

# Long Range Microwave Sensor Kit



Avi-on's Long Range Microwave Sensor is suited to cover large open areas like open manufacturing and warehouse floors up to 100ft tall. 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 kit includes an Avi-on Sensor Input Module 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, but I can also be directly connected

**Use it for:** Large motion open area motion detection up to 100ft tall, or side mounted up to 100ft wide covering areas up to 250 feet long.

#### Use other products for:

- Use AVI-DC-MW for office, low bay, sensor per fixture applications or if daylight harvesting is needed
- Use AVI-DC-PIR for high bay ceiling mount with warehouse aisles or other obstructions
- Not recommended for outdoor applications near lights where insects may false trigger the sensor

#### Coverage

Note coverage pattern when designing placement and density.

### **ORDERING INFORMATION**

| Part Number | Description   | Antenna  | Input Voltage  |
|-------------|---|----------|--|
| AVI-KIT-MRW | Long Range Microwave, Junction Mount, with SIM and Power Supply (AVI-SEN-MRW-24-BLE + AVI-B-SIM-12-24-EA+AVI-PS-277-12-250) | Internal | 12 - 24 VDC<br>110-277VAC with included Power Supply |

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

| Project | Location/Type |  |
|---------|---------------|--|
|---------|---------------|--|



## **SPECIFICATIONS**

**Input Voltage:** 12-24VDC or 110V-277VAC with included power supply

**Power Consumption:** 105mA **Sensor Frequency:** 10.525 Ghz

**Sensor Range:** 25-100 ft (vertical mount)

25-150 ft (horizontal mount)

Size (Sensor Only): 2.28in x 2.28in x 1.02in

(58mm x 58mm x26mm)

**Mounting:** Screw holes (see diagrams)

Weight (Sensor Only): 3.5 oz (98g)

Connection Wires: 22 AWG DC, 18 AWG AC
Operating Temperature: -22F to +158F (-30C to +70C)
Storage Temperature: -40F to +176F (-40C to +80C)
Humidity Rating: 90-95% non-condensing

Microwave Radio Freq: 10.525 Ghz Mesh Radio Freq: 2.4GHz

**Wireless Standard:** BLE 4.2 with Avi-on Mesh

Point to Point Range\*: 80ft with obstructions and 350ft

unobstructed

**Security:** AES 128-bit encryption for device to device

communication

AES 256-bit encryption for device to cloud

communication

**Warranty:** 5 years; 10 years optional

**Regulatory:** 

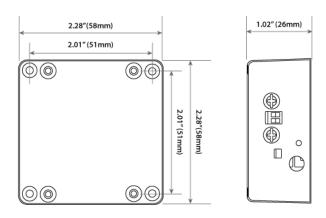
Network: FCC: 2AFZI-AVI1010 B

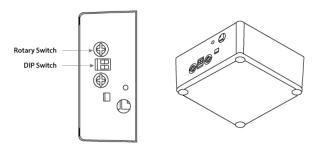
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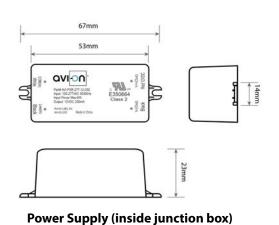
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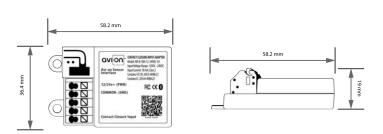
# **DIMENSIONS**





**Sensor (Surface Mount)** 



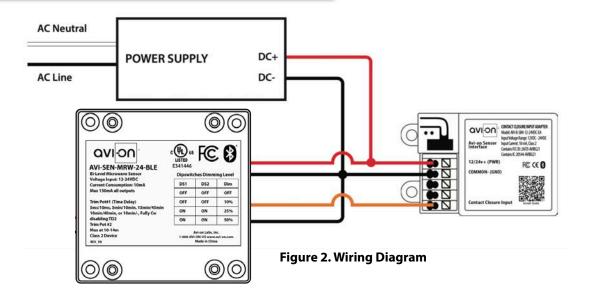


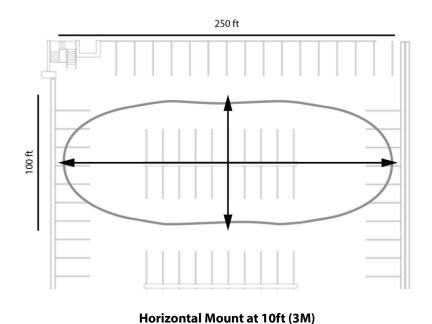
SIM (inside junction box)

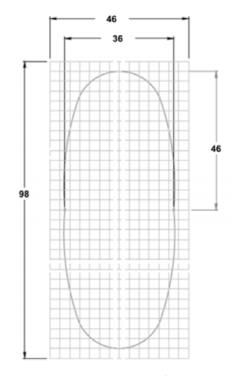
<sup>\*</sup>When communicating through the mesh, range is essentially unlimited (5000ft+)



## **DIAGRAMS**







Vertical Mount at 100ft (30M)

**Figure 3. Coverage Patterns** 

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