

# DS860 Surface or Corner Mount TriTech PIR/Microwave Detector

Prod. ID DS860



The DS860 Detector provides with its passive infrared microwave processing excellent catch performance with freedom from false alarms. The surface or corner mount DS860 TriTech PIR/Microwave Detector provides a microwave frequency of 10.525 GHz.

## ■ Features

- Artificial Intelligence
- 5 Layers of Detection including "Look Down Zone"
- Supervised microwave and PIR
- Selectable PIR sensitivity
- Draft/insect immunity
- 5 Mounting Options
- 1 Standard Coverage Pattern, 1 Optional
- Vertical and Horizontal Pointability

## ■ Basic Functions

### Signal processing

Uses passive infrared and microwave technologies to provide an alarm condition when both fields of protection are simultaneously activated. Alarm signals must meet the signaling requirements of both technologies to activate an alarm. Adjustable PIR and microwave sensitivity.

### PIR signal processing

Motion Analyzer II uses multiple thresholds and timing windows to analyze timing, amplitude, duration and polarity of signals to make an alarm decision. Will not alarm on extreme levels of thermal and illumination disturbances caused by heaters and air conditioners, hot and cold drafts, sunlight, lightning, and moving headlights. Two sensitivity settings are provided.

### Microwave signal

Pattern recognition circuitry identifies and ignores repetitive false alarm sources. Adaptive processing adjusts to background disturbances. This helps to reduce false alarms while maintaining catch performance.

### Test features

Externally visible alarm LED flashes to indicate a trouble condition.

### Supervised microwave and PIR

Patented fully supervised microwave and PIR circuitry provides single technology coverage in the event the microwave subsystem fails. Use the memory circuit to force a self-test at anytime.

### Draft/insect immunity

The sealed optical chamber provides immunity to drafts and insects.

## ■ Certifications and Approvals

UL Standard	UL639, Intrusion Detection Units
ULC Standard	S306-M89
Approvals	CE
	FCC Compliant

## ■ Patents and Trademarks

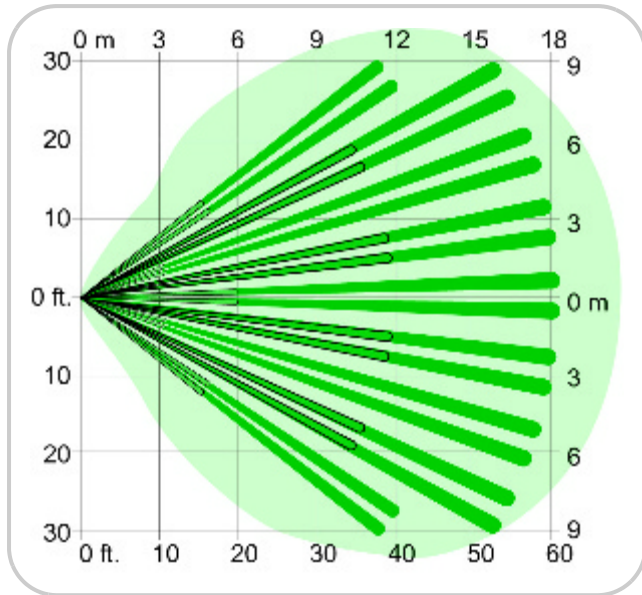
4,660,024; 4,764,755                      5,077,548; 5,208,567  
5,262,783; 5,450,062

## ■ Planning

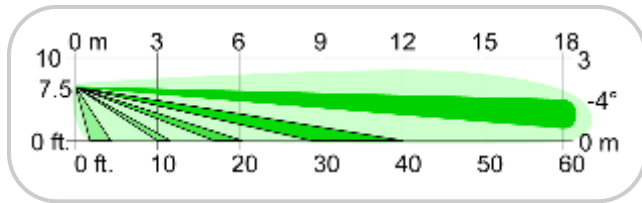
### Coverage

**Broad: 60 ft. x 60 ft. (18.3 m x 18.3 m)**

Top View

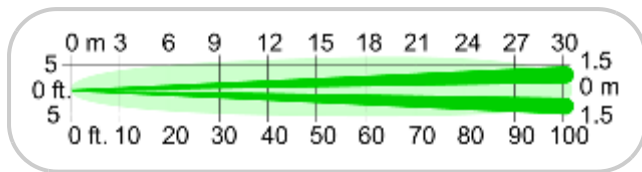


Side View

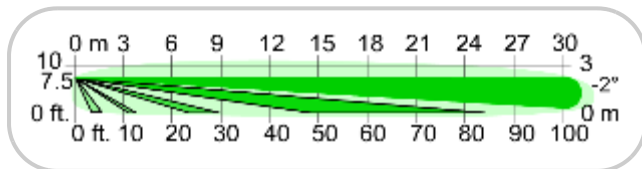


**Long range: 100 ft. x 10 ft. (30.5 x 3 m)**

Top View



Side View



## Planning

The recommended mounting height is 7.5 ft. (2.3 m). Mounts to a standard single gang electrical box.

## ■ Technical Specifications

<b>Alarm Output</b>	Normally Closed reed relay rated at 3.0 watts, 125 mA @ 28 VDC for resistive loads and protected by a 4.7 ohm resistor in the common "C" leg.
<b>Enclosure Design</b>	
Material:	High impact ABS plastic enclosure.
Dimensions (HxWxD):	5 in. x 2.8 in. x 2.2 in. (12.7 cm x 7.1 cm x 5.6 cm)
<b>Environmental Considerations</b>	
Operating Temperature:	-40°F to +120°F (-40°C to +49°C) <i>For UL Certificated installations, +32°F to +120°F (0°C to +49°C)</i>
<b>Mounting</b>	
Height Range:	6 ft. to 8 ft. (1.8 m to 2.4 m)
Location:	Surface or corner mount
<b>Power Requirements</b>	9 to 15 VDC, 16 mA @ 12 VDC
<b>Radio Frequency Interference (RFI) immunity</b>	No alarm or setup on critical frequencies in the range from 26 to 950 Megahertz at 50 v/m.
<b>Tamper Output</b>	Normally Closed tamper switch. Contacts rated at 28 VDC, 0.125 amp maximum.

## ■ Hardware Options

### B328 Gimbal Mount Bracket



Mounts single gang box. Wires hire inside.  
For DS306E, DS308EA, DS774i, DS774Ti,  
DS775, DS776Z, DS777Z, DS778, DS820,  
DS835, DS860, DS950, DS970, and OD850.

### B335 Low Profile Mount Bracket



For DS303E, DS306E, DS308EA, DS774i,  
DS774Ti, DS775, DS776Z, DS777Z, DS778,  
DS820, DS820i, DS825, DS835, DS840, DS860,  
DS940, DS950, and DS970.  
Is shipped in packages of 3.

### B800 Ceiling Mount Bracket



Ceiling mount bracket for DS820, DS835, DS860,  
DS950, and DS970.

### OLR92 Long Range Lens



Shipped in packages of 3.  
For DS860, DS950, and DS970.

