

Updated with Enhanced Capabilities Multi-Voltage • Photocell • Low Temperature

The **H-MOSS OPTIMYZER™ Fluorescent High Bay Occupancy Sensor** utilizes highly advanced and accurate passive infrared (PIR) sensor technology for long range occupancy detection and enhanced false trip immunity. It is specifically designed for ON/OFF control of high bay fluorescent fixtures in warehouses, distribution centers, and similar facilities. The sensor easily mounts directly to industrial T5, T5HO and T8 fixtures through an extended ½ inch chase nipple. The specially designed PIR lens provides 1.4:1 coverage up to 30 feet and 1.1:1 coverage to 45 feet. For deep body fluorescent fixtures, an extension adapter is also available for positioning the sensor flush or below the bottom of the reflector for full field of view coverage.

This sensor is available with either single or dual relays, making it the perfect solution for single or multiple-ballast fixtures. The single relay sensor features a primary timer for ON/OFF control for maximum energy savings. The dual relay sensor features two timers for multiple light level control (i.e. step dimming). The dual relay sensor also includes Smart Cycling technology which maximizes lamp and ballast life by ensuring that all lamps receive the same operating hours. A built-in photosensor is also available for automatic daylight harvesting.



Key Features

- Digital passive infrared (PIR) sensor
- Low-profile design
- Multiple (single and dual) relay versions
- Unique Smart Cycling™ for improved lamp life
- Single and dual timer operation
- Zero Arc Point Switching
- Supports mounting heights up to 45 ft.
- Area and aisle coverage with one lens
- Photosensor version available for daylight harvesting
- Low-temperature versions available
- ETL, Conforms to UL STD 916, Certified to CAN/USA STD 22.2 No. 61010-1-04, and Title 24 certified
- 5-year limited warranty

Features and Benefits

Features	Benefits
Multiple (single and dual) Relay Versions	Provides control of single or multiple-ballast fixtures
Smart Cycling	Maximizes lamp and ballast life in multiple-ballast fixtures by ensuring that all lamps receive the same operating hours.
Single and Dual Timer Operation	Dual relays and timers provide multiple light-level control Enables step dimming
Zero Arc Point Switching (patent #5,821,642)	Minimizes relay-contact wear from high inrush loads
Optional Built-in Photosensor	Increases energy savings by turning off lights when there is sufficient natural light

Applications

Florescent High Bay Applications such as: Warehouses, Distribution Centers, Gyms, Retail and Manufacturing



H-MOSS[®] Occupancy Sensors

OPTIMYZER™ - Fluorescent High Bay Occupancy Sensor

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OPTIMYZER™ Ordering Information



Standard

Description	Voltage	Catalog Number
PIR Sensor, 1 Relay	120-347V AC	HMHB21U
PIR Sensor, 2 Relays	120-347V AC	HMHB22U
PIR Sensor, 1 Double Pole Relay	208, 240V AC	HMHB23A
PIR Sensor, 1 Double Pole Relay	480V AC	HMHB23B
PIR Sensor	24V DC	HMHB2LV*

Daylight Harvesting (With Photocells)

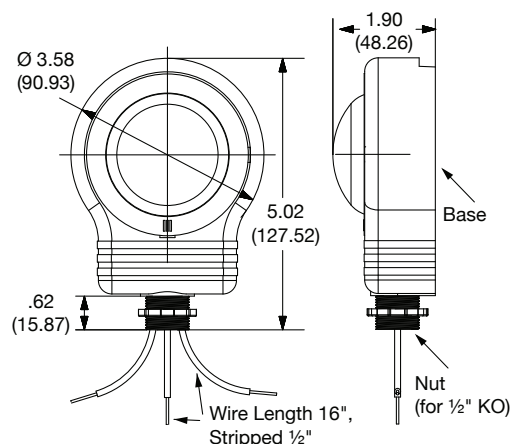
Description	Voltage	Catalog Number
PIR Sensor, 1 Relay with Photocell	120-347V AC	HMHB21UP
PIR Sensor, 2 Relays with Photocell	120-347V AC	HMHB22UP
PIR Sensor, 1 Double Pole Relay with Photocell	208, 240V AC	HMHB23AP
PIR Sensor, 1 Double Pole Relay with Photocell	480V AC	HMHB23BP
PIR Sensor with Photocell	24V DC	HMHB2LVP*

Low Temperature (-40°F, -40°C Min)

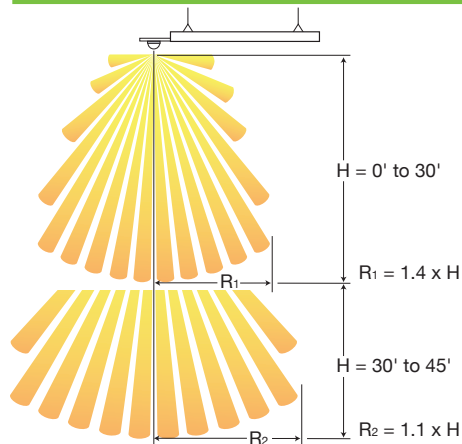
Description	Voltage	Catalog Number
PIR Sensor, Low Temperature, 1 Relay No Photocell	120-347V AC	HMHB21UC
PIR Sensor, Low Temperature, 1 Relay with Photocell	120-347V AC	HMHB21UPC
PIR Sensor, Low Temperature, 2 Relays	120-347V AC	HMHB22UC
PIR Sensor, Low Temperature, 2 Relays with Photocell	120-347V AC	HMHB22UPC
PIR Sensor, Low Temperature, 1 Double Pole Relay	208, 240V AC	HMHB23AC
PIR Sensor, Low Temp., 1 Double Pole Relay with Photocell	208, 240V AC	HMHB23APC
PIR Sensor, Low Temperature, 1 Double Pole Relay	480V AC	HMHB23BC
PIR Sensor, Low Temp., 1 Double Pole Relay with Photocell	480V AC	HMHB23BPC
PIR Sensor, Low Temperature	24V DC	HMHB2LVC*
PIR Sensor, Low Temperature, with Photocell	24V DC	HMHB2LVPC*

* For use with a CU series control unit: **CU300A** (120/277V AC, 50/60 Hz), **CU300AU** (120/277V AC, 50/60 Hz manufactured in the U.S.A.), **CU347A** (347V AC, 60 Hz).

Dimensions in Inches (mm)



Coverage Pattern



Specifications

User Interface	2 four-pin dip switches (standard version) 3 four-pin dip switches (photosensor version)	
Timer time-outs	Primary: 8-second test mode 4, 8, 16 and 30 minute time-outs Secondary: – Can be disabled 30, 60 and 90 minute time-outs	
Passive infrared	Dual element pyrometer and spherical Fresnel lens	
Photosensor Range (Photosensor version only)	50-3000FC, Set point adjustable	
Coverage	360° (includes masking kit for aisle and end-of-aisle applications) Lens: Below 30 ft.: 1.4 – 42 ft. radius; mounted @ 30 ft.; Up to 45 ft.: 1.1 – 49.5 ft. radius; mounted @ 45 ft.	
Load ratings (line voltage units)	120V AC: 0–800W ballast or tungsten 277V AC: 0–1200W ballast 347V AC: 0–1500W ballast	208/240V AC: 0-1200W ballast 480V AC: 0-2400W ballast ¼-HP motor load @ 120V AC, ½ HP @ 347V
Operating environment	Indoor use only Operating temperature: (standard version) 32°F – 149°F (0°C – 65°C); (low temperature version): -40°F–149°F (-40°C–65°C) Relative humidity (non-condensing): 0% – 95%	
Construction	Casing—high-impact injection-molded thermoplastic	
Size and weight	Size: 4.4 inch x 3.6 inch x 2.0 inch; Weight: 7 oz.	
Color	White	
Mounting	Mounts directly to the end of a fixture through an extended ½ inch 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.	
Certifications	ETL, Conforms to UL STD 916, Certified to CAN/USA STD 22.2 No. 61010-1-04 and Title 24 Certified	
Warranty	5 year limited	

HUBBELL[®]
Wiring Device-Kellems

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Printed in U.S.A. Specifications subject to change without notice.

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WLDSHM007R 4/11