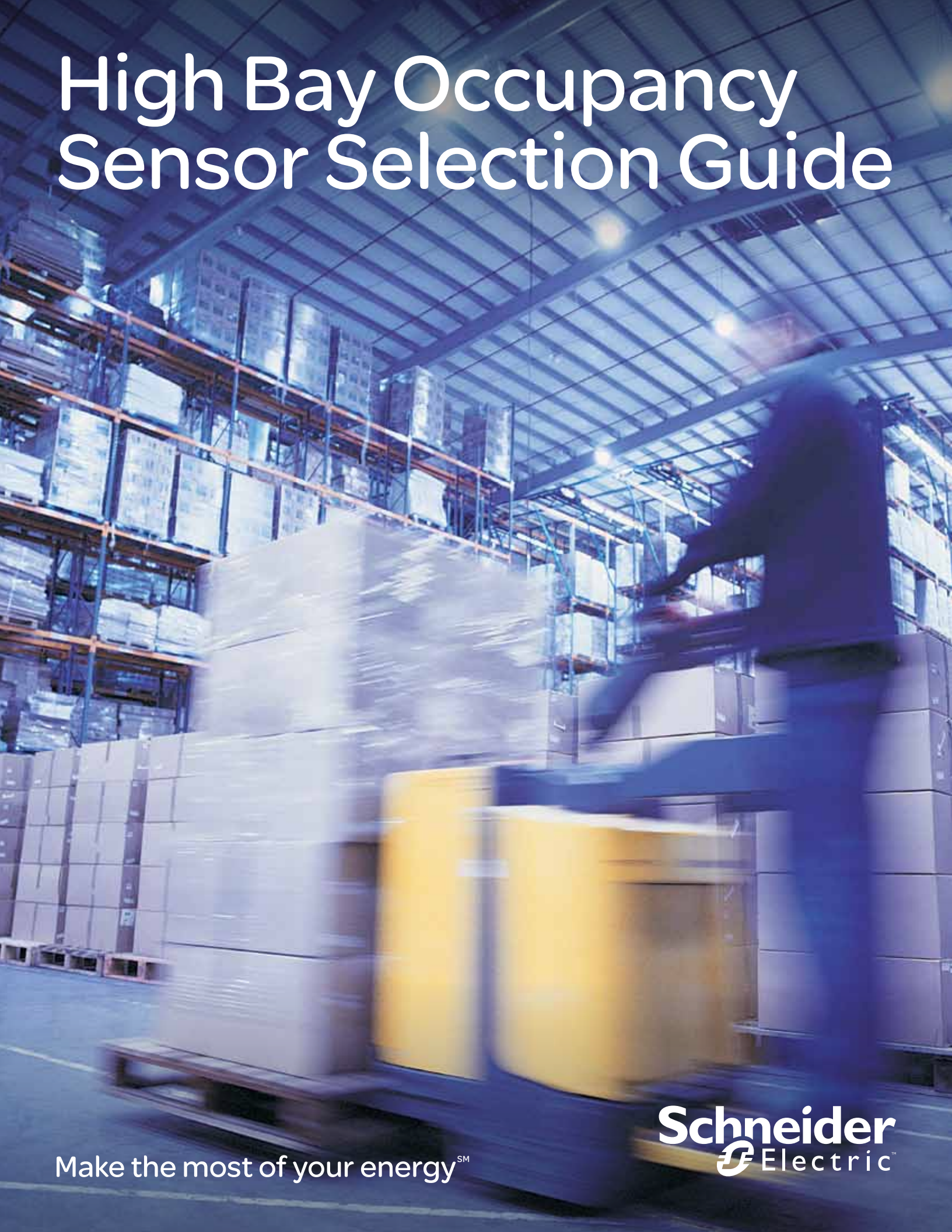
High Bay Occupancy Sensor Selection Guide



Make the most of your energy℠

Schneider Electric™

>> Schneider Electric offers a vast array of lighting control sensors for HID and Fluorescent High Bay applications.

HID High Bay Occupancy Sensors

Save energy by reducing the lamp wattage to 50 percent in empty areas with the high bay high intensity discharge (HID) Basic, Single and Dual output occupancy sensors by Schneider Electric.

Interchangeable aisle and area lenses make this sensor perfect for warehouses and large gymnasiums. Features such as customizing the time you want the lights to stay on, as well as a sensitivity adjustment, make each sensor perfect for your specific application.

Schneider Electric high bay sensors incorporate the ability to communicate via fiber optic cabling. One way send/receive communication is provided by the Single Output sensor (SLSPIP211), two directional communication is provided by the Dual Output sensor (SLSPIP212). For zero output communication, the Basic sensor (SLSPIP210) is also offered.

HID Occupancy Sensors

HID Fiber Optic Switch Packs

HID Switch packs are designed to work seamlessly with HID high bay occupancy sensors. These switch packs illuminate a lamp when a signal is received from either one or two different occupancy sensors.

Interleave these switch packs with the HID high bay occupancy sensor in any configuration where occupancy detection is not needed to reduce costs while maximizing lighting efficiency.

HID Fiber Optic Switch Pack

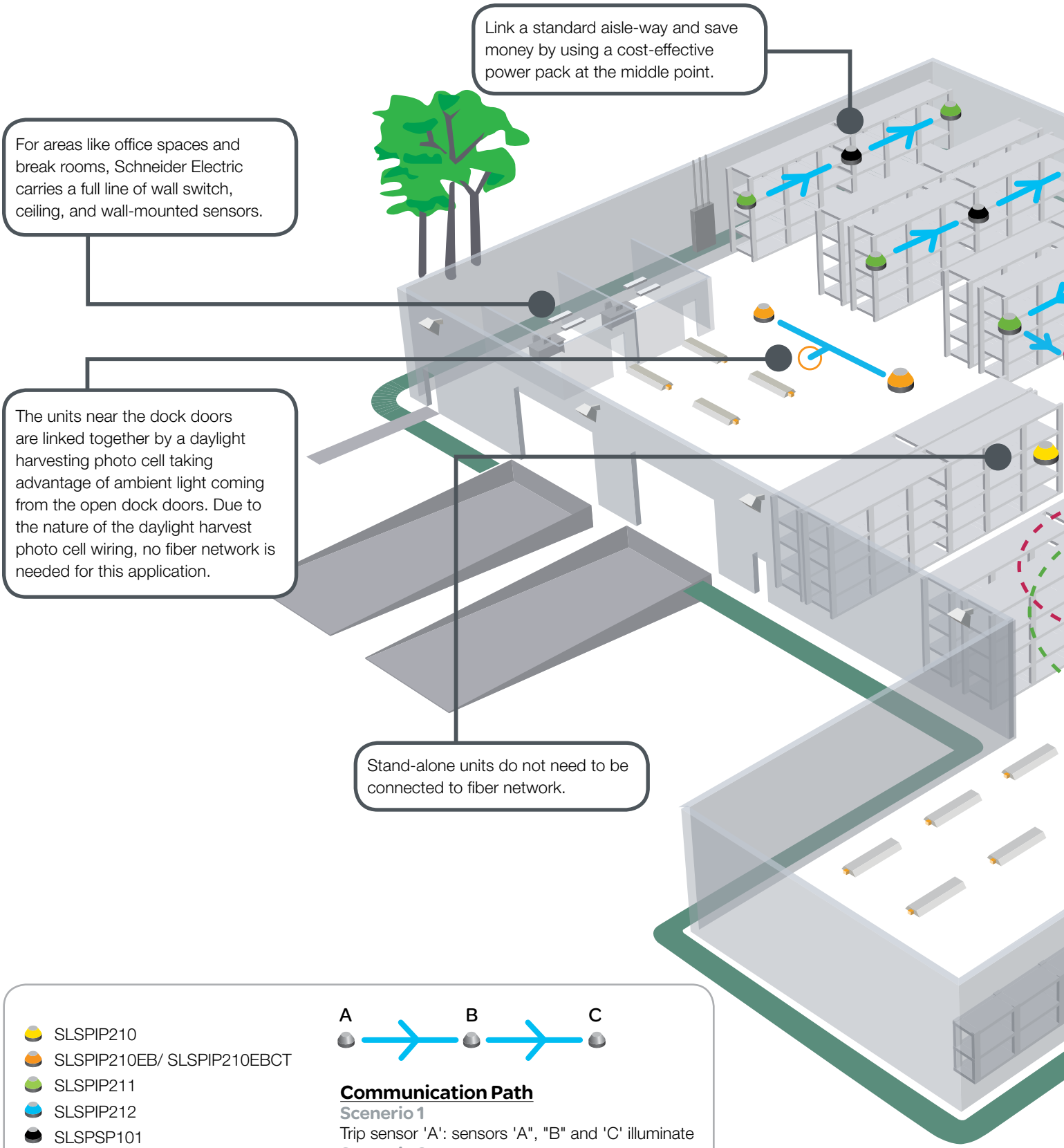
Fluorescent High Bay Occupancy Sensors

Compatible with T5, T8, and inductive lamp fluorescent fixtures, these sensors feature interchangeable high bay, low bay, and high bay aisle lenses for a wide variety of applications: warehouses, gymnasiums, manufacturing areas, maintenance facilities, and environmental controlled parking areas. User-adjusted dials allow you to customize how long the luminaries stay on and how sensitive occupancy detection is.

Fluorescent Occupancy Sensors

Name	What is it?	Ideal uses	Variances
Basic HID Occupancy Sensor (SLSPIP210)	A stand-alone sensor that is not connected to other sensors.	Ideal for use in single lamp areas.	PIP210EB: Electronic Ballast PIP210CT: Cold Temperature PIP210EBCT: Electronic Ballast/Cold Temperature
Single Output HID Occupancy Sensor (SLSPIP211)	A sensor that sends and receives a signal to other lamps in one direction only.	Used with other switch packs and sensors in applications where occupancy can be detected from a single entry point.	—
Dual Output HID Occupancy Sensor (SLSPIP212)	A sensor that sends signals to other lamps in two different directions.	This sensor is used to detect occupancy, and trigger lamps to illuminate in two different directions from the sensor.	—
Single Input HID Switch Pack (SLSPSP101)	A switch pack that turns on a lamp when it receives a signal from a sensor and can pass that signal to other sensors or switch packs.	Used when occupancy is detected from a single entry point and multiple lamps are illuminated from this occupancy detection.	—
Dual Input HID Switch Pack (SLSPSP102)	A switch pack that turns on a lamp when it receives a signal from one of two different sensor lamp sources.	Used when occupancy can be detected from two points and additional lamps are illuminated from either occupancy detection.	—
Fluorescent High Bay Occupancy Sensor	A standalone sensor for fluorescent ballasts.	Used to detect occupancy in high bay, low bay, area, or aisle applications.	SLSFPS1347: 120, 277, and 347V applications SLSFPS1480: 208 or 480V applications

Solution Diagram



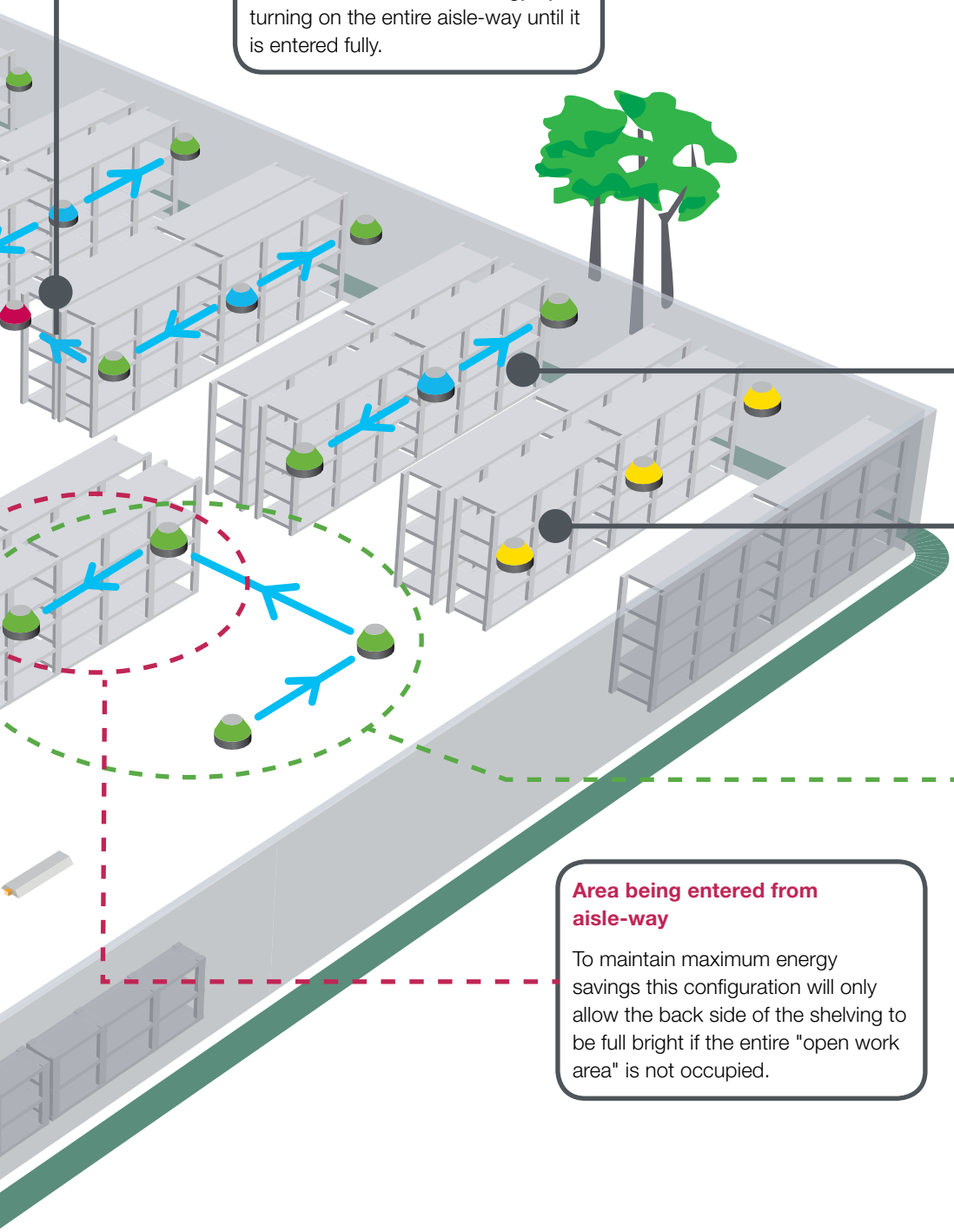
- SLSPIP210
- SLSPIP210EB/ SLSPIP210EBCT
- SLSPIP211
- SLSPIP212
- SLSPSP101
- SLSPSP102
- SLSFPS1347/SLSFPS1480
- Daylight Harvesting Photo Cell

Communication Path

Scenerio 1
Trip sensor 'A': sensors 'A", "B" and 'C' illuminate

Scenerio 2
Trip sensor 'B': only sensors 'B' and 'C' illuminate

Scenerio 3
Trip sensor 'C': only sensor 'C' illuminates



High traffic area of personnel and tow motors. Light is needed in the walkway between the aisles, but we don't want to waste energy by turning on the entire aisle-way until it is entered fully.

This application shows an example of the first sensor only turning itself ON to provide light entering the aisle-way and prevent nuisance tripping on the entire aisle-way from tow motors passing by. However, once the second sensor is turned on the entire aisle-way will go to full brightness.

Motion coverage is needed throughout the entire aisle-way, however less commonly stocked items are placed in the area and it is not necessary to turn on the entire aisle-way every time it is entered.

Area being entered from manufacturing location

The type of configuration will allow all four fixtures to go to full bright when someone moves from the manufacturing area to the open work area.

Area being entered from aisle-way

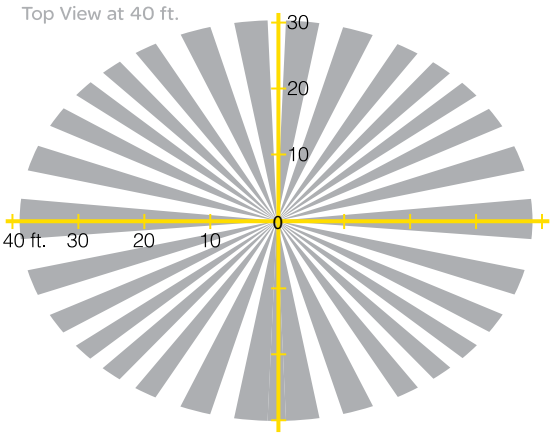
To maintain maximum energy savings this configuration will only allow the back side of the shelving to be full bright if the entire "open work area" is not occupied.

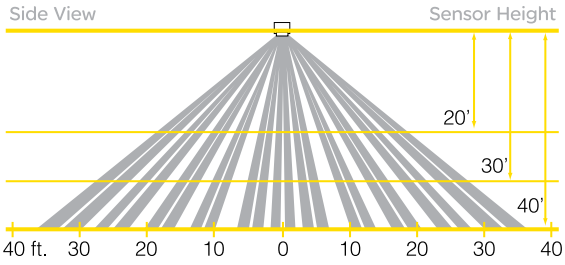
HID High Bay Sensors

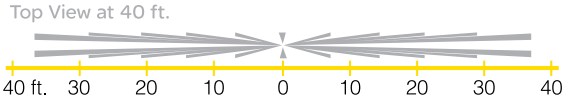
Catalog numbers				
	SLSPIP210	SLSPIP211	SLSPIP212	SLSPIP210CT
Specifications				
Ratings	120/208/240/277/347/480VAC			
Fixture compatibility	HID with constant wattage autotransformer ballast			
Dimming method	Relay-switched dual-section capacitor			
Switching configurations	Parallel (preferred) or series capacitors			
Relay current rating	4 amperes RMS maximum			
Maximum fixture wattage	1000 watts parallel mode/250 watts series mode			
AC line voltage (white and black wires)	120/208/240/277/347/480VAC Auto-Adjusting			
Power consumption	3 watts maximum			
Maximum fiber spacing between nodes	200 ft. (60.96 m)			
Ambient temperature range	32 to 122 °F (0 to 50 °C) non condensing			-10 to 122 °F (23 to 50 °C) non condensing
Observed motion ON time	1 to 15 minutes (user adjustable)			
Lamp warm-up interval	15 minutes (not adjustable)			
Installation assists	—			
Mounting options	—			
Wire harness	4 Conductor 18 AWG stranded copper wire			
Wire harness length	36 inches (914 mm)			
Dimensions (including mounting nipple)	3.25in. x 3.25in. x 3.25in. (82.56mm x 82.56mm x 82.56mm)			
Features				
	User-adjustable 1 to 15 minute activity timer			
	User-adjustable range dial to customize PIR sensitivity			
	Available with interchangeable aisle and area lenses			
	Lamp always starts on high to provide full rated HID lamp life, even after AC power bumps or loss of fiber optic signals			
	Includes a manual test switch for self diagnostics that assist with installation and debugging networks			
Adjustments				
	User-adjustable 1 to 15 minute activity timer			
	User-adjustable range dial to customize PIR sensitivity			
Regulatory				
	UL® and cUL® listed			
	FCC Part 15, Class B			
Warranty				
	Standard 5 yr. warranty for all sensors			

SLSPIP210EB	SLSPIP210EBCT	SLSPSP101	SLSPSP102
HID with electronic ballast dimming port		—	—
Relay-switched		—	—
—	—	Parallel (preferred) or series capacitors	
—	—	1000W parallel mode/250W series mode	
—	—	200 ft.	
32 to 122 °F (0 to 50 °C) non condensing	-10 to 122 °F (23 to 50 °C) non condensing	32 to 122 °F (0 to 50 °C) non condensing	
		—	—
		Magnetic test switch and blinking LED	
		1/2" NPT nipple	
		9 inches (22.86 cm)	
		Compatible with HID luminaires rated between 120 and 480VAC/60Hz, without adding taps or jumpers	
		Compatible with most dimming-ready HID luminaires equipped with a constant wattage autotransformer (CWA) ballast and dual-section capacitor	
	Gaskets in the sealed housing to prevent moisture from entering	Lamp always starts on high to provide full rated HID lamp life, even after AC power bumps or loss of fiber optic signals	
	An internal self-heater for operation in cold temperatures	Includes a manual test switch for self diagnostics that assist with installation and debugging of networks	

Coverage Patterns





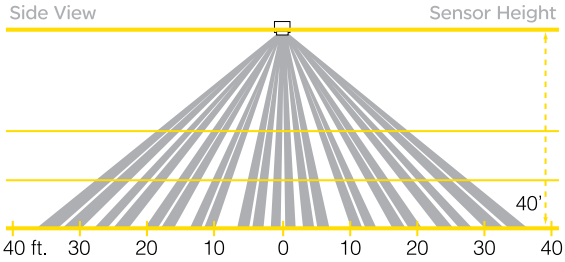


Florescent High-Bay Sensors

Catalog numbers		
	SLSFPS1480	SLSFPS1347
Specifications		
Fixture compatibility	T5 and T8 fluorescent fixtures	
AC line voltage (white and black wires)	Black/Black wires 208 or 480VAC +/-10%, 60Hz	White/Black wires 120/277/347VAC +/-10%, 60Hz
Output contact rating	2000W max ballast load	1000/1800/1500W max ballast load
Ambient temperature range	32 to 158°F (0 to 70°C)	
Observed motion ON time	15 seconds to 30 minutes	
Dimensions (including mounting nipple) (HxWxD)	4.96in. x 3.25in. x 3.25in. (126mm x 82.56mm x 82.56mm)	
Features		
	Both sensors come with three different lenses: High Bay Area, Low Bay Area, High Bay Aisle-Way	
	Includes a user-adjustable time dial to set the length of time the luminaires stay on from 15 seconds to 30 minutes	
	Includes a user-adjustable range dial to customize PIR sensitivity	
	No need for drop down bracket, built into sensor's design	
	Factory preset at 18 minutes for optimum energy and lamp life	
	Direct fixture mount	
	SLSFPS1347 auto voltage range adjustment from 120-347 volts	
Adjustments		
	User-adjustable time dial to set the length of time the luminaires stay on from 15 seconds to 30 minutes	
	User-adjustable range dial to customize PIR sensitivity	
Regulatory		
	UL® and cUL® listed	
	FCC Part 15	
Warranty		
	Standard 5 yr. warranty for all sensors	

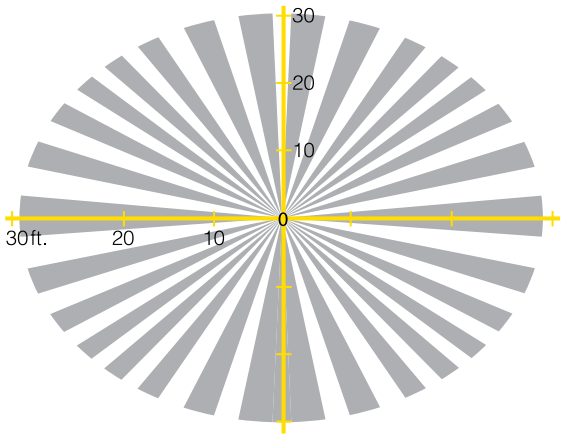
Coverage Patterns

High Bay Area Lens

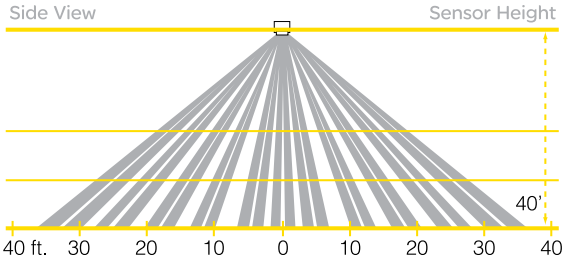


Distance From Sensors

Top View From Area Lens at 40'

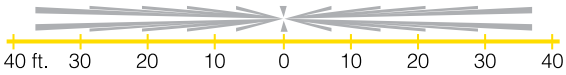


High Bay Aisle-Way Lens

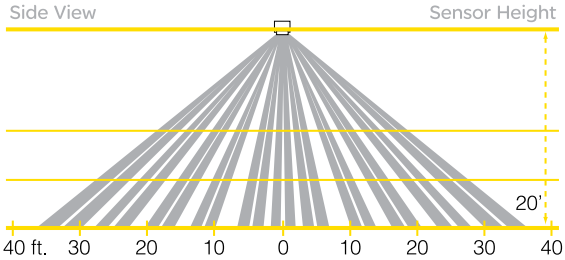


Distance From Sensors

Top View at 40'

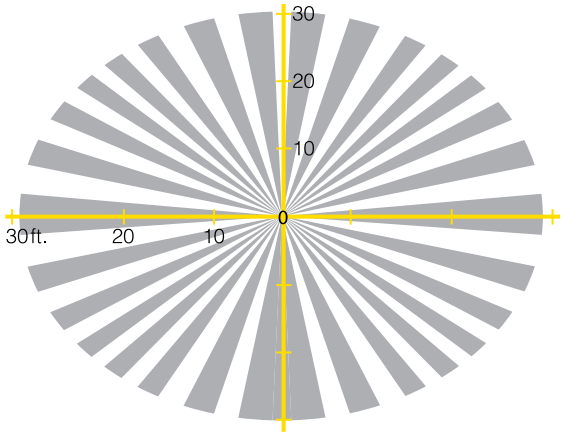


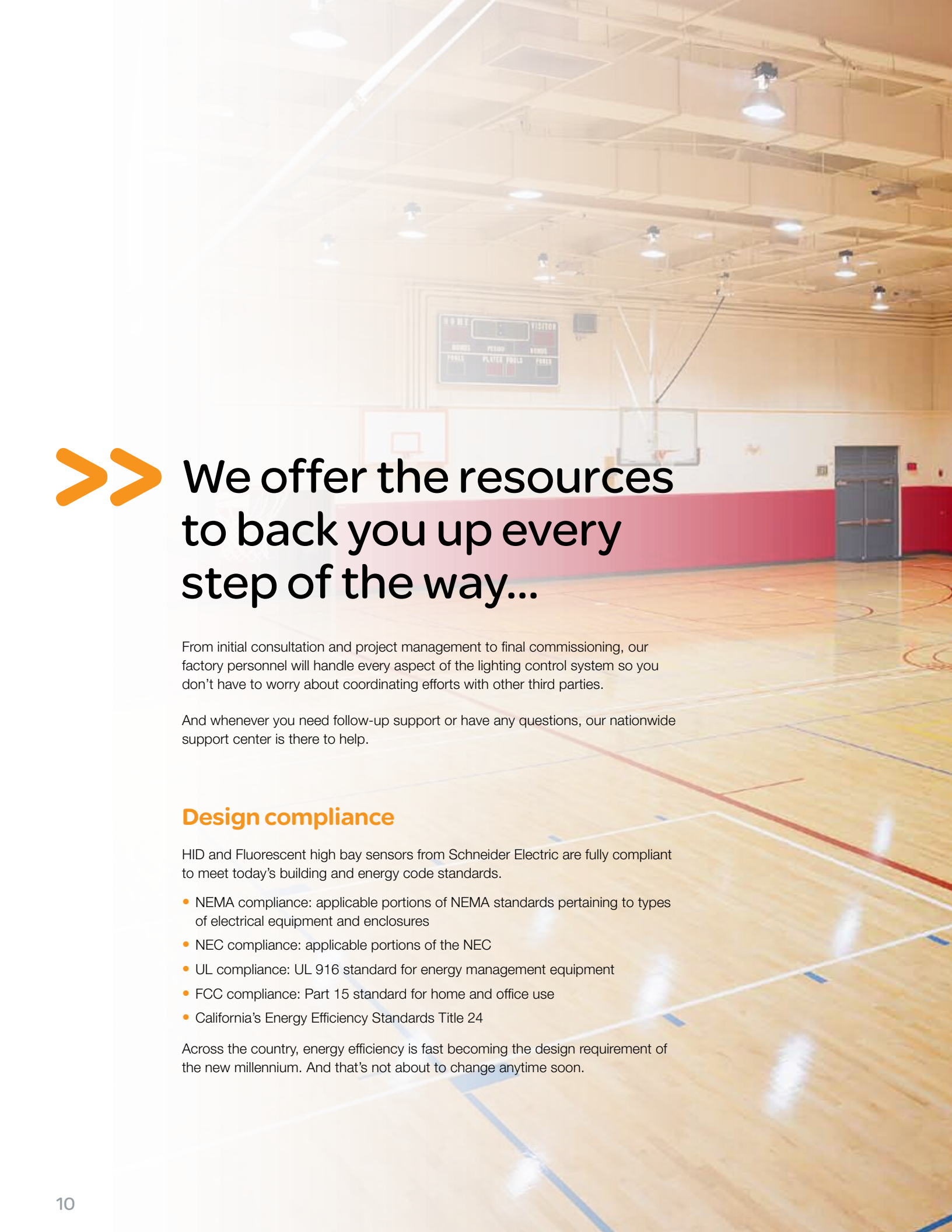
Low Bay Area Lens



Distance From Sensors

Top View From Area Lens at 20'





We offer the resources to back you up every step of the way...

From initial consultation and project management to final commissioning, our factory personnel will handle every aspect of the lighting control system so you don't have to worry about coordinating efforts with other third parties.

And whenever you need follow-up support or have any questions, our nationwide support center is there to help.

Design compliance

HID and Fluorescent high bay sensors from Schneider Electric are fully compliant to meet today's building and energy code standards.

- NEMA compliance: applicable portions of NEMA standards pertaining to types of electrical equipment and enclosures
- NEC compliance: applicable portions of the NEC
- UL compliance: UL 916 standard for energy management equipment
- FCC compliance: Part 15 standard for home and office use
- California's Energy Efficiency Standards Title 24

Across the country, energy efficiency is fast becoming the design requirement of the new millennium. And that's not about to change anytime soon.

To learn more, visit **www.schneider-electric.com**
or call: **1-888-778-2733**

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