Indoor Intrusion Detection Systems

PIRAMID

Dual Technology Sensor for Medium and High Security Applications

Overview

The PIRAMID indoor intrusion sensor combines Stereo Doppler Microwave and Passive Infrared technologies whereby both technologies must activate simultaneously to create an alarm. The Stereo Doppler Microwave portion activates upon the ***movement*** of an intruder and the Passive Infrared portion activates on the ***change in infrared radiation*** caused by the intruder.

Applications

The PIRAMID indoor sensor was designed to satisfy high level and medium level security requirements as well as environmentally challenging applications. Using the unique combination of Stereo Doppler Microwave and Passive infrared increases detection sensitivity while providing unequalled false-alarm-free performance.

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.
- **Dual Element Infrared Sensor -** Ignores normal temperature variations yet very responsive to rapid infrared changes created by an intruder.
- **Microprocessor Controlled -** Proprietary integrated circuit design provides enhanced digital signal processing for both microwave and passive infrared technologies.
- **Balanced Temperature Compensations -** Stereo Doppler Microwave and Passive Infrared automatically adjust detection parameters to compensate for losses in range that occur at elevated temperatures.
- **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.
- **Assorted Protection Patterns -** Interchangeable Fresnel Lens Modules offer tremendous assortment of protection patterns for optimum flexibility.
- **Fluorescent Filter Module (Optional) -** FF-3 Fluorescent Filter eliminates interference from nearby fluorescent lighting affecting sensor performance.

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 MHz USA
	International Frequencies: 10.587 GHz/9.90 GHz/ 9.47 GHz

ORDERING INFORMATION - COMMERCIAL VERSIONS	
SDI-76-A	75 ft. x 75 ft. (22m x 22m)
SDI-77-D	100 ft. x 10 ft. (30m x 3m)
ORDERING INFORMATION - HIGH SECURITY VERSIONS	
SDI-76-H	50 ft. x 50 ft. (15m x 15m)
SDI-76-G	50 ft. x 50 ft. (15m x 15m)
SDI-77-D	100 ft. x 10 ft. (30m x 3m)
FF-3 (Optional Flourescent Filter Module)	

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