwork. If there will be front side printing only, the custom artwork number will be placed on the printed side, opposite the standard location.

3. **Artwork Placement:** Indicate the placement of your artwork on the template below. Custom artwork must clear the slot punch locations and edges by a min. of 0.125".

4. **Magnetic Stripe (Optional):** If the location of the magnetic stripe is custom (other than standard) and/or if other types of magnetic stripes are to be added to the card (for example Debitek stripe), indicate the locations of the magnetic stripe(s) on the template.
   - **Standard Location**
   - **Custom Location**

---

**Card Artwork Templates**

**Notes:**
1. External # location reads in the direction as shown. External # character height is approximately 0.1".
2. Cards will have a small "HID logo" and reference number printed in the lower left-hand corner and a slot punch target printed on the back of the card.
3. A standard custom artwork file number is printed on the back side of the card. Front side printing of this same number is an option.
4. Slot punch location "indicators" will appear on the back side of the card only.
5. Do not order slot punched cards for use in dye sublimation printers.
   - Slot edge may damage the printer ribbon. Slot should be punched after dye sublimation printing.
6. Some video imaging printers cannot accommodate pre-slot punched cards. Consult with the printer manufacturer prior to ordering.

**Name:** ____________________ **Signature:** ____________________ **Date:** ____________________
Tag Credentials

- iCLASS Tag
- MIFARE Tag
- MIFARE DESFire Tag

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>PO No.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity:</td>
<td>Tag and Artwork File No.</td>
<td></td>
</tr>
</tbody>
</table>

1. **External Number:**
   - Standard Location: The external # can only be printed on the back of the Tag.

2. **Artwork Placement:** Indicate the placement of your artwork on the template below (Front side only). Custom artwork must clear the inner circle by a min. of 0.125".

---

**Tag Artwork Template**

---

**Notes:**
1. Minimum order quantity 10,000 pieces per Purchase Order.
2. Maximum two color artwork.

---

**Name:** __________________________  **Signature:** __________________________  **Date:** __________________________
### iCLASS Clamshell Cards

#### Company Name: | PO No. | Date |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity:</td>
<td>Card and Artwork File No.</td>
<td></td>
</tr>
</tbody>
</table>

1. **External Number:**
   - **Standard Location:** The standard external # location is shown on the template below. The external # can only be printed on the back of the card. The external # will be printed in the standard location, unless otherwise specified.
   - **Custom Location:** Indicate the desired external # location by writing "12345" on the appropriate template. The external # can only be printed on the back of the card.

2. **Artwork Placement:** Indicate the placement of your artwork on the template below. Custom artwork must clear the slot punch location and edges by a min. of 0.125".

### Card Artwork Templates

![Card Artwork Templates](image)

**Notes:**

1. All iCLASS Clamshell cards have a molded HID logo on the back side (as indicated) as well as a beveled edge all the way around the card. Custom artwork graphics need to clear the molded logo and bevel by a minimum of 0.125"
2. External # location reads in the direction as shown. External # character height is approximately 0.1"
3. There is no custom artwork file number on the iCLASS Clamshell.

**Name:** __________________________  **Signature:** __________________________  **Date:** __________________________
### iCLASS Readers

The following section of the How To Order Guide contains ordering information for iCLASS readers. iCLASS readers are available in various flavors, supporting many credential compatibilities, applications, and system interfaces. Use the following table to navigate to the applicable section of iCLASS part numbers.

<table>
<thead>
<tr>
<th>Credential Compatibility</th>
<th>Application</th>
<th>System Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS / Prox / Magstripe</td>
<td>Access Control, Standard</td>
<td>Wiegand / Clock-and-Data</td>
</tr>
<tr>
<td>iCLASS</td>
<td>Access Control, Standard</td>
<td>OSDP</td>
</tr>
<tr>
<td>iCLASS</td>
<td>Access Control, Standard</td>
<td>Hi-O</td>
</tr>
<tr>
<td>iCLASS</td>
<td>Read / Write, Standard</td>
<td>Serial</td>
</tr>
<tr>
<td>iCLASS</td>
<td>Biometric Access Control</td>
<td>Wiegand / Clock-and-Data or Serial</td>
</tr>
<tr>
<td>FIPS 201 / Prox / iCLASS</td>
<td>Access Control, US Gov’t</td>
<td>Wiegand / Clock-and-Data</td>
</tr>
<tr>
<td>FIPS 201 / iCLASS</td>
<td>Access Control, US Gov’t</td>
<td>OSDP</td>
</tr>
<tr>
<td>FIPS 201 / iCLASS</td>
<td>Read / Write, US Gov’t</td>
<td>Serial</td>
</tr>
<tr>
<td>FeliCa / CEPAS / iCLASS</td>
<td>Access Control, Transit Credentials</td>
<td>Wiegand / Clock-and-Data</td>
</tr>
<tr>
<td>EV1 / MIFARE</td>
<td>Access Control, HF Migration</td>
<td>Wiegand / Clock-and-Data / OSDP</td>
</tr>
<tr>
<td>Rijkspas (EV1) / MIFARE</td>
<td>Access Control, Dutch Gov’t</td>
<td>Wiegand / Clock-and-Data or Serial</td>
</tr>
</tbody>
</table>
### 13.56 MHz How to Order Guide – D00529, E.2

**iCLASS Read-Only Reader Part Numbers and Options**

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No.</th>
<th>Current Rev. No.*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Setting Options¹</th>
<th>iCLASS Security²</th>
<th>MIFARE CSN¹ Wiegand Output Mode</th>
<th>Keypad Configuration Setting Options²</th>
<th>Optional Custom³</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>iCLASS R10</strong> Contactless Smart Card Reader: Mullion Mount - Read-Only, RoHS Compliant (Wiegand)</td>
<td>6100</td>
<td>6108</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td><strong>iCLASS R15</strong> Contactless Smart Card Reader: Mullion Mount - Read-Only, RoHS Compliant (Wiegand)</td>
<td>6140</td>
<td>6148</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td><strong>iCLASS R30</strong> Contactless Smart Card Reader: European &amp; Asian Back Box Mount Read-Only, RoHS Compliant (Wiegand)</td>
<td>6110</td>
<td>6118</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td><strong>iCLASS R40</strong> Contactless Smart Card Reader: US, European &amp; Asian Back Box Mount - Read-Only, RoHS Compliant (Wiegand)</td>
<td>6120</td>
<td>6128</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td><strong>iCLASS R40</strong> Contactless Smart Card Reader: With Keypad - European &amp; Asian Back Box Mount Read-Only, RoHS Compliant (Wiegand)</td>
<td>6130</td>
<td>6138</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td><strong>iCLASS R90</strong> Contactless Smart Card Reader: Long Read Range - Read-Only, RoHS Compliant (Wiegand)</td>
<td>6150</td>
<td>A</td>
<td>K</td>
<td>Black</td>
<td>T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 = CSN option not available</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td><strong>iCLASS RKL55</strong> Contactless Smart Card Reader: Read, with LCD and Keypad US, European and Asian Back Box Mount Wiegand or Clock and Data output RoHS Compliant (Wiegand)</td>
<td>6170</td>
<td>B</td>
<td>K</td>
<td>Black</td>
<td>T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only</td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult factory for availability.

¹ Configuration Setting Options are as follows (Factory or Field Configurable):

- 00 = Beep on, LED normally red, reader flashes green on tag read
- 01 = Beep off, LED normally red, reader flashes green on tag read
- 02 = Beep on, LED normally off, reader flashes green on tag read
- 03 = Beep off, LED normally off, reader flashes green on tag read
- 04 = Beep on, LED normally red, host must flash red and/or green
- 05 = Beep off, LED normally red, host must flash green

² Additional information on Key Management:

0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
1 = Custom, not valid with FIPS201 options (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)
2 = Standard with Open Collector Tamper enabled
3 = Custom with Open Collector Tamper enabled

³ MIFARE Card Serial Number (CSN) Wiegand Output Modes are as follows (Factory or Field Configurable): See Application Note Number 25 for additional information on Key Management.

- 0 = CSN option not available
- 00 = Standard (Same as 6055A and 6055BXX0011)
- 01 = 32 bit reverse
- 02 = 32 bit
- 03 = 34 bit
- 04 = 40 bit
- 05 = 37 bit
- 06 = 56 bit
- 07 = CSN Suppressed

4 Keypad data is output via Wiegand cable. Reader processes keystrokes. Configuration Setting options:

- 00 = Buffer one key, no parity, 4 bit message
- 01 = Buffer one key, no parity, 8 bit message (Dorado)
- 02 = Single Key buffering
- 03 = Buffer one key and add parity
- 04 = Buffer one to five keys (Standard 26 bit output)
- 05 = Buffer four keys and add parity
- 20 = Single Key buffering
- 22 = Local PIN Verify

Note: Local PIN Verify requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (consult factory for availability)

Contact Factory for pricing, availability, and minimum order quantity.

RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
### multiCLASS with HID or Indala Prox Read-Only Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Setting Options¹</th>
<th>iCLASS Security²</th>
<th>MIFARE CSN³ Wiegand Output Mode</th>
<th>Keypad Configuration Setting Options⁴</th>
<th>Optional Custom⁵</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS RP15 Combination Tech Reader: HID, AWID or Indala Prox, iCLASS &amp; FIPS201- Mullion Mount Read Only, RoHS Compliant</td>
<td>6145 6143</td>
<td><strong>C</strong></td>
<td>G = Charcoal Gray K = Black</td>
<td>Pigtail Only</td>
<td>N = HID and AWID Module D = Indala Module</td>
<td>00 01 02 03 04 05 06 07 0 1 2 3 4 5 6 7 Z</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
<tr>
<td>iCLASS RP40 Combination Technology Reader: HID, AWID, or Indala Prox, iCLASS &amp; FIPS201 US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>6125 6123</td>
<td><strong>C</strong></td>
<td>G = Charcoal Gray K = Black</td>
<td>Pigtail Only</td>
<td>N = HID and AWID Module D = Indala Module</td>
<td>00 01 02 03 04 05 06 07 0 1 2 3 4 5 6 7 Z</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
<tr>
<td>iCLASS RPK40 Combination Tech Reader: HID, AWID, or Indala Prox, iCLASS &amp; FIPS201 US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>6136 6133</td>
<td><strong>C</strong></td>
<td>G = Charcoal Gray K = Black</td>
<td>Pigtail Only</td>
<td>N = HID and AWID Module D = Indala Module</td>
<td>00 01 02 03 04 05 06 07 0 1 2 3 4 5 6 7 Z</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
</tbody>
</table>

¹ Configuration Setting Options are as follows (Factory or Field Configurable):
00 = Beep on, LED normally red, reader flashes green on tag read 03 = Beep off, LED normally off, reader flashes green on tag read 06 = Beep on, LED normally off, host must flash red and/or green
01 = Beep off, LED normally red, reader flashes green on tag read 04 = Beep on, LED normally red, host must flash green 07 = Beep off, LED normally off, host must flash red and/or green
02 = Beep on, LED normally off, reader flashes green on tag read 05 = Beep off, LED normally red, host must flash green

² iCLASS Security Options (Factory or Field Configurable): See Application Note Number 28 for additional information on Key Management.
0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
1 = Custom, not valid with FIPS201 options (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)
C = Standard with Open Collector Tamper enabled
D = Custom with Open Collector Tamper enabled

³ MIFARE Card Serial Number (CSN) Wiegand Output Modes are as follows (Factory or Field Configurable). Refer to the "iCLASS Reader Wiegand Output Configuration Guide" for more details. (SETTING NOT APPLICABLE WITH ELITE ORDERS. ELITE READERS DO NOT READ MIFARE CSN.)
0 = 32 bit 1 = 32 bit reverse (Same as 6055A and 6055BXX0011) 2 = 26 bit 3 = 34 bit 4 = 40 bit 5 = 37 bit 6 = 56 bit Z = CSN Suppressed

⁴ Keypad data is output via Wiegand cable. Reader processes keystrokes. Configuration Setting options:
00 = Buffer one key, no parity. 4 bit message 09 = Buffer one key, add compliment, 8 bit message (Dorado) 10 = Buffer six keys and add parity
11 = Buffer one key and add parity 14 = Buffer one to five keys (Standard 26 bit output) 19 = Buffer four keys and add parity
20 = Single Key buffering 22 = Local PIN Verify. 23 = Buffer one to 11 keys

Note: Local PIN Verify requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (consult factory for availability.)

⁵ Contact Factory for pricing, availability, and minimum order quantity.
RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)

*Revision numbers and availability are subject to change without notice. Consult factory for availability.

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### 13.56 MHz How to Order Guide – D00529, E.2

#### multiCLASS Magstripe Read-Only Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Setting Options¹</th>
<th>iCLASS Security²</th>
<th>Magnetic Stripe Data Output³</th>
<th>Keypad Configuration Setting Options⁴</th>
<th>Optional Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICLASS RM40 Combination Tech Reader, Wiegand Magnetic stripe, iCLASS</td>
<td>6220</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 5 6 7 8 9 A B C D E F</td>
<td>N/A</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td>ICLASS RM40 Combination Tech Reader, Clock-and-Data Magnetic stripe, iCLASS</td>
<td>6228</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>1 4</td>
<td>N/A</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td>ICLASS RMP40 Combination Tech Reader, Wiegand Magnetic stripe, HID and AWID Prox, iCLASS</td>
<td>6225</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 5 6 7 8 9 A B C D E F</td>
<td>N/A</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td>ICLASS RMP40 Combination Tech Reader, Clock-and-Data Magnetic stripe, iCLASS</td>
<td>6223</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>1 4</td>
<td>N/A</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td>ICLASS RMP40 Combination Tech Reader, Wiegand Magnetic stripe, iCLASS</td>
<td>6230</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 5 6 7 8 9 A B C D E F</td>
<td>00 09 10 11 14 19 20 22 23</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td>ICLASS RMP40 Combination Tech Reader, Clock-and-Data Magnetic stripe, iCLASS</td>
<td>6238</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>1 4</td>
<td>N/A</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td>ICLASS RMP40 Combination Tech Reader, Wiegand Magnetic stripe, HID and AWID Prox, iCLASS</td>
<td>6236</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>0 5 6 7 8 9 A B C D E F</td>
<td>00 09 10 11 14 19 20 22 23</td>
<td>-XXXX Y</td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult factory for availability.

¹Configuration Setting Options are as follows (Factory or Field Configurable):
- 00 = Beep on, LED normally red, reader flashes green on tag read
- 01 = Beep off, LED normally red, host must flash red and/or green
- 02 = Beep off, LED normally red, reader flashes green on tag read
- 03 = Beep off, LED normally off, host must flash red and/or green
- 04 = Beep on, LED normally red, host must flash green
- 05 = Beep off, LED normally off, host must flash green
- 06 = Beep on, LED normally off, host must flash red and/or green

²iCLASS Security Options (Factory or Field Configurable):
- 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
- 1 = Custom cards (Reads only iCLASS cards with unique keys diversified from matching site specific master key, consult factory for availability)
- 1C = Custom with Open Collector Tamper enabled

³Magnetic Stripe Data Output:
- 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
- 1 = Custom cards (Reads only iCLASS cards with unique keys diversified from matching site specific master key, consult factory for availability)

⁴Keypad data is output via Wiegand cable. Reader processes keystrokes. Configuration Setting Options:
- 00 = Buffer one key, no parity, 4 bit message
- 09 = Buffer one key, add compliment, 8 bit message (Dorado)
- 10 = Buffer six keys and add parity

Note: Local PIN Verify requires User PIN code to be programmed into the ICLASS Credential at the factory or by using the ICLASS Card Programmer (consult factory for availability.)
multiCLASS with EM4102 Prox Read-Only Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Setting Options1</th>
<th>iCLASS Security2</th>
<th>MIFARE CSN3 &amp; EM41024 Wiegand Output Mode</th>
<th>Keypad Configuration Setting Options3</th>
<th>Optional Custom5</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS RP15 Combination Technology Reader: EM4102 Prox, iCLASS &amp; FIPS201 Wiegand Mullion Mount Read Only, RoHS Compliant</td>
<td>6145 6143</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>Pigtail Only</td>
<td>00 01 02 03 04 05 06 07 0 1 C D</td>
<td>0 2 3 4 5</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
<tr>
<td>iCLASS RP40 Combination Technology Reader: EM4102 Prox, iCLASS &amp; FIPS201 US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>6125 6123</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>Pigtail Only</td>
<td>00 01 02 03 04 05 06 07 0 1 C D</td>
<td>0 2 3 4</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
<tr>
<td>iCLASS RPK40 Combination Technology Reader: EM4102 Prox, iCLASS &amp; FIPS201 US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>6136 6133</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>Pigtail Only</td>
<td>00 01 02 03 04 05 06 07 0 1 C D</td>
<td>0 2 3 4 5</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
</tbody>
</table>

* Revision numbers and availability are subject to change without notice. Consult the factory for availability.

1 Configuration Setting Options are as follows (Factory or Field Configurable):
- 00 = Beep on, LED normally red, reader flashes green on tag read
- 01 = Beep off, LED normally red, reader flashes green on tag read
- 02 = Beep on, LED normally red, reader flashes green on tag read
- 03 = Beep off, LED normally off, reader flashes green on tag read
- 04 = Beep off, LED normally red, host must flash green
- 05 = Beep off, LED normally red, host must flash green

2 iCLASS Security Options (Factory or Field Configurable): See Application Note 28 for additional information on Key Management.
- 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
- 1 = Custom, not valid with FIPS201 options (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)
- C = Standard with Open Collector Tamper enabled
- D = Custom with Open Collector Tamper enabled

3 MIFARE Card Serial Number (CSN) and EM4102 Wiegand Output Modes are as follows (Factory or Field Configurable), Refer to the “iCLASS Reader Wiegand Output Configuration Guide” for details. (SETTING NOT APPLICABLE WITH ELITE ORDERS. ELITE READERS DO NOT READ MIFARE CSN.)
- 0 = 32 bit Wiegand
- 2 = 26 bit Wiegand
- 3 = 34 bit Wiegand
- 4 = 40 bit Wiegand
- 5 = 34 bit Wiegand (EM Parity Modified) (Note: This is = ask option 8, MIFARE CSN enabled)

4 EM4102 Output (MIFARE CSN Suppressed)
- K = 26 Bit Wiegand
- M = 34 Bit Wiegand
- N = 40 Bit Wiegand
- P = 42 Bit Wiegand
- Q = C&D (10 Digit Magstripe)
- S = 32 Bit Wiegand
- T = 42 bit Wiegand (Parity Modified, MIFARE CSN Suppressed)
- U = 34 bit Wiegand (Parity Modified, MIFARE CSN Suppressed)
- V = 34 bit Wiegand (Parity Modified, 34-bit MIFARE CSN)

5 Keypad data is output via Wiegand cable. Reader processes keystrokes. Configuration Setting options:
- 00 = Buffer one key, no parity, 4 bit message
- 09 = Buffer one key, add compliment, 8 bit message (Dorado)
- 10 = Buffer six keys and add parity
- 11 = Buffer one key and add parity
- 14 = Buffer one to five keys (Standard 26 bit output)
- 19 = Buffer four keys and add parity
- 20 = Single Key buffering
- 22 = Local PIN Verify
- 23 = Buffer one to 11 keys

Note: Local PIN Verify requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (consult factory for availability.)

6 Contact the factory for pricing, availability, and minimum order quantity
RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
### iCLASS OSDP Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Settings Options</th>
<th>iCLASS Security</th>
<th>MIFARE CSN</th>
<th>Keypad Configuration</th>
<th>Optional Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS R15 Contactless Smart Card Reader OSDP Enabled Mullion Mount Read-Only, RoHS Compliant</td>
<td>6142</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P</td>
<td>0 1 2 3 4 5 6 7</td>
<td>For keypad readers only</td>
<td>-XXXXY</td>
</tr>
<tr>
<td>iCLASS R30 Contactless Smart Card Reader OSDP Enabled European and Asian Back Box Mount Read-Only, RoHS Compliant</td>
<td>6112</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P</td>
<td>0 1 2 3 4 5 6 7</td>
<td>For keypad readers only</td>
<td>-XXXXY</td>
</tr>
<tr>
<td>iCLASS R40 Contactless Smart Card Reader OSDP Enabled US, European and Asian Back Box Mount Read-Only, RoHS Compliant</td>
<td>6122</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P</td>
<td>0 1 2 3 4 5 6 7</td>
<td>For keypad readers only</td>
<td>-XXXXY</td>
</tr>
<tr>
<td>iCLASS RK40 Contactless Smart Card Keypad Reader OSDP Enabled US, European and Asian Back Box Mount Read-Only, RoHS Compliant</td>
<td>6132</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P</td>
<td>0 1 2 3 4 5 6 7</td>
<td>For keypad readers only</td>
<td>-XXXXY</td>
</tr>
<tr>
<td>iCLASS RKLS5 Contactless Smart Card LCD Keypad Reader OSDP Enabled US, European and Asian Back Box Mount Read-Only, RoHS Compliant</td>
<td>6172</td>
<td>B</td>
<td>K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P</td>
<td>0 1 2 3 4 5 6 7</td>
<td>For keypad readers only</td>
<td>-XXXXY</td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult factory for availability.

1 Configuration Setting Options are as follows (Factory or Field Configurable):

- 00 = Beep on, LED normally red, reader flashes green on tag read
- 01 = Beep off, LED normally red, reader flashes green on tag read
- 02 = Beep off, LED normally off, reader flashes green on tag read
- 03 = Beep off, LED normally off, reader flashes green on tag read
- 04 = Beep off, LED normally red, reader must flash green
- 05 = Beep off, LED normally red, reader must flash green
- 06 = Beep on, LED normally off, host must flash red and/or green
- 07 = Beep off, LED normally off, host must flash red and/or green

2 iCLASS Security Options (Factory or Field Configurable): See Application Note Number 28 for additional information on Key Management.

- 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
- 1 = Elite Key (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)
- P = Standard with OSDP Tamper enabled
- Q = Elite with OSDP Tamper enabled

3 MIFARE Card Serial Number (CSN) Wiegand Output Modes are as follows (Factory or Field Configurable). Refer to the "iCLASS Reader Wiegand Output Configuration Guide" for more details.

- 0 = 32 bit
- 1 = 32 bit reverse (Same as 6155A and 6155DX0X011)
- 2 = 26 bit
- 3 = 34 bit
- 4 = 40 bit
- 5 = 37 bit
- 6 = 56 bit
- Z = CSN Suppressed

4 Keypad data is output via Wiegand cable. Reader processes keystrokes. OSDP interface supports standard OSDP keypad output. Configuration Setting options for Wiegand interface includes:

- 00 = Buffer one key, no parity, 4 bit message
- 01 = Buffer one key and add parity
- 02 = Buffer two keys
- 03 = Buffer one to five keys (Standard 26 bit output)
- 04 = Buffer four keys and add parity
- 05 = Single Key buffering
- 06 = Local PIN Verify
- 07 = Buffer one to 11 keys

5 The OSDP communication modules allow host driven communication using (HID Advanced Device Protocol) / OSDP (Open Supervised Device Protocol) over an RS485 (Half-Duplex) hardware interface. RoHS compliant readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
### iCLASS Hi-O Enabled Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No*</th>
<th>Color Options</th>
<th>Hardware Options 7</th>
<th>Configuration Settings Options</th>
<th>iCLASS Security</th>
<th>MIFARE CSN</th>
<th>Keypad Configuration</th>
<th>Optional Custom</th>
</tr>
</thead>
</table>
| iCLASS R10 Contactless Smart Card Reader  
Hi-O Communications  
Mullion Mount  
Read-Only, RoHS Compliant | 6102 | C | G = Charcoal Gray  
K = Black | H = Terminal Strip with Hi-O Communications | 00 | 0 | 1 | 0 | For keypad readers only | -XXXXX |
| iCLASS R15 Contactless Smart Card Reader  
Hi-O Communications  
Mullion Mount  
Read-Only, RoHS Compliant | 6142 | C | G = Charcoal Gray  
K = Black | H = Terminal Strip with Hi-O Communications | 00 | 0 | 1 | 0 | For keypad readers only | -XXXXX |
| iCLASS R30 Contactless Smart Card Reader  
Hi-O Communications  
European and Asian Back Box Mount  
Read-Only, RoHS Compliant | 6112 | C | G = Charcoal Gray  
K = Black | H = Terminal Strip with Hi-O Communications | 00 | 0 | 1 | 0 | For keypad readers only | -XXXXX |
| iCLASS R40 Contactless Smart Card Reader  
Hi-O Communications  
US, European and Asian Back Box Mount  
Read-Only, RoHS Compliant | 6122 | C | G = Charcoal Gray  
K = Black | H = Terminal Strip with Hi-O Communications | 00 | 0 | 1 | 0 | For keypad readers only | -XXXXX |
| iCLASS RK40 Contactless Smart Card Keypad Reader  
Hi-O Communications  
US, European and Asian Back Box Mount  
Read-Only, RoHS Compliant | 6132 | C | G = Charcoal Gray  
K = Black | H = Terminal Strip with Hi-O Communications | 00 | 0 | 1 | 0 | 00 | -XXXXX |

*Revision numbers and availability are subject to change without notice. Consult factory for availability.

1 Configuration Setting Options are as follows (Factory or Field Configurable):
   - 00 = Beep on, LED normally red, reader flashes green on tag read
   - 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
   - 1 = Elite Key (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)
   - 2 = Elite Key (Reads only iCLASS cards with unique keys diversified from HID master key)

2 iCLASS Security Options (Factory or Field Configurable): See Application Note Number 28 for additional information on Key Management.
   - 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
   - 1 = Elite Key (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)

3 MIFARE Card Serial Number (CSN) Hi-O bus output modes are as follows:
   (SETTING NOT APPLICABLE WITH ELITE ORDERS. ELITE READERS DO NOT READ MIFARE CSN.)
   - 0 = 32 bit LSB (if MIFARE DESFire or other CSN Length, output is length of CSN output LSB)
   - Credential data is always represented within a Card Format Hi-O data package.

5 Keypad data is output via Hi-O bus. Reader processes keystrokes. Configuration Setting options:
   - 00 = ASCII (Hi-O Bus Default)

6 Contact Factory for pricing, availability, and minimum order quantity.

7 The Hi-O communications allows for encrypted CANbus communication with other Hi-O enabled devices.

RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
### iCLASS Read/Write Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No.</th>
<th>Current Rev. No.*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Setting Options</th>
<th>iCLASS Security</th>
<th>MIFARE CSN*</th>
<th>Keypad Configuration Setting Options</th>
<th>Optional Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>iCLASS RW100</strong> Contactless Smart Card Reader/Writer: Read/Write, Mullion Mount. Wiegand and RS232 or RS485 or USB or UART (RoHS Compliant)</td>
<td>6101</td>
<td>C</td>
<td>G = Gray, K = Black</td>
<td>T = RS232, 4 = RS485(Full-Duplex), M = RS485(Half-Duplex), U = USB, B = UART to UART</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only -XXXX Y</td>
</tr>
<tr>
<td><strong>iCLASS RW150</strong> Contactless Smart Card Reader/Writer: Read/Write, Mullion Mount. Wiegand and RS232 or RS485 or USB or UART (RoHS Compliant)</td>
<td>6141</td>
<td>C</td>
<td>G = Gray, K = Black</td>
<td>T = RS232, 4 = RS485(Full-Duplex), M = RS485(Half-Duplex), U = USB, B = UART to UART</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only -XXXX Y</td>
</tr>
<tr>
<td><strong>iCLASS RW300</strong> Contactless Smart Card Reader/Writer: Read/Write, European and Asian Back Box Mount. Wiegand and RS232 or RS485 or USB or UART (RoHS Compliant)</td>
<td>6111</td>
<td>C</td>
<td>G = Gray, K = Black</td>
<td>T = RS232, 4 = RS485(Full-Duplex), M = RS485(Half-Duplex), U = USB, B = UART to UART</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only -XXXX Y</td>
</tr>
<tr>
<td><strong>iCLASS RW400</strong> Contactless Smart Card Reader/Writer: Read/Write, US, European and Asian Back Box Mount. Wiegand and RS232 or RS485 or USB or UART (RoHS Compliant)</td>
<td>6121</td>
<td>C</td>
<td>G = Gray, K = Black</td>
<td>T = RS232, 4 = RS485(Full-Duplex), M = RS485(Half-Duplex), U = USB, B = UART to UART</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>For Keypad readers only -XXXX Y</td>
</tr>
<tr>
<td><strong>iCLASS RWK400</strong> Contactless Smart Card Reader/Writer: Read/Write, with Keypad, US, European and Asian Back Box Mount. Wiegand Output, and/or RS-232/422 or USB or UART (RoHS Compliant)</td>
<td>6131</td>
<td>C</td>
<td>G = Gray, K = Black</td>
<td>T = RS232, 4 = RS485(Full-Duplex), M = RS485(Half-Duplex), U = USB, B = UART to UART</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td><strong>iCLASS RWK550</strong> Contactless Smart Card Reader/Writer: Read/Write, with LCD and Keypad, US, European and Asian Back Box Mount. Wiegand Output, and/or RS-232, RS-485, USB or UART (RoHS Compliant)</td>
<td>6171</td>
<td>B</td>
<td>K = Black</td>
<td>T = RS232, 4 = RS485(Full-Duplex), M = RS485(Half-Duplex), U = USB, B = UART to UART</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1</td>
<td>0 1 2 3 4 5 6 Z</td>
<td>-XXXX Y</td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult factory for availability.

1. Configuration Setting Options are as follows (Factory or Field Configurable):
   - 00 = Beep on, LED normally red, reader flashes green on tag read
   - 01 = Beep off, LED normally red, reader flashes green on tag read
   - 02 = Beep off, LED normally off, reader flashes green on tag read

2. iCLASS Security options (Factory or Field Configurable): See Application Note Number 28 for additional information on Key Management.

3. Keypad data is output via Wiegand cable. Reader processes keystrokes. Configuration Setting options:
   - 00 = Buffer one key, no parity, 4 bit message
   - 14 = Buffer one to five keys (Standard 26 bit output)

4. Contact factory for pricing, availability, and minimum order quantity.

5. All the following communication modules allow host driven communication using the iCLASS Serial Protocol. All the following communication modules (except USB) allow for card ID reporting instantiated by the reader. For multi-drop functionality, see iCLASS OSDP Readers. All Reader/Write readers are terminal strip readers. RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in the electrical and electronic equipment.)
# 13.56 MHz How to Order Guide – D00529, E.2

## bioCLASS Reader/Enroller, Read-Only and Read/Write Biometric Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No.</th>
<th>Current Rev. No.*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Setting Options1</th>
<th>iCLASS Security2</th>
<th>MIFARE CSN/Wiegand Output Mode</th>
<th>Keypad Configuration Setting Options3</th>
<th>Optional Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS RKL857 Contactless Smart Card Biometric Reader/Enroller: Reader with LCD, Keypad, and fingerprint biometric module US, European and Asian Back Box Mount (Wiegand Output) Read Only, RoHS Compliant</td>
<td>6180</td>
<td>B K = Black</td>
<td>R = Reader/Enroller6</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 0 1 0 1 0 0 = N/A</td>
<td>00 09 10 11 14 19 20 22</td>
<td>-XXXX Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS RKL857 Contactless Smart Card Reader: with LCD, Keypad, and fingerprint biometric module US, European and Asian Back Box Mount (Wiegand Output) Read Only, RoHS Compliant Requires reader/enroller or CP575A for enrolling fingerprint templates.</td>
<td>6180 6188</td>
<td>B K = Black</td>
<td>T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 0 1 0 1 0 0 = N/A</td>
<td>00 09 10 11 14 19 20 22</td>
<td>-XXXX Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS RWKL575 Contactless Smart Card Reader/Writer: Read/Write, with LCD, Keypad, and fingerprint biometric module US, European and Asian Back Box Mount Wiegand Output, and/or RS-232, RS-485, USB or UART Requires reader/enroller or CP575A for enrolling fingerprint templates.</td>
<td>6181</td>
<td>B K = Black</td>
<td>(All Terminal Strip)</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 0 1 0 1 0 0 = N/A</td>
<td>00 09 10 11 14 19 20 22</td>
<td>-XXXX Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS BIO500 5 fingerprint biometric module upgrade (Sensor Only)</td>
<td>6190</td>
<td>B K = Black</td>
<td>N = None</td>
<td>00</td>
<td>0 0 = N/A</td>
<td>0 = N/A</td>
<td>00</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

1. Configuration Setting Options are as follows (Factory or Field Configurable):
   - 00 = Beep on, LED normally red, reader flashes green on tag read
   - 01 = Beep off, LED normally red, reader flashes green on tag read
   - 02 = Beep on, LED normally red, reader flashes green on tag read
   - 03 = Beep off, LED normally off, reader flashes green on tag read
   - 04 = Beep off, LED normally red, host must flash green
   - 05 = Beep off, LED normally off, host must flash green
   - 06 = Beep on, LED normally off, host must flash red and/or green
   - 07 = Beep off, LED normally off, host must flash red and/or green

2. iCLASS Security options (Factory or Field Configurable)
   - 0 = Standard; protects access and biometric applications (Reads/Enrolls all iCLASS cards with unique keys diversified from HID master key)
   - 1 = Elite; protects access and biometric applications (Reads/Enrolls only iCLASS cards with site-specific Elite key; consult factory for availability)
   - C = Standard with Open Collector Tamper enabled
   - D = Elite with Open Collector Tamper enabled

3. MIFARE Card Serial Number (CSN) Wiegand Output Modes are as follows (Factory or Field Configurable). Refer to the "iCLASS Reader Wiegand Output Configuration Guide" for more details. (SETTING NOT APPLICABLE WITH ELITE ORDERS. ELITE READERS DO NOT READ MIFARE CSN.)
   - 0 = Standard; protects access and biometric applications (Reads/Enrolls all iCLASS cards with unique keys diversified from HID master key)
   - 00 = Buffer one key, no parity, 4 bit message
   - 01 = Buffer one key, no parity, 8 bit message
   - 02 = Buffer one key, add compliment, 8 bit message
   - 03 = Buffer six keys and add parity
   - 04 = Buffer one to five keys (Standard 26 bit output)
   - 05 = Buffer four keys and add parity
   - 06 = Buffer one to 11 keys

4. Keypad data is output via Wiegand cable. Reader processes keystrokes. Configuration Setting options:
   - 00 = Single Key buffering
   - 01 = Buffer one key, no parity, 4 bit message
   - 02 = Buffer one key, no parity, 8 bit message
   - 03 = Buffer one key, add compliment, 8 bit message
   - 04 = Buffer six keys and add parity
   - 05 = Buffer one to 5 keys (Standard 26 bit output)
   - 06 = Buffer four keys and add parity
   - 07 = Buffer one to 11 keys

5. Note: Local PIN Verify requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (consult factory for availability.)

6. Bio500 fingerprint biometric module upgrade is compatible with the RWKL575 iCLASS LCD Keypad Reader only.

7. In addition to RKL857 reader only (6180BKT), this product provides additional enrollment capabilities and multi-lingual support. Reader/Enroller is field configurable for one of the following behaviors: reader/enroller, reader-only or enroller-only, and field configurable for one of 10 languages (see datasheet for more information). This product replaces CP575 fingerprint template enroller (no longer available).

8. All the following communication modules allow host driven communication using the iCLASS Serial Protocol. All the following communication modules (except USB) allow for card ID reporting instantiated by the reader.

RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
13.56 MHz How to Order Guide – D00529, E.2
iCLASS US Government FIPS201 Compliant Read-Only Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No.</th>
<th>Current Rev. No.*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Setting Options¹</th>
<th>iCLASS Security²</th>
<th>FIPS 201³ Wiegand Output Mode</th>
<th>Keypad Configuration Setting Options¹</th>
<th>US Government FIPS 201 Required Part Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS R10 Contactless Smart Card Reader:</td>
<td>6100</td>
<td></td>
<td>C</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td>Mullion Mount - Read-Only, RoHS Compliant</td>
<td>6108</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS R15 Contactless Smart Card Reader:</td>
<td>6140</td>
<td></td>
<td>C</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td>Mullion Mount - Read-Only, RoHS Compliant</td>
<td>6148</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS R30 Contactless Smart Card Reader:</td>
<td>6110</td>
<td></td>
<td>C</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td>European &amp; Asian Back Box Mount</td>
<td>6118</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS R40 Contactless Smart Card Reader:</td>
<td>6120</td>
<td></td>
<td>C</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td>US, European &amp; Asian Back Box Mount</td>
<td>6128</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS RK40 Contactless Smart Card Reader:</td>
<td>6130</td>
<td></td>
<td>C</td>
<td>N = Pigtail 18” (0.5 meter) T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td>With Keypad - Read-Only, RoHS Compliant</td>
<td>6138</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>US, European &amp; Asian Back Box Mount</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS RKLS5 Contactless Smart Card Reader:</td>
<td>6170</td>
<td></td>
<td>B</td>
<td>T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td>Read, with LCD and Keypad</td>
<td>6178</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

¹Configuration Setting Options are as follows (Factory or Field Configurable):
00 = Beep on, LED normally red, reader flashes green on tag read
01 = Beep off, LED normally red, reader flashes green on tag read
02 = Beep on, LED normally off, reader must flash red
03 = Beep off, LED normally off, reader must flash red
04 = Beep on, LED normally red, host must flash green
05 = Beep off, LED normally off, host must flash red
06 = Beep on, LED normally off, host must flash red and/or green
07 = Beep off, LED normally off, host must flash red and/or green

²iCLASS Security Options (Factory or Field Configurable): See Application Note Number 28 for additional information on Key Management.
0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
1 = Custom (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)
C = Standard with Open Collector Tamper enabled
D = Custom (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)
K = Standard with Open Collector Tamper enabled
1 = Standard with Open Collector Tamper enabled

³FIPS 201 (USA Government Smart Card) Format:
7 = 200 bit, 8 = 64 bit, BCD, 9 = 64 bit, REVERSE BCD, A = 40 bit, BCD, C = 40 bit, REVERSE BCD, D = 75 bit GSA, F = HMAC + 200 bit, G = HMAC + 40 bit BCD, H = HMAC + 64 bit BCD, I = 80 bit combined, J = 32 bit HMAC
K = 200 bit & 14443A 56 bit CSN, M = 200 bit & 14443A 26 bit CSN, N = 75 bit GSA & 14443A 56 bit CSN, T = 14443A 32bit CSN

For more information on the FIPS201 outputs, refer to the output selection guide: http://www.hidcorp.com/pdfs/products/fips201_technote.pdf

Note: Local PIN Verify requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (consult factory for availability.)

RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
# 13.56 MHz How to Order Guide – D00529, E.2

## multiCLASS US Government FIPS201 Compliant with HID or Indala Prox Read-Only Reader Part Numbers and Options

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS RP15 Combination Tech Reader: HID, AWID or Indala Prox, iCLASS &amp; FIPS201- Mullion Mount - Read Only, RoHS Compliant</td>
<td>6145 6143</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>Pigtail Only</td>
<td>N = HID and AWID Module</td>
<td>D = Indala Module</td>
<td>00 01 02 03 04 05 06 07 0 1 1</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td>iCLASS RP40 Combination Technology Reader: HID, AWID, or Indala Prox, iCLASS &amp; FIPS201 US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>6125 6123</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>Pigtail Only</td>
<td>N = HID and AWID Module</td>
<td>D = Indala Module</td>
<td>00 01 02 03 04 05 06 07 0 1 1</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
</tr>
<tr>
<td>iCLASS RPK40 Combination Tech Reader: HID, AWID, or Indala Prox, iCLASS &amp; FIPS201 US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>6136 6133</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>Pigtail Only</td>
<td>N = HID and AWID Module</td>
<td>D = Indala Module</td>
<td>00 01 02 03 04 05 06 07 0 1 1</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult factory for availability.

1. Configuration Setting Options are as follows (Factory or Field Configurable):
   - 00 = Beep on, LED normally red, reader flashes green on tag read
   - 01 = Beep off, LED normally red, reader flashes green on tag read
   - 02 = Beep on, LED normally off, reader flashes green on tag read
   - 03 = Beep off, LED normally off, reader flashes green on tag read
   - 04 = Beep on, LED normally red, host must flash green
   - 05 = Beep off, LED normally red, host must flash green
   - 06 = Beep on, LED normally off, host must flash red and/or green
   - 07 = Beep off, LED normally off, host must flash red and/or green

2. iCLASS Security Options (Factory or Field Configurable): See Application Note Number 28 for additional information on Key Management.
   - 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
   - 1 = Custom (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)
   - C = Standard with Open Collector Tamper enabled
   - D = Custom with Open Collector Tamper enabled

3. FIPS 201 (USA Government Smart Card) Formats:
   - 7 = 200 bit, 8 = 64 bit, BCD, 9 = 64 bit, REVERSE BCD, A = 40 bit, BCD, C = 40 bit, REVERSE BCD, D = 75 bit GSA, F = HMAC + 200 bit, G = HMAC + 40 bit BCD, H = HMAC + 64 bit BCD, I = 80 bit combined, J = 32 bit HMAC, K = 200 bit & 14443A 56 bit CSN, M = 200 bit & 14443A 26 bit CSN, N = 75 bit GSA & 14443A 56 bit CSN, T = 14443A 32bit CSN.

For more information on the FIPS201 outputs, refer to the output selection guide: [http://www.hidcorp.com/pdfs/products/fips201_technote.pdf](http://www.hidcorp.com/pdfs/products/fips201_technote.pdf)

4. Keypad data is output via Wiegand cable. Reader processes keystrokes. Configuration Setting options:
   - 00 = Buffer one key, no parity, 4 bit message
   - 01 = Buffer one key, add compliment, 8 bit message (Dorado)
   - 10 = Buffer six keys and add parity
   - 11 = Buffer one key and add parity
   - 14 = Buffer one to five keys (Standard 26 bit output)
   - 19 = Buffer four keys and add parity
   - 20 = Single Key buffering
   - 22 = Local PIN Verify
   - 23 = Buffer one to 11 keys

Note: Local PIN Verify requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (consult factory for availability.)

RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
### multiCLASS US Government FIPS 201 Compliant with Magstripe Read-Only Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Setting Options 1</th>
<th>iCLASS Security 2</th>
<th>FIPS201 Wiegand Output Mode</th>
<th>Keypad Configuration Setting Options 4</th>
<th>US Government (FIPS 201) Required Part Suffix</th>
<th>Magnetic Stripe Data Output 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>multiCLASS RM40 Combination Tech Reader, Wiegand, Magnetic stripe, iCLASS US/EU APAC Back Box Mount, Wall switch form factor, Read Only, RoHS Compliant</td>
<td>6220</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>N/A</td>
<td>-G3.0</td>
<td>0 5 6 7 8 9 A B C D E F</td>
</tr>
<tr>
<td>multiCLASS RMP40 Combination Tech Reader, Wiegand, Magnetic stripe, HID and AWID Prox, iCLASS US/EU APAC Back Box Mount, Wall switch form factor, Read Only, RoHS Compliant</td>
<td>6225</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>N/A</td>
<td>-G3.0</td>
<td>0 5 6 7 8 9 A B C D E F</td>
</tr>
<tr>
<td>multiCLASS RMK40 Combination Tech Keypad Reader, Wiegand, Magnetic stripe, iCLASS US/EU APAC Back Box Mount, Wall switch form factor, Read Only, RoHS Compliant</td>
<td>6230</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>00 09 10 11 14 19 20 22</td>
<td>-G3.0</td>
<td>0 5 6 7 8 9 A B C D E F</td>
</tr>
<tr>
<td>multiCLASS RPMK40 Combination Tech Keypad Reader, Wiegand, Magnetic stripe, HID and AWID Prox, iCLASS, US/EU APAC Back Box Mount, Wall switch form factor, Read Only, RoHS Compliant</td>
<td>6236</td>
<td>C</td>
<td>K = Black</td>
<td>N = Pigtail T = Terminal Strip</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 C D</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>00 09 10 11 14 19 20 22</td>
<td>-G3.0</td>
<td>0 5 6 7 8 9 A B C D E F</td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult factory for availability.

1 Configuration Setting Options are as follows (Factory or Field Configurable):
- 00 = Beep on, LED normally red, reader flashes green on tag read
- 01 = Beep off, LED normally red, reader flashes green on tag read
- 02 = Beep on, LED normally off, reader flashes green on tag read
- 03 = Beep off, LED normally off, reader flashes green on tag read
- 04 = Beep on, LED normally red, host must flash green
- 05 = Beep off, LED normally red, host must flash green
- 06 = Beep on, LED normally off, host must flash red and/or green

2 iCLASS Security Options (Factory or Field Configurable):
- 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
- 1 = Custom (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)
- C = Standard with Open Collector Tamper enabled
- D = Custom with Open Collector Tamper enabled

3 FIPS 201 (USA Government Smart Card) Formats:
- 7 = 200 bit
- 8 = 64 bit, BCD
- 9 = 64 bit, REVERSE BCD
- A = 40 bit, BCD
- C = 40 bit, REVERSE BCD
- D = 75 bit GSA
- F = HMAC + 200 bit
- G = HMAC + 40 bit BCD
- H = HMAC + 64 bit BCD
- I = 80 bit combined
- J = 32 bit HMAC
- K = 200 bit & 14443A 56 bit CI
- M = 200 bit & 14443A 26 bit CI
- N = 75 bit GSA & 14443A 56 bit CI
- T = 14443A 32 bit CI


4 Keypad data is output via Wiegand cable. Reader processes keystrokes. Configuration setting options:
- 00 = Buffer one key, no parity, 4 bit message
- 09 = Buffer one key, add compliment, 8 bit message (Dorado)
- 06 = Buffer six keys and add parity
- 07 = Buffer one to five keys (Standard 26 bit output)
- 11 = Buffer four keys and add parity
- 14 = Local PIN Verify
- 19 = Buffer four keys and add parity
- 20 = Single Key buffering

5 Stripe Data Output
- 0 = Northern card to 32 bit Wiegand, (FC=16 bits, ID=16 bits)
- 1 = ABA card, all bits raw data – CAD
- 4 = ABA card all ABA digits, plus 10 leading & 10 trailing 0’s – CAD
- 5 = ABA card all ABA digits, plus 10 leading & 10 trailing 0’s – Wiegand
- 6 = ABA card convert last 4 ABA digits in first field to binary and output as 26 bit Wiegand
- 7 = ABA card convert last 7 ABA digits in first field to binary and output as 26 bit Wiegand
- 8 = EMPI card to 26 bit Wiegand
- 9 = EMPI card to 34 bit Wiegand
- A = ABA card, convert last 9 ABA digits in first field to binary and output as 34 bit Wiegand
- B = Basic MS raw output – all bits Wiegand in order received
- C = ABA to 26 bit Wiegand (FC=8 bits, ID=16 bits)
- D = ABA to 34 bit Wiegand (FC=16 bits ID=16 bits)
- E = ABA to 34 bit Wiegand (Mercury compatible) (FC=12 bits, ID=20 bits)
- F = ABA to 26 bit Wiegand

All magnetic stripe format outputs match option B (Basic MS raw output – all bits Wiegand in order received), documented on page 6 of [http://www.hidglobal.com/documents/multiclass_magstripe_reader_an_en.pdf](http://www.hidglobal.com/documents/multiclass_magstripe_reader_an_en.pdf). To modify magstripe output, contact technical support department to order desired configuration card from Table 2, column “Configuration Card”, on page 6.

RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restraint of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)

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## iCLASS US Government FIPS 201 Read/Write Reader Part Numbers and Options

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<tr>
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<tbody>
<tr>
<td>iCLASS RW100 Contactless Smart Card Reader/Writer:</td>
<td>6101</td>
<td>C</td>
<td>G = Gray</td>
<td>T = RS232 4 = RS485 (Full-Duplex)</td>
<td>00 01 02 03 04 05</td>
<td>0 1</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>Read/Write Mullion Mount Wiegand and RS232 or RS485 or USB or UART (RoHS Compliant)</td>
<td></td>
<td></td>
<td>K = Black</td>
<td>M = USB</td>
<td>06 07</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>iCLASS RW150 Contactless Smart Card Reader/Writer:</td>
<td>6141</td>
<td>C</td>
<td>G = Gray</td>
<td>T = RS232 4 = RS485 (Full-Duplex)</td>
<td>00 01 02 03 04 05</td>
<td>0 1</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>Read/Write Mullion Mount Wiegand and RS232 or RS485 or USB or UART (RoHS Compliant)</td>
<td></td>
<td></td>
<td>K = Black</td>
<td>M = USB</td>
<td>06 07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS RW300 Contactless Smart Card Reader/Writer:</td>
<td>6111</td>
<td>C</td>
<td>G = Gray</td>
<td>T = RS232 4 = RS485 (Full-Duplex)</td>
<td>00 01 02 03 04 05</td>
<td>0 1</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>Read/Write European and Asian Back Box Mount Wiegand and RS232 or RS485 or USB or UART (RoHS Compliant)</td>
<td></td>
<td></td>
<td>K = Black</td>
<td>M = USB</td>
<td>06 07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS RW400 Contactless Smart Card Reader/Writer:</td>
<td>6121</td>
<td>C</td>
<td>G = Gray</td>
<td>T = RS232 4 = RS485 (Full-Duplex)</td>
<td>00 01 02 03 04 05</td>
<td>0 1</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>Read/Write US, European and Asian Back Box Mount Wiegand and RS232 or RS485 or USB or UART (RoHS Compliant)</td>
<td></td>
<td></td>
<td>K = Black</td>
<td>M = USB</td>
<td>06 07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS RWK400 Contactless Smart Card Reader/Writer:</td>
<td>6131</td>
<td>B</td>
<td>G = Gray</td>
<td>T = RS232 4 = RS485 (Full-Duplex)</td>
<td>00 01 02 03 04 05</td>
<td>0 1</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>Read/Write, with Keypad US, European and Asian Back Box Mount Wiegand Output, and/or RS-2304/22 or USB or UART (RoHS Compliant)</td>
<td></td>
<td></td>
<td>K = Black</td>
<td>M = USB</td>
<td>06 07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iCLASS RWKL550 Contactless Smart Card Reader/Writer:</td>
<td>6171</td>
<td>B</td>
<td>K = Black</td>
<td>T = RS232 4 = RS485 (Full-Duplex)</td>
<td>00 01 02 03 04 05</td>
<td>0 1</td>
<td>7 8 9 A C D F G H I J K M N T</td>
<td>For Keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>Read/Write, with LCD and Keypad US, European and Asian Back Box Mount Wiegand Output, and/or RS-232, RS-485, USB or UART (RoHS Compliant)</td>
<td></td>
<td></td>
<td></td>
<td>M = USB</td>
<td>06 07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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*Revision numbers and availability are subject to change without notice. Consult factory for availability.

1 Configuration Setting Options are as follows (Factory or Field Configurable):

- 00 = Beep on, LED normally red, reader flashes green on tag read
- 01 = Beep on, LED normally red, reader flashes green on tag read
- 02 = Beep on, LED normally red, reader flashes green on tag read
- 03 = Beep off, LED normally off, reader flashes green on tag read
- 04 = Beep on, LED normally red, host must flash green
- 05 = Beep off, LED normally red, host must flash green
- 06 = Beep on, LED normally off, host must flash red and/or green
- 07 = Beep off, LED normally off, host must flash red and/or green

2 iCLASS Security options (Factory or Field Configurable): See Application Note Number 28 for additional information on Key Management.

- 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
- 1 = Elite Key (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)

3 C = Standard with Open Collector Tamper enabled

4 = Custom with Open Collector Tamper enabled

1. **FIPS 201 (USA Government Smart Card) Formats:**

   - 7 = 200 bit, 8 = 64 bit, BCD, 9 = 64 bit, REVERSE BCD, A = 40 bit, BCD, C = 40 bit, REVERSE BCD, D = 75 bit GSA, F = HMAC + 200 bit, G = HMAC + 40 bit BCD, H = HMAC + 64 bit BCD, I = 80 bit combined, J = 32 bit HMAC, K = 200 bit & 14443A 56 bit CSN, M = 200 bit & 14443A 28 bit CSN, N = 75 bit GSA & 14443A 56 bit CSN, T = 14443A 32bit CSN.

2. **Local PIN Verify**

   - 00 = Buffer one key, no parity, 4 bit message
   - 09 = Buffer one key, add complement, 8 bit message (Dorado)
   - 11 = Buffer one key and add parity
   - 14 = Buffer one to five keys (Standard 28 bit output)
   - 19 = Buffer four keys and add parity
   - 20 = Single Key buffering
   - 22 = Local PIN Verify
   - 23 = Buffer one to 11 keys

   **Note:** Local PIN Verify requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (consult factory for availability.)

---

All the following communication modules allow host driven communication using the iCLASS Serial Protocol. All the following communication modules (except USB) allow for card ID reporting instantiated by the reader. For multi-drop functionality, see iCLASS OSDP Readers. All Reader/ Writers are terminal strip readers. RoHS compliant Readers are appropriately marked on reader and box. (RoHS/ Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
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**iCLASS US Government FIPS 201 Compliant OSDP Reader Part Numbers and Options**

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No</th>
<th>Color Options</th>
<th>Hardware Options (^1)</th>
<th>Configuration Settings Options</th>
<th>iCLASS Security</th>
<th>FIPS201(^2) Wiegand Output Mode</th>
<th>Keypad Configuration(^3)</th>
<th>US Government (FIPS 201) Required Part Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS R15 Contactless Smart Card Reader OSDP Enabled Mullion Mount Read-Only, RoHS Compliant</td>
<td>6142</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P Q</td>
<td>789 A C D F G H I J K M N T</td>
<td>For keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>iCLASS R30 Contactless Smart Card Reader OSDP Enabled European and Asian Back Box Mount Read-Only, RoHS Compliant</td>
<td>6112</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P Q</td>
<td>789 A C D F G H I J K M N T</td>
<td>For keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>iCLASS R40 Contactless Smart Card Reader OSDP Enabled US, European and Asian Back Box Mount Read-Only, RoHS Compliant</td>
<td>6122</td>
<td>C</td>
<td>G = Charcoal Gray K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P Q</td>
<td>789 A C D F G H I J K M N T</td>
<td>For keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>iCLASS RK40 Contactless Smart Card Keypad Reader OSDP Enabled US, European and Asian Back Box Mount Read-Only, RoHS Compliant</td>
<td>6132</td>
<td>B</td>
<td>G = Charcoal Gray K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P Q</td>
<td>789 A C D F G H I J K M N T</td>
<td>For keypad readers only</td>
<td>-G3.0</td>
</tr>
<tr>
<td>iCLASS RKL55 Contactless Smart Card LCD/Keypad Reader OSDP Enabled US, European and Asian Back Box Mount Read-Only, RoHS Compliant</td>
<td>6172</td>
<td>B</td>
<td>K = Black</td>
<td>P = Terminal Strip with OSDP (RS485) Module</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0 1 P Q</td>
<td>789 A C D F G H I J K M N T</td>
<td>For keypad readers only</td>
<td>-G3.0</td>
</tr>
</tbody>
</table>

\(^1\) Configuration Setting Options are as follows (Factory or Field Configurable):
00 = Beep off, LED normally red, reader flashes green on tag read
01 = Beep off, LED normally red, reader flashes green on tag read
02 = Beep on, LED normally red, reader flashes green on tag read
03 = Beep on, LED normally red, reader flashes green on tag read
04 = Beep on, LED normally red, host must flash green
05 = Beep off, LED normally red, host must flash green
06 = Beep on, LED normally red, host must flash red and/or green
07 = Beep off, LED normally red, host must flash red and/or green

\(^2\) FIPS201 (USA Government Smart Card) Formats:
7 = 200 bit, 8 = 64 bit, BCD, 9 = 64 bit, REVERSE BCD, A = 40 bit, BCD, C = 40 bit, REVERSE BCD, D = 75 bit GSA, F = HMAC + 200 bit, G = HMAC + 40 bit BCD, H = HMAC + 64 bit BCD, I = 80 bit combined, J = 32 bit HMAC, K = 200 bit & 1443A 56 bit CSN, L = 200 bit & 1443A 26 bit CSN, M = 75 bit GSA & 1443A 56 bit CSN, N = 75 bit GSA & 1443A 32 bit CSN, T = 1443A 32 bit CSN.

\(^3\) FIPS 201 (USA Government Smart Card) Formats:
7 = 200 bit, 8 = 64 bit, BCD, 9 = 64 bit, REVERSE BCD, A = 40 bit, BCD, C = 40 bit, REVERSE BCD, D = 75 bit GSA, F = HMAC + 200 bit, G = HMAC + 40 bit BCD, H = HMAC + 64 bit BCD, I = 80 bit combined, J = 32 bit HMAC, K = 200 bit & 1443A 56 bit CSN, L = 200 bit & 1443A 26 bit CSN, M = 75 bit GSA & 1443A 56 bit CSN, N = 75 bit GSA & 1443A 32 bit CSN, T = 1443A 32 bit CSN.

\(^4\) Keypad data is output via Wiegand cable. Reader processes keystrokes. OSDP interface supports standard OSDP keypad output. Configuration Setting options for Wiegand interface includes:
00 = Buffer one key, no parity, 4 bit message
01 = Buffer one key, add parity, 4 bit message (Dorado)
02 = Buffer one key and add parity
03 = Buffer one key and add parity
04 = Buffer one to five keys (Standard 26 bit output)
05 = Buffer one to five keys (Standard 26 bit output)
06 = Single Key buffering
07 = Single Key buffering
22 = Local PIN Verify
23 = Local PIN Verify

\(^5\) The OSDP communication modules allow host driven communication using (HID Advanced Device Protocol) / OSDP (Open Supervised Device Protocol) over an RS485 (Half-Duplex) hardware interface. RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)

---

**Note:** Local PIN Verify requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (consult factory for availability.)

**Revision numbers and availability are subject to change without notice. Consult factory for availability.**

**Configuration Setting Options are as follows (Factory or Field Configurable):**
- 00 = Beep off, LED normally red, reader flashes green on tag read
- 01 = Beep off, LED normally red, reader flashes green on tag read
- 02 = Beep on, LED normally red, reader flashes green on tag read
- 03 = Beep on, LED normally red, reader flashes green on tag read
- 04 = Beep on, LED normally red, host must flash green
- 05 = Beep off, LED normally red, host must flash green
- 06 = Beep on, LED normally red, host must flash red and/or green
- 07 = Beep off, LED normally red, host must flash red and/or green

**Security Options (Factory or Field Configurable):**
- 00 = Beep on, LED normally red, reader flashes green on tag read
- 01 = Beep on, LED normally red, reader flashes green on tag read
- 02 = Beep on, LED normally red, reader flashes green on tag read
- 03 = Beep on, LED normally red, reader flashes green on tag read
- 04 = Beep on, LED normally red, host must flash green
- 05 = Beep off, LED normally red, host must flash green
- 06 = Beep on, LED normally red, host must flash red and/or green
- 07 = Beep off, LED normally red, host must flash red and/or green

**Keypad Configuration Options (Factory or Field Configurable):**
- 00 = Beep off, LED normally red, reader flashes green on tag read
- 01 = Beep on, LED normally red, reader flashes green on tag read
- 02 = Beep on, LED normally red, reader flashes green on tag read
- 03 = Beep on, LED normally red, reader flashes green on tag read
- 04 = Beep on, LED normally red, host must flash green
- 05 = Beep off, LED normally red, host must flash green
- 06 = Beep on, LED normally red, host must flash red and/or green
- 07 = Beep off, LED normally red, host must flash red and/or green
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**iCLASS / multiCLASS Transit Read-Only Reader Part Numbers and Options**

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No.</th>
<th>Current Rev. No.*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration Setting Options¹</th>
<th>iCLASS Security¹</th>
<th>MIFARE CSN², FeliCa™ IDm or CEPAS Output</th>
<th>Keypad Configuration Setting Options⁶</th>
<th>Optional Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>iCLASS R10-T Contactless Smart Card Reader</strong></td>
<td>6109 C</td>
<td>G = Charcoal Gray</td>
<td>N = Pigtail 18” (0.5 meter)</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>5 6 7 8 9 A B C D E F</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
<tr>
<td>iCLASS and CEPAS Mullion Mount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read-Only, RoHS Compliant (Wiegand)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>iCLASS R15-T Contactless Smart Card Reader</strong></td>
<td>6149 C</td>
<td>G = Charcoal Gray</td>
<td>N = Pigtail 18” (0.5 meter)</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>5 6 7 8 9 A B C D E F</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
<tr>
<td>iCLASS and CEPAS Mullion Mount</td>
<td></td>
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<td></td>
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<tr>
<td>Read-Only, RoHS Compliant (Wiegand)</td>
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</tr>
<tr>
<td><strong>iCLASS R30-T Contactless Smart Card Reader</strong></td>
<td>6119 C</td>
<td>G = Charcoal Gray</td>
<td>N = Pigtail 18” (0.5 meter)</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>5 6 7 8 9 A B C D E F</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
<tr>
<td>iCLASS, FeliCa and CEPAS European &amp; Asian Back Box Mount</td>
<td></td>
<td></td>
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<tr>
<td>Read-Only, RoHS Compliant</td>
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</tr>
<tr>
<td><strong>iCLASS R40-T Contactless Smart Card Reader</strong></td>
<td>6129 C</td>
<td>G = Charcoal Gray</td>
<td>N = Pigtail 18” (0.5 meter)</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>5 6 7 8 9 A B C D E F</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
<td></td>
</tr>
<tr>
<td>iCLASS, FeliCa and CEPAS US, European &amp; Asian Back Box Mount</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Read-Only, RoHS Compliant</td>
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</tr>
<tr>
<td><strong>iCLASS RK40-T Contactless Smart Card Reader with Keypad - iCLASS and FeliCa</strong></td>
<td>6139 C</td>
<td>G = Charcoal Gray</td>
<td>N = Pigtail 18” (0.5 meter)</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>5 6 7 8 9 A B C D E F</td>
<td>00 09 10 11 14 19 20 22 23</td>
<td>-XXXX Y</td>
<td></td>
</tr>
<tr>
<td>US, European &amp; Asian Back Box Mount</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Read-Only, RoHS Compliant (Wiegand)</td>
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</tr>
<tr>
<td><strong>multiCLASS RP15-T Combination Technology Reader</strong></td>
<td>6144 C</td>
<td>G = Charcoal Gray</td>
<td>Black</td>
<td>Pigtail Only</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>5 6 7 8 9 A B C D E F</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td>HID, AWID, or Indala Prox, iCLASS, FeliCa and CEPAS Mullion Mount</td>
<td></td>
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</tr>
<tr>
<td>Read-Only, RoHS Compliant (Wiegand)</td>
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<tr>
<td><strong>multiCLASS RP40-T Combination Technology Reader</strong></td>
<td>6124 C</td>
<td>G = Charcoal Gray</td>
<td>Black</td>
<td>Pigtail Only</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>5 6 7 8 9 A B C D E F</td>
<td>For Keypad readers only</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td>HID, AWID, or Indala Prox, iCLASS and FeliCa US, European &amp; Asian Back Box Mount</td>
<td></td>
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<td>Read-Only, RoHS Compliant</td>
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<td></td>
</tr>
<tr>
<td><strong>multiCLASS RK40-T Combination Technology Reader</strong></td>
<td>6134 C</td>
<td>G = Charcoal Gray</td>
<td>Black</td>
<td>Pigtail Only</td>
<td>00 01 02 03 04 05 06 07</td>
<td>0</td>
<td>5 6 7 8 9 A B C D E F</td>
<td>00 09 10 11 14 19 20 22 23</td>
<td>-XXXX Y</td>
</tr>
<tr>
<td>HID, AWID, or Indala Prox, iCLASS and FeliCa US, European &amp; Asian Back Box Mount</td>
<td></td>
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<tr>
<td>Read-Only, RoHS Compliant (Wiegand)</td>
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</tbody>
</table>

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**Note:**
- Transit readers have the ability to read FeliCa IDm’s and CEPAS CAN or CSN.
- **Revision numbers are subject to change without notice. Consult factory for availability.**
- Configuration Setting Options are as follows (Factory or Field Configurable):
  - 00 = Beep on, LED normally red, reader flashes green on tag read
  - 01 = Beep off, LED normally red, reader flashes green on tag read
  - 02 = Beep on, LED normally off, reader flashes green on tag read
  - 03 = Beep off, LED normally off, reader flashes green on tag read
  - 04 = Beep on, LED normally red, host must flash green
  - 05 = Beep off, LED normally red, host must flash green
  - 06 = Beep on, LED normally off, host must flash red and/or green
  - 07 = Beep off, LED normally off, host must flash red and/or green

**Setting Options** (Factory or Field Configurable): See Application Note Number 28 for additional information on Key Management.

**iCLASS Security Options** (Factory or Field Configurable): Refer to the “iCLASS Reader Wiegand Output Configuration Guide” for more details. (SETTING NOT APPLICABLE WITH ELITE ORDERS. ELITE READERS DO NOT READ MIFARE CSN.)

**MIFARE Card Serial Number (CSN), FeliCa IDm, CEPAS CAN/CSN output modes are as follows (Factory or Field Configurable).** Refer to the “iCLASS Reader Wiegand Output Configuration Guide” for more details. (SETTING NOT APPLICABLE WITH ELITE ORDERS. ELITE READERS DO NOT READ MIFARE CSN.)

**1** Transit readers have the ability to read FeliCa IDm’s and CEPAS CAN or CSN.

**2** MIFARE Card Serial Number (CSN), FeliCa IDm, CEPAS CAN/CSN output modes are as follows (Factory or Field Configurable). Refer to the “iCLASS Reader Wiegand Output Configuration Guide” for more details. (SETTING NOT APPLICABLE WITH ELITE ORDERS. ELITE READERS DO NOT READ MIFARE CSN.)

**3** RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)

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The image contains a table listing various card reader specifications, including part numbers, option colors, and available security features.
### iCLASS High Frequency Migration Readers
MIFARE DESFire EV1 and MIFARE Classic Compliant Read-Only Part Numbers and Options

<table>
<thead>
<tr>
<th>iCLASS Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.56 MHz Only Wiegand Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Model: RS10, Read-Only Wiegand Output**

- **iCLASS High Frequency Migration Reader**
- MIFARE DESFire EV1 & MIFARE Classic
- Custom Data Application Support
- Mullion Mount

<table>
<thead>
<tr>
<th></th>
<th>7100</th>
<th>C</th>
<th>K = Black</th>
<th>T = Terminal Strip, No Spacer</th>
<th>S = Terminal Strip &amp; Spacer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Model: RS40, Read-Only Wiegand Output**

- **iCLASS High Frequency Migration Reader**
- MIFARE DESFire EV1 & MIFARE Classic
- Custom Data Application Support
- Wall Switch Mount. EU/US/Asian Mounting Holes.

<table>
<thead>
<tr>
<th></th>
<th>7120</th>
<th>C</th>
<th>K = Black</th>
<th>T = Terminal Strip, No Spacer</th>
<th>S = Terminal Strip &amp; Spacer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Model: RSK40, Read-Only Wiegand Output with Keypad**

- **iCLASS High Frequency Migration Reader**
- MIFARE DESFire EV1 & MIFARE Classic
- Custom Data Application Support
- Wall Switch Mount. EU/US/Asian Mounting Holes.

<table>
<thead>
<tr>
<th></th>
<th>7130</th>
<th>C</th>
<th>K = Black</th>
<th>T = Terminal Strip, No Spacer</th>
<th>S = Terminal Strip &amp; Spacer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult the factory for availability.

¹ Default configuration is Beeper On, LED Normally Red, LED Flashes Green on card read, iCLASS HID Application, MIFARE CSN output 32 bit, Keypad 4-bit output, Tamper Disabled. For more configuration options, consult your regional technical support representative. Custom reader configurations support up to two (2) of the following: MIFARE Classic, MIFARE DESFire EV1 (including MIFARE DESFire 0.6 backward compatible configurations). Additionally readers support ISO14443A CSN and Prox (multiCLASS model reader required).

**Notes:**
- All readers RoHS compliant. RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
- Contact the factory for pricing, availability, and minimum order quantity.
multiCLASS High Frequency Migration Readers
MIFARE DESFire EV1 and MIFARE Classic Compliant Read-Only Part Numbers and Options

<table>
<thead>
<tr>
<th>multiCLASS Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model: RSP15, Read-Only Wiegand Output multiCLASS High Frequency Migration Reader MIFARE DESFire EV1 &amp; MIFARE Classic Custom Data Application Support 125 kHz HID Prox Support Mullion Mount</td>
<td>7145</td>
<td>C</td>
<td>K = Black</td>
<td>N = HID Prox w/ Pigtail, No Spacer U = HID Prox w/ Pigtail &amp; Spacer</td>
<td>-EVP00000</td>
</tr>
<tr>
<td>Model: RSP40, Read-Only Wiegand Output multiCLASS High Frequency Migration Reader MIFARE DESFire EV1 &amp; MIFARE Classic Custom Data Application Support 125 kHz HID Prox Support Wall Switch Mount. EU/US/Asian Mounting Holes.</td>
<td>7125</td>
<td>C</td>
<td>K = Black</td>
<td>N = HID Prox w/ Pigtail, No Spacer U = HID Prox w/ Pigtail &amp; Spacer</td>
<td>-EVP00000</td>
</tr>
<tr>
<td>Model: RSPK40, Read-Only Wiegand Output with Keypad multiCLASS High Frequency Migration Reader MIFARE DESFire EV1 &amp; MIFARE Classic Custom Data Application Support 125 kHz HID Prox Support Wall Switch Mount. EU/US/Asian Mounting Holes.</td>
<td>7136</td>
<td>C</td>
<td>K = Black</td>
<td>N = HID Prox w/ Pigtail, No Spacer U = HID Prox w/ Pigtail &amp; Spacer</td>
<td>-EVP00000</td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult the factory for availability.  
1 Default configuration is Beeper On, LED Normally Red, LED Flashes Green on card read, iCLASS HID Application, MIFARE CSN output 32 bit, Keypad 4-bit output, Tamper Disabled. For more configuration options, consult your regional technical support representative. Custom reader configurations support up to two (2) of the following: MIFARE Classic, MIFARE DESFire EV1 (including MIFARE DESFire 0.6 backward compatible configurations). Additionally readers support ISO14443A CSN and Prox (multiCLASS model reader required).  

Notes:  
- All readers RoHS compliant. RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)  
- Contact the factory for pricing, availability, and minimum order quantity.
### iCLASS Card Reader Description

#### 13.56 MHz Only

OSDP Communication

<table>
<thead>
<tr>
<th>Model: RS10, OSDP Communication to and from Panel</th>
<th>Base Part No</th>
<th>Current Rev No</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS High Frequency Migration Reader</td>
<td>7102</td>
<td>C</td>
<td>K = Black</td>
<td>T = Terminal Strip, No Spacer</td>
<td>-EVP00120</td>
</tr>
<tr>
<td>MIFARE DESFire EV1 &amp; MIFARE Classic</td>
<td></td>
<td></td>
<td></td>
<td>S = Terminal Strip &amp; Spacer</td>
<td></td>
</tr>
<tr>
<td>Custom Data Application Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mullion Mount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model: RS40, OSDP Communication to and from Panel</th>
<th>Base Part No</th>
<th>Current Rev No</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS High Frequency Migration Reader</td>
<td>7122</td>
<td>C</td>
<td>K = Black</td>
<td>T = Terminal Strip, No Spacer</td>
<td>-EVP00120</td>
</tr>
<tr>
<td>MIFARE DESFire EV1 &amp; MIFARE Classic</td>
<td></td>
<td></td>
<td></td>
<td>S = Terminal Strip &amp; Spacer</td>
<td></td>
</tr>
<tr>
<td>Custom Data Application Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall Switch Mount. EU/US/Asian Mounting Holes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model: RSK40, OSDP Communication to and from Panel</th>
<th>Base Part No</th>
<th>Current Rev No</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>iCLASS High Frequency Migration Reader</td>
<td>7132</td>
<td>C</td>
<td>K = Black</td>
<td>T = Terminal Strip, No Spacer</td>
<td>-EVP00120</td>
</tr>
<tr>
<td>MIFARE DESFire EV1 &amp; MIFARE Classic</td>
<td></td>
<td></td>
<td></td>
<td>S = Terminal Strip &amp; Spacer</td>
<td></td>
</tr>
<tr>
<td>Custom Data Application Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall Switch Mount. EU/US/Asian Mounting Holes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult the factory for availability.

1 Default configuration is Beeper On, LED Normally Red, LED Flashes Green on card read, iCLASS HID Application, MIFARE CSN output 32 bit, Keypad 4-bit output, Tamper Disabled. For more configuration options, consult your regional technical support representative. Custom reader configurations support up to two (2) of the following: MIFARE Classic, MIFARE DESFire EV1 (including MIFARE DESFire 0.6 backward compatible configurations). Additionally readers support ISO14443A CSN and Prox (multiCLASS model reader required).

**Notes:**

- RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)

- Contact the factory for pricing, availability, and minimum order quantity.
### iCLASS / multiCLASS Rijkspas Compliant Read-Only and OSDP Reader Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No</th>
<th>Current Rev No*</th>
<th>Color Options</th>
<th>Hardware Options</th>
<th>Configuration†</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>iCLASS – Rijkspas RS10</strong> Contactless Smart Card Reader MIFARE DESFire EV1 Rijkspas, MIFARE Classic Mullion Mount Read Only, RoHS Compliant</td>
<td>7100</td>
<td>7102</td>
<td>C</td>
<td>K = Black</td>
<td>-RJP00000 (Wiegand) -RJP00112 (OSDP)</td>
</tr>
<tr>
<td><strong>iCLASS – Rijkspas RS40</strong> Contactless Smart Card Reader: MIFARE DESFire EV1 Rijkspas, MIFARE Classic US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>7120</td>
<td>7122</td>
<td>C</td>
<td>K = Black</td>
<td>-RJP00000 (Wiegand) -RJP00112 (OSDP)</td>
</tr>
<tr>
<td><strong>iCLASS – Rijkspas RSP15</strong> Combination Technology Reader: MIFARE DESFire EV1 Rijkspas, MIFARE Classic, HID Prox US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>7145</td>
<td></td>
<td>C</td>
<td>K = Black</td>
<td>-RJP00000</td>
</tr>
<tr>
<td><strong>iCLASS – Rijkspas RSK40</strong> Contactless Smart Card Reader with Keypad: MIFARE DESFire EV1 Rijkspas, MIFARE Classic US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>7130</td>
<td>7132</td>
<td>C</td>
<td>K = Black</td>
<td>-RJP00000</td>
</tr>
<tr>
<td><strong>iCLASS – Rijkspas RSPK40</strong> Combination Technology Reader: MIFARE DESFire EV1 Rijkspas, MIFARE Classic, HID Prox US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>7136</td>
<td></td>
<td>C</td>
<td>K = Black</td>
<td>-RJP00000</td>
</tr>
<tr>
<td><strong>iCLASS – Rijkspas RSP40</strong> Combination Technology Reader: MIFARE DESFire EV1 Rijkspas, MIFARE Classic, HID Prox US, European &amp; Asian Back Box Mount - Read Only, RoHS Compliant</td>
<td>7125</td>
<td></td>
<td>C</td>
<td>K = Black</td>
<td>-RJP00000</td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult the factory for availability.

† Default configuration is Beeper On, LED Normally Red, LED Flashes Green on card read, No MIFARE CSN output, Keypad local verify for Rijkspas, Keypad 4-bit output non-Rijkspas, Tamper Disabled.


**Notes:**
- RoHS compliant Readers are appropriately marked on reader and box. (RoHS or Restriction of Hazardous Substances Directive restricts certain hazardous substances in electrical and electronic equipment.)
- Contact the factory for pricing, availability, and minimum order quantity.
### MIFARE CSN¹,² Wiegand Data Output Formats

<table>
<thead>
<tr>
<th>MIFARE CSN Wiegand Data Output formats</th>
<th>Comments</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any HID/OEM format.</td>
<td>As encoded into the iCLASS card by HID factory or field programmer.</td>
<td>All models</td>
</tr>
<tr>
<td>32-bit, MIFARE Card Serial Number.</td>
<td>For MIFARE Cards only, random number burned into card chip.</td>
<td>XXXX0000YY</td>
</tr>
<tr>
<td>32-bit, MIFARE Card Serial Number, reverse output.</td>
<td>For MIFARE Cards only, reverse output matches HID MIFARE Reader base model number: 6055A and 6055BXX0011</td>
<td>XXXX0001YY</td>
</tr>
<tr>
<td>26-bit, derived from MIFARE Card Serial number.</td>
<td>For MIFARE Cards only, ID = 16 lower bits of CSN. Reader generates fixed FC - defaults to 001, but can be XXXX0002YY</td>
<td></td>
</tr>
<tr>
<td>34-bit, MIFARE Card Serial number plus beginning/ending parity.</td>
<td>For MIFARE Cards only</td>
<td>XXXX0003YY</td>
</tr>
<tr>
<td>40-bit, MIFARE Card Serial number plus 8-bit checksum.</td>
<td>For MIFARE Cards only, Checksum per Philips standard.</td>
<td>XXXX0004YY</td>
</tr>
<tr>
<td>37 bit, derived from MIFARE Ultralight or MIFARE DESFire Card Serial</td>
<td>For Ultralight or MIFARE DESFire Cards only, 37 lower bits of CSN in reverse order (Keypad Readers Only)</td>
<td>61XX0005YY</td>
</tr>
<tr>
<td>56 bit, MIFARE Ultralight or MIFARE DESFire Card Serial Number</td>
<td>For Ultralight or MIFARE DESFire Card Only, 56 bit CSN in reverse order (Keypad Readers Only)</td>
<td>61XX0006YY</td>
</tr>
</tbody>
</table>

**Notes:**
1. MIFARE CSN = Card Serial Number, a 32-bit random number burned into the chip by the chip manufacturer (not HID).
2. iCLASS 64 bit CSN is never transmitted via the Wiegand Output. See HID Application Note Number 29 for details.

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### iCLASS Programmer Ordering Guide

All iCLASS and bioCLASS Programmers are now located in the Credential Programmer How To Order Guide.
# SmartID Readers

## SmartID Single-Technology 13.56 MHz Readers Part Numbers and Options

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No.</th>
<th>Current Rev. No.</th>
<th>Color Options</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SmartID S10</strong> Contactless Smart Card Reader</td>
<td>8030 D</td>
<td>S = Silver</td>
<td>HM = HID MIFARE (default) HC = HID MIFARE (non-default) CM = MIFARE DM = Dual MIFARE DF = MIFARE DESFire</td>
<td></td>
</tr>
<tr>
<td>Mullion Mount, Terminal Strip</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wiegand, Clock-and-Data, RS232, RS485 or RS422</td>
<td>(RoHS Compliant)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **SmartID SW100** Contactless Smart Card Reader/Writer      | 8030 D        | S = Silver      | TC = T/CL Protocol RW = 3964 Protocol (Legacy) |
| Mullion Mount, Terminal Strip                               |               |                 |                                       |
| Host driven RS232, RS485 or RS422                           | (RoHS Compliant) |                 |                                       |

| **SmartID SK10** Contactless Smart Card Keypad Reader       | 8031 D        | S = Silver      | HM = HID MIFARE (default) HC = HID MIFARE (non-default) CM = MIFARE DM = Dual MIFARE DF = MIFARE DESFire |
| Mullion Mount, Terminal Strip                               |               |                 |                                       |
| Wiegand, Clock-and-Data, RS232, RS485 or RS422              | (RoHS Compliant) |                 |                                       |

| **SmartID SWK100** Contactless Smart Card Keypad Reader/Writer | 8031 D | S = Silver | TC = T/CL Protocol RW = 3964 Protocol (Legacy) |
| Mullion Mount, Terminal Strip                                 |       |           |                                       |
| Host driven RS232, RS485 or RS422                            | (RoHS Compliant) |           |                                       |

1 All part numbers generated by the above grid (except HM = HID MIFARE) require an additional accompanying “format configuration”. The format configuration is a separate part number that is combined on a PO with the above part number to make up the full definition of a reader. Format configurations are either generic (for public use) or custom. For generic format information, see [SmartID – Generic Configuration Document](http://www.hidcorp.com/documents/smartid_configuration_guide_en.pdf). For custom format definition, see [Custom SmartID Format, MIFARE or MIFARE DESFire Requirements](http://www.hidcorp.com/documents/smartid_apps_configs.pdf). The HM application provides standard reader configurations, including beeper and LEDs. The HC application allows for configuration of beeper and LEDs.

## SmartTRANS Multi-Technology Readers Part Numbers and Options

(13.56 MHz & 125 kHz)

<table>
<thead>
<tr>
<th>Card Reader Description</th>
<th>Base Part No.</th>
<th>Current Rev. No.</th>
<th>Color Options</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SmartID SP10</strong> Multi-Technology Contactless Smart Card and Prox Reader</td>
<td>8100 = HID 8140 = Indala</td>
<td>D = Silver</td>
<td>HM = HID MIFARE (default) HC = HID MIFARE (non-default) CM = MIFARE DM = Dual MIFARE DF = MIFARE DESFire</td>
<td></td>
</tr>
<tr>
<td>Mullion Mount, Terminal Strip</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HID Prox and AWID (125 kHz) or Indala Prox</td>
<td>(RoHS Compliant)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **SmartID SPK10** Multi-Technology Contactless Smart Card and Prox Keypad Reader | 8101 = HID 8141 = Indala | D = Silver | HM = HID MIFARE (default) HC = HID MIFARE (non-default) CM = MIFARE DM = Dual MIFARE DF = MIFARE DESFire |
| Mullion Mount, Terminal Strip                               |               |                 |               |                                       |
| HID Prox and AWID (125 kHz) or Indala Prox                  | (RoHS Compliant) |                 |               |                                       |

1 All part numbers generated by the above grid (except HM = HID MIFARE) require an additional accompanying “format configuration”. The format configuration is a separate part number that is combined on a PO with the above part number to make up the full definition of a reader. Format configurations are either generic (for public use) or custom. For generic format information, see [SmartID – Generic Configuration Document](http://www.hidcorp.com/documents/smartid_configuration_guide_en.pdf). For custom format definition, see [Custom SmartID Format, MIFARE or MIFARE DESFire Requirements](http://www.hidcorp.com/documents/smartid_apps_configs.pdf). The HM application provides standard reader configurations, including beeper and LEDs. The HC application allows for configuration of beeper and LEDs.
SmartTOOLS Card Programming Software and Devices Part Numbers and Options

All SmartID Programmers are now located in the Credential Programmer How To Order Guide.

SmartID Desktop Reader/Writer Part Numbers and Options

Contactless Smart Card Reader/Writer, Desktop, USB and RS232

- 800-1063* SmartID SWD100 Reader/Writer, MIFARE & ISO14443-4 MIFARE DESFire & SmartxMX, USB with PC/SC Protocol
- 800-8240* SmartID SWD100 Reader/Writer, MIFARE & ISO14443-4 MIFARE DESFire & SmartxMX, RS232 with T=CL Protocol

To complete the part number, specify formatting information.
For custom format definition, see Custom Format MIFARE or MIFARE DESFire Reader Ordering Guide.
## SmartID Reader Cross Reference
### GEN 1 & 2

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Generation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>800-8030</td>
<td>ISO 14443-3 MIFARE Sector</td>
<td>8030DSCM</td>
</tr>
<tr>
<td>800-8060</td>
<td>ISO 14443-4 MIFARE DESFire reader with MIFARE configuration</td>
<td>SmartID S10 Read Only, Custom MIFARE</td>
</tr>
<tr>
<td>800-8045</td>
<td>ISO 14443-3 MIFARE PIN Reader</td>
<td>8031DSCM</td>
</tr>
<tr>
<td>800-8075</td>
<td>ISO 14443-4 MIFARE DESFire PIN reader with MIFARE configuration</td>
<td>SmartID SK10 Read Only Keypad, Custom MIFARE</td>
</tr>
<tr>
<td>800-8061</td>
<td>ISO 14443-3 MIFARE DESFire reader</td>
<td>8030DSDF</td>
</tr>
<tr>
<td>800-8060</td>
<td>ISO 14443-3 MIFARE DESFire reader (FIPS 201 mid point compliant)</td>
<td>SmartID S10 Read Only, DESFIRE</td>
</tr>
<tr>
<td>800-8063</td>
<td>ISO 14443-3 MIFARE DESFire and MIFARE reader (FIPS 201 mid point compliant)</td>
<td>Not Available. See iCLASS FIPS 201 Readers</td>
</tr>
<tr>
<td>800-8076</td>
<td>ISO 14443-3 MIFARE DESFire PIN reader</td>
<td>8031DSDF</td>
</tr>
<tr>
<td>800-8075</td>
<td>ISO 14443-3 MIFARE DESFire PIN reader (FIPS 201 mid point compliant)</td>
<td>SmartID SK10 Read Only Keypad, MIFARE DESFIRE</td>
</tr>
<tr>
<td>800-8062</td>
<td>ISO 14443-3 Dual MIFARE reader</td>
<td>8030DSDF</td>
</tr>
<tr>
<td>800-8077</td>
<td>ISO 14443-3 Dual MIFARE PIN reader</td>
<td>8031DSDF</td>
</tr>
<tr>
<td>800-8080</td>
<td>ISO 14443-4 reader (ISO 7816-4, PIV II Compliant)</td>
<td>N/A</td>
</tr>
<tr>
<td>800-8085</td>
<td>ISO 14443-4 PINpad reader (ISO 7816-4, PIV II Compliant)</td>
<td>N/A</td>
</tr>
<tr>
<td>800-8030TC</td>
<td>ISO 14443-4 Reader/Writer, T=CL Protocol</td>
<td>8030DSTC</td>
</tr>
<tr>
<td>800-8045TC</td>
<td>ISO 14443-4 Reader/Writer with PINpad, T=CL Protocol</td>
<td>SmartID SW100 Reader/Writer, MIFARE &amp; ISO14443-4 MIFARE DESFire &amp; SmartMX, T=CL Protocol</td>
</tr>
<tr>
<td>800-8030</td>
<td>ISO 14443-4 Reader/Writer, 3964 Protocol</td>
<td>8030DSRW</td>
</tr>
<tr>
<td>800-8045</td>
<td>ISO 14443-4 Reader/Writer with PINpad, 3964 Protocol</td>
<td>SmartID SW100 Reader/Writer with Keypad, 3964 Protocol</td>
</tr>
<tr>
<td>800-8100CM</td>
<td>SmartTRANS reader (ISO 14443 &amp; HID Prox), MIFARE</td>
<td>8100DSDF</td>
</tr>
<tr>
<td>800-8110CM</td>
<td>SmartTRANS PINpad reader (ISO 14443 &amp; HID Prox), MIFARE</td>
<td>SmartTRANS SP10 Read Only Keypad, HID + AWID Prox, Custom MIFARE</td>
</tr>
<tr>
<td>800-8100DF</td>
<td>SmartTRANS reader (ISO 14443 &amp; HID Prox), MIFARE DESFire</td>
<td>SmartTRANS SP10 Read Only Keypad, HID + AWID Prox, Custom MIFARE</td>
</tr>
<tr>
<td>800-8110DF</td>
<td>SmartTRANS PINpad reader (ISO 14443 &amp; HID Prox), MIFARE DESFire</td>
<td>Not Available. See iCLASS FIPS 201 Readers</td>
</tr>
<tr>
<td>800-8100</td>
<td>SmartTRANS reader (ISO 14443 &amp; HID Prox), PIVII</td>
<td>N/A</td>
</tr>
<tr>
<td>800-8110</td>
<td>SmartTRANS PINpad reader (ISO 14443 &amp; HID Prox), PIVII</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1. All format configurations previously ordered with GEN 1 parts are backward compatible with GEN 2. When ordering GEN 2 product, order using the same format configuration number previously used when ordering GEN 1 product.
### GEN 2 & FlexSmart

<table>
<thead>
<tr>
<th>Part Number¹</th>
<th>Description</th>
<th>Part Number²</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6075AKN00000</td>
<td>FlexSmart HID MIFARE</td>
<td>8030DSHM</td>
<td>SmartID S10 Mullion Read Only, HID MIFARE*</td>
</tr>
<tr>
<td>6075AKNxxxxx</td>
<td>FlexSmart HID MIFARE, non default configuration</td>
<td>8030DSCM</td>
<td>SmartID S10 Mullion Read Only, HID MIFARE*</td>
</tr>
<tr>
<td>6071AKN000000</td>
<td>FlexSmart HID MIFARE, Keypad</td>
<td>8031DSCM</td>
<td>SmartID SK10 Mullion Read Only Keypad, HID MIFARE*</td>
</tr>
<tr>
<td>6071AKNxxxxx</td>
<td>FlexSmart HID MIFARE, Keypad, non default configuration</td>
<td>8031DSCM</td>
<td>SmartID SK10 Mullion Read Only Keypad, Custom MIFARE*</td>
</tr>
<tr>
<td>6072AKNxxxxx</td>
<td>FlexSmart Custom MIFARE</td>
<td>8031DSCM</td>
<td>SmartID SK10 Mullion Read Only Keypad, Custom MIFARE*</td>
</tr>
<tr>
<td>6077AKNxxxxx</td>
<td>FlexSmart Custom MIFARE DESFIRE</td>
<td>8031DSCM</td>
<td>SmartID SK10 Mullion Read Only Keypad, Custom DESFire*</td>
</tr>
<tr>
<td>6073AKNxxxxx</td>
<td>FlexSmart Custom MIFARE DESFIRE, Keypad</td>
<td>8031DSCM</td>
<td>SmartID SK10 Mullion Read Only Keypad, Custom DESFire*</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td>8090AS</td>
<td>SmartID Single Gang Electrical Box Cover</td>
</tr>
</tbody>
</table>

¹ xxxx signifies non-0000 configuration

² When ordering GEN 2 SmartID product with FlexSmart custom configurations, modify the format reference number (FMxxxx) previously used when ordering FlexSmart product as follows: (a) add 02 to FMxxxx and (b) separate FM and first x with a -. Thus the FlexSmart format configuration FMxxxx turns to 02FM-xxxx when ordering SmartID GEN 2 product.

### SmartID (GEN 2) & HID MIFARE

<table>
<thead>
<tr>
<th>HID MIFARE</th>
<th>Description</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6055Byy0000</td>
<td>HID MIFARE 6055 (used for read only)</td>
<td>8030DSHM</td>
<td>SmartID S10 Read Only, HID MIFARE</td>
</tr>
<tr>
<td>6055Byyxxxx</td>
<td>HID MIFARE 6055 (used for read only)</td>
<td>8030DSCM</td>
<td>SmartID S10 Read Only, HID MIFARE (non-default)</td>
</tr>
<tr>
<td>6055Byy0000</td>
<td>HID MIFARE 6055 (used for read/write)</td>
<td>8030DSTM</td>
<td>SmartID SW100 ReadWrite, T=CL Protocol</td>
</tr>
<tr>
<td>6055Byy0000</td>
<td>HID MIFARE 6055 (used for read-only and read/write)</td>
<td>N/A</td>
<td>Not Available</td>
</tr>
<tr>
<td>6074Ayy00</td>
<td>HID MIFARE 6074 (Legacy)</td>
<td>8030DSHM</td>
<td>SmartID S10 Read Only, HID MIFARE</td>
</tr>
<tr>
<td>6074Ayyyy</td>
<td>HID MIFARE 6074 (Legacy)</td>
<td>8030DSCM</td>
<td>SmartID S10 Read Only, HID MIFARE</td>
</tr>
</tbody>
</table>

¹ xxxx signifies non-0000 configuration
SmartID MIFARE and MIFARE DESFire Reader Custom Format Request Form

Reader Part Numbers:

☐ 8030/8100 MIFARE or DUAL MIFARE  ☐ 8030/8100 MIFARE DESFire

☐ 8031/8101 MIFARE or DUAL MIFARE with Keypad  ☐ 8031/8101 MIFARE DESFire with Keypad

Description: These custom MIFARE or MIFARE DESFire readers offer a complete selection of keys and card formats for adding to existing installations or facilitating companies to manage their own keys and formats. This worksheet will help you to gather information that will be required to process orders for these readers.

Specify the following

A - Custom Format Number:

B - New Custom MIFARE Format:

Use MAD (Yes/No):

☐ Yes  ☐ No

If Yes, AID (recommended):

If No, Sector:

Block where data is located:

Starting bit:

Number of bits to output:

Block where data is located (2nd, DUAL Only)

Starting bit (2nd, DUAL Only)

Number of bits to output (2nd, DUAL Only)

Custom Keys (Yes/No):

☐ Yes  ☐ No

C - New Custom MIFARE DESFire Format:

Specify APPLICATION to store data:

File to store data:

Address in file where data is located:

Starting bit:

Number of bits to output:

Custom Keys (Yes/No):

☐ Yes  ☐ No

Security Level:

☐ Plain communication

☐ Plain communication secured by DES/3DES MACing

☐ Fully DES/3DES enciphered communication

☐ Communication mode of the file is used
D - Output format:

- Clock-and-Data
- Wiegand

Number of digits: ______
Left Parity:       Odd       Even
Calculation First Bit: ______       Last Bit: ______
Right Parity:       Odd       Even
Calculation First Bit: ______       Last Bit: ______

- Serial

Number of chars: ______
Type (RS232/RS485/RS422): ______
Baud rate: ______

E - User interface:

Card reading beep (Yes/No):
Yes  No

Keypad key press beep (Yes/No):
Yes  No

LED, Left:
Set LED constant green

When combining green and red are combined, the LED will set to yellow.
Set LED green when card is read
Set LED green when key is stroked
Set LED constant red
Set LED red when card is read
Set LED red when key is stroked

LED, Right:
Set LED constant green

When green and red are combined, the LED will set to yellow.
Set LED green when card is read
Set LED green when key is stroked
Set LED constant red
Set LED red when card is read
Set LED red when key is stroked

Input pin 1 (When active to GND):
Used for LED (Left/Right):
- Left
- Right
- LED off
- LED to Green
- LED to Red
- LED to Yellow

Input pin 2 (When active to GND):
Used for LED (Left/Right):
- Left
- Right
- LED off
- LED to Green
- LED to Red
- LED to Yellow

Transfer all keys securely and do not place keys in this Order Guide. All custom formats require additional time to develop and test. Required is a customer sign-off before fulfilling the first order.

Once your key is encrypted using the HID Key Wrapper program, fill-in the following information:

Wrapped Keys:

Access Key Sector
Access Key MAD

Wrapping Password (Pass Phrase): ________________
DISTRIBUTE OVER PHONE ONLY

Using the HID Key Wrapper program keeps your key secure during order processing.
# FlexSmart Readers Part Numbers and Options (Asia-Pacific Region Only)

<table>
<thead>
<tr>
<th>Reader Description</th>
<th>Base Part No.</th>
<th>Current Rev. No.*</th>
<th>Color Options¹</th>
<th>Hardware Options</th>
<th>Configuration Setting Options²</th>
<th>Card Read Mode³</th>
<th>CSN Wiegand Output Mode⁴</th>
<th>Custom Key⁵</th>
<th>Keypad⁶</th>
<th>Custom⁷</th>
</tr>
</thead>
<tbody>
<tr>
<td>HID FlexSmart MIFARE Reader, Read only Capability, Reads HID Formats in sector 1 and/or CSN, Wiegand or C&amp;D output (RoHS Compliant)</td>
<td>6075</td>
<td>B</td>
<td>K = Black Arch Slim</td>
<td>N = Pigtail 18&quot; (0.5 meter)</td>
<td>00 01 02 03 1 2 4 0</td>
<td>N/A</td>
<td>XXXX Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HID FlexSmart MIFARE Reader, Read Only Capability, Custom Configurable, Wiegand or C&amp;D output (Old Part # MX200) (RoHS Compliant)</td>
<td>6076</td>
<td>A</td>
<td>K = Black Arch Slim</td>
<td>N = Pigtail 18&quot; (0.5 meter)</td>
<td>00 01 02 03 4 2 4 1</td>
<td>N/A</td>
<td>XXXX Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HID FlexSmart MIFARE DESFire Reader, Read Only Capability, MIFARE DESFire Custom Configurable, Wiegand or C&amp;D output (Old Part # DX200) (RoHS Compliant)</td>
<td>6077</td>
<td>A</td>
<td>K = Black Arch Slim</td>
<td>N = Pigtail 18&quot; (0.5 meter)</td>
<td>00 01 02 03 3 0 1 2 4 1 0</td>
<td>N/A</td>
<td>XXXX Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HID FlexSmart MIFARE Keypad Reader, Read only Capability, Reads HID Formats in sector 1 and/or CSN, Wiegand or C&amp;D (RoHS Compliant)</td>
<td>6071</td>
<td>A</td>
<td>K = Black</td>
<td>N = Pigtail 18&quot; (0.5 meter)</td>
<td>00 01 02 03 0 1 2 4 0 0 9</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HID FlexSmart MIFARE Keypad Reader, Read Only Capability, Custom Configurable, Wiegand or C&amp;D output (RoHS Compliant)</td>
<td>6072</td>
<td>A</td>
<td>K = Black</td>
<td>N = Pigtail 18&quot; (0.5 meter)</td>
<td>00 01 02 03 4 0 1 2 4 1 0</td>
<td>N/A</td>
<td>XXXX Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HID FlexSmart MIFARE DESFire Keypad Reader, Read Only Capability, MIFARE DESFire Custom Configurable, Wiegand or C&amp;D output (RoHS Compliant)</td>
<td>6073</td>
<td>A</td>
<td>K = Black</td>
<td>N = Pigtail 18&quot; (0.5 meter)</td>
<td>00 01 02 03 3 0 1 2 4 1 0</td>
<td>N/A</td>
<td>XXXX Y</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Revision numbers and availability are subject to change without notice. Consult factory for availability. All trademarks and registered trademarks are the properties of their respective companies.

1 Refer to the "13.56 MHz Accessories" page in this guide for additional bezel options.

2 6055, 6075, 6076 and 6077 Model Configuration Setting Options are as follows (factory programmed):
   - 00 = Beep on, LED normally red, reader flashes green on tag read
   - 01 = Beep off, LED normally red, reader flashes green on tag read
   - 02 = Beep on, LED normally off, reader flashes green on tag read
   - 03 = Beep off, LED normally off, reader flashes green on tag read
   - 04 = Beep on, LED normally red, host must flash green
   - 05 = Beep off, LED normally red, host must flash green
   - 06 = Beep on, LED normally off, host must flash red and/or green
   - 07 = Beep off, LED normally off, host must flash red and/or green

3 Card Read Modes are as follows (factory programmed): Refer to the "HID FlexSmart Reader Wiegand Output Configuration" Guide for more details.
   - 0 = HID Data only (Sector 1, MIFARE Application Directory or Sector Location, only applies if "CSN Wiegand output Mode" = 0)
   - 1 = Card Serial Number (CSN) Only
   - 2 = HID MIFARE Data or CSN
   - 3 = MIFARE DESFire Custom
   - 4 = MIFARE Custom

4 Card Serial Number (CSN) Wiegand Output Modes are as follows (factory programmed). Refer to the "HID MIFARE Reader Wiegand Output Configuration" Guide for more details.
   - 0 = 32 bit
   - 1 = 32 bit reverse (as in 6055A)
   - 2 = 26 bit
   - 3 = 34 bit
   - 4 = 40 bit

5 Custom Key: 0 = Standard keys, 1 = Custom keys

6 Keypad: 0 = Buffer one key, no parity, 4 bit message
   - 9 = Buffer one key, add compliment, 8 bit message (Dorado)

7 Consult Factory.
Custom Format MIFARE or MIFARE DESFire Reader Ordering Guide

Reader Part Numbers:
☐ 6076 (MIFARE)  ☐ 6077 (MIFARE DESFire)
☐ 6072 (MIFARE With Keypad)  ☐ 6073 (MIFARE DESFire With Keypad)

Description: These custom MIFARE or MIFARE DESFire readers offer a complete selection of keys and formats for adding to existing installations or facilitating companies to manage their own keys and formats. This worksheet will help you to gather information that will be required to process orders for these readers.

Specify the following

A - Custom Format Number

B - New Custom MIFARE Format

Specify Sector

Block where data is located

Starting bit

Number of bits to output

Custom Keys (Yes/No)

C - New Custom MIFARE DESFire Format

Specify APPLICATION to store data

File to store data

Number of bits to output

Custom Keys (Yes/No)

All keys should be transferred securely and not placed in this Order Guide. All custom formats require additional time to develop and test, with a customer sign-off before the first order can be fulfilled.

Once your key is encrypted using the HID Key Wrapper program, fill-in the following information:

Wrapped Key: ____________________________________________ .

Wrapping password (Pass Phrase): ____________________________ .

Using the HID Key Wrapper program will keep your key secure during order processing.
### Edge Readers

**Edge™ Solo Part Numbers and Options**

<table>
<thead>
<tr>
<th>Edge™ Solo Product Description</th>
<th>Base Part</th>
<th>Rev. No.*</th>
<th>Color</th>
<th>Hardware Configuration</th>
<th>Configuration Option</th>
<th>iCLASS Elite Key¹</th>
</tr>
</thead>
</table>
| **EdgePlus™ Solo ES400**
Single door, IP-based stand-alone controller with built in web interface.
Allows external connection to any Wiegand output (up to 128 bit ID) or most HID Clock & Data readers. Indoor use only.
Stand-alone integrated access control | 83000 | B | K = Black | E = Externally-mounted reader | N/A | N/A |
| **EdgeReader™ Solo ESR40**
Single door, IP-based stand-alone controller with built in web interface, with integrated R40 iCLASS reader. Indoor use only.
Stand-alone integrated access control | 83120 | B | K = Black | I = Integrated reader | 00 = Beep on, LED normally red, reader flashes green on tag read | 0 |
| **EdgeReader Solo ESRP**
Single door, IP-based stand-alone controller with built in web interface, with integrated RP40 Multi-Class reader. Indoor use only.
Stand-alone integrated access control | 83125 | B | K = Black | I = Integrated reader | 00 = Beep on, LED normally red, Reader flashes green on tag read | 0 |

For Technical Support, call 800-237-7769 (Press option 4).
For Sales support, call 877-276-3346

*Revision numbers and availability are subject to change without notice.

¹ 0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)

**Example Part #:**
EdgePlus Solo ES400: 83000BKE
EdgeReader Solo ESR40: 83120AKI000
EdgeReader Solo ESRP40: 83125BKI000
### Edge™ Solo Kit Part Numbers and Options

<table>
<thead>
<tr>
<th>Edge™ Solo Product Description</th>
<th>Base Part</th>
<th>Rev No.*</th>
<th>Color</th>
<th>Hardware Configuration</th>
<th>Configuration Option</th>
<th>iCLASS Elite Key¹</th>
<th>Reader / Credential Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kit EdgePlus Solo ES400 with (1) RP15 and (20) iCLASS 37bit Cards</td>
<td>K83000</td>
<td>B</td>
<td>K = Black</td>
<td>E = Externally mounted reader</td>
<td>N/A</td>
<td>N/A</td>
<td>PC</td>
</tr>
<tr>
<td>Kit EdgePlus Solo ES400 with (1) RP15 and (10) iCLASS 37bit Keyfobs</td>
<td>K83000</td>
<td>B</td>
<td>K = Black</td>
<td>E = Externally mounted reader</td>
<td>N/A</td>
<td>N/A</td>
<td>PK</td>
</tr>
<tr>
<td>Kit EdgePlus Solo ES400 with (1) R15 and (20) iCLASS 37bit Cards</td>
<td>K83000</td>
<td>B</td>
<td>K = Black</td>
<td>E = Externally mounted reader</td>
<td>N/A</td>
<td>N/A</td>
<td>RC</td>
</tr>
<tr>
<td>Kit EdgePlus Solo ES400 with (1) R15 and (10) iCLASS37bit Keyfobs</td>
<td>K83000</td>
<td>B</td>
<td>K = Black</td>
<td>E = Externally mounted reader</td>
<td>N/A</td>
<td>N/A</td>
<td>RK</td>
</tr>
<tr>
<td>Kit EdgeReader Solo ESR40 with (20) iCLASS Cards</td>
<td>K83120</td>
<td>A</td>
<td>K = Black</td>
<td>I = Integrated reader</td>
<td>00 = Beep on, LED normally red, reader flashes green on tag read</td>
<td>0</td>
<td>C</td>
</tr>
<tr>
<td>Kit EdgeReader Solo ESR40 with (10) iCLASS Keyfobs</td>
<td>K83120</td>
<td>A</td>
<td>K = Black</td>
<td>I = Integrated reader</td>
<td>00 = Beep on, LED normally red, reader flashes green on tag read</td>
<td>0</td>
<td>K</td>
</tr>
<tr>
<td>Kit EdgeReader multiCLASS Solo ESRP40 with (20) iCLASS Cards</td>
<td>K83125</td>
<td>B</td>
<td>K = Black</td>
<td>I = Integrated reader</td>
<td>00 = Beep on, LED normally red, reader flashes green on tag read</td>
<td>0</td>
<td>C</td>
</tr>
<tr>
<td>Kit EdgeReader Solo multiCLASS ESRP40 with (10) iCLASS Keyfobs</td>
<td>K83125</td>
<td>B</td>
<td>K = Black</td>
<td>I = Integrated reader</td>
<td>00 = Beep on, LED normally red, reader flashes green on tag read</td>
<td>0</td>
<td>K</td>
</tr>
</tbody>
</table>

For Technical Support, call 800-237-7769 (Press option 4).  
For Sales support, call 877-276-3346

¹Revision numbers and availability are subject to change without notice.  
²0 = Standard (Reads all iCLASS cards with unique keys diversified from HID master key)
**Example Part #:**
Kit EdgePlus Solo ES400 with R15 and Cards: K83000BKE000-RC
Kit EdgeReader Solo ESR40 with Keyfobs: K83120AKI000-K
Kit EdgeReader Solo ESRP40 with Cards: K83125BKII000-C

<table>
<thead>
<tr>
<th>Additional Card Packs and Keyfobs</th>
<th>Base Part</th>
<th>Memory</th>
<th>Programming</th>
<th>Front Packaging</th>
<th>Back Packaging</th>
<th>Card Numbering</th>
<th>Slot Punch</th>
<th>Option / Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edge Solo Card Pack - (20)</td>
<td>200</td>
<td>0</td>
<td>P</td>
<td>C</td>
<td>G</td>
<td>M</td>
<td>V</td>
<td>EDGE</td>
</tr>
<tr>
<td>EdgeSolo logo iCLASS 37bit Cards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edge Solo Key Pack – (10) iClass Keyfobs 37bit</td>
<td>205</td>
<td>0</td>
<td>P</td>
<td>K</td>
<td>N</td>
<td>M</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

**Example Part #:**
Edge Solo Card Pack: 2000-PCGMV-EDGE
Edge Solo Key Pack: 2050-PKNMN
## 13.56 MHz Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6303-104-01</td>
<td>iCLASS Mini-Mullion Reader Mounting Plate, Any Color (works with Rev C R10, RS10 and RW100)</td>
</tr>
<tr>
<td>6309-103-01</td>
<td>iCLASS Mullion Reader Mounting Plate, Any Color (works with Rev C R15, RP15, RS15, RSP15, RW150, R15-T, RP15-T)</td>
</tr>
<tr>
<td>6402-103-01</td>
<td>iCLASS EU/Asian Reader Mounting Plate, Any Color (works with Rev C R30, RW300, R30-T)</td>
</tr>
<tr>
<td>6403-109-01</td>
<td>iCLASS Wall Switch Reader Mounting Plate, Any Color (works with Rev C R40, RP40, RS40, RSP40, RW400, R40-T, RP40-T)</td>
</tr>
<tr>
<td>6094-101-01</td>
<td>iCLASS Wall Switch Keypad Reader Mounting Plate, Any Color (works with Rev C RK40, RPK40, RSK40, RSPK40, RWK400, RK40-T, RPK40-T)</td>
</tr>
<tr>
<td>6132AKB</td>
<td>iCLASS Mini-Mullion Reader Spacer, Black (works with R10, RS10, RW100 and R10-T)</td>
</tr>
<tr>
<td>6132AGB</td>
<td>iCLASS Mini-Mullion Reader Spacer, Gray (works with R10, RS10, RW100 and R10-T)</td>
</tr>
<tr>
<td>6132AKC</td>
<td>iCLASS Mullion Reader Spacer, Black (works with R15, RP15, RS15, RSP15, RW150, R15-T, RP15-T)</td>
</tr>
<tr>
<td>6132AGC</td>
<td>iCLASS Mullion Reader Spacer, Gray (works with R15, RP15, RS15, RSP15, RW150, R15-T, RP15-T)</td>
</tr>
<tr>
<td>6132AKD</td>
<td>iCLASS EU/Asian Reader Spacer, Black (works with R30, RW300, R30-T)</td>
</tr>
<tr>
<td>6132AGD</td>
<td>iCLASS EU/Asian Reader Spacer, Gray (works with R30, RW300, R30-T)</td>
</tr>
<tr>
<td>6132AKE</td>
<td>iCLASS Wall Switch Reader Spacer, Black (works with R40, RP40, RS40, RSP40, RW400, R40-T, RP40-T)</td>
</tr>
<tr>
<td>6132AGE</td>
<td>iCLASS Wall Switch Reader Spacer, Gray (works with R40, RP40, RS40, RSP40, RW400, R40-T, RP40-T)</td>
</tr>
<tr>
<td>6132AG</td>
<td>iCLASS Wall Switch Keypad Reader Spacer, Black (works with RK40, RPK40, RSK40, RSPK40, RWK400, RK40-T, RPK40-T)</td>
</tr>
<tr>
<td>6132AG</td>
<td>iCLASS Wall Switch Keypad Reader Spacer, Gray (works with RK40, RPK40, RSK40, RSPK40, RWK400, RK40-T, RPK40-T)</td>
</tr>
<tr>
<td>6410-303-01</td>
<td>MultiCLASS Magnetic Stripe Reader Backplate, Integrated Mag Reader and Read Head, Black.</td>
</tr>
<tr>
<td>400-2D71-06</td>
<td>iCLASS reader security screw (Qty 1)</td>
</tr>
</tbody>
</table>

### SmartID Reader Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8090AS</td>
<td>SmartID Single-gang Electrical Box Cover</td>
</tr>
<tr>
<td>9287AS</td>
<td>SmartID Spacer Kit</td>
</tr>
<tr>
<td>0300A</td>
<td>SmartID Tamper Switch</td>
</tr>
<tr>
<td>0055A</td>
<td>SmartID Screw Cover</td>
</tr>
<tr>
<td>0056A</td>
<td>SmartID Black Plexiglas Cover</td>
</tr>
<tr>
<td>0057A</td>
<td>SmartID 8 Pin Connector</td>
</tr>
</tbody>
</table>

### HID 6055 MIFARE Reader Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5395-104-01</td>
<td>Classic cover, 6055 MIFARE Reader (Rev. C) - White</td>
</tr>
<tr>
<td>5395-104-02</td>
<td>Classic cover, 6055 MIFARE Reader (Rev. C) - Beige</td>
</tr>
<tr>
<td>5395-104-03</td>
<td>Classic cover, 6055 MIFARE Reader (Rev. C) - Black</td>
</tr>
<tr>
<td>5395-104-04</td>
<td>Classic cover, 6055 MIFARE Reader (Rev. C) - Charcoal Gray</td>
</tr>
</tbody>
</table>

**New Look**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5395-371-01</td>
<td>Designer cover, 6055 MIFARE Reader (Rev. C) - Black</td>
</tr>
<tr>
<td>5395-371-02</td>
<td>Designer cover, 6055 MIFARE Reader (Rev. C) - Charcoal Gray</td>
</tr>
<tr>
<td>5395-371-04</td>
<td>Designer cover, 6055 MIFARE Reader (Rev. C) - Wave Blue</td>
</tr>
<tr>
<td>5395-371-05</td>
<td>Designer cover, 6055 MIFARE Reader (Rev. C) - White</td>
</tr>
</tbody>
</table>

### HID FlexSmart Reader Series

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPZ3511H</td>
<td>HID Bezel Cover, Arch Slim Reader - Black</td>
</tr>
<tr>
<td>FPZ3517H</td>
<td>HID Bezel Cover, Arch Slim Reader - Beige</td>
</tr>
<tr>
<td>FPZ3521H</td>
<td>HID Bezel Cover, Arch Wall Switch Reader - Black</td>
</tr>
<tr>
<td>FPZ3527H</td>
<td>HID Bezel Cover, Arch Wall Switch Reader - Beige</td>
</tr>
<tr>
<td>FPZC1511H</td>
<td>HID Bezel Cover, Wave Slim Reader - Black</td>
</tr>
<tr>
<td>FPZC1514H</td>
<td>HID Bezel Cover, Wave Slim Reader - Blue</td>
</tr>
</tbody>
</table>
13.56 MHz How to Order Guide – D00529, E.2

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPZC1521H</td>
<td>HID Bezel Cover, Wave Wall Switch - Black</td>
</tr>
<tr>
<td>FPZC1524H</td>
<td>HID Bezel Cover, Wave, Wall Switch Reader - Blue</td>
</tr>
<tr>
<td>Indala</td>
<td></td>
</tr>
<tr>
<td>02-0004-01</td>
<td>Universal Power Supply for the Indala ProxSmith</td>
</tr>
<tr>
<td>iCLASS Credentials</td>
<td></td>
</tr>
<tr>
<td>CONFIG-0001</td>
<td>Configuration Card Pack, HADP Addresses 0-8, Non-LCD Readers</td>
</tr>
<tr>
<td>CONFIG-0002</td>
<td>Configuration Card Pack, HADP Addresses 0-8, LCD Readers</td>
</tr>
</tbody>
</table>

1 To ensure security of the format and cards, a Software License Agreement must be signed by the final user of the 3012AKN00, 3012ANS00, and be on file at HID prior to shipment.
2 Developer's Resource CD includes: Serial Protocol Documentation and Developer's Test Program to assist in developing custom MIFARE software applications.
3 Demo CD Includes: MIFARE Documentation and Sample Application Program.
iCLASS Programming Platform

HID Global’s iCLASS Programming Platform allows the programming of a configured iCLASS card through a FARGO™ HDP printer, increasing the flexibility of programming options for customers. Through this platform, the HID Access Control Application is programmed directly to a card with unique facility codes and card numbers. This tool allows a dealer or integrator to support multiple customers with a stock of configured cards, programming the cards only when the customer wishes. For the dealer or integrator, increase flexibility offering fully programmed iCLASS cards at a moment’s notice.

End-users benefit from this platform by maintaining control over their facility codes and card numbers, printing identification badges within their own facility. Use the iCLASS Programming Platform to replace lost badges on the spot instead of having to experience any delays from re-ordering an iCLASS card from their local dealer or integrator.

Components of the iCLASS Programming Platform

- Configured iCLASS Credentials
- iCLASS Programming Platform Encoder installed within an Fargo HDP Printer
- iCLASS Programming Platform Smart Card containing a specific facility code and the number of credential credits purchased
- Fargo HDP 5000 or HDPii Printer
- Asure ID Card Personalization Software (Enterprise Version)

Configured iCLASS Credentials

Configured iCLASS Credentials come with all your standard card body options, including PVC and Composite makeup, from 2k to 32k in size. A configured iCLASS Credential has the Access Control Application loaded with the application lay-out defined, but does not contain specific facility codes or card numbers. These are added through the iCLASS Programming Platform.

Encoder

The iCLASS Programming Platform Encoder is a specialized version of an HID encoder that installs directly to the HDP Printer. This encoder communicates with the iCLASS Programming Platform Smart Card and Asure ID Card Personalization Software to program cards with the appropriate facility code, card number and other data. In a single pass, program this card data, and enable a personalized photo, background image or other security features through the Fargo printer.

Smart Card with Facility Code and Credential Credits

Order the iCLASS Programming Platform Smart Card with a specific facility code and required number of credential credits. When inserting this smart card into an external contact smart card reader (OMNIKEY readers offer several options), the iCLASS Programming Platform Smart Card communicates with the iCLASS Programming Platform Encoder allowing the programming of a configured iCLASS Credential with the appropriate facility code and other information from Asure ID.

FARGO HDP Printers and Asure ID are products from HID Global. Go to www.hidglobal.com > Solutions > Fargo Printers to find your local Authorized Integrator.
iCLASS Programming Platform Ordering Guide

The iCLASS Programming Platform consists of configured cards, an encoder and smart cards used in combination with an HDP printer and Asure ID software. When completing this order, ensure discussing all choices with the user.

I. Configured iCLASS Programming Platform Cards

Ensure checking each required option with the appropriate choice to fulfill a completed order.

<table>
<thead>
<tr>
<th>Base Model</th>
<th>200 Standard PVC</th>
<th>210 Composite 40% Polyester / PVC *</th>
</tr>
</thead>
</table>

- **iCLASS Memory Size and Allocation (Check One)**
  - 0 - 2k Bits (256 Bytes) with 2 Application Areas
  - 1 - 16k Bits (2k Bytes) with 2 Application Areas
  - 2 - 16k Bits (2k Bytes) with 16 Application Areas
  - 3 - 32k Bits (4K Bytes) Application areas 16k/2+16k/1
  - 4 - 32k Bits (4K Bytes) Application areas 16k/16+16k/1

- **Programming (Check One)**
  - C - Configured, Non-Programmed iCLASS. Programming Information Not Required.

- **Front Packaging (Check One)**
  - G - Plain White with Gloss Finish

- **Back Packaging (Check One)**
  - G - Plain White with Gloss Finish

- **Card Numbering (Check One)**
  - N - No External Card Numbering

- **Slot Punch (Check One)**
  - N - No Slot Punch (Printed location of vertical slot punch will remain)

Enter your final card options from checked boxes above. Example: 2001CGGNN

**Final Part Number**

- Cards ordered with plain white front and back packaging still have a small “HID logo” and reference number printed in the lower left-hand corner
- The composite construction is recommended for all cards with over-laminate applied. Consult with the printer manufacturer prior to ordering.

II. iCLASS Programming Platform Encoder

- 089182 HSK-SDI-ENCODER – contains docking station for insertion into the HDP Printer bay two (2)
- 089181 HSK-SDI-ENCODER – for insertion into the HDP Printer bay zero (0)

III. iCLASS Programming Platform Smart Card

- **Base Model**
  - VCI-SCCC
  - VCI-SCCF

Customers should choose VCI-SCCC if they wish to use any card number contained within the range permitted by the format number selected. For example, format number H10301 allows for 65,535 card numbers and customers who select VCI-SCCC use any of those numbers. VCI-SCCF restricts the card number to the next in the series. If the customer has previously ordered and used card numbers 1 – 50, the next set of numbers start at 51. Using VCI-SCCF prevents duplication of card numbers within the facility code and format range.

- **Facility Code:**
- **Format Number:**
- **iCLASS Elite ICE Number (if applicable):**
- **Number of Credits:**
Corporate 1000 Format Request & Authorization Form

Corporate 1000® is a 35-bit card format that is developed specifically for use by individual end-user organizations. Organizations must qualify, formally enroll and be accepted by HID Global Corporation.

The Corporate 1000 Format is offered to large, multi-location, and end-user organizations which use HID access control readers and cards. In this program, the end-user has the flexibility to choose any access control hardware/software platform and any HID System Provider. As the end-user utilizing the Corporate 1000 Program, fill in your company information in TABLE I. Ensure all fields are complete for the primary and secondary (if desired) authorized contacts within your company.

TABLE I: Your Company’s Primary and Secondary Contacts

<table>
<thead>
<tr>
<th>Information</th>
<th>Security Director Contact</th>
<th>IT Director Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mailing Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State/Province</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zip/Postal Code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact Signature</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Phone Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-mail Address</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Card numbers available within the Corporate 1000 format are 0 – 1,048,575.

Indicate the card number in which your first order should start: Enter start number here.

All card numbers following this number will be “blocked” from use. If you do not specify a card start number, your first order will start at one (1). Should you require assistance, contact your systems provider or HID directly.

Added card security:

- Invisible Ink
- Advantage OVD
- Hologram
- Micro-fine Printing
- Signature Panel

Once accepted into the Corporate 1000 Program, HID shall grant a royalty free license to use the Corporate 1000 Format within your organization. Please sign below to enroll in this program and to confirm your acceptance of the License Agreement.

ACCEPTANCE OF HID CREDENTIAL PROGRAM LICENSE AGREEMENT

The undersigned party hereby accepts and agrees to be bound by the terms and conditions of the HID Credential Program. License Agreement is located at www.hidglobal.com/pdfs/credential_license.pdf, pursuant to which a license is granted to the undersigned party authorizing the use of certain credential formats in connection with participation by the undersigned in the HID Corporate 1000 Program.

Dated: 
Authorized Signature: X
Company Name: ____________________________
Contact Name: ____________________________
Title: ____________________________
To ensure the security of your card format, authorize any HID System Provider to purchase and manage your Corporate 1000 cards on your behalf. Enter authorized HID System Provider information in **Table II**, and HID System Installers in **Table III**.

Use this form to communicate all authorization concerning your Corporate 1000 format. It is recommended for each end-user to maintain an original copy of this form listing all authorizations.

### TABLE II: Authorized HID System Providers

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Company # 1</th>
<th>Company # 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-Mail Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authorized End-User Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authorized End-User Signature</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Date</td>
<td></td>
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</tr>
</tbody>
</table>

### TABLE III: Authorized HID System Installers

<table>
<thead>
<tr>
<th>Company Name</th>
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</tr>
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<tbody>
<tr>
<td>Contact Name</td>
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<td></td>
</tr>
<tr>
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<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Date</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Send to HID Global for approval and processing by faxing: 949-732-2359.

For assistance, contact your Customer Service Representative. To add or remove authorizations, submit an HID Global Corporate 1000 Change Form.

**For Internal Use Only:**

<table>
<thead>
<tr>
<th>HID Sales Manager:</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print Name</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Issued Corporate 1000 Format No.: Entered by HID Global after approval.
iCLASS Elite Program™ Request & Authorization Form

The iCLASS Elite program includes a credential format and custom authentication key. Use any format, including the HID Corporate 1000 format. Corporate 1000 is a 35-bit card format available for qualified end-users by formal enrollment and acceptance by HID Global. A custom authentication key provides increase security. HID assigns the key to guarantee uniqueness, and programs the site-specific readers and credentials.

With the iCLASS Elite program, the end-user has the flexibility to choose any access control hardware/software platform, or any HID System Provider. As the iCLASS Elite program end-user, enter your company information in **TABLE I**. Ensure all fields are complete for the primary and secondary (if desired) authorized contacts within your company.

**TABLE I: Your Company’s Primary and Secondary Contacts**

<table>
<thead>
<tr>
<th>Information</th>
<th>Primary Company Contact</th>
<th>Secondary Company Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td></td>
<td></td>
</tr>
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<td></td>
</tr>
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<td>E-mail Address</td>
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</table>

Enter the program features:

35-Bit Credential Format (if different, enter: _____)  

☐ Custom Authentication Key

Once accepted into the iCLASS Elite Program, HID shall grant a royalty free license to use the iCLASS Elite Program within your organization. Sign below to enroll in this program and your acceptance of the License Agreement.

**ACCEPTANCE OF HID CREDENTIAL PROGRAM LICENSE AGREEMENT**

The undersigned party hereby accepts and agrees to be bound by the terms and conditions of the HID Credential Program. License Agreement is located at [www.hidglobal.com/pdfs/credential_license.pdf](http://www.hidglobal.com/pdfs/credential_license.pdf), pursuant to which a license is granted to the undersigned party authorizing the use of certain credential formats in connection with participation by the undersigned in the HID iCLASS Elite Program.

Dated:  
Authorized Signature: X  
Company Name:  
Contact Name:  
Title:
To ensure the security of your card format, authorize any HID System Provider to purchase and manage your iCLASS Elite Credential format on your behalf. Enter authorized HID System Provider information in Table II, and System Installers in Table III.

Use this form to communicate all authorization concerning your iCLASS Elite Credential format. It is recommended for each end-user to maintain an original copy of this form listing all authorizations.

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Issued iCLASS Elite Program Format No.: Entered by HID Global after approval.