

PROJECT:	_____
CATALOG #:	_____
FIXTURE TYPE:	_____
NOTES:	_____



# AVI-2301-PIR Direct Connect PIR Occupancy & Daylighting Sensor

Works with any Avi-on Load Controller

**Bi Level PIR Motion & Daylighting Sensor**  
Fully adjustable parameters

**High Resolution Lens & Sensor**  
A single product suited for 8' to 40' mounting heights, indoor and outdoor, warehouse and office



*Images are shown for illustration purposes only.*

**Easy Connect to Avi-on Load Controllers**  
3ft and 10ft cable options are easy to install inside or outside fixture

**Flexible Mounting Options**  
-In Fixture (including outdoor IP66)  
-Ceiling Mount  
-Side Mount  
-Junction Mount

### Description

The AVI-2301-PIR sensor provides motion detection and/or daylight harvesting in a single compact unit. Passive infrared (PIR) sensing technology works with any Avi-on load controller. The sensor is an integral part of the Avi-on Bluetooth with Mesh product ecosystem including the ability to support Luminaire Level Lighting Control (LLLC) and/or groups of fixtures. The network auto detects the sensor locations and commissions into the system with its associated fixture. Configuration is done using the Avi-on mobile app, commissioning tools, and cloud IoT services remotely or on-site.

### Operation

The sensor receives communication and power from any Avi-on load controller via a Avi-on standard low voltage cable. The motion sensor supports a wide array of control strategies including occupancy, vacancy, Bi-level, scheduled operation, even safety presence detection for UV-C lighting. Daylight sensing can apply to zones of fixtures as required by code.

### Applications

The versatile design and mounting options make this sensor a great solution for commercial, institutional and industrial applications such as warehouses, manufacturing plants, gymnasiums, offices, schools or common areas. The sensor can be fully integrated into a fixture through a knockout, mounted as an end-cap using an optional mounting elbow, or in a ceiling through acoustic tile or in a junction box. The high resolution lens allows for mounting heights ranging from 8' to 40'.

The sealed design with an IP66 rating make this sensor well suited for wet and outdoor locations for luminaires like area pole lights, floods, canopies, garage or open area fixtures.

Product	Description	Application	Color
AVI-DC-PIR	Direct Connect PIR & Daylighting Sensor	In-fixture, Indoor/ Outdoor	White
AVI-DC-PIR-ELB	End-Cap mounting bracket	In-fixture, Indoor/ Outdoor	White
AVI-DC-P10FTCBL	Direct Connect 10ft (3M) Cable	Ceiling Mount, Indoor	—

## SPECIFICATIONS

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### INPUT

Avi-on Direct Connect™ Low Voltage DC Sensor Port

### DIMENSIONS

(58.2mm x 36.4mm x 19mm)

(2.30in x 1.43in x 0.75in)

### MOUNTING

Fixture and Ceiling Mount

### WEIGHT

1.4 oz (40g)

### WIRING

Direct Connect™ Cable: 3ft (1m) and 10ft (3m)

### OPERATING TEMPERATURE

-30C to +70C (-22F to +158F)

### STORAGE TEMPERATURE

-40C to +85C (-40F to +185F)

### HUMIDITY RATING

95% non-condensing

### PROGRAMMING

Via Avi-on Platform. Mobile, Laptop, remote, local. Program groups of sensors at once

### OPERATING MODES

Occupancy, Vacancy, UV-C Safety, Bi Level, Dim to specified level (never off), Schedule driven, Control zones or individual fixtures

### OCCUPANCY SENSOR

Quad element high sensitivity, 360°

### LENS

Hi resolution, continuous detection pattern

### TIME DELAYS

15 sec - 1h 30 min adjustable via network (15min default)

### STATUS LED

On motion detection. Fixture light flashes on motion in test mode

### DAYLIGHT HARVESTING

Open or Closed Loop

### DAYLIGHTING RANGE

360° x 90°

### SPACIAL COVERAGE

90°

### HEIGHT RANGE

2.5m-12m (8ft-40ft)

### IP RATING

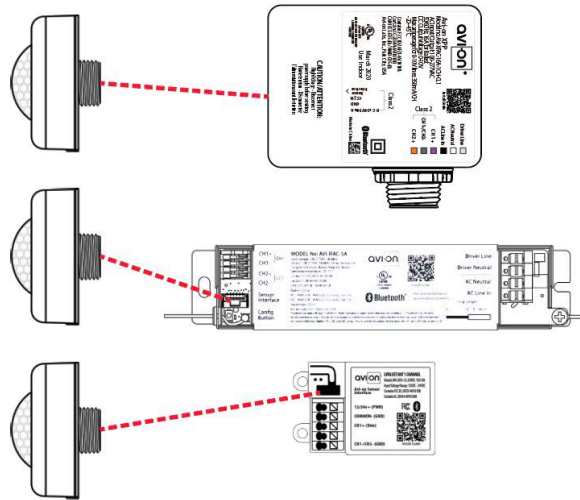
IP66 (PIR head when mounted to a waterproof enclosure)

### WARRANTY

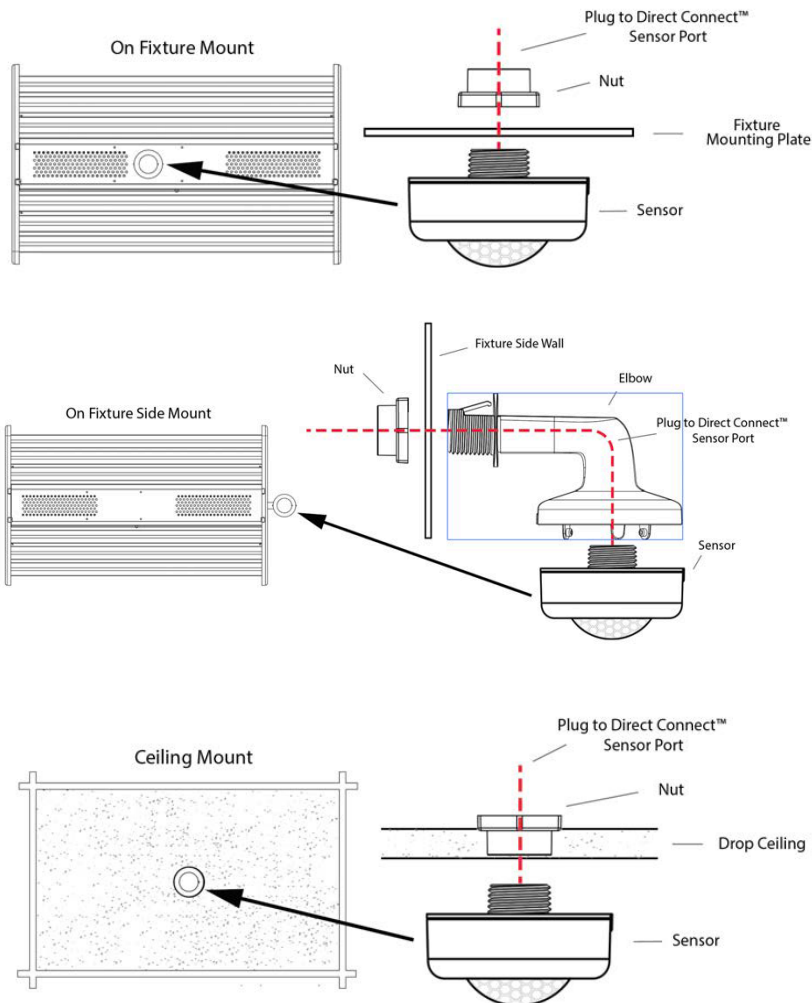
5 Years, 10 years optional

## WIRING DIAGRAM

The Direct Connect PIR Sensor easily connects to any Avi-on fixture/load controller with a single wire through the Direct Connect Sensor Interface port

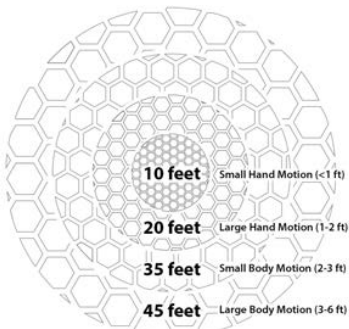


## MOUNTING OPTIONS



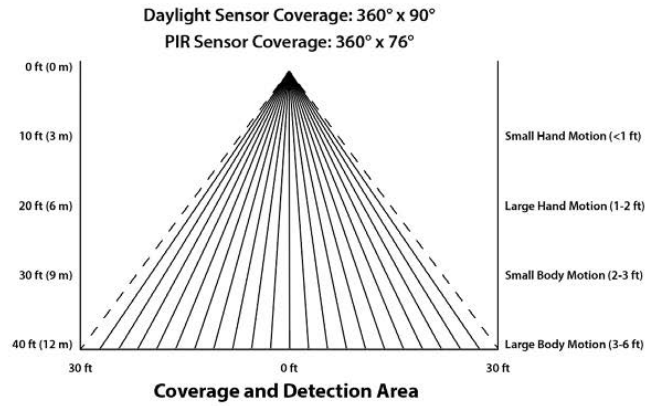
## COVERAGE PATTERN

The Avi-on PIR sensor does not require separate high and low bay lenses because of its unique Hexa-ray™ lens that provides consistent detection and smaller dead spots whether the sensor is mounted 10' or 40' high. Sensitivity adjustment to different applications is done through the mobile app on individual or groups of sensors.

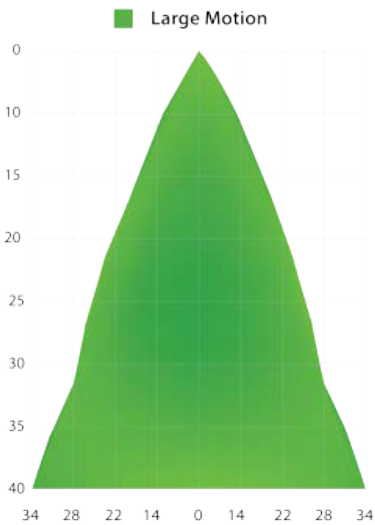


Coverage Patterns at Ceiling Heights

## Detection Area



## Large Motion Detection



## Small Motion Detection

