



# General Information

## Vue d'ensemble

The WaveLinx Pro Insights ceiling sensor is an integral part of the WaveLinx Pro System and offers Occupant count, Passive Infra-Red (PIR) occupancy sensing, daylighting, temperature, and humidity capability. This sensor has Occupant count and Occupancy coverage patterns of up to 600 square feet, it is low voltage powered and is one of the smartest ceiling mounted sensors for multi-sensing in the market. The sensor operates on a wireless mesh network based on IEEE802.15.4 standards.

## Caractéristiques nominales du plénum

The WaveLinx Pro Insights ceiling sensor components intended for installation above ceiling are plenum rated.

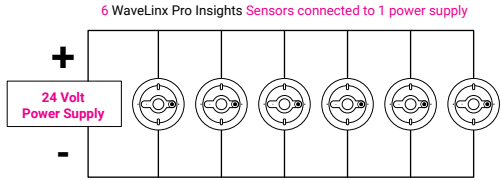
## Spécifications

Compatible only with Cooper Lighting Solutions Lighting WaveLinx Pro Wireless Systems.

<b>Alimentation</b>	Puissance d'entrée : 120/277 VCA Connexions : Chargé, neutre
<b>Indicateurs</b>	Fonctionnalité DEL • Indication de la connexion au réseau sans fil • Indication de blocage de lumière du jour
<b>Spécifications environnementales</b>	Plage de température de fonctionnement : -20 °C à 55 °C (-4 °F à 131 °F) Plage de température de stockage : -40 °C à 70 °C (-40 °F à 158 °F) Humidité relative : 5 % à 95 % sans condensation, pour usage intérieur uniquement
<b>Normes</b>	Caractéristiques nominales : Homologué UL/cUL, FCC, IC UL244A – Commande d'appareil/sels grimpants et espace UL508/NEMA 410 – Équipement de commande industriel UL2043 (Installation de plénum) Répond aux exigences de la norme 90.1 de la ASHRAE Répond aux exigences de la IECC Répond aux exigences du chapitre 24 de la CEC
<b>Sans fil Spécifications</b>	Radio 2,4 GHz Protocole IEEE 802.15.4 Configuration de type routeur, point limite Portée de perte de signal de 25 m (75 pi) 2 murs intérieurs d'une construction standard Meilleure pratique : 100 dispositifs par contrôleur de zone sans fil
<b>Hauteur de montage</b>	8-12ft (2.4 - 3.7m)

## Wiring

The unit is powered by a 24VDC power supply. Please make sure the correct polarity is used for the power supply connections.

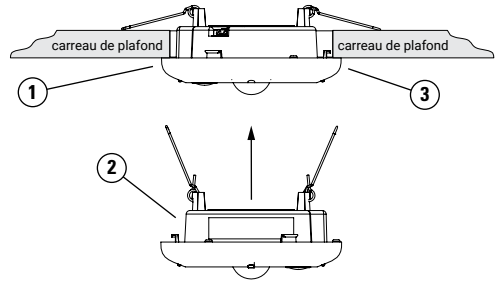


## Insights Ceiling Sensor Installation

There are various methods that may be used to affix the WaveLinx Insights Sensor to a ceiling surface.

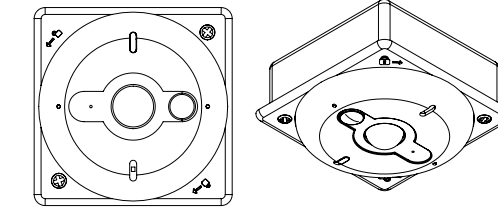
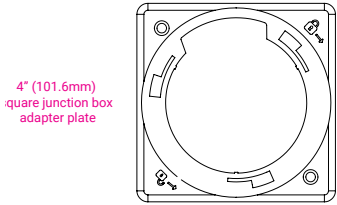
### Tilemount installation

1. Cut 3.8" (95.3mm) diameter hole in ceiling tile.
2. Snap sensor body into ceiling trim.
3. Torsion spring clips secure the Insights Sensor to a recessed ceiling tile.



## Surface Mount / J-Box installation

1. Attach junction box adapter plate to 4" (101.6mm) square junction box. (screws not included)
2. Align sensor with keyhole pattern.
3. The Wireless Sensor may be installed directly to a ceiling surface via a 4" (101.6mm) square junction box adapter plate.



## Installation Notes

Consult [www.cooperlighting.com](http://www.cooperlighting.com) for the most up-to-date revision of the Insights Ceiling system design guide and install this product according to the guidelines described.

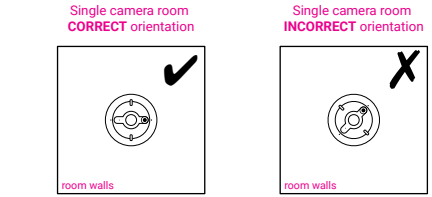
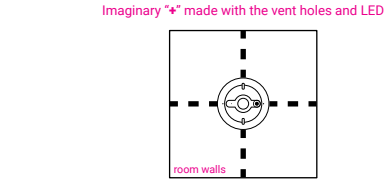
The Sensor is to be installed in dry, indoor locations ONLY. Do not install the Sensor in damp locations. Damp locations are defined as: interior locations subject to moderate degrees of moisture, such as some basements, some barns, some cold-storage warehouses, and the like, and partially protected locations under canopies, marquees, roofed open porches, and the like.

## Camera and Sensor Location Notes

The Sensor provides 360° coverage pattern. It is recommended to install the sensor more than 4ft (1.2m) away from air supply vents.

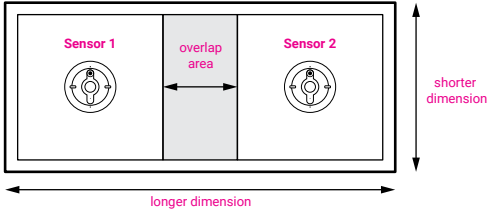
## Single Sensor Setup

1. The imaginary "+" made with the vent holes and LEDs should be approximately perpendicular with walls when possible.



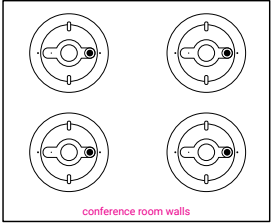
## Multi Sensor Setup

1. The imaginary "+" made with the vent holes and LEDs should be approximately perpendicular with the walls when possible
2. The lens as a reference point should be facing the same way in all those included in a multi-sensor setup
3. Best practice for rectangular rooms: The camera side of the sensor should point at one of the "longer" walls of the room, and as previously mentioned, the two cameras should both point the same direction. See image below

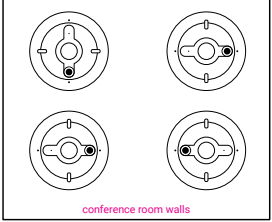


## Multi Sensor Camera Orientation

All cameras oriented the SAME direction



All cameras oriented DIFFERENT directions



Cooper Lighting Solutions  
1121 Highway 74 South  
Peachtree City, GA 30269  
www.cooperlighting.com  
Pour obtenir de l'aide technique  
Mississauga (Ontario) L5R 1B8  
ou un service :  
1 800 553-3879

Service des ventes du Canada  
5925 McLaughlin Road  
Mississauga (Ontario) L5R 1B8  
Tél. : 905 501-3000  
Télec. : 905 501-3172

© Cooper Lighting Solutions, 2022.  
Tous droits réservés.  
Imprimé en Mexique  
Publication no IL50372722  
Aout 2022

## LED and Button Definitions

- One press and release will reboot the unit
- Press and release 6 times, for 5 seconds each, for a factory reset

### Sensor Status LED Indication while in out-of-box mode

There are two LED indicators on this sensor, one positioned above the camera lens (People count sensor status LED or BLE LED), and one on the other side below the reset button (Zigbee LED).

### On power up

- Zigbee LED blink momentarily in red and once after that it will blink green on detecting occupancy/motion.
- BLE LED/Occupant Count LED momentarily in Amber and will remain OFF until sensor is claimed to WAC and registered under license.

### Reset button to enable pairing mode

On power up the sensor will not be in pairing mode, it requires two-time power cycle or IR remote command or press the reset button two times (equivalent to power cycle) to get the sensor to pairing mode to get join a WAC which is in pairing/commissioning mode.

### Out-of-box functionality

As Insights CS is a ceiling sensor without own light fixture associated to it there is no user functionality before it is added to the WAC.

## Troubleshooting

- There are no user-serviceable parts inside of the Sensor Interface Module. Please return the device to Cooper Lighting Solutions if service is required.
- The device is ONLY intended for use with WAC and Trellix releases of SR9 and beyond? (If the device is claimed to a WAC prior to SR9, it will not be represented correctly and Occupancy Counting will not work unless it is completely reset after the WAC is upgraded to SR9 or later.)

If still having trouble, call Technical Services at 1-800-553-3879.

## French

Cooper Lighting Solutions est une marque déposée. Toutes les autres marques de commerce sont la propriété de leur propriétaire respectif.

La disponibilité du produit, les spécifications et les conformités peuvent être modifiées sans préavis.



# General Information

## Descripción General

The WaveLinx Pro Insights ceiling sensor is an integral part of the WaveLinx Pro System and offers Occupant count, Passive Infra-Red (PIR) occupancy sensing, daylighting, temperature, and humidity capability. This sensor has Occupant count and Occupancy coverage patterns of up to 600 square feet, it is low voltage powered and is one of the smartest ceiling mounted sensors for multi-sensing in the market. The sensor operates on a wireless mesh network based on IEEE802.15.4 standards.

## Plenum rating

The WaveLinx Pro Insights ceiling sensor components intended for installation above ceiling are plenum rated.

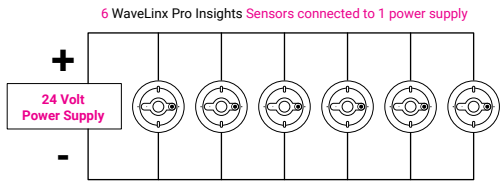
## Especificaciones

Compatible only with Cooper Lighting Solutions Lighting WaveLinx Pro Wireless Systems.

<b>Corriente</b>	Corriente de entrada: 120/277 VCA Conexiones: Caliente, neutro
<b>Indicadores</b>	Funcionalidad LED • Indicación de conexión a la red inalámbrica • Indicación de retraso de la luz del día
<b>Especificaciones ambientales</b>	Rango de temperatura de funcionamiento: -4°F - 131°F (-20°C - 55°C) Rango de temperatura de almacenamiento: -40°F - 158°F (-40°C - 70°C) Humedad relativa: 5% a 95% sin condensación, solo para uso en interiores.
<b>Estándares</b>	Listados: Listado UL/cUL, FCC, IC UL244A - Control de dispositivo /líneas de fuga y distancia en el aire Equipo de control industrial UL 508/NEMA 410 UL 2043 (instalación plenum) Cumple con los requisitos del estándar 90.1 de ASHRAE Cumple con los requisitos de IECC Cumple con los requisitos del Título 24 de CEC
<b>Dispositivo i inalámbrico Especificaciones</b>	Radio 2,4GHz Estándar IEEE 802.15.4 Tipo de configuración Enrutador, Nodo final Alcance 75 pies (25 m) LOS 2 paredes interiores de construcción estándar. Mejores prácticas: 100 dispositivos por controlador de área inalámbrico
<b>Altura de montaje</b>	8-12ft (2.4 - 3.7m)

## Wiring

The unit is powered by a 24VDC power supply. Please make sure the correct polarity is used for the power supply connections.

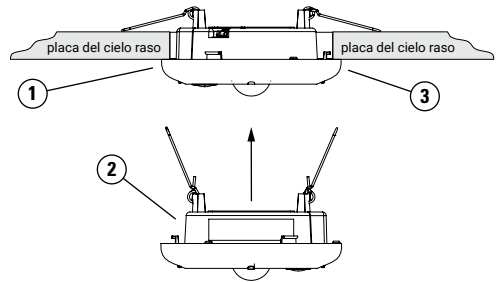


## Insights Ceiling Sensor Installation

There are various methods that may be used to affix the WaveLinx Insights Sensor to a ceiling surface.

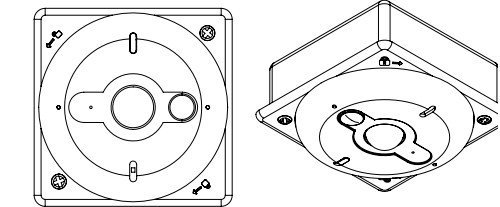
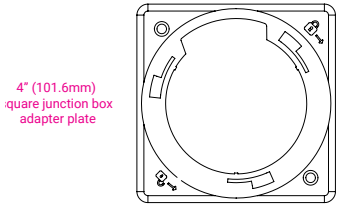
### Tilemount installation

1. Cut 3.8" (95.3mm) diameter hole in ceiling tile.
2. Snap sensor body into ceiling trim.
3. Torsion spring clips secure the Insights Sensor to a recessed ceiling tile.



## Surface Mount / J-Box installation

1. Attach junction box adapter plate to 4" (101.6mm) square junction box. (screws not included)
2. Align sensor with keyhole pattern.
3. The Wireless Sensor may be installed directly to a ceiling surface via a 4" (101.6mm) square junction box adapter plate.



## Installation Notes

Consult [www.cooperlighting.com](http://www.cooperlighting.com) for the most up-to-date revision of the Insights Ceiling system design guide and install this product according to the guidelines described.

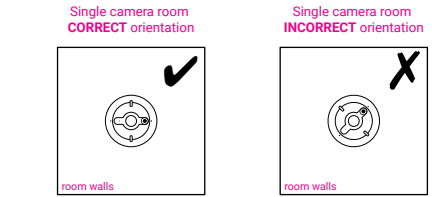
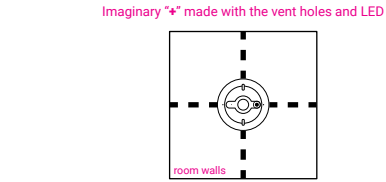
The Sensor is to be installed in dry, indoor locations ONLY. Do not install the Sensor in damp locations. Damp locations are defined as: interior locations subject to moderate degrees of moisture, such as some basements, some barns, some cold-storage warehouses, and the like, and partially protected locations under canopies, marquees, roofed open porches, and the like.

## Camera and Sensor Location Notes

The Sensor provides 360° coverage pattern. It is recommended to install the sensor more than 4ft (1.2m) away from air supply vents.

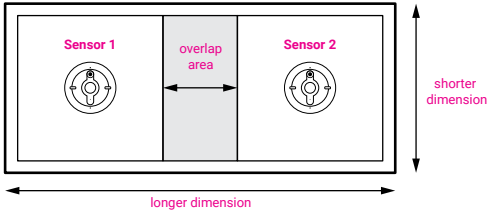
## Single Sensor Setup

1. The imaginary "+" made with the vent holes and LEDs should be approximately perpendicular with walls when possible.



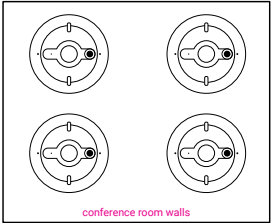
## Multi Sensor Setup

1. The imaginary "+" made with the vent holes and LEDs should be approximately perpendicular with the walls when possible
2. The lens as a reference point should be facing the same way in all those included in a multi-sensor setup
3. Best practice for rectangular rooms: The camera side of the sensor should point at one of the "longer" walls of the room, and as previously mentioned, the two cameras should both point the same direction. See image below

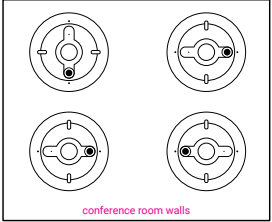


## Multi Sensor Camera Orientation

All cameras oriented the SAME direction



All cameras oriented DIFFERENT directions



Cooper Lighting Solutions  
1121 Highway 74 South  
Peachtree City, GA 30269  
www.cooperlighting.com  
Para servicio o asistencia técnica:  
1-800-553-3879

Servicio de ventas de Canada  
5925 McLaughlin Road  
Mississauga (Ontario) L5R 1B8  
T : 905 501-3000  
T : 905 501-3172

© 2022 Cooper Lighting Solutions  
Todos los derechos reservados  
Impreso en México  
Publicación No.IL50372722  
Agosto 2022

Cooper Lighting Solutions es una marca registrada. Todas las marcas registradas son propiedad de sus respectivos propietarios.

La disponibilidad de productos, las especificaciones y los cumplimiento están sujetos a cambio sin previo aviso.

