CX-100 Passive Infrared Occupancy Sensor

**Product Overview**

The Watt Stopper’s CX-100 and CX-105 are passive infrared occupancy sensors that control lighting in a wide variety of applications. These sensors provide superior coverage and performance with great energy savings.

**Operation**

The 24 VDC occupancy sensors control lighting systems through Watt Stopper power packs. The units operate by turning lighting on when they detect the difference between infrared energy from a human body in motion and the background space. After the area is vacated and the time delay elapses, lighting automatically turns off.

**Coverage Choices**

The CX sensors are available with a choice of coverage patterns. The standard lens offers coverage up to 1000 square feet for typical desktop activity. When using the -1 or -3 lens, motion moving toward sensors will begin to be detected at 55 to 60 feet.

**Applications**

The CX sensors are ideal for large areas and can cover up to 2000 square feet of walking motion. By choosing the proper lens pattern for each application, the sensors can reliably cover large offices, computer rooms, classrooms, aisle ways, warehouses, and open offices where coverage cut-off is desired. Corner mounting to a wall or ceiling adds versatility and more control to the coverage.

**Description**

ASIC technology reduces components and enhances reliability

Pulse Count Processing eliminates false offs without reducing sensitivity

Detection Signature Analysis eliminates false triggers; provides immunity to RFI and EMI

Digital time delay adjustable from 15 seconds to 30 minutes

Adjustable sensitivity enables occupancy detection to match the level of activity for each space

Integrated light level sensor (CX-100) can create bi-level control for added energy savings

**Features**

- Multi-level Fresnel lens for superior desktop occupancy detection with four lens patterns
- Isolated relay can interface with HVAC, EMS systems, monitoring systems, or with an additional lighting load
- Dual-element, temperature compensated pyro-electric sensor
- Swivel mounting bracket for convenient corner mounting to wall or ceiling
- LED indicates occupancy detection

**Coverage Choices**

- Choice of four coverages patterns
- Built-in light level sensor
- Isolated relay for use with HVAC or other control systems
- User-adjustable time delay and sensitivity
- ASIC technology reduces components and provides greater reliability
- Turns lights on and off based on occupancy

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**CX-100 Technical Information**

- Dual-element, temperature compensated pyroelectric sensor
- CX-100 contains isolated relay with N/O and N/C outputs; rated for 1 Amp at 24 VDC/VAC
- Time delay adjustment from 15 seconds to 30 minutes
- Integrated light level sensor (CX-100) – works from 3 to 200 footcandles
- Units per power pack: CX-100 up to 6 (B), up to 8 (BZ); CX-105 up to 14 (B), up to 18 (BZ)
- Dimensions: 3.3” x 3.3” x 2.1” (83.8mm x 83.8mm x 53.3mm) (W x L x D))
- UL and CUL listed; five year warranty

### Specifications

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Description</th>
<th>Voltage</th>
<th>Current</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CX-100</td>
<td>PIR sensor; full-featured; dense wide angle lens</td>
<td>24 VDC</td>
<td>19 mA</td>
<td>up to 2000 sq ft</td>
</tr>
<tr>
<td>CX-100-1</td>
<td>PIR sensor; full-featured; long range lens</td>
<td>24 VDC</td>
<td>19 mA</td>
<td>up to 90 linear ft</td>
</tr>
<tr>
<td>CX-100-3</td>
<td>PIR sensor; full-featured; two-sided aisleway lens</td>
<td>24 VDC</td>
<td>19 mA</td>
<td>up to 120 linear ft</td>
</tr>
<tr>
<td>CX-100-4</td>
<td>PIR sensor; full-featured; one-sided aisleway lens</td>
<td>24 VDC</td>
<td>19 mA</td>
<td>up to 50 linear ft</td>
</tr>
<tr>
<td>CX-105</td>
<td>PIR sensor; dense wide angle lens</td>
<td>24 VDC</td>
<td>8 mA</td>
<td>up to 2000 sq ft</td>
</tr>
<tr>
<td>CX-105-1</td>
<td>PIR sensor; long range lens</td>
<td>24 VDC</td>
<td>8 mA</td>
<td>up to 90 linear ft</td>
</tr>
<tr>
<td>CX-105-3</td>
<td>PIR sensor; two-sided aisleway lens</td>
<td>24 VDC</td>
<td>8 mA</td>
<td>up to 120 linear ft</td>
</tr>
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<td>PIR sensor; one-sided aisleway lens</td>
<td>24 VDC</td>
<td>8 mA</td>
<td>up to 50 linear ft</td>
</tr>
<tr>
<td>MB-1</td>
<td>Industrial Mounting Bracket (recommended for use with -3 and -4 lenses)</td>
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<td></td>
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</tr>
<tr>
<td>MB-2</td>
<td>Industrial Mounting Bracket for HID fixtures</td>
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</tbody>
</table>

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

### Wiring & Settings

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- UL and CUL listed; five year warranty

### Coverage & Mounting

- A swivel mounting bracket allows the sensor to be angled for wall or ceiling mounting.
- Grooves on the bracket help to achieve desired angle for coverage.

- MB-1 Industrial Mounting Bracket

### Ordering Information

- The MB-1 is used for installing to ceilings or fixtures in industrial settings.

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The Watt Stopper®, Inc.
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