

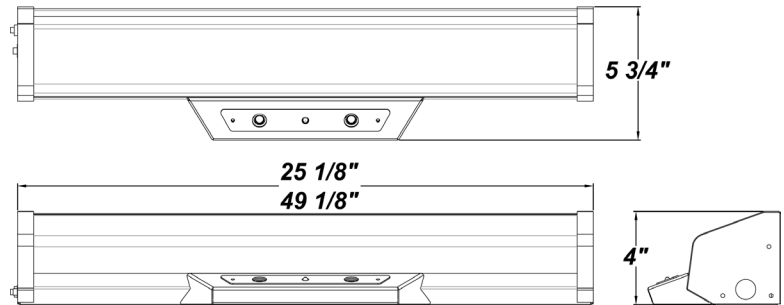
PROJECT :
TYPE :
ORDERING # :
COMMENTS :

**ALLERO**



**FEATURES**

- Steel Housing & End Caps w/ Matte Silver Powder Coat Finish
- High Impact Frosted Acrylic Diffuser
- Steel Reflector Plate w/ Hi-Reflectance White Powder Coat Finish
- Mounts Directly to Wall or Ceiling w/ Four Wall Anchors (Not Included)
- CSA Listed Damp Location
- ADA Compliant



**ORDERING INFORMATION**

Example : (ALO24214E - 277E - WAL - SW -TP)

Matte Silver is Standard Finish

PRODUCT	SOURCE/WATTAGE	VOLTAGE	DIFFUSER / TRIM	FINISH	OPTIONS
Allero 25"	ALO24217E - (2) 17W T8	120E - 120V Electronic	FAL - Frosted Acrylic Lens (Standard)	SM - Matte Silver	F - Fused (120V / 277V Only)
	ALO24214E - (2) 14W T5	277E - 277V Electronic	WAL - Frosted & White Acrylic Lens Assembly	TB - Textured Black	MSE - Wattstopper FS-505 External Motion Sensor w/ Power Pack (120V / 277V Only)
ALO24224E - HO* - (2) 24W T5	347E - 347V Electronic	AC - Antique Copper		EBW - Integral Emergency Battery (See Below)	
Allero 49"	ALO48232E - (2) 32W T8	*HO - High Output		AS - Antique Silver	TP - Tamper Resistant Screws
	ALO48228E - (2) 28W T5			BT - Bronze Mist	W2L - Wire 2 Lamps to Integral Emergency Battery (T8 Lamping Only)
	ALO48254E - HO* - (2) 54W T5			CP - Copper	MSP - Program Start Ballast (Standard w/ Motion Sensor) ***
				KC - Kenworth Chrome	
				SN - Sand	
				SW - Swedish Steel	
				BZ - Textured Bronze	
				TW - Textured White	
				<b>RAL Colors or Custom Match - Consult Factory</b>	

**REPLACEMENT PARTS**

**PART NO.**

Frosted 2' Acrylic Diffuser	3029662
Frosted 4' Acrylic Diffuser	3001562
White 2' Acrylic Lens Assembly	38112
White 4' Acrylic Lens Assembly	38113

ARRA 2009



**NOTES**

\*\*\* For Electronic Wattage Fixtures Being Used in Conjunction With an Occupancy Sensor (Either Provided by us, or Your Own System), a Program Start Ballast is Recommended in Order to Maximize Lamp Life.

**Emergency Battery Options**

Initial light output in Emergency mode will last for a minimum of 90 minutes. 1 lamp wired unless ordered otherwise. The following are suitable for indoor and damp locations. Please refer to Bodine's specification sheet.

EBW : Bodine's B50LP (T8 Electronic) - Temperature Rating (Ambient) 32° F - 122° F  
Bodine's LP550 (T5 Electronic) - Temperature Rating (Ambient) 32° F - 122° F

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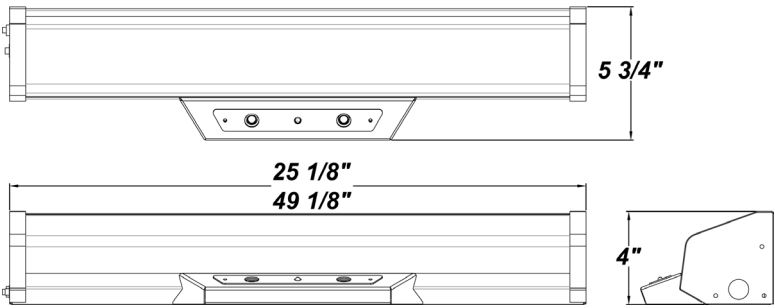
**ALLERO**



W/ MSE OPTION

**DIMMING APPLICATIONS & RESTRICTIONS**

- Step-Dimming is available at 10% and 40% for 32W T8 linear lamps
  - Emergency Battery is not available for use with the 10% and 40% Step-Dim option
  - Ballast used is the **Robertson brand #PSL232T8MV3D**
- Step-Dimming is available at 50% for 17W and 32W T8 Linear Lamps
  - Emergency Battery is available for use with the 50% Step-Dim option
  - Ballast used is the **Universal brand #B232PUS50-A**
- Step-Dimming is available at 50% for 28W T5 Linear Lamps
  - Emergency Battery is available for use with the 50% Step-Dim option
  - Ballast used is the **Philips Advance brand #IOP-2S28-95-SC-SD**
- All 3 ballasts meet California's Title 24 requirement by reducing power by 50% or more



**MOTION SENSOR WITH 2 BALLASTS "MS2B" APPLICATIONS & RESTRICTIONS**

- The "MS2B" option is intended to have one lamp providing 100% constant light output, while the other lamp is connected to the Motion Sensor. Two ballasts are required with this option

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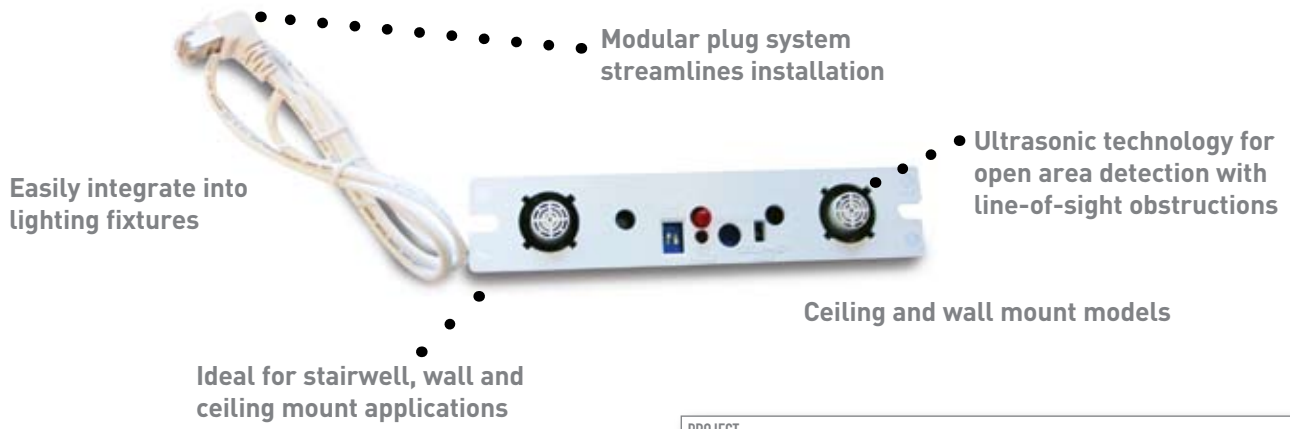
**NOTES**

We reserve the right to revise the design or components of any product due to parts availability or change in UL standards, without assuming any obligation or liability to modify any products previously manufactured, and without notice.





# FS-505/FS-505C Low Voltage Ultrasonic Fixture Integrated Occupancy Sensors



PROJECT
LOCATION/TYPE

## Product Overview

### Description

The FS-505 and FS-505C Low Voltage Ultrasonic Fixture Sensors control lighting based on occupancy. They are designed with a low-profile, architecturally pleasing appearance to easily integrate into a wide range of lighting fixtures or a customized housing. The sensors' modular plug-in system utilizes an RJ45 connector and 3' cord for flexibility and ease of use.

### Operation

When connected to an FS-PP Power Pack, the FS-505 Series sensors use high frequency (40 kHz) ultrasonic technology to sense motion within a space and automatically turn lights on even when the sensor has no direct line of sight to occupants. After the area is vacated and the time delay has elapsed, the sensors automatically turn the lights off. Ultrasonic detection operates by transmitting sound waves throughout an area and measuring the speed at which they return. Movement increases the return frequency, which triggers occupancy.

The FS-505 Series sensors provide functions for testing, overriding the fixture 'ON' and a 72-hour lamp burn-in mode.

### Applications

Typical applications for the FS-505 Series sensors include open office cubicles, offices, conference rooms, restrooms and hallways. This technology also provides superior detection in hard surfaced areas, such as stairwells and hallways.

For a large rectangular detection area with ceiling-mounted fixtures, the FS-505C provides excellent coverage. For specialized applications such as stairwells, the elongated coverage pattern of the FS-505 is ideal.

The FS-505 can provide bi-level lighting control in fixtures that have bi-level or dimming ballasts, resulting in up to 66% energy savings for fixtures that are on 24-hours a day, seven days a week, while still providing enough light for safety and egress.

## Features

- Ultrasonic technology (40Khz)
- Compact design for installation in low-profile fixtures
- 24 VDC
- Three modes: override, burn-in and test modes



## Specifications

### FS-505 Low Voltage Ultrasonic Fixture Sensor



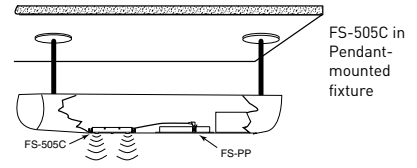
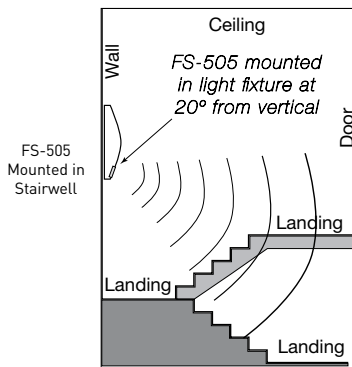
<b>Voltage</b>	24VDC
<b>Current Consumption</b>	43mA
<b>Power Supply</b>	FS-PP Fixture Power Pack
<b>Time Delay</b>	5-30 minutes
<b>Coverage at 8' ht.</b>	24' (731.5cm) diameter
<b>Operating Temp</b>	32-131°F (0-55°C)
<b>Color</b>	White
<b>Dimensions*</b>	5.2" x 1.25" x .62" (132.4mm x 32.2mm x 15.7mm)

### FS-505C Low Voltage Ultrasonic Fixture Sensor



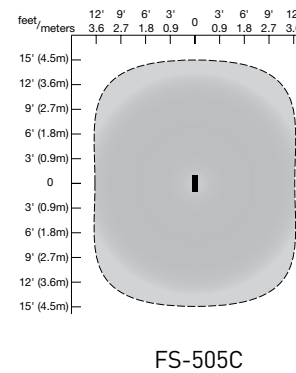
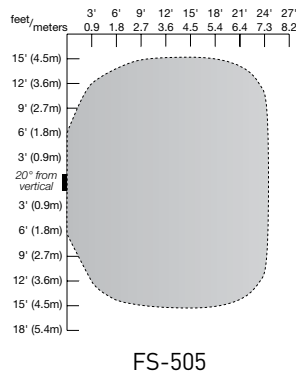
<b>Voltage</b>	24VDC
<b>Current Consumption</b>	43mA
<b>Power Supply</b>	FS-PP Fixture Power Pack
<b>Time Delay</b>	5-30 minutes
<b>Coverage at 8' ht.</b>	30' x 24' (457.2 x 365.7cm)
<b>Operating Temp</b>	32-131°F (0-55°C)
<b>Color</b>	White
<b>Dimensions*</b>	5.2" x 1.25" x .62" (132.4mm x 32.2mm x 15.7mm)

## Applications

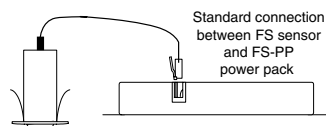


## Wiring & Coverage

### Coverage Patterns @ 8 ft Mounting Height



### FS Low Voltage Wiring Example



## Ordering Information

Catalog No.	Description
<input type="checkbox"/> FS-505	Low Voltage Ultrasonic Fixture Occupancy Sensor for Stairway Applications; 24 VDC fixture mount
<input type="checkbox"/> FS-505C	Low Voltage Ultrasonic Fixture Occupancy Sensor for Open Areas; 24 VDC fixture mount
<input type="checkbox"/> FS-PPv2	Fixture Power Pack 120/277 VAC; 60Hz

**NOTE:** All FS Low Voltage Sensors require an FS-PP or other WattStopper Power Pack (ordered separately) to operate.