

# eProx™ Lock Module

*The Keyless Lock Solution*

4041A

Presented by  
**HID**  
CORPORATION

## Battery-Powered, Stand-Alone Proximity Access Control

The eProx Lock Module is a low-power proximity module for battery-powered, stand-alone electronic door locks. It is designed specifically for the OEM market.

### Benefits

- Enables lock manufacturers to incorporate a miniature proximity reader into their electronic door locks. The reader is compact and fits most electronic door lock housings.
- Provides a keyless, card-activated lock. Eliminates card slot and associated maintenance costs.
- HID compatibility allows stand-alone electronic locks to be used in conjunction with existing online systems that are using HID cards and readers.
- Affords compatibility with installed base of HID proximity cards and tags. HID is the worldwide leader in proximity cards and readers.
- Available in Wiegand, F2F, and Clock-and-Data output formats.
- Prevents false activation and battery drain using unique transponder detection technology.
- Engineering support and design assistance is available (OEM supplies antenna and plastic housing).

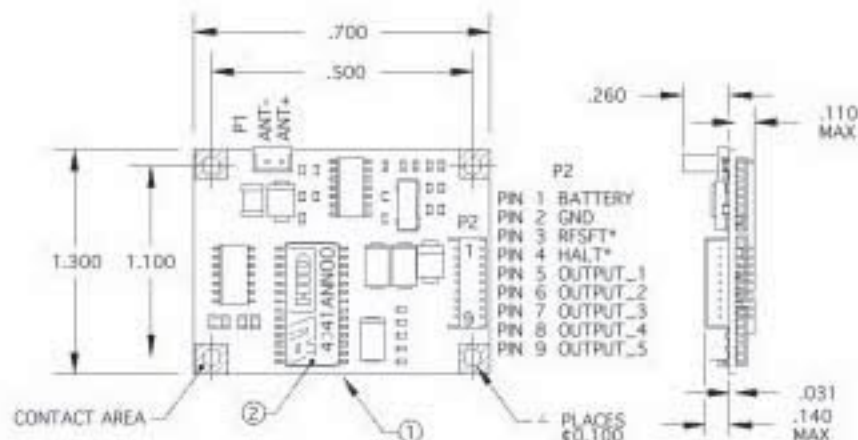


The eProx Lock Module can be embedded in most electronic door locks. Antenna design will vary depending on OEM requirements.

Patent Pending

**HID**  
HID CORPORATION

# eProx™ Lock Module



TOLERANCES: .XXX = .020

## FEATURES

### Mounting:

Four 0.10" (2.54 mm) mounting holes are provided, one in each corner, on centers of 1.5" (38.1 mm) and 1.10" (27.94 mm).

### Easily Interfaced:

All outputs are open collector. Standard protocols are used (Wiegand, Clock-and-Data, and F2F).

### Connections:

Two connectors are provided. Inputs/Outputs are described below.

#### P1

PIN	Signal name	Signal Direction	Description
P1.1	Antenna +	-	Antenna connection
P1.2	Antenna -	-	Antenna connection

#### P2

PIN	Signal name	Signal Direction	Description
P2.1	V+	Input to unit	DC power (Battery or regulated by OEM host)
P2.2	GROUND	-	Signal and DC power common
P2.3	RESET*	Input to Reader	Active Low, resets microprocessor
P2.4	HALT*	Input to Reader	Active Low, inhibits read mode
P2.5	OUTPUT 1	Output from Unit	Active Low, function depends on output protocol
P2.6	OUTPUT 2	Output from Unit	Active Low, function depends on output protocol
P2.7	OUTPUT 3	Output from Unit	Active Low, function depends on output protocol
P2.8	OUTPUT 4	Output from Unit	Active Low, function depends on output protocol
P2.9	OUTPUT 5	Output from Unit	Active Low, reset test signal, also active low in normal operation while unit is in active mode

### Antenna Design:

HID will assist the OEM with antenna design for their electronic door lock enclosure. Note that all RFID devices require a non-metallic antenna housing or cover.

### Warranty:

eProx Lock Module is warranted against defects in materials and workmanship. (See complete warranty policy for details)

### Part Number:

Base Part Number 4041A NN00

### Description:

(N) No hardware options, (N) normal operating voltage, (00) standard Wiegand Interface

### Options:

(01) Clock-and-Data output  
 (02) F2F output

Please see 'How To Order' guide for a description of the options and associated part numbers.

Specifications subject to change without notice.

## SPECIFICATIONS

Typical Maximum Read Range  
 • Up to 1 inch - depending on antenna design

### Power Supply

• 4.0 - 10.0 VDC  
 • Four or Six 1.5 WAA or One 9 V battery may be used

### Current Requirements

• 30  $\mu$ A max, 12  $\mu$ A typical during "Sleep" Mode  
 • 80 mA max, 36 mA typical for 250 mSec during RF Card Read

### Dimensions

• 1.3" x 1.7" x .261"  
 (33.02 x 43.18 x 7.13 mm)  
 Thickness at antenna connector = 0.401" (10.18 mm)

### Operating Temperature

• -22° to 150°F (-30° to 65°C)

### Operating Humidity

• 5% to 95% relative humidity noncondensing

### Operating Vibration Limit

• 0.04 g2Hz 20- 2000 Hz

### Operating Shock Limit

• 30g, 11 mSec Half Sine

### Static Protection

• Meets industry requirements for ESD (Electro Static Discharge).

### Transmit Frequency

• 125 kHz

### Tag Read Time

• 150 mSec (typical)

### Certifications

• UL Recognized (Safety)  
 • OEM is responsible for Regulatory Approvals  
 • Assistance with RF approvals is available: contact HID for details

