



## Wireless Access

# Model WRI-IN-12VDC

### Wireless Reader Interface - Indoor Version

#### Overview

Eliminate wiring from the door to the access control panel up to 200 feet away using the WRI-IN-12VDC. Install it above the door like a conventional reader interface, then wire a reader, strike or mag lock, door position switch, request-to-exit sensor and a 12 VDC power supply.

#### Reliability

Ultra-reliable communications result from several technological advances and incorporated features. 900 MHz Spread Spectrum technology enables high transmission power in a license-free band. Modulo 256 error detection maintain data integrity on each transmission and redundant transmissions ensure communication success. Periodic "heartbeat" signals assure good communications are maintained between the WRI-IN-12VDC and PIM. Lastly, Dynamic Channel Switching overcomes harsh RF environments by automatically changing channels to avoid potential interference.

#### Universal

Utilizing open standards for compatibility with virtually all access control systems, seamlessly integrate the WRI-IN-12VDC into new and existing installations. The WRI-IN-12VDC installs like a traditional wired access point, accepting any reader with a Wiegand or mag stripe interface.

Security is also maintained as the WRI-IN-12VDC utilizes Spread Spectrum transmissions, which are encoded with 128-bit keys, to yield a system that is virtually uncompromisable. In addition, scalability is virtually unlimited as each Wireless Access Point Module (WAPM) has nearly a million addresses to choose from during the linking process.



#### ORDERING INFORMATION

**WRI-IN-12VDC** - Indoor Wireless Reader Interface with internal antenna. Requires local power at door.

#### OPTIONAL ACCESSORIES

**593PI-12DC (Power supply)**  
12VDC power supply

## FEATURES

- Wireless communications with Panel Interface Module
- Wiegand or Magnetic Stripe interface protocols
- Supports all reader technologies with Wiegand (data1/data0) or magnetic stripe (clock & data) outputs up to 255 bits
- Encoded Spread Spectrum transmissions
- 900 MHz Spread Spectrum RF technology
- Flash memory

## ADDITIONAL FEATURES

### Ultra-Reliable Communications

900 MHz band, with 15 channels to choose from, up to 225 MW of power, Modulo 256 error detection on every transmission and redundant transmissions.

### Online Communications (Heartbeat)

Regular communications between the WRI-IN-12VDC and Panel Interface Module (PIM) monitor transmission presence and integrity. Online communications enable the PIM to download information or instructions to the WRI-IN-12VDC. The period between heartbeat transmissions is configurable from 1 second to 18 hours in 1-second increments.

### Auto Addressing / Linking

A simple one-button operation links the WRI-IN-12VDC to a select PIM and assigns a unique address. There are over 65,000 unique addresses available per channel, providing nearly a million combinations for virtually unlimited scalability.

### Assured Communications

A Packet-Error-Rate test is performed during linking, assuring greater than 99.0% of all messages get through.

### Long Range

Up to 200 feet normal building construction, horizontal.  
Up to 1000 feet line of sight.

### Encoded Transmissions

Each transmission is encoded using 128 keys to provide virtually uncompromisable security.

### Reader Interfaces Supported

Wiegand (data1/data0) up to 255 bits  
Magnetic Stripe (clock & data) up to 255 bits

### Configurable Items from PIM

- heartbeat frequency
- relock parameters:
  - unlock time
  - when to re-lock
- card format conversion
- extended unlock
- polarity of signals
- fail safe/fail secure
- cache memory
- dynamic channel switching (DCS)

## BENEFITS

- Installs quickly and reduces time and wiring costs
- Compatible with ALL existing access control systems
- Seamless integration to existing installations
- Virtually impossible to be compromised
- Long range with ultra-reliable communications
- Easy to upgrade to latest software

## SPECIFICATIONS

<b>Certifications:</b>	FCC Part 15 certified, RSS-210 of Industry Canada approved, UL 294 certified
<b>Supply Voltage:</b>	Regulated 7.5 to 14.0 VDC at 300 ma peak, UL approved.
<b>Frequency Range:</b>	902 to 928 MHz license-free band in U.S. and Canada 15 discrete channels to select among
<b>Transmission Type:</b>	Encoded Direct Sequence Spread Spectrum
<b>Data Rate:</b>	62.5 Kbps max, half duplex
<b>Verification Time:</b>	Less than 0.10 second (not including panel delays)
<b>Enclosure Rating:</b>	Fire retardant plastic, Indoor
<b>Contacts:</b>	1 Form C relay (Strike) 6A @ 24VDC or 120VAC 3A @ 240VAC, resistive
<b>Operating Temperature:</b>	35°C to +66°C
<b>Operating Humidity:</b>	20% RH to 95% RH (non-condensing)
<b>Weight:</b>	1.5 lbs.
<b>Dimensions (Overall):</b>	7" H x 5" W x 2" D

**Power supply, Reader, Door Position Switch, Electric Strike or Electromagnetic Lock and Request-to-Exit Switch Required.**

