



# PIRAMID XL2 Outdoor Motion Sensor

## Models: SDI-76XL2, SDI-77XL2

### GENERAL

PIRAMID XL2 models SDI-76XL2 and SDI-77XL2 are dual technology intrusion sensors combining PROTECH's proprietary Stereo Doppler Microwave Technology with a dual element Passive Infrared Sensor. The independent sensor technologies are "And Gated" and must activate simultaneously to create an overall sensor alarm.

The XL2 version of PIRAMID incorporates advanced signal processing for enhanced bird and animal immunity. The PIRAMID XL2 sensors are unique in that they provide reliable outdoor volumetric protection under even the most severe environmental conditions.

The PIRAMID XL2 sensors have a very broad application range. The key to their success is the unique dual channel Stereo Doppler Microwave Portion and its ability to ignore randomly moving objects. An internal sensitivity switch selects the distance an intruder must move to initiate an alarm. This built-in flexibility affords a high level of security while virtually eliminating false alarms.

Generally, the PIRAMID XL2 sensors are used for strategic area or asset protection. They are also frequently used in conjunction with outdoor perimeter systems as "gap fillers".

### 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.

**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 sensors automatically adjust detection parameters to compensate for the loss of range that occurs at elevated temperatures.

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

**Digital Range Control** - Ten-position digital switch adjusts the overall size of the sensor's detection area (to its maximum range).

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

**Enhanced Bird/Animal Immunity Control** - Two-position switch adjusts the sensor's immunity to birds and small animals.

**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 the 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** - Housing tamper 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.

### 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 130° F -34° C to 54° C
<b>Relay Contact Rating:</b>	0.1A, 50V
<b>Housing Dimensions:</b>	6.25" L x 5.25" W x 3.5" H
<b>Shroud Dimensions:</b>	9.25" L x 6" W x 4.25" H
<b>Microwave Frequency:</b>	Factory adjusted to one of the following frequencies: 10,525 MHz USA 10,587 MHz International 9,900 MHz International 9,470 MHz International

### ORDER INFORMATION

SDI-76XL2	50 ft. x 50 ft.	15m x 15m	(Wide Angle)
SDI-77XL2	90 ft. x 50 ft.	27m x 15m	(Wide Angle)
SDI-77XL2-B	100 ft. x 35 ft.	30m x 10.5m	(Medium Angle)
SDI-77XL2-C	125 ft. x 20 ft.	38m x 6m	(Narrow Angle)
SDI-77XL2-D	100 ft. x 10 ft.	30m x 3m	(Vertical Barrier)
XL-SOUNDER Audible Tester			

## Protech

Protection Technologies Incorporated

**(800) 428-9662**

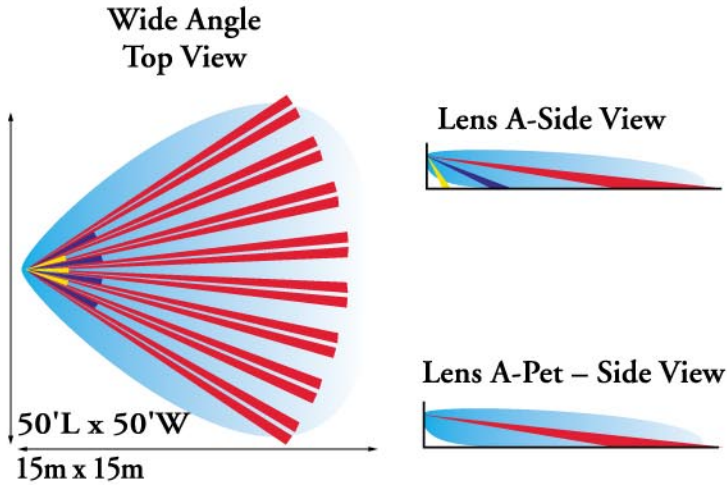
185 N. Edison Way, #1 • Reno, Nevada 89502 • [www.protechusa.com](http://www.protechusa.com)

Phone: 775-856-7333 Fax: 775-856-7658

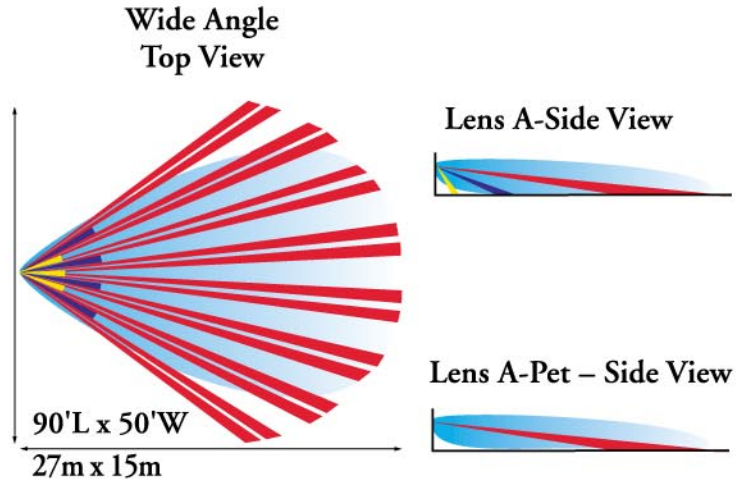
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## LENS MODULE CONFIGURATION

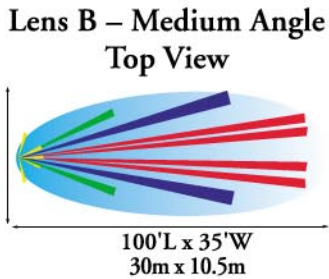
### SDI-76XL2



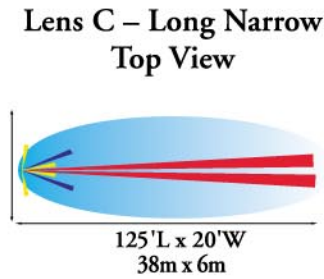
### SDI-77XL2



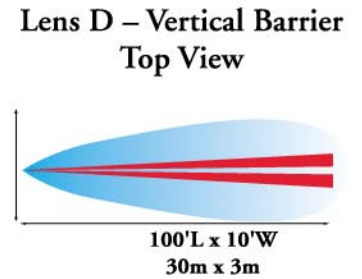
### SDI-77XL2-B



### SDI-77XL2-C



### SDI-77XL2-D



Caution: These diagrams, which are shown at maximum range setting, are approximations. Protection coverage can vary with temperature, terrain, physical structures, vegetation, etc. Sensors must be physically walk-tested to determine actual range.

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