

Keilton

Basic³²

IFS28R-AUX Series

Integrated 12 V Microwave Sensor with Photocell



PHOTOCELL VALUE

LOW	HIGH	CAL	OFF
5 fc	20 fc	Calibrate	Disable

fc = foot-candles (a unit of light level)

CAL = calibrate (use the current room light level as the threshold)

Description

The IFS28R-AUX is a small microwave occupancy sensor with an integrated photocell, designed to be built into a low-bay luminaire. A single plug-in connection carries both power and dimming, so no separate control wiring is needed. The photocell adjusts the lights based on the room light level.

Features

- Microwave motion sensing for low-bay applications
- Integrated photocell with four settings (5 fc / 20 fc / CAL / OFF)
- 2.5 mm audio jack connector for easy installation
- AlgoH² algorithm for accurate detection and low false-ON triggers
- Works with 0–10 V DC dim-to-off LED drivers
- Five default operating modes (A–E) for common applications
- Setup with RM51 Remote Controller (sold separately)

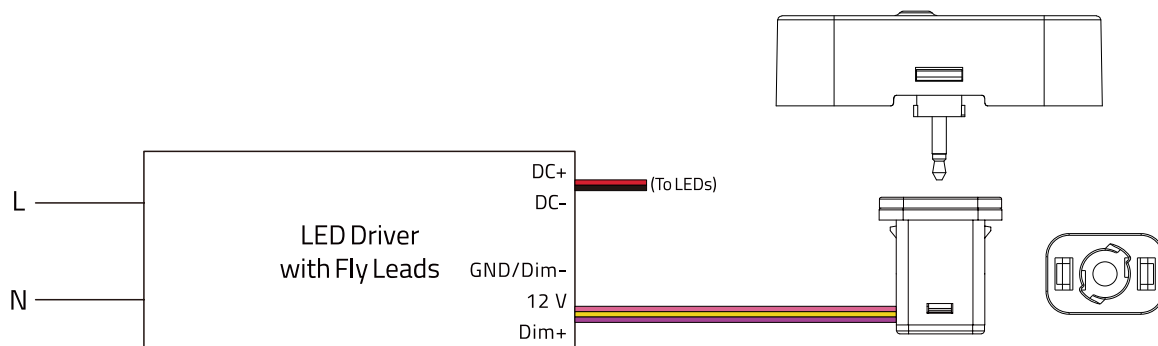
Specifications

Input Voltage	12 V DC $\pm$ 1 V
Input Current	40 mA
Standby Power	0.5 W
Sinking Current	10 mA max
Detection Range	40 ft max
Microwave Frequency	5.8 GHz
Mounting Height	20 ft max
IR Remote Distance	20 ft max
Housing Material	UL 94-5VA
Indoor/Outdoor Use	Indoor use only
Operating Temperature	–30°C to 55°C (–22°F to 131°F)
Storage Temperature	–30°C to 85°C (–22°F to 185°F)
IP Rating	IP20
Color	White
Warranty	5 years
Compliance	UL 8750, RoHS
Safety	cULus Listed LED Controller E504054

Ordering Information

Model	Description
IFS28R-AUX	Low-bay microwave occupancy sensor with photocell and 2.5 mm audio jack, for 0–10 V LED drivers
SC05	Slim audio jack receptacle for low-bay applications

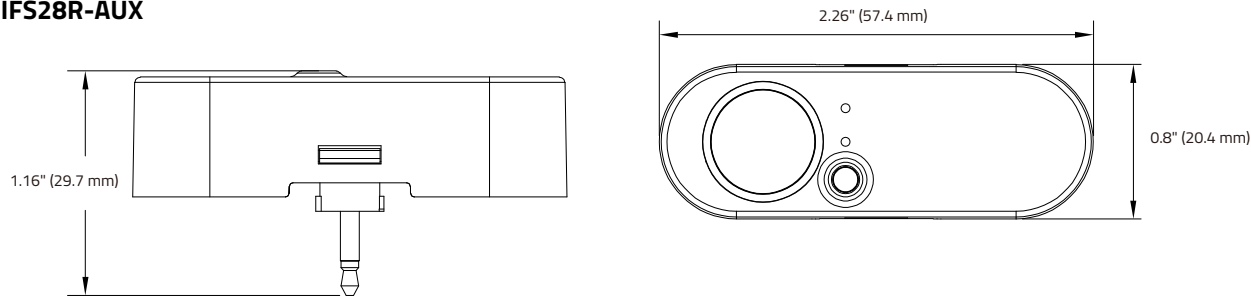
Wiring



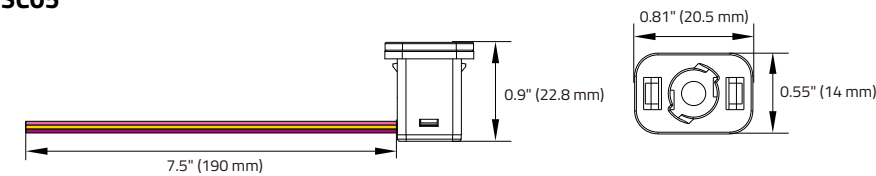
Dimensions

Unit: inch / mm

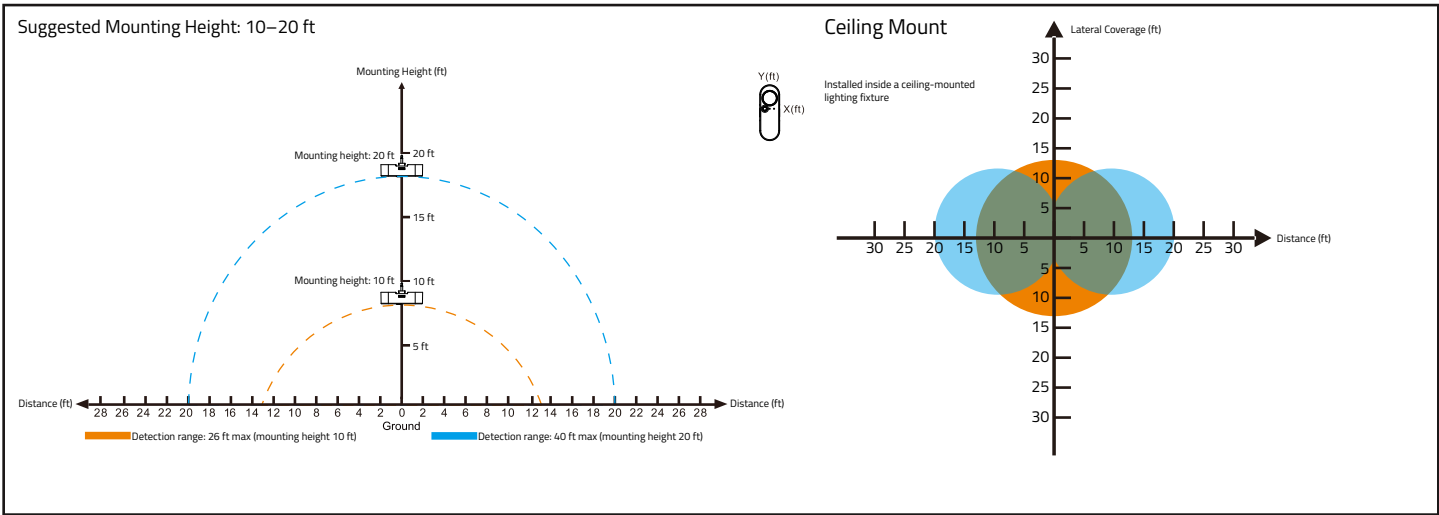
IFS28R-AUX



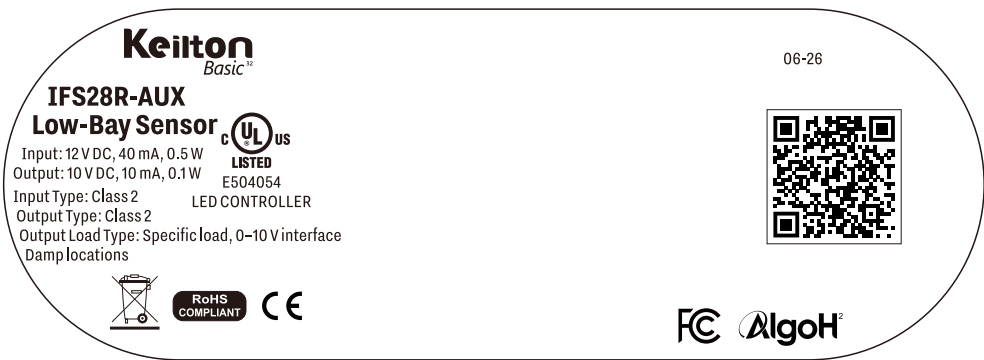
SC05



Coverage



Product Label



Remote Instructions

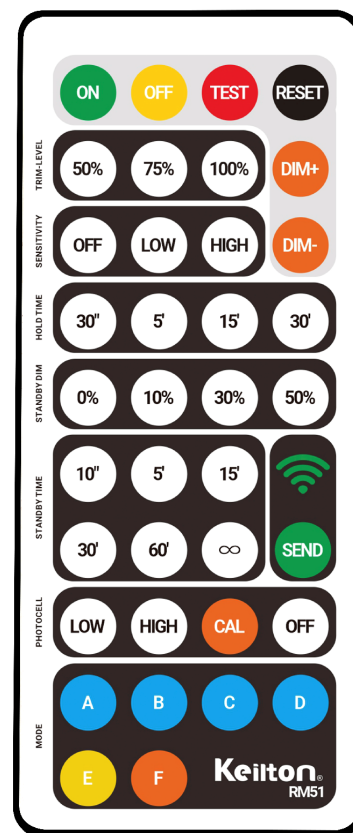
Memory Mode (Commissioning)

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 are configured with the buttons in the labelled groups on the remote: TRIM-LEVEL, SENSITIVITY, HOLD TIME, STANDBY DIM, STANDBY TIME, and PHOTOCELL. 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.

ON	Turns ON luminaires.
OFF	Turns OFF luminaires.
TEST	Test mode exits automatically after 5 minutes. Test mode parameters are: Trim-Level: 100%, Sensitivity: HIGH, Hold Time: 2 s, Standby Dim: 50%, Standby Time: 2 s.
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 0.5 V 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: disables motion detection.
HOLD TIME	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 ∞ (infinity), the daylight detection function is activated.
PHOTOCELL	Set the visible light threshold. The luminaire is allowed to turn on when the room light level falls below the threshold. LOW: 5 fc / HIGH: 20 fc, CAL: Collect the current visible light illuminance as the threshold,
MODE	OFF: disables the photocell function. Default configuration parameters for mode A to E .
SEND	Send settings to sensor.
T1 = Hold Time (time before the sensor goes to standby dim level) T2 = Standby Time (time at standby dim level before the sensor goes off)	
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% .



Mode F is not used on the IFS28R-AUX.

' = minutes, " = seconds

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