HID MIFARE® Reader

Contactless Smart Card Reader

Application

HID's affordable smart card reader/writer utilizes MIFARE® technology to read and write to contactless smart cards. Contactless smart cards are used for stored value or data applications, such as Access Control, Vending, Toll Roads, Airline Ticketing, Banking Cards, City Cards, ID Cards, University Cards, Loyalty schemes, Phone Cards, Park and Ride, and Prepaid Metering.

Features

- The HID MIFARE® Reader/Writer has two communication ports:
    1) Wiegand for connection to standard access control panels.
    2) RS-232 for connection to PC's or dedicated microcontrollers.
- The HID MIFARE® Reader/Writer has two operational modes:
    1) Security (outputs Wiegand data, also echoed on the RS232 port).
    2) Transaction mode (externally controlled via the RS232 port).
- Potted electronics protect against harsh weather and vandalism.
- Easy installation with mounting on standard single gang electrical switchbox.
- ISO 14443 Type A compatible.

MIFARE® is a registered trademark of Philips Electronics N.V.

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HID®

HID CORPORATION

Features

Mounting: Mounts on a single-gang electrical box for easy installation. Mounts directly on metal with minimal impact on read range performance

Audiovisual Indication
A red LED flashes green and the beeper sounds when reader is presented with an HID MIFARE® Card. The multicolor LED and beeper can also be controlled individually by the host system.

Diagnostics: On reader power-up, an internal self-test routine checks and verifies the setup configuration, determines the internal or external control of the LED and beeper, and initializes reader operation.

Indoor/Outdoor design: Sealed in a rugged, weatherized polycarbonate enclosure designed to withstand harsh environments, providing reliable performance, and a high degree of vandal resistance.

Easily interfaced: The Wiegand output interfaces with all existing Wiegand protocol access control systems. In Security Mode, the RS-232 port echoes the Wiegand output, sending data in hexadecimal format. In Transaction Mode, the RS-232 port interfaces with personal computers or dedicated microcontrollers using bi-directional serial communications, and the HID communications protocol.

Card Compatibility
HID MIFARE® Cards (HID-encoded MIFARE® cards)
HID Proximity and MIFARE Cards (dual technology: MIFARE® and HID 125 kHz proximity)
Any MIFARE® card using the Philips S50 Chip or equivalent (ISO 14443, Type A)

Security
48-bit read and write keys are extremely secure
Unique key pairs may be defined for each sector
Readers and cards must have matching keys
All RF data transmission between the card and reader is encrypted.

Warranty: Warranted against defects in materials and workmanship for life from date of shipment (see complete warranty policy for details)

Part Numbers
Base Part No.: 6055B Wiegand and RS232 Interface
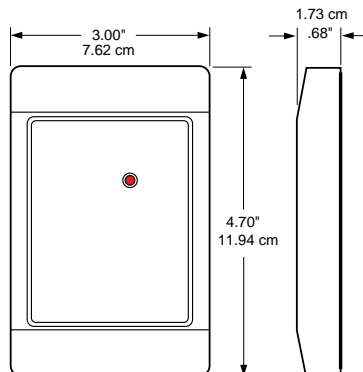Description: Tri-state LED, Internal Beeper On
Options:
· color: (grey, beige, black, white)
· LED and beeper operation
· custom label
(Please see "How to Order Guide for a description of the options and associated part numbers)

Function	Color
+DC	Red
Ground	Black
Data O	Green
Data 1	White
Green LED	Orange
Red LED	Brown
Beeper	Yellow
Hold/CD	Blue
DSR	Violet
RX	Pink
DTR	Grey
TX	Blue/White
Screen	Drain

Specifications

Typical maximum* read range:
1.5" (3.75 cm)
*Depending on local installation conditions.

Dimensions:
4.70" x 3.00" x 0.68"
(11.9 x 7.6 x 1.7 cm)

Material: Polycarbonate UL 94

Power supply:
Voltage: 9-14 VDC (16 VDC maximum)
Current: 100mA @ 12 VDC
Linear power supply recommended.

Operating temperature:
-22° to 150° F (-30° to 65° C)

Operating humidity:
0-95% relative humidity non-condensing

Weight:
3.3 oz. (94 gm)

Transmit frequency:
13.56 MHz

Certifications:
UL 294/cUL
FCC Certification, United States
Canada Certification
CE Mark, Europe
Australia C-Tick
New Zealand EMC

Cable distance:
Wiegand interface: 500 feet (150 m)
RS-232 interface: 50 feet (15 m)
Recommended cable is ALPHA 1299 C (22 AWG)
9 conductor minimum stranded with overall shield or equivalent. Additional conductors may be required for connection of all outputs.

LIT6055BDS 8/01, supercedes 3/01

www.HIDCorp.com

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