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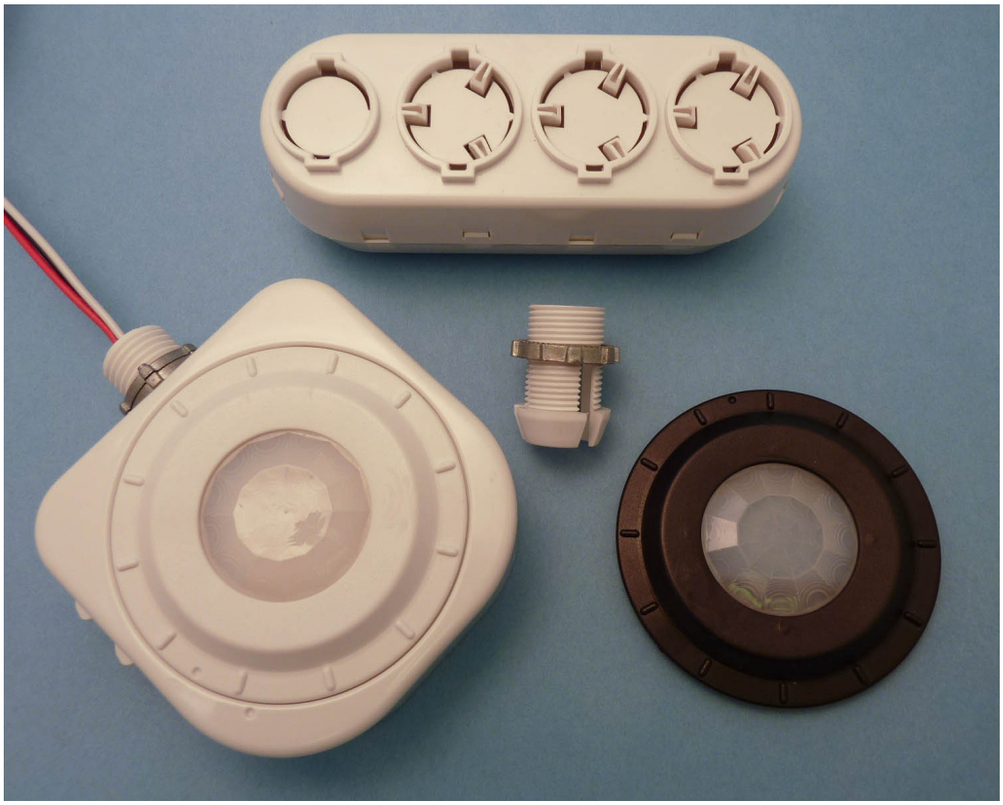
SECTION N
SENSORS



Sensors

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HIGH BAY PIR OCCUPANCY SENSORS

Line Voltage Sensors

Passive Infrared (PIR) Sensing Technology Line voltage sensor with 360 degree lens offer amazing performance and sensitivity to small movements and are ideal for new or retrofit applications. Compatible with electronic and magnetic ballasts. The units are UL and cUL approved and comply with California Title 24 requirements.

Applications: Lighting ON/OFF Control, Tungsten, Halogen, Fluorescent, LED light sources.
Ideal for high bay fixtures in warehouse, manufacturing facilities and retail box stores.

Features:
- Occupancy and motion detection using Passive Infrared Technology Inside.
- 360 Degree Wide Range and Aisle Way Coverage Interchangeable lenses. Other pattern lenses are available.
- Up to 35 foot Mounting Height
- Relay Imbedded (No External Box is Required)
- No Minimum Load Requirement
- Adjustable Time Delay, from about 30 seconds to 25 minutes.
- Adjustable Day Lighting Control. 30 - 2500 Lux range.
- LED Activity Indication blinks when sensor detects motion.
- Self contained using standard 1/2" knockouts.
- Relay circuitry - zero crossing to provide long reliable life.
- 5 Year Limited Warranty

Coverage:
- Line of Sight Distance up to 35 Feet (Object and Environment Dependant)
- Interchangeable Lens for 360 Degree Hi Bay Circular (white color), Aisle Way (black color) Patterns and Low Bay Circular 360º (blue color).

Mounting:

½" Knockout (7/8" OD) with double D sides to prevent turning if used.

Electrical & Environmental Specifications:

	SENPIR-HB-01	SENPIR-HB-04
Input:		
Input Voltage:	120/277/347 VAC	480VAC
Frequency:	50/60 Hz	50/60 Hz
Operating Temperature:	-10ºC to 70ºC/14ºF to 160ºF	-10ºC to 70ºC/14ºF to 160ºF
Maximum Case Temp:	75ºC	75ºC
Relative Humidity:	20 – 85 %	20 – 85 %
Power Consumption:	2W @ 120V,1W @ 277V	.8W@347V/.6W@480V
Load Rating:		
	120/277/347 VAC. 800VA@120VAC, 1200VA@277VAC, 1500VA@347V 1/4 HP Load @ 120V	2000VA@480VAC

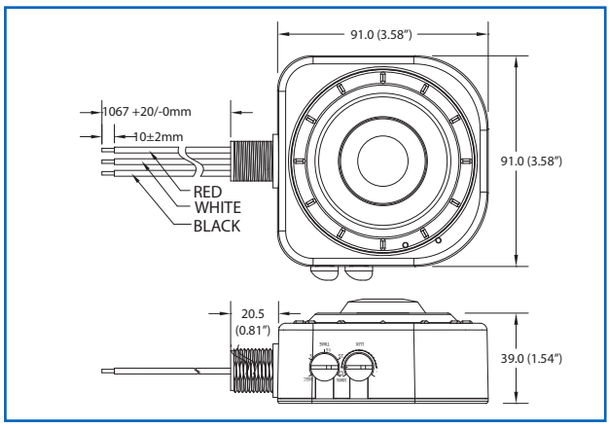
Mechanical Specifications

Case:	White High Impact Injected molded plastic
Dimensions:	91mm (w) X 91mm (h) X 39mm (t) 3.58"(w) X 3.58"(h) X 1.54 (t)
Input Wires:	Black, White, UL1316, #18AWG,105C, 600V PVC Solid, 42" long
Output Wire:	Red, UL1316, #18AWG, 105C, 600V, PVC Solid, 42" long

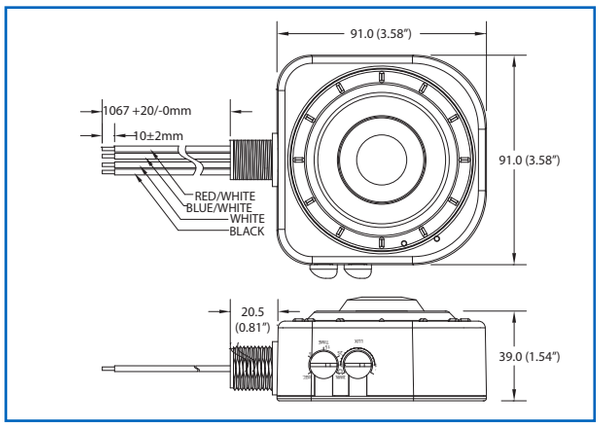
HIGH BAY PIR OCCUPANCY SENSORS

Line Voltage Sensors

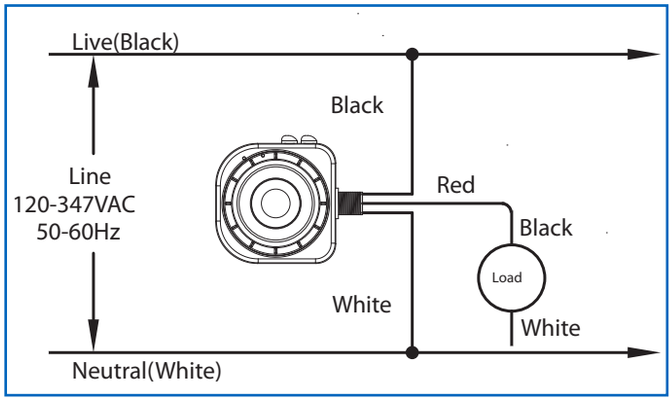
Drawing for 120-347V - SENPIR-HB-01



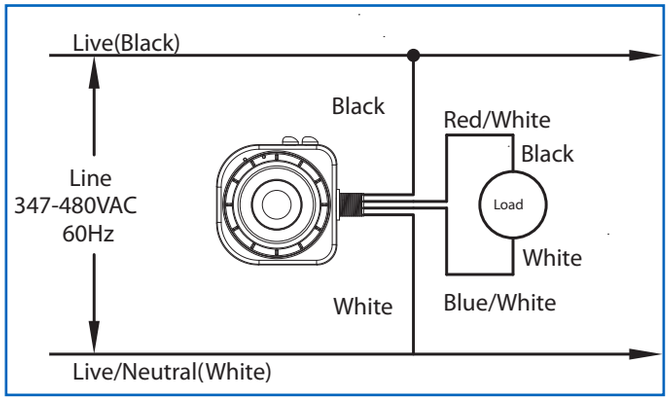
Drawing for 347-480V - SENPIR-HB-04



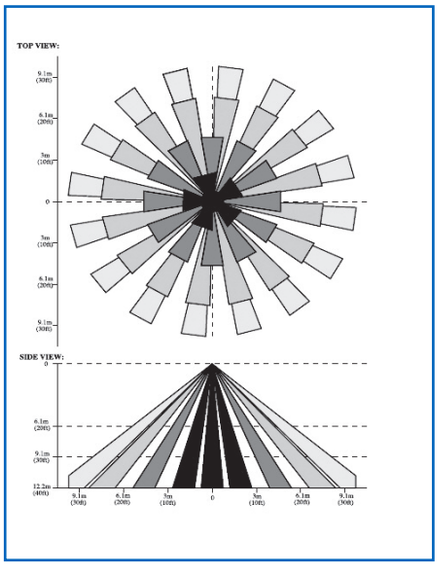
Wiring Diagram 120-277-347V - SENPIR-HB-01



Wiring Diagram 480V - SENPIR-HB-04

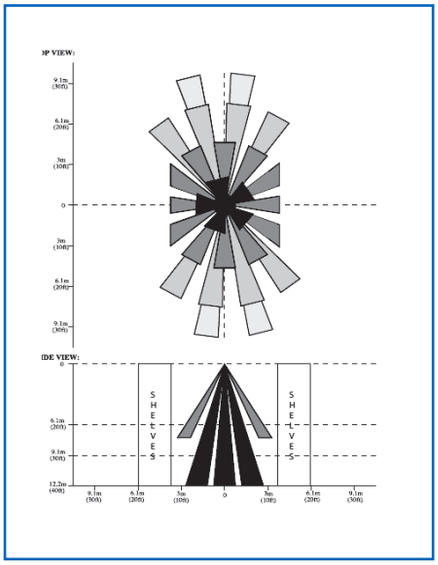


High Bay 360° Field of View



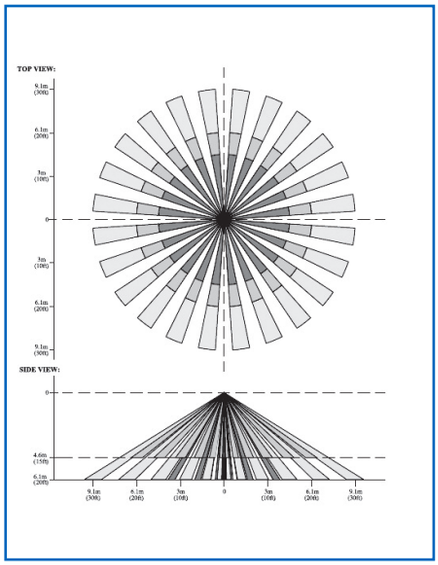
SENPIR-LENS-HB

Aisle Field of View



SENPIR-LENS-AI

Low Bay 360° Field of View



SENPIR-LENS-LB (OPTIONAL)

HIGH BAY COLD STORAGE PIR OCCUPANCY SENSOR

High Bay Cold Storage PIR Occupancy Sensor

Passive Infrared (PIR) Sensing Technology sensor with 360 degree lens offer amazing performance and sensitivity to small movements and is ideal for low temperature environments. Typical Applications include Meat Packing Plants, Food Processing Facilities, Food Distribution Warehouses, Breweries etc. The units are UL and cUL approved.

SENPIR-HB-02CS Applications: Lighting ON/OFF Control, e.g. Light bulb, Halogen lamp, Fluorescent, LED in low temperature environment.

Features:

- Occupancy and motion detection using Passive Infrared Technology Inside.
- 360° Wide Range and Aisle Way Coverage Interchangeable lenses.
- 20 to 40 foot Mounting Height
- Relay Imbedded (No External Box is Required)
- No Minimum Load Requirement
- Adjustable Time Delay, from about 30 seconds to 30 minutes.
- LED Activity Indication blinks when sensor detects motion.
- Self contained using standard 1/2" knockouts.
- 5 Year Limited Warranty.

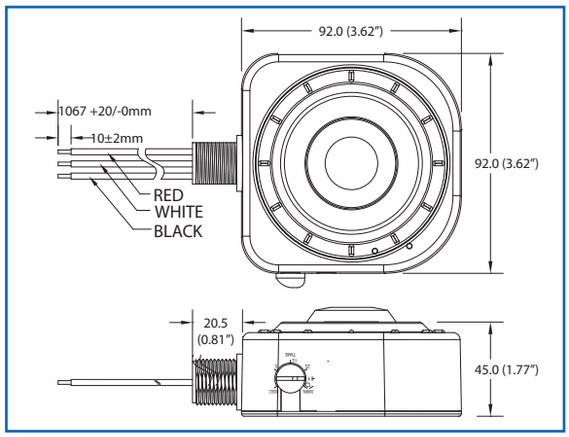
Coverage:

- Up to 40 ft. to 60 ft. of diameter coverage at 20 ft. to 40 ft. mounting height with 360° white lens. Additional black aisle lens can be adopted for narrow area detection.

Mounting:

- Sensor can be directly mounted on common lighting fixture with 1/2" trade-size knockout hole.
- Motion sensor adaptor can be purchased separately for better mounting position.

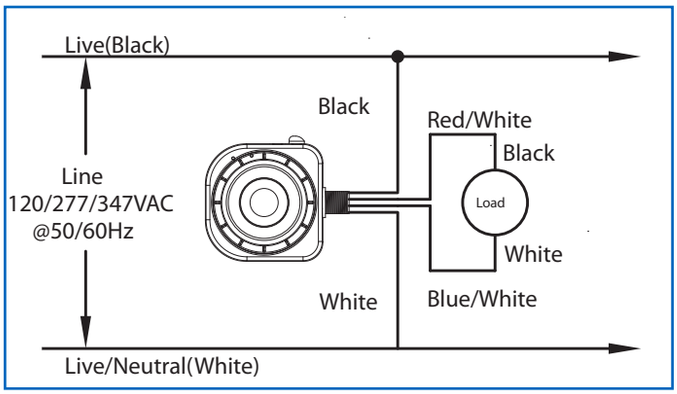
Drawing for SENPIR-HB-02CS



SENPIR-HB-02CS

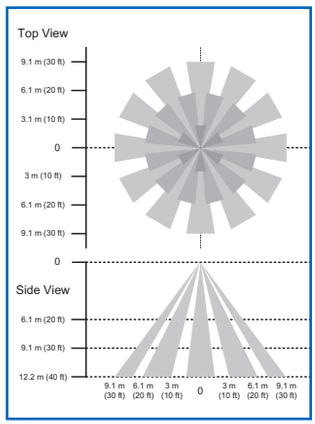
Input:

Input Voltage:	120/277/347 VAC
Output Voltage:	120/277/347VAC@50/60 Hz
Operating Temperature:	-40ºC to 70ºC/-40ºF to 160ºF
Maximum Case Temp:	75ºC
Relative Humidity:	20 – 90 %
Power Consumption:	0.8W max.



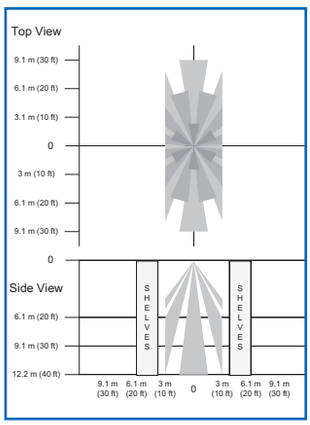
Wiring Diagram 120-277-347V - SENPIR-HB-02CS

High Bay 360° Field of View



SENPIR-LENS-HB

Aisle Field of View



SENPIR-LENS-AI

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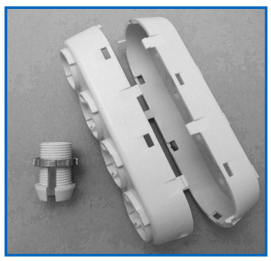
OFFSET EXTENSION BRACKET AND SHORT ADAPTER FOR PIR SENSORS

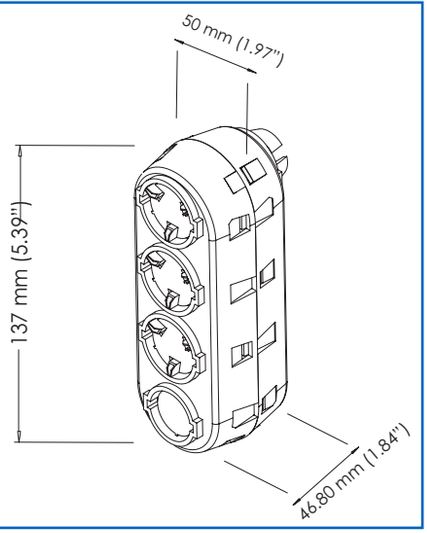
Line Voltage Sensor - Offset Extension Brackets

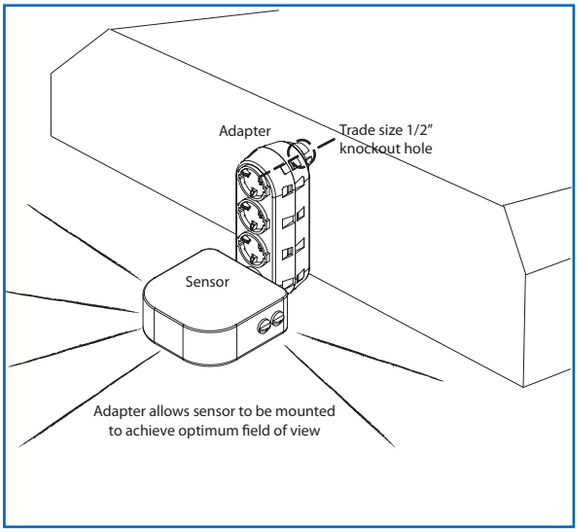
In cases where the direct line of sight is obstructed, these offset extension brackets can be used to extend the sensor downward to gain a clear line of sight. The bracket is designed to fit into the fixture 1/2” KO (0.875” dia. hole).

SENPIR-HB-OB - MULTI POSITION LONG OFFSET BRACKET

The bracket has 3 positions that can be used to mount the sensor and offers the greatest mounting flexibility. The bracket is designed to protect and allow the wires to pass through directly into the fixtures.

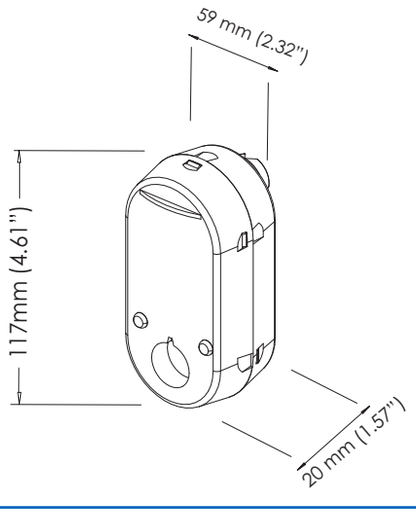


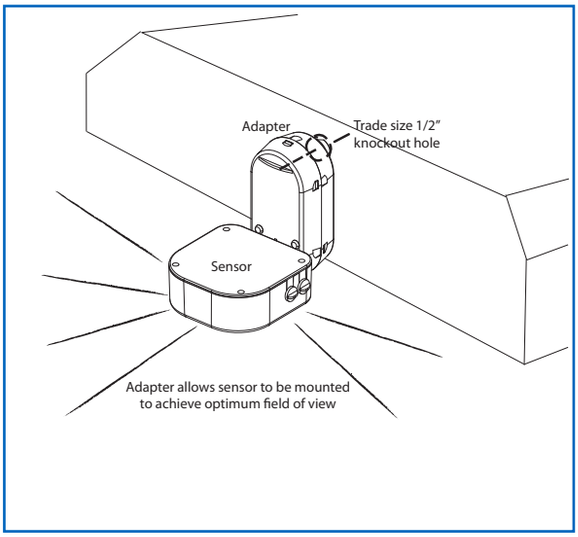




SENPIR-HB-OB2 - SHORT OFFSET BRACKET - SINGLE POSITION

The bracket has only one position which drops the sensor 2 3/4” from the KO center line. The bracket is designed to protect and allow the wires to pass through directly into the fixture.

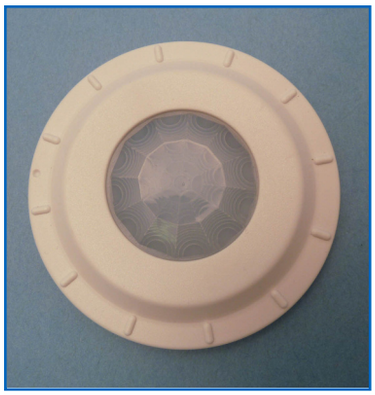




Lenses

Lenses - units are shipped with two lenses - 360º High Bay & Aisle Pattern - also available is the optional Low Bay Lense.

SENPIR-LENS-HB



WHITE - 360º HIGH BAY

SENPIR-LENS-AI

BLACK - AISLE PATTERN

SENPIR-LENS-LB

BLUE - LOW BAY (OPTIONAL)

Line Voltage Sensors - Ordering Chart

Ordering Information:

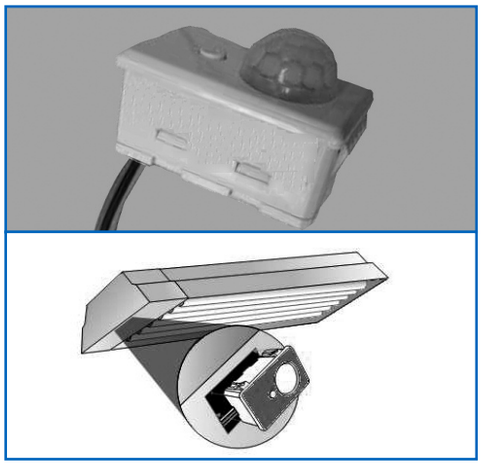
Model Number	Description
SENPIR-HB-01	HIGH BAY PIR SENSOR - 120/277/347V - 2 LENSES EXTERNAL MOUNT
SENPIR-HB-04	HIGH BAY PIR SENSOR - 347V/480V - 2 LENSES EXTERNAL MOUNT
SENPIR-HB-OB	OFFSET BRACKET ACCESSORY FOR SENPIR-HB - 3 POSITION
SENPIR-HB-OB2	SHORT OFFSET BRACKET - SINGLE POSITION
SENPIR-HB-O2CS	HIGH BAY COLD STORAGE PIR SENSOR - 120/277/347V
SENPIR-LB-01	LOW BAY PIR SENSOR - 120/277V - 1 LENS INTERNAL MOUNT
SENPIR-LENS-HB	HIGH BAY SENSOR - REPLACEMENT LENS - 360º HI BAY - WHITE
SENPIR-LENS-LB	LOW BAY SENSOR - REPLACEMENT LENS - 360º LOW BAY - BLUE
SENPIR-LENS-AI	HIGH BAY SENSOR - REPLACEMENT LENS - AISLE PATTERN - BLACK

LOW BAY OCCUPANCY MOTION DETECTOR

Low Bay PIR Occupancy Sensor

The Etlin-Daniels SENPIR-LB-01 Integral Occupancy Sensor, mounts directly into the luminaire and is ideal for linear and task lighting. The self–contained sensor uses Passive Infrared (PIR) Sensing Technology with a 360 degree lens offer amazing performance and sensitivity to small movements and is designed for indoor applications at 8 feet mounting height. The unit snaps into the fixture adjacent to the ballast and easily wired into the fixture which saves labor, time and cost. The Adjustable Time Delay is located on the sensor housing and is easily accessible without removing the ballast cover. The units are UL and cUL approved.

SENPIR-LB-01 Applications: Lighting ON/OFF Control, e.g. Light bulb, Halogen lamp, Fluorescent, LED.



Features:

- Easily installed by snapping into the fixture without any additional hardware.
- Occupancy and motion detection using Passive Infrared Technology inside for accurate sensing.
- 360° Wide Range Coverage.
- 8ft. Mounting Height for Indoor applications
- Relay Imbedded (No External Box is Required)
- Relay technology provides maximum contact life and compatibility with electronic ballasts
- Long leads allow for easy connection to any ballast and eliminate the need to splice additional wires
- Adjustable Time Delay dial located on sensor housing for easy access
- Compact size for mounting into tight spaces
- Internal fixture mount reduces number of devices on ceiling
- No Minimum Load Requirement
- Adjustable Time Delay, ranging from 30 seconds to 30 minutes.
- LED Activity Indication blinks when sensor detects motion.
- 5 Year Limited Warranty.

Coverage:

- 20 ft diameter coverage at 8 ft mounting height.

Mounting:

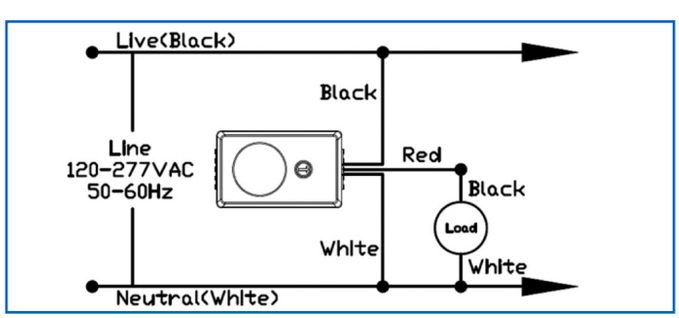
- Sensor can be directly mounted into the fixture panel

Knock-out with dimension: 2.16” (55mm) x 1.30” (33mm). Typical Panel thickness: 0.0030” (0.8mm) and depth: 0.985” (25mm).

SENPIR-LB-01

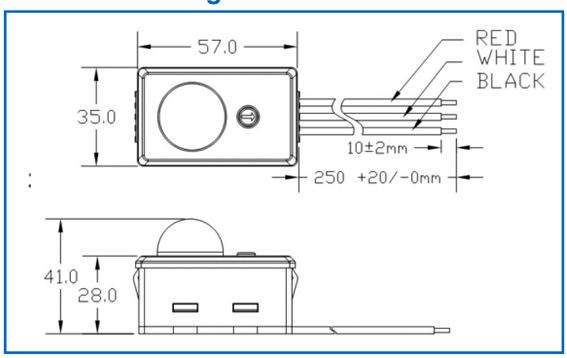
Input:

Input Voltage:	120/277 VAC
Output Voltage:	120/277VAC @ 50/60Hz(Input Dependent)
Load Rating(Fluorescent)	800VA @ 120VAC 1200VA @ 277VAC
Load Rating(Incandescent)	800VA @ 120VAC
Operating Temperature:	-10ºC to 70ºC/14ºF to 160ºF
Maximum Case Temp:	75ºC
Relative Humidity:	20 – 90 % (Non-condensing)
Power Consumption:	0.4W max.

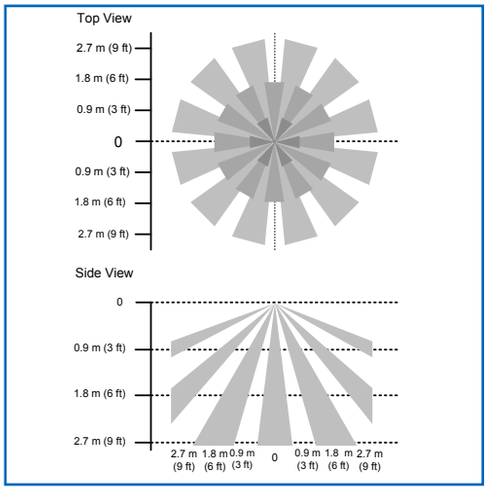


Wiring Diagram 120-277V - SENPIR-LB-01

Drawing for SENPIR-LB-01



360º Field of View



FOR MORE INFORMATION CALL
1-800-661-9610 (Canada) **1-888-762-5384** (USA)

SMALL LINE VOLTAGE PIR SENSOR

Small Voltage Sensors

Passive Infrared (PIR) Sensing Technology Line voltage sensor with 360 degree lens offer amazing performance and sensitivity to small movements and are ideal for new or retrofit applications. Compatible with electronic and magnetic ballasts. The units are UR and cUR approved and comply with California Title 24 requirements.

Applications: Lighting ON/OFF Control, Tungsten, Halogen, Fluorescent, LED light sources.
Ideal for indoor lower height applications such as hallways, stairwells, washrooms, hotel rooms, hospital rooms, utility rooms,etc.

Features:
- Occupancy and motion detection using Passive Infrared Technology Inside.
- 360 Degree Wide Range.
- Up to 10 foot Mounting Height
- No Minimum Load Requirement
- Adjustable Time Delay, from about 4 to 20 minutes.
- Adjustable Day Lighting Control. 30 - 2500 Lux range.
- Self contained
- Relay circuitry - zero crossing to provide long reliable life.
- 1 Year Limited Warranty

Coverage:
- Line of Sight Distance up to 10 Feet (Object and Environment Dependant).
- 360º wide range or 270º wide range with lens cover.

Electrical & Environmental Specifications:

	LB800S
Input:	
Input Voltage:	120V
Frequency:	50/60 Hz
Operating Temperature:	-10ºC to 70ºC/14ºF to 160ºF
Maximum Case Temp:	75ºC
Relative Humidity:	20 – 90 %
Power Consumption:	2.5VA in standby
Load Rating:	120VAC 100VA.

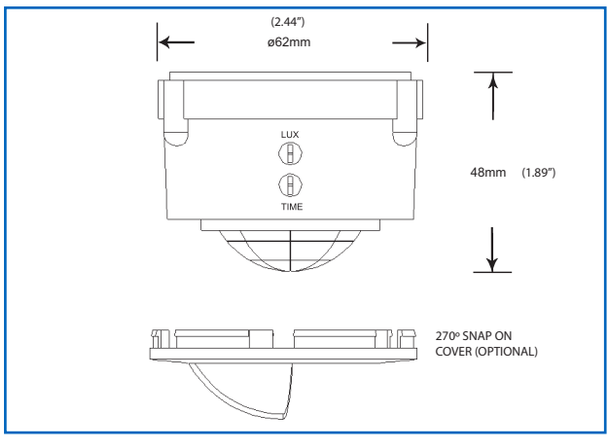
Mechanical Specifications

Case:	White High Impact Injected molded plastic
Dimensions:	61mm Dia. X 48mm (T), 2.4” Dia. X 1.89”(T)
Input Wires:	Black, White, Silicon wire, #18AWG, 200ºC, 300V stranded
Output Wire:	Black, Red,, Silicon wire, #18AWG, 200ºC, 300V stranded

SMALL LINE VOLTAGE PIR SENSOR

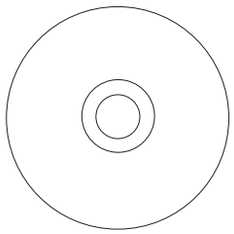
Small Voltage Sensors Diagrams & Drawings

Drawing for SENPIR-LB800S

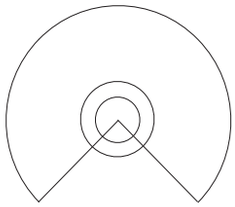


Coverage area for SENPIR-LB800S

360º Bean angle normally:

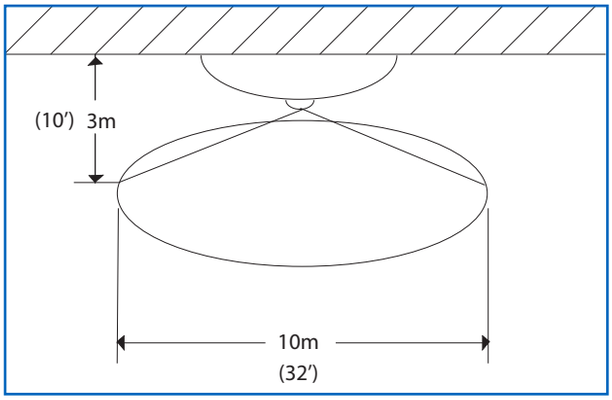


270º Bean angle with optional sensor cover:

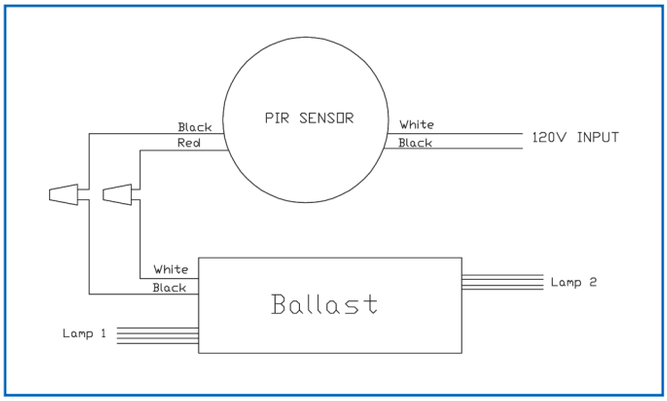


Installed:

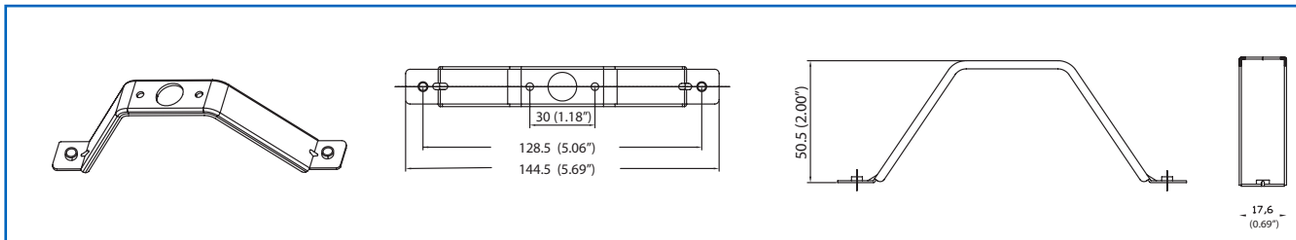
Coverage Pattern:



Wiring Diagram - SENPIR-LB800S



Mounting Brackets



Ordering Information:

Model Number	Description
SENPIR-LB800S	LOW BAY PIR SENSOR - 120V - 360º - WHITE
SENPIR-LB800S-SC	LOW BAY PIR SENSOR SNAP ON 270º COVERAGE, COVER - WHITE
SENPIR-LB800S-MB1	SENSOR OFFSET MOUNTING BRACKET - STEEL