



# INDOOR "STERO DOPPLER" MICROWAVE INTRUDER DETECTOR

## MODELS SDI-76MW AND SDI-77MW

### GENERAL

Models SDI-76MW and SDI-77MW are indoor microwave intrusion sensors designed for applications where the very highest level of security is required. As in all PROTECH intrusion sensors, Models SDI-76MW and SDI-77MW utilize PROTECH's proprietary "Stereo Doppler" Microwave technology.

### STEREO DOPPLER TECHNOLOGY

In 1980, a technological breakthrough in microwave signal processing termed "Stereo Doppler" was developed. This technology became the basis for PROTECH's high security military sensor designs. Unlike conventional microwave sensors, PROTECH sensors can actually determine the exact distance in inches (centimeters) that a target must move to create a valid alarm signal. In addition, sensors equipped with Stereo Doppler technology can ignore vibration and randomly moving objects (swinging signs, overhead doors, moving displays, etc.) as potential sources of nuisance alarms. The benefit is a higher level of security without the nuisance alarms. Models SDI-76MW and SDI-77MW are typically used in military and government installations.

### FEATURES

**Stereo Doppler Microwave Sensor** - Two receiving channels rather than one and 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.

**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.

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

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

**All Solid State Relay** - User selectable form C relay output.

**Metal Housing** - Rugged and durable and offers maximum protection against RFI and EMI interference.

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

**Fluorescent Filter Module (Optional)** - FF-2 Fluorescent Filter is a plug-in printed circuit board module that can be field installed on the sensor in applications where nearby fluorescent lighting is affecting sensor performance. The FF-2 Fluorescent Filter is highly recommended in applications where fluorescent lighting will be left on during the protected hours and the lighting fixtures are located in the sensors field of view (within 20 ft.).

\* **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>	-40F to 155 F (-40C to 70C)
<b>Operating Humidity:</b>	0 to 100% Relative Humidity
<b>Relay Contact Rating:</b>	0.1A, 50V
<b>Housing Dimensions:</b>	6 1/2" L x 5 1/4" W x 3 3/8" H 16.5cm L x 13.3cm W x 8.5cm 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-76MW	50 ft. x 50 ft. (15m x 15m)
SDI-77MW	100 ft. x 60 ft. (30m x 18m)
FF-2	Optional Fluorescent Filter Module
HS Versions*	High Security Auxiliary P.C. Board Assembly

**Protech**

Protection Technologies Incorporated

(800) 428-9662

529 Vista Blvd. • Sparks, Nevada 89434

(775) 856-7333 • Fax (775) 856-7658 • [www.protechusa.com](http://www.protechusa.com)



Proudly Made In The USA