TITLE 24 COMPLIANCE

UL LISTED ®

OCCUPANCY SENSING

DAYLIGHT HARVESTING

SMART CYCLING

IP65

WASP₂ ™

End Mount WASP2 Sensor with lens option

PROJECT INFORMATION

Project Name

Catalog No.   Date

The *WASP*2 Indoor/Outdoor Occupancy Sensor is specifically designed for ON/OFF control of high bay fixtures in warehouse, distribution centers and similar facilities. The *WASP*2 sensor is also available for low mount applications when using the appropriate lens. The sensor is available in end mount and surface mount versions with either single or dual outputs.
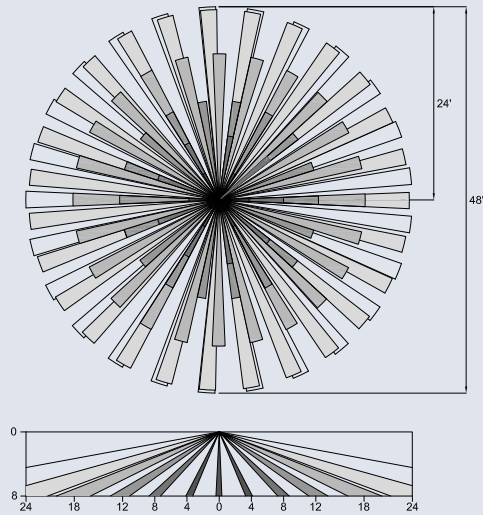
All *WASP*2 sensors feature a daylight sensor which can be used to increase energy savings by turning off lights when there is sufficient natural light detected. These sensors also have a unique feature known as "Smart Cycling" which ensures even lamp burn time within the fixture. Using the "Smart Cycling" feature, the amount of time each lamp is burned is maintained and kept balanced.
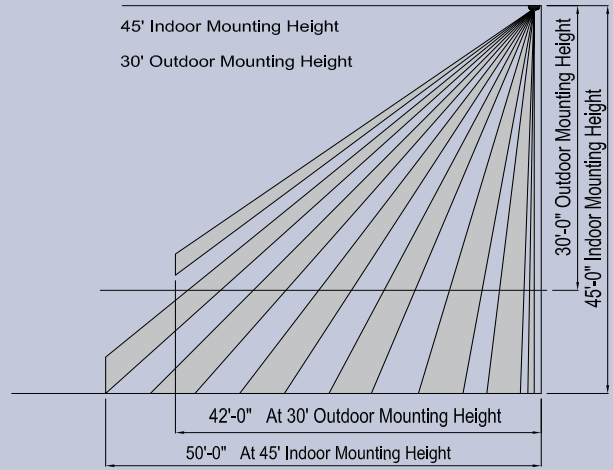
PRODUCT FEATURES

- Digital Passive Infrared (PIR) sensor
- Supported mounting heights:
    - High mount lens: 30 ft (9.14m) outdoors; 45 ft indoors (13.72m)
    - Low mount lens: 16 ft indoors/outdoors (4.88m)
- Multiple (single and dual) output versions
- Unique Smart Cycling for improved lamp life
- End mount and surface mount versions
- Interchangeable high/low area detection lens options
- Low voltage and line voltage models available
- Daylight sensor for daylight harvesting applications
- Low temperature/water-tight/indoor-outdoor versions
- Withstands low temperature and conforms to IP65 water- tight standards
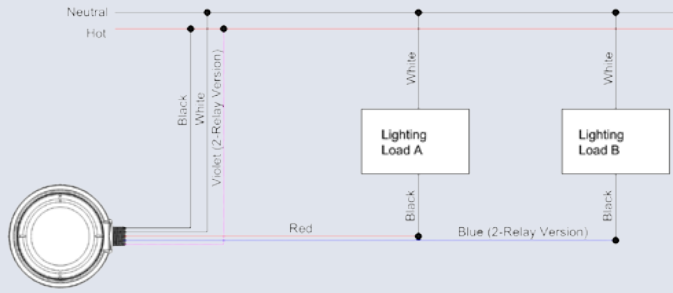- UL and cUL listed
- Five-year limited warranty

Interchangeable Lens Options

High Impact Plastic Design

1.5" [38.1]

4.0" [101.6]

® **HUBBELL Control Solutions**

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

45' Indoor Mounting Height

30' Outdoor Mounting Height

30'-0" Outdoor Mounting Height
45'-0" Indoor Mounting Height

42'-0"   At 30' Outdoor Mounting Height

50'-0"   At 45' Indoor Mounting Height

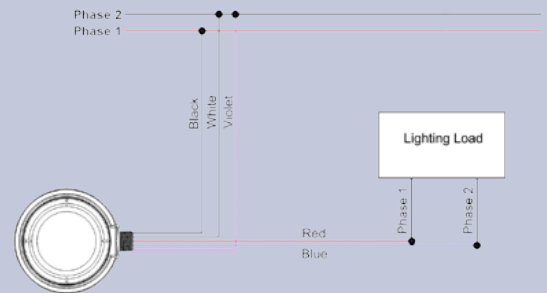**Sensor Lens Coverage and Detection Patterns
When Mounted at 30ft and 45ft with Standard Lens**
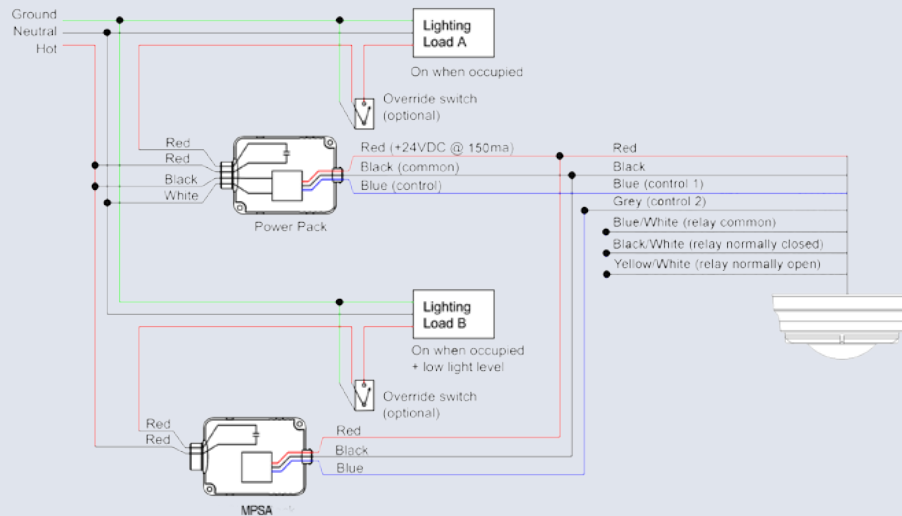
General Specifications

Power Requirements	Line Voltage sensors: 120/277/347VAC, 208/240VAC, 480VAC, 60 Hz, 30mA Low Voltage sensors: 24VDC, 30mA (uses UVPP or MP-Series power pack – not included)
Load Ratings (Line voltage sensors)	120VAC: 0-800W ballast or 0-600W tungsten, 60Hz 277VAC: 0-1200W ballast 347VAC: 0-1500W ballast 208/240VAC: 0-1200W ballast 480VAC: 0-2400W ballast ¼ HP motor load @ 120VAC, 1/6HP @ 347VAC
Output (Low voltage sensors)	24VDC active high-logic control signal Relay: N/O + N/C contacts; 500mA rated @ 24VDC; three wire isolated relay
User Interface	(1) Twelve pin dip switch
Timer Timeouts	Primary: 8-second test mode - 4, 8, 16 and 30 minute timeouts Secondary: Can be disabled (switches off with primary timer) - 30, 60 and 90 minute timeouts
Passive Infrared	Dual element pyrometer and spherical Fresnel lens designed for robust detection of a walking person.* *When used with program start ballast, a 1-2 second delay from occupancy detection to lamp turn-on may be experienced.
Daylight Sensor	Range: 30 – 2500FC End mount sensor: Downward and upward looking daylight sensors (Direction selectable via dip switch) Surface mount sensor: Downward looking daylight sensor only

Interchangeable Lens Options	Lens options: (Lenses sold separately – not included with sensor module)
	    Low Mount/High Mount
	    Indoor/Outdoor
	    Coverage: 360°, 180°, Aisle, Half Aisle

Operating environment	Standard version: Indoor use only; Operating temperature: 32° to 149°F (0° to 65°C); Relative humidity (non-condensing): 0% to 95% Low-temperature/Water-tight/Indoor-Outdoor version: Operating temperature: -40° to 149°F (-40° to 65°C)
Construction	Sensor Module and Lens Assembly – high impact, injection-molded plastic
Dimensions	Ø4.0" x 1.5" H (Ø101.6mm x 38.1mm H)
Weight	7 oz. (198.45g)
Color	White, Black and Gray
Mounting	End mount sensor: Mounts directly to end of fixture through extended ½" (12.7mm) chase nipple For deeper body fixtures, an optional Extender Adapter (available separately) positions the sensor flush or below the bottom of the reflector for a full field-of-view. Surface mount sensor: Mounts directly to fixture or j-box via (2) 1.25" (31.75mm) stainless steel screws and locking nuts
Certifications	Conforms to UL STD 508, UL STD 244A
Warranty	Five-year limited

**HUBBELL
Control Solutions**

120/277/347VAC WASP2
Wiring Diagram

208/240 & 480VAC WASP2
Wiring Diagram

24V WASP2 Wiring Diagram

Ordering Information

WSP				
SENSOR MODEL	**MOUNTING**	**INPUT VOLTAGE**	**ENVIRONMENT**	**COLOR**

SENSOR MODEL	MOUNTING		INPUT VOLTAGE		ENVIRONMENT		COLOR	
WSP	**EM**	End Mount	**24V**	24VDC (Low Voltage)	**(Blank)**	Standard Version	**(Blank)**	White
	SM	Surface Mount	**UNV**	120/277/347VAC	**LWO**	Low-Temp/Water Tight/	**BK**	Black
			UNV2R	120/277/347VAC (2 Outputs)		Indoor/Outdoor	**GY**	Gray
			208	208/240VAC				
			480	480VAC				

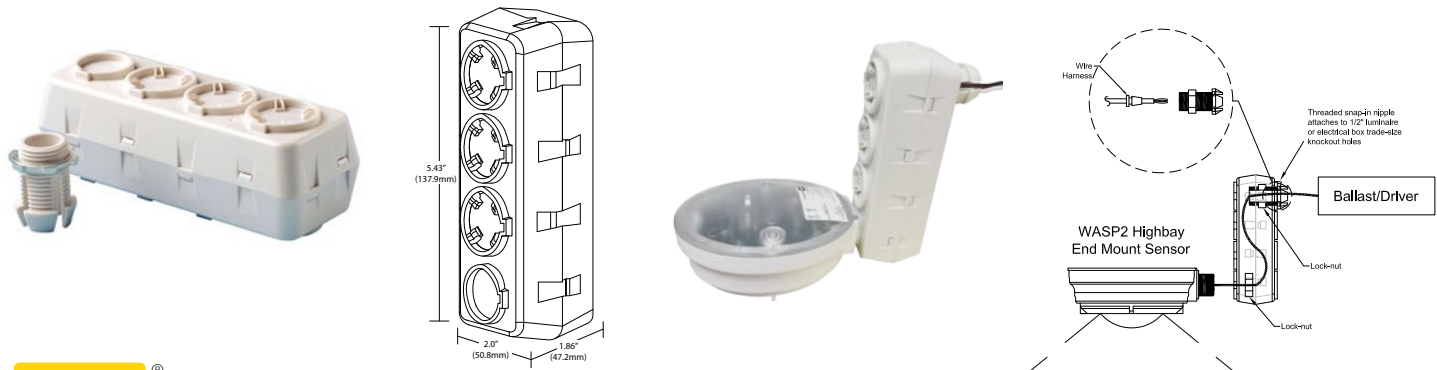*Example: WSP EM UNV – Wasp End Mount Sensor, 120-347VAC, White*

For available lens options and ordering information, reference the WASP2 Occupancy Sensor Lens Specification Sheet.

Accessory

The Optional WSPADAPTOR2 offset adaptor can be used to improve the field of view for fixture mounted sensors where the geometry of the fixture might otherwise interfere with the sensor's performance. The adapter snaps into a standard 1/2" (12.7mm) knockout on the end of the fixture and provides several mounting position choices for the sensor.

Ordering Information

MODEL

WSPADAPTOR2