Occupancy Sensors
meets energy codes • supports sustainable designs

# 5 <br> S WattStopper 

17 legrand ${ }^{\circ}$

## The NEW generation of occupancy sensors:

Watt Stopper/Legrand's new generation of occupancy sensors are packed with features and options that streamline sensor installation and strengthen performance - yet fit in a small, clean package.


Attractive new enclosures offer a flat, extremely low profile appearance that leaves the ceiling clean and uncluttered.


With a full $360^{\circ}$ of coverage, these sensors are able to control a wide range of applications, either individually, or for large areas, in zones that overlap.

## SmartSetTM <br> Watt Stopper SmartSet technology means no

 adjustments are needed at installation.SmartSet monitors the space to identify usage patterns. With this information, it automatically adjusts the time delay and sensitivity settings for both optimal performance and maximum energy efficiency.


The lights don't need to stay on for the entire length of the time delay if someone is just dropping off mail or other items. With our smart Walk Through Mode, lights turn off 3 minutes after an area is initially occupied if no movement is detected within 30 seconds.

applications. The simplicity of low voltage wiring allows for optimal placement. However, some applications, because of installer preference, are better suited to line voltage ceiling mount sensors. better suited to line voltage ceiling mount sensors.
Our new generation of sensors are available in both line and low voltage models to match each and every application and installation style.
 in addition to the occupancy based control, the new generation sensors do the job. They offer the convenience of a low voltage switch input lon the low voltage sensor models) so that wiring to a momentary wall switch is quick and easy.

## Occupancy sensor technologies

## Passive infrared ceiling mount sensors

Many Watt Stopper PIR sensors are enhanced with advanced technologies to ensure higher sensitivity to minor motion without the potential for false activations. These include Detection Signature Analysis and Pulse Count Processing.

WPIR
CX series
Cl-200 series
Cl-300 series
CB-100


PIR technology senses occupancy by detecting the difference between heat emitted from the human body in motion and the background space.

Relying on a clear line-of-sight view, passive infrared sensors make $100 \%$ coverage cut off possible. These sensors utilize a unique Fresnel lens which divides the coverage area into zones, enhancing detection of small movement.

## Wall switch technologies

## Watt Stopper automatic wall

 switches incorporate features, such

## Ultrasonic technology



Using the Doppler principle, ultrasonic sensors work by bouncing ultrasonic sound waves off objects in an area and measuring the time it takes for the waves to return. Movement by a person in the area causes the sound waves to return at a changed frequency, resulting in a Doppler shift and occupancy detection.

## Ultrasonic technology

These sensors utilize our Advanced Signal Processing Circuitry to automatically adjust the signal detection threshold in compensation for changing levels of activity and airflow. This helps eliminate false ON activations common in other ultrasonic sensors.

W series
WT series
UT-300 series

## Dual technology

While PIR and ultrasonic sensors provide optimal control for a variety of spaces, some applications pose difficulty for single technology sensors.


We created and patented Dual Technology - a combination that takes advantage of the best features of both PIR and ultrasonic technologies. Using the Dual Sensing Verification Principle, both technologies must detect occupancy to turn lighting on, while continued detection by only one technology will hold lighting on.

## Dual technology

Dual Technology sensors ensure the greatest sensitivity and coverage for tough applications, without the threat of false triggers. This leads to the greatest energy savings.

DT-200 series
DT-300 series

## Applying occupancy sensors



In offices where the wall switch has a view of the work space, replace the switch with a passive infrared wall switch sensor. Take advantage of the built-in light level feature to keep lights off when ample sunlight is present.

Control lighting in restrooms with
ultrasonic sensors and eliminate hours of unneeded on-time.
Ceiling-mounted ultrasonics can
sense motion around restroom stalls for reliable coverage.



## PIR <br> Best Applications

- Warehouses
- High ceiling mount locations
- Library bookstack or other aisles
- Common building areas
- Lobbies
- Computer rooms

In open or partitioned offices,
use ultrasonic or dual technology sensors. Placed on the ceiling, these sensors cover the area in zones that overlap.



PIR Wall Switch Best Applications

- Offices
- Copy rooms and other common building areas
- Storage closets
- Small conference rooms


Common building spaces, such as
copy rooms, are ideal for
occupancy based control. With a passive infrared sensor placed in the corner of the ceiling or as a wall switch replacement, users can save hours of wasted lighting each day.

In large conference rooms, occupants may be still for long periods of time. Dual technology sensors will be able to detect the small motion and keep lights on as long as the space is occupied.

In warehouses, a passive infrared sensor mounted to a ceiling or fixture will control the lighting between shelves - so that lighting in unoccupied areas will turn off or turn to a lower level. Users can achieve this control with fluorescent as well as HID lighting.


## Ultrasonic <br> Best Applications

- Restrooms
- Open office spaces
- Offices
- Enclosed hallways
- Stairways



## Dual Technology Best Applications

- Classrooms
- Large conference rooms
- Large offices
- Lunch rooms


## WS-200 Automatic Wall Switch

Attractive, low-profile appearance

## Built-in light level sensor

Terminal style wiring for easy installation

Adjustable sensitivity

Zero Crossing Circuitry increases longevity

ASIC technology

## Specifications

- Dual 120/277 voltage
- 30 sec to 30 min time delay
- Built-in light level sensor 2 to 200 fc (107 to 1,614 lux)
- No minimum load requirement
- Compatible with all electronic ballasts and PL lamp ballasts
- $2.6^{\prime \prime} \times 1.7^{\prime \prime} \times 2$ " $\mathrm{L} \times \mathrm{W} \times \mathrm{D}$ $(66.0 \mathrm{~mm} \times 44.2 \mathrm{~mm} \times 50.8 \mathrm{~mm}$ )
- UL and CUL listed, 5 year warranty


## Applications

- Small offices
- Small conference rooms
- Break rooms
- Utility rooms
- Storage closets


## Wiring Diagram

The WS-200 can be wired for single-level lighting (shown), or for manual bi-level control.


## Coverage Pattern



Coverage shown is for half-step, walking motion, maximum of 900 sq ft . For typical, desktop activity, when mounted at 4 ft $(1.2 \mathrm{~m})$, coverage is $300 \mathrm{ft}^{2}\left(27.9 \mathrm{~m}^{2}\right)$.

## Order Information

| CATALOG \# | VOLTAGE* | LOAD REQUIREMENTS | COVERAGE* |
| :--- | :--- | :--- | :--- |
| WS-200 | 120 VAC; 60 Hz or | $0-800$ Watt Ballast or | up to $900 \mathrm{ft}^{2}\left(83.6 \mathrm{~m}^{2}\right), 180^{\circ}$ |
|  | $277 \mathrm{VAC} ; 60 \mathrm{~Hz}$ | $0-1200$ Watt Ballast |  |

Add -I to Cat. \# for Ivory, -W for White, -A for Light Almond, -G for Grey, -B for Black; Single-gang cover plate ASP-211 included. Order ASP-422 for blank 2-gang cover plate, ASP-432 for 2-gang cover plate with switch option, specify color. $\quad$ *Models for 220-240 VAC (WS-230) and 347 VAC (WS-347) are available.

## WA Automatic Wall Switches

SmartSet ${ }^{\text {TM }}$ automatically selects optimal settings for each space

Choice of Auto-ON or Manual-ON operation

## Built-in light level sensor

Selectable walk-through mode for increased savings

## Specifications

- Universal 100-300 VAC; $50 / 60 \mathrm{~Hz}$ operation
- 1.0 mm hard poly IR2 lens
- SmartSet (automatic) time delay or fixed (5-30 minute)
- SmartSet (automatic) or reduced sensitivity
- Zero Crossing Circuitry
- Built-in light level sensor 8 to 180 fc (86 to 1,937 lux)
- No minimum load requirement
- Compatible with all electronic ballasts and PL lamp ballasts
- $2.6^{\prime \prime} \times 1.7^{\prime \prime} \times 1.9^{\prime \prime}$ (66.0mm x $43.2 \mathrm{~mm} \times 48.3 \mathrm{~mm}$ )
- UL and CUL listed, 5 year warranty

Terminal style wiring simplifies installation

Two relays and dual switch buttons control two separate lighting loads or circuits (WA-300)

Audible and/or visual alerts of impending shut-off

Vandal resistant hard lens
Applications

- Public area offices
- Small offices
- Small conference rooms
- Storage closets


Coverage shown is for halfstep, walking motion, maximum of $300 \mathrm{ft}^{2}$. Typical coverage at the desktop level when mounted at 4 ft is $150 \mathrm{ft}^{2}$.

WA-200 Wiring

The WA-200 can be wired for single-level lighting (shown), or for manual bi-level control.
 mander

WA-300 Wiring


The WA-300 can be wired for bi-level (shown) or dual circuit control.

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## Order Information

| CATALOG \# | DESCRIPTION | VOLTAGE | LOAD REQUIREMENTS | COVERAGE |
| :---: | :---: | :---: | :---: | :---: |
| WA-200 | Automatic wall switch | 100/120 VAC; $50 / 60 \mathrm{~Hz}$ or 230/277 VAC; $50 / 60 \mathrm{~Hz}$ | 0-800 Watt Ballast or 0-1200 Watt Ballast | $\begin{aligned} & \text { up to } 300 \mathrm{ft}^{2} \\ & \left(28 \mathrm{~m}^{2}\right) \end{aligned}$ |
| WA-300 | Automatic wall switch, dual relays | $100 / 120$ VAC; $50 / 60 \mathrm{~Hz}$ or 230/277 VAC; $50 / 60 \mathrm{~Hz}$ | 0-800 Watt Ballast or 0-1200 Watt Ballast | $\begin{aligned} & \text { up to } 300 \mathrm{ft}^{2} \\ & 128 \mathrm{~m}^{2} \end{aligned}$ |

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## WI Automatic Wall Switches

Choice of auto-ON or manual-ON operation

4 level lens for superior desktop detection

## Built-in light level sensor



Two relays for control of two separate lighting loads or circuits (WI-300)

DIP switch adjustable sensitivity and time delay

## Applications

- Offices
- Conference rooms
- Dual 120/277 VAC
- Time delay of 15 sec to 30 min (WI200); 30 sec to 30 min (WI-300)
- Built-in light level sensor 10 to 150 fc (107-1,614 lux) (on secondary relay of WI-300)
- LED indicator
- No minimum load requirement
- Compatible with all electronic ballasts and PL lamp ballasts
- $2.8^{\prime \prime} \times 4.8^{\prime \prime} \times 1.5^{\prime \prime}$ (72.1mm x $121.9 \mathrm{~mm} \times 38.1 \mathrm{~mm})$
- UL and CUL listed, 5 year warranty


## WI-200 Wiring



The WI-200 can be wired for single-level lighting (shown), or for manual bi-level control.

WI-300 Wiring


The WI-300 can be wired for bi-level (shown) or dual circuit control.

## Coverage Pattern



4-level Fresnel lens detects horizontal and vertical motion.
Maximum coverage under ideal conditions and for half-step walking motion is $1000 \mathrm{ft}^{2}$.

## Order Information

| CATALOG \# | DESCRIPTION | VOLTAGE | LOAD REQUIREMENTS | COVERAGE |
| :--- | :--- | :--- | :--- | :--- |
| WI-200 | Automatic wall switch | $120 \mathrm{VAC} ; 60 \mathrm{~Hz}$ or | $0-800$ Watt Ballast or | up to $1000 \mathrm{ft}^{2}\left(92.9 \mathrm{~m}^{2}\right) 180^{\circ}$ |
|  |  |  | $277 \mathrm{VAC} ; 60 \mathrm{~Hz}$ | $0-1200$ Watt Ballast |

Add -W to cat \# for White, -A for Light Almond; Order ASP-121 for blank switch 2-gang box plate; Order ASP-122 for 2-gang box plate with switch option (WI-200 only)

## WN Motion Sensor Nightlight Switch

Manual-on or automatic-on operation
Energy efficient, super bright LED
Built in nightlight illuminates whenever overhead lights are off


Adjustable time delay from 15 minutes to 2 hours

## Impact resistant hard lens

Terminal wiring for quick and easy installation

Zero Crossing Circuitry increases product longevity

## Specifications

- 120 or 277 VAC, 60 Hz
- Time delay of $15 \mathrm{~min}, 30 \mathrm{~min}, 1$ hour or 2 hours
- 1.0 mm hard poly IR2 lens
- $2.63^{\prime \prime} \times 1.69^{\prime \prime} \times 1.88^{\prime \prime}(66.8 \mathrm{~mm} \times$ $42.9 \mathrm{~mm} \times 47.8 \mathrm{~mm})$
- UL and CUL listed, 5 year warranty


## Applications

- Hotel guest bathrooms
- Military housing
- Healthcare facilities


## Coverage Pattern



The WN-100 has a coverage range of $180^{\circ}$ and a maximum coverage area of 300 $\mathrm{ft}^{2}$. To maintain its coverage capacity and optimally detect motion, the WN-100 must have a clear and unobstructed view of occupants.

## Order Information

| CATALOG \# | VOLTAGE | LOAD REQUIREMENTS | COVERAGE |
| :--- | :---: | :---: | :---: |
| WN-100-120 | 120 VAC; 60 Hz | $0-500 \mathrm{~W}$ incandescent, fluorescent | up to $300 \mathrm{ft}^{2}\left(28 \mathrm{~m}^{2}\right), 180^{\circ}$ |
| and compact fluorescent |  |  |  |

Add -I to Cat. \# for Ivory, -W for White, -A for Light Almond; Single-gang cover plate ASP-211 included. Order ASP-422 for blank 2-gang cover plate, ASP-432 for 2-gang cover plate with switch option, specify color.

## WD Dimmable Automatic Switch

Occupancy sensing dimmable wall switch
Slide dimmer adjusts light level
Low profile, flat decorator design
Zero voltage turn on/off increases life of sensor


Works with dimming ballasts
Vandal resistant, hard tens
ASIC enhances reliability and helps to eliminate false triggers

## Specifications

- WD-170, WD-270 operate at 120 VAC; WD-180, WD-280 operate at 277 VAC
- WD-170/180 time delay of 30 sec to 30 min
- WD-270/280 fixed initial 15 min delay for dim; secondary adjustable delay ( 5 min to 30 min ) for off
- 1.0 mm hard poly IR 2 lens
- LED indicator
- Adjustable sensitivity
- 2.7"x1.8"x2.2" (68.9mm x $45.7 \mathrm{~mm} \times$ $55.9 \mathrm{~mm})$
- UL and CUL listed, 5 year warranty


## Wiring Diagram



The WD can be wired for single-level lighting (shown) or for manual bi-level control.

## Coverage Pattern



## Applications

- Small offices
- Public area offices
- Small conference rooms


## Order Information

| CATALOG \# | VOLTAGE | LOAD REQUIREMENTS | COVERAGE | OFF MODE |
| :--- | :--- | :--- | :--- | :--- |
| WD-170 | 120 VAC; 60 Hz | 10-500 W Ballast | up to $300 \mathrm{ft}^{2}\left(28 \mathrm{~m}^{2}\right)$ | Automatic-OFF |
| WD-180 | 277 VAC; 60 Hz | 10-500 W Ballast | up to $300 \mathrm{ft}^{2}\left(28 \mathrm{~m}^{2}\right)$ | Automatic-OFF |
| WD-270 | 120 VAC; 60 Hz | $10-500$ W Ballast | up to $300 \mathrm{ft}^{2}\left(28 \mathrm{~m}^{2}\right)$ | Dim-bef-disconnect |
| WD-280 | 277 VAC; 60 Hz | $10-500$ W Ballast | up to $300 \mathrm{ft}^{2}\left(28 \mathrm{~m}^{2}\right)$ | Dim-bef-disconnect |

Add -I to Cat. \# for Ivory, -W for White, -A for Light Almond; Single-gang cover plate ASP-211 included. Order ASP-422 for blank 2-gang cover plate, ASP-432 for 2-gang plate with switch option, specify color.

# CN, CW Vacancy Sensors for Residential Use 

Manual-on/automatic-off operation; lights cannot be overriden ON

CN contains energy efficient nightlight that illuminates whenever overhead lights are off

Simple pushbutton programming

## Specifications

- 120 VAC, 60 Hz
- Time delay of 1 min to 30 min
- 1.0 mm hard poly IR2 lens
- Compatible with 0-500W incandescent, fluorescent, compact fluorescent, MLV, and ELV loads

Adjustable time delay from 1 to 30 minutes

## Impact resistant hard lens

CEC 2005 Title 24 compliant

## Applications <br> Applications

CW

- Hallways
- Laundry rooms
- Bathroom
- Bedrooms
- Garages
- No minimum load requirement
- $2.63^{\prime \prime} \times 1.69^{\prime \prime} \times 1.88^{\prime \prime}$ ( $66.8 \mathrm{~mm} \times$ $42.9 \mathrm{~mm} \times 47.8 \mathrm{~mm}$ )
- UL and CUL listed, 5 year warranty



## Wiring Diagram



## Coverage Pattern



The sensors have a coverage range of $180^{\circ}$ and a maximum coverage area of 300 $\mathrm{ft}^{2}$. To maintain its coverage capacity and optimally detect motion, the sensor must have a clear and unobstructed view of occupants.

## Order Information

| CATALOG \# | DESCRIPTION | VOLTAGE | LOAD REQUIREMENTS | COVERAGE |
| :--- | :--- | :--- | :--- | :--- |
| CN-100 | Residential vacancy <br> sensor with nightlight | $120 \mathrm{VAC} ; 60 \mathrm{~Hz}$ | $0-500 \mathrm{~W}$ incandescent, fluorescent <br> and compact fluorescent | up to $300 \mathrm{ft}^{2}\left(28 \mathrm{~m}^{2}\right), 180^{\circ}$ |
| CW-100 | Residential vacancy <br> sensor | $120 \mathrm{VAC} ; 60 \mathrm{~Hz}$ | $0-500 \mathrm{~W}$ incandescent, fluorescent <br> and compact fluorescent | up to $300 \mathrm{ft}^{2}\left(28 \mathrm{~m}^{2}\right), 180^{\circ}$ |

Add -I to Cat. \# for Ivory, -W for White, -A for Light Almond. Single-gang cover plate ASP-211 included. Order ASP-422 for blank 2-gang cover plate, ASP-432 for 2-gang cover plate with switch option, specify color.

## WPIR Passive Infrared Sensor

PIR occupancy sensor turns lights on and off based on occupancy

## User-adjustable sensitivity

User-adjustable time delay of 30 sec to 30 min


ASIC technology reduces components and provides greater reliability

## LED indicator

30 segment multi-element Fresnel lens

## Specifications

- Adjustable time delay of 30 sec to 30 min
- Units per power pack: up to 8 ( B ); up to 10 (BZ)
- $2.5^{\prime \prime} \times 2.5^{\prime \prime} \times 1.14^{\prime \prime}$
$(63.5 \mathrm{~mm} \times 63.5 \mathrm{~mm} \times 29.0 \mathrm{~mm}$ )
- UL and CUL listed, 5 year warranty


## Applications

- Small offices
- Copy rooms
- Break rooms
- Computer rooms
- Racquetball courts
- Library book stacks

Product Controls


Wiring Diagram


Coverage Pattern


## Order Information

| CATALOG \# | VOLTAGE | CURRENT | COVERAGE |
| :---: | :---: | :---: | :---: |
| WPIR | 24 VDC | 14 mA | up to $300 \mathrm{ft}^{2}\left(28 \mathrm{~m}^{2}\right)$ |

## CX Passive Infrared Sensor

Choice of four coverage patterns
User-adjustable time delay and sensitivity

ASIC technology reduces components and provides greater reliability

Swivel mounting bracket for convenient corner mounting to wall or ceiling

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Built-in light level sensor (CX-100)
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Isolated relay for use with HVAC or other control systems (CX-100)

## Specifications

- Time delay of 15 sec to 30 min
- Built-in light level sensor 3 to 200 fc (32-2,152 lux) (CX-100)
- Units per power pack: CX-100 up to 6 (B), up to 8 (BZ); CX-105 up to 14 (B), up to 18 (BZ)
- $3.3^{\prime \prime} \times 3.3^{\prime \prime} \times 2.1^{\prime \prime}$ ( $83.8 \mathrm{~mm} x$ $83.8 \mathrm{~mm} \times 53.3 \mathrm{~mm})$
- UL and CUL listed, 5 year warranty


## Applications

- Large offices
- Open office spaces
- Warehouses
- Classrooms
- Computer rooms


## Wiring \& Controls



## Coverage Patterns



Two Sided Aisleway: CX-100-3, CX-105-3


Long Range Lens: CX-100-1, CX-105-1

Coverages shown are maximum. Under ideal conditions, coverage for half-step walking motion
(standard lens) can reach up to $2000 \mathrm{ft}^{2}\left(185.8 \mathrm{~m}^{2}\right)$, for desktop activity up to $1000 \mathrm{ft}^{2}\left(92.9 \mathrm{~m}^{2}\right.$ ).

| Order Information |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CATALOG \# | VOLTAGE | CURRENT | COVERAGE | FEATURES |
| CX-100 | 24 VDC | 19 mA | up to $2000 \mathrm{ft}^{2}\left(185.8 \mathrm{~m}^{2}\right)$ | light level, isolated relay |
| CX-100-1 | 24 VDC | 19 mA | up to 90 linear ft ( 27.4 m ) | light level, isolated relay |
| CX-100-3 | 24 VDC | 19 mA | up to 120 linear ft ( 36.6 m ) | light level, isolated relay |
| CX-100-4 | 24 VDC | 19 mA | up to 50 linear ft ( 15.2 m ) | light level, isolated relay |
| CX-105 | 24 VDC | 8 mA | up to $2000 \mathrm{ft}^{2}\left(185.8 \mathrm{~m}^{2}\right)$ |  |
| CX-105-1 | 24 VDC | 8 mA | up to 90 linear ft ( 27.4 m ) |  |
| CX-105-3 | 24 VDC | 8 mA | up to 120 linear $\mathrm{ft}(36.6 \mathrm{~m})$ |  |
| CX-105-4 | 24 VDC | 8 mA | up to 50 linear ft ( 15.2 m ) |  |
| All units are white and use Watt Stopper power packs. Order the MB-1 Industrial Mounting Bracket for installing the CX in industrial settings such as warehouses. |  |  |  |  |

## CI-200 Passive Infrared Sensor

$360^{\circ}$ coverage

User adjustable time delay and sensitivity
ASIC enhances reliability and helps eliminate false triggers

Isolated relay for use with HVAC or other control systems (Cl-200)

Built-in light level sensor (Cl-200)

## Specifications

- Time delay 15 sec to 30 min
- Built-in light level sensor 4 to 190 fc (43 to 2,045 lux) (CI-200)
- SPDT isolated relay (CI-200)
- Units per power pack: $\mathrm{Cl}-200$ up to 5 (B), up to 7 (BZ); Cl-205 up to 10 (B), up to 13 (BZ)
-3.3" diameter x $2.2^{\prime \prime}$ total depth ( $83.8 \mathrm{~mm} \times 55.9 \mathrm{~mm}$ ) Extends approx $.36^{\prime \prime}$ from ceiling
- UL and CUL listed, 5 year warranty


## Applications

- Open or partitioned office spaces
- Conference rooms
- Computer rooms
- Classrooms


## Wiring \& Controls



## Coverage Patterns



Coverage shown represents half-step, walking motion. Typical coverage at the desktop is $500 \mathrm{ft}^{2}\left(46.5 \mathrm{~m}^{2}\right)$ with the Extended Range lens and $300 \mathrm{ft}^{2}\left(111.5 \mathrm{~m}^{2}\right)$ with the High Density lens.

## Order Information

| CATALOG \# | VOLTAGE | CURRENT | COVERAGE |
| :---: | :---: | :---: | :---: |
| CI-200 | 24 VDC | 20 mA | up to $1200 \mathrm{ft}^{2}\left(111.5 \mathrm{~m}^{2}\right)$ |
| CI-200-1 | 24 VDC | 20 mA | up to $500 \mathrm{ft}^{2}\left(46.5 \mathrm{~m}^{2}\right)$ |
| CI-205 | 24 VDC | 11 mA | up to $1200 \mathrm{ft}^{2}\left(111.5 \mathrm{~m}^{2}\right)$ |
| CI-205-1 | 24 VDC | 11 mA | up to $500 \mathrm{ft}^{2}\left(46.5 \mathrm{~m}^{2}\right)$ |

All units are white and use Watt Stopper power packs.

# CI-300, CI-355 360 ${ }^{\circ}$ PIR Sensor 

Architecturally appealing low profile appearance

SmartSet automatically selects optimal time delay and sensitivity

Depluggable terminal wiring for quick and easy installation


Accepts low voltage switch input for manual-on operation (CI-300, CI-305)

Line and low voltage models available
Walk-through mode increases savings potential

## Specifications

- CI-300, CI-305: 24 VDC/VAC
- CI-355: 120/230/277/347 VAC, $50 / 60 \mathrm{~Hz}$
- Time delays: SmartSet (automatic), fixed ( $5,10,15,20$, or 30 minutes), walk-through, test-mode
- Sensitivity adjustment: SmartSet (automatic) or reduced sensitivity
- Built-in light level sensor; 10 to 300 fc (107 to 3,229 lux) (CI-300, CI-355)
- Isolated relay with N/O and N/C outputs rated for 1 Amp at 30 VDC/VAC (CI-300)
- Mounting options: ceiling tile; 4 square junction box with double gang mudring (Cl-300, CI-305)
- Mounting options: 4 square junction box with double gang mudring; 4 inch octagonal junction box (Cl-355)


## Wiring Diagrams



## Coverage Patterns



## Applications

- Open offices
- Conference rooms
- Classrooms
- Offices
- Storage rooms
- Computer rooms

Extended Range Lens (Standard) CI-300, CI-305, CI-355


High Density/Reduced Range Lens CI-300-1, Cl-305-1, Cl-355-1


## Order Information

| CATALOG \# | VOLTAGE | CURRENT/LOAD REQ | COVERAGE |
| :---: | :---: | :---: | :---: |
| CI-300 | 24 VDC | 20 mA | up to $1200 \mathrm{ft}^{2}\left(111.5 \mathrm{~m}^{2}\right)$ |
| CI-300-1 | 24 VDC | 20 mA | up to $500 \mathrm{ft}^{2}\left(46.5 \mathrm{~m}^{2}\right)$ |
| CI-305 | 24 VDC | 9 mA | up to $1200 \mathrm{ft}^{2}\left(111.5 \mathrm{~m}^{2}\right)$ |
| CI-305-1 | 24 VDC | 9 mA | up to $500 \mathrm{ft}^{2}\left(46.5 \mathrm{~m}^{2}\right)$ |
| CI-355 | 120 VAC, $50 / 60 \mathrm{~Hz}$ | 0-800 W Ballast/Tungsten | up to $1200 \mathrm{ft}^{2}\left(111.5 \mathrm{~m}^{2}\right)$ |
|  | 230/277 VAC, $50 / 60 \mathrm{~Hz}$ | 0-1200 W Ballast |  |
|  | 347 VAC, $50 / 60 \mathrm{~Hz}$ | 0-1500 W Ballast |  |
| CI-355-1 | 120 VAC, $50 / 60 \mathrm{~Hz}$ | 0-800 W Ballast/Tungsten | up to $500 \mathrm{ft}^{2}\left(46.5 \mathrm{~m}^{2}\right)$ |
|  | 230/277 VAC, $50 / 60 \mathrm{~Hz}$ | 0-1200 W Ballast |  |
|  | 347 VAC, $50 / 60 \mathrm{~Hz}$ | 0-1500 W Ballast |  |

# Cl-12,Cl-24 Sensor for HVAC, BAS 

## Ceiling mount $360^{\circ}$ sensor

Interfaces directly with EMS or HVAC system through internal isolated relay

User adjustable time delay and sensitivity via
DIP switch


Four-level Fresnel lens offers superior desktop detection

## Advanced PIR technology

ASIC technology reduces components and enhances reliability

## Specifications

- Time delay 30 seconds to 30 minutes
- Isolated relay rated for 1 Amp at 24 VAC/VDC
- 3.3" diam x $2.2^{\prime \prime}$ depth $183.8 \mathrm{~mm} x$ 55.9 mm ) extends approx $.36^{\prime \prime}$ from ceiling
- UL and CUL listed, 5 year warranty


## Applications

- Open or partitioned office spaces
- Conference rooms
- Computer rooms
- Classrooms


## CB Low Temp Sensor

PIR occupancy sensor for areas of extreme low temperature

Watertight enclosure prevents moisture and dust from affecting detection


## Choice of three coverage patterns

Convenient DIP switch adjustments for time delay and sensitivity

Isolated relay contact for use with HVAC or other control systems

## Specifications

- Time delay 15 sec to 10 min
- Temperature range $-40^{\circ} \mathrm{F}$ to $+95^{\circ} \mathrm{F}$
- Units per power pack: up to 5 (B); up to 7 (BZ)
- 3.94 "x3.74"x2.36" (100.1mm x $95.0 \mathrm{~mm} \times 60.0 \mathrm{~mm}$ )
- UL and CUL listed, 5 year warranty


## Applications

- Cold storage and freezers
- Unconditioned spaces


## Wiring Diagram

## Cl-12/CI-24 Order Information

| CATALOG \# | VOLTAGE | LOAD REQUIREMENTS | COVERAGE |
| :--- | :--- | :--- | :--- |
| CI-12 | 12 VDC | 28 mA | See coverage |
| $\mathrm{CI}-24$ | $24 \mathrm{VAC}, \mathrm{VDC}$ | 37 mA | patterns CI-200 |

Units are white; Extended Range lens is standard; Add -1 to Cat\# for High Density/Reduced coverage lens.


## CB-100 Order Information

| CATALOG \# | VOLTAGE | CURRENT | COVERAGE |
| :--- | :--- | :--- | :--- |
| CB-100 | 24 VDC | 20 mA | See coverage patterns CX-100 |

Units are beige; Dense Wide Angle lens is standard; Add-1 to Cat\# for Long Range, -3 for Two Sided Aisle way

## W Ultrasonic Occupancy Sensor

Advanced, omni-directional,
Doppler technology
Adjustable time delay from 15 seconds to 15 minutes
$500,1000,2000 \mathrm{sq} \mathrm{ft}$, and haltway coverages available


Ideal for open office areas, conference rooms and restrooms

Advanced Signal Processing Circuitry automatically adjusts detection threshold

## Applications

- Open and partitioned spaces
- Restrooms
- Storage areas
- Conference rooms
- Hallways


## Wiring Diagram



## Coverage Patterns



## Order Information

| CATALOG \# | VOLTAGE | CURRENT | COVERAGE |
| :--- | ---: | :--- | :--- | :--- |
| W-500A | 24 VDC | 16 mA | $360^{\circ}, 500 \mathrm{ft}^{2}\left(46.5 \mathrm{~m}^{2}\right)$ |
| W-1000A | 24 VDC | 16 mA | $360^{\circ}, 1000 \mathrm{ft}^{2}\left(92.9 \mathrm{~m}^{2}\right)$ |
| W-2000A | 24 VDC | 16 mA | $360^{\circ}, 2000 \mathrm{ft}^{2}\left(185.8 \mathrm{~m}^{2}\right)$ |
| W-2000H | 24 VDC | 16 mA | $360^{\circ}, 90$ linear $\mathrm{ft}(27.4 \mathrm{~m})$ |

All units are white and use Watt Stopper power packs.

## WT Ultrasonic Occupancy Sensor

Ultrasonic technology with 32 KHz frequency

Utilizes advanced, omni-directional, Doppler technology

Advanced Signal Processing automatically adjusts detection threshold


Units per power pack:
WT-605 up to 4 (B), 5 (BZ); WT-600 up to 3 (B), 4 (BZ); WT-1105, WT2205, WT-2255 up to 3 (B), 5 (BZ); WT-1100, WT-2200, WT-2250 up to 2 (B), 3 (BZ)

- UL and CUL listed, 5 year warranty


## Wiring \& Controls



User-adjustable DIP switch time delay and sensitivity settings
$600,1100,2200 \mathrm{sq} \mathrm{ft}$ and hallway coverages available

Isolated relay allows sensor to interface with building control systems

## Specifications

- Ultrasonic technology with 32 KHz frequency
- Time delay 15 sec to 30 min
- Isolated relay with N/O and N/C outputs; rated for 1 amp a 30 VDC/VAC
- 4.8 " diam x $1.5^{\prime \prime}$ depth (121.9mm x 38.1 mm )


## Applications

- Open and partitioned spaces
- Restrooms
- Storage areas
- Conference rooms
- Hallways


## Coverage Patterns



## Order Information

| CATALOG \# | VOLTAGE | CURRENT | COVERAGE | FEATURE |
| :--- | :--- | :--- | :--- | :--- | :--- |
| WT-605 | 24 VDC | 27 mA | $360^{\circ}$ one-sided, $600 \mathrm{ft}^{2}\left(55.7 \mathrm{~m}^{2}\right)$ |  |
| WT-600 | 24 VDC | 37 mA | $360^{\circ}$ one-sided, $600 \mathrm{ft}^{2}\left(55.7 \mathrm{~m}^{2}\right)$ | isolated relay |
| WT-1105 | 24 VDC | 30 mA | $360^{\circ}$ two-sided, $1100 \mathrm{ft}^{2}\left(102.2 \mathrm{~m}^{2}\right)$ |  |
| WT-1100 | 24 VDC | 40 mA | $360^{\circ}$ two-sided, $1100 \mathrm{ft}^{2}\left(102.2 \mathrm{~m}^{2}\right)$ | isolated relay |
| WT-2205 | 24 VDC | 30 mA | $360^{\circ}$ two-sided, $2200 \mathrm{ft}^{2}\left(204.4 \mathrm{~m}^{2}\right)$ |  |
| WT-2200 | 24 VDC | 40 mA | $360^{\circ}$ two-sided, $2200 \mathrm{ft}^{2}\left(204.4 \mathrm{~m}^{2}\right)$ | isolated relay |
| WT-2255 | 24 VDC | 30 mA | $360^{\circ}$ two-sided, 90 linear $\mathrm{ft}(27.4 \mathrm{~m})$ |  |
| WT-2250 | 24 VDC | 40 mA | $360^{\circ}$ two-sided, 90 linear $\mathrm{ft}(27.7 \mathrm{~m})$ | isolated relay |

All units are white and use Watt Stopper power packs.

## UT-300, UT-355 $360^{\circ}$ Ultrasonic Sensor

Architecturally appealing low profile appearance

SmartSet automatically selects optimal time delay and sensitivity

Depluggable terminal wiring for quick and easy installation


Accepts low voltage switch input for manual-on operation (UT-300, UT-305)

Ultrasonic diffusers give more comprehensive coverage

Walk-through mode increases savings potential

## Specifications

- UT-300, UT-305: 24 VDC/VAC
- UT-355: 120/230/277/347 VAC, $50 / 60 \mathrm{~Hz}$
- Time delays: SmartSet (automatic), fixed ( $5,10,15,20$, or 30 minutes), walk-through, test-mode
- Sensitivity adjustment: SmartSet (automatic) or reduced sensitivity
- Ultrasonic frequency of 40 kHz


## UT-300 Wiring



## UT-355 Wiring



## Applications

- Restrooms
- Large Offices
- Open Offices

Coverage Patterns


Coverages represent half-step walking motion. Actual coverages can vary for each application based on room shape, use and obstacles.

## Order Information

| CATALOG \# | VOLTAGE | CURRENT/LOAD REQ | COVERAGE |
| :---: | :---: | :---: | :---: |
| UT-300-X | 24 VDC | 43 mA | see diagram |
| UT-305-X | 24 VDC | 37 mA |  |
| UT-355-X | 120 VAC, $50 / 60 \mathrm{~Hz}$ | 0-800 W |  |
|  | 230/277 VAC, $50 / 60 \mathrm{~Hz}$ | Ballast/Tungsten |  |
|  | 347 VAC, $50 / 60 \mathrm{~Hz}$ | 0-1200 W Ballast |  |
|  |  | 0-1500 W Ballast |  |

$X=1$ for $500 \mathrm{ft}^{2}$ of coverage; -2 for $1000 \mathrm{ft}^{2} ;-3$ for $2000 \mathrm{ft}^{2}$.
All units are white and low voltage models use Watt Stopper power packs.
For line voltage installations requiring an adapter plate, order cat \# CA-1.

## DT-200 Dual Technology Sensor

Combines passive infrared and ultrasonic technologies

Trouble-free lighting control in applications difficult for single technology sensors

## Built-in light level sensor



SmartSet automatically selects optimal settings for each space

Accepts low voltage switch input for manual-on operation

Walk-through mode increases savings potential

## Specifications

- 24 VDC/VAC
- Ultrasonic frequency of 40 kHz
- Time delays: SmartSet (automatic), fixed (5, 10, 15, 20, or 30 minutes), walk-through, test-mode
- Sensitivity adjustment: SmartSet (automatic) or reduced sensitivity
- SPDT isolated relay (DT-200)
- Isolated relay with N/O and N/C outputs rated for 1 Amp at 24 VDC/VAC (DT-200)
- Built-in light level sensor; 2 to $200 \mathrm{fc}(21$ to 2,152) lux) (DT-200)
- Units per power pack: DT-200 up to 3 (B), up to 4 (BZ); DT-205 up to $4(B)$, up to $5(B Z)$
- $4.4^{\prime \prime} \times 3.4^{\prime \prime} \times 2$ " 1111.8 mm x $86.4 \mathrm{~mm} \times 50.8 \mathrm{~mm})$
- UL and CUL listed, 5 year warranty

Applications

- Classrooms
- Conference and training rooms
- Large offices


## Wiring Diagram

## Coverage Pattern



Coverages shown are maximum. Under ideal conditions, coverage for half-step walking motion (standard lens) can reach up to $2000 \mathrm{ft}^{2}$, for desktop activity up to $1000 \mathrm{ft}^{2}$.

## Order Information

| CATALOG \# | VOLTAGE | CURRENT | COVERAGE | FEATURES |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DT- 200 | 24 VDC | 43 mA | $2000 \mathrm{ft}^{2}\left(185.8 \mathrm{~m}^{2}\right)$ | light level, isolated relay |
| DT- 205 | 24 VDC | 35 mA | $2000 \mathrm{ft}^{2}\left(185.8 \mathrm{~m}^{2}\right)$ |  |

## DT-300 3600 Dual Technology Sensors

Architecturally appealing low profile appearance

SmartSet ${ }^{\text {TM }}$ automatically selects optimal settings for each space

Ultrasonic diffusers give more
comprehensive coverage


Accepts low voltage switch input for manual-on operation (DT-300, DT-305)

Depluggable terminal wiring for quick and easy installation

Walk-through mode increases savings potential
line and low voltage models available

## Specifications

- DT-300, DT-305: 24 VDC/VAC
- DT-355: 120/230/277/347 VAC, $50 / 60 \mathrm{~Hz}$
- Time delays: SmartSet (automatic), fixed ( $5,10,15,20$, or 30 minutes), walk-through, test-mode
- Sensitivity adjustment: SmartSet (automatic) or reduced sensitivity
- Ultrasonic frequency of 40 kHz
- Isolated relay with N/O and N/C outputs rated for 1 Amp at 30 VDC/VAC (DT-300)
- Built-in light level sensor; 10 to 300 fc (107 to 3,229 lux) (DT-300, DT-355)
- Mounting options: ceiling tile; 4 square junction box with double gang mudring (DT-300, DT-305)
- Mounting options: 4 square junction box with double gang
mudring; 4 inch octagonal junction box (DT-355)
- Units per power pack: DT-300 up to 2 (B), up to 3 (BZ); DT-305 up to 3 (B), up to 4 (BZ)
- $4.5^{\prime \prime}$ diameter x 1.02 " 144.3 mm x 25.9 mm ) Extends approx $.36^{\prime \prime}$ from ceiling
- UL and CUL listed, 5 year warranty

Applications

- Classrooms
- Open office spaces
- Computer rooms


## Wiring Diagrams



DT-300 Wiring
Wiring diagram includes bi-level control and manual-on option with momentary switch.


DT-355 Wiring

## Coverage Pattern



Coverage shown is maximum and represents half-step walking motion. Under ideal conditions, coverage for half-step walking motion can reach up to $1000 \mathrm{ft}^{2}\left(92.9 \mathrm{~m}^{2}\right)$.

| Order Information |  |  |  |
| :---: | :---: | :---: | :---: |
| CATALOG \# | VOLTAGE | CURRENT/LOAD REQ | COVERAGE |
| DT-300 | 24 VDC | 43 mA | up to $1000 \mathrm{ft}^{2}\left(92.9 \mathrm{~m}^{2}\right)$ |
| DT-305 | 24 VDC | 35 mA | up to $1000 \mathrm{ft}^{2}\left(92.9 \mathrm{~m}^{2}\right)$ |
| DT-355 | 120 VAC, $50 / 60 \mathrm{~Hz}$ | 0-800 W Ballast/Tungsten | up to $1000 \mathrm{ft}^{2}\left(92.9 \mathrm{~m}^{2}\right)$ |
|  | 230/277 VAC, $50 / 60 \mathrm{~Hz}$ | 0-1200 W Ballast | up to $1000 \mathrm{ft}^{2}\left(92.9 \mathrm{~m}^{2}\right)$ |
|  | 347 VAC, $50 / 60 \mathrm{~Hz}$ | 0-1500 W Ballast | up to $1000 \mathrm{ft}^{2}\left(92.9 \mathrm{~m}^{2}\right)$ |
| All units are white and low voltage models use Watt Stopper power packs. For line voltage installations requiring an adapter plate, order cat \# CA-1. |  |  |  |

## Power Packs

Fully self-continued transformer and relay
Many models of power pack products for wide range of applications

Plenum rated


Two-relay output power pack that accepts signals from multiple control devices (LC-100)

Daylighting control with photosensor (LC-100)
2 channel dimming with $0-10 \mathrm{~V}$ ballasts (LC-100)
Load shed dimming or ON/OFF switching capability (LC-100)

## B Power Pack Specifications

- Secondary voltage of 24VDC
- Secondary output of $150 \mathrm{~mA}, 114 \mathrm{~mA}$ with relay connected
- Low voltage leads rated for 300 volts
- UL rated $94 \mathrm{~V}-0$ plastic enclosure, units are white
- ABS UL 2043 plenum rated plastic and wiring
- $1.6^{\prime \prime} \times 2.75$ " x $1.6^{\prime \prime}(41 \mathrm{~mm} \times 70 \mathrm{~mm} \times$ 41 mm ) with a $1 / 2^{\prime}$ snap-in nipple
- UL and CUL listed, 5 year warranty


## BZ Specifications

- 120/277 VAC voltage input, 60 Hz
- Secondary voltage of 24VDC
- Secondary output of $150 \mathrm{~mA}, 150 \mathrm{~mA}$ with relay connected
- Low voltage leads rated for 300 volts
- UL rated $94 \mathrm{~V}-0$ plastic enclosure, units are grey
- ABS UL 2043 plenum rated plastic and wiring
- Relay is Zero Crossing
- Hold-ON/hold-OFF inputs
- LED status and overcurrent indicator
- 1.6 " $\times 2.75$ " $\times 1.6^{\prime \prime}(41 \mathrm{~mm} \times 70 \mathrm{~mm} \times$ 41 mm ) with a $1 / 2^{\prime}$ snap-in nipple
- UL and CUL listed, 5 year warranty

| Order Information |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CATALOG \# | INPUT VOLTAGE | LOAD RATINGS |  |  | OUTPUT |
|  |  | BALLAST(A) | INCAN(A) M | TOR(HP) |  |
| Power Packs |  |  |  |  |  |
| B120E-P | $120 \mathrm{VAC}, 6 \mathrm{~Hz}$ | 20 | 13 | 1 | $24 \mathrm{VDC} ; 150 \mathrm{mA***}$ |
| B277E-P | $277 \mathrm{VAC}, 60 \mathrm{~Hz}$ | 20 | - | - | 24VDC; 150mA*** |
| B230E-P | 220-240VAC, $50 / 60 \mathrm{~Hz}$ | 20 | 13 | 1 | $24 \mathrm{VDC} ; 150 \mathrm{mA***}$ |
| B347D-P | $347 \mathrm{VAC}, 6 \mathrm{~Hz}$ | 15 |  | - | $24 \mathrm{VDC} ; 150 \mathrm{mA***}$ |
| BZ-100 | 120/277VAC, 60 Hz | 20 | 20 | 1 | $24 \mathrm{VDC} ; 150 \mathrm{~mA}{ }^{\dagger}$ |
| LC-100 | $120 / 277$ VAC; $50 / 60 \mathrm{~Hz}$ | 20 | 20 | 1 | 24VDC; 150mA ${ }^{\dagger}$ |
| Auxiliary Packs |  |  |  |  |  |
| S120/277/ | 120/277/347VAC | 20/20/15 | 13/-/ | 1/-/ |  |
| 347E-P |  |  |  |  |  |
| Form C Power Packs |  |  |  |  |  |
| A120C-P** | $120 \mathrm{VAC}, 60 \mathrm{~Hz}$ | 8NO/5NC | 5NO/3NC | 1 $\mathrm{NO} / 2.5 \mathrm{NC}$ | $24 \mathrm{VDC} ; 100 \mathrm{~mA}$ |
| A277C-P** | $277 \mathrm{VAC}, 60 \mathrm{~Hz}$ | ${ }^{6} \mathrm{NO} / 3 \mathrm{NC}$ | $5 \mathrm{NO} / 2.5 \mathrm{NC}$ | 2NO/.5NC | $24 \mathrm{VDC} ; 100 \mathrm{~mA}$ |
| 2 Relay Power Packs |  |  |  |  |  |
| C120E-P | $120 \mathrm{VAC}, 60 \mathrm{~Hz}$ | 20* | 13* | 1* | $24 \mathrm{VDC} ; 150 \mathrm{~mA}$ |
| C277E-P | $277 \mathrm{VAC}, 60 \mathrm{~Hz}$ | 20* | - | - | $24 \mathrm{VDC} ; 150 \mathrm{~mA}$ |
| Power Supplies |  |  |  |  |  |
| AT-120 | $120 \mathrm{VAC}, 6 \mathrm{~Hz}$ | - | - | - | $24 \mathrm{VDC} ; 800 \mathrm{~mA}$ |
| AT-277 | $277 \mathrm{VAC}, 60 \mathrm{~Hz}$ | - | - | - | $24 \mathrm{VDC} ; 800 \mathrm{~mA}$ |

[^1]
## Outdoor Motion Sensors

Optional model with lampholders

Weatherproof and raintight for reliable performance

## Adjustable light level and time delay

 settingsLine and low voltage models available

## 90 degree or long-range field of view (EN)

Security override-ON option allows lights to be turned on for length of time delay

Isolated relay enables interface with security systems or other loads

## EW Specifications

- Operating temperature range: $40^{\circ} \mathrm{F}$ to $+130^{\circ} \mathrm{F}$
- UL 773A rated raintight; UL 1571 rated for wet locations
- Adjustable time delay of 12 sec to 16 min
- Light level adjustment of .5 to 200 fc (5-2152 lux)
- Isolated relay with NO/NC outputs; rated for 1 Amp a 30 VDC/VAC (EW-200)


## Applications

- Walkways and entranceways
- Dock lighting
- Zero Crossing Circuitry
- 1/2' threaded nipple fits standard NEMA weatherproof fixture fitting
- Lamp holders us PAR 20 or 38 lamps, up to 150 W each lamp
- EW sensor: 6.7" $\times 3.2^{\prime \prime} \times 2.2^{\prime \prime}$ ( $170 \mathrm{~mm} \times 80 \mathrm{~mm} \times 55 \mathrm{~mm}$ )
- UL and CUL listed, 5 year warranty


## EN Specifications

- Operating temperature range: $40^{\circ} \mathrm{F}$ to $+130^{\circ} \mathrm{F}$
- UL 773A rated raintight; UL 1571 rated for wet locations
- Adjustable time delay of 12 sec to 16 min
- Light level adjustment of .4 to 42 fc (4.3-452 lux)
- SPDT isolated relay
- Zero Crossing Circuitry


## Applications

- Walkways and entranceways
- Dock lighting
- Manual override-ON allows lights to be turned on for 4 hours
- 3/4' threaded nipple fits standard NEMA weatherproof fixture fitting
- $4.3^{\prime \prime} \times 3.0^{\prime \prime} \times 2.3^{\prime \prime}(110 \mathrm{~mm} x$ $77 \mathrm{~mm} \times 58 \mathrm{~mm}$ )
- UL and CUL listed, 5 year warranty
- Garages and yards
- Driveways
- Doorways
- Corridors


## EW Order Information

| CATALOG \# | VOLTAGE | LOAD REQ/CURRENT * | COVERAGE | FEATURES |
| :---: | :---: | :---: | :---: | :---: |
| EW-200 | - 120, - 277 VAC | 0-1000 W ballast | $270^{\circ}$ | Isolated relay |
| EWF-205 | - 120 VAC | $0-1000 \mathrm{~W}$ ballast | $270^{\circ}$ | Lamp holders |
| EW-205-24 | 24 VDC | 8 mA | $270^{\circ}$ | Controls outdoor HIDs |
| EW-105-24 | 24 VDC | 8 mA | $180^{\circ}$ | Controls outdoor HIDs |

Specify voltage by adding -120 or -277 to Cat. \#. Add -W to Cat. \# for Arctic White, -G for Architectural Grey
*For 120 VAC applications, tungsten loads are also acceptable.

## EN Order Information

| CATALOG \# | VOLTAGE | LOAD REQUIREMENT* | COVERAGE | FEATURES |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EN-100 | $-120,-277$ VAC | $0-1000 \mathrm{~W}$ ballast | $90^{\circ}$ | Isolated relay |
| EN-200 | $-120,-277$ VAC | $0-1000 \mathrm{~W}$ ballast | Long range | Isolated relay |

Specify voltage by adding -120 or -277 to Cat. \#. Add -W to Cat. \# for Arctic White, -G for Architectural Grey
*For 120 VAC applications, tungsten loads are also acceptable.

## IT-200 InteliTimer Logger

Determines energy savings potential from occupancy sensor use

## Adjustable light pipe observes lighting level

Logs when a space is occupied/ vacant and when lighting is on/off

IT-ProSoft Software provides single-step data retrieval, storage, analysis, printing

Logs when a space is occupied/ vacant and when lighting is on/off

Small and lightweight for ease of use and portability

## IT-200 Specifications

- PIR technology
- Lithium battery; 10 year average life
- Test button to activate occupancy and light level LEDs for 90 seconds
- Adjustable sensitivity
- Recessed reset switch
- Stores up to 4096 entries
- Stores site name to identify area being monitored
- Connects to PC for data retrieval


## IT-ProSoft Software Specifications

- List entries include number, date, time of entry, and lighting/occupancy status
- Users set energy cost per kWh, size of controlled load, and site name
- HVAC adder calculates savings from reduction of cooling
- Reports show graphs of occupancy/lighting, potential dollar savings, statistical information
- Operable in 6 languages
- Windows compatible
- Downloadable at www.wattstopper.com


## IT-200 Controls



Sample Logger Reports


## Order Information

CATALOG \# DESCRIPTION
IT-200 Occupancy and light logger, PC connector cable included
All units are white

## TS Digital Time Switches

Automatically turns lights off after preset time

Bright electroluminescent LCD shows timer's countdown

Optional audible or visual alerts before lights turn off


Terminal style wiring for simplified installation
Digital operation and simple pushbutton set-up

Time scroll features allows time to adjust up or down

## Specifications

- TS-400: 100-300 AC; 50/60 Hz
- TS-400-24: 24 VAC/VDC/VAC half-wave rectified input
- Time out adjustments range from 5 minutes to 12 hours (5 minute increments to 1 hour, then 15 minute increments to 12 hours)
- Optional visual warning: flashes lights at 5 min and 1 min prior to time-out
- Optional audible warning: beeps every 5 sec at 1 min prior to time-out
- Compatible with all electronic ballasts and motor loads

Applications

- TS-400-24 contains SPDT isolated relay rated for 1 Amp a 30 VDC
- $2.66^{\prime \prime} \times 1.79^{\prime \prime} \times 1.76^{\prime \prime}(67.5 \mathrm{~mm} \times$ $45.5 \mathrm{~mm} \times 44.7 \mathrm{~mm})$
- UL and CUL listed, 5 year warranty
- Equipment rooms
- Storage areas
- Closets


## TS-400 Wiring Diagram



## TS-400-24 Wiring Diagrams



TS-400-24 wiring with power pack


TS-400-24 wiring with lighting control panel

## Order Information

| CATALOG \# | VOLTAGE | LOAD REQ/CURRENT |
| :--- | :--- | :--- |
| TS-400 | $100 / 120$ VAC or | $0-800$ Watt ballasts or |
|  | $220 / 277$ VAC; $50 / 60 \mathrm{~Hz}$ | $0-1200$ Watt ballast |
| TS-400-24 | 24 VAC/VDC/VAC rect. | Current: $12 \mathrm{~mA} \mathrm{DC/41mA} \mathrm{AC}$ |

Add -I to Cat. \# for Ivory, -W for White, -A for Light Almond; Single-gang cover plate ASP-211 included. Order ASP-422 for blank 2-gang cover plate, ASP-432 for 2-gang plate with switch option, specify color.

## Product Line Summary




[^0]:    Add -I to Cat. \# for Ivory, -W for White, -A for Light Almond, -G for Grey, -B for Black; Single-gang cover plate ASP-211 included. Order ASP-422 for blank 2-gang cover plate, ASP-432 for 2-gang cover plate with switch option, specify color.

[^1]:    * Ratings per relay. ** Contain an isolated relay with normally open (NO) and normally closed (NC) contacts. ***Output is 150 mA before relay is connected and 114 mA after relay is connected.
    Output is 150 mA with relay connected.

