PASSIVE INFRARED CEILING SENSORS | CI-200 SERIES

360° coverage

User-adjustable time delay and sensitivity

Low-profile design

Built-in light level sensor

Isolated relay for use with HVAC or other control systems

ASIC enhances reliability and helps eliminate false triggers

Automatic or manual-on operation when used with a BZ-150 Power Pack

Description

Wattstopper's CI-200 Series Passive Infrared (PIR) Ceiling Sensors provide 360° coverage to detect occupancy in the controlled area. These low-profile sensors reliably control lighting in a variety of applications.

Operation

The CI-200 Series Sensors are 24 VDC and control lighting through Wattstopper power packs. Utilizing the latest PIR technology, they turn lighting on when a difference is detected between the infrared energy from a human being in motion and the background space within the controlled area. After the area is vacated for a user-adjustable time delay, lighting automatically turns off.

Coverage

Coverage from the CI-200 Series Sensors can reach up to 1200 square feet using the Extended Range Lens, and 500 square feet using the High Density Lens (circular pattern) for walking motion. For typical desktop-level activity, coverage can reach up to 300 square feet.

Applications

Applications include open office spaces, computer rooms, conference rooms, classrooms and warehouses. Areas with high ceilings or with two-level lighting can also be controlled. Due to low initial cost and the great energy saving potential, the sensors offer fast paybacks.

Features

- ASIC technology reduces components and enhances reliability
- Pulse Count Processing eliminates false off without reducing sensitivity
- Detection Signature Analysis eliminates false triggers and provides immunity to RFI and EMI
- Low-profile design ensures a clean and uncluttered ceiling appearance
- User-adjustable time delay from 15 seconds to 30 minutes by two-minute increments

- Sensitivity is programmed through a DIP switch which has four settings ranging from minimum to maximum
- Light-level output can create bi-level lighting for added convenience and energy savings
- Isolated relay can be used to interface with HVAC, EMS or an additional lighting load
- LED indicates occupancy detection

| PROJECT		LOCATION/ TYPE	

Specifications

- Dual-element, temperature compensated pyroelectric sensor
- CI-200 contains isolated relay with N/O and N/C outputs; rated for 1 Amp at 24 VDC/VAC
- Adjustable digital time delay: 15 seconds to 30 minutes with ± 2% tolerance
- Integrated light level sensor: 4-190 footcandles (43-2,045 lux)
- Mounting options: ceiling tile, round mud ring

- Max. CI-200s per power pack: B = 5, BZ = 7
  Max. CI-205s per power pack: B = 10, BZ = 13
- Dimensions: 3.3" x 2.2" (84mm x 56mm) diameter x depth; extends approximately .36" (9.1mm) from ceiling
- UL and cUL listed
- Five year warranty
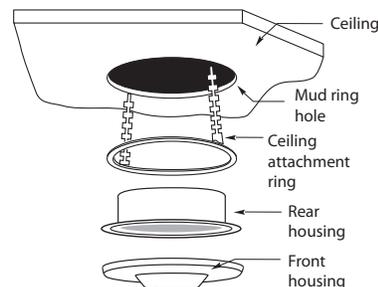
Wiring, Mounting & Settings

Wiring Diagram
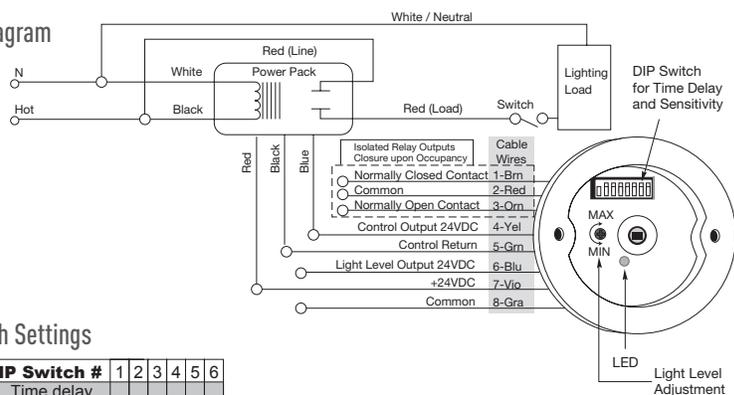
DIP Switch Settings

DIP Switch #	1	2	3	4	5	6
Time delay						
15 seconds	↑	↑	↑	↑	↑	↑
2 minutes	↓	↓	↑	↑	↑	↑
4 minutes	↓	↑	↑	↑	↑	↑
6 minutes	↓	↓	↓	↑	↑	↑
8 minutes	↓	↑	↑	↓	↑	↑
10 minutes	↓	↓	↑	↓	↑	↑
12 minutes	↓	↑	↓	↑	↑	↑
14 minutes	↓	↓	↓	↑	↑	↑
16 minutes	↓	↑	↑	↑	↑	↑
18 minutes	↓	↓	↑	↑	↑	↑
▶ 20 minutes	↓	↑	↓	↑	↑	↑
22 minutes	↓	↓	↑	↓	↑	↓
24 minutes	↓	↑	↑	↓	↑	↓
26 minutes	↓	↓	↑	↓	↑	↓
28 minutes	↓	↑	↓	↓	↑	↓
30 minutes	↓	↓	↓	↓	↑	↓
Service						↓

DIP Switch #	7	8
Sensitivity		
Minimum	↓	↓
Medium Low	↓	↑
Medium High	↑	↓
▶ Maximum	↑	↑

↑ = ON   ↓ = OFF

▶ = Factory Presets

Mounting

- Ceiling
- Mud ring hole
- Ceiling attachment ring
- Rear housing
- Front housing

Coverage

Coverage Patterns

Extended Range Lens (Standard)
CI-200, CI-205

44 ft.

8 ft

Typical desk-top level

22 ft   13 ft   7 ft 3 ft 0 3 ft 7 ft   13 ft   22 ft

High Density Lens
CI-200-1, CI-205-1

24 ft

8 ft

Typical desk-top level

12 ft 9 ft 7 ft 5 ft 3 ft 0 3 ft 5 ft 7 ft 9 ft 12 ft
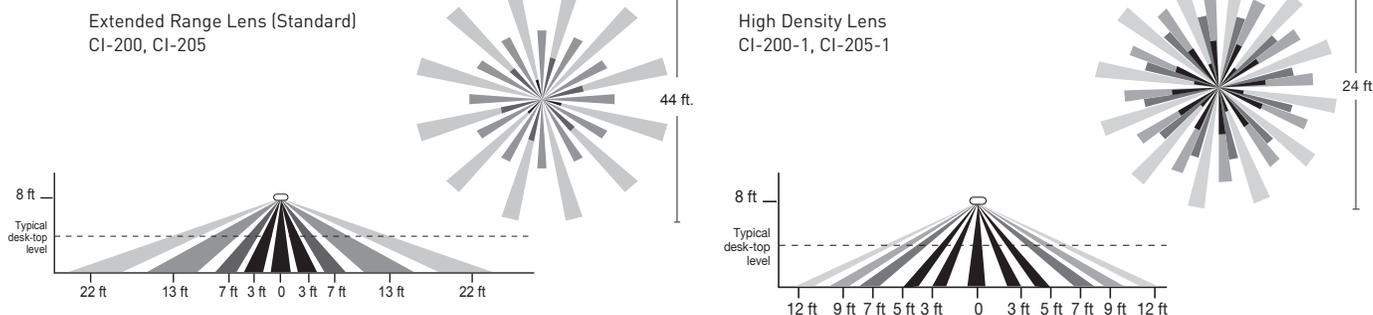
Ordering Information

Catalog #	Voltage	Current	Coverage	Features
☐ CI-200	24 VDC	20 mA	360°; up to 1200 ft² (111.5 m²)	Isolated relay, light level
☐ CI-200-1	24 VDC	20 mA	360°; up to 500 ft² (46.5 m²)	Isolated relay, light level
☐ CI-205	24 VDC	11 mA	360°; up to 1200 ft² (111.5 m²)	
☐ CI-205-1	24 VDC	11 mA	360°; up to 500 ft² (46.5 m²)	
☐ MB-1	Industrial Mounting Bracket			
☐ MB-2	Industrial Mounting Bracket for HID fixtures			

All units are white and use Wattstopper power packs. Current consumption can be slightly higher when only one sensor per power pack is used.