

# Direct Connect PIR Sensor

Occupancy & Daylighting

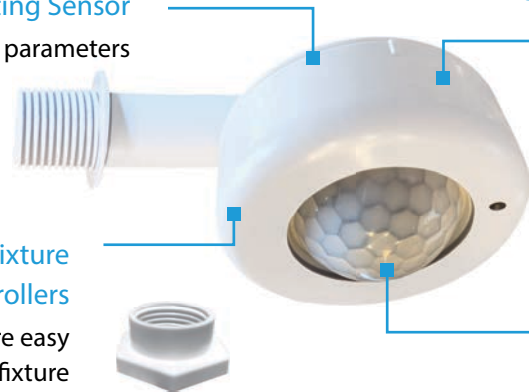
**Works with all Avi-on Fixture & Zone Controllers**

Bi Level PIR Motion & Daylighting Sensor

Fully Adjustable parameters

Easy Connect to Avi-on Fixture & Zone Controllers

3ft and 10ft cable options are easy to install inside or outside fixture



Flexible Mounting Options

- In-fixture
- Ceiling Mount
- Side Mount
- Junction Mount
- IP 67 for Watertight Applications
- UL Indoor Rated

High Resolution Lens & Sensor

A Single product suited for 8' to 40' mounting heights, indoor and outdoor, warehouse and office

## PRODUCT OVERVIEW

### Description

The Avi-on® Direct Connect™ PIR Sensor provides motion detection and/or daylight harvesting in a single compact unit. Passive Infrared (PIR) sensing technology works with any Avi-on fixture and zone 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 automatically detects the sensor locations and commissions them into the system with their associated fixtures. 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 Fixture or zone controller via an Avi-on low voltage cable. The motion sensor supports a wide array of control strategies, including

Occupancy, Vacancy, Bi-Level, scheduled operation, and even safety presence detection for UV-C lighting. Daylight sensing can be applied 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 8ft to 40ft. Sensitivity levels for different applications are easily set locally or remotely using the mobile app. The IP67 rating (sensor head), IP66 with Elbow Mount, supports installation in watertight (indoor) applications like food processing and wet industrial locations.

## ORDERING INFORMATION

Part Number	Description	Application	Color
AVI-DC-PIR	Direct Connect™ PIR & Daylighting Sensor*	In-fixture, junction, ceiling	White
AVI-DC-PIR-ELB	End-Cap mounting elbow	In-fixture, junction, ceiling	White
AVI-DC-10FTCBL	10ft (3m) Direct Connect™ Cable	Junction, ceiling	Gray
AVI-DC-PIR-GASKET	Gasket for fixture attachment in watertight applications	Fixture, Junction Mount	Black

\*Includes mounting nut and 3ft cable

To order please contact Avi-on sales at **(877) AVION-US**, (877) 284-6687 or [prosales@avi-on.com](mailto:prosales@avi-on.com) for information on becoming an Avi-on partner and order details.

Project		Location/ Type	
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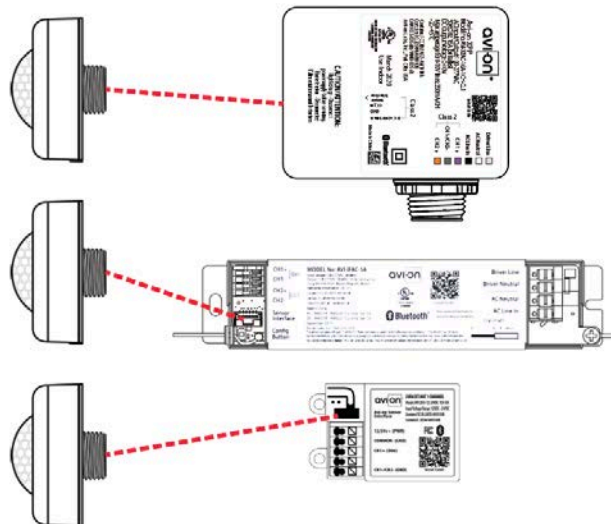
## SPECIFICATIONS

<b>Height Range:</b>	8ft-40ft (2.5m-12m)	<b>Wiring:</b>	Direct Connect Cable: 3ft (1m) - included and 10ft (3m) available
<b>Input:</b>	Avi-on Direct Connect Low Voltage DC Sensor Port	<b>Operating Temp:</b>	-22F to +158F (-30C to +70C)
<b>Dimensions:</b>	2.30 in x 1.43 in x 0.75 in (58.2mm x 36.4mm x 19mm)	<b>Storage Temperature:</b>	-40F to +185F (-40C to +85C)
<b>PIR Head Mounting (Ceiling or Fixture):</b>	Threaded Insert: Fits 1/2" pipe thread up to 3/16" (6mm) thick (straight threads). Maximum material thickness for direct screw-in to angled threads: 3/16" (5mm). Drill a 13/16" (20.3mm) hole for use with the supplied nut. The nut accommodates material thickness from 0 to 5/16" (0 to 8mm) for hard materials and 0 to 3/4" (0 to 20mm) for soft materials (like acoustic tile or drywall). Connector thread size 0.80in (20.5mm) x 0.79in (20mm). Elbow extends 2" from the fixture edge and 2" down from the hole center. Inner clearance from fixture mount edge to inside edge of sensor is 3/4"	<b>Humidity Rating:</b>	95% non-condensing
<b>Elbow Mounting:</b>		<b>Programming:</b>	Via Avi-on platform. Mobile, laptop, remote, local. Program single or a groups of sensors Occupancy, vacancy, UV-C safety, b-level, dim-to-specified level (never off), schedule driven, control zones or individual fixtures
<b>Weight:</b>	1.4 oz (40g)	<b>Operating Modes:</b>	Quad element high sensitivity, 360°
		<b>Occupancy Sensor:</b>	Hi resolution, continuous detection pattern
		<b>Lens:</b>	15 sec - 1h 30 min adjustable via network (20 min default)
		<b>Time Delays:</b>	On motion detection. Fixture light flashes on motion in test mode
		<b>Status LED:</b>	Open or closed loop (0-1020 Lux)
		<b>Daylight Harvesting:</b>	360° x 90°
		<b>Daylighting Range:</b>	90°
		<b>Special Coverage:</b>	5 years; 10 years optional
		<b>Warranty:</b>	UL 916 (Indoor)
		<b>Certifications:</b>	IP67 Sensor Head when installed in a waterproof box with an optional gasket. IP66 - With Elbow Mount (spray-proof only). Use an optional gasket to connect elbow threads to a waterproof enclosure.

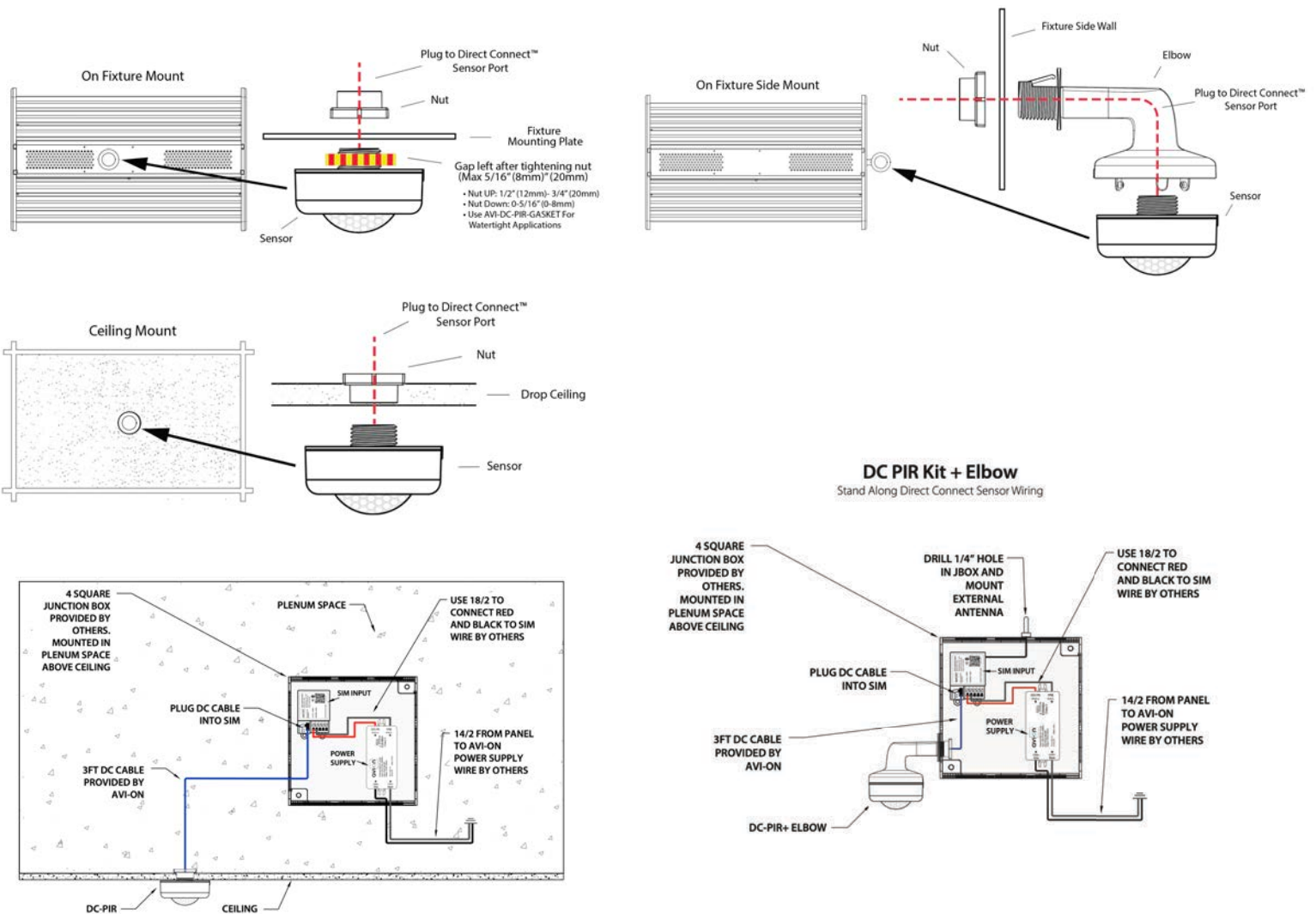
\* Note: Operating controller at or above these levels may result in damage to components/product

## WIRING DIAGRAM

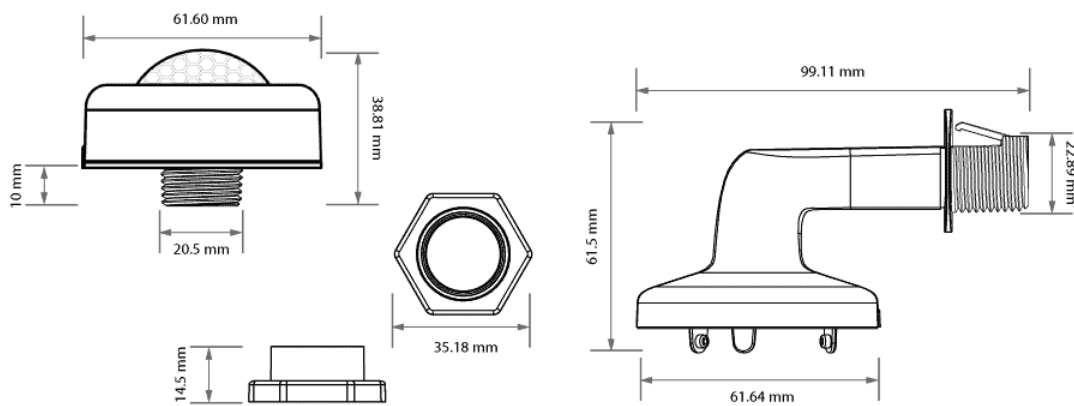
The Direct Connect™ PIR sensor easily connects to any Avi-on fixture/zone controller with a low voltage cable through the Direct Connect Sensor interface port



## MOUNTING OPTIONS



## DIMENSIONS

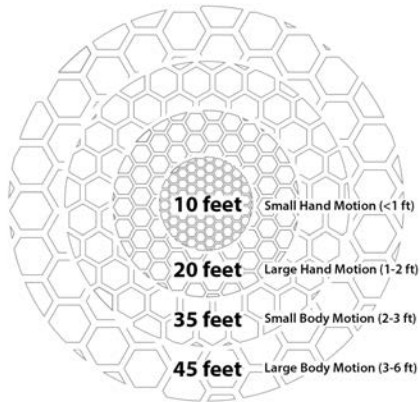


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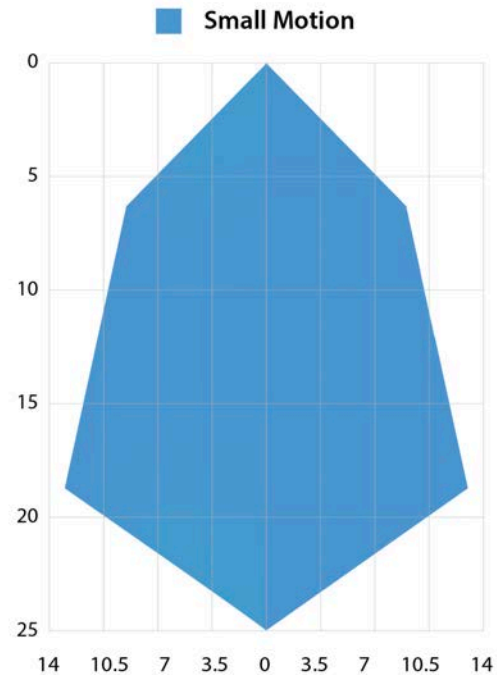
## COVERAGE CHARTS

### Coverage Pattern

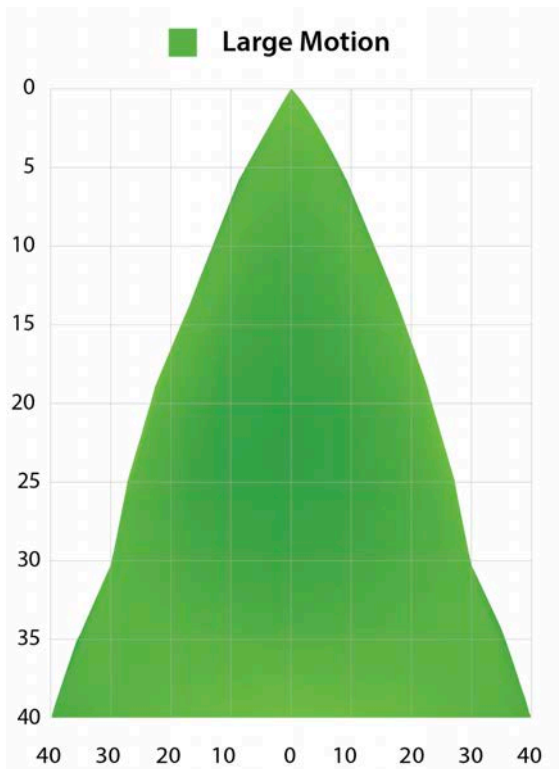
The Avi-on PIR sensor does not require separate high and low bay lenses because of its unique Hexa-ray™ lens that provides consistent detection and smaller dead spots whether the sensor is mounted 10ft or 40ft high. Sensitivity adjustment to different applications is done through the mobile app on individual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



### Small Motion Detection



### Large Motion Detection



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