



Wireless Access

Model PIM-TD2, PIM-TD4, PIM-EXP Panel Interface Module

Overview

The PIM enables all traditional access control panels to interface with Wireless 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 Wireless 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. Modulo 256 error detection maintain data integrity on each transmission and redundant transmissions ensure communication success. Periodic "heartbeat" signals assure good communications are maintained. 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 Wireless Access solutions into new and existing installations. Integration with existing access control panels is made easy because the PIM has both Wiegand and magnetic stripe interfaces to select from.

Security

Used extensively by government and military organizations, Spread Spectrum technology provides significant security advantages over conventional transmission methods. Wireless Access devices utilize 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:

PIM-TD2 – Panel Interface Module with outdoor enclosure. Supports 2 access points

PIM-TD4 – Panel Interface Module with outdoor enclosure. Supports 4 access points

PIM-EXP – Panel Interface Module Expander for PIM-TD2 Supports 2 additional access points (4 total)

OPTIONAL ACCESSORIES

ANT-REM-IN - Omni-directional remote indoor antenna module.

ANT-REM-I/O - Omni-directional remote indoor/ outdoor antenna module with grounding kit.

ANT-REM-I/O+6DB - Directional, flat panel, remote indoor/outdoor antenna with 6db of gain. Requires available Grounding Kit (MGB+MCA5) for outdoor installations.

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

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

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

One of the final steps in the installation process is called "linking". Linking ties a specific WAPM 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.

Encoded Transmissions

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

Tamper

The PIM cover is monitored by a Tamper switch.

Visual Indicators

One green LED to indicate:

- power on
- microprocessor running
- PIM tamper status

Two red and two bi-colored (red & green) LEDs to indicate:

- WAPM low battery
- no WAPM RF communication
- WAPM reader tamper
- WAPM lock motor stall
- WAPM cache used
- linking status to WAPM
- PIM transmitting RF data
- PIM receiving RF data
- PIM firmware version

BENEFITS

- Installs quickly & reduces time and wiring costs
- Long range with ultra-reliable communication
- 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

SPECIFICATIONS

Certifications:	FCC Part 15 certified, RSS-210 Industry Canada approved, UL 294 certified
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 from
Transmission Type:	Encoded Direct Sequence Spread Spectrum
Data Rate:	62.5 Kbps max, half duplex
Doors Monitored:	PIM-TD2 – 2 doors, expandable to 4 doors with the PIM-EXP add on PCB PIM-TD4 – 4 doors
Inputs:	Door Strike - senses access control panel strike relay
Enclosure Rating	NEMA 1, 4, 4X Rated
Operating Temperature:	-35°C to +66°C
Operating Humidity:	20% RH to 95% RH (non-condensing)
Weight:	1.75 lbs (PIM-TD2) 2.25 lbs (PIM-TD4)
Dimensions:	7.1" H x 10.0" W x 3" D

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

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

