

# **Specification**

Product Name: PIR Switch sensor

Product Model: MC113S D IR

Versions	Release/ Update Date	Reason	Publishing
V1.0	11-OCT-2024		James Guo



# [Product Feature]

- Designed for LED fixtures, inside mounted split ON/OFF function PIR sensor.
- Easily programming detection area, hold time and daylight threshold by DIP switch
- Max mounting height 4m



### [Parameters]

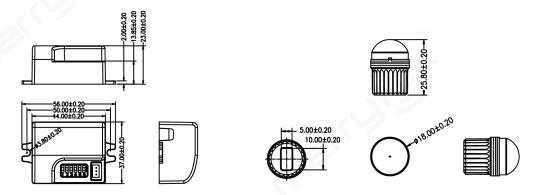
Input			
Operating Voltage	220-240Vac		
Rated Voltage	230Vac		
Stand-by Power	≤0.5W		
Surge Test	1KV (L/N, EN61000-4-5)		
Output			
Working Mode	ON/OFF		
Load Type	Inductive Load/Resistive Load		
Load Power	400W@230VAC(Inductive Load), 800W @230VAC(Resistive Load).		
Load Surge Current	30A (50% Ipeak, Twidth 200us @230Vac full load, cold start)		
Sensor Parameters			
Detection Way	PIR		
Hold Time	5s/30s/3min/10min DIP set		
Detection Area	N/A		
Daylight Sensor	5Lux/15Lux//50Lux/Disable (Diffusion) by rotary switch		
	Ceiling Mounting at 3m high, <u>r≥3m@0.6~1m/s</u> tangential direction		
Detection Denge (Dedice)	Wall mounting at 1.2m high, <u>r≥6m@0.6~1m/s</u> tangential direction		
Detection Range(Radius)	Test condition: 100% sensitivity, indoors, no direct sunlight to sensor,		
	no wind, Temperature 25℃		
Mounting Height	3m (4m Max)		
Environment			
Operating Temperature	-20℃~+55℃		
Storage Temperature	-40°C~+80°C, humidity≤85% (Non-condensing)		
Certificate Standards			
Safety (LVD) standard	EN61058-1-2, EN61058-1		
Surge	1KV (L/N, EN61000-4-5)		
EMC Standards	EN55015		
Environmental Requirement	Compliant to RoHS 2.0, Reach		
Certificates	CE, RED		
IP Rating	IP20		
Product classification	Class II		
Others			
Wiring	Lead wire, AC wire: (L:Brown L':Red N:Blue) :wire diameter: 0.5mm²		
Installation	Inside mounting		
Package	Bubble bag + cardboard + outer carton(K=A)		



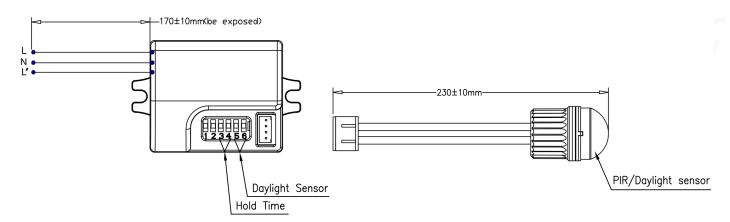
Net Weight	43.4±3g
Lifetime	3 years warranty@Ta 230Vac full load

### [Product Information]

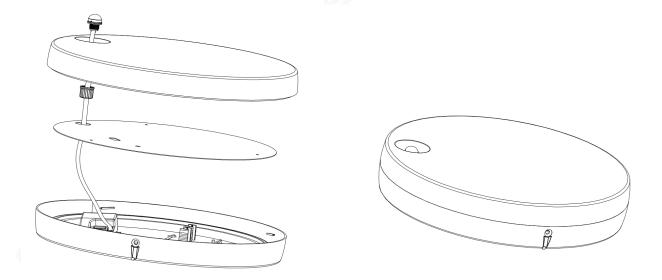
• Dimension (units: mm)



#### Wiring&function



### • [Installation Instruction]



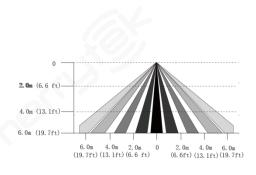


# [Detection Range]

Top View

low Bay
360°

6.0m 4.0m 2.0m 0 2.0m 4.0m 6.0m
(19.7ft)(13.1ft) (6.6 ft) (6.6ft) (13.1ft) (19.7ft)



Side View

# [DIP setting]

1) Detection Area

# N/A

# 2) Hold Time

<b>b</b>	3	4	
I	ON	ON	5S
II	-	ON	30S
III	ON	-	3min
IV	-	-	10min



#### Daylight Sensor

	5	6	
Ι	ON	ON	Disable
II	-	ON	5Lux
III	ON	-	15Lux
IV	-	-	50Lux

<sup>\*</sup>When set to Disable gear, the sensor will turn on the light as long as the motion of the object is detected, regardless of whether the illumination is adequate or not.

#### [Initialization]

After power on, the sensor automatically turns on light to 100% brightness and turns off light in 12±3seconds. During initialization, sensor is not able to detect movement.

#### [Default setting]

Sensitivity: 100% Hold-time: 5s Daylight sensor: Disable

#### [Application Notice]

- Sensor should be installed by a professional electrician. Please turn off power before installing, wiring.
- The typical installation height is 3m. It's for indoor use only, in order to avoid false trigger by the ambient temperature. Pls do not install in locations sensitive to temperature or airflow changes, to avoid sensing failure due to false trigger or high temperature.
- Sensors should be kept away from air conditioners, refrigerators, exhaust vents, furnaces, and other places sensitive to changes in air temperature.
- Sensors should not be obstructed by screens, furniture, large bonsai or other isolating objects within the detection range.
- Reflective objects should be avoided directly in front of the sensor, reflecting light will cause the sensor to be triggered incorrectly.
- Sensors should not be installed indoors directly in front of a window, otherwise the disturbance of thermal airflow outside the window and the movement of people will cause false alarms. The sensitivity of PIR sensors to the human body is also highly related to the direction of human movement, radial movement is at the least sensitivity, while highly sensitive to the cross section direction (perpendicular to the radius).

<sup>\*</sup>The light sensing threshold is a typical value in a sunny environment with no shadow and diffuse reflection of ambient light.



- The distance detect standards: At night, indoor ambient temperature of  $25^{\circ}$ C, humidity 50-70%, the human body surface temperature of 36-37 degrees, people walk in the cross-section direction at the speed of  $0.6 \sim 1 \text{m/s}$ . The maximum sensing angle of the product is based on highest sensitivity setting, if set at low sensitivity can not fulfil the maximum sensing angle. The sensing distance is related to the height of the tester, the installation height and working environment etc.
- As PIR sensor probe is relatively fragile, pls pay attention to protection during production, storage, handling, transportation, consumer installation, and need to be gently held and put under no effective protective packaging. If the product falls may cause the infrared probe to appear hidden cracks or damage to the inner chip, then it will not work or false trigger.