

# SENTROL

## PRODUCT INFORMATION BULLETIN



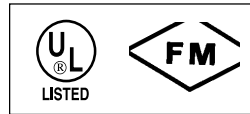
Model 6198 does not include barrier box

## 6190 SERIES PASSIVE INFRARED

### Intrinsically Safe PIR System

Model number:  
6197

6198



- The 6197 is UL and FM-approved for use in:  
Class I, Division 1, Groups A,B,C,D;  
Class II, Division 1, Groups E,F,G;  
Class III, Division 1, hazardous locations
- The 6198 is FM approved for Class I, Division 2, Groups A,B,C,D non-incendive applications
- Cast metal PIR, both water resistant and dust proof
- Advanced signal processing for superior intruder detection
- Includes three coverage patterns in the box

Sentrol's 6197 Intrinsically Safe PIR system consists of two units: PIR and Barrier Box. The PIR is installed in the hazardous area while the Barrier Box is installed in the nonhazardous area. Sentrol's 6198 Non-Incendive PIR consists of an encapsulated, self-contained PIR (without barrier box) for use in non-incendive applications.

Both the 6197 and 6198 utilize a dual pyroelectric sensor with jumper selectable one- or two-zone detection. These also feature a sequence processor that combines bi-directional pulse counting and Motion Verification, the most sophisticated signal processing available. An opaque, high resolution Fresnel lens focuses the infrared energy on the pyroelectric sensor while blocking stray or reflected light. The unit includes three lenses: standard, vertical barrier, and long range. The PIR is housed in a cast metal housing designed to mount flat on a wall. The case, as well as the mounting screws are gasketed for water resistant rating.

The 6197 utilizes Factory Mutual and UL Listed barriers provided in the Barrier Box that limit voltage and current on the PIR wiring to intrinsically safe levels. The switching module inside the Barrier Box provides protected relay contacts for alarm and tamper loops for connection to the alarm panel. The Barrier Box includes a NEMA-4 rated steel box with a lid.

# Sentrol 6190 Series Intrinsically Safe PIR System and Non-Incendive PIR

## Specifications:

### Electrical

#### 6197

Voltage ..... 9 to 16 V DC  
 Current ..... 50 mA max.  
 Max. loop rating ..... 16 V DC, 50 mA max.  
 Alarm output ..... Fail safe contacts w/ 10 Ohms in series,  
 Form C, SPDT  
 Alarm duration ..... 2 to 5 seconds  
 Housing tamper rating ..... 16 V DC, 50 mA max.  
 Housing loop ..... Fail safe contacts w/ 10 Ohms in series,  
 Form A, Normally closed (SPST)

#### 6198

Voltage ..... 7 to 16 V DC  
 Current ..... 8 mA typical, 10 mA max.  
 Max. loop rating ..... 16 V DC, 50 mA max.  
 Alarm output ..... Fail safe contacts w/10 Ohms in series,  
 Form A, SPST  
 Alarm duration ..... 2 to 5 seconds  
 Cover Tamper Contacts ..... Normally closed,  
 rating: 50 mA, 12 V DC

### Environmental: PIR

Operating temperature ..... -40°F to 120°F (-40°C to +50°C)  
 Dust proof, water resistant  
 RF Immunity ..... greater than 10 V meter from 1 to 1000MHz  
 Static/lightning immunity ..... 2.5 kV, 2 joules max. energy  
 impulse, 1 msec rise / 50 msec decay

### Environmental: Barrier Box (6197 only)

Operating temperature ..... -4°F to 140°F (-20°C to +60°C)  
 Dust proof, water proof if sealed fittings used

### Features

Operating modes ..... 1-zone, 2-zone, or test mode  
 Range

Standard Wide Angle ..... 45' (13.7 m) x 90°  
 Long Range ..... 70' (21.3 m) x 6°  
 Vertical Barrier ..... 40' (12.2 m) x 6°

Mounting ..... Wall only/conduit entry

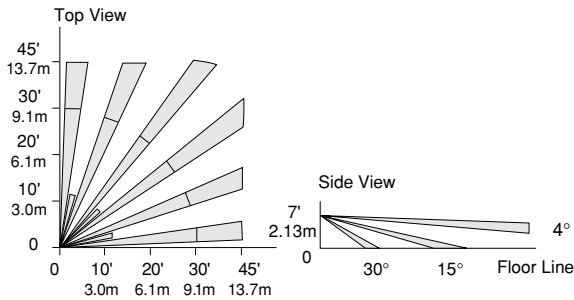
LED indicator ..... Walktest, or disable with jumper

Dimensions PIR ..... 5.12" (13.03 cm) H  
 5.12" (13.03 cm) W

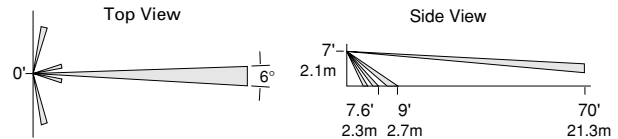
Dimensions Barrier Box ..... 3.25" (8.25 cm) D  
 7.40" (18.80 cm) H  
 7.40" (18.80 cm) W

Dimensions Barrier Box ..... 9.50" (24.13 cm) H  
 4.00" (10.16 cm) D

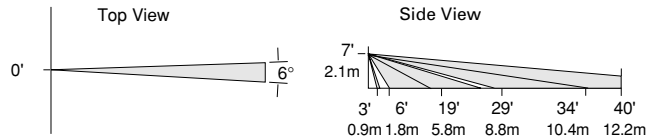
## Standard Wide Angle



## Long Range

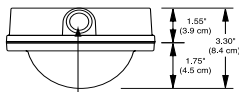


## Vertical Barrier

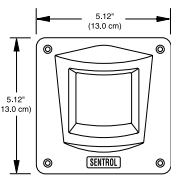


## Dimensions

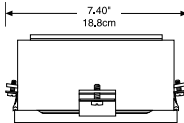
### Top View



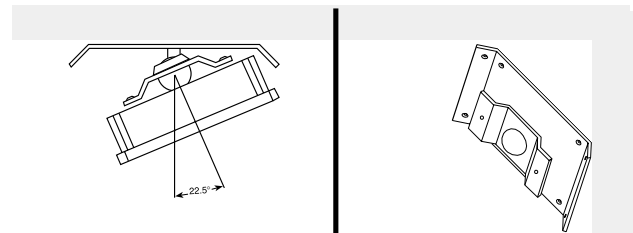
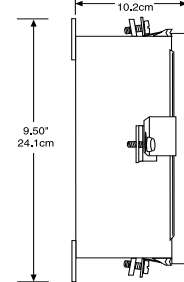
### Front View



### Top View



### Side View



Flat Wall  
 Top view  
 (max. adjusting angle 22.5°)

Corner

Optional swivel mount bracket assembly, part No. 6083-N

## Ordering Information

Model Number	Loop Type	Electrical Configuration	Approvals	Listing
6197	Closed, Open	SPDT (N.C. and N.O.)	Class I, Division 1, Groups A,B,C,D; Class II Div. 1, Groups E,F,G; Class III, Div. 1	UL, FM
6198	Closed	SPST (N.C.)	Class I, Division 2 Groups A,B,C,D	FM only
6083	—	—	Swivel mount bracket assembly, optional	—



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