

# Long Range Microwave Sensor

## Long Range Motion Detection For Large Areas

**Fully Network Configurable**  
Program settings locally or remotely

**Long Range Sensitivity**  
Cover multi-hundred foot open areas with a single sensor

**12-24DC Power**  
Easy to install in a junction box with a low cost AC-DC power supply

**Surface Mount**  
Easy mounting on junction box Cover plates

## Product Overview

Avi-on's Long Range Microwave Sensor is suited to cover large open areas like open manufacturing and warehouse floors. When side mounted, the sensor can cover areas up to 100 wide by 250 long, allowing much fewer sensors per fixture than PIR or other sensor options. The sensor includes an Avi-on Bluetooth Radio and functions as a stand alone network component for zoned sensor applications. The sensor does not include a daylight harvesting sensor or 0-10V dimming output.

**Use it for:** Large open area motion detection side mounted up to 100ft wide covering areas up to 250 feet long. Can also be ceiling mounted up to 40 feet.

### Use other products for:

Office, low bay, sensor per fixture, troffer behind the lens mounting: Use AVI-DC-MW.

High bay ceiling mount with warehouse aisles or other obstructions: Use AVI-DC-PIR

### Features

- Long range allows a single sensor to cover up to 100 ft x 250 ft
- 12-24VDC power
- Easy to mount on a junction mount cover

## ORDERING INFORMATION

Part Number	Description	Antenna	Input Voltage
AVI-KIT-MRW-24-BLE	Long Range Microwave, Junction Mount, with Power Supply (AVI-SEN-MRW-24-BLE + AVI-PS-277-12-250)	Internal	12 - 24 VDC

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.

<b>Project</b>		<b>Location/Type</b>	
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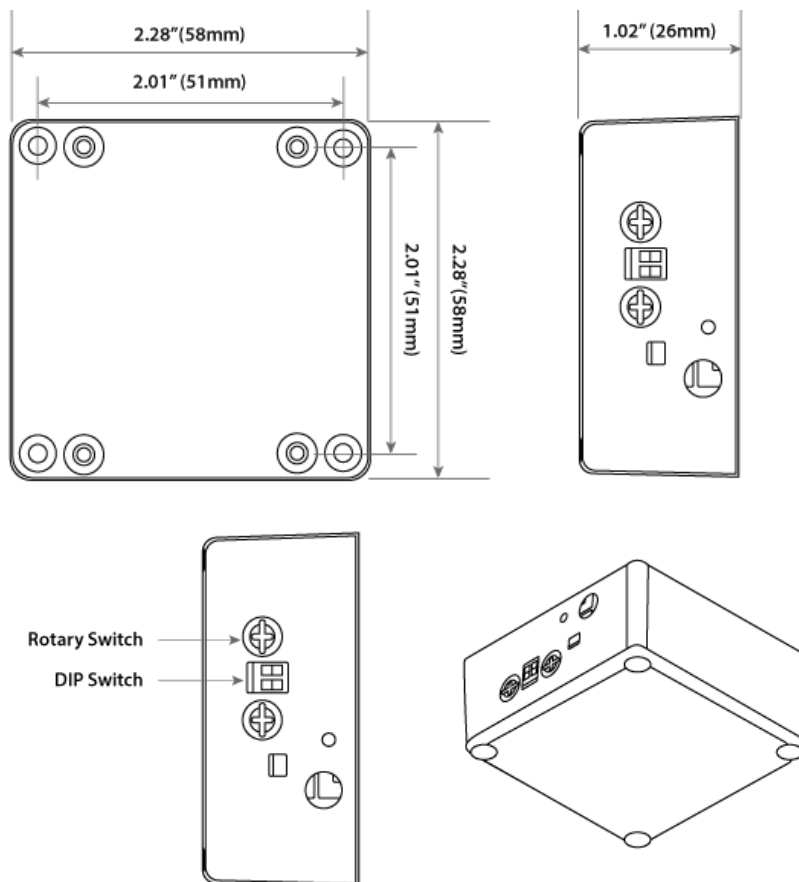
## SPECIFICATIONS

<b>Input Voltage:</b>	12-24VDC
<b>Power Consumption:</b>	85mA
<b>Sensor Frequency:</b>	10.525 Ghz
<b>Sensor Range:</b>	20-40 ft (vertical mount) 20-150 ft (horizontal mount)
<b>Size:</b>	2.28in x 2.28in x 1.02in (58mm x 58mm x 26mm)
<b>Mounting:</b>	Screw holes (see diagrams)
<b>Weight:</b>	3.5 oz (98g)
<b>Connection Wires:</b>	22 AWG
<b>Operating Temperature:</b>	-22F to +158F (-30C to +70C)
<b>Storage Temperature:</b>	-40F to +176F (-40C to +80C)
<b>Humidity Rating:</b>	90-95% non-condensing

<b>Microwave Radio Freq:</b>	10.525 Ghz
<b>Mesh Radio Freq:</b>	2.4GHz
<b>Wireless Standard:</b>	BLE 4.2 with Avi-on Mesh
<b>Point to Point Range*:</b>	80ft with obstructions and 350ft unobstructed
<b>Security:</b>	AES 128-bit encryption for device to device communication AES 256-bit encryption for device to cloud communication
<b>Warranty:</b>	5 years; 10 years optional
<b>Regulatory:</b>	
Network:	FCC: 2AFZI-AV11010 B IC: 20544-AV11010 B BQB: D031801, DID: 86303
Sensor:	FCC: ZZ0WCM-01 UL E341446

*\*When communicating through the mesh, range is essentially unlimited (5000ft+)*

## DIMENSIONS



**Figure 1. Microwave Sensor Dimensions**

# Diagrams

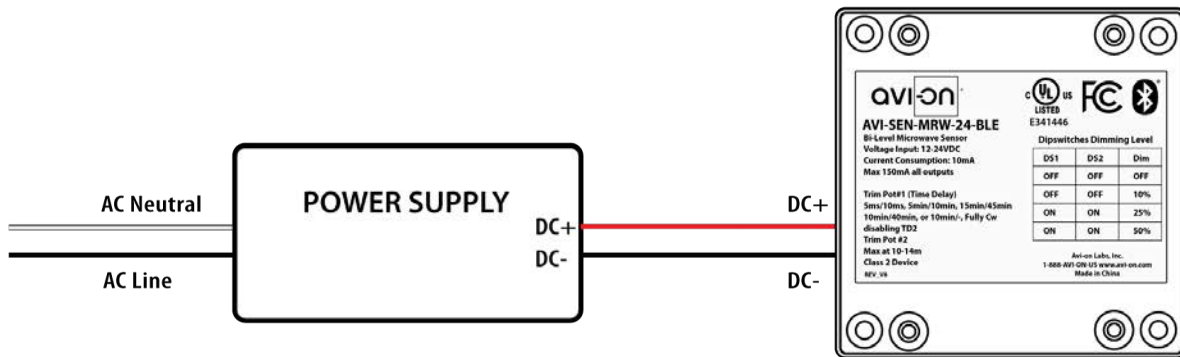


Figure 2. Wiring Diagram

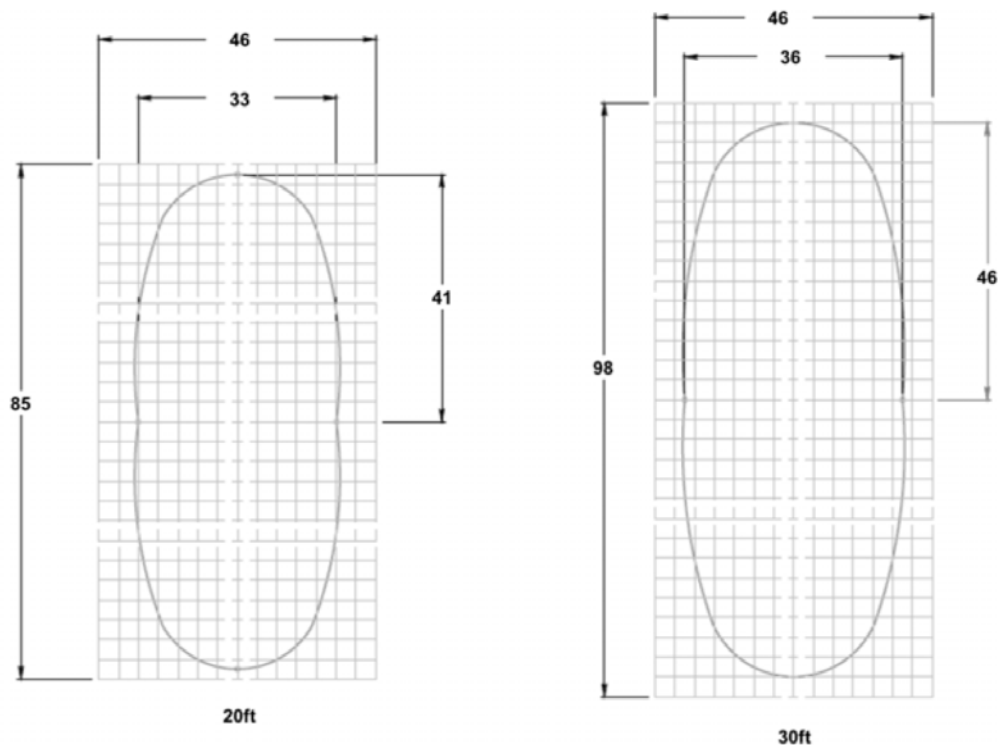


Figure 3. Coverage Patterns

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