HUBBELL® **Building Automation, Inc.**

High Bay Occupancy Sensors and Controllers
HBA WASP™ — Fluorescent High Bay Occupancy Sensor

KEY FEATURES
- Digital passive infrared (PIR) sensor
- Low-profile design
- Multiple (single and dual) output versions
- Unique Smart Cycling™ for improved lamp life
- Single and dual timer operation
- Zero Arc Point Switching
- Supports mounting heights up to 45 ft.
- Photosensor version available for daylight harvesting
- Low-voltage and line-voltage (120/277/347VAC, 208/240VAC, 480VAC) versions available
- Certified to UL916 standards
- 5-year warranty

OVERVIEW
The HBA WASP Fluorescent High Bay Occupancy Sensor provides the most advanced and accurate passive infrared (PIR) sensor technology for unequaled occupancy detection and 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 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 at 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 outputs, making it the perfect solution for single or multiple-ballast fixtures. The single output sensor features a primary timer for ON/OFF control for maximum energy savings. The dual output sensor features two timers for multiple light level control (i.e. step dimming). The dual output sensor also includes Smart Cycling technology which maximizes lamp and ballast life by ensuring that all lamps receive the same number of switching cycles. A built-in photosensor is also available for automatic daylight harvesting.

FEATURES and BENEFITS

Features	Benefits
Multiple (single and dual) output 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 number of switching cycles
Single and dual timer operation	• Provides 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
- Warehouses
- Distribution centers

SPECIFICATIONS

Photosensor Range (Photosensor version only)	• 50-3000FC
User interface	• 2 four-pin dip switches (standard version) • 3 four-pin dip switches (photosensor version)

Timer timeouts	• Primary:
	  - 8-second test mode
	  - 4, 8, 16, and 30 minute timeouts
	• Secondary:
	  - Can be disabled
	  - 30, 60, and 90 minute timeouts

Passive infrared	• Dual element pyrometer and spherical Fresnel lens
Coverage	• 360° (includes masking kit) • Lens: 1.4:1 coverage up to 30ft., 1.1:1 coverage up to 45ft.
Load ratings (line voltage units)	• 120VAC: 0–800W ballast or tungsten • 277VAC: 0–1,200W ballast • 347VAC: 0–1,500W ballast • 208/240VAC: 0-5A ballast • 480VAC: 0-5A ballast • ¼-HP motor load
Power requirements	• Line voltage units: 120/277/347V, 208/240V, 480V, 60 Hz
Operating environment	• Indoor use only • Operating temperature (standard version): 32°–149° F (0°–65° C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—high-impact injection-molded plastic
Size and weight	• Size: 4.4"L x 3.6"W x 2.0"D; Weight: 7 oz.
Mounting	• Mounts directly to the end of a fixture through an extended ½" 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	• Conforms to UL STD 916, Certified to CAN/USA STD 22.2 No. 61010-1-04
Warranty	• 5 years

HOW TO ORDER

Catalog Number	Description
FHB140NP24V	HBA Wasp Fluorescent High Bay Sensor with 1.4 area lens, 24VDC (UVPP or MP Series Power Pack required), White
FHB14INPUNV	HBA Wasp Fluorescent High Bay Sensor with 1.4 area lens, I-SPST Output,120-347 VAC, White
FHBI42NPUNV	HBA Wasp Fluorescent High Bay Sensor with 1.4 area lens, 2-SPST Outputs, 120-347 VAC, White
FHB14INP208	HBA Wasp Fluorescent High Bay Sensor with 1.4 area lens, 1-DPST Output, 208/240VAC, White
FHB14INP480	HBA Wasp Fluorescent High Bay Sensor with 1.4 area lens, 1-DPST Output, 480VAC, White
FHB140PS24V	HBA Wasp Fluorescent High Bay Sensor with 1.4 area lens, Photosensor, 24VDC (UVPP or MP Series Power Pack required), White
FHB141PSUNV	HBA Wasp Fluorescent High Bay Sensor with 1.4 area lens, 1-SPST Output, Photosensor, 120-347VAC, White
FHB142PSUNV	HBA Wasp Fluorescent High Bay Sensor with 1.4 area lens, 2-SPST Output, Photosensor, 120-347VAC, White
FHB141PS208	HBA Wasp Fluorescent High Bay Sensor with 1.4 area lens, 1-DPST Output, Photosensor, 208/240VAC, White
FHB141PS480	HBA Wasp Fluorescent High Bay Sensor, 1.4 area lens, 1-DPST Output, Photosensor, 480VAC, White
FHBADAPTOR	HBA Wasp Fluorescent High Bay Mounting Extension Adapter
FHBMASKKIT	HBA Wasp Fluorescent High Bay Sensor Masking Kit - 10 pack