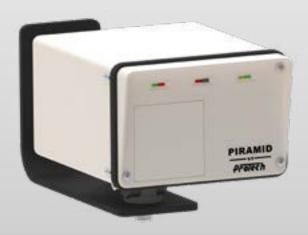


Indoor Intrusion Detection Systems

# **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 indoor 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).



### **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.

TECHNICAL SPECIFICATIONS	
Input Voltage	10.5 VDC to 28 VDC
Current Consumption	150 mA at 12 VDC (LEDs off)
RF Power Density	120 uW/cm² max. at the face of the unit
Operating Temperature	-40°F to 158°F / -40°C to 70°C
Operating Humidity	0 to 100% relative humidity
Relay Contact Rating	100 mA / 50 V
Housing Dimensions	6.70" x 5.25" x 3.5" (14.88cm x 13.34cm x 8.890cm)
Frequency Bands	10.525 GHz USA; International 10.587 GHz/9.90 GHz/9.47 GHz

ORDERING INFORMATION - COMMERCIAL VERSIONS	
SDI-76-MW	50 ft. x 50 ft. (I5m x I5m)
SDI-77-MW	100 ft. x 60 ft. (30m x 18m)

<sup>\*</sup> HS Features - High Security PCB Assembly (Optional)



