



IFS05SE Series

JAYKAL

PROJECT NAME:

JAYKAL LED SOLUTIONS, INC.

www.jaykal.net

21499 Baltimore Ave.

Georgetown, DE 19947

(P) 302-295-0015

(F) 302-295-0016

PROJECT NOTES:

PRODUCT DESCRIPTION

The IFS05SE is a compact PIR sensor that combines occupancy sensing with a photocell. It operates with a 0-10VDC dim-to-off LED driver, enabling any lighting manufacturer to deliver sensor-equipped fixtures with minimal engineering effort.

FEATURES

- Operates on 12VDC supplied by the LED driver.
- Programming can be selected using the RM51 infrared remote controller (not included).
- The integrated photocell can switch lights on and off for dusk-to-dawn control.
- In daylight harvesting mode, the Auto-Calibration function controls the amount of electric light by measuring the overall combined light in the space



Revised 5/30/2026

Specifications are typical values and may change without notification

efficiency. illuminated.



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Requirements

- 0-10VDC LED driver with 12VDC output
- RM51 infrared remote controller (ordered separately)
- HBL1 or LBL2 lens (ordered separately)

Specifications

MODELS	JLS-IFS05SE.B1
Input Voltage	DC 12V
Input Current	30mA
Input Power	0.36W
Output Current	10mA Max
Output Power	0.1W
Dimming	Class 2, 0-10V DC 10mA Max
Sinking Current	10mA Max
Housing Material	UL 94-5VA
Detection Range	40-80ft
Mounting Height	18-40ft
IR Remote Distance	Max 16'
Operating Temperature	-30°C to 70°C, -22°F to 158°F
Storage Temperature	-30°C to 85°C, -22°F to 185°F
IP Rating	IP20/MBL1,HBL1. IP20/LBL2
Color	White
Warranty	5-year warranty
Compliance	UL8750, RoHs
Safety	cULus Listed LED Controller E504054

PHOTOCELL VALUE

LOW	HIGH	CAL	OFF
5FC	20FC	Configurable LUX	Disable

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Ordering Information (not included in the product package)



HBL1

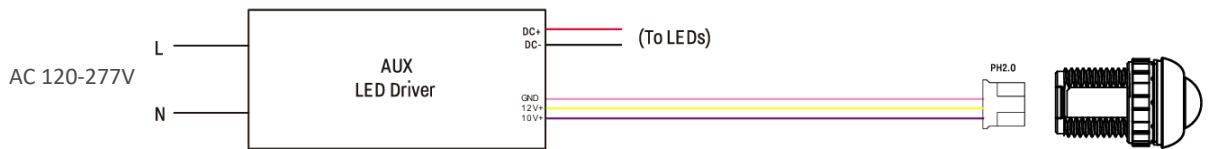


LBL2

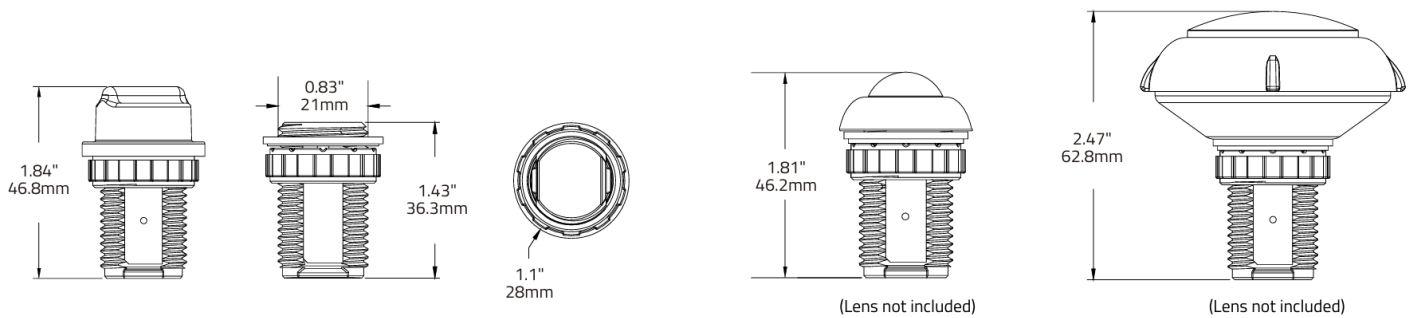
Ordering Information

MODEL	Description
IFS05SE.B1	Fixture Sensor
HBL1-0.5-W	HBL1 High Bay Lens
LBL2-0.5-W	LBL2 Low Bay Lens for minor movement (Default for Low Bay)

Wiring



DIMENSIONS (Units : Inch/mm)



Socket Mounting Dimensions		½ inch US standard knockout
Size	T.P.I - inch	Major Dia. - inch
R1/2	14	0.825

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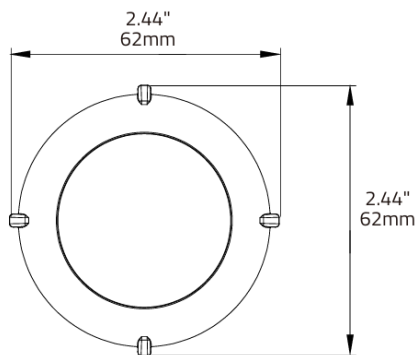
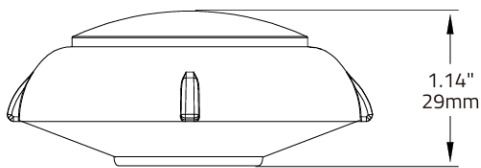
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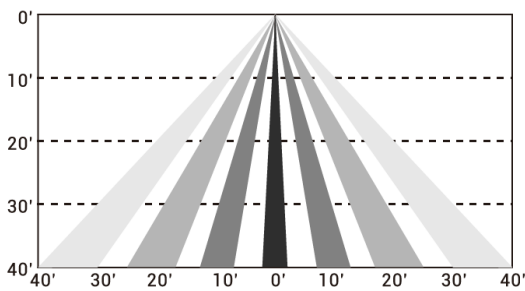
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Dimensions - Accessories

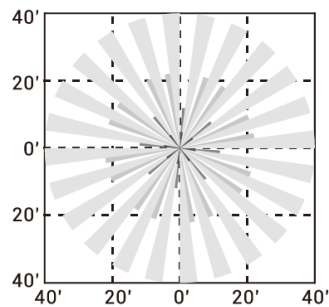
HBL2-0.5-W Lens (not included)



Coverage Side View

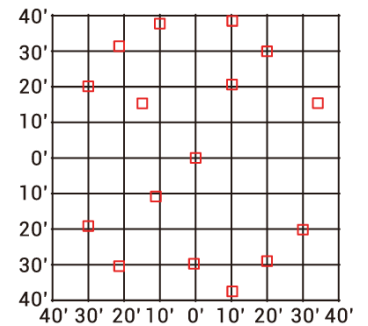


Coverage Top View



Height 40ft

Detecting Spots For Ref



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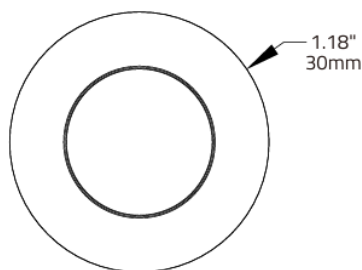
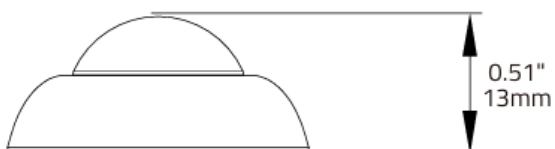
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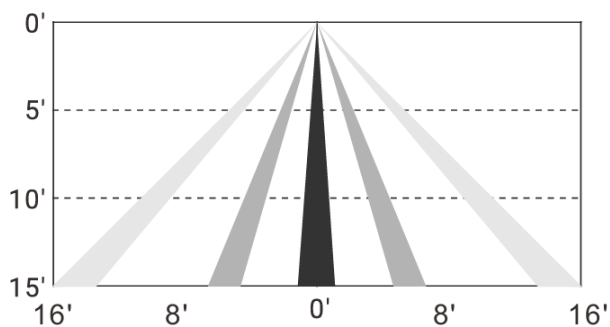
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Dimensions - Accessories

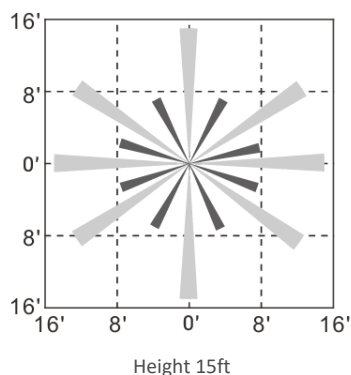
LBL2-0.5-W Lens (not included)



Coverage Side View



Coverage Top View



Height 15ft

IFS05SE.B1 Integrated Low Voltage Photo & PIR & Daylight Harvesting Sensor



RoHS COMPLIANT



12V

Dim-

12V+

Dim+

Input: Class 2, CV, 12VDC, 30mA, 0.36W.
Output: Class 2, 10VDC, 10mA max, 0.1W.

Damp location,
0-10V dimming,



LISTED
E504054
LED Controller

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Remote Instructions

Memory Mode (Commissioning)

To begin commissioning, follow these steps:

1. Select a memory profile: A, B, C, D, or E.
2. The remote's indicator lights will flash, indicating the currently saved settings.
3. Settings can be configured by pressing the appropriate buttons in the highlighted gray area of the remote (TRIM-LEVEL, SENSITIVITY, HOLD TIME, STANDBY DIM, STANDBY TIME, and PHOTOCCELL). Review the selected settings and make changes as needed.
4. Point the remote at the desired luminaire and press "SEND."
5. The luminaire will flash twice to confirm the settings are saved. Changing a parameter in a memory profile will automatically override previous settings.
6. If configuring multiple luminaires, repeat steps 4 and 5 after selecting the configured memory mode.

* **E Mode** allows for visual adjustment to choose the desired dimming level.

Daylight Harvesting (F Mode)

Continuous Adjustment Mode adjusts dimming levels

1. Point the remote at the desired luminaire and press "ON," then press DIM+ or DIM- to adjust the dimming level.
2. Press "F." The indicator lights on the remote will show the current saved settings. Note: Only TRIM-LEVEL, SENSITIVITY, and HOLD TIME can be selected for Daylight Harvesting settings
3. Review the selected settings and make changes as necessary. Press "SEND."
4. If the configuration is successful, the luminaire will flash twice to confirm the setting is saved. If configuring multiple luminaires, select the configured Daylight Harvesting settings, then follow step 1, step 2 and step 3.

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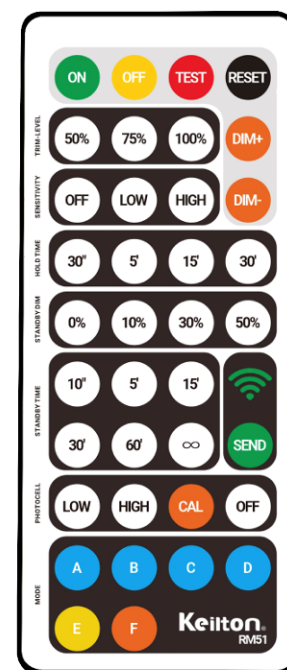
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ON	Turns ON luminaires.
OFF	Turns OFF luminaires.
TEST	The fixture enters the test mode and exit automatically after 5 minutes, the test mode parameters are configured as follows: Trim-level: 100%,Sensitivity: HIGH, Hold time : 2s, Standby dim: 50%,Standby time: 2s.
RESET	Trim= 100% , Sensitivity = High , T1 = 5 min , Standby Dim = 30% , T2 = 60 min , Photocell = OFF.
DIM+/-	Press Dim+ or Dim- to adjust brightness in 0.5V increments. Hold the button for continuous dimming
TRIM-LEVEL	Set Maximum brightness.
SENSITIVITY	Set the motion sensitivity of the sensor LOW:50% / HIGH:100% , OFF: disable the motion detection function.
HOLDTIME	The duration that elapses without occupancy detection before transitioning to standby dim.
STANDBY DIM	Select any standby dim level.
STANDBY TIME	Standby time, when the time is set to "∞", the daylight detection function is activated.
PHOTOCELL	visible light threshold, the fixture is allowed to be turned on when it falls below the threshold LOW:5fc / HIGH:20fc,CAL: Collect the current visible light illuminance as the threshold, OFF: disable PHOTOCELL function.
MODE	Default configuration parameters for mode A to F .
SEND	Send settings to sensor.
DEFAULT MODE A	Trim= 100% , Sensitivity = Low , T1 = 30 min , Standby Dim = 50% , T2 = ∞, Photocell = CAL .
DEFAULT MODE B	Trim= 100% , Sensitivity = Low , T1 = 30 min , Standby Dim = 50% , T2 = 15 min , Photocell = CAL .
DEFAULT MODE C	Trim= 100% , Sensitivity = Low , T1 = 30 min , Standby Dim = 50% , T2 = 15 min , Photocell = OFF .
DEFAULT MODE D	Trim= 50% , Sensitivity = Low , T1 = 30 s , Standby Dim = 50% , T2 = 30 min , Photocell = CAL .
DEFAULT MODE E	Manual Dimmer Mode, Trim= 100% .
DEFAULT MODE F	Daylight Harvesting, Trim= 50% , Sensitivity = Low , T1 = 15 min .



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