

LMUC-100 Digital Ultrasonic Ceiling Mount Occupancy Sensor

Ultrasonic sensor with diffusers for comprehensive coverage

Digital sensor with LCD display and programming pushbuttons behind snap-off cover

Component of Digital Lighting Management integrated control system

IR transceiver for wireless configuration and remote control

Quick access to Push n' Learn for system personalization

Low profile design for architectural appeal



PROJECT
LOCATION/TYPE

Product Overview

Description

The LMUC-100 low profile Digital Ultrasonic Ceiling Mount Occupancy Sensor uses ultrasonic diffusion technology to achieve 360° occupancy sensing for energy-efficient control of lighting and plug loads. It is a digital sensor, and is part of a WattStopper Digital Lighting Management (DLM) system.

Operation

The LMUC-100 operates on Class 2 power supplied to a DLM local network by one or more DLM room controllers. It works with the room controller(s) to turn loads on and off based on occupancy. 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 LMUC-100 may be assigned to a specific load; load assignments and load parameters may be changed using Push n' Learn. The LMUC-100 may be reconfigured either using the pushbuttons and an LCD screen conveniently located behind the snap-off front sensor cover, or with a wireless configuration tool.

Digital Settings and IR Communications

The LMUC-100 includes a unique, easy-to-access, LCD screen that displays sensor parameters and simplifies changing those parameters. Time delay and sensitivity can be precisely adjusted and walk through mode can be activated. Changes are made at the sensor with easy-to-use pushbuttons, or via a wireless configuration tool that communicates with the sensor using a bi-directional infrared (IR) signal. The LMUC-100 IR transceiver allows wireless system operation in addition to configuration. The LCD display also facilitates system personalization, showing load information when in Push n' Learn mode.

Applications

The LMUC-100 can sense motion in areas with partial obstructions, and is ideal for spaces with ceilings up to ten feet high. The LMUC-100 sensor is recommended for restrooms and open office areas. Multiple sensors may be used to control large partitioned office spaces when configured in zone patterns.

Features

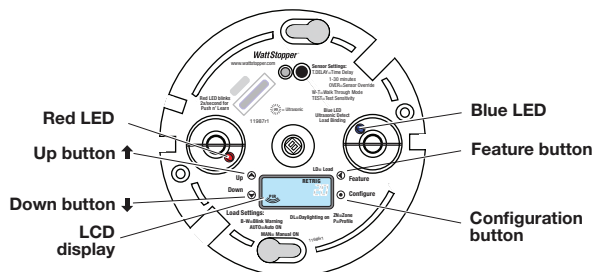
- Plug n' Go™ automatic configuration for quick installation and maximum energy savings
- Push n' Learn™ functionality for customization without the need for tools or a PC
- Digital Lighting Management components plug together on a free-topology Category 5e DLM local network
- Infrared (IR) transceiver for wireless configuration and control
- Ultrasonic diffusion technology spreads coverage to a wider area (patented); 40KHz signal
- Detection Signature Processing eliminates false triggers and provides immunity to RFI and EMI
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- RoHS compliant
- Qualifies for ARRA-funded public works projects



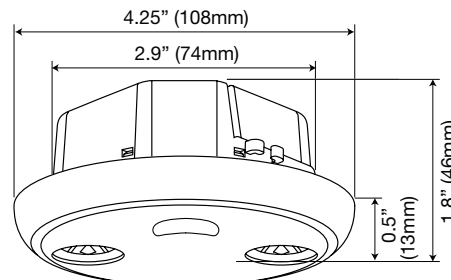
Specifications

- Input voltage: 24VDC from DLM network
- Current consumption: 20mA
- DLM local network connection: 2 RJ45 ports
- LCD display and pushbuttons for setting sensor and system parameters
- Infrared (IR) transceiver
- Ultrasonic frequency: 40 kHz
- Coverage: Major motion, 1,000 ft² (93 m²)
Minor motion, 450 ft² (42 m²)
- 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

Controls & Dimensions

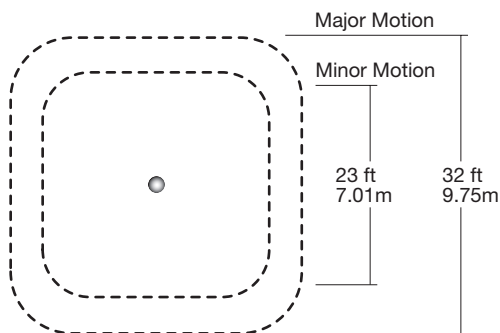


Product Dimensions



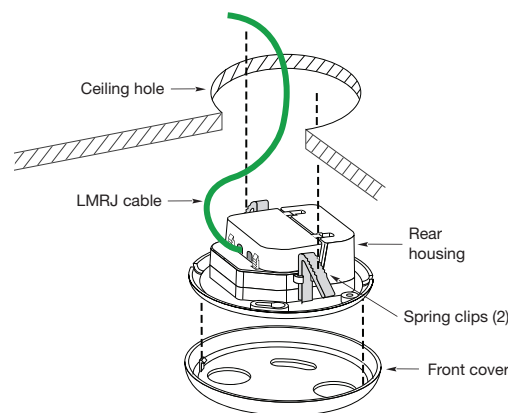
Sensor Parameter	Available Options	Default Setting
Time Delay	1-30 min. (1 min. increments) /Override	20 minutes
Walk Thru	On/Off	Off
Ultrasonic Sensitivity	10-100% (10% increments)/Off	70%
Test Mode	Activate	Off

Coverage & Mounting



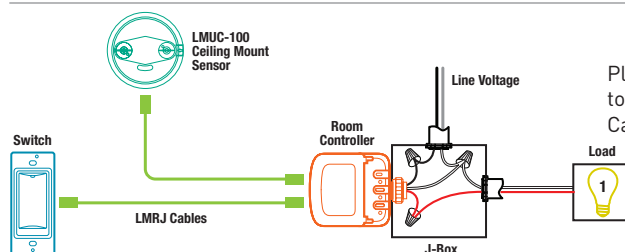
For optimal sensing of large spaces, place sensors so that coverage overlaps.

Mounting Options



Mount directly to ceiling tile using spring clips (included) or to a 4" octagonal box. See installation instructions for more details.

Wiring Sample Connection Diagram



Plug DLM local network components together in any configuration using Cat 5e cables with RJ45 connectors.

Ordering Information

Catalog No.	Color	Description
<input type="checkbox"/> LMUC-100-2	White	Digital Ultrasonic Ceiling Mount Occupancy Sensor, 1,000 ft ² coverage
<input type="checkbox"/> LMUC-100-2-U	White	Digital Ultrasonic Ceiling Mount Occupancy Sensor, 1,000 ft ² coverage, ARRA-compliant*

*Product produced in the U.S.