

# *iCLASS*<sup>®</sup>

# "How to Order"

# Guide

For products other than *iCLASS*<sup>®</sup>, please refer to HID's "How to Order Guide."  
Click here for HID's "How to Order Guide."

[Click here to go to the "Table of Contents"](#)

The most current version of this document is always available for download at:  
[www.hidcorp.com/support](http://www.hidcorp.com/support)

To check status on your order, go to:  
[www.hidcorp.com/order](http://www.hidcorp.com/order)  
to register

This document is subject to change without notice

## Table of Contents

Click on an item below to view the page.  
To return to this page, click on the HID Logo.

	<u>Page Number</u>
The Basics of Ordering <b>iCLASS</b> ® Contactless Smart Credentials	6
200 - <b>iCLASS</b> Card Ordering Guide	7
201 - <b>iCLASS</b> embeddable Card Ordering Guide	8
202 - <b>iCLASS</b> Prox Card Ordering Guide	9
203 - <b>iCLASS</b> Prox embeddable Card Ordering Guide	10
204 - <b>iCLASS</b> Wiegand Card Ordering Guide	11
205 - <b>iCLASS</b> Key Ordering Guide	12
206 - <b>iCLASS</b> Tag Ordering Guide	13
208 - <b>iCLASS</b> Clamshell Card Ordering Guide	14
201/203 <b>iCLASS</b> Standard Contact Smart Chip Module Card Ordering Form (Quantities over 1000)	15
<b>iCLASS</b> Contact Smart Card Request for Quotation Form	16
<b>iCLASS</b> Custom Artwork Checklist Form	18
<b>iCLASS</b> Custom Artwork Placement and Inkjet Location Forms	21
<b>iCLASS</b> Reader Part Numbers and Options	25
<b>iCLASS</b> Reader/Writer Part Numbers and Options	26
<b>bioCLASS</b> Reader/Writer biometric Part Numbers and Options	27
<b>iCLASS</b> OEM Module Part Numbers and Options	28
<b>iCLASS</b> Reader Wiegand Output Configuration Guide	30
<b>iCLASS</b> Accessories Ordering Guide	31
<b>iCLASS</b> Programmer Ordering Guide	32
Corporate 1000 Format Request Form	33
Corporate 1000 Change & Authorization Form	34
<b>iCLASS</b> Elite Program Request Form	35
<b>iCLASS</b> Elite Program Change & Authorization Form	36

## Welcome to *iCLASS*® by HID

*iCLASS* is the first advanced contactless smart card technology designed by and for the access control professional. *iCLASS* is a contactless smart card technology that operates at a frequency of 13.56 MHz and offers read/write capability. Optimized for secure access control, *iCLASS* is versatile enough to extend your access control card in many new directions.

There are over one billion smart cards in use around the world today. But until now, no one has offered a cost-effective smart card technology for both access control and other non-access control functions. *iCLASS* fills that gap by offering the power of smart cards and the operating and installation convenience of proximity, all at a price any organization can afford.

To make it easy to offer your customers exciting new products with enhanced benefits, HID has prepared this new *iCLASS* How to Order Guide. To help you get started, this “welcome” provides:

- An overview of the *iCLASS* readers, reader/writers, and OEM module products.
- An overview of the *iCLASS* credentials
- Important information about questions to ask before choosing an *iCLASS* credential.

### *iCLASS* Readers

- The alpha designator indicates whether the reader is:
  - READ ONLY (R)
  - READ/WRITE (RW)
  - READ ONLY WITH KEYPAD (RK)
  - READ/WRITE WITH KEYPAD (RWK)
- The numeric designator signifies the physical size of the unit. (The smaller the number, the physically smaller the unit.)

When your application requires the ability to read card numbers and output data using the standard Wiegand protocol, use a **read only (R series) *iCLASS*** product. The four standard *iCLASS* readers are:

**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.

**R30** - This 83.8 mm (3.15”) square reader is designed to mount to and cover standard **European and Asian 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.

**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.



**RP40** - The RP40 reader simultaneously supports HID proximity, *iCLASS*, MIFARE, and HID multi-technology credentials. The RP40's mounting plate attaches to **U.S./EU/Asian back box** 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 reader body, secured with a screw. The RP40 measures 3.30" x 4.80" x .85" (8.38 cm x 12.19 cm x 2.16 cm).

**R90** - The R90 is the largest size (12" or 30.48 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, 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.

### *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 three standard *iCLASS* reader/writers are:

**RW300** - This 80 mm (3.15") square reader is designed to mount to and cover standard **European and Asian back boxes**. This reader has the same features as the R30, with the added feature of **read/write capability via RS-232**.

**RW400** - The RW400 is designed to mount to and cover **single gang switch boxes** primarily used in the United States. It contains all the features of the R40, with the added feature of **read/write capability via RS-232**.

**RWK400** - This reader/writer offers the same features as the RK40, with the extended ability to **read/write user data to HID *iCLASS* credentials via RS-232 or RS-485**.

### *iCLASS* OEM Modules

OEM Modules assist third-party hardware manufacturers with the embedding of *iCLASS* technology into their products. Products might include: biometric, cashless vending, secure PC log-on, or alarm keypad arm/disarm. HID offers two distinctly different OEM Modules:

**OEM50** - The OEM50 has a very small form factor. This board level product provides no voltage regulation (+5VDC +/- .25) and low level TTL interfaces for all communication and controls. Additionally the reader can be connected to several available remote antennas. This allows the embedding manufacturer to place the antenna away from the electronics and any other metallic obstruction.

**OEM150** - The OEM150 is a slightly larger board level product that provides full *iCLASS* reader functionality. Voltage regulation (+5 and 16VDC), standard Wiegand level outputs, and LED/beeper/hold control lines are just a few of the OEM150 features. The addition of an OEM150 expansion module increases functionality at minimal extra cost. Currently available expansion modules convert the OEM150 module reader into a reader/writer with the following interfaces; TTL, RS232, RS485, and USB. The OEM150 can be ordered with the appropriate expansion module or the expansion module can be purchased separately for field upgrades. Additionally the reader can be connected to several available remote antennas. This allows the embedding manufacturer to place the antenna away from the electronics and any other metallic obstruction.



### **iCLASS Programmer:**

The **iCLASS CP400 & CP575A** Card programmers are designed for on-site programming of access control data, PIN codes, and user data onto HID **iCLASS** cards. It allows HID proximity formats, keypad PIN codes, and user data fields to be programmed directly into **iCLASS** contactless cards. The **CP400** card programmer includes a desktop reader/writer, personalization diskette, universal power supply, and serial cable. The **CP575A** programmer includes **CP400** features with the added capability of programming biometric templates for use in our **bioCLASS** reader and includes a **bioCLASS** reader/writer, personalization diskette, universal power supply and USB cable. To ensure security of the format and cards, an **iCLASS** card programmer license is required.

### **iCLASS Credentials:**

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

1. Which form factor (i.e., card, key or tag) of credential best meets my needs?
2. Do I need a multi-technology credential (i.e., **iCLASS** and proximity or **iCLASS** and Wiegand) to help leverage investments in existing access control systems while transitioning to new technologies or applications?
3. How much memory (i.e., 2k bits or 16k bits) do I need?
4. 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. Application Area 1 is reserved by HID for access control use. The remaining application areas can be defined. Please review 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). This card is also offered in an embeddable version (**iCLASS embeddable** card) to allow an optional contact smart chip module to be added to the card.

**iCLASS Prox Cards** – **iCLASS Prox** cards offer a dual technology solution (13.56 MHz contactless smart card technology and 125 kHz proximity technology) in a single card. Personalize these cards by adding a photo ID, or barcode (These cards are also available with an optional magnetic stripe). This card is also offered in an embeddable version (**iCLASS Prox embeddable** card) to allow an optional contact smart chip module to be added to the card.

**iCLASS Wiegand Cards** – **iCLASS Wiegand** cards offer a dual technology solution (13.56 MHz contactless smart card technology and Wiegand strip technology) in a single card. Personalize these cards by adding a photo ID, or barcode (These cards are also available with an optional magnetic stripe).



**iCLASS Keys** – This newly designed hexagonal key is less obtrusive than a card in your pocket or handbag and has all the capabilities of a card or tag. The **iCLASS** Key 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.

**iCLASS** by HID. A new solution for the access control market that is Smart, Powerful and Trusted. Become acquainted with this technology. You will understand the difference you can make in your customers' ability to secure and manage their environments by offering **iCLASS** !

## The Basics of Ordering **iCLASS**<sup>®</sup> 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 credential orders must have the following information:

- **Base Part Number** - Indicates type of credential
- **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
- **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)**
- **Any Special Instructions**











## iCLASS® Key Ordering Guide

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

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

\* **205 Base Model** **Part Number Worksheet** (\* = Required Fields)

**\*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

**\*Programming (Check One)**

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

**\*Front Packaging**

- K - Black with HID Standard Artwork

**\*Back Packaging**

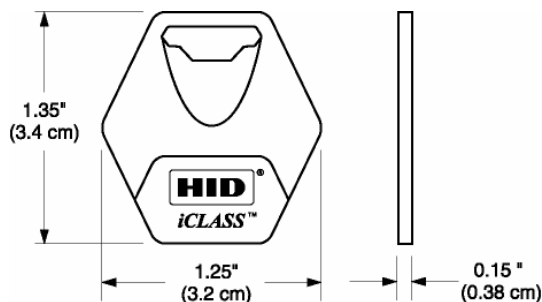
- N - None

**\*Key Numbering<sup>1</sup>**

- 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)

**\*Slot Punch<sup>2</sup>**

- N - None



Please enter your final Key options from check boxes above. Example: 2052CKNNN

* Final Part Number	205			K	N	N	-	(Optional Artwork #)
---------------------	-----	--	--	---	---	---	---	----------------------

### \* iCLASS Key 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 \_\_\_\_\_

PIN:  Sequential: Start # \_\_\_\_\_  Random: Length \_\_\_\_\_

Special Instructions: \_\_\_\_\_

<sup>1</sup> The external key number is placed on the back of the key.

<sup>2</sup> Key Ring sold separately (Part Number: 57-0001-02) .

## 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.

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

---

\* **206 Base Model** **Part Number Worksheet** (\* = Required Fields)

---

**\*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

**\*Programming (Check One)**

- N - Non-Configured, Non-Programmed *iCLASS*. Programming Information Not Required.
- 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 Number<sup>2</sup>

**\*Back Packaging**

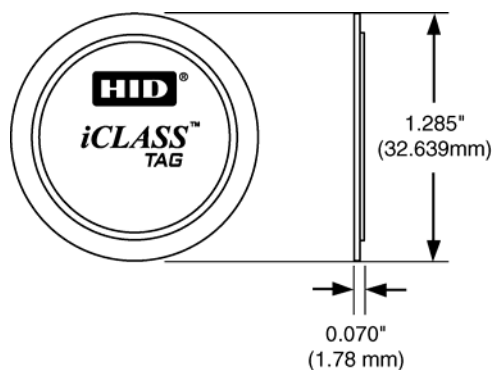
- S - Adhesive Backing

**\*Tag Numbering<sup>1</sup>**

- 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<sup>4</sup>**

- N - None



**Optional Custom Artwork<sup>1</sup>**

- \_\_\_\_\_ (Specify Artwork Number – Refer to the Custom Artwork Forms for new Artwork)

Please enter your final Tag options from check boxes above. Example: 2061CSSNN

* Final Part Number	206				S		N	-	(Optional Artwork #)
---------------------	-----	--	--	--	---	--	---	---	----------------------

**\* iCLASS Tag Programming Information**

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

Facility Code \_\_\_\_\_

(Custom Formats) Site Code \_\_\_\_\_ City Code \_\_\_\_\_ OEM Code \_\_\_\_\_

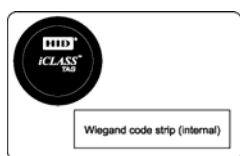
Internal Card # Start \_\_\_\_\_ Stop \_\_\_\_\_ External Card # Start \_\_\_\_\_ Stop \_\_\_\_\_

PIN:  Sequential: Start # \_\_\_\_\_       Random: Length \_\_\_\_\_

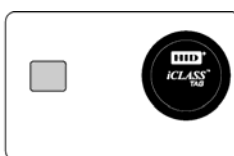
Special Instructions: \_\_\_\_\_

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

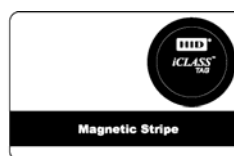
Do not adhere to metal surfaces. Metal shields the RF, making the tag inoperable. Due to variations in cards and reading devices, HID does not claim that the *iCLASS* Tag will work in every situation. Functional and non-functional *iCLASS* Tags are available for compatibility testing with existing credential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



Wiegand Swipe card



Contact Smart Chip



Magnetic Swipe card

# iCLASS® Clamshell Card Ordering Guide

The iCLASS contactless smart card offers read/write capability.

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

\* 208 Base Model **Part Number Worksheet** (\* = Required Fields)

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

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

**\* Programming (Check One)**

- N - Non-Configured, Non-Programmed iCLASS. Programming Information Not Required.
- 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 PVC with Gloss Finish
- A - iCLASS Clamshell - Adhesive Front<sup>1</sup>
- C - Custom Artwork - Specify Custom Artwork Number<sup>2</sup>

**\* Back Packaging (Check One)**

- S - Base with Molded HID Logo
- C - Custom Artwork - Specify Custom Artwork Number<sup>2</sup>

**\* Card Numbering<sup>3</sup> (Check One)**

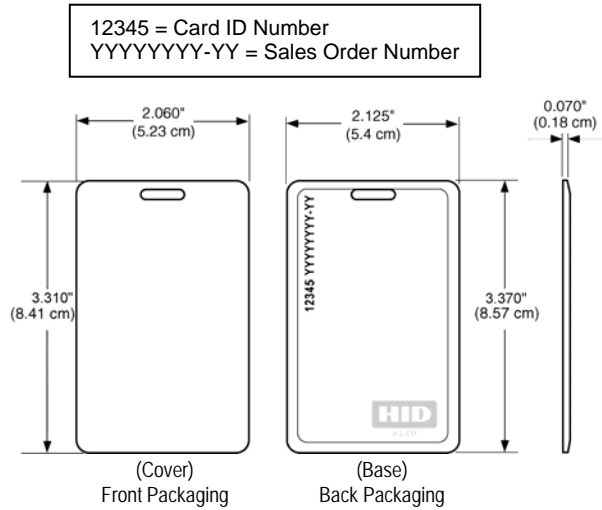
- M - Sequential Matching Internal/External (Inkjetted)
- N - No External Card Numbering
- S - Sequential Internal/Sequential Non-Matching External (Inkjetted)
- R - Random Internal/Non-Matching Sequential External (Inkjetted)

**\* Slot Punch<sup>5</sup> (Check One)**

V - Vertical Slot Punch

**Optional Custom Artwork<sup>2</sup>**

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



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

* Final Part Number	208	0					V	-	(Optional Artwork #)
---------------------	-----	---	--	--	--	--	---	---	----------------------

**\* iCLASS 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 \_\_\_\_\_

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

Special Instructions: \_\_\_\_\_

<sup>1</sup> 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.

<sup>2</sup> For new artwork files, contact Customer Service for custom artwork number, lead-times, and cost.

<sup>3</sup> 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.



# Standard Contact Smart Chip Module Card Ordering Form

HID 13.56 MHz *iCLASS*® Card with an embedded Contact Smart Chip Module - For quantities over 1000

## Part Number Worksheet

(\* = Required Fields)

### \* Card Body (Check One)

- 201 - *iCLASS* Embeddable Card
- 203 - *iCLASS* Prox Embeddable Card

12345 = Card ID Number  
 YYYYYYYY-YY = Sales Order Number

### \* *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

### \* For 201 *iCLASS* Card Programming (Check One)

- N - Non-Configured, Non-Programmed *iCLASS*
- C - Configured, Non-Programmed *iCLASS*
- P - Programmed *iCLASS*

### \* For 203 *iCLASS* Prox Card Programming (Check One)

- N - Non-Configured, Non-Programmed *iCLASS* & 125 kHz Proximity
- C - Configured, Non-Programmed *iCLASS* & 125 kHz Proximity
- P - Programmed *iCLASS* only
- A - Configured, Non-Programmed *iCLASS*, Programmed 125 kHz Proximity
- L - Programmed 125 kHz Proximity only
- B - Programmed 125 kHz Proximity and *iCLASS*

### \* Front Packaging (Check One)

- G - Plain White PVC with Gloss Finish<sup>1</sup>
- C - Embedded Contact Smart Chip Module, and/or Custom Artwork<sup>1</sup>

### \* Back Packaging (Check One)

- G - Plain White PVC with Gloss Finish<sup>1,2</sup>
- C - Embedded Contact Smart Chip Module and/or Custom Artwork<sup>1,2</sup>
- 1 - Plain White PVC with Gloss Finish with Magnetic Stripe<sup>1,2</sup>
- 3 - Embedded Contact Smart Chip Module with Magnetic Stripe, and/or Custom Artwork<sup>1,2</sup>

### \* *iCLASS* Card Numbering<sup>3</sup> (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)<sup>4</sup>
- B - Sequential Internal/Sequential Non-Matching External (Laser Engraved)<sup>4</sup>
- C - Random Internal/Non-Matching Sequential External (Laser Engraved)<sup>4</sup>

### \* Slot Punch<sup>5</sup> (Check One)

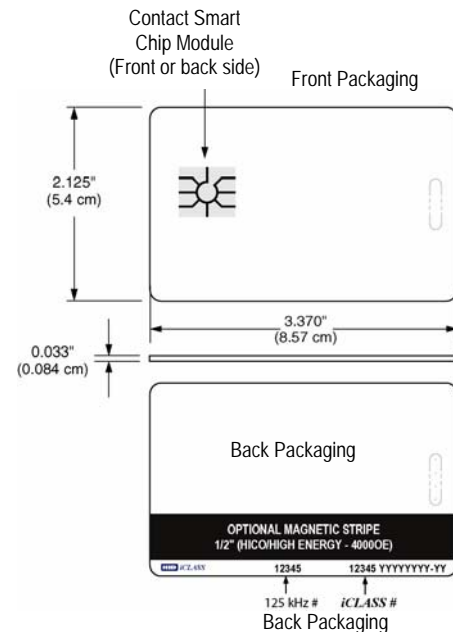
- N - No Slot Punch (Printed location of vertical slot punch will remain)
- V - Vertical Slot Punch

### \* 125 kHz Card Numbering<sup>3</sup> (Check One) (Applies to 203 *iCLASS* Prox Card only)

- 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)<sup>4</sup>
- B - Sequential Internal/Sequential Non-Matching External (Laser Engraved)<sup>4</sup>
- C - Random Internal/Non-Matching Sequential External (Laser Engraved)<sup>4</sup>

### \* Contact Smart Chip Module (Check One)

- 1601H - Axalto Cryptoflex 32KB
- 1601Y - Axalto Cyberflex Access 64KB Java
- 1601J - Giesecke and Devrient (G&D) SLE 4442 (256 Bytes memory)
- 1601M - Giesecke and Devrient (G&D) StarCOS 2.4SPK 32KB
- 1601N - Giesecke and Devrient (G&D) Sm@rtCafe 32 KB Java
- 1601O - Gemplus MPEMV-32 KB (4KB) with MPCOS Operating System
- 1601P - Gemplus GPK16000 (16KB) with GemSafe Mapping
- 1601Q - Gemplus GemXpresso 64KB Java
- 1601S - Datakey 330 with 32KB



### Notes:

<sup>1</sup> Contact Customer Service for lead-times and cost. <sup>2</sup> Cards will have a slot punch target printed on the back of the card. Gemplus contact smart chip module cards will have a small "Bull" logo printed in the upper left corner. <sup>3</sup> The external card number is placed in the bottom right-hand corner for *iCLASS* 13.56 MHz and in bottom center for 125 kHz Proximity on the back of the card. <sup>4</sup> For Laser Engraved external numbers, consult factory for lead times and cost. <sup>5</sup> Cards are provided with an optional vertical slot punch at no additional charge. Some video imaging printers cannot accommodate pre-slot punched cards. Please consult with the printer manufacturer prior to ordering.

Please enter your final card options from check boxes above. Example: 2032BGCMMN-1601H

* Final Part Number		-		(Contact Smart Chip Module)
---------------------	--	---	--	-----------------------------

### \* *iCLASS* Programming Information

Bit Numbers \_\_\_\_\_ (example: 26 bit)  
 Format Number \_\_\_\_\_ (example: H10301)  
 Facility Code \_\_\_\_\_  
 Internal Card No. Start \_\_\_\_\_ Stop \_\_\_\_\_  
 External Card No. Start \_\_\_\_\_ Stop \_\_\_\_\_  
 PIN:  Sequential: Start # \_\_\_\_\_  Random: Length \_\_\_\_\_

### \* 125 kHz Programming Information (Applies to 203 *iCLASS* Prox)

Bit Numbers \_\_\_\_\_ (example: 26 bit)  
 Format Number \_\_\_\_\_ (example: H10301)  
 Facility Code \_\_\_\_\_  
 Internal Card No. Start \_\_\_\_\_ Stop \_\_\_\_\_  
 External Card No. Start \_\_\_\_\_ Stop \_\_\_\_\_  
 Special Instructions: \_\_\_\_\_

[Click Here to Fill Out this Form Electronically](#)



## iCLASS® Contact Smart Card Request For Quotation

**Customer and Channel Information**    Sales Person:     Date:  (mm,dd,yr)

Customer:     Location:     Direct HID Customer:    Yes     No   
(City, State, Country)

Contact:     Telephone #:     Email:

Customer Type:     OEM     Integrator     Dealer     VAR     Apps. Provider     End User     Other:

Distribution Channel:

Is the End User currently an HID Customer:     Yes     No    What technology/technologies do they currently use:     iCLASS®     HID Proximity     Wiegand

Mag. Stripe     Barium Ferrite     MIFARE®     Other Proximity:      Other:

What format do they use:     Corp. 1000     iCLASS Elite     Standard 26 Bit     OEM Proprietary     Standard 37 Bit

Other Proprietary:

End User:     Location:  (City, State, Country)

Contact:     Telephone #:     Email:

Does HID have permission to contact the Customer and/or End User directly:    Customer:  Yes     No    End User:  Yes     No

### **Base Card and Packaging**

Base Card Type:     2010 iCLASS embeddable     2011/2 iCLASS embeddable     2030 iCLASS Prox embeddable     2031/2 iCLASS Prox embeddable

1397 Smart ISOProx II     1398 Smart DuoProx II

1430 HID MIFARE (1K)     1440 HID MIFARE (4K)     1431 Proximity and MIFARE (1K)     1441 Proximity and MIFARE (4K)

Quantity:     Requested Delivery Date:     Vertical Slot Punch Required     Yes     No

Mag. Stripe:  Yes     No    Location:  Front     Back    # Tracks:     Oersted:     Type:   
(Primary)    (1, 2, 3)    (2750, 4000, ..)    (HID Standard, Debitek, E-Mag,....etc)

Mag. Stripe:  Yes     No    Location:  Front     Back    # Tracks:     Oersted:     Type:   
(Secondary)    (1, 2, 3)    (2750, 4000, ..)    (HID Standard, Debitek, E-Mag,....etc)

Front Packaging:     Plain White Gloss     Custom Artwork    If Custom Artwork, # Colors:

Back Packaging:     Plain White Gloss     Custom Artwork    If Custom Artwork, # Colors:

Custom Artwork:     Custom Laminated by HID     Surface Printing by HID     HID Card Personalization Service

Artwork printed by Customer:     Dye Sublimation/Thermal Image     UV Waterless Ink Process

If using a printing process other than Dye Sublimation/Thermal Image Transfer, be sure to run samples and test for proper adhesion prior to the production print run.

Do you need to print photos/barcode on the card after the base artwork is printed:     Yes     No

Do you need a clear overlay to keep the ink from previously printed artwork from bleeding when the photo/barcode is printed:     Yes     No

If an overlay is required, this will increase the card thickness by .002" to .004". This may result in the card thickness exceeding the ISO 7816/ISO 7810 standard.

An increase in card thickness may prevent the card from fitting in a contact smart card reader.

HID does not recommend placing custom graphics on either side of the Contact Smart Chip area.



## iCLASS and/or Proximity and/or MIFARE Programming

### **iCLASS**

Programmed **iCLASS**     Non-Programmed **iCLASS**     Configured **iCLASS**    Facility Code:     Bit Format:

**iCLASS** Elite:  Yes     No    Inkjet Card Number:  Yes     No    Laser Engraved Card Number:  Yes     No

### **125 kHz Proximity**

Programmed 125 kHz Proximity     Non-Programmed 125 kHz Proximity    Facility Code:     Bit Format:

Corporate 1000:  Yes     No    Inkjet Card Number:  Yes     No    Laser Engraved Card Number:  Yes     No

### **MIFARE**

Standard MIFARE 13.56 MHz modules come from the manufacturer with a permanent unique 32-bit serial number burned into the memory. This number is not available to be marked on the back of the card. This number is determined by reading each individual card.

Custom format programmed by HID into MIFARE memory:  Yes     No    Facility Code:     Bit Format:

Corporate 1000:  Yes     No    Inkjet Card Number:  Yes     No    Laser Engraved Card Number:  Yes     No

## Contact Smart Chip Module Information

### **Applications Contact Smart Chip Module is to be Used for:**

E-Purse/Cashless Vending     Secure Log On     Loyalty     Transportation     Personal/Employee Info.

Medical Records     Physical Access Control     Biometrics     PKI (Public Key Infrastructure)     Other:

### **Applications Provider**

Schlumberger     Gemplus     Oberthur     Datakey     G & D

Other:      Undecided

If undecided define contact module type:  Processor Module     Processor with Cryptographic Coprocessor     Memory Module

### **Contact Smart Chip Module Model**

If the Customer has decided on the contact module manufacturer and model please list:

Typical Options: 1. Schlumberger: Cyberflex, Cryptoflex, Payflex    2. Gemplus: MPCOS-EMV, GPK, GemXpresso  
3. Oberthur: AuthentiC, GalactiC4.    Datakey: 330, 330J    5. G & D: Starcos 2.1, 2.3, 2.4 SPK, Smartcafe    6. etc...

### **Memory Size**

1K     2k     4K     8K     16k     32k     64K     Bits     Bytes    Note: Eight (8) Bits in One (1) Byte

### **Operating System and File Structure** (Unless specified the current available version of the O/S chosen will be supplied)

Suppliers Standard     JAVA     Other:      Undecided

### **Desired Module Location:**

Front of Card     Back of Card

### **Desired Communication Protocol:**

T=0     T=1     I<sup>2</sup>C     Other:      Undecided     Unknown

Note: Module Communication Protocol must be the same as that of contact reader chosen.

### **Comments:**



## iCLASS® Custom Artwork Checklist Form

Company Name:		PO No.		Date	
Quantity:		Card/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 iCLASS® Tag 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.

### Card Type: Standard (Cards: 100% PVC)

- 200 - iCLASS® Card   
 201 - iCLASS® embeddable Card   
 202 - iCLASS® Prox Card   
 204 - iCLASS® Wiegand  
 203 - iCLASS® Prox embeddable Card   
 206 - iCLASS® Tag   
 208 - iCLASS® Clamshell Card

### Card Type: Composite 25% Polyester + 75% PVC (Additional fee and longer lead-time)

- 210 - iCLASS® Card   
 211 - iCLASS® embeddable Card   
 212 - iCLASS® Prox Card  
 213 - iCLASS® Prox embeddable Card   
 214 - iCLASS® Wiegand

### 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 <sup>2,5</sup>:     Yes     No     Horizontal     Vertical  
Signature Panel:  Yes     No    Size: \_\_\_\_\_  
Front Card Finish:  Gloss  
Back Card Finish:  Gloss  
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     Yellow     Blue     Green     Glow in the Dark  
Microfine Print:     Yes     No  
Hologram <sup>7</sup>:     Surface     Embedded

### Notes:

1. Metallic colors (800 series) not recommended on PVC cards.
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. Please 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 Requirement Checklist File Submission & Preparation

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:**

Please submit files on CD or ZIP. Compressed files should be self extracting. Submitted media will not be returned to the customer.

**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. **Please 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® - Adobe PageMaker® - Macromedia Freehand® - 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.

**BLEEDS:**

Please 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.

**MARGINS:**

Elements that do not bleed should be at least 0.125" from the edge.

**REVERSES:**

Light colors on a dark field are called reverses. The minimum line thickness for reverses is 1 point. This can be applied to fine serifs on type elements as well.

## 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 finished the card and includes 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.

### Embedded Advantage™ Security Seal

The Advantage™ product is a specialized optically variable device that is manufactured in only one plant worldwide. It has been the OVD of choice for many government identity documents, including many states driver licenses and the INS card. Like the embedded hologram, this device is placed under the rigid clear outer layer and is not subject to surface abrasion and wear. Advantage™ images shift from orange to green at different viewing angles.

### 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.

### Microfine 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.

### High Temperature Formulations

HT-Prox formulations are designed for durable applications and for use in dye sublimation printers that employ re-transfer technology and/or polyester laminant patches. HT-Prox cards will minimize the warping caused by such processes. These formulations derive their strength from combining biaxially oriented polyester (OPET) with traditional polyvinyl chloride (PVC).



# iCLASS® Custom Artwork Placement and Inkjet Location Form

iCLASS Card

iCLASS Prox Card

iCLASS Wiegand Card

Company Name:		PO No.		Date	
Quantity:		Card and Artwork File No.			

### 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: Please indicate the desired external # location by writing "12345" on the appropriate template. The external # can only be printed on the back of the card.


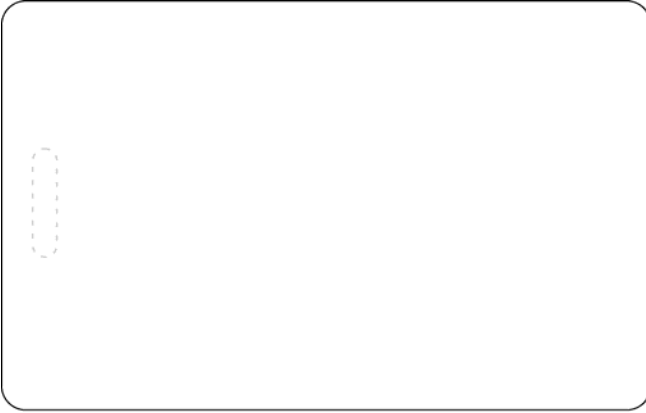

2. An Artwork File Number is placed on each card. The standard location is indicated by the "CCCCC". The standard location for the custom artwork number is on the back side of the card. Please indicate/incorporate the artwork number on the artwork. *If there will be front side printing only, the custom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

3. Artwork Placement: Please indicate the placement of your artwork on the template below. Custom artwork must clear the slot punch locations, edges and magnetic stripe 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 (i.e. Debitek stripe), indicate the locations of the magnetic stripe(s) on the template.

- Standard Location
- Custom Location

## Card Artwork Templates

 Slot Punch Indicators	12345 = Card ID Number YYYYYYYY-YY = Sales Order Number
Front	Back
	
	125 kHz # or Wiegand #      iCLASS #

### 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"  iCLASS 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 punch 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. Please consult with the printer manufacturer prior to ordering.

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# iCLASS® Custom Artwork Placement and Inkjet Location Form

iCLASS embeddable Card

iCLASS Prox embeddable Card

Company Name:		PO No.		Date	
Quantity:		Card and Artwork File No.			

### 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: Please 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. Please 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: Please indicate the placement of your artwork on the template below. Custom artwork must clear the slot punch locations, edges and magnetic stripe 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 (i.e. Debitek stripe), indicate the locations of the magnetic stripe(s) on the template.

- Standard Location
- Custom Location

## Card Artwork Templates

Slot Punch Indicators

12345 = Card ID Number  
 YYYYYYYY-YY = Sales Order Number

Front

Contact Smart Chip location to be embedded compliant with ISO 7816 on front or back side. HID does not recommend placing custom graphics on either side of the Contact Smart Chip area.

Back

Optional Magnetic Stripe  
(1/2" HICO/High Energy OE)

12345      12345 YYYYYYYY-YY

↑                      ↑

125 kHz #                      iCLASS #

### 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" "iCLASS" 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 punch 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. Please consult with the printer manufacturer prior to ordering.

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## iCLASS® Custom Artwork Placement and Inkjet Location Form

iCLASS Tag

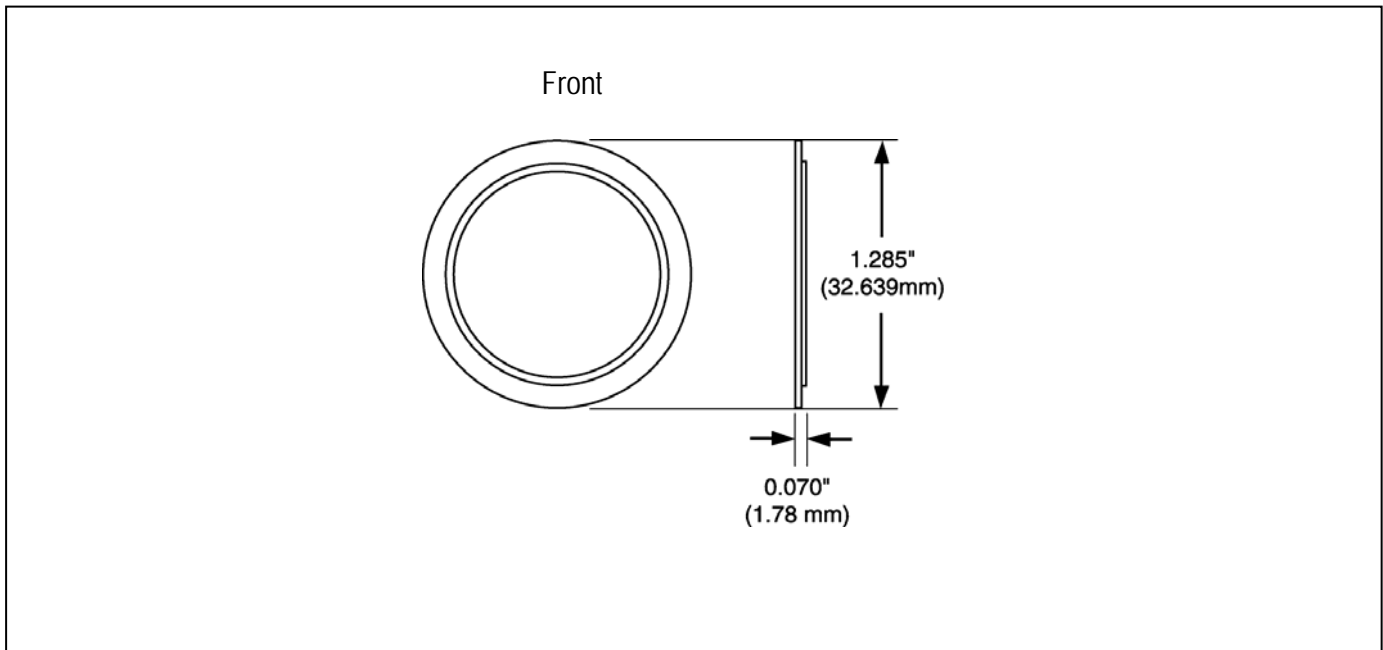
Company Name:		PO No.		Date	
Quantity:		Tag and Artwork File No.			

**1. External Number:**

Standard Location: The external # can only be printed on the back of the Tag.

**2. Artwork Placement:** Please 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".

### Card Artwork Templates



**Notes:**

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

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## Custom Artwork Placement and Inkjet Location Form *iCLASS* Clamshell Cards


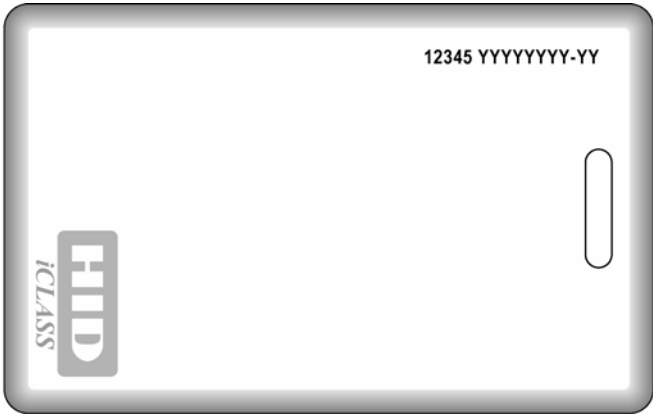
Company Name:		PO No.		Date	
Quantity:		Card and Artwork File No.			

**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: Please 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:** Please 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"

### *iCLASS* Clamshell Card Artwork Templates

Cover (Front)	<div style="border: 1px solid black; padding: 5px; display: inline-block;">             12345 = Card ID Number              YYYYYYYY-YY = Sales Order Number           </div>	Base (Back)
		

**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. Please note that there is no custom artwork file number on the *iCLASS* Clamshell.

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## iCLASS® Read-Only Reader Part Numbers and Options

Card Reader Description	Base Part No.	Current Rev. No.*	Color Options	Hardware Options	Configuration Setting Options <sup>1</sup>	iCLASS Elite Key <sup>2</sup>	MIFARE CSN <sup>3</sup> or FIPS201 <sup>4</sup> Wiegand Output Mode	Keypad Configuration Setting Options <sup>5</sup>	Optional US Government (FIPS201) Format	Optional Custom <sup>6</sup>
<b>iCLASS R10</b> Contactless Smart Card Reader: Read-Only Mullion Mount Wiegand Output (RoHS Compliant)	6100	B	G = Charcoal Gray K = Black	N = Pigtail 18" (0.5 meter) T = Terminal Strip	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6	For Keypad readers only	(N/A)	-XXXX Y
							7 8 9 A C F G H I J	For Keypad readers only	-G2.0	
<b>iCLASS R30</b> Contactless Smart Card Reader: Read-Only European and Asian Back Box Mount Wiegand Output (RoHS Compliant)	6110	B	G = Charcoal Gray K = Black	N = Pigtail 18" (0.5 meter) T = Terminal Strip	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6	For Keypad readers only	(N/A)	-XXXX Y
							7 8 9 A C F G H I J	For Keypad readers only	-G2.0	
<b>iCLASS R40</b> Contactless Smart Card Reader: Read-Only US, European and Asian Back Box Mount Wiegand Output (RoHS Compliant)	6120	B	G = Charcoal Gray K = Black	N = Pigtail 18" (0.5 meter) T = Terminal Strip	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6	For Keypad readers only	(N/A)	-XXXX Y
							7 8 9 A C F G H I J	For Keypad readers only	-G2.0	
<b>iCLASS RP40</b> Combination Technology Reader: HID Prox, iCLASS & FIP201, Read Only US, European and Asian Back Box Mount Wiegand Output (RoHS Compliant)	6125	A	G = Charcoal Gray K = Black	N = Pigtail 18" (0.5 meter)	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6	For Keypad readers only	(N/A)	-XXXX Y
							7 8 9 A C F G H I J	For Keypad readers only	-G2.0	
<b>iCLASS RK40</b> Contactless Smart Card Reader: Read-Only, with Keypad, Wiegand Output US, European and Asian Back Box Mount Wiegand Output (RoHS Compliant)	6130	A	G = Charcoal Gray K = Black	N = Pigtail 18" (0.5 meter) T = Terminal Strip	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6	00 09 10 11 14 19 22	(N/A)	-XXXX Y
							7 8 9 A C F G H I J	-G2.0		
<b>iCLASS R90</b> Contactless Smart Card Reader: Read-Only, Long Read Range Wiegand Output (RoHS Compliant)	6150	A	K = Black	T = Terminal Strip	00 01 02 03 04 05 06 07	0 1	0 = N/A	For Keypad readers only	(N/A)	-XXXX Y

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

<sup>1</sup> 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

<sup>2</sup> iCLASS Elite Key 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)

<sup>3</sup> 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 6055A and 6055BXX0011)    2 = 26 bit    3 = 34 bit    4 = 40 bit    5 = 37 bit    6 = 56 bit

<sup>4</sup> FIPS201 (USA Government Smart Card) Formats: 7 = 200 bit, 8 = 64 bit, MSB, 9 = 64 bit, LSB, A = 40 bit, MSB, C = 40 bit, LSB, F = HMAC + 200 bit, G = HMAC + 40 bit MSB, H = HMAC + 64 bit MSB, I = 80 bit combined, J = 32 bit HMAC  
 For more information on the FIPS201 outputs, please refer to the output selection guide: [http://www.hidcorp.com/pdfs/products/gsc\\_technote.pdf](http://www.hidcorp.com/pdfs/products/gsc_technote.pdf) (For additional outputs, expiration date, GUID, TWIC please contact HID for a Command Card).

<sup>5</sup> 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  
 22 = Local PIN Verify. Requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (please consult factory for availability.)

<sup>6</sup> Contact Factory for pricing, availability, and minimum order quantity.

Any readers that are RoHS compliant (RoHS = Restriction of the use of certain hazardous substances in electrical and electronic equipment) will be appropriately marked on reader and box.



## iCLASS® Read/Write Reader Part Numbers and Options

Card Reader Description	Base Part No.	Current Rev. No.*	Color Options	Hardware Options	Configuration Setting Options <sup>1</sup>	iCLASS Elite Key <sup>2</sup>	MIFARE CSN <sup>3</sup> or FIPS201 <sup>4</sup> Wiegand Output Mode	Keypad Configuration Setting Options <sup>5</sup>	Optional US Government (FIPS201) Format	Optional Custom <sup>6</sup>
<b>iCLASS RW100</b> Contactless Smart Card Reader/Writer: Read/Write <b>Mullion Mount</b> Wiegand and RS232 or RS485 or USB (RoHS Compliant)	6101	B	G = Gray K = Black	(All Terminal Strip) T=RS232 4=RS485 U=USB	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6 7 8 9 A C F G H I J	For Keypad readers only For Keypad readers only	(N/A) -G2.0	-XXXX Y
<b>iCLASS RW300</b> Contactless Smart Card Reader/Writer: Read/Write <b>European and Asian Back Box Mount</b> Wiegand and RS232 or RS485 or USB (RoHS Compliant)	6111	B	G = Gray K = Black	(All Terminal Strip) T=RS232 4=RS485 U=USB	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6 7 8 9 A C F G H I J	For Keypad readers only For Keypad readers only	(N/A) -G2.0	-XXXX Y
<b>iCLASS RW400</b> Contactless Smart Card Reader/Writer: Read/Write <b>US, European and Asian Back Box Mount</b> Wiegand and RS232 or RS485 or USB (RoHS Compliant)	6121	B	G = Gray K = Black	(All Terminal Strip) T=RS232 4=RS485 U=USB	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6 7 8 9 A C F G H I J	For Keypad readers only For Keypad readers only	(N/A) -G2.0	-XXXX Y
<b>iCLASS RWK400</b> Contactless Smart Card Reader/Writer: Read/Write, with Keypad <b>US, European and Asian Back Box Mount</b> Wiegand Output, and/or RS-232/485 Output (RoHS Compliant)	6131	A	G = Gray K = Black	T = Terminal Strip	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6 7 8 9 A C F G H I J	00 09 10 11 14 19 22	(N/A) -G2.0	-XXXX Y
<b>iCLASS RWKL550</b> Contactless Smart Card Reader/Writer: Read/Write, with LCD and Keypad <b>US, European and Asian Back Box Mount</b> (RoHS Compliant) Wiegand Output, and/or RS-232/485, and/or USB Output	6171	A	K = Black	T = Terminal Strip	00 01 02 03 04 05 06 07	0 1	0 1 2 3 4 5 6	00 09 10 11 14 19 22	Not available at this time	-XXXX Y

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

<sup>1</sup> 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

<sup>2</sup> iCLASS Elite Key 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)

<sup>3</sup> 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 6055A and 6055BXX0011)    2 = 26 bit    3 = 34 bit    4 = 40 bit, MSB    5 = 37 bit    6 = 56 bit

<sup>4</sup> FIPS201 (USA Government Smart Card) Formats: 7 = 200 bit, 8 = 64 bit, MSB, 9 = 64 bit, LSB, A = 40 bit, MSB, C = 40 bit, LSB, F = HMAC + 200 bit, G = HMAC + 40 bit MSB, H = HMAC + 64 bit MSB, I = 80 bit combined, J = 32 bit HMAC  
For more information on the FIPS201 outputs, please refer to the output selection guide: [http://www.hidcorp.com/pdfs/products/gsc\\_technote.pdf](http://www.hidcorp.com/pdfs/products/gsc_technote.pdf) (For additional outputs, expiration date, GUID, TWIC please contact HID for a Command Card).

<sup>5</sup> 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 complement, 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  
22 = Local PIN Verify. Requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (please consult factory for availability.)

<sup>6</sup> Contact Factory for pricing, availability, and minimum order quantity.

Any readers that are RoHS compliant (RoHS = Restriction of the use of certain hazardous substances in electrical and electronic equipment) will be appropriately marked on reader and box.



## bioCLASS® Read/Write biometric Reader Part Numbers and Options

Card Reader Description	Base Part No.	Current Rev. No.*	Color Options	Hardware Options	Configuration Setting Options <sup>1</sup>	iCLASS Elite Key <sup>2</sup>	MIFARE CSN <sup>3</sup> or FIPS201 <sup>4</sup> Wiegand Output Mode	Keypad Configuration Setting Options <sup>5</sup>	Optional Custom <sup>6</sup>
<b>iCLASS RWKLB575</b> 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-232/485, and/or USB Output Requires an <b>iCLASS CP575</b> Kit for enrolling fingerprint templates.	6181	A	K = Black	T = Terminal Strip	00 01 02 03 04 05 06 07	0	0 = N/A	00 09 11 22	-XXXX Y
<b>iCLASS BIO500</b> <sup>7</sup> fingerprint biometric module upgrade	6190	A	K = Black	N = None	00	0 = N/A	0 = N/A	00	N/A
<b>iCLASS CP575</b> Fingerprint enrollment kit <sup>8</sup>	6251	A	N = None	N = None	00	N/A	N/A	N/A	-XXXX Y

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

<sup>1</sup> 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	

<sup>2</sup> iCLASS Elite Key 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)

<sup>3</sup> MIFARE Card Serial Number (CSN) Wiegand Output Modes are as follows (Factory or Field Configurable):

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

Refer to the "iCLASS Reader Wiegand Output Configuration Guide" for more details.

<sup>4</sup> FIPS201 (USA Government Smart Card) Formats: 7 = 200 bit    8 = 64 bit, MSB    9 = 64 bit, LSB    A = 40 bit, MSB    C = 40 bit, LSB

Refer to the "iCLASS Reader Wiegand Output Configuration Guide" for more details. (For additional outputs, expiration date, GUID, TWIC please contact HID for a Command Card).

<sup>5</sup> 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)    11 = Buffer one key and add parity

22 = Local PIN Verify. Requires User PIN code to be programmed into the iCLASS Credential at the factory or by using the iCLASS Card Programmer (please consult factory for availability.)

<sup>6</sup> Contact Factory for pricing, availability, and minimum order quantity.

<sup>7</sup> BIO500 fingerprint biometric module upgrade is compatible with the RWKL550 iCLASS LCD Keypad Reader only.

<sup>8</sup> Kit includes an iCLASS RWKLB575 programmer with stand, fingerprint enrollment software, power supply and RS-232 connector/USB cable.

Any readers that are RoHS compliant (RoHS = Restriction of the use of certain hazardous substances in electrical and electronic equipment) will be appropriately marked on reader and box.



## iCLASS® OEM 50, 100 and 300 Module Part Numbers and Options

OEM Modules Description	Base Part No.	Current Rev. No.*	Color Options	Hardware Options	Configuration Setting	iCLASS Elite Key <sup>1</sup>	MIFARE CSN <sup>2</sup> Wiegand Output Mode	Optional Custom <sup>3</sup>
<b>iCLASS</b> OEM 50 Read/Write Module, Read/Write: Circuit Card Assembly, Wiegand and/or TTL Output Dimensions: 1.200" X 1.100" X 0.272" (3.048 cm X 2.794 cm X 0.691 cm) <b>(RoHS Compliant)</b>	3131	A	N = None	N=None	00	0 1	0 1 2 3 4 5 6	-XXXX Y
<b>iCLASS</b> OEM 100 Read/Write Module, Read/Write: Circuit Card Assembly, Wiegand and/or TTL Output Dimensions: 3.600" X 1.450" X 0.454" (9.144 cm X 3.683 cm X 1.15316 cm)	3100	A	N = None	N=None	00	0 1	0 1 2 3 4 5 6	-XXXX Y
<b>iCLASS</b> OEM 100 Read/Write Module, Read/Write: Circuit Card Assembly, RS-232 Output Dimensions: 3.600" X 1.450" X 0.454" (9.144 cm X 3.683 cm X 1.15316 cm)	3101	A	N = None	N=None	00	0 1	0 1 2 3 4 5 6	-XXXX Y
<b>iCLASS</b> OEM 300 Read/Write Module, Read/Write: Circuit Card Assembly, Wiegand and/or RS-232 Output Dimensions: 2.850" X 2.700" X 0.446" (7.239 cm X 6.858 cm X 1.13284 cm)	3111	A	N = None	N=None	00	0 1	0 1 2 3 4 5 6	-XXXX Y

OEM Modules Antenna Description	Base Part No.	Current Rev. No.*	Hardware Options
<b>iCLASS</b> OEM 50 Antenna, Circuit Card Assembly: Dimensions: 3.150" X 3.150" X 0.062" (8.001 cm X 8.001 cm X 0.158 cm) <b>(RoHS Compliant)</b>	3132	A	A = Air Tuned N = Not Tuned
<b>iCLASS</b> OEM 50 Antenna, Circuit Card Assembly: Dimensions: 1.900" X 1.350" X 0.062" (4.826 cm X 3.429 cm X 0.158 cm) <b>(RoHS Compliant)</b>	3133	A	A = Air Tuned N = Not Tuned

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

<sup>1</sup> iCLASS Elite Key Options (Factory or Field Configurable):

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

1 = High Security, Custom, not valid with FIPS201 options (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)

See Application Note Number 28 for additional information on Key Management.

<sup>2</sup> MIFARE Card Serial Number (CSN) Wiegand Output Modes are as follows (Factory or Field Configurable):

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    Refer to the "iCLASS Reader Wiegand Output Configuration Guide" for more details.

<sup>3</sup> Contact Factory for pricing, availability, and minimum order quantity.

Any readers that are RoHS compliant (RoHS = Restriction of the use of certain hazardous substances in electrical and electronic equipment) will be appropriately marked on reader and box.



## iCLASS® OEM 150 Module Part Numbers and Options

OEM 150 Modules Description	Base Part No.	Current Rev. No.*	Color Options	Hardware Options	Configuration Setting	iCLASS Elite Key <sup>1</sup>	MIFARE CSN <sup>2</sup> or FIPS201 <sup>3</sup> Wiegand Output Mode	Optional Custom <sup>4</sup>
<b>iCLASS OEM 150 Read/Write Module Circuit Card Assembly</b> Wiegand Output <sup>5</sup> Dimensions: 2.441" x 1.102" x 0.351" (6.200 cm x 2.800 cm x 0.890 cm) <b>(RoHS Compliant)</b>	3121	A	N = None	N=None 2=RS232 4=RS485 U=USB	00 = None	0 1	0 1 2 3 4 5 6 7 8 9 A C F G H I J	-XXXX Y

Expansion Module Description	Base Part No.	Current Rev. No.*	Color Options	Hardware Options	Configuration Setting A	Configuration Setting B
<b>iCLASS OEM 150 / RW Expansion Module Circuit Card Assembly. RS232</b> Dimensions: 1.102" x 0.886" x 0.437" (2.800 cm x 2.250 cm x 1.110 cm) <b>(RoHS Compliant)</b>	3122	A	N	E = Standard B=Uart to Uart	00	00
<b>iCLASS OEM 150 / RW Expansion Module Circuit Card Assembly. RS485</b> Dimensions: 1.102" x 0.886" x 0.437" (2.800 cm x 2.250 cm x 1.110 cm) <b>(RoHS Compliant)</b>	3123	A	N	E = Standard	00	00
<b>iCLASS OEM 150 / RW Expansion Module Circuit Card Assembly. USB</b> Dimensions: 1.102" x 0.886" x 0.437" (2.800 cm x 2.250 cm x 1.110 cm) <b>(RoHS Compliant)</b>	3124	A	N	E = Standard	00	00

OEM Modules Antenna Description	Base Part No.	Current Rev. No.*	Tuning Options
<b>iCLASS OEM 150 Antenna Circuit Card Assembly. R10 Size</b> Dimensions: 3.267" x 1.496" x 0.062" (8.300 cm x 3.800 cm x 0.160 cm) <b>(RoHS Compliant)</b>	3135	A	A = Adaptive F = Fixed N = Non-Tuned
<b>iCLASS OEM 150 Antenna Circuit Card Assembly. R40 Size</b> Dimensions: 3.583" x 2.677" x 0.062" (9.800 cm x 6.800 cm x 0.160 cm) <b>(RoHS Compliant)</b>	3136	A	A = Adaptive F = Fixed N = Non-Tuned

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

<sup>1</sup> iCLASS Elite Key Options (Factory or Field Configurable):

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

1 = High Security, Custom, not valid with FIPS201 options (Reads only iCLASS cards with unique keys diversified from matching site specific master key; consult factory for availability)

See Application Note Number 28 for additional information on Key Management.

<sup>2</sup> MIFARE Card Serial Number (CSN) Wiegand Output Modes are as follows (Factory or Field Configurable):

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    Refer to the "iCLASS Reader Wiegand Output Configuration Guide" for more details.

<sup>3</sup> FIPS201 (USA Government Smart Card) Formats: 7 = 200 bit, 8 = 64 bit, MSB, 9 = 64 bit, LSB, A = 40 bit, MSB, C = 40 bit, LSB, F = HMAC + 200 bit, G = HMAC + 40 bit MSB, H = HMAC + 64 bit MSB, I = 80 bit combined, J = 32 bit HMAC

For more information on the FIPS201 outputs, please refer to the output selection guide: [http://www.hidcorp.com/pdfs/products/gsc\\_technote.pdf](http://www.hidcorp.com/pdfs/products/gsc_technote.pdf) (For additional outputs, expiration date, GUID, TWIC please contact HID for a Command Card).

<sup>4</sup> Contact Factory for pricing, availability, and minimum order quantity.

<sup>5</sup> Expansion Modules Available for Additional Serial Interface Capability

Any readers that are RoHS compliant (RoHS = Restriction of the use of certain hazardous substances in electrical and electronic equipment) will be appropriately marked on reader and box.



## iCLASS® Reader Wiegand Output Configuration Guide

MIFARE CSN <sup>1, 2</sup> Wiegand Data Output formats	Comments	Model Number <sup>3, 4</sup>
Any HID/OEM format.	As encoded into the <i>iCLASS</i> card by HID factory or field programmer.	All models
32-bit, MIFARE Card Serial Number.	For MIFARE Cards only, random number burned into card chip.	XXXXAXX0000YY
32-bit, MIFARE Card Serial Number, reverse output.	For MIFARE Cards only, reverse output matches HID MIFARE Reader base model number: 6055A and 6055BXX0011	XXXXAXX0001YY
26-bit, derived from MIFARE Card Serial number.	For MIFARE Cards only, ID = 16 lower bits of CSN. Reader generates fixed FC - defaults to 001, but can be factory or field configured.	XXXXAXX0002YY
34-bit, MIFARE Card Serial number plus beginning/ending parity.	For MIFARE Cards only	XXXXAXX0003YY
40-bit, MIFARE Card Serial Number plus 8-bit checksum.	For MIFARE Cards only, Checksum per Philips standard.	XXXXAXX0004YY
37 bit, derived from MIFARE Ultralight or DESFire Card Serial Number	For Ultralight or DESFire Cards only, 37 lower bits of CSN in reverse order (Keypad Readers Only)	61XXAXX0005YY
56 bit, MIFARE Ultralight or DESFire Card Serial Number	For Ultralight or DESFire Card Only, 56 bit CSN in reverse order (Keypad Readers Only)	61XXAXX0006YY

FIPS201 (USA Government Smart Card) Wiegand Data Output formats – Low Level <sup>5</sup>	Comments	Model Number <sup>3, 4</sup>
200 bit, FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXX7YY-G2.0
64 bit, MSB First FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXX8YY- G2.0
64 bit, LSB First FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXX9YY- G2.0
40 bit, MSB FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXXAYY- G2.0
40 bit, LSB FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXXCY- G2.0
HMAC + 200 bit, FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXXFY- G2.0
HMAC + 40 bit MSB, FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXXGY- G2.0
HMAC + 64 bit MSB, FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXXHY- G2.0
80 bit combined, FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXXIYY-G2.0
32 bit HMAC, FIPS201 output	Output as defined by USA Government Smart Card Specification	XXXXAXXXXJYY- G2.0

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 28 for details.
3. XX = Indicates model variations, color and hardware options. Refer to the *iCLASS* "How to Order Guide" for complete ordering instructions.
4. YY = Indicates Keypad Configuration Setting Options for *iCLASS* Keypad Readers Only.
5. Must use the "-G2.0" suffix when ordering a FIPS201 Wiegand Data Output Format, (128 bit output is configurable with a Command Card)

All trademarks and registered trademarks are the properties of their respective companies.

## *iCLASS*<sup>®</sup> Accessories

Part No.	Description
----------	-------------

### *iCLASS* Reader Accessories

3175ANN00 <sup>1</sup>	<i>iCLASS</i> SDK Card Programmer. Software development kit (SDK) includes CD, stand, and power supply.
6091-302-01	R10 - 6100 Reader cover, Black
6091-302-02	R10 - 6100 Reader cover, Gray
6092-302-01	R30 - 6110 & RW300 - 6111 Reader cover, Black
6092-302-02	R30 - 6110 & RW300 - 6111 Reader cover, Gray
6093-302-01	R40 - 6120 & RW400 - 6121 Reader cover, Black
6093-302-02	R40 - 6120 & RW400 - 6121 Reader cover, Gray
6132AK	RK40 – 6130 & RWK400 - 6131 Keypad Reader Spacer Kit, Black
6132AG	RK40 – 6130 & RWK400 - 6131 Keypad Reader Spacer Kit, Gray

<sup>1</sup> To ensure security of the format and cards, a Software License Agreement must be signed by the final user of the *iCLASS* SDK Card Programmer, and be on file at HID prior to shipment.



## HID Corporation *iCLASS*® Programmer Ordering Guide

**3150ANN00 (Model: CP400)**

**Description:** Programmer for HID 13.56 MHz *iCLASS* Programmable RFID Transponders/Cards/ Keys/Tags<sup>1</sup>, with CD-ROM and diskette containing programmer software and plug-in power supply.

**6250ANN00 (Model: CP575A)**

**Description:** The CP575A programmer includes CP400 features with the added capability of programming biometric templates for use in our *bioCLASS* reader (RWKLB575) and includes a *bioCLASS* reader/writer, personalization diskette, universal power supply and USB cable.

**3175ANN00 (Only requires section 3 to be completed)**

**Description:** *iCLASS* SDK Card Programmer. Software development kit (SDK) includes CD, stand, and power supply.

**Section 1: To upgrade<sup>4</sup> an existing *iCLASS* Programmer please provide:**

HID Part Number: **3150-304-01**

Serial Number: \_\_\_\_\_

Software Name: \_\_\_\_\_  
(Software name can be found on the Customer Specific Files Diskette)

**Section 2: Please specify the following<sup>1, 2</sup>:**

- A - Format Number # 1 \_\_\_\_\_  
 Facility Code Range, or specific Facility Code \_\_\_\_\_  
 Card Number Range (Start and Stop) \_\_\_\_\_
- B - Format Number # 2 (If required) \_\_\_\_\_  
 Facility Code Range, or specific Facility Code \_\_\_\_\_  
 Card Number Range (Start and Stop) \_\_\_\_\_

**Section 3: Customer must also identify the final user of the *iCLASS* Programmer to HID<sup>3</sup>:**

Company Name: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone #: \_\_\_\_\_

Fax #: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

<sup>1</sup> Only formats authorized for use by your company can be ordered. For HID Format Numbers, please contact HID Customer Service.

Consult factory for a list of programmable RFID Transponders/Cards/Tags that can be programmed with this Programmer.

<sup>2</sup> For Corporate 1000 Format, *iCLASS* Elite Format, and Custom Facility Code & Card Number Range Programmers, please contact Customer Service for availability, lead times, and pricing.

<sup>3</sup> To ensure security of the format and cards, a Software License Agreement must be signed by the final user of the *iCLASS* Programmer, and be on file at HID prior to shipment.

<sup>4</sup> Software License Agreement does not apply to *iCLASS* Programmer upgrades.



## Corporate 1000™ Format Request & Authorization Form (Part 1)

HID's Corporate 1000 Format is a 35-bit card format that is developed specifically for use by individual end-user organizations. Organizations must be qualified, formally enrolled and accepted by HID Global Corporation to participate in this program.

The Corporate 1000 Format is offered primarily to large, multi-location, 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, please fill in your company information in **TABLE I** below. Be sure to provide the primary and secondary (if desired) authorized contacts within your company.

**TABLE I: Primary and Secondary Contacts Within Your Company**

Information	Primary Company Contact	Secondary Company Contact
Company Name		
Mailing Address		
City		
State/Province		
Country		
Zip/Postal Code		
Contact Name		
Title		
Contact's Signature		
Phone Number		
Fax Number		
E-mail Address		

Card numbers available within the Corporate 1000 format are 0 – 1,048,575. Please indicate the card number you wish your first order to start with here: \_\_\_\_\_. All card numbers below 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 with this, please ask your systems provider or contact HID directly.)

You may add any of the following options for added card security:

Invisible Ink    Advantage® OVD    Hologram    Microfine 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 that certain HID Credential Program License Agreement located at [www.hidcorp.com/pdfs/credential\\_license.pdf](http://www.hidcorp.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\_\_\_\_\_



## Corporate 1000™ Format Request & Authorization Form (Part 2)

To ensure the confidentiality and privacy of your card format, you may authorize any HID System Provider who can purchase and manage your Corporate 1000 cards on your behalf. This information should be entered in **Table II** for HID System Providers who can purchase and manage cards on your behalf, and **Table III** for HID System Installers who can only install on your behalf.

Use this form to communicate all authorization concerning your Corporate 1000 Format. HID recommends that each end-user maintain an original copy of this form listing all authorizations.

**TABLE II: HID System Providers Who Can Purchase and Manage Cards (Resellers) on your behalf**

	Company # 1	Company # 2
Company Name		
Contact Name		
Title		
Address		
Phone Number		
Fax Number		
E-Mail Address		
Authorized End-User's Contact Name		
Authorized End-User's Contact Signature		

**TABLE III: HID System Installers Who Can Only Install on your behalf**

	Company # 1	Company # 2
Company Name		
Contact Name		
Title		
Address		
Phone Number		
Fax Number		
E-Mail Address		
Authorized End-User's Contact Name		
Authorized End-User's Contact Signature		

**Please forward to HID for approval and processing: Fax: (949) 598-5756**

If you need any assistance, please contact your Customer Service Representative.

To add or remove authorizations, please submit a "HID Corporation Corporate 1000 Change Form" to HID.

**For Internal Use Only:**

HID Sales Manager:		X	
	Print Name	Signature	Date
Issued Corporate 1000 Format No.:		To be entered by HID after approval	





## *iCLASS*<sup>®</sup> Elite Program<sup>™</sup> Request & Authorization Form (Part 2)

To guarantee the confidentiality and privacy of your card format, you may authorize any HID System Provider who can purchase and manage your *iCLASS* Elite Credential Format on your behalf. This information should be entered in **Table II** for HID System Providers who can purchase and manage cards on your behalf, and **Table III** for System Installers who can only install your card format on your behalf.

Use this form to communicate all authorization concerning your *iCLASS* Elite Credential Format. HID recommends that each end-user maintain an original copy of this form listing all authorizations.

**TABLE II: HID System Providers Who Can Purchase and Manage *iCLASS* Elite Credentials and Readers on your behalf.**

	Company # 1	Company # 2
Company Name		
Contact Name		
Title		
Phone Number		
Fax Number		
E-Mail Address		
Authorized End-User's Contact Name		
Authorized End-User's Contact Signature		

**TABLE III: HID System Installers Who Can Only Install on your behalf.**

	Company # 1	Company # 2
Company Name		
Contact Name		
Title		
Phone Number		
Fax Number		
E-Mail Address		
Authorized End-User's Contact Name		
Authorized End-User's Contact Signature		

**Please forward to HID for approval and processing: Fax: (949) 598-5756**

If you need any assistance, please contact your Customer Service Representative.

To add or remove authorizations, please submit a "*iCLASS* Elite Program Change Form" to HID.

**For Internal Use Only:**

HID Sales Manager:		X	
	Print Name	Signature	Date
Issued <i>iCLASS</i> Elite Program #:		To be entered by HID after approval	