Indoor Intrusion Detection Systems

PIRAMID MW

Microwave Sensor for High Security Applications

Overview

The **PIRAMID MW** indoor models are single technology microwave intrusion sensors designed for applications where the very highest level of security is required or where single technology intrusion sensors are a requirement. As in all PROTECH intrusion sensors, PIRAMID MW sensors utilized PROTECH's proprietary "Stereo Doppler" Microwave Technology.

Stereo Doppler Technology

Protech's unique microwave technology can determine the precise distance in inches (centimeters) that a target must move to create a valid alarm signal. With the advanced "Stereo Doppler" signal processing PROTECH sensors can discriminate against vibration and randomly moving targets as potential sources of nuisance alarms.

Applications

The **PIRAMID MW** offers enhanced detection capability for slow moving, fast moving, and crawling intruders. The PIRAMID MW outdoor sensors can be used in various high security applications such a military bases, correctional facilities and nuclear power plants where the highest level of security is required. The PIRAMID MW offers a very high PD (probability of detection) of greater than 0.95 yet, provides a very low NAR/FAR (Nuisance Alarm Rate/False Alarm Rate).

dual technology sensors

FEATURES

- **Stereo Doppler Microwave Sensor -** Two receiving channels with the ability to eliminate vibration and periodically moving objects as sources of false alarms.
- **Microprocessor Controlled -** Proprietary integrated circuit design provides enhanced digital signal processing for both microwave and passive infrared technologies.
- **Stereo Doppler Supervision -** Self-checking circuitry ensure proper performance is maintained.
- **Master LED -** Displayed on the face of the unit indicating the alarm relay status.
- **Analytic LEDs -** Alarm and environmental caution LEDs for Stereo Doppler Microwave and Passive Infrared portions are displayed on the face of the sensor. An internal switch can disable analytic LEDs.
- **Metal Housing -** Rugged and durable; offers maximum protection against RFI and EMI interference.
- **Fluorescent Filter Module (Optional) -** FF-3 Fluorescent Filter eliminates interference from nearby fluorescent lighting affecting sensor performance. **Note: Add FF-3 to model designation.**

HS (HIGH SECURITY) FEATURES

- **Anti-Masking –** Special circuitry that detects an obstruction of the sensor's faceplate.
- **Remote Self-Test –** Enables the sensor to be tested from a remote location in the same manner as if physically walk-tested.

TECHNICAL SPECIFICATIONS	
Input Voltage	10 VDC to 28 VDC
Current Consumption	150 mA at 12 VDC (LED's off)
RF Power Density	120 uW/cm² max. at the face of the unit
Operating Temperature	-40°F to 150°F / -40°C to 65°C
Operating Humidity	0 to 100% relative humidity
Relay Contact Rating	0.1 A / 50 V
Housing Dimensions	6.25" (L) x 5.25" (W) x 3.3625" (H) (16.5cm x 13.3cm x 8.5cm)
Frequency Bands	10.525 GHz USA
	International Frequencies: 10.587 GHz/9.90 GHz/9.47 GHz

ORDERING INFORMATION - COMMERCIAL VERSIONS	
SDI-76XL-MW	50 ft. x 50 ft. (15m x 15m)
SDI-77XL-MW	100 ft. x 60 ft. (30m x 18m)
***SDI-76XL-MW-HS**	50 ft. x 50 ft. (15m x 15m)
***SDI-77XL-MW-HS**	100 ft. x 60 ft. (30m x 18m)

* HS Features - High Security PCB Assembly (Optional)

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