

# Direct Connect Microwave Sensor

## Occupancy & Daylighting

### Works With All Avi-on Fixture & Zone Controllers

**Microwave Motion & Daylighting Sensor**  
Fully adjustable parameters

**Easy to Connect to**  
Avi-on Fixture & Zone Controller  
3ft and 10ft cable options make it easy to install inside or outside the fixture

**Flexible Mounting Options**

- In-fixture via magnet or bracket, behind the lens
- Acoustic tile

**High Resolution, Low Power**

- Covers office and open areas up to 15ft
- Will not trigger through floors, door, windows

## PRODUCT OVERVIEW

### Description

The *Avi-on® Direct Connect™ Microwave Sensor* provides motion detection and/or daylight harvesting in a highly compact unit. Microwave sensing technology works with any *Avi-on Fixture & 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 adds them to the system with their associated fixtures. Commissioning can be done using the *Avi-on* mobile apps or installer web tools. Sites that subscribe to *Avi-on IoT Cloud Services* using an *Avi-on Remote Access Bridge* can be commissioned remotely.

### Operation

The sensor receives communication and power from any *Avi-on* load 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, 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 and institutional applications such as offices, schools, or common areas, as well as behind a lens of sealed fixture low bay applications.

The sensor can be mounted in many different ways including behind a lens using an innovative magnetic mounting clip, screwed on using elbow or flush brackets, or clipped to acoustic tile rail on the edge of the fixture with the supplied tile clip. The microwave pattern can be tuned to a variety of applications up to 15 feet using the mobile app or remote setup tools. **Best of all, the low-power unit will not shine through floors, walls, or windows.**

## ORDERING INFORMATION

Part Number	Description	Application	Color
AVI-DC-MW	Direct Connect™ Microwave & Daylighting Sensor*	In-fixture, tile mount, indoor	White
AVI-DC-10FTCBL	10ft (3m) Direct Connect™ Cable**	Ceiling mount, indoor	Gray
AVI-DC-MW-MAG	Microwave Magnetic Mount**	In-fixture, indoor	Gray

\*Includes acoustic tile rail mount clip and 3ft cable.

\*\*Accessory

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

# SPECIFICATIONS

**Input:** *Avi-on Direct Connect™ Low Voltage DC Sensor Port*

**Dimensions:** 1.46 in x 1.02 in x 0.60 in (37mm x 26mm x 15mm)

**Mounting:** Acoustic tile clip included. Magnetic mount for inside fixture mounting available. 4mm M4 screw threads for mounting clip by customer

**Weight:** 1.4 oz (40g)

**Wiring:** Direct Connect Cable: 3ft (1m) -included and 10ft (3m) available

**Operating Temp:** -22F to +158F (-30C to +70C)

**Storage Temperature:** -40F to +185F (-40C to +85C)

**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

**Microwave Sensor:** 360° hi resolution, low power

**Time Delays:** 15 sec - 1h 30 min adjustable via network (20min default)

**Status LED:** On motion detection. Fixture light flashes on motion in test mode

**Daylight Harvesting:** Open or closed loop (0-1020 Lux)

**Daylighting Range:** 360° x 90°

**Spacial Coverage:** 90°

**Height Range:** 8ft-15ft (2.5m-4.2m)

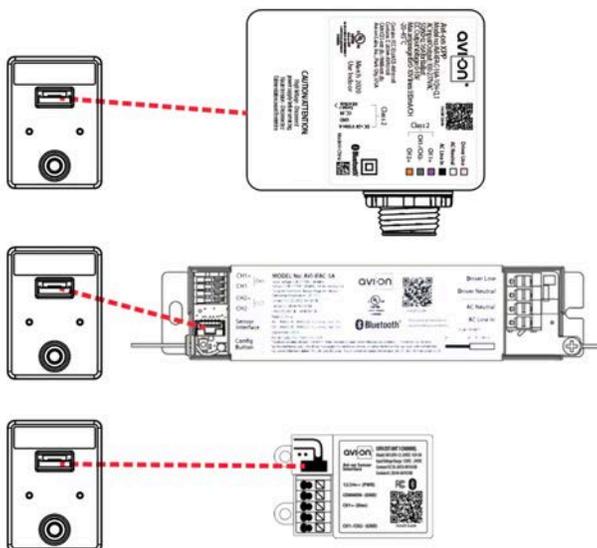
**IP Rating:** None

**Warranty:** 5 years, 10 years optional

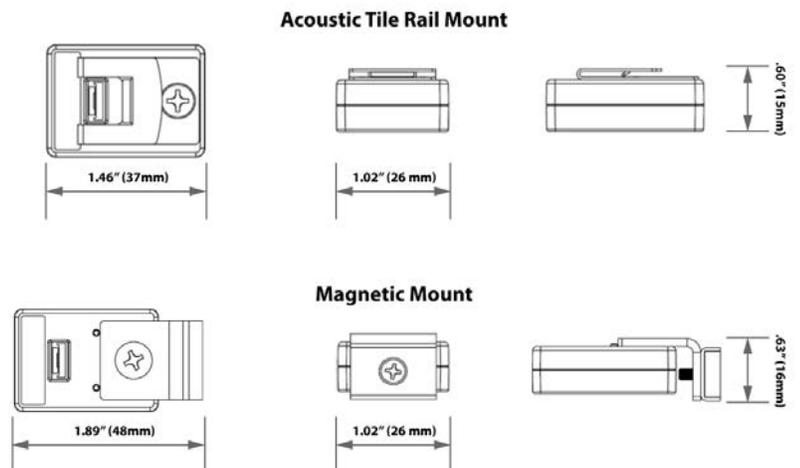
\* Note: Operating controller at or above these levels may result in damage to components/product

# DIAGRAMS

## Wiring Diagrams

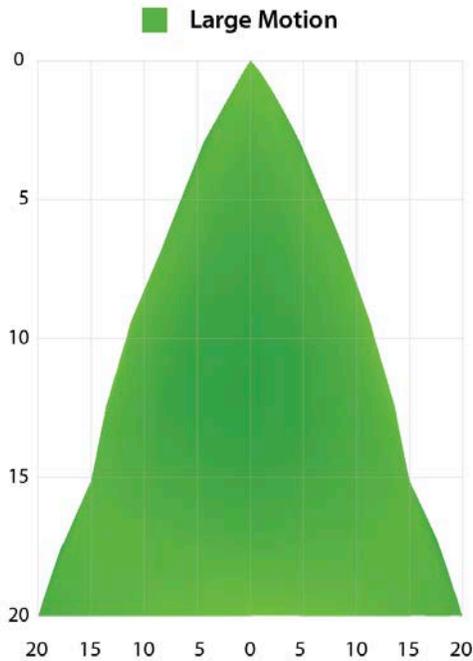


## Dimensions

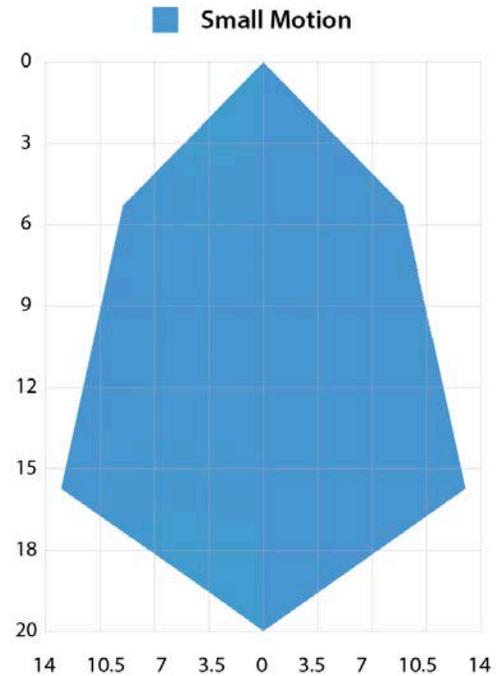


# COVERAGE CHARTS

## Large Motion Detection



## Small Motion Detection



## Additional Information

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**IMPORTANT NOTE:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular

installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected..
- Consult the dealer or an experienced radio/TV technician for help.

**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

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