

WyRELESS ACCESS



Wyreless Access Ensures:

- A durable wireless connection to all access control locations.
- Reliable communications.
- Secure communications.
- Total installation time is dramatically reduced.
- Multiple trades are not needed.
- Wiring errors are eliminated.

PANEL INTERFACE MODULE

PIM

The PIM enables all traditional access control panels to interface with Wyreless Access Point Modules (WAPMs). The PIM seamlessly integrates to any panel via Wiegand or magnetic stripe communications. The PIM operates in the 900 MHz license-free band, allowing rapid, no-hassle deployment. Used by individual building owners and enterprises alike, the Wyreless Access PIM provides high-level performance with minimum installation time.

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. Encoded Spread Spectrum transmission data yields a system that is virtually uncompromisable. Each transmission can be randomly repeated 3 times to ensure communication success. Linking is done at lower power to ensure full power transmissions during regular communications are successful. A Packet-Error-Rate calculation is done during linking. Error checking is done on every transmission. Communications are done at regular intervals to assure good communications are maintained.

Universal

Recognition Source's products utilize standard reader protocols that afford smooth migration from a wired system to wireless. Integration with existing panel hardware is made easy because the PIM has both Wiegand and magnetic stripe interfaces to select from.

PIM Features

- Wireless communications with WAPMs
- 900 MHz Spread Spectrum RF technology
- Automatic linking to remote WAPMs through advanced software with 15 channel frequencies to select from
- Wiegand or Magnetic Stripe interface
- Encoded Spread Spectrum transmissions
- 5 visual indicators
- Configurable card format conversion
- Flash memory

PIM Benefits

- ➔ Installs quickly and reduces time and wiring costs
- ➔ Long range with ultra-reliable communications
- ➔ Easy and quick commissioning
- ➔ Compatible with ALL existing access control systems
- ➔ Virtually impossible to be compromised
- ➔ Quickly pinpoints and displays trouble conditions
- ➔ Flexible adaptation to existing installations
- ➔ Easy to upgrade to latest software

PIM

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 Wyreless Access Point Module (WAPM) and PIM monitor transmission presence and integrity. Online communications enable the PIM to download information or instructions to the WAPM.

Auto Addressing / Linking

PIMs are linked to WAPMs by simply pushing a PIM's Link switch and then connecting a WAPM battery pack. The PIM automatically selects an address for itself and its mating WAPM and sends it to the WAPM.

Assured Communications

Linking is done at half to two-thirds the normal PIM and WAPM transmission power to assure that there will be reliable communications during normal operation. Additionally, a Packet-Error-Rate test is performed during linking, assuring greater than 99.0% of all messages get through.

Encoded Transmissions

Each transmission is coded to provide virtually uncompromisable security.

Tamper

The PIM cover is monitored by a Tamper switch.

Visual Indicators

There are 5 LEDs. Two are both red and green. They indicate 9 different conditions: power on / microP running, low battery, no communication, tamper at reader, tamper at PIM, link request, transmitting, receiving, firmware version, stalled lock motors.

Outputs per Door

Wiegand or Magnetic Stripe Reader connections
Door Position - open collector to ground at 50 ma.
Trouble - open collector to ground at 50 ma.
Request-to-Exit - open collector to ground at 50 ma.
Polarity of output signals is configurable.

Reader Interfaces Supported

Magnetic Stripe (Clock & Data)
Wiegand (Data1, Data0)

Configurable Items from PIM

Heartbeat communication periods
Relock mechanism - time, door open, door closed
Card format conversion
Extended unlock
Polarity of signals

SPECIFICATIONS

Certifications

FCC Part 15 certified, RSS-210 of Industry Canada approved, UL 294 Listed

Supply Voltage

7.5 to 14.0 VDC at 300 ma peak, UL approved

Frequency Range

902 to 928 MHz license-free band in U.S. and Canada
15 discrete channels to select among

Transmission Type

Encoded Direct Sequence Spread Spectrum

Data Rate

62.5 Kbps max, half duplex

Doors Monitored

2 doors - expandable to 4 doors with the PIME add-on PCB

Inputs

Door Strike - senses access control panel strike relay

Material

Indoor enclosure (PIM) - Fire retardant plastic case
Weatherproof enclosure (PIM-OTD) - NEMA 1, 4, 4X Rated
Metal enclosure (PIM-ELEV) - Cold rolled steel

Operating Temperature

-0°C to +50°C Indoor enclosure
-35°C to +66°C Weatherproof and Metal enclosure

Operating Humidity

20% RH to 95% RH (non-condensing)

Weight

Indoor enclosure - 1.5 lbs
Weatherproof enclosure - 1.75 lbs
Metal enclosure - 4.5 lbs

Dimensions

Indoor - 5.5" H x 8.25" W x 3.25" D
Weatherproof - 7.1" H x 10.0" W x 3" D
Metal - 10" H x 7" W x 3" D

Warranty

1 year parts and labor. See warranty for details.

Order Information

PIM - Panel Interface Module with indoor enclosure (2 WAPMs)

PIME - Panel Interface Module Expander, a PCB that mounts into a PIM (2 WAPMs)

PIM-OTD - Panel Interface Module with weatherproof enclosure (2 WAPMs)

PIME-OTD - Panel Interface Module Expander, a PCB that mounts into a PIM-OTD (2 WAPMs)

PIM-ELEV - Panel Interface Module with metal enclosure for elevator control, 1 cab per module, requires ANT-REMOTE

ANT-REMOTE - Remote antenna module for PIM-OTD (optional) or PIM-ELEV (needed)

ANT-OMNI - Omni-directional antenna for PIM (replacement)


RECOGNITION SOURCE