



HS / MIL

# PIRAMID XL Outdoor Motion Sensor High Security Versions

SDI-76XL-MIL  
SDI-77XL-MIL

SDI-76XL-HS  
SDI-77XL-HS

SDI-76XL-MW  
SDI-77XL-MW



MW

## GENERAL

The High Security Versions of the PIRAMID XL offer enhanced detection capability when compared to the standard PIRAMID XL and XL2 Versions. The detection parameters are altered to enable these sensors to offer greater overall detection capability for slow moving, fast moving and crawling intruders.

The PIRAMID XL high security version sensors are manufactured using PROTECH's proprietary Stereo Doppler Microwave Technology. The high security versions of the PIRAMID XL sensors are offered as dual technology sensors, as well as single technology microwave-only sensors. The following are the models offered in each category:

**Dual technology:** SDI-76XL-MIL, SDI-77XL-MIL, SDI-76XL-HS, SDI-77XL-HS

**Single technology:** SDI-76XL-MW, SDI-77XL-MW

The Dual Technology models are also equipped with a dual element Passive Infrared Sensor. In these versions the independent sensor modules are "And Gated" and must activate simultaneously to create an overall sensor alarm. The various models of high security PIRAMID XL offer different levels of detection capability and stability. Models SDI-76XL-MW and SDI-77XL-MW offer the best detection capability while providing good stability. Models SDI-76XL-MIL, SDI-77XL-MIL, SDI-76XL-HS and SDI-77XL-HS offer excellent detection capability and stability.

## FEATURES

**Stereo Doppler Microwave Detector** - Two receiving channels with the ability to eliminate vibration and periodically moving objects as sources of false alarms.

**Dual Element Infrared Detector** - Ignores normal temperature variations, yet is very responsive to rapid infrared changes created by an intruder. (Dual Technology Sensors Only).

**Microprocessor Controlled** - Proprietary integrated circuit design provides enhanced digital signal processing for both microwave and passive infrared technologies.

**Balanced Temperature Compensation** - Stereo Doppler Microwave and Passive Infrared portions automatically adjust detection parameters to compensate for the loss of range that occurs at elevated temperatures. (Dual Technology Sensors Only)

**Stereo Doppler Supervision** - A component failure will cause the sensor to lock-in alarm.

**Digital Range Control** - Ten-position digital switch adjusts how far the sensor detects (to its maximum range).

**Digital Sensitivity Control** - Ten-position digital switch adjusts the amount of movement required to initiate an alarm condition.

**Master Alarm LED** - Displayed on the face of the unit indicating the alarm relay status.

**Analytic LED's** - Alarm and Environmental Caution LED's for both technologies are displayed on the face of the sensor. An internal switch can disable both Master and Analytic LED's.

**Walk-Test Sounder** - Optional audible tester to assist in walk-test and initial sensor set-up. The XL-Sounder greatly simplifies the installation as it enables walk-testing and adjustment by a single installer.

**Swivel Mounting** - 180° Horizontal Adjustment  
90° Vertical Adjustment

**Tamper Proof** - Tamper switch with terminal connection.

**All Solid State Relay** - User selectable form C relay output. A Solid State relay is flexible, silent and more reliable than an electromechanical relay.

**Metal Housing** - Rugged, weather-proof housing offers maximum protection against RFI and EMI interference.

**Weather Shroud** - Metal hood that routes rain away from sensor's face and provides maximum protection from ice, snow, wind and sun loading.

\***HS Auxiliary PC Board** - Optional factory installed satellite printed circuit board that provides anti-masking and remote self-test features.

## SPECIFICATIONS

<b>Input Voltage:</b>	8.5 to 20 VDC
<b>Current Consumption:</b>	150 mA@12 VDC (LED's off)
<b>RF Power Density:</b>	120 uW/cm <sup>2</sup> max. at the face of the unit
<b>Operating Temperature:</b>	-30 F to 150 F (-34 C to 65 C)
<b>Operating Humidity:</b>	0 to 100% Relative Humidity
<b>Relay Contact Rating:</b>	0.1A, 50V
<b>Housing Dimensions:</b>	6 1/4" L x 5 1/4" W x 3 1/2" H 16.5cm L x 13.3cm W x 8.5cm H
<b>Shroud Dimensions:</b>	9 1/4" L x 6" W x 4 1/4" H 23.5cm L x 15.25cm W x 11cm H
<b>Microwave Frequency:</b>	Factory adjusted to one of the following frequencies: 10,525 MHz USA Other International Frequencies Also Available.
<b>False Alarm Rate:</b>	1/unit/year based on signal to noise ratio
<b>Probability Of Detection:</b>	Greater Than 0.95

## ORDER INFORMATION

SDI-76XL-MIL	50 ft. x 50ft.	15m x 15m	Dual Technology Sensor
SDI-77XL-MIL	100 ft. x 10 ft.	30m x 3m	Dual Technology Sensor
SDI-76XL-HS*	50 ft. x 50 ft.	15m x 15m	Dual w/Anti-Masking
SDI-77XL-HS*	100 ft. x 10 ft.	30m x 3m	Dual w/Anti-Masking
SDI-76XL-MW	50 ft. x 50 ft.	15m x 15m	Microwave Sensor Only
SDI-77XL-MW	100 ft. x 60 ft.	30m x 18m	Microwave Sensor Only
HS Versions*	High Security Auxiliary P.C. Board Assembly		
XL-Sounder	Audible Tester		

# Protech

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