

R100-Prox Reader

125 kHz Versatile Proximity Card Reader

Application

The R100-Prox Reader combines multiple configuration options with attractive, medium read range. The basic unit can be configured to Wiegand output formats and economical price. Its secure potted electronics are ideal for both indoor and outdoor applications.

Features

- Features a beeper and multicolor LED which can be host or locally controlled.
- Enables various beeper and LED configurations, depending on individual site requirements.
- Small outline just 1.7" x 3.3" x 0.7"
- Can read card with formats up to 42 bits.
- Available with Wiegand output formats.
- Compatible with all standard access control systems.

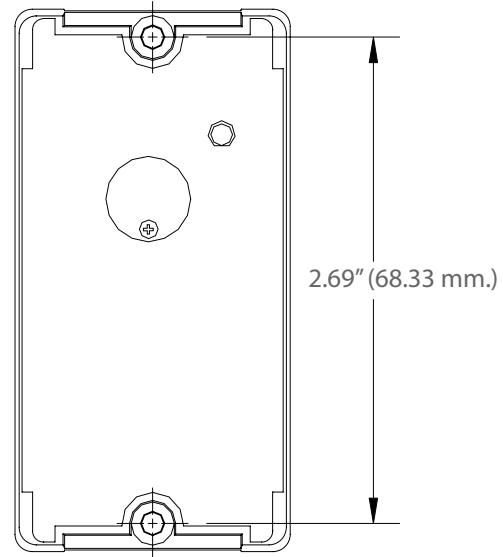
Theory of Operation

The reader generates a 125 kHz inductive field that extends some distance beyond the reader module. When a transponder is placed within the vicinity of the reader module, it draws power from this field and providing the field is of sufficient strength the internal microcircuits contained in the transponder begin to function. Data is transferred from the transponder by means of amplitude modulation in such a manner that the transponder varies the rate at which it draws power from the field in a way that corresponds to the internal identity code programmed in this internal memory. These changes in field power can be detected by the reader and converted back into a copy of the original data.



Mounting Instructions

- Determine an appropriate mounting location. The reader may be mounted to any surface, including metal.
- Drill two (2) 5/64-inch (2mm) holes approximately 1 inch deep for mounting the reader.
- Drill a 5/8-inch (16mm) hole for the cable.
- Remove the snap-on cover from the reader and secure the reader to the mounting surface.
- Route the cable from the reader and/or power supply to the host. A linear type power supply is recommended. Check all electrical codes for proper cable installation.
- Test the operation of the reader. After completion of the test, replace the snap-on cover.



Connecting the Reader to the Host

Connect the reader to the host according to the wiring table below and the host installation guide.

Signals	Wire Color
+DC	Red
Ground	Black
Shield Ground	Drain
Data0	Green
Data1	White
GO	Orange
NG	Brown
Beep	Yellow
GPIN#1	Violet
GPIN#2	Blue

Testing and Operation

- When power is applied to the reader the LED will flash green two times then red one time while the beeper beeps simultaneously after that LED go OFF.
- Present an ID card to the reader. The LED will momentarily turn green while the beeper beeps once, indicating that the card was read successfully.

Specifications

- Typical maximum read range: up to 2.5"
- Dimensions: 1.7" x 3.3" x 0.7" (4.35 x 8.35 x 1.75cm.)
- Material: PVC
- Power Supply: 5-16 VDC (Linear power supplies are recommended)
- Maximum Current Requirements: Average 90 mA, Peak 120 mA.
- Operating Temperature: -22° to 150°F (-30° to 65°C)
- Operating Humidity: 0-95% relative humidity noncondensing
- Transmit Frequency: 125 kHz
- Transponder: Read Only
- Weight: 100 gm
- Interface: Wiegand
- Cable Distance : 500 feet (153m)