



# Cyrus AM

AC Powered Wireless Microwave  
Motion & Light Sensor



## Product Overview

Cyrus AM is a BLE5.2 controllable high bay Microwave motion and daylight sensor. This sensor operates on a 90–277VAC input voltage range adopts a 5.8GHz Microwave sensing technology for accurate motion detection. It can be mounted at a maximum height of 7m(23ft) and provides a maximum detection range of 17m(55.8ft) diameter. The sensor can be mounted to the ceiling or at the surface using ceiling or surface mount accessories. It can be quickly commissioned, configured, and controlled from any mobile device and can be connected to Lumos Controls cloud for data analytics and configuration management.

The Lumos Controls ecosystem comprises controllers, sensors, switches, modules, drivers, gateways, and analytical dashboards. It is listed by the **Design Lights Consortium (DLC)**, qualifying it for energy conservation incentive programs and rebates by utility companies.

## Specifications

### Electrical

Specifications	Value	Remarks
Input voltage	90–277VAC	
Input current	9mA	9mA@230VAC
	25 mA	15mA@90VAC
Frequency	50–60Hz	
Inrush current	4A	
Surge rating	4kV	
Standby current	22mA @110V 14mA @230v	

### Environmental

Specifications	Value
Ambient temperature	0–80°C (32 to 176°F)
Case temperature	70°C (158°F)
Relative humidity	20–85%

## Features

- High-bay motion and daylight sensor, with mounting height up to 12m(39.4ft)
- BLE 5.2 based non flooding wireless communication
- 90–277VAC universal AC input voltage range
- 5.8GHz Microwave sensor for accurate motion detection
- Motion detection range up to 17m(55.8ft) diameter

### Bluetooth

Specifications	Value	Remarks
Frequency range	2402–2480MHz	
Max output power	8dBm	Conductive
Receive sensitivity	–95dBm	
Connection distance (device to device)	45m(147ft)	Vary depending on the installation environment

### Mechanical

Specifications		Value	Remarks
Dimension	Excluding accessories	2.3 X 2.5in (59.8 X 63.1mm)	Diameter x Height
	Ceiling mount accessories WMAM-CMK	3.53 x 3.91in (89.7 x 99.17mm)	Diameter x Height
	Surface mount accessories WMAM-SMK	4.32 x 2.80in (109.8 x 71.2mm)	Diameter x Height
Net weight		85g(3.0oz)	
Case material		ABS Plastic	White
Flammability rating		UL 94 5VA	

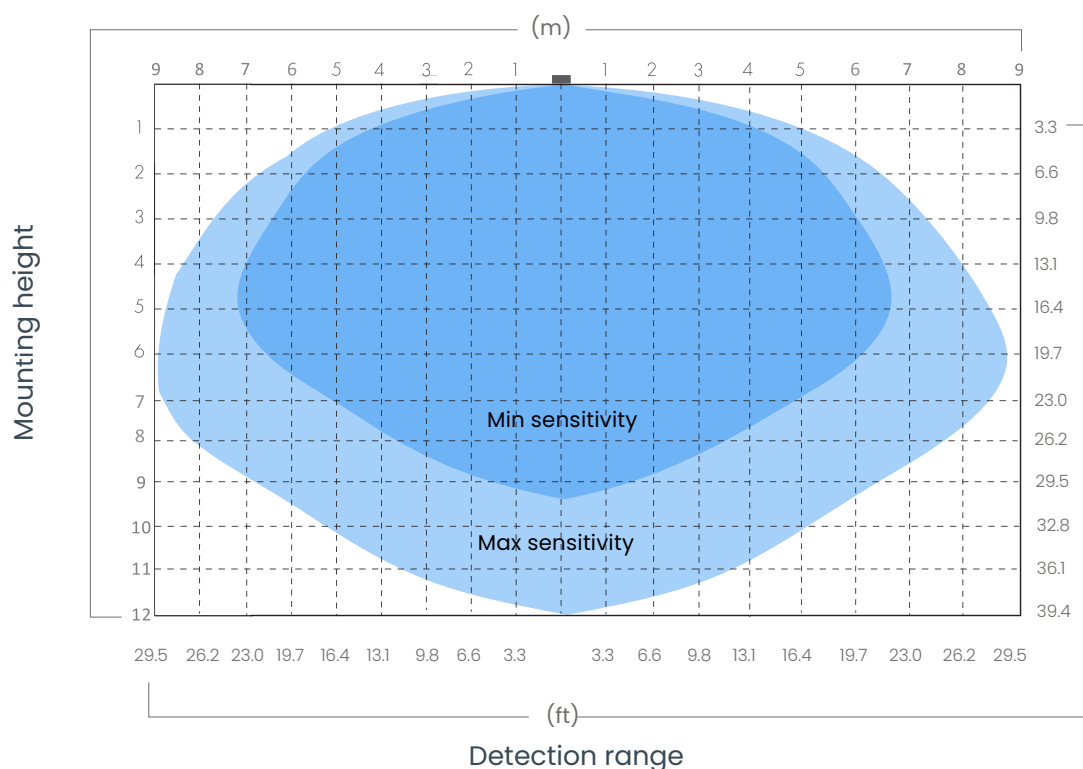
## Light Sensor

Specifications	Value	Remarks
Dynamic Illuminance range	0-10500 lux	
Default range setting	19-512 lux	User programmable
Illuminance accuracy	±10%	

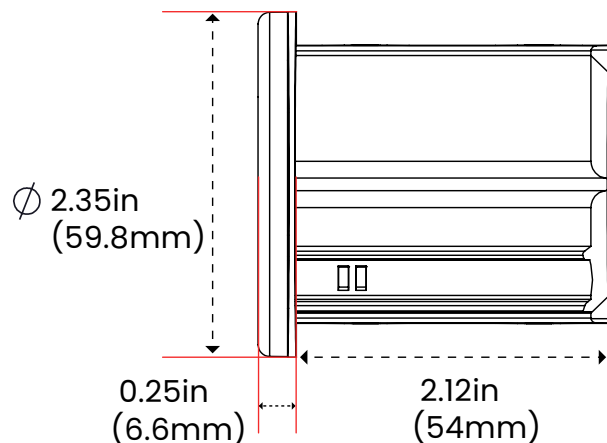
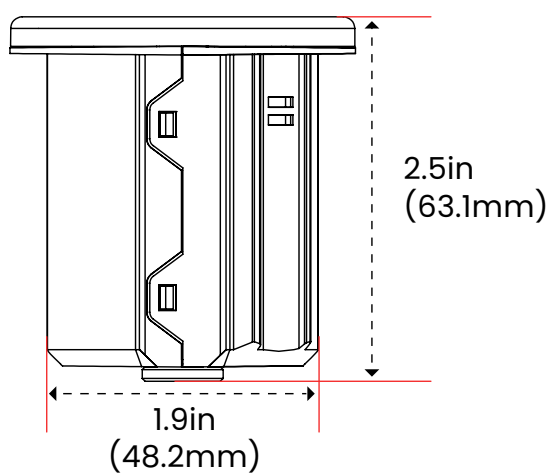
## Microwave Motion Sensor

Specifications	Value	Remarks
Mounting height	13.1-22.9ft (4-7m)	Use 19.8-23ft(6-7m) height for best output
Max detection range	55.7ft (17m)	Diameter, @19.8ft(7m) mounting height; 150mm(5.9in) movement sensitivity
Max coverage area	2732.5sq.ft(254.32sq.m)	Area, @19.8ft(7m) mounting height

## Motion Sensor Characteristics

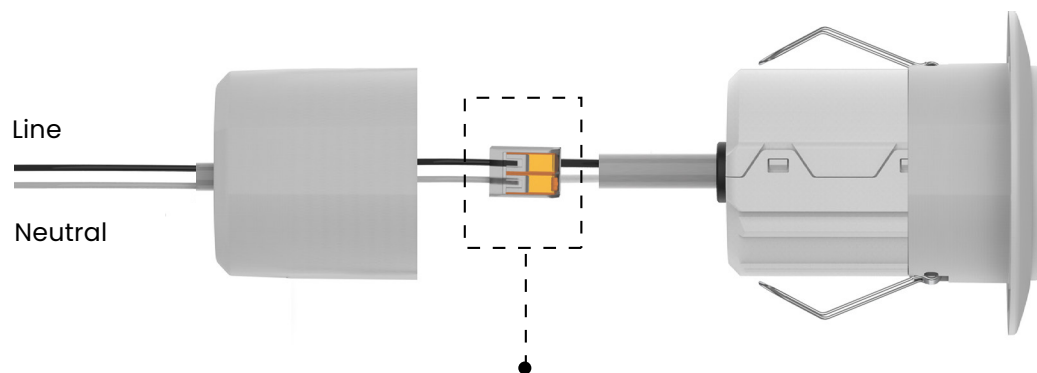


## Product Dimensions (Excluding accessories)



## Wire Description

Cyrus AM is powered via AC supply to communicate sensor data wirelessly with other WiSilica BLE mesh devices.



The termination takes place inside the sensor case

### Note:

Additional junction box is not required for the sensor as the termination will happen inside the sensor case.

Pin	Name	Color	Guage	Rating	Description
1	Line	Black	18AWG (0.75mm <sup>2</sup> )	300V	90-277VAC input line
2	Neutral	White	18AWG (0.75mm <sup>2</sup> )	300V	AC input neutral

## Antenna Information

### 1) Flat patch antenna

*\*For WMAM-SMK*



Antenna Properties	
Frequency range	2.4GHz-2.5GHz
Impedance	50Ω Nominal
VSWR	1.92:1 Max
Return loss	-10dB Max
Gain(peak)	1.5dBi
Cable loss	0.3dBi Max
Polarization	Linear

### 2) 150mm wire antenna

*\*For WMAM-CMK*



Antenna Properties	
Frequency range	2.4GHz-2.5GHz
Impedance	50Ω Nominal
VSWR	1.92:1 Max
Return loss	-10dB Max
Gain(peak)	1.5dBi
Cable loss	0.3dBi Max
Polarization	Linear

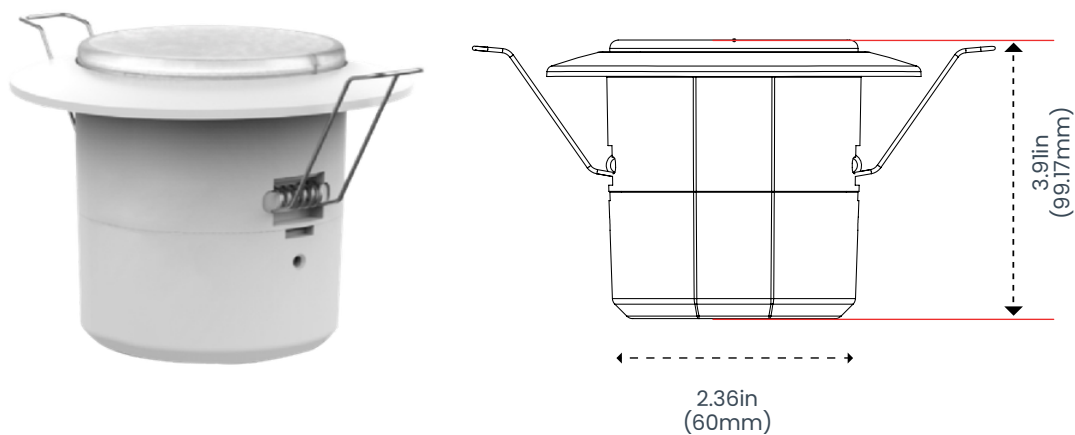
## Accessories

CyrusAMcanbemounted to ceiling or at surface using the following mounting accessories.

### 1. Cyrus AM with ceiling mount accessory (WMAM-CMK )

Dimension: 89.7 x 99.17mm(3.53 x 3.91in) (Top Diameter x Height)

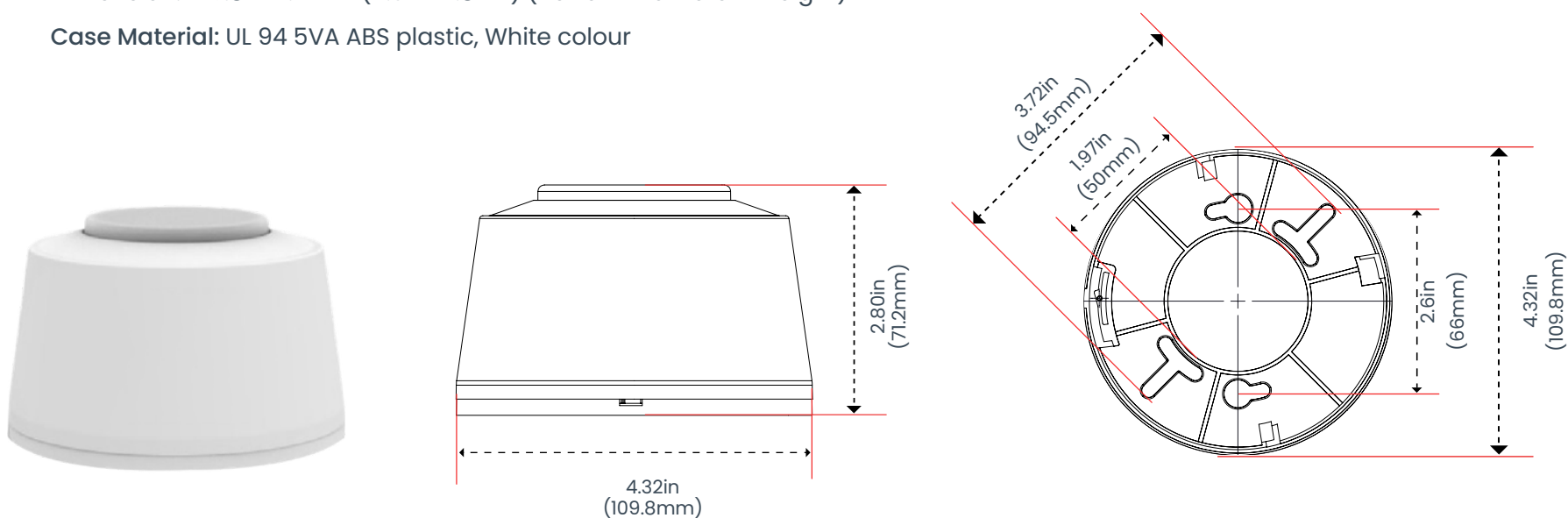
Case Material: UL 94 5VA ABS plastic, White colour



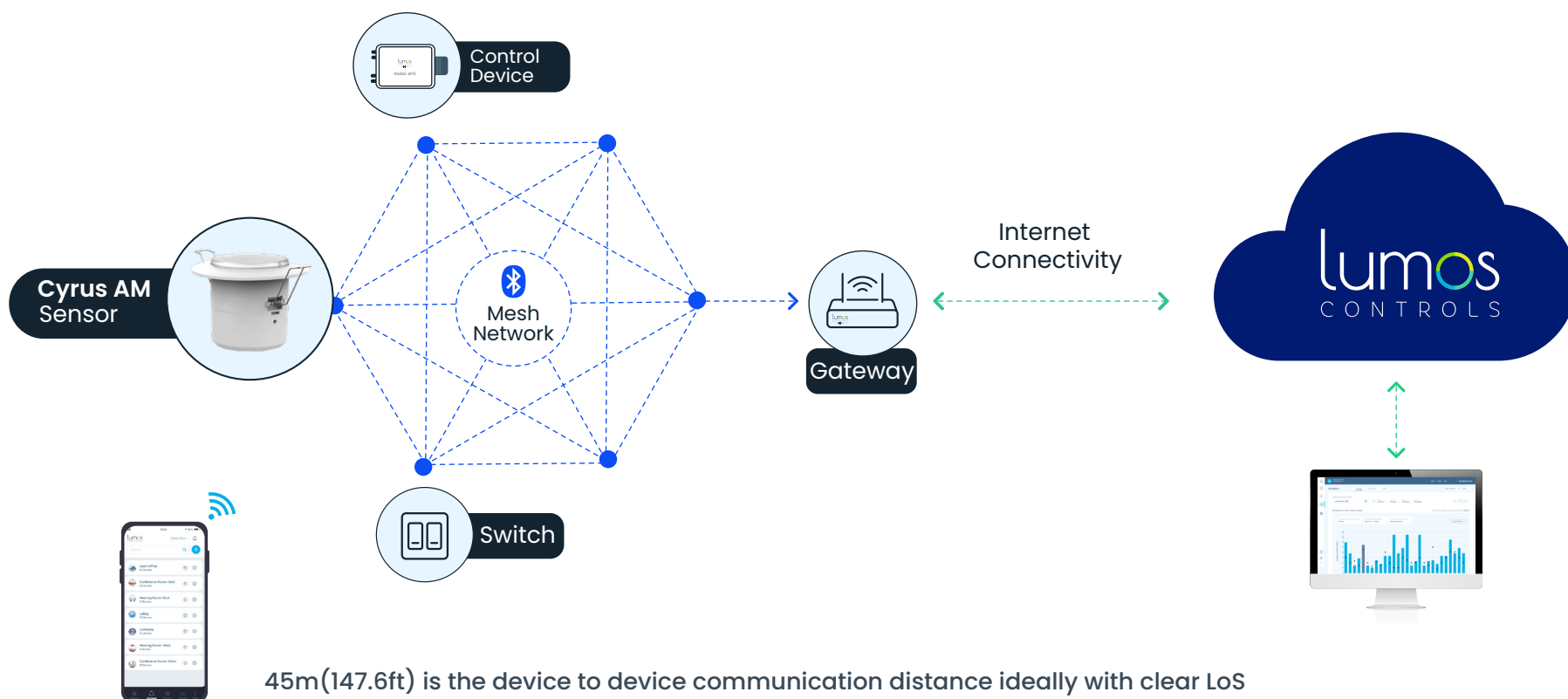
### 2. Cyrus AM with surface mount accessory(WMAM-SMK)

Dimension: 109.8 x 71.2 mm(4.32 x 2.80in) (Bottom Diameter x Height)

Case Material: UL 94 5VA ABS plastic, White colour

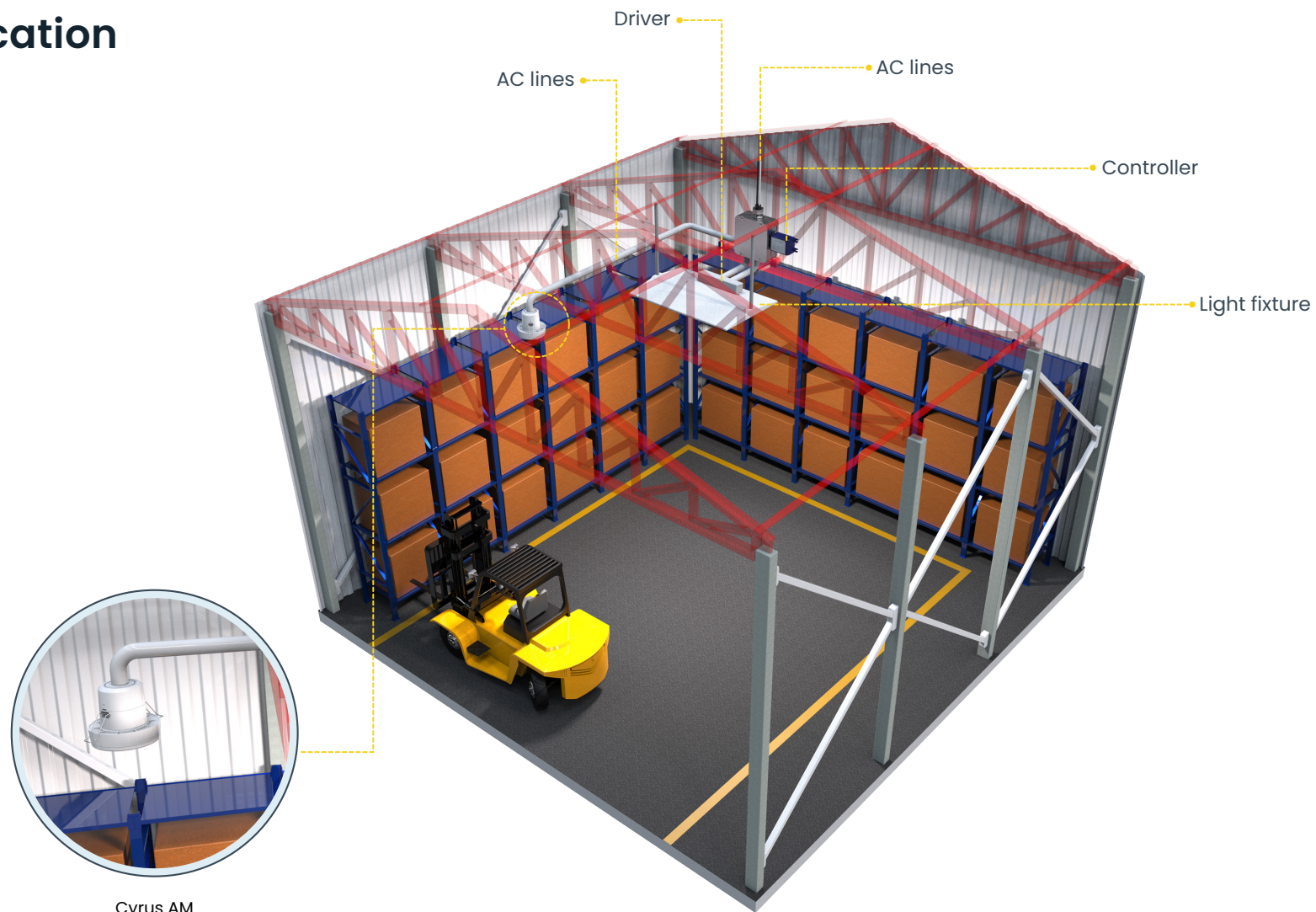


# Smart Ecosystem



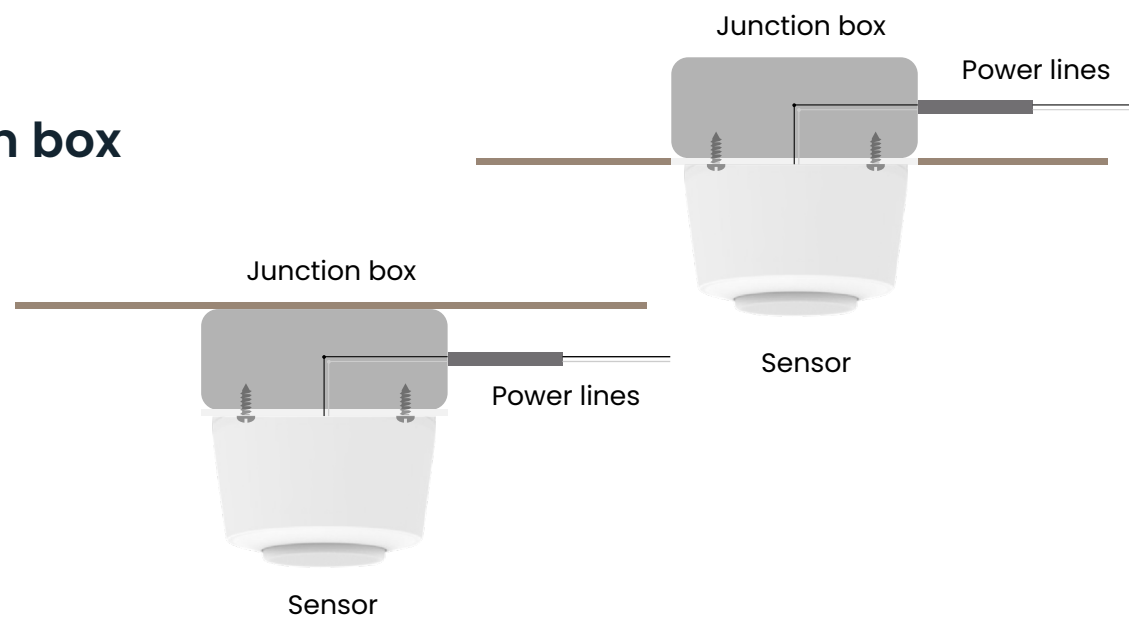
Certifications (In progress)	Details
CE	<p>Article 3, RED 2014/53/EU</p> <p><b>EMC test standards</b></p> <p>ETSIEN301489-IV2.2.3(2019-11)            ETSIEN301489-3V2.2.0(2021-11)            ETSIEN301489-17V3.2.4(2020-09)            EN55032:2015/A11:2020            EN55035:2017+A11:2020</p> <p><b>Safety test standard</b></p> <p>EN IEC61058-1:2018            EN61058-1-2:2016</p> <p><b>Radio test standard</b></p> <p>ETSIEN300328V2.2.2(2019-07)            ETSIEN300440V2.2.1(2018-07)</p> <p><b>Health test standard:</b></p> <p>EN62479:2010            EN50663:2017</p>
cETLus	Conforms to UL Std. 773A Cert. to CSA Std. C22.2 NO. 284
FCC	ID: 2AG4N-WMAM
RoHS 2.0	RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU
REACH	Regulation (EC) No 1907/2006 of REACH
WEEE	Under the WEEE Directive: 2012/19/EU
Bluetooth	Declaration ID: D059551

# Application



## Installation using a junction box

To install the sensor with its surface mount accessory on a junction box, place the mounting plate on the box, drill holes to attach it, and create a central hole to route the sensor wires for termination.



## Items included in the package box

- Cyrus AM (fitted with chosen mounting accessory)
- User Guide
- Wire Nuts
- Screws\*
- Wallplugs\*

*\*Only for WMAM-SMK*

### Accessories

Product Code	Product Description
WM-SMK	Surface mount accessory
WM-CMK	Ceiling mount accessory



### Ordering Information

Product Code	Product Name	Product Description	Communication	Voltage Rating
WMAM-CMK	Cyrus AM with ceiling mount accessory	Wireless microwave motion & daylight sensor	BLE 5.2	90-277VAC
WMAM-SMK	Cyrus AM with surface mount accessory	Wireless microwave motion & daylight sensor	BLE 5.2	90-277VAC

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