

# HID Proximity

125 kHz Cards and Readers



ACCESS SECURE IDENTITY



# HID Proximity

125 kHz Proximity Cards and Readers



For security managers, dealers, integrators and OEMs, HID proximity cards and readers are recognized as the industry standard for physical access control. Featuring 125 kHz RFID technology, HID proximity products are robust, affordable and seamlessly integrate with access control systems.

# HID Proximity Readers



## Did you know?

HID has a multilingual installation manual for ProxPoint Plus, ThinLine II, MiniProx, ProxPro II and Prox80 with instructions in English, French, German, Spanish, Portuguese, Japanese, Chinese, Korean and Russian. The manual can be downloaded from [www.hidglobal.com](http://www.hidglobal.com).

### ProxPoint® Plus

**125 kHz value priced proximity card reader**

**Base Part Number • 6005, 6008**

- Small sized reader features a beeper and multicolor LED which can be host and/or locally controlled
- Can mount directly on metal with no change in read range performance
- Power requirements: 5-16 VDC
- Dimensions: 3.14" x 1.70" x 0.66" (7.96 cm x 4.3 cm x 1.68 cm)
- Read Range: up to 3.0" (7.5 cm)\*



### MiniProx®

**125 kHz mullion mount proximity card reader**

**Base Part Number • 5365, 5368**

- Power requirements: 5-16 VDC
- Dimensions: 6.0" x 1.7" x 1.0" (15.2 cm x 4.3 cm x 1.91 cm)
- Read Range: up to 5.5" (14.0 cm)\*



### Thinline® II

**125 kHz low profile proximity card reader**

**Base Part Numbers • 5395, 5398**

- The size of most standard U.S. switch plates
- Available with Wiegand or Clock-and-Data interface
- Power requirements: 5-16 VDC
- Dimensions: 4.7" x 3.0" x 0.68" (11.9 cm x 7.6 cm x 1.7 cm)
- Read Range: up to 5.5" (14.0 cm)\*



\* Dependent upon installation conditions and credential type



### ProxPro®

#### 125 kHz versatile proximity card reader

Base Part Numbers • 5355, 5352, 5358

- Ideal for medium-range applications
- Available with Wiegand, Serial (RS-232/RS-422) or Clock-and-Data interface
- Power requirements: 10-28.5 VDC
- Dimensions: 5.0" x 5.0" x 1.0" (12.7 cm x 12.7 cm x 2.54 cm)
- Read Range: up to 8.0" (20.5 cm)\*



### ProxPro® with keypad

#### 125 kHz keypad proximity card reader with keypad

Base Part Numbers • 5355, 5352, 5358

- Ideal for medium-range applications
- Available with Wiegand, Serial (RS-232/RS-422) or Clock-and-Data interface
- Power requirements: 10-28.5 VDC
- Dimensions: 5.0" x 5.0" x 1.0" (12.7 cm x 12.7 cm x 2.54 cm)
- Read Range: up to 8.0" (20.5 cm)\*



### ProxPro® II

#### 125 kHz new generation proximity card reader

Base Part Numbers • 5455, 5458

- Versatile Proximity Card Reader
- Optional glass mount kit available for mounting the reader behind glass
- Power requirements: 5-16 VDC
- Dimensions: 5.0" x 5.0" x 1.0" (12.7 cm x 12.7 cm x 2.54 cm)
- Read Range: up to 8.0" (20.5 cm)\*



### MaxiProx®

#### 125 kHz long range proximity card reader

Base Part Number • 5375

- Auto-tune allows read range to be maintained within four inches of metal
- RS-232, RS-422, and RS-485 output modes are configurable
- "Parking hold" feature ensures accurate detection of vehicles in parking lanes
- Reads all HID Formats
- Power requirements: 12 or 24 VDC (configurable)
- Dimensions: 12.0" x 12.0" x 1.0" (30.5 cm x 30.5 cm x 2.54 cm)
- Available in Wiegand or Clock-and-Data Interface
- Read Range: up to 24.0" (61.0 cm)\*



\* Dependent upon installation conditions and credential type

## Did you know?

HID's ProxPass® II active vehicle tag enables convenient, hands-free parking control when used with the MaxiProx reader.



# HID Proximity Readers



**ProxPoint Plus®**

**MiniProx®**

**Thinline® II**

**ProxPro®**

<b>Base Model Number</b>	6005B/6008B	5365E/5368E	5395C/5398C	5355A/5352A/5358A
<b>Dimensions</b>	3.13" x 1.7" x .66" (8.0 cm x 4.5 cm x 1.5 cm)	6.0" x 1.7" x 1.0" (15.0 cm x 4.5 cm x 2.0 cm)	4.7" x 3.0" x .68" (12.0 cm x 7.5 cm x 1.5 cm)	5.0" x 5.0" x 1.0" (12.5 cm x 12.5 cm x 2.5 cm)
<b>Weight</b>	3.6 oz (102 g)	7.89 oz (224 g)	7.33 oz (208 g)	9.62 oz (273 g)
<b>Read Range</b>	Up to 3.0" (7.5 cm)	Up to 5.5" (14.0 cm)		Up to 8.0" (20.5 cm)
<b>Mounting</b>	Mullion		Single-gang electrical box	Single-gang electrical box; Glass Mount Kit Available
<b>Power Supply</b>	5-16 VDC			10-28.5 VDC
<b>Current Requirements</b>	30/75 mA	30/75 mA	30/110 mA @ 5 VDC 20/115 @ 12 VDC	100/120 mA
<b>Termination</b>	Pigtail	Pigtail or Terminal Strip	Pigtail	
<b>Output Formats</b>	Wiegand or Clock-and-Data			Wiegand, Clock-and-Data, RS-232 or RS-422
<b>Tamper</b>	No			Switch
<b>Indoor/Outdoor</b>	IP55 Certified			IP55 Certified
<b>Warranty</b>	Lifetime			

# Comparison Chart



**ProxPro® II**



**ProxPro® with Keypad**



**EntryProx™**



**MaxiProx®**



**Prox80™**

	5455B/5458B	5355A/5352A/5358A	4045C	5375A	5405A/5408A
	5.0" x 5.0" x 1.0" (12.5 cm x 12.5 cm x 2.5 cm)		5.25" x 2.75" x 1.37" (13.5 cm x 7.0 cm x 3.5 cm)	12.0" x 12.0" x 1.0" (30.5 cm x 30.5 cm x 2.5 cm)	3.15" x 3.15" x 0.8" (8.0 cm x 8.0 cm x 2.0 cm)
	13.65 oz (387 g)	9.62 oz (273 g)	11.76 oz (333 g)	50.8 oz (1440 g)	2.2 oz (63 g)
	Up to 8.0" (20.5 cm)		Up to 3.0" (7.5 cm)	Up to 24.0" (61.0 cm)	Up to 5.5" (14.0 cm)
	Single-gang electrical box; Glass Mount Kit Available		US or EU single gang box, wall surface, or on glass with included adhesive pads	Mount on non-metallic surfaces for optimal read range performance.	EU/Asian single-gang box
	5-16 VDC	10-28.5 VDC	10-15 VDC	12 VDC or 24 VDC	5-16 VDC
	25/125 mA	25/125 mA	150 mA	200/700 mA @ 12 VDC 260 mA/1.2 A @ 24 VDC	30/110 mA @ 5 VDC 20/115 mA @ 12 VDC
	Pigtail	Terminal Strip			Pigtail
	Wiegand or Clock-and-Data	Wiegand, Clock-and-Data, RS-232 or RS-422	Wiegand	Wiegand, Clock-and-Data, RS-232, RS-422 and RS-485	Wiegand or Clock-and-Data
	No	Switch		Switch	No
	IP55 Certified				
	Lifetime				

# What Format Do You Need?

This is the question no one wants to ask or hear, but its answer is critical to program and order any credential.

## What is a format?

A format is the structure of the data stored in an access control credential. Basically it is comprised of a set of binary digits – “bits” – put together a certain way to create a binary number, which is converted into a credential number by an access control system. The number of ones and zeros, and how they are put together, determines the format and ultimately the credential number.

**For example:** A 26-bit format (HI0301) is created like this

**1-1111111-0001011111101100-1** with the first set of ones (**in red**) representing the site code and the second set of ones and zeros (**in blue**) representing the credential number. The access control system sees this format as card number 6124 with a site code 255. The 26-bit format is the most common format requested by dealers and can be used by most access control systems available today. However, there are many formats available and some formats are unique to access control systems and do not work with other formats at the same time. This is why it is so important to know the format when ordering credentials.

Here is some additional information about the 26-bit format (HI0301) and other formats you may have come across:

### HID 26-Bit Format: HI0301

**General:** The 26-bit format (Format number HI0301) is the industry standard format, and is an open format. The sale of this format is not limited to any one company. The range of credential numbers available in this format is limited, and therefore, the potential exists for credential numbers to be duplicated. It is important to understand that HID does not insure that credential numbers will not be duplicated. HID does not control or restrict the ordering of credentials programmed with the standard 26-bit format. Convenience in ordering credentials and universal access control panel acceptance are the primary benefits of using the standard 26-bit card format.

**Description:** The 26-bit format consists of 255 possible facility codes. Within each facility code, there are 65,535 unique card numbers.

**Sales Policy:** This format can be sold to any customer.

### HID Proprietary 37-Bit Format: HI0302

**General:** In an effort to provide an open format to the industry, while simultaneously assuring that the numbers are unique and will not be duplicated, the 37-bit format was developed. Under this format, HID controls the issuing of credential numbers and does not duplicate the numbers.

**Description:** The 37-bit format can be used to program a wide range of unique credential numbers. Although it is available to all customers, not all access control systems can handle such a large data length format. In addition, many systems are unable to handle a format that does not have a facility code.

**Sales Policy:** Just like the 26-bit format, the 37-bit format can be sold to any customer. Although it is available to all customers, HID controls the numbers generated for each order. Buyers must confirm that the system that the credentials are to be used on is capable of using a 37-bit number with no facility code.

#### **HID Proprietary 37-Bit Format with Facility Code: H10304**

**General:** The 37-bit format with facility code differs from the 37-bit format only in that it also contains a facility code. Just like the 37-bit format without facility code, this format provides the customer with an open format in which credential numbers will not be duplicated because HID tracks the credential manufacturing process to prevent duplication.

**Description:** This 37-bit format has 65,535 facility codes available and over 500,000 card numbers within each facility code. Just like the 37-bit format without facility code, many systems are not capable of handling a format as large as 37 bits. In addition, many systems are not capable of handling a facility code as large as 65,535.

**Sales Policy:** The 37-bit format with facility code is ideal for dealers who would like to have their own format. This allows them to have the security of no credential duplication, without dependence on a system supplier for a format. This format is reserved for customers with a requirement for a large population of credentials.

#### **Corporate 1000 Format (see the Corporate 1000 page for more details)**

**General:** The Corporate 1000 format is a 35-bit format designed to provide large end-users with their own proprietary format. This assures them that their credentials will not be duplicated because HID reserves an exclusive Corporate 1000 format for each end user. This format also provides the end-user the freedom to work with any system and with any dealer of their choice. Some access systems are not capable of handling a 35-bit format, but as a service to the customer, many OEM's will make enhancements to their control systems to allow the use of an HID Corporate 1000 format. The end-user is offered the security and flexibility of selecting and authorizing the security dealer of his/her choice and controlling the issuance of credentials for the organization.

**Description:** The Corporate 1000 format is a 35-bit format with a unique Company ID Code and more than 1,000,000 available credential numbers.

**Sales Policy:** The Corporate 1000 format offers the end-user a large quantity of available credential numbers and is typically reserved for customers with the need or potential to badge a large number of cardholders. The Corporate 1000 format is also available to large, geographically diverse organizations with a requirement to unify the structure of their access control system around an exclusive access control card format under their control.

We hope these brief explanations help answer some of the questions you may have about formats. If you require further information, please contact us and we will work to clarify your understanding.

# HID Proximity Credentials

## **ProxCard® II**

**Value priced 125 kHz proximity card**

**Base Part Number • 1326**

- Price competitive with all other card technologies
- Thin enough to carry in a wallet or purse



## **ISOProx® II**

**125 kHz thin proximity card**

**Base Part Number • 1386**

- Combines proximity technology and offers photo identification capability on a single card
- Graphics quality surface for use with direct image printers
- Same size and thickness as a standard credit card
- Vertical or horizontal slot punch capability

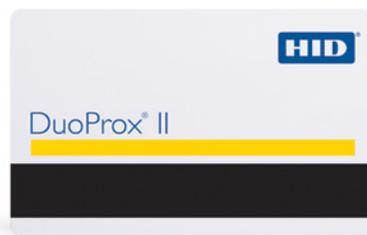


## **DuoProx® II**

**125 kHz thin proximity card with magnetic stripe**

**Base Part Number • 1336**

- Combines proximity technology and offers photo identification capability on a single card
- Graphics quality surface for use with direct image printers
- Same size and thickness as a standard credit card
- Vertical or horizontal slot punch capability
- Magnetic stripe technology
- Thin enough to be used with standard swipe or insert readers



## **Smart ISOProx® II**

**125 kHz ISO-thin proximity card, contact smart chip embeddable (optional magnetic stripe) \***

**Base Part Number • 1597**

- Allows a contact smart chip module to be embedded for multi-technology applications
- Graphics quality surface for use with direct image printers
- Smart DuoProx II includes magnetic stripe
- Same size and thickness as a standard credit card



\* ISO 7816 compliant for embedding optional contact smart chip module. Some custom graphics can increase overall card thickness.



### **Smart DuoProx® II**

**125 kHz ISO-thin proximity card with magnetic stripe, contact smart chip embeddable \***

**Base Part Number • 1598**

- Allows a contact smart chip module to be embedded for multi-technology applications
- Graphics quality surface for use with direct image printers
- Smart DuoProx II includes magnetic stripe
- Same size and thickness as a standard credit card

\* ISO 7816 compliant for embedding optional contact smart chip module. Some custom graphics can increase overall card thickness.



### **MicroProx® Tag**

**125 kHz proximity adhesive tag**

**Base Part Number • 1391**

- The size of a coin, the Tag easily attaches to all nonmetallic materials
- The Tag can be programmed in any HID proximity format, and is compatible with all HID proximity readers
- The Tag is RF-programmable for ease of encoding with HID's ProxProgrammer®

**Did you know?** You can add a MicroProx Tag to a cellphone or PDA to create a secondary credential.



### **ProxKey® III**

**Convenient 125 kHz proximity key fob**

**Base Part Number • 1346**

- Small enough to fit on a key ring
- Universal compatibility with HID proximity readers
- Dimensions: 1.56" x 1.25" x 0.24" (3.95 x 3.18 x 0.60 cm)
- Weight: 0.14 oz (4.0g)



### **ProxPass® II**

**Long range 125 kHz proximity active vehicle tag \***

**Base Part Number • 1351**

- Active tag for vehicle access control
- Provides up to eight-foot read range
- Solely compatible with the MaxiProx® reader and all HID card formats
- One year warranty
- Replaceable battery
- Dimensions: 3.61" x 2.66" x 0.30" (91.6 x 67.5 x 7.6 mm)

\* ProxPass II features a one-year warranty and has a 2-5 year battery life, depending on usage.

# HID Proximity Credentials

## Did you know that most proximity, magnetic stripe and iCLASS credentials purchased from HID since Sept 1, 2003 have the sales order number printed on them?

The example below explains where to look and how to identify the sales order number on most credentials ordered today.

**The benefits:** The order identification number "Sales Order Number" enables us to help trace a past order placed with HID. This number is useful when customers need to place an order for a particular credential which requires information they may not have immediately on-hand. A call to the HID Global Customer Service at 800-872-5359 with this Sales Order Number allows us quickly to identify the style of credential including numbering (matching, non-matching, etc.), format\*, site code and most importantly, the previously ordered credential numbers. So just remember this little bit of information the next time a customer comes in with a credential or calls you wanting to order something but does not know exactly what they need. With this simple printed Sales Order Number, you may have all the information you need.



### ProxProgrammer®

**Program proximity cards and tags ON DEMAND!**

**Base Part Number • 1050**

- Programs all HID proximity cards and tags except for ProxPass active tags
- Custom formats available
- Security features for controlled operation
- Ease of programming
- Dimensions: 5.0" x 5.0" x 4.3" (12.7 x 12.7 x 10.9 cm)



### ProxCard® Plus

**Wiegand and 125 kHz proximity card**

**Base Part Number • 169**

- Combines Wiegand technology, proximity technology and photo identification capability on a single card
- Graphics quality surface for use with direct image printers



# Multi-Technology Transition Cards



## **iCLASS® Read/Write Contactless Smart Chip & Coil**

**Operating Frequency:** 13.56 MHz read/write technology

**Memory Size:** 2k bit (256 Byte) with two application areas, 16k bit (2k Byte) with two or 16 application areas, or 32k bit (4k Bytes) with two or 16 application areas plus an additional 16k application area

**Read Range:** Up to 4.5" (11.4 cm) depending on local installation conditions and card reader selection  
**RF Interface:** As suggested by ISO/IEC 15693

**Format:** Any proximity bit format up to 84 bits. For more information, use HID's iCLASS Reference Guide or visit our website at [www.hidglobal.com/iclass](http://www.hidglobal.com/iclass).

## **Contact Smart Chip Module Guidelines**

For customers who require a contact smart chip module, HID has developed partnerships with the leading providers of application software and contact smart chip modules. Depending on your specifications, HID can embed contact smart chip modules from a number of industry leaders. When application software is needed, turn to HID's partners. To learn more about HID's smart card offerings and partners, visit our website at [www.hidglobal.com/smart](http://www.hidglobal.com/smart).

## **MIFARE® Contactless Memory Chip and Coil**

**Operating Frequency:** 13.56 MHz read/write technology

**Memory Size:** 8k bit (1k Byte)

**Read Range:** Up to 1.5" (3.8 cm) depending on local installation conditions and card reader selection.

**RF Interface:** As suggested by ISO/IEC 14443, Type A

**Fixed Serial Number:** Unique 32 bit.

For more information, use HID's MIFARE Reference Guide or visit our website at [www.hidglobal.com](http://www.hidglobal.com).



## **iCLASS® Prox Card**

**13.56 MHz iCLASS contactless smart card and 125 kHz proximity thin card**

**Base Part Number • 202**

- 13.56 MHz iCLASS read/write technology and HID 125 kHz proximity technology in a single ISO standard thickness card
- Enables contactless smart card applications to be added to an existing HID proximity technology access control system
- Offers the ability to add a magnetic stripe, barcode, anti-counterfeiting feature, custom artwork, or photo ID
- Meets ISO standards for thickness for use with direct image and thermal transfer printers



## **MIFARE® /Prox Card**

**125 kHz thin proximity & 13.56 MHz MIFARE® card (optional magnetic stripe)**

**Base Part Number • 1431**

- Combine MIFARE 1K and HID proximity technologies to add smart card applications, such as cashless vending, corporate and campus applications, event ticketing, customer loyalty and photo ID cards, to access control systems
- Provides high security with mutual authentication, data encryption and unique 32-bit serial number and supports all HID proximity card formats, including Corporate 1000
- Photo ID compatibility allows printing directly to the card with a direct image or thermal transfer printer
- Cards can be produced with visual security and anti-counterfeiting features such as holograms, ultra-violet fluorescent inks, micro-printing or a custom logo
- Also Available in Composite Polyester / PVC and MIFARE 4K versions

# HID Proximity Credentials



**ProxCard® II**

**ISOProx® II**

**DuoProx® II**

**Smart  
ISOProx II™**

**Smart  
DuoProx® II**

	ProxCard® II	ISOProx® II	DuoProx® II	Smart ISOProx II™	Smart DuoProx® II
<b>Base Part Number</b>	1326	1386	1336	1597	1598
<b>Read Range: *</b>					
<b>ProxPoint® Plus</b>	Up to 3.0" (7.5 cm)	Up to 2.5" (6.5 cm)			
<b>MiniProx®</b>	Up to 5.5" (14.0 cm)	Up to 5.0" (12.5 cm)			
<b>Thinline® II</b>	Up to 5.5" (14.0 cm)	Up to 5.0" (12.5 cm)			
<b>ProxPro®</b>	Up to 8.0" (20.5 cm)	Up to 7.0" (18.0 cm)			
<b>ProxPro® II</b>	Up to 9.0" (23.0 cm)	Up to 8.0" (20.0 cm)			
<b>MaxiProx®</b>	Up to 29.0" (74.0 cm)	Up to 20.0" (51.0 cm)			
<b>EntryProx™</b>	Up to 3.0" (7.5 cm)	Up to 2.5" (6.5 cm)			
<b>Prox80™</b>	Up to 5.5" (14.0 cm)	Up to 5.0" (12.5 cm)	Up to 2.5" (6.0 cm)		
<b>Memory Size/ Application Area</b>	N/A				
<b>HID Proximity 125 kHz</b>	Yes				
<b>Contact Smart Chip Module Embeddable</b>	No		Yes**		
<b>Wiegand Strip</b>	No				
<b>Magnetic Stripe</b>	No	Yes	No	Yes	
<b>Printable ***</b>	Yes				
<b>Standard HID Artwork</b>	Optional				
<b>Slot Punch</b>	Vertical (standard)	Horizontal or Vertical Optional		Vertical Optional	
<b>Visual Security Options</b>	N/A	Yes			
<b>Additional Security Options</b>	Corporate 1000				
<b>Warranty</b>	Lifetime				

\* Dependent upon installation conditions.

\*\* Contact smart chip module not included. Ask about HID's SMARTS Program for off-the-shelf contact smart chip embedded cards.

\*\*\* Some types of printing processes can take these credentials out of ISO compliance for thickness. Consult factory for more information.

# Comparison Chart



**iCLASS® Prox**

**MIFARE®/Prox**

**ProxCard® Plus**

**ProxKey® III**

**MicroProx® Tag**

**ProxPass® II**

	202X/212X; 203X/213X	1431	169	1346	1391	1351
	Up to 2.5" (6.5 cm)		Up to 1.0" (2.5 cm)	Up to 1.5" (4.0 cm)	Up to 2.0" (5.0 cm)	N/A
	Up to 5.0" (12.5 cm)		Up to 2.0" (5.0 cm)		Up to 2.5" (6.5 cm)	N/A
	Up to 5.0" (12.5 cm)		Up to 1.5" (4.0 cm)	Up to 2.0" (5.0 cm)	Up to 3.0" (7.5 cm)	N/A
	Up to 7.0" (18.0 cm)		Up to 3.0" (7.5 cm)		Up to 4.0" (10.0 cm)	N/A
	Up to 8.0" (20.0 cm)		Up to 4.0" (10.2 cm)		Up to 4.5" (11.5 cm)	N/A
	Up to 20.0" (51.0 cm)		Up to 13.0" (33.0 cm)	Up to 12.0" (28.0 cm)	Up to 15.0" (38.0 cm)	Up to 8.0' (2.5 m)
	Up to 2.5" (6.5 cm)		Up to 1.0" (2.5 cm)	Up to 1.5" (4.0 cm)	Up to 2.0" (5.0 cm)	N/A
	Up to 5.0" (12.5 cm)		Up to 1.5" (3.5 cm)	Up to 2.0" (5.0 cm)	Up to 2.5" (6.0 cm)	N/A
	2k bits with two application areas; 16k bits with two application areas, 16k bits with 16 application areas; 32k bits (16k/2+16k/1), 32k bits (16k/16+16k/1)	MIFARE 1K: 1K Byte (8k bits) in 16 64-byte Sectors  MIFARE 4K: 4K Byte (32k bits) in 40 Sectors: 32 sectors of 64 bytes, 8 sectors of 256 bytes.	N/A			
	Yes					
	Optional**		No			
	No		Yes	No		
	Optional			No		
	Yes			No		
	Optional			Yes	Yes	N/A
	Vertical Optional	Horizontal or Vertical Optional		Key Ring Hole	No	
	Yes			N/A		
	Corporate 1000					
	Lifetime					One Year