WIRELESS CEILING MOUNT PIR OCCUPANCY SENSOR | LMPC-600

- Passive infrared occupancy sensor with a choice of three 360° lens options for different coverage patterns
- Built-in IPv6 Mesh and Bluetooth antennas provide robust signal strength and reliable communication
- Uses IPV6 Mesh to establish secure network communication with all DLM wireless devices
- Streamlined low profile design and optional recessed mounting, for architectural appeal
- Quick and easy wireless installation – no Cat 5e connection needed
- Snap apart sensor mask for quick and easy coverage pattern customization
- 10+ year battery life, with LED indicator for low battery alert; battery level can be viewed with wireless DLM software
- Extended height lens option for mounting up to 40′
- Bluetooth commissioning using DLM Configuration App

GET IT ON **Google Play**   Get it on **iTunes**   **IPv6 MESH**   Bluetooth   RoHS

Description

The LMPC-600 wireless low profile Digital PIR Ceiling Mount Occupancy Sensor uses passive infrared (PIR) technology and one of three lenses to detect occupancy in different types of spaces for energy-efficient control of lighting and plug loads. It is a digital sensor, and is part of the NEW wireless Wattstopper Digital Lighting Management (DLM) system.

Operation

The LMPC-600 communicates with the room controller(s) to turn loads on and off based on occupancy. It operates on an included CR123A battery providing a 10+ year lifespan. An installer can create a wireless mesh network via Push to Pair, connecting it to other wireless DLM devices in the room (e.g. LMRC-611 wireless dimming room controller or LMBC-650 wireless bridge) drastically reducing installation time and eliminating wiring errors. Default operation is established by Plug n′ Go, which automatically configures system components to maximize energy savings. Initially, all occupancy sensors control all loads on the same local network. Each LMPC-600 may be assigned to a specific load; load assignments and load parameters may be changed using Push n′ Learn. The LMPC-600 may be reconfigured using any one of three options:

1. **DLM Configuration App available for iOS or Android.** Simply walk through the on screen prompts to connect the wireless DLM devices in the room and choose from sequence of operations profiles. Plug n′ Go automatic configuration assigns all loads connected to the most energy efficient Sequence of Operation once the wireless network is created.

2. **Push to Pair**, by pushing the "config" button on each wireless device in the room to pair them together.
3. **LMCS for networked projects.** Wattstopper LMCS software provides an easy method for commissioning the entire building and applying desired settings to devices on the network.

Digital Settings and Bluetooth Communication

Changes are made at the sensor using the DLM Configuration App that communicates with the sensor via Bluetooth. The built-in IPv6 Mesh and Bluetooth Low Energy (BLE) radio transceivers in the LMPC-600 allows two-way communication for both wireless configuration using the DLM Configuration App and system operation. Time delay and sensitivity can be precisely adjusted and walk through mode can be activated.

Applications

The wireless nature of the LMPC-600 make it ideal for renovations or any application where quick and easy installation of a lighting control system is desired. LMPC-600 sensors, with different lenses for different spaces, are ideal for high and low ceiling areas including open offices, computer rooms, conference rooms, classrooms, warehouses and gyms. Sensor coverage for walking motion is approximately 1,000 square feet using the extended range lens, 450 square feet using the high density lens and 3,800 square feet using the extended height lens. The high density lens is ideal for detecting desktop activity, and small motion coverage is up to 300 square feet.

| PROJECT		LOCATION/ TYPE	

Features

- Component of the NEW wireless Digital Lighting Management integrated control system
- Robust and reliable BACnet over IPv6 Mesh Network based on open standards & protocols formed automatically with other wireless DLM components
- Backward compatible with wired DLM via wireless bridge (LMBC-650) enabling easy hybrid architecture when wired product functionality is needed
- Three options for commissioning: the DLM Configuration App for iOS or Android, Push to Pair, or LMCS for networked projects
- Internal antennas with diversity provide robust signal strength and reliable communication
- IPv6 Mesh wireless standard delivers reliable, long range, low latency wireless communication that is scalable for a single room or entire buildings with thousands of rooms
- Firmware can easily be updated over the air using the Bluetooth DLM Configuration App or LMCS software.
- A fully networked DLM system, paired with RACCESS remote support, allows updates to be pushed to the entire building from the Wattstopper Remote Operations Center (ROC), avoiding downtime or service calls.

- Includes three 90° snap-on masks, for limiting coverage area
- Industry leading wireless security, backed by Secure Commission and Secure Control technology
  - Device Validation: Trusted hardware chips prevent any outside devices from being able to connect to the lighting control network.
  - Zero touch provisioning: Pre-loaded digital identity and security profile makes the system automatically secure.
  - Ongoing AES encryption: Communication between devices is protected by AES128 symmetric key encryption
- Plug n' Go™ automatic configuration for quick installation and maximum energy savings
- Push n' Learn™ functionality for customization without the need for tools or a PC
- 360 degree PIR coverage with extended range, high density, and extended height lens options
- Detection Signature Processing eliminates false triggers and provides immunity to RFI and EMI
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- The product meets the materials restrictions of RoHS

Specifications

- Power Supply: Battery powered, Lithium Ion, CR123A 3V, 1500 mAh (included)
- Connection to DLM Network: Wireless IPv6 Mesh
- Wireless Standards supported:
  - IPv6 Mesh (6LoWPAN / 802.15.4 / 2.4GHz), range up to 60 ft.
  - Bluetooth (BLE) (802.15.4 / 2.4GHz), range up to 60 ft.
- Built-in Antennas: IPv6 Mesh and BLE
- Device Security: Secure-factory provisioned trusted hardware with Legrand-private certificate chain and signed ECC keypair

- Wireless Encryption: AES 128-bit symmetric key, randomly generated per-PAN, shared via secure DTLS only
- Operating conditions: for indoor use only; 32-104°F (0-40°C); 5-95% RH, non-condensing
- UL and cUL listed
- FCC part 15 compliant
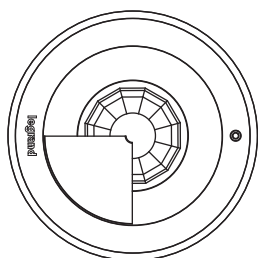- Five year warranty

Dimensions

3.67" (93 mm)

1.39" 35mm

4.4" (112mm)

.75" (19mm)

1.7" (43mm)

Recessed Mount
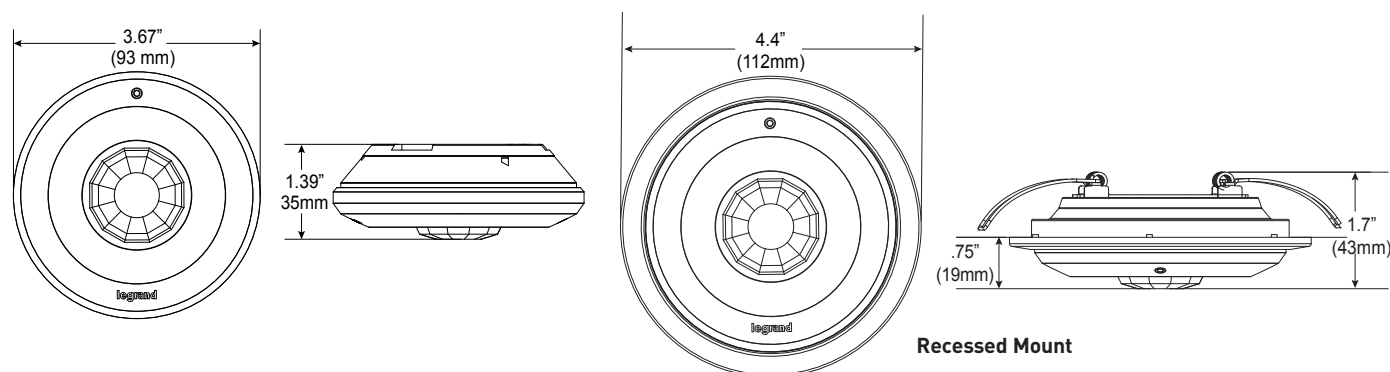
Mounting and Installation

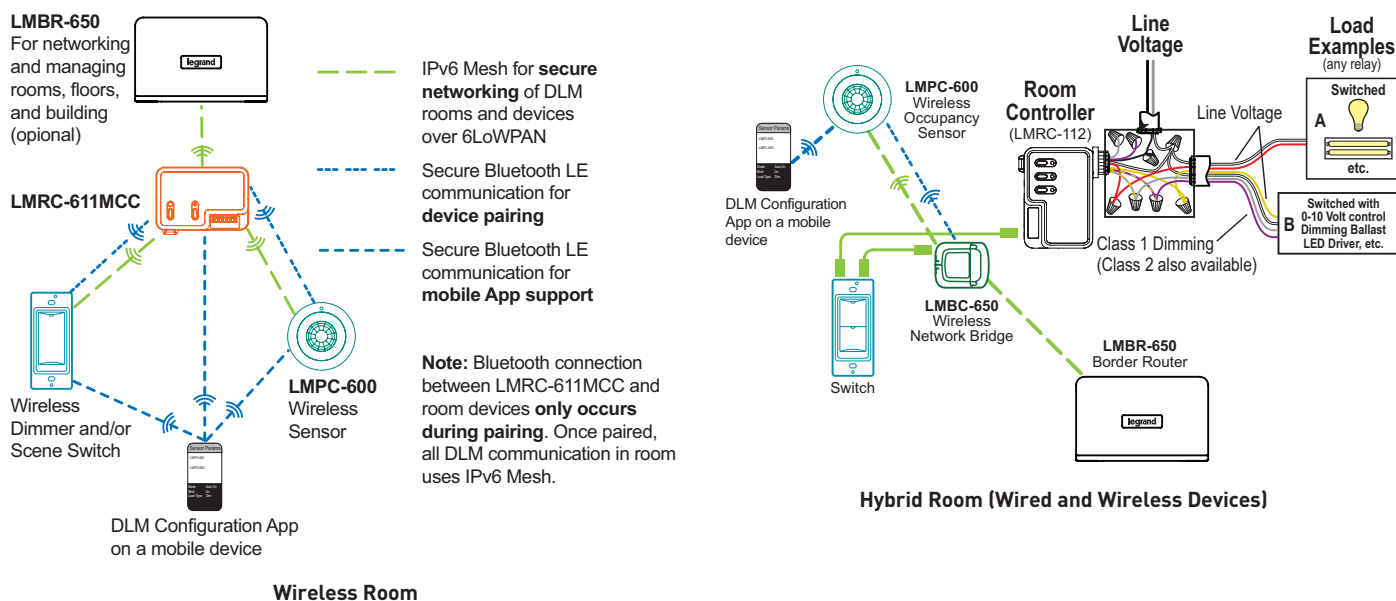The LMPC-600 can be mounted using one of thee possible methods:

- Mounted to the ceiling using the included mounting plate
- Mounted to a hanging threaded rod, for open ceiling environments, using the included threaded rod adapter
- Recessed mounting, using the optional LMPC-600-RPM Plenum Recessed Mounting Kit

Ceiling Mount

Twist to Lock
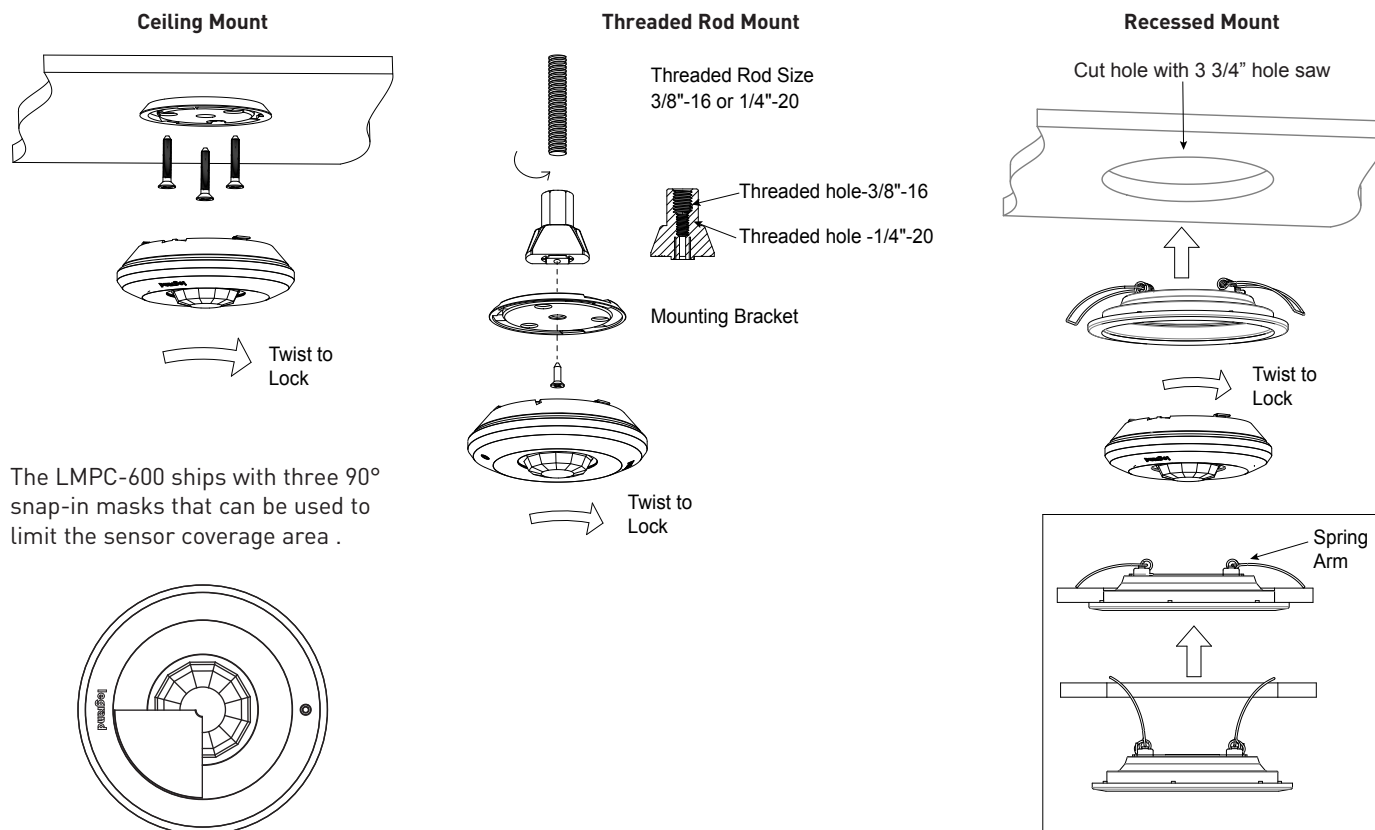
The LMPC-600 ships with three 90° snap-in masks that can be used to limit the sensor coverage area .

Threaded Rod Mount

Threaded Rod Size
3/8"-16 or 1/4"-20

Threaded hole-3/8"-16
Threaded hole -1/4"-20

Mounting Bracket

Twist to Lock

Recessed Mount

Cut hole with 3 3/4" hole saw

Twist to Lock

Spring Arm

Connection

LMBR-650
For networking and managing rooms, floors, and building (opional)

LMRC-611MCC

Wireless Dimmer and/or Scene Switch

LMPC-600 Wireless Sensor

DLM Configuration App on a mobile device

– – – IPv6 Mesh for **secure networking** of DLM rooms and devices over 6LoWPAN

- - - Secure Bluetooth LE communication for **device pairing**

- - - Secure Bluetooth LE communication for **mobile App support**

Note: Bluetooth connection between LMRC-611MCC and room devices **only occurs during pairing**. Once paired, all DLM communication in room uses IPv6 Mesh.

Wireless Room

LMPC-600 Wireless Occupancy Sensor

DLM Configuration App on a mobile device

Switch

LMBC-650 Wireless Network Bridge

Line Voltage

Room Controller (LMRC-112)

Line Voltage

Class 1 Dimming (Class 2 also available)

LMBR-650 Border Router

Load Examples (any relay)

Switched

A

etc.

Switched with 0-10 Volt control Dimming Ballast LED Driver, etc.
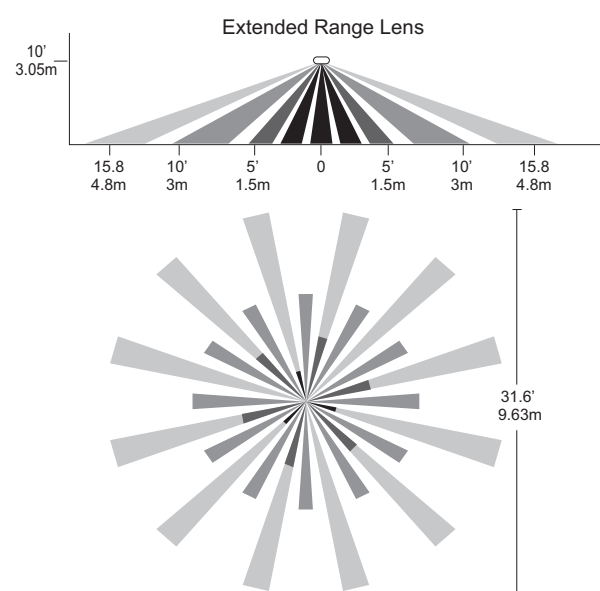
B

Hybrid Room (Wired and Wireless Devices)

Coverage

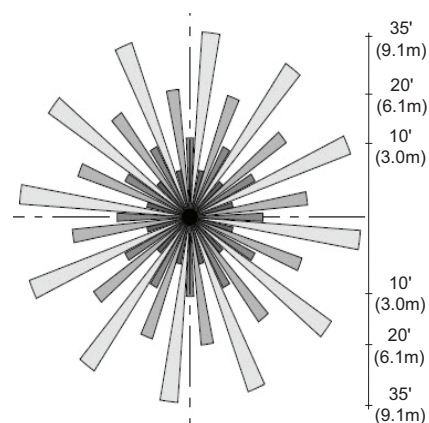Coverages shown are maximum and represent half-step walking motion

Extended Range Lens

10'
3.05m

15.8   10'   5'   0   5'   10'   15.8
4.8m   3m   1.5m   1.5m   3m   4.8m

31.6'
9.63m

LMPC-600, extended range lens

High Density Lens

10'
3.05m

8.63'   6'   4'   2'   0   2'   4'   6'   8.63'
2.6m   1.8m 1.2m 0.6m   0.6m 1.2m 1.8m 2.6m

17.25'
5.25m
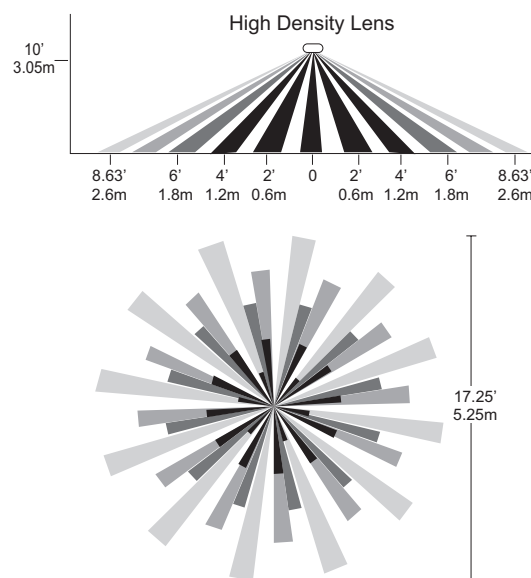
LMPC-600-1, high density lens

40'
(12.2m)

20'
(6.1m)

40'   30'   20'   10'   0   10'   20'   30'   40'
(12.2m)(9.1m)(6.1m)(3.0m)   (3.0m)(6.1m)(9.1m)(12.2m)

35'
(9.1m)

20'
(6.1m)

10'
(3.0m)

10'
(3.0m)

20'
(6.1m)

35'
(9.1m)
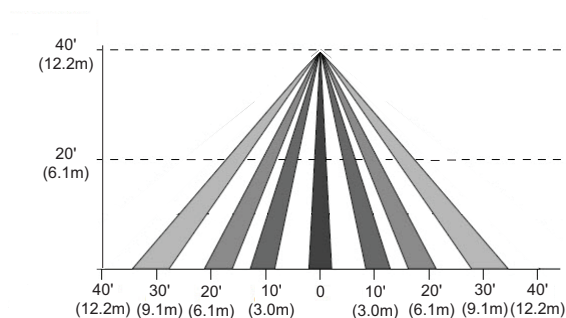
LMPC-600-5, extended height lens

Ordering Information

Catalog #	Description
☐ LMPC-600	Wireless Ceiling Mount PIR Occupancy Sensor, extended range lens
☐ LMPC-600-1	Wireless Ceiling Mount PIR Occupancy Sensor, high density lens
☐ LMPC-600-5	Wireless Ceiling Mount PIR Occupancy Sensor, extended height lens
☐ LMPC-600-RPM	Recessed Plenum Mounting Kit for LMPC-600