



HBA WASP™ Fluorescent High Bay Low Temperature Sensor FAQs

Q. What is being announced today?

A. New HBA WASP Fluorescent High Bay Occupancy Sensors suitable for low temperature environments such as freezer applications.

Q. What is the supported operating environment for these new low temperature sensors?

A. Indoor use only; -40° – 149° Fahrenheit (-40° – 65° Celsius); Relative humidity (non-condensing): 0% - 95%.

Q. What voltages are supported?

A. The sensor is available in low voltage (requires a separate power pack), 120/277/347VAC, 208/240VAC, and 480VAC versions.

Q. What are the load ratings for the HBA WASP?

A. 120VAC: 0 – 800W ballast or tungsten, 277VAC: 0 – 1200W ballast, 347W: 0 – 1500W ballast, 208/240VAC: 0 – 5A ballast, and 480VAC: 0 – 5A ballast.

Q. Does the HBA WASP have a motor load rating?

A. Yes. The HBA WASP sensor has a ¼-HP motor load rating @ 120VAC and 1/6-HP @ 347VAC

Q. Which fluorescent fixtures does the HBA WASP work with?

A. The sensor is designed to work with T5, T5HO, and T8 fluorescent fixtures.

Q. What about T12 fluorescent fixtures, will the HBA WASP work with those?

A. Yes, however for most high bay applications T12 fixtures do not provide the necessary lumen output.

Q. What is Smart Cycling™?

A. One of the major contributors to lamp failures is lamp cycling. The HBA WASP has a unique feature known as “Smart Cycling” which extends the lamp burn time evenly within the fixture. In a typical installation, one pair of lamps is always left on as back-lighting. If the same pair is always left on, those lamps will fail after the standard lamp life (around 20,000 hours). Using the HBA WASP’s “Smart Cycling” feature, the amount of time each lamp is burned is maintained and kept balanced. For example, in a 4 lamp/2-ballast fixture, no lamp will run 20,000 hours until all lamps have run 20,000 hours. In this example instead of re-lamping the two lamps that were always on after 20,000 hours, re-lamping would not be necessary until after 40,000 hours. This is an increase in time between lamp replacements from every 27 months to every 54 months.

Q. What are the Dual Timers used for?

A. For applications where there is a need to increase energy savings AND provide some lighting for a longer period of time, the HBA WASP’s exclusive Dual Timer feature (available on the two output version only) provides multiple options for light level control. Specific lamps within the fixture can be turned off over time – thus providing flexible step dimming. When the area becomes unoccupied, the primary timer turns off the first group of lamps (leaving the area with backlight). After the secondary (backlight) timer expires, the remaining lamps are turned off.

Q. What timer settings are available?

A. Primary Timer: controls time interval to turn off light(s) controlled by Primary Timer after the lighted space becomes unoccupied. Available settings are: Test (8 seconds), 4, 8, 16 and 30 minutes. Secondary Timer: controls time interval to turn off light(s) controlled by Secondary Timer after the lighted space has become unoccupied and Primary Timer has expired. Available settings are: Disabled, 30, 60, and 90 minutes.

Q. What is the HBA WASP’s detection range?

A. The detection range varies based on the height of the fixture. For a high bay PIR sensor like the HBA WASP, the lens is the most important part of the sensor because everything is so far away. Using a standard office occupancy sensor lens at 35’ is like using binoculars for astronomy, it just doesn’t work. To solve this, the sensor uses a specially designed lens which provides 1.4:1 coverage up to 30 ft. and 1.1:1 coverage at 45 ft. For example, if the sensor is mounted at 30 feet, the coverage area radius is 1.4 x 30 or 42 ft.

Q. Can the HBA WASP turn off lights if there is sufficient ambient light in the area?

A. Yes. Selected models of the HBA WASP sensor feature a built-in upward looking photosensor that can be used to turn off lights if there is enough natural light.



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Q. How are the photosensor light levels configured on the HBA WASP?

A. Very easily. There are 15 pre-defined foot-candle levels that are selected by a 4-pin dipswitch. The levels range from 50 to 3000FC.

Q. Does the HBA WASP contain Zero Arc Point Switching technology?

A. Yes. The sensor features Zero Arc Point Switching technology that minimizes relay contact wear from high inrush loads.

Q. How do you mount the HBA WASP to a fixture?

A. The sensor easily mounts directly to industrial T5HO and T8 fixtures through and extended ½-inch chase nipple. For deep body fluorescent fixtures, where the height of the ballast cavity knockout is greater than or equal to 1.5", the extension adapter should be used for positioning the sensor flush or below the bottom of the reflector for full field of view coverage.

Q. Can the HBA WASP work with both program start and instant start fluorescent ballasts?

A. Yes, however most ballast manufacturers recommend the use of occupancy sensors only with program start ballast. When used with program start ballast, a 1-2 second delay from occupancy detection to lamp turn-on may be experienced. HBA recommends that you consult with your ballast manufacturer for suitability with occupancy sensors.

Q. How do you order the HBA WASP?

A. See product data sheet for ordering information.