



ED211S-Y

Product Specification
(Ver1.0)

ED211S-Y The microwave motion switch is designed based on the Doppler principle, it transmits the high frequency electromagnetic wave through the antenna and receives the reflected wave. Based on this principle it judges the movement of the object within the coverage range, and feedback corresponding electricity signal.

It is widely used in motion sensor lighting, security, small household electrical appliances, smart home, automatic door control switch, greeting device and other products, as well as garage, corridor, courtyard, balcony, bathroom and other places that need automatic motion sensor control.



Feature & Advantage

- Compared with PIR module, microwave motion sensor is better (with more wide detection range, no dead area, no lens, no lens aging problem, no environment interference)
- Strong anti-interference ability -- It is not affected by temperature, humidity, airflow, dust, noise, brightness and other factors
- Microwave can penetrate Acrylic, glass or thin non-metal materials
- Complying with environmental requirements

Characteristic Description



Distance Customize



Daylight Optional



Delay Time Customize



Constant Light On Mode:
On/Off Three times

Application Place

It is widely applied in motion sensor lighting, security, small household electrical appliances, smart home, automatic door control switch, greeting device and other products, as well as garage, corridor, courtyard, balcony, bathroom and other places that need automatic motion sensor control.



Washroom

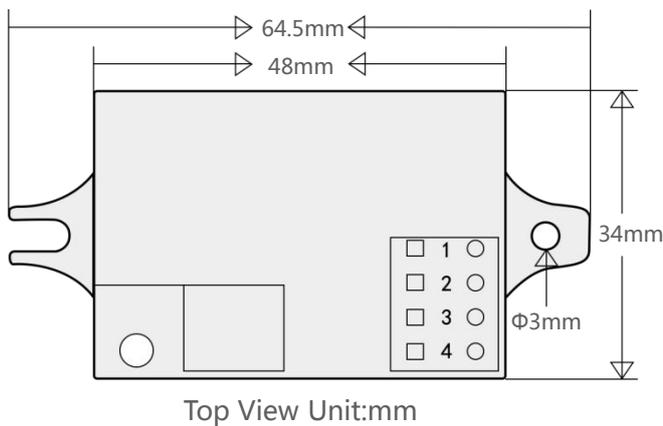


Corridor

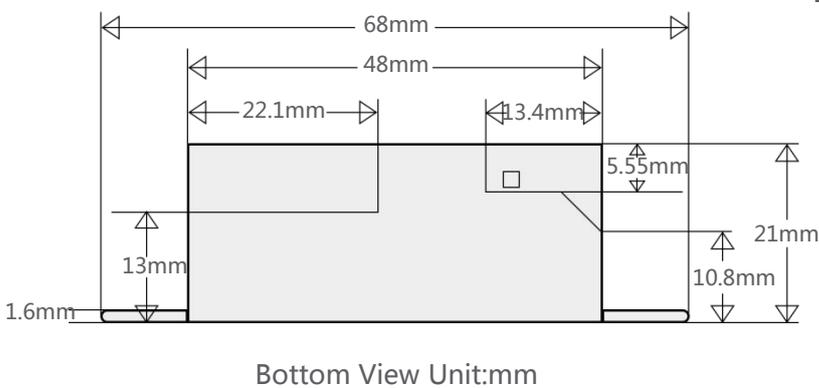


Garage

Structural Drawing



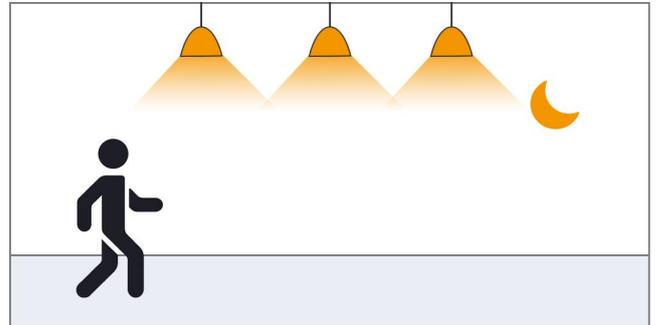
- 1 : Live Wire:L Input
- 2 : Naught Wire:N Input
- 3 : Live Wire:L' Output
- 4 : Naught Wire:N' Output



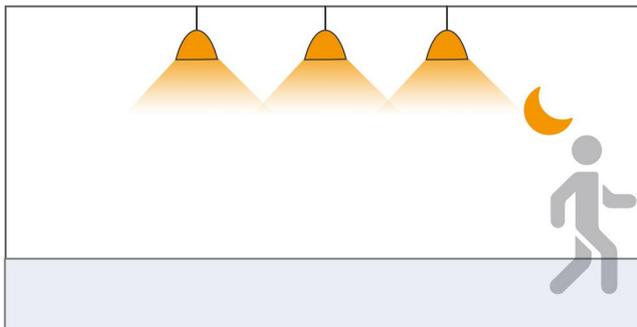
Application Demo



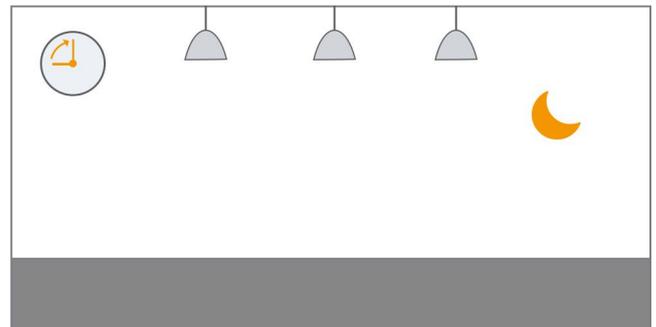
The light does not trigger on when detect moving object with the ambient brightness is enough



The light triggers on when the sensor detect moving object with the ambient brightness is lower than the preset threshold of photo-transistor

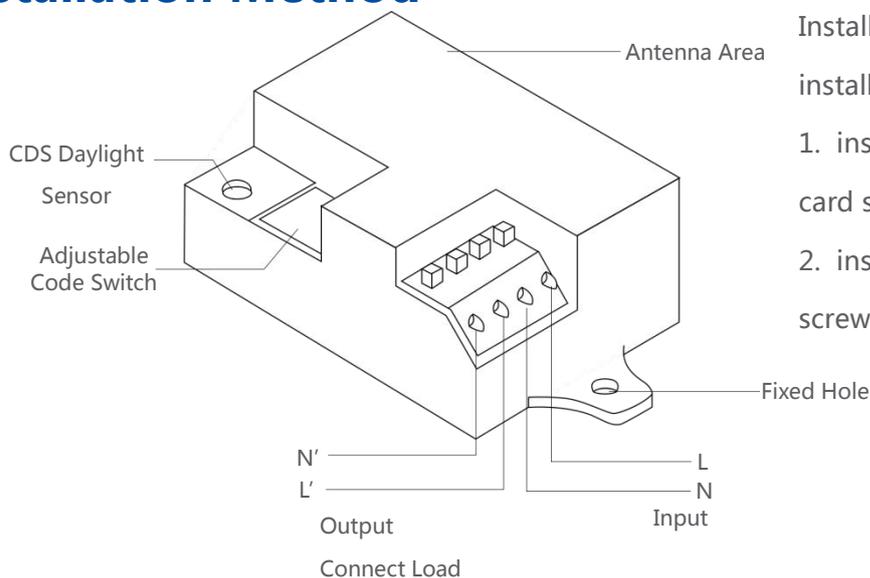


After the moving object leaves or object keep still during delay time cycle, the light will keep lighting on till delay time cycle over



After the preset delay time over and no moving object detect, the light will automatically off

Installation Method



Installation Method: A variety of installation options are available:

1. install the fixed bracket with card slot and layering.
2. install the fixed bracket with screws or rivets.

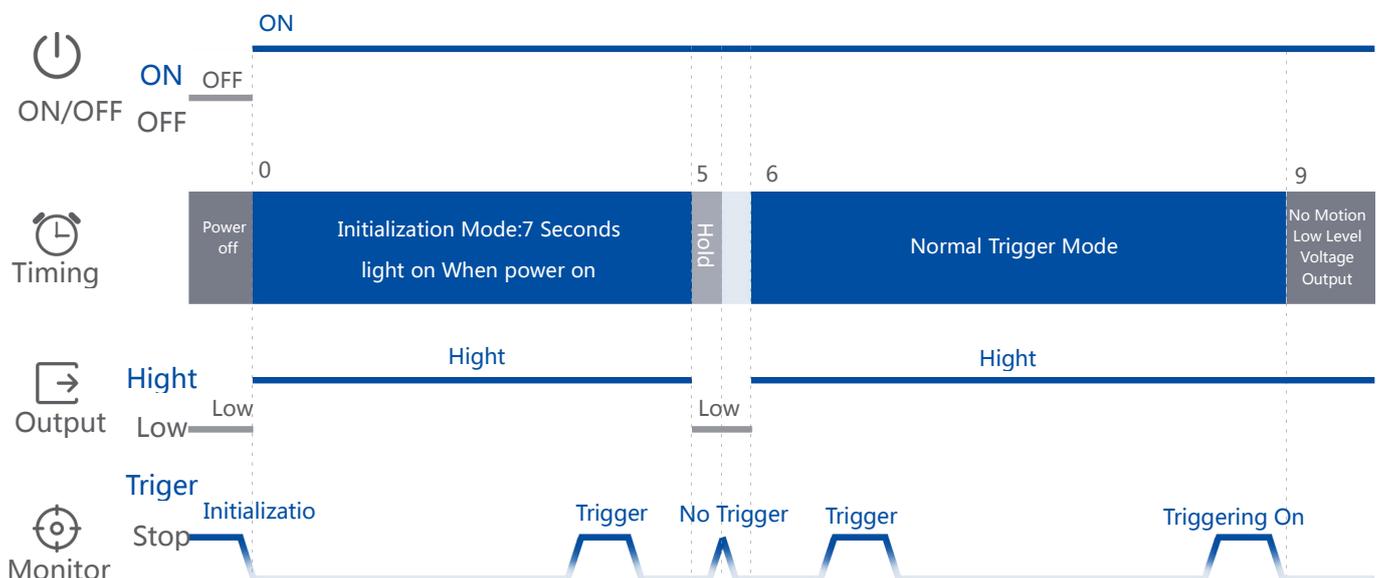
Specification

Parameter	Min	Typical	Max	Unit	
Transmit Frequency	100	-	277	V	-
Surge Protection	-	-	400	W	@100V-277V
Rated Power	5.725	5.8	5.875	GHz	-
Power Dissipation	-	0.5	-	W	-
3dB beam angle	-	93	-	°	XZ Plane
	-	99	-	°	YZ Plane
Antenna Gain	-	4	-	dB	
Detect Distance	5	6	7	m	-
Delay Time	5	180	300	s	Remark 1
Daylight Sensor Lux	-	25	-	Lux	-
Work Temperature	-25	-	85	°C	Remark 2
Storage Temperature	-50	-	125	°C	-

■ Remark 1 : Test Environment affect detect distance of motion switch..For example:the detect distance is longer when tested in corridor, because corridor is empty space. And the distance will be affected if there are many stuffs or obstacles.

■ Remark 2 : Daylight sensor lux is tested under natural brightness

Working sequence when Power on



Adjustable Code Switch Setting:

1. Detect Distance Setting -- The 1 st code switch	
	1
100%	ON
50%	-

Remark: According to different application occasions, the induction distance can be adjusted by setting the code switch to choose 100%, 50%.

3. Daylight Sensor Setting: The 4th code switch	
	4
25Lux	ON
Disable	-

Only when the ambient illuminance is lower than the setting valve, there is an object moving in the sensing area. The daylight sensor limit value is: 25LUX / day.

2.Delay Time Setting: The 2 nd and 3 rd code switch		
	2	3
5s	ON	ON
1min	ON	-
3min	-	ON
5min	-	-

Remark:Delay time refers to the time when the moving object moves away from the sensing area. The code switch can be set as 5S, 1min, 3min and 5min.

Naming Rules

ED	Type	Item No	Antenna Type	Configuration No	Delay Time	Holding Time	Version
ED	2	11	D	N	5s-180s-300s	2s	R6
	<input type="checkbox"/> 1Radar Module	11	<input type="checkbox"/> S Single Layer Antenna	<input type="checkbox"/> Y With LDR	5s-180s-300s	2s	R6
	<input checked="" type="checkbox"/> 2Radar Switch		<input checked="" type="checkbox"/> D Stacked Antenna	<input checked="" type="checkbox"/> N No LDR			
			<input type="checkbox"/> H High Precision	<input type="checkbox"/> P Programming			
			<input type="checkbox"/> Antenna				

Additional Remarks

-  Warning: IFI/IFQ output signal is sensitive to ESD(electrostatic damage),if exposure to high electrostatic or power source areas may cause irreversible damage to the radar module
-  Recommendation: It is recommended to use a qualified DC voltage stabilizing power supply.That is,DC voltage, current, and ripple coefficient that are all up to the standard, otherwise it will affect the stability of this product and may cause some anomalies, such as: false alarm, no detection, circulation, self-start, etc.

Attentions

- Avoid installing together with metal accessories or shell,when install microwave motion sensor,metal will absorb microwave and affect the effect.
- Please use power supply circuit with tiny ripple current, especially the low frequency ripple, which disturb the sensor's work easily.
- The output current of the sensor is very weak, If driver too large current easy to cause misinformation. Better us drive the load by isolation drive, and can also use MCU to read the output state.
- The recommend distance between each switch is 1.5m,for better performance and no interface.

History Revision Records

No Revision



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