WCMS

Wireless Ceiling Mount Passive Infrared (PIR) and Photo Sensors



The Encelium WCMS (Wireless Ceiling Mount Sensors) consists of Passive Infrared (PIR) and Photo Sensors which collect occupancy and daylight information from a lighted space and communicate collected data to the Encelium X Lighting Control System over a wireless mesh network.

These Wireless PIR/Photo Sensors have been recognized as some of the smallest in the industry. Powered by 2 AA batteries with an extended battery life of 10 years, these sensors are intended to be installed onto a ceiling surface or electrical box.

Three configurations are available: up to 42 sq m (450 sq ft) range, up to 140 sq m (1,500 sq ft) range, or a high-bay option that covers up to 260 sq m (2,800 sq ft) with a mounting height of up to 12 m (40 ft). These sensors feature tool-less mounting options for easy installation and offer masking options to maximize control flexibility.

Date:	
Quantity:	
Company:	
Project:	

Works with

- Encelium X
 - ▶ Wireless



Key Features & Benefits

- Available in three coverage options –
 42 sq m (450 sq ft), 140 sq m
 (1,500 sq ft), and high-bay option
- Simple installation, using magnetic mounting and 360° directional flexibility
- Reposition sensor with no noticeable substrate marks
- Setup and configuration via Polaris[™] software
- Wireless sensor offer 10-year battery life with automatic battery monitoring via Polaris software



Specifications

SENSING AND CONTROL

Sensing

- Passive Infrared (PIR) Sensor
- Photo Sensor

Light Sensor Operating Range

- 0 to 1,000 Lux
- Shields included (no opening of sensor required)

Control

■ Wireless Communication

Batteries

- 2-AA Alkaline batteries (provided)
- Exchangeable and readily accessible

ELECTRICAL

Radio Frequency

■ 2.4 GHz

ENVIRONMENTAL

Operating Temperature

- Standard Range (SR) and Extended Range (ER) Sensors 0° to 40°C (32° to 104°F)
- High-Bay (HB) Sensor 0° to 60°C (32° to 140°F)

Relative Humidity

• 0% to 95% non-condensing, for indoor use only

PHYSICAL

Base Diameter

■ 85.5 mm (3.37 inches)

Height

- 28.6 mm (1.13 inches) SR Sensor
- 26.2 mm (1.03 inches) ER and HB Sensors

Weight

■ 110 g (3.9 oz)

Housing Color

Matte White

Housing Material

UV Stabilized Plastic

Mounting Options

- Magnetic Mount
- Surface Mount
- Ceiling Tile Mount (requires optional mounting accessory kit)
- Junction Box Mount (requires optional mounting accessory kit)
- High-Bay Mount (requires optional mounting accessory kit)

Mounting Height

- 2.4 to 3.7 m (8 to 12 ft) SR and ER Sensors
- Up to 12 m (40 ft) HB Sensor

WARRANTY

For warranty details, refer to the full warranty documentation at encelium.com

CERTIFICATIONS & SAFETY

Approbations

- cUL Listed (UL 916)
- CE
- FCC Part 15/ICES-003
- RoHS Compliant
- Meets ASHRAE Standard 90.1 and CEC Title 24 requirements



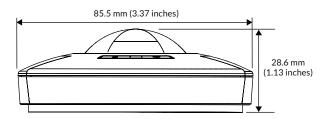




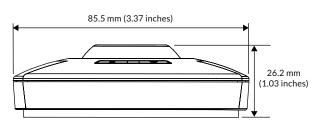


Dimensions

Standard Range Sensor



Extended Range Sensor High-Bay Sensor



Ordering Information

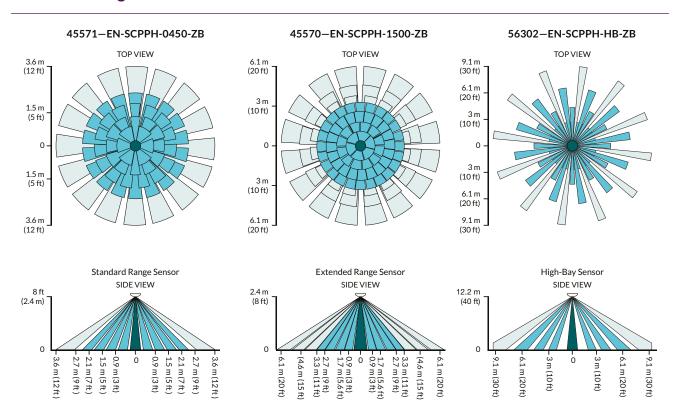
Ordering Code	Description	Approbations	Sensing Technologies	Coverage	Sensing Angle
45571	Wireless Ceiling Mount Sensor	UL and CE	PIR/Photo	42 m ² (450 ft ²)*	360°
45570	Wireless Ceiling Mount Sensor	UL and CE	PIR/Photo	140 m ² (1,500 ft ²)*	360°
56302	Wireless Ceiling Mount Sensor	UL and CE	PIR/Photo	See Notes**	360°
45584	Mounting Accessory Kit	UL and CE	_	_	_

 $^{^{}st}$ Mounting Height: 8 to 12 ft (2.4 to 3.7 m)

Sensor Mounting Height

Mounting Height	Coverage	
6 m (20 ft)	$\sim 102 \text{ m}^2 (1,100 \text{ ft}^2)$	
9 m (30 ft)	$\sim 167 \text{ m}^2 (1,800 \text{ ft}^2)$	
12 m (40 ft)	$\sim 260 \text{ m}^2 (2,800 \text{ ft}^2)$	

Sensor Coverage

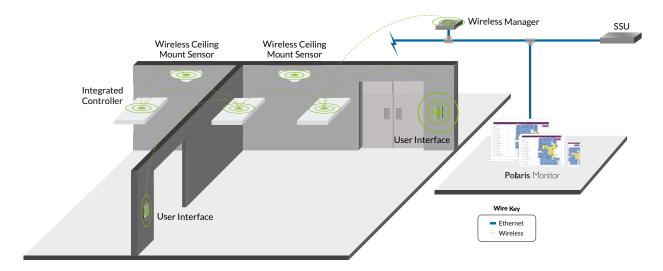


WCMS Specification Sheet 3

^{**} Dependent on mounting height

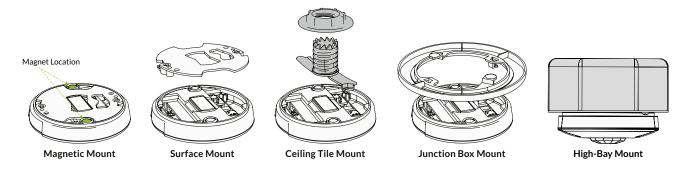
Wireless System Overview

This illustration shows how each component is easily integrated into the Encelium X Lighting Control System.



Mounting Options

Ceiling Tile Mount, Junction Box Mount, and High-Bay Mount requires optional mounting kit (sold separately).





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