

# Combination/Transition Readers

Combination Mag Stripe/Proximity Reader • 230

Combination Mag Stripe/Proximity Reader with Keypad • 240

- ▶ Weatherproof housing design in an insertion-style reader or reader with keypad for increased security
- ▶ Connects to access control systems with Wiegand interface and Clock-and-Data format
- ▶ Reads security badges, time and attendance badges, parking cards, and more (must be format compatible)
- ▶ Read head assembly is adjustable to track location 1, 2, or 3
- ▶ Mounts on single-gang electrical box



## ACCESS affordability.

HID's Combination/Transition Readers provide a single reader that simultaneously supports both magnetic stripe and proximity technologies. When a PIN is needed, HID also offers a single reader with keypad that supports magnetic stripe, proximity, and PIN use. These two combination/transition readers provide specific solutions to system upgrade challenges.

To provide a seamless technology bridge with one common output, HID's combination readers will read both magnetic stripe and proximity cards. By allowing the use of existing magnetic stripe cards while gradually upgrading to newer proximity technology, substantial cost savings can be realized. In addition, the upgrade process is simplified. Implementation can occur as budgets and schedules allow.

For those users who require additional security or have applications requiring a PIN, HID offers combination readers with or without a keypad. Choose the combination/transition readers that offer the technologies you need for each application!

The combination/transition readers are compatible with HID's EMPI and Standard 10 or 12 digit ABA/ANSI/ISO magnetic stripe cards. It will also read up to the first 64 bits of any customer-encoded ABA cards. The readers are also compatible with HID Proximity formats up to 36 bits and Dorado EMPI proximity formats.

When your application requires combination/transition readers and cards, choose the trusted brand!

# Specifications

<b>Proximity Card Read Range</b>	<b>Model Dorado 230:</b> 4" - 5" (16mm x 20mm) <b>Model Dorado 240:</b> 2" - 3" (8mm x 12mm)
<b>Card Reading Speed</b>	Less than 80 milliseconds
<b>Output Formats</b>	MS 26 or 34-bit Wiegand, all bits Wiegand up to 64 bits Prox – as encoded on card, up to 36-bits
<b>Approvals</b>	FCC Part 15, CE
<b>Housing Dimensions</b>	4.56" x 3.00" x 1.14" (17.95mm x 11.81mm x 4.49mm)
<b>Card Format</b>	<b>Magnetic Stripe:</b> EMPI ABA/ANSI/ISO up to 64 bits (insert reader reads 2/3 of the mag stripe) <b>Proximity:</b> HID up to 36 bits EMPI
<b>Connections</b>	Plug-in 8" (200mm) connector
<b>Cable Length</b>	200' (60m) on #22 wires 500' (150m) on #18 wires
<b>Keypad Output</b>	Telephone arrangement outputting 8-bit burst
<b>Static Discharge</b>	Withstands 20,000 volts

**LED**  
Red, Green

**Buzzer**  
Activates on card acceptance

**Case Material**  
GE Lexan (polycarbonate) in black

**Temperature**  
31° to 150° F (-35° to 66° C)

**Humidity**  
5% to 95%, non-condensing

**Environment**  
Indoor or outdoor

**Color:**  
Black

**Description**  
**Dorado 230:** Combination Mag Stripe/Proximity  
**Dorado 240:** Combination Mag Stripe/Proximity with Keypad

**Part Number**  
**Dorado 230:** 3110-2305  
**Dorado 240:** 3110-2405

**Warranty**  
27-month limited warranty covering parts and labor. For complete details, please see HID's Sales Policy.

For complete ordering details, please see HID's How to Order Guide found at [www.hidcorp.com/products/product-ordering-guide.html](http://www.hidcorp.com/products/product-ordering-guide.html).

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80% Recycled  
40% Post-Consumer Waste  
Processed Chlorine Free

MKT-MAG230/240\_DS\_EN



**ACCESS** experience.

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