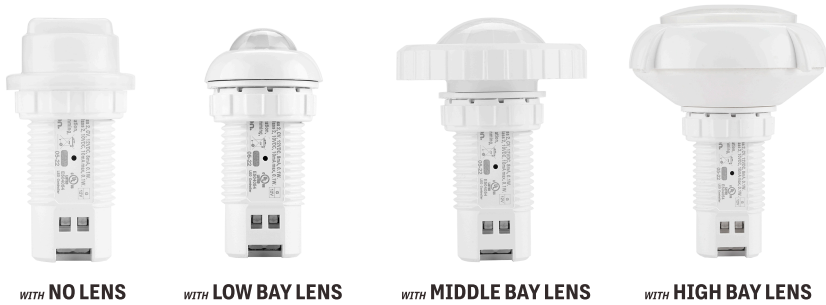


# INTEGRATED LOW VOLTAGE DAYLIGHT HARVESTING/BI-LEVEL PIR MOTION SENSOR

## IFS05S



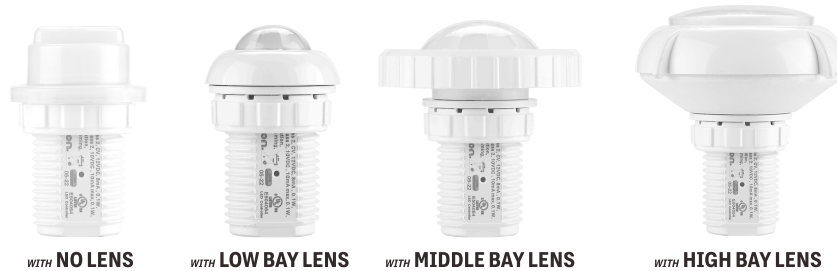
WITH NO LENS

WITH LOW BAY LENS

WITH MIDDLE BAY LENS

WITH HIGH BAY LENS

## IFS05SE



WITH NO LENS

WITH LOW BAY LENS

WITH MIDDLE BAY LENS

WITH HIGH BAY LENS



## FEATURES

IFS05S/SE is compact size PIR sensor combines occupancy sensing with photocell. When used with 0-10V dim-to-off LED drivers, it enables any lighting manufacturer to deliver sensor-equipped fixtures with minimal engineering effort.

It operates on 12V DC supplied by LED driver, which will save OEM cost on manufacturer side. Different mode can be selected according to different applications through RM51 IR remote controller.

The integrated photocell can switch the lights on and off for dusk to dawn control, so that lighting remains on overnight even without motion detection.

Under daylight harvesting mode, the auto-calibration function can control the amount of electric light by measuring the overall combined natural and electric light to achieve the desired light level.

## SPECIFICATIONS

Input Voltage: DC 12V  
 Input Current: 8mA  
 Input Power: 0.1W  
 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,  
 Indoor/Outdoor Use  
 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: IP66/MBL1,HBL1.

IP20/LBL1,LBL2

Color: White

Warranty: 5 years warranty

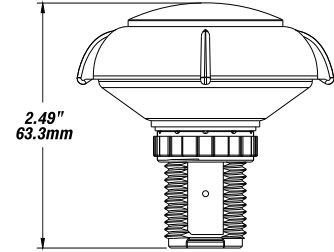
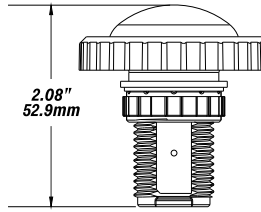
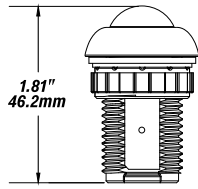
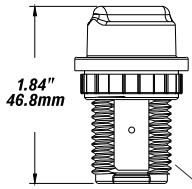
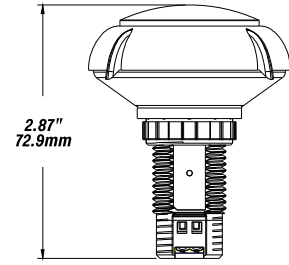
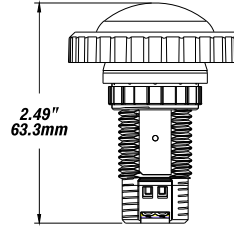
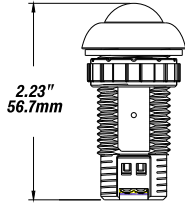
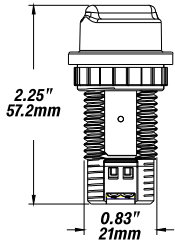
Comply to UL8750, RoHS

Safety: cULus Listed LED Controller  
 E504054

MODEL	DESCRIPTION
IFS05S	Fixture Sensor
IFS05SE	Fixture Sensor with low profile luminaire
HBL1-1/2-W	HBL1 High Bay Lens
MBL1-1/2-W	MBL1 Middle Bay Lens
LBL1-1/2-W	LBL1 Low Bay Lens
LBL2-1/2-W	LBL2 Low Bay Lens for minor movement (Default for Low Bay)

## DIMENSIONS

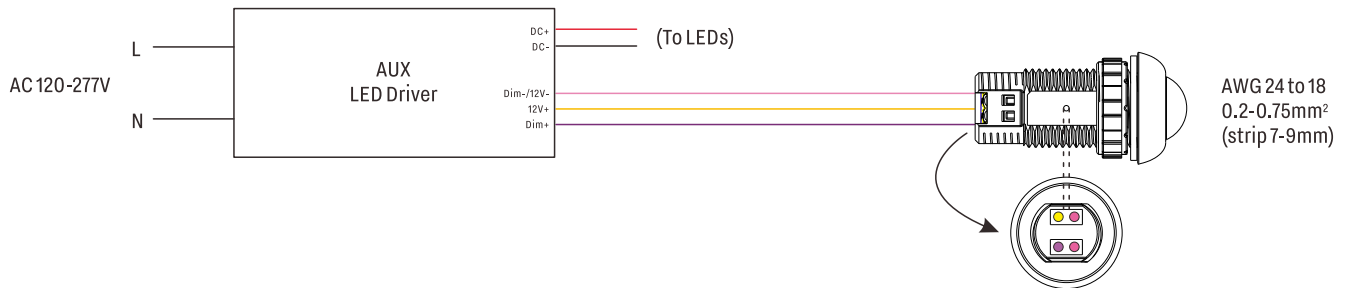
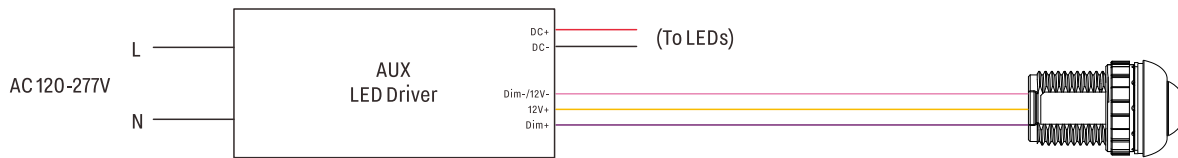
Unit: inch/mm



1/2 inch US standard knockout

AMERICAN INCH PRODUCTS		
Size	T.P.I	Major Dia.
	inch	inch
R1/2	14	0.825

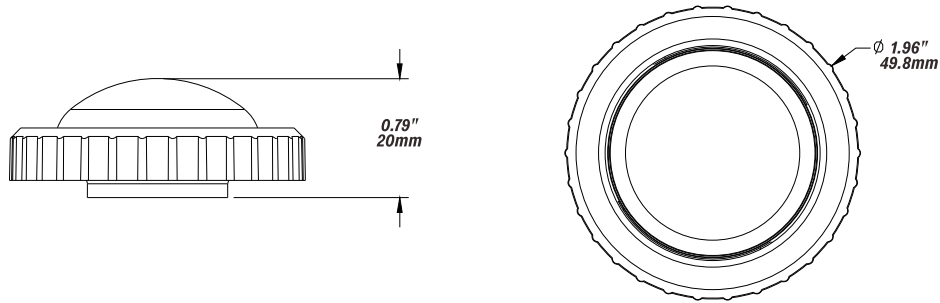
## WIRING



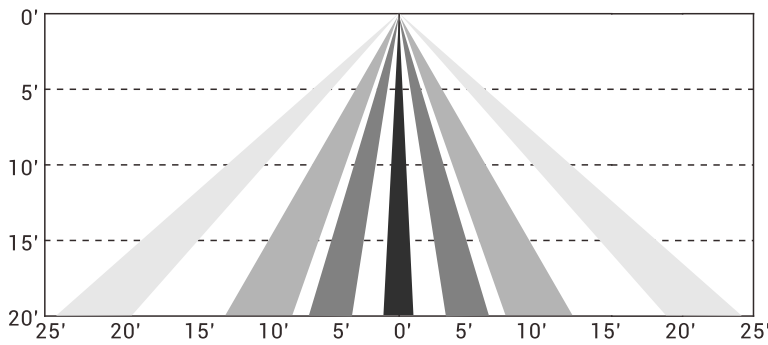
**DIMENSIONS**

Unit: inch/mm

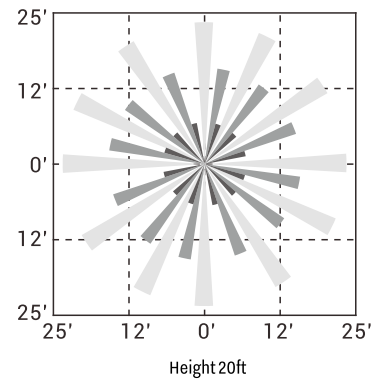
**MBL1**



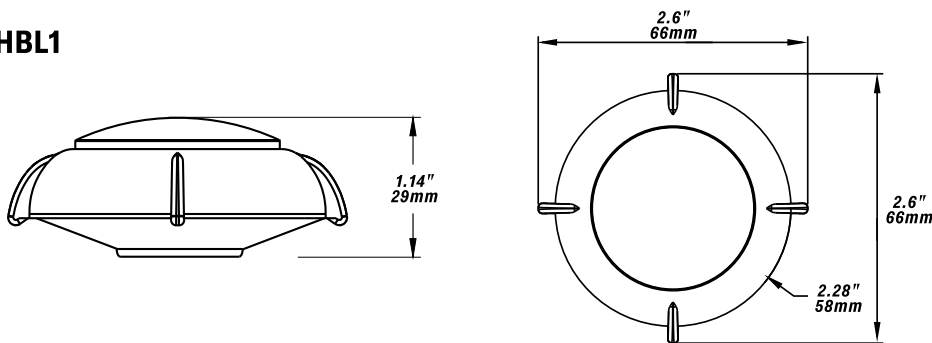
**Coverage Side View**



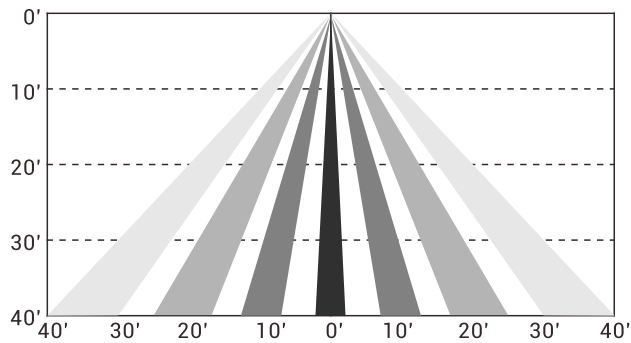
**Coverage Top View**



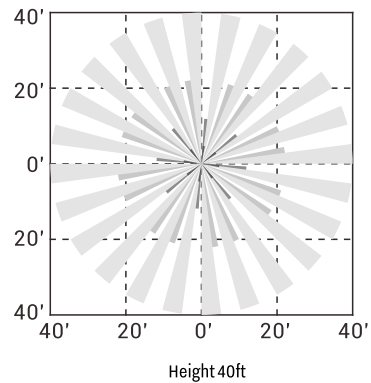
**HBL1**



**Coverage Side View**



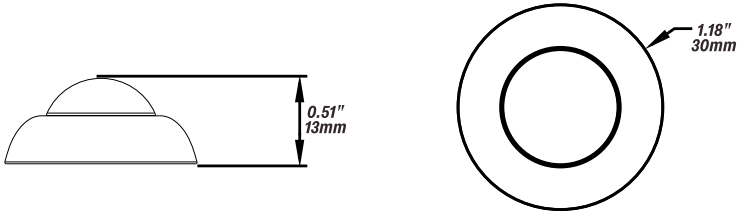
**Coverage Top View**



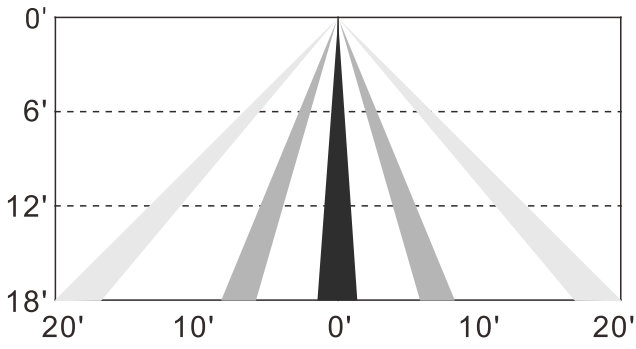
**DIMENSIONS**

Unit: inch/mm

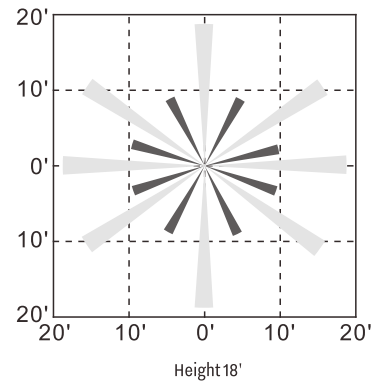
**LBL1**



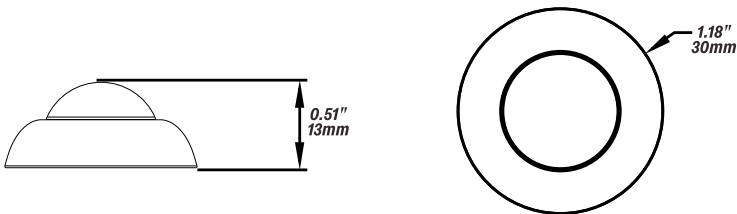
**Coverage Side View**



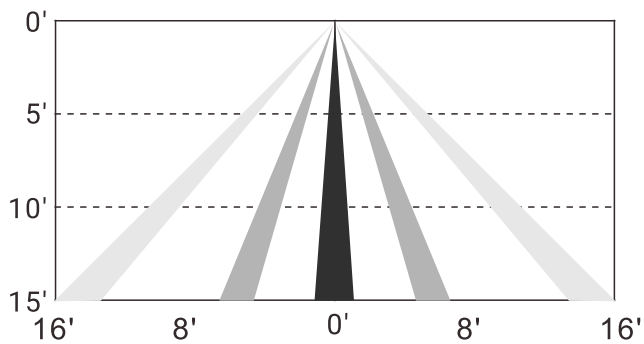
**Coverage Top View**



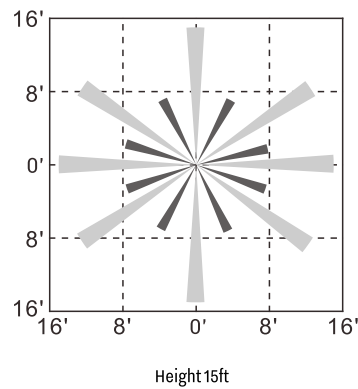
**LBL2**



**Coverage Side View**



**Coverage Top View**



**MARKING**

IFS05SE Integrated Low Voltage  
Photo & PIR & Daylight Harvesting  
Sensor

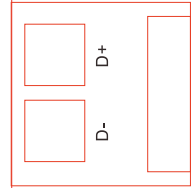
YEL	PUR	PINK
12V	10V+	12V-/10V-

**Keilton®**

IFS05S Integrated Low Voltage  
Photo & PIR & Daylight  
Harvesting Sensor



**Keilton®**



Input: Class 2, CV, 12VDC, 8mA, 0.1W.  
Output: Class 2, 10VDC, 10mA max, 0.1W.  
Damp location,  
0-10V dimming,



RoHS  
COMPLIANT



**LISTED**  
E504054  
LED Controller

**Keilton®**

Input: Class 2, CV, 12VDC, 8mA, 0.1W.  
Output: Class 2, 10VDC, 10mA max, 0.1W.

Damp location,  
0-10V dimming,

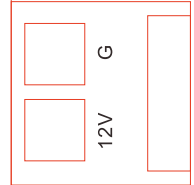


RoHS  
COMPLIANT



**LISTED**  
E504054  
LED Controller

**Keilton®**



## REMOTE INSTRUCTION

### Memory Mode (Commissioning) To begin commissioning, follow the steps below:

1. Select either A, B, C, D.
2. Indicator lights on the remote will flash to indicate the current saved settings.
3. Settings can be configured by pressing appropriate buttons in the highlighted gray area of the remote. (TRIM-LEVEL, SENSITIVITY, HOLD TIME, STANDBY DIM, STANDBY TIME, and PHOTOCELL). Review selected settings and make changes as necessary.
4. Point IR remote to desired luminaire for configuration and press "SEND".
5. If configuration is successful, luminaire will flash two times suggesting settings are saved. Any parameter change to the current saved settings on A to F will override previous settings and will be automatically saved on the remote. If configuring multiple luminaires, select the configured memory mode A to E then follow steps 4 and 5.

\*\*\* **E Mode** allows visual adjustment to choose the desired dimming Level.

### Continuous Adjustment Mode or Daylight Harvesting (F Mode) enables dimmability in response to daylight availability.

1. Point IR remote to desired luminaire.
2. Press "ON" then press DIM+ or DIM- to adjust dimming level.
3. Press "F", indicator lights on the remote will indicate current saved settings. Note: only TRIM-LEVEL, SENSITIVITY, and HOLD TIME can be selected for Daylight Harvesting settings.
4. Review selected settings and make changes as necessary. Press "SEND".
5. If configuration is successful, luminaire will flash twice to confirm setting saved. If configuring multiple luminaires, select the configured DAYLIGHT HARVESTING settings then follow steps 4 and 5.

### Reset Mode

Default Settings: Motion --> 100%, No Motion >= 5min --> DIM to 30%, No Motion >= 60min --> Off

ON	Turns ON Luminaires
OFF	Turns OFF Luminaires
TEST	Test mode will last 5 mins then return to previous setting Test mode will hold time 2 seconds SDL 50% and standby time 2 seconds
RESET	Trim-High=100%,sensitivity=High,T1=5min,Standby Dim=30%, T2=60min,Photocell=OFF
DIM+/-	Remote will manually dim luminaire up or down by increments of 0.5volts. Must be smooth dimming if holding dimming button.
TRIM-LEVEL	Set Maximum threshold value 50/75/100%
SENSITIVITY	OFF(PIR OFF Enter PC ON/OFF function)/LOW(50%)/HIGH (100%)
HOLD TIME	(time of no occupancy after which fixture goes to standby) 30s / 5min /15min / 30min
F MODE DAYLIGHT HARVESTING	(Enable/Disable) Measure and set feature to allow the fixture to maintain a light level. If turned ON.
STANDBY DIM	Select any standby dim level 0/10/30/50%
STANDBY TIME	Standby time -10s / 5min/15min / 30min /1h/∞. "∞" means the stand-by time is infinite and the fixture is effectively controlled by the daylight sensor)
PHOTOCELL	LOW (1fc) / HIGH (50fc)/CAL Collecting The current Lux Level OFF
MODE	Set settings to a Program profile A to F
SEND	Send settings to sensor
DEFAULT MODE A	Trim-High=100%,sensitivity=low,T1=30min,Standby Dim=50%, T2=∞,Photocell=CAL
DEFAULT MODE B	Trim-High=100%,sensitivity=low,T1=30min,Standby Dim=50%, T2=15min,Photocell=CAL
DEFAULT MODE C	Trim-High=100%,sensitivity=low,T1=30min,Standby Dim=50%, T2=15min,Photocell=OFF
DEFAULT MODE D	Trim-Low=50%,sensitivity=low,T1=30min,Standby Dim=50%, T2=30min,Photocell=CAL
DEFAULT MODE E	Manual Mode,Trim-High=100%
DEFAULT MODE F	Daylight Harvesting,Trim-Low=50%,sensitivity=low,T1=15min

