D8223 Proximity Card Reader

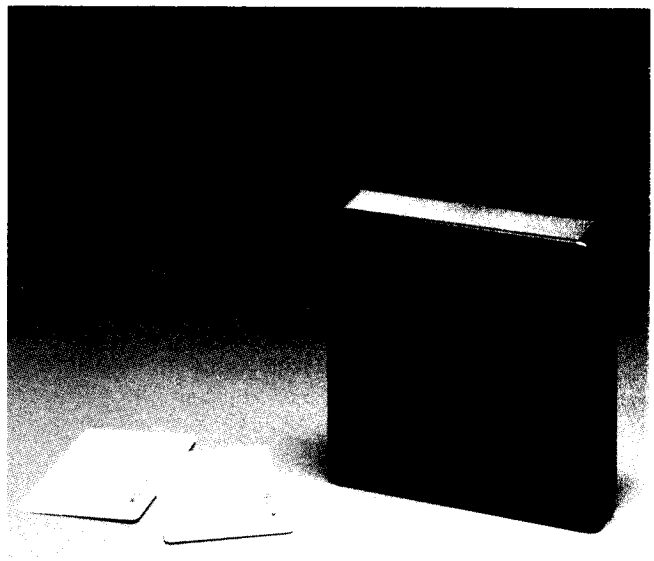
Description

The D8223 Proximity Reader is a single enclosure proximity card reader designed for mounting on a standard single gang electrical box. The reader contains both an antenna and controller providing the interface to an access control system.

The D8223 Reader generates a low-frequency RF magnetic field. When a D8236 Proximity Control Card comes within range, the card is powered up by the voltage induced in the magnetic field, causing the card to transmit its unique code to the reader. The red LED on the reader flashes green and a beeper sounds indicating that the D8236 Proximity Card number has been successfully read.

The reader decodes the signal and translates it into a digital format The reader transmits the ID number to the D8112A access control system through a Wiegand Interface (Radionics D8210). Final access decisions are made by the D8112A access control system. The reading process takes less than one fifth of a second.

Radionics proximity products are engineered for ease of installation and service, plus long life and compatibility with existing security equipment. The D8223 Proximity Reader enclosure is designed to withstand harsh environments. Cable connections are made with common multi-conductor cables. No coaxial cable or tuning is required. The D8223 Proximity Reader can be mounted on any surface, including metal, providing the installer with many options when choosing the best location.



Features

Built In Tests
At power up of the reader, an internal self test routine checks the system configuration, verified set and switch settings, identified internal or external control of the LED and beeper, and initializes the EPROM.

Mounting
Mounting holes fit standard single gang switch box and adapters for dual gang boxes, simplifying installation. Mounts directly to metal with selectable jumper setting for improved read range.

Low Power Consumption
10 - 26 VDC with average Wiegand current draw of 100 mA.

Easily Interfaced
The D8223 Proximity Reader interfaces with the D8112A access control system using the D8210 Wiegand Interface and Aux Power. D8223 Proximity Readers communicate in 26-Bit Wiegand formats.

Security
The D8223 Proximity Reader includes a tamper switch to provide protection against reader tampering and recognizes over 137 billion unique codes.

Indoor/Outdoor Design
The D8223 Proximity Reader is sealed in a rugged polycarbonate enclosure able to withstand harsh environments as well as providing a high degree of vandal resistance. This allows the reader to be easily installed in any location.

Audio/Visual Indication
When a proximity card is presented to the reader, the red LED flashed green and the beeper sounds. The multicolored LED and beeper may also be controlled by the host system.

Warranty

D8223 Proximity Readers are warranted against defects in materials and workmanship for 15 months from date of shipment. See the complete warranty policy for details.

Listings

FCC and DTI Certified
Approved in the U.S. and U.K. for use without site licenses.

Specifications

Read Range (Typical):
8" (203 mm) in air @ 12 VDC
9" (229 mm) in air @ 24 VDC
5.5" (140 mm) on metal with metal jumper setting

Power Supply:
10 - 26 VDC.
Reverse voltage protection included.
Linear Power supplies are recommended.

Dimensions
5.0' x 5.0" x 1.0" (12.7 x 12.7 x 2.54 cm)

Weight:
12 oz (336 gm)

Certification:
FCC Part 15, United States
DTI (MPT 1337), United Kingdom

Enclosure Material:
Polycarbonate U.L.94

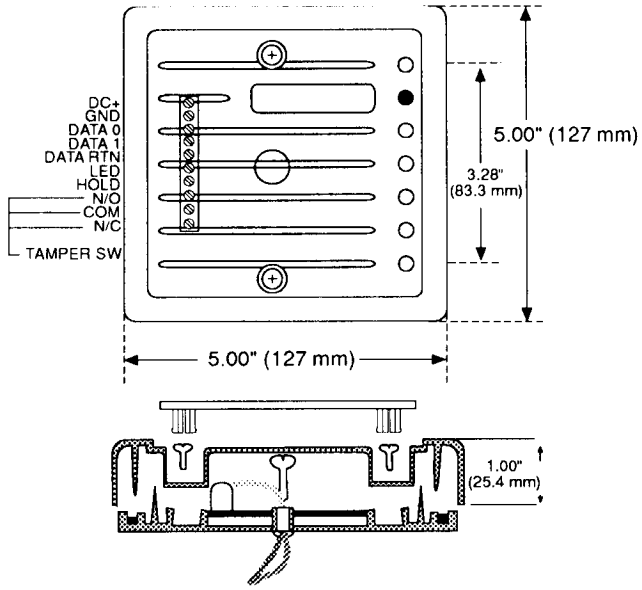
Operating Humidity:
5 - 95% non-condensing

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

Cable Distance:
Wiegand: 500 feet (150 m)

Isolated/Non-isolated Outputs
Switch Selectable

Reading Time:
Wiegand (26 bit) 175 ms
Time required to power up D8236 Proximity Card process return signal and complete output of formatted number via appropriate interface.



D8223 Proximity Card Reader Dimensions

Current Requirements

Current (DC)	Wiegand
Average	100 mA
Peak	175 mA

Transmit Frequency
125 kHz

Recommended Cable
Belden 8786 (22 AWG) or equivalent.

Color
Charcoal Gray

Notes and Options

The Wiegand interface data outputs may be selected as non-isolated or isolated via a jumper switch. The non-isolated output configuration is internally connected to the +5 volt power supply through a 1k resistor. The signal return is directly connected to the power supply ground. This is the most commonly used configuration. The isolated output, using opto-couplers, completely separates (isolates) the reader electronics from the host electronics.

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