



Bi-Level PIR Motion Sensor 20



LL-100 Remote Control

Description

The Litelume Bi-level PIR Motions Sensor 20 (MS20) is a self-contained motion and daylight sensor with a line voltage relay design. Suitable for installation inside commercial lighting fixtures for indoor or outdoor use. The IP66 outdoor rated MS20 uses passive infrared (PIR) sensing technology to detect motion in its coverage area and automatically dims and/or turns off lights when no occupancy is detected. Intended for mounting heights ranging from 8' to 40', offering 2 lens coverage choices and operating 0-10v dimming and/or non-dimming drivers.

Specifications

Power Supply:	120~277VAC, 50Hz/60Hz
Maximum Load @-40°C~70°C	Resistive/Halogen-800W/1200W@ 120V/277V Fluorescent Ballast/CFL -660W/1200W@120/277V Electronic Ballast (LED) - 5A/5A@120/277V
Dim Control Output:	0-10V, max. 25mA sinking current
Detection Radius/angle:	30ft@40ft height/360
Mounting Height:	Max 24ft@ L1, Max 40ft@L2
Remote Range:	50ft (15m) indoor, no backlight
Humidity:	Max 95% RH
Operating Temperature:	-40°C~70°C

Features

- Provides line voltage On/Off switching and 0-10VDC dimming control
- Works with ballasts or LED drivers
- High and low modes fully adjustable from 0 to 10V
- Time delay from 5 to 30 minutes
- Optional cutoff delay
- Adjustable ramp up and fade down times
- CLASS 2 for whole sensor
- Optional daylighting setpoints feature automatic calibration, or permit manual adjustment.
- Polycarbonate, flame retardant, UV resistant, impact resistant.
- UL773A and FCC

Warranty

- 5 Year Warranty

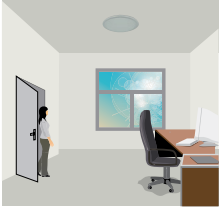


Operation

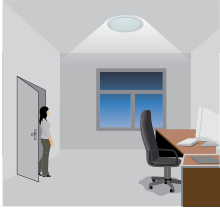
Typically, the sensor ramps lighting On to the selected High mode level when motion is detected and the ambient light level is below the hold off setpoint. After the sensor stops detecting movement and the time delay elapses, lights fade to the Low mode level. If there is no motion during the subsequent cut off time delay, the lights will turn Off. For dusk to dawn control, the integral photocell can switch the lights On and Off based on the ambient light level so that lighting remains on overnight even without motion detection.

Corridor Function

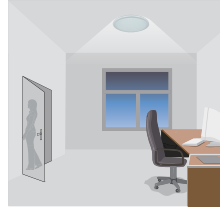
For areas that require a light change notice before switch-off, use the corridor function to achieve tri-level control. The MS20 offers 3 levels of light: 100 to dimmed light (natural light is insufficient) to off. There are also 2 periods of selectable waiting time: motion hold-time and stand-by period; selectable daylight threshold and freedom of detection area



With sufficient natural light, the light does not switch on when presence is detected



With insufficient natural light, the sensor switches on the light automatically when presence is detected



After hold-time, the light dims to stand-by level if the surrounding natural light is below the daylight threshold.



Light switches off automatically after the stand-by period elapses

Smart Photocell Function

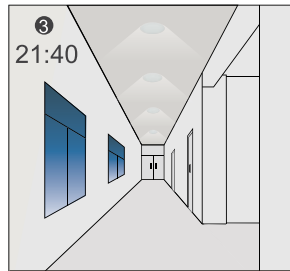
Open the smart photocell sensor by pushing  when the remote control is in setting mode.



The light switches on at 100% when there is movement detected.

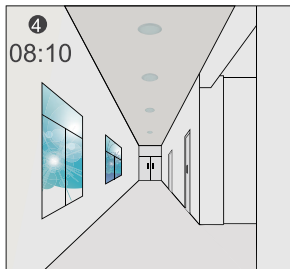


The light dims to stand-by levels after the hold time.

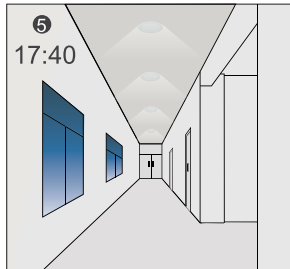


The light remains in dimming level at night.

1 ↔ **3** goes in cycle at night ...
100% on when movement detected, and dims to 10% in long absence.



When natural light levels exceed setpoint off to light, the light will turn off even if the space is occupied.



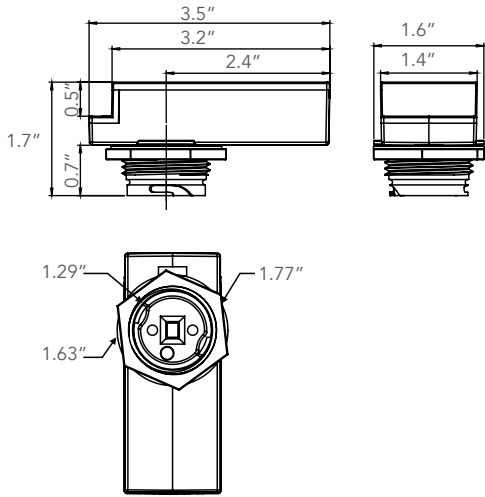
The light automatically turns on at 10% when natural light is insufficient (no motion)

Applications

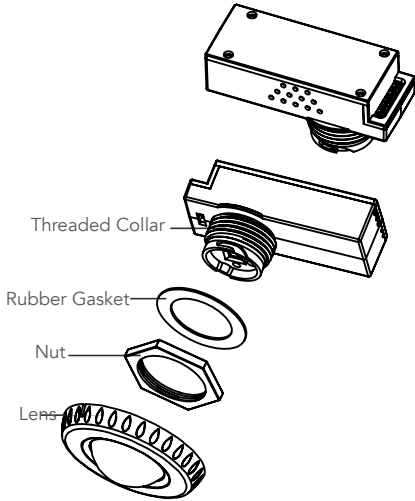
The slim, low-profile MS20 is designed for installation inside the bottom of a light fixture body. When fully assembled and installed in an IP65-rated fixture, the PIR sensor module parts are IP65 outdoor rated. The sensor is ideal for areas such as parking facilities, gas stations, pedestrian pathways and warehouses. A choice of two PIR Lens ensures complete coverage for mounting heights up to 40'.



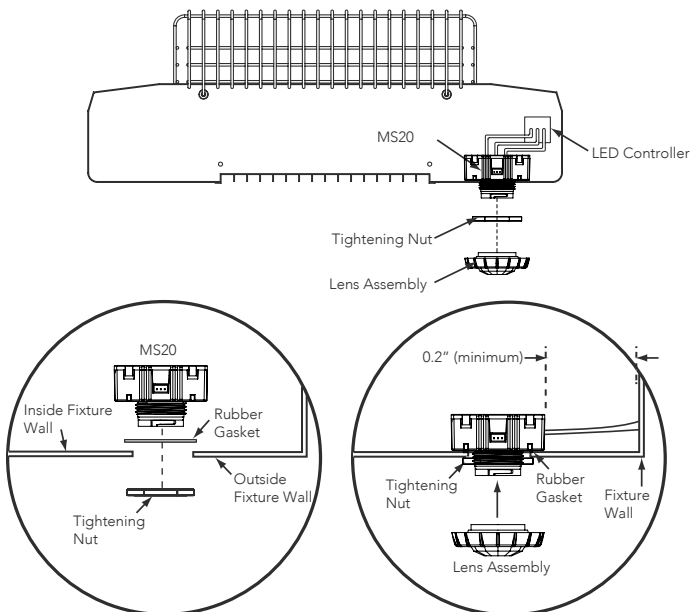
Dimensions



Sensor Module



Sensor Mounting

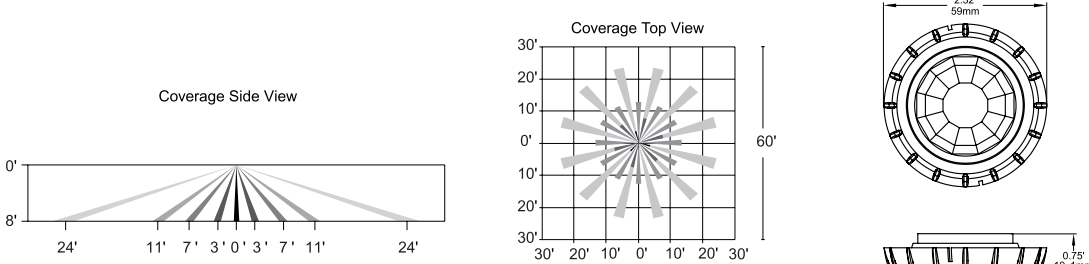




Project Name	
Catalog #	
Job Type	
Prepared By	
Notes	

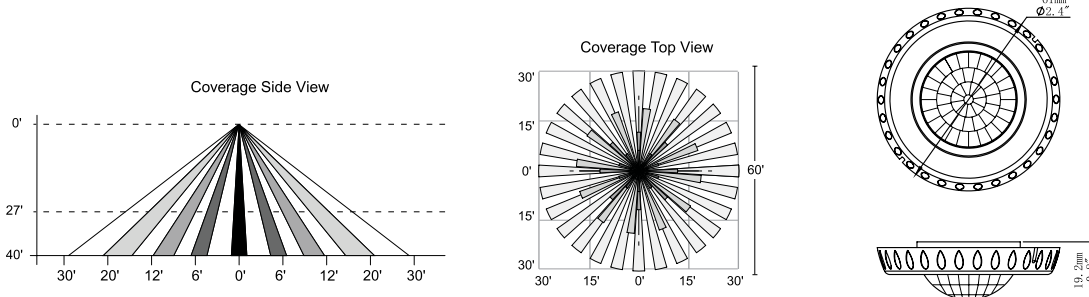
Coverage Pattern

L3



L3: 360° Coverage

L4

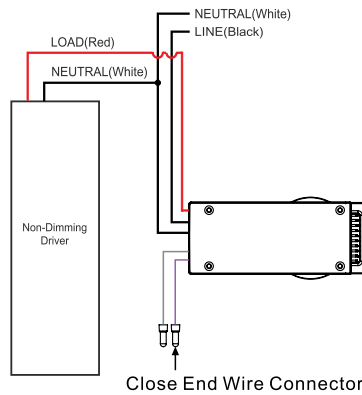
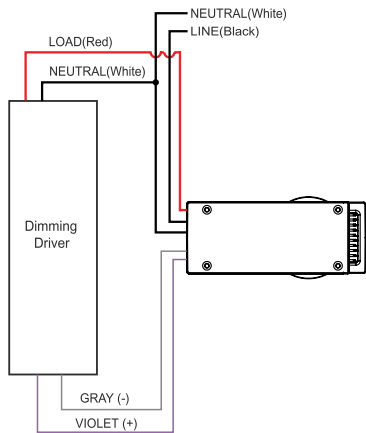


L4: 360° Coverage

Wiring Diagram

Wiring with dimming ballast or LED driver

Wiring with non-dimming ballast or LED driver



Ordering Information

Part #	Description
MS20	Bi-Level PIR Motion Sensor 20
L3	L3 Low Bay Coverage Lens
L4	L4 High Bay Coverage Lens
LL-100	Remote Control 100

* Please contact LITELUME for all Custom Option Requests