

DIMMING WASP[™] Occupancy and Daylight Sensor





HUBBELL Lighting

www.hubbell-automation.com

LIGHTING CONTROL HAS NEVER BEEN MORE ESSENTIAL

Energy conservation initiatives, ever-evolving lighting codes and LED technology are revolutionizing the lighting industry. Lighting control now means much more than a simple flip of a switch.

With the challenge of staying in compliance with tightening lighting standards, reducing operating and maintenance costs and improving the performance of lighting, it's never been more important to implement lighting controls.



Ever Evolving Lighting Codes

Over the past decade, energy codes have become more and more stringent in an attempt to conserve energy and limited natural resources. Lighted areas that previously were exempt from most lighting controls have slowly been included - requiring lighting and lighting control technology to constantly evolve in order to meet these requirements.

While these standards provide guidance for the control of these lighted areas, putting them into effect can be challenging and cumbersome. This means that design professionals, building owner, and facility managers need up to date controls options to ensure code compliance.

Making the Most of LED Technology

The cost of energy has also continued to escalate prompting building owners and facility managers to search for lighting and lighting control solutions that will allow them to keep more of their hard earned capital in their pockets.

New Solid-state LED solutions can last up to 3 times longer than Metal Halide or Fluorescent sources while saving as much as 69% on energy consumption. When these LED solutions are combined with lighting controls, energy usage can be reduced by as much as 80%* - which equates into a nice amount of energy cost savings.

*http://www.energycodes.gov/

Reduce energy consumption, maximize illumination performance, and meet optimal operating costs and lighting code standards!

The Dimming WASP[™] sensor provides occupancy sensing and daylight harvesting for indoor and outdoor lighting applications. Sensors may be configured to turn lights off or go to preset dimmed settings to provide optimal safety and security while still providing energy savings for the user. The Dimming WASP is ideal for a variety of applications such as parking garages, area/site lighting, pathways, warehouses, storage areas and more.

HCS's Dimming WASP takes the sting out of meeting energy codes while maximizing the energy savings available from Solid-state LED lighting.



UV Stabilized Material

Interchangeable Lens Options

IP65 Rated Design

Dimming WASP Energy Saving Features That Take the Sting out of Code Compliance



Occupancy Sensing

The Dimming WASP occupancy sensing feature maximizes energy savings by allowing only those spaces which are occupied to be lit to either 80% or 100% – while all others are either illuminated to a default safety level or turned off.



Daylight Harvesting

The Dimming WASP has an integral photocell which allows for even more energy savings during daylight hours by turning off lights when there is sufficient natural light.



Preset Dimming

The Dimming WASP sensor reduces energy consumption and maintains safety standards by lowering light output to a predetermined dimming level of 70%, 60%, 50%, or 20% after a pre-set period of no activity.

Auto Off Delay

The Dimming WASP sensor offers a maximum energy savings option of turning lighting fixtures off entirely after 60 minutes of being in the unoccupied, dimmed level state.



OUTDOOR APPLICATIONS

Outdoor lighting has always been a balancing act between safety/liability and energy savings. While it's critical to provide pedestrian safety, exterior lighting consumes a lot of energy. According to the U.S. Department of Energy, parking lot and garage lighting alone accounts for more than 51 TWh of electrical energy use annually. This is the equivalent of 83 million barrels of oil, or 35 metric tons of CO2 emissions, or the annual electricity cost of almost 4.3 million homes.* The Dimming WASP[™] Occupancy and Daylighting Sensor provides code required energy efficiency while maintaining strong security and safety lighting levels.

Garage Lighting

Lighting in parking garages is important for pedestrian and vehicle safety. In the past this has meant leaving lighting on 24 hours a day. The *Dimming WASP* controls when lights come on, how long they stay on and at what level they dim to. Motion sensing allows for preset dimming control to reduce energy consumption and costs without sacrificing safety. When motion is detected, only those spaces which are occupied are lit to a predetermined level – all others are either off or dimmed to a default safety level. Daylight harvesting allows for enhanced lighting control for perimeter lighting, turning lights off when enough natural light is detected.

Pathway Lighting

Providing ample lighting in parking lots is critical to public safety; but it can be a significant expense. *Dimming WASP* sensors ensure the appropriate level of lighting when activity is detected and adjusts lighting levels during periods of inactivity to conserve energy. When movement is detected, lighting is brought up ahead of pedestrians, illuminating their pathway. When the area is vacant, light levels are dimmed down. The *Dimming WASP* provides additional energy savings with daylight harvesting by turning off or dimming lights when there is sufficient natural light detected.

Area/Site Lighting

Outdoor lighting improves the appeal of a property and plays a critical role in providing safety and security. The *Dimming WASP* is ideal for walk ways, parks, and bike paths to maximize safety and minimize energy consumption. When movement is detected, lighting is brought up ahead of pedestrians, safely illuminating their path. When the area is empty, light levels are dimmed down to preset levels to reduce energy consumption. Daylight sensors turn lights on and off when sufficient natural light is detected to increase energy savings.

*www4.eere.energy.gov

RATED IP 65 WATER-DUST RESISTANT





INDOOR APPLICATIONS

Some interior spaces have always been more difficult to control due to safety concerns and extreme conditions such as moisture, heat or cold. The *Dimming WASP* Occupancy and Daylighting Sensor allows for these conditions while saving energy and providing code compliance. The Low Mount Lens option allows for a wide coverage range with a 3 to 1 radius-to-mounting height, giving a 24' Radius / 48' Diameter when the sensor is mounted at 8 feet.

Cold or Non- Environmentally Controlled Spaces

Good for applications such as Freezers, Cold Storage Warehouses, Shipping and Receiving Areas, and Storage Facilities. With an operating temperature range of between -40°C to 65°C (-40°F to 149°F), the *Dimming WASP* is an ideal lighting control solution that complies with possible code requirements such as reducing lighting power by at least 50% when the area is unoccupied or shutting off fixtures in daylighting zones when there is enough natural daylight. Motion sensing allows for preset dimming control to reduce energy consumption and costs without sacrificing lighting quality and safety.

Humid or Wet Locations

Good for applications such as Green Houses, Industrial Kitchens, and Shower Facilities. The *Dimming WASP* is rated IP65, which makes it a great lighting control solution for indoor areas of high humidity or areas that are subject to wash downs.

Dusty Locations

With an IP rating of 65, the *Dimming WASP* is ideal for applications such as automotive garages, various workshops and construction facilities that are subject to very dusty environments.

Other Indoor Applications Wide Hallways

Gymnasiums Storage Closets Laboratories Warehouses Manufacturing



The Dimming WASP™ improves Protection, Performance and Savings



Superior Detection

The Dimming WASP's Fresnel lenses are densely multifaceted to ensure maximum coverage and motion detection. A variety of lens options prevent the need for time-wasting masking. Dual pyrometers maximize detection zones.



Weatherproof

The Dimming WASP sensor stands up to the toughest climates, with reliable operation at temperatures as low as -40°F/C. Durable UVresistant plastics ensure reliable operation even in the most extreme weather conditions. The IP65 rating raises the bar for weather protection.



Versatile Options

The *Dimming WASP* line offers a model for every application. The sensor is available in one-relay, two-relay, 208VAC, 480VAC, and low voltage versions. Surface and end-mount versions increase installation flexibility.



Lens Options

The *Dimming WASP* line also offers different lenses with versatile masking options providing customized coverage for your space. These options include: High Mount, Low Mount, 360° Coverage, 180° Coverage, Aisle Patterns, and Half Aisle Patterns.

Product Information

- Supports outdoor mounting heights up to 30ft and indoor mounting heights up to 45 ft.
- · Controls 0-10V dimmable ballasts
- User controlled dimming presets
- End mount and surface mount versions
- · Interchangeable High/Low area detection options
- Low voltage and line voltage models available
- · Low temperature /water-tight/indoor-outdoor

Range Diagrams

Sensor Lens Coverage and Detection Patterns (When Mounted at 8ft with Low Mount Lens)





Sensor Lens Coverage and Detection Patterns (When Mounted at 30ft and 45ft with High Mount Lens)



General Specifications

| Power Requirements | Line Voltage sensors: 120/277/347VAC, 208/240VAC, 480VAC, 50/60Hz |
|------------------------|--|
| | Low voltage sensors: 24VDC (uses OVPP or MP-series power pack – not included) |
| Load Ratings | 120VAC: 0-800W ballast or 0-600W tungsten, 60Hz |
| (Line Voltage sensors) | 2//VAC: 0-1200W ballast |
| | 34/VAC: 0-1500W Dallast |
| | 480/AC: 0-2400W ballast |
| | 4 HP motor load @ 120VAC, 1/6 HP @ 347VAC |
| 0-10V Dimming | Capable of sinking up to 30mA |
| Output | 24VDC active high-logic control signal |
| (Low voltage sensors) | Relay: N/O + N/C contacts; 500mA rated @ 24VDC |
| User Interface | Twelve pin dip switch for choice of functionality |
| Timer Timeouts | 8-second test mode – 1, 5, 10 and 15 minute timeouts |
| Dimming Presets | Unoccupied: 70%, 60%, 50%, 20% |
| Full Off Timer Delay | Enabled: After 60 minutes in the Unoccupied low level state, sensor will turn lighting off Disabled: Sensor will maintain low level setting when there is no occupancy |
| Passive Infrared | Dual element pyrometer and spherical Fresnel lens designed for robust detection of walking person* |
| Daylight Sensor | Range: 1 to 50FC for downward facing daylight sensor or 5-500FC for upward facing daylight sensor End mount sensor: Downward and upward facing daylight sensor (direction selectable via dipswitch) |
| | Surface mount: Downward facing daylight sensor only |
| Operating environment | Indoor/outdoor use |
| Operating temperature: | - 40°F to 149°F (-40°C to 65°C) |
| Color | White, black, gray |
| Mounting | End mount sensor: 1/2" chase nipple; Optional extender adaptor (available separately) Surface mount sensor: Mounts directly via (2) 1.25" stainless screws and locking nuts |
| Certifications | Conforms to UL STD 508, UL STD 244A Conforms to IP65 |
| Warranty | Five years |

Sensor Ordering Information



Example: WSPEMUNVLWO - D - BK - Wasp End Mount Sensor, 120-347VAC, Low Temp/Water Tight, Dimming, Black

Lens Ordering Information







Hubbell Lighting Brands:

Alera Lighting

Architectural Area Lighting

Beacon Products

Columbia Lighting

Compass Life Safety

Devine Lighting

Dual-Lite

Hubbell Control Solutions

Hubbell Industrial

Hubbell Outdoor

Kim Lighting

Kurt Versen

Litecontrol

Precision-Paragon [P2]

Prescolite

Progress Lighting

Security Lighting Systems

Spaulding Lighting

Sportsliter Solutions

Sterner

Thomas Research Products Whiteway

701 Millennium Blvd. Greenville, SC 29607 hubbelllighting.com

Hubbell Control Solutions Lighting Control Product Lines:

Networked Lighting Controls NX[™] Distributed Intelligence controls

Wireless Lighting Controls wiHUBB® Distributed lighting controls wiSCAPE™ Outdoor lighting controls wiSTAR™ Self-powered lighting controls

Daylight Harvesting Controls Zone 5[™] Daylighting controls LuxStat Simple daylighting control

Lighting Control Panels

CX Commercial Lighting Controls LX Networked Lighting Controls

Occupancy/Vacancy Sensors

LightHAWK®2 Wall switch sensor LightOWL® Wall-mount occupancy sensor OMNI® Ceiling-mount occupancy sensor WASP™2 High-mount occupancy sensor Dimming WASP™ Indoor/outdoor sensor

Hubbell, A Name You Can Trust

Hubbell Control Solutions is a strong proponent of innovative, integrated energy-saving lighting controls. From introducing the industry's first self-adaptive occupancy sensor to today's advanced wired and wireless distributed intelligence lighting controls, the company continues to offer the most comprehensive line of occupancy sensors on the market. Other products include daylight harvesting and high bay controls.

The brand is part of Hubbell Lighting, one of the largest lighting manufacturers in North America. Hubbell Lighting brands offer products for commercial, industrial and residential markets. The company's history of innovation extends back to 1886 and Harvey Hubbell's invention of the very first lighting control device—the pull chain switch.



9601 Dessau Rd., Building One | Austin, Texas 78754 T 512-450-1100 | F 512-450-1215 www.hubbell-controls.com

© 2016 Hubbell Control Solutions. All rights reserved. Subject to change without notice. Trademarks are property of their respective owners. Doc # 2027 3-22-2016