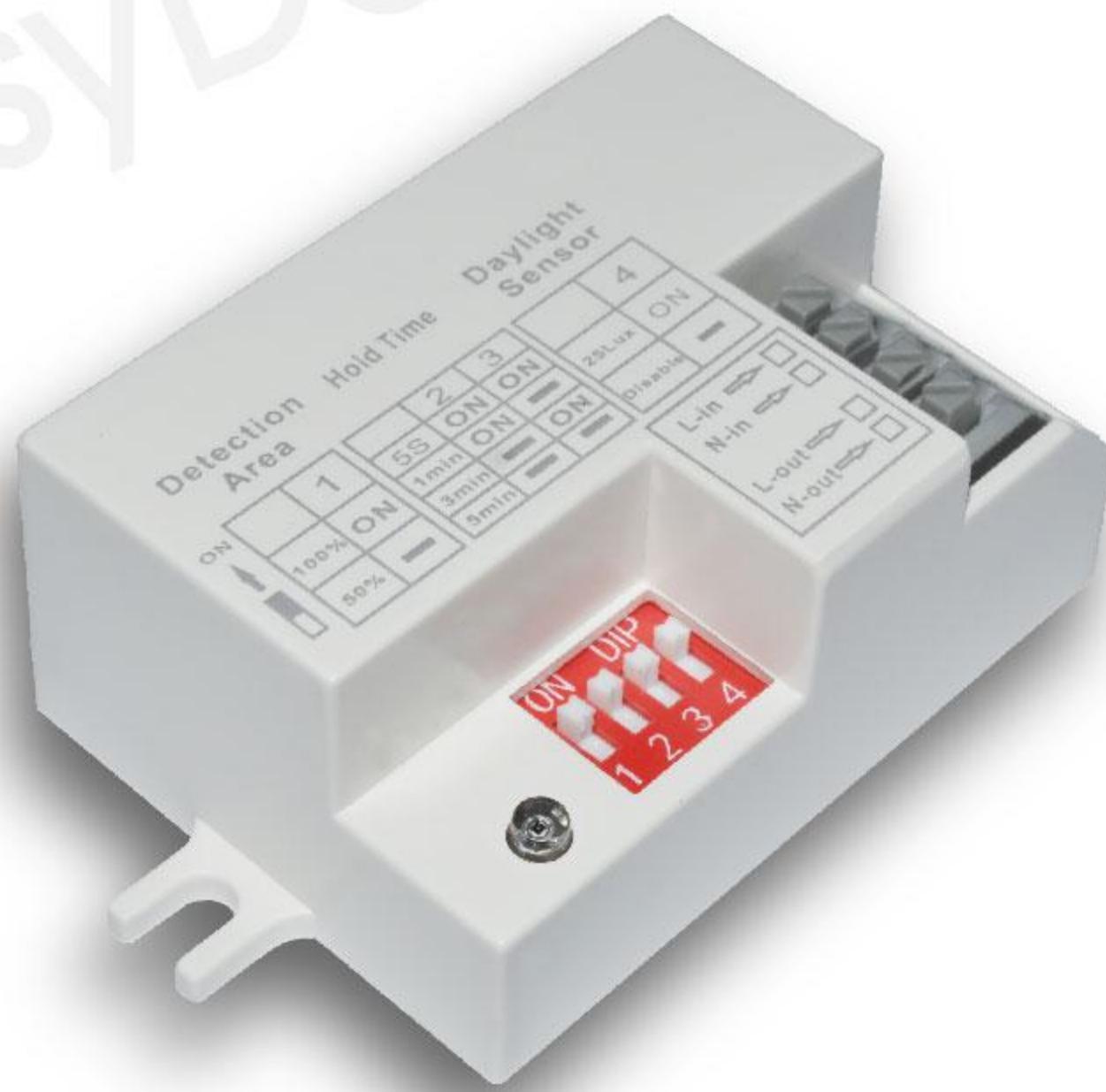


EDC211D Specification

5.8GHz Adjustable Series Lighting Components



Product Features

- Embedded multiple digital filtering algorithms for higher immunity
- Support ambient light recognition
- DIP-switch design, user can configure each sensing parameter according to requirements
- Comply with the new ERP standard, the power consumption of the whole machine is less than 0.3W

Electrical Parameters

Input voltage	100-240V AC
Operating current	8mA@220V AC
output voltage	100-240V
output signal	Relay ON/OFF
Power consumption	≤0.3W@220V AC
Application Load	Maximum load: 400W

Functional Parameters

Regular motion sensing radius ^①	4-7.5m
Low power motion sensing radius ^①	Regular 3m
Hanging height	5S/60S/180S/300S
photosensitivity threshold	25LUX/Disable

Output Parameters

Center frequency	5.8GHz±75MHz
3dB beam angle	91°(XZ plane) 93°(YZ plane)

Environment & Lifespan

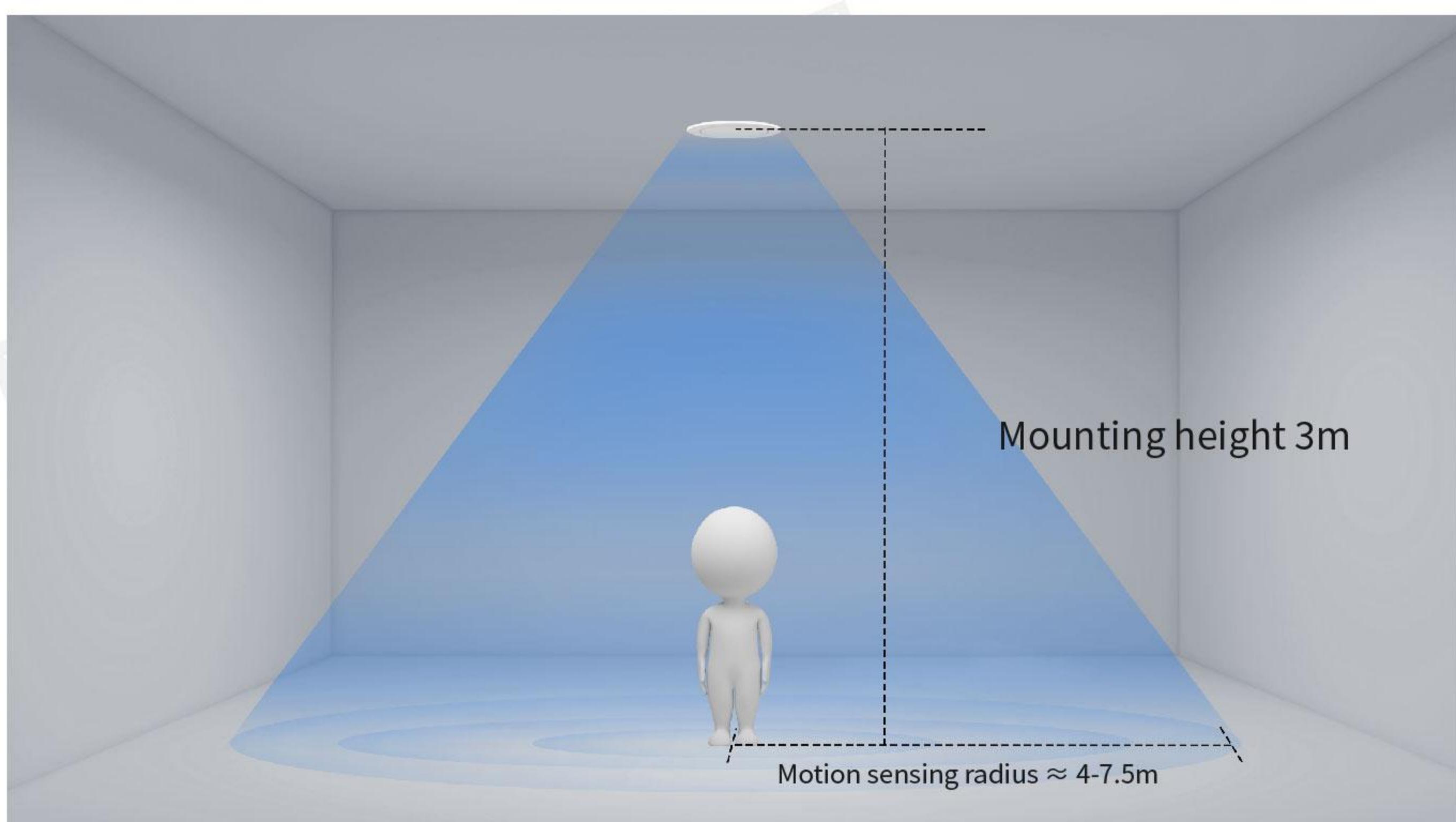
Operating temperature	-20~+70°C
Storage temperature	-20~+105°C

Remarks:

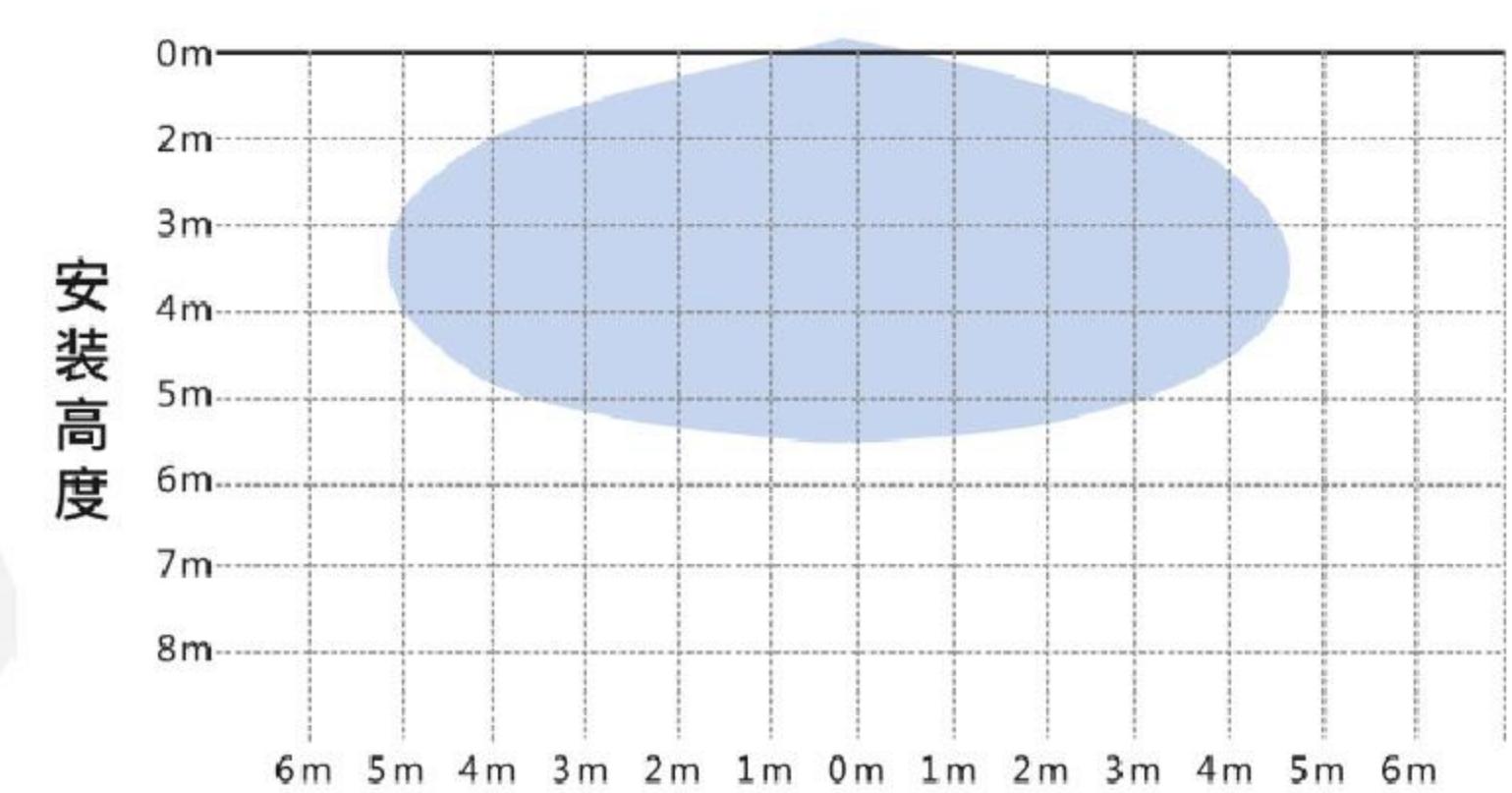
① The test distance range is based on the sensor hanging height of 3m, indoor installation environment test, the test person is 170cm tall, weight 65-75kg, walking speed 1m/s. Different scenes may cause changes in the range of installation, subject to actual testing.

② Due to the spectral characteristics of the photosensitive device, the threshold is uniformly tested under natural light conditions.

Detection Schematic



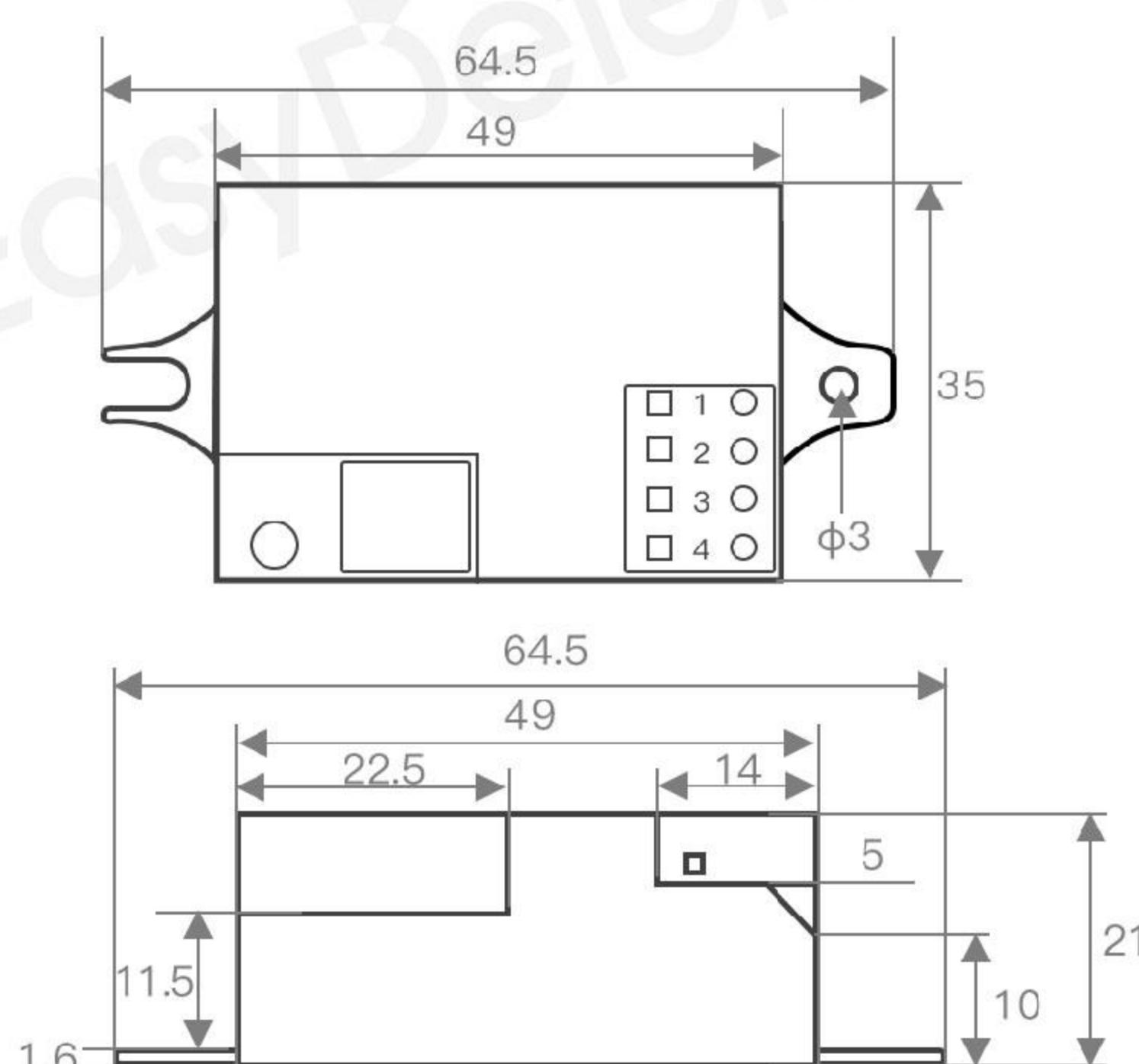
Radar Sensing Schematic



Motion sensing radius $\approx 4\text{-}7.5\text{m}$

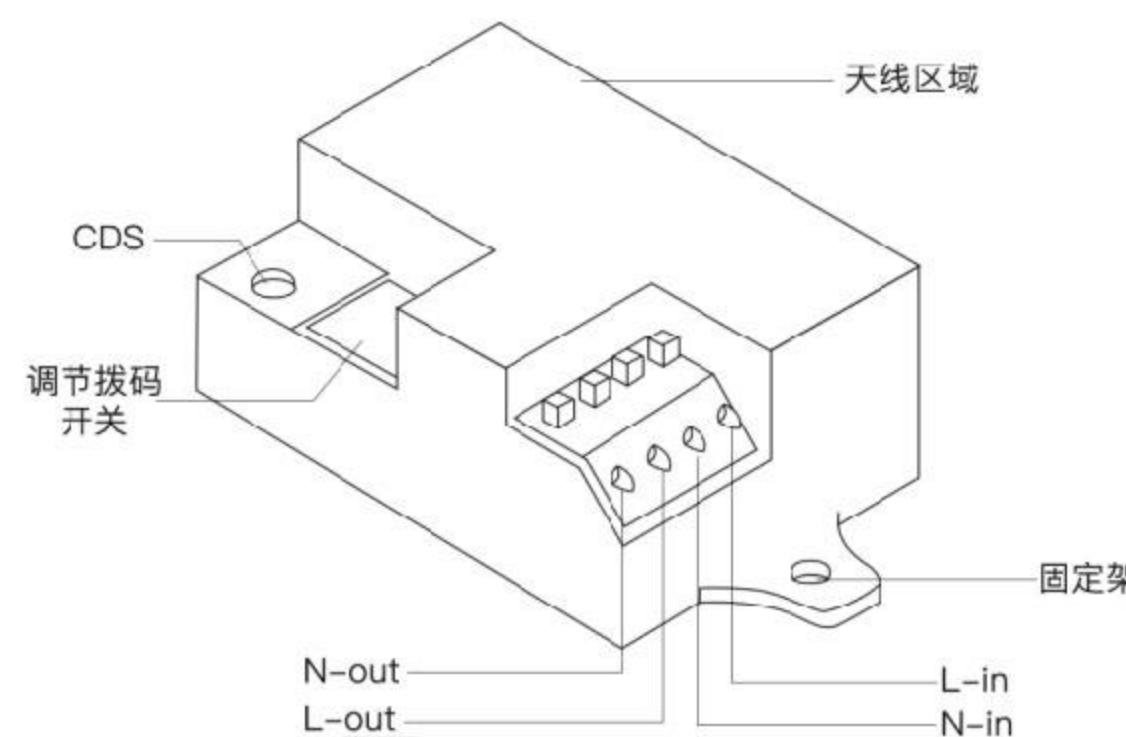
Dimension Drawing / Pinout

Dimensions :mm



EDC211D Dimension Tolerance: ± 0.2
Pin Welding Hole: $\phi 0.9$

Pin Description



Pin	Description
L-out	Fire wire out
N-out	Zero line out
L-in	Fire wire in
N-in	Zero wire in

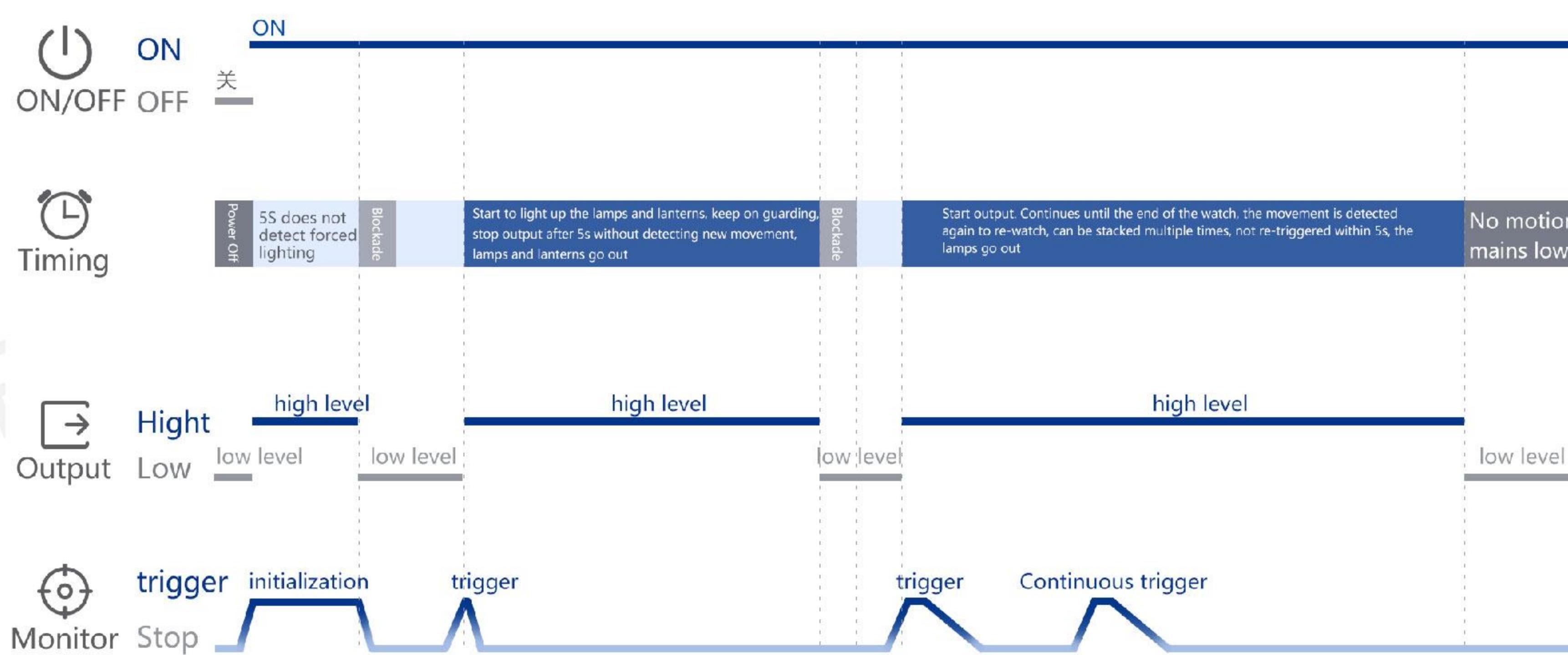
DIP Switch Setting



four-digit dial code

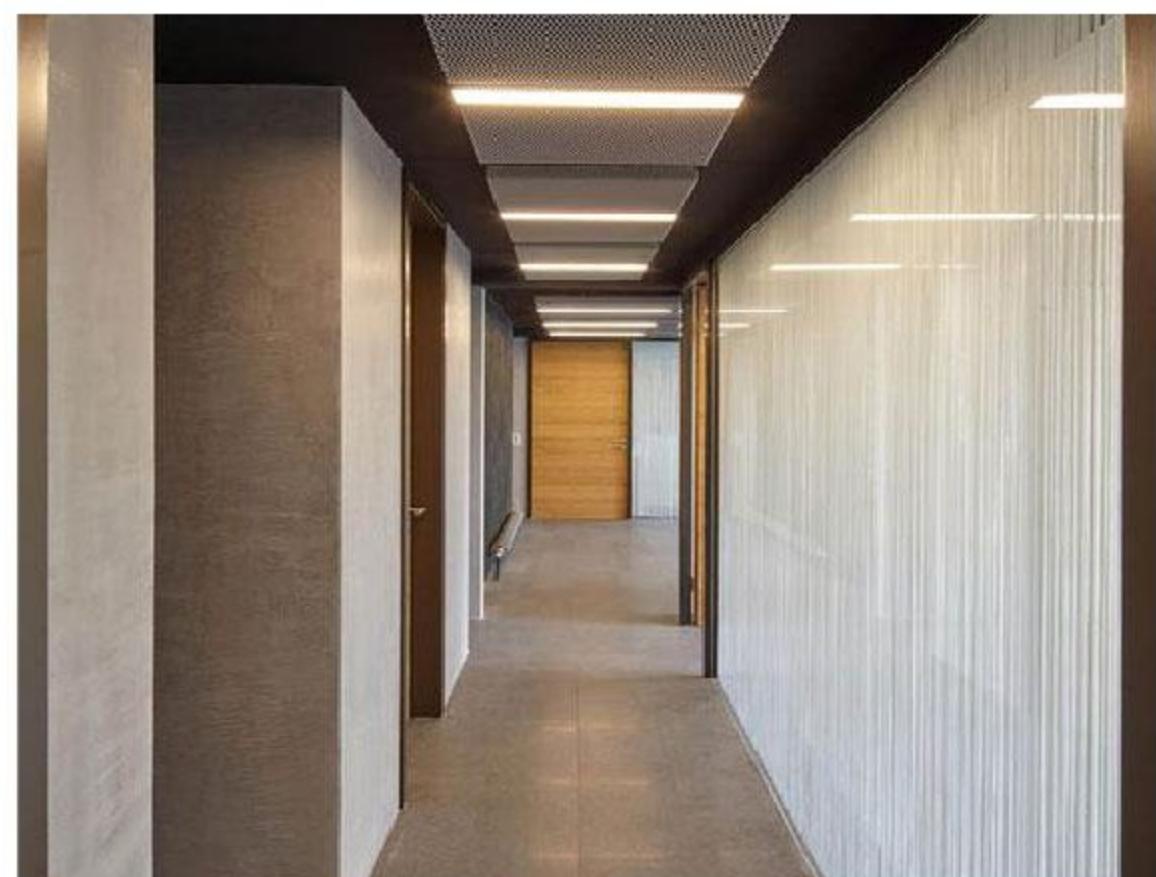
Distance Setting		delay time			photosensitive threshold	
1		2	3		4	
ON	100%	ON	ON	5s	ON	25Lux
OFF	50%	OFF	ON	1min	OFF	Disable
		ON	OFF	3min		
		OFF	OFF	5min		

⌚ Timing Diagram



This diagram is based on the product dialling code table: 1-ON 2-ON 3-ON 4-ON 5-ON 6-OFF, for example.

⌚ Application Scenarios/Products



corridor



escalator



flight of stairs



chandelier



panel light



ceiling light

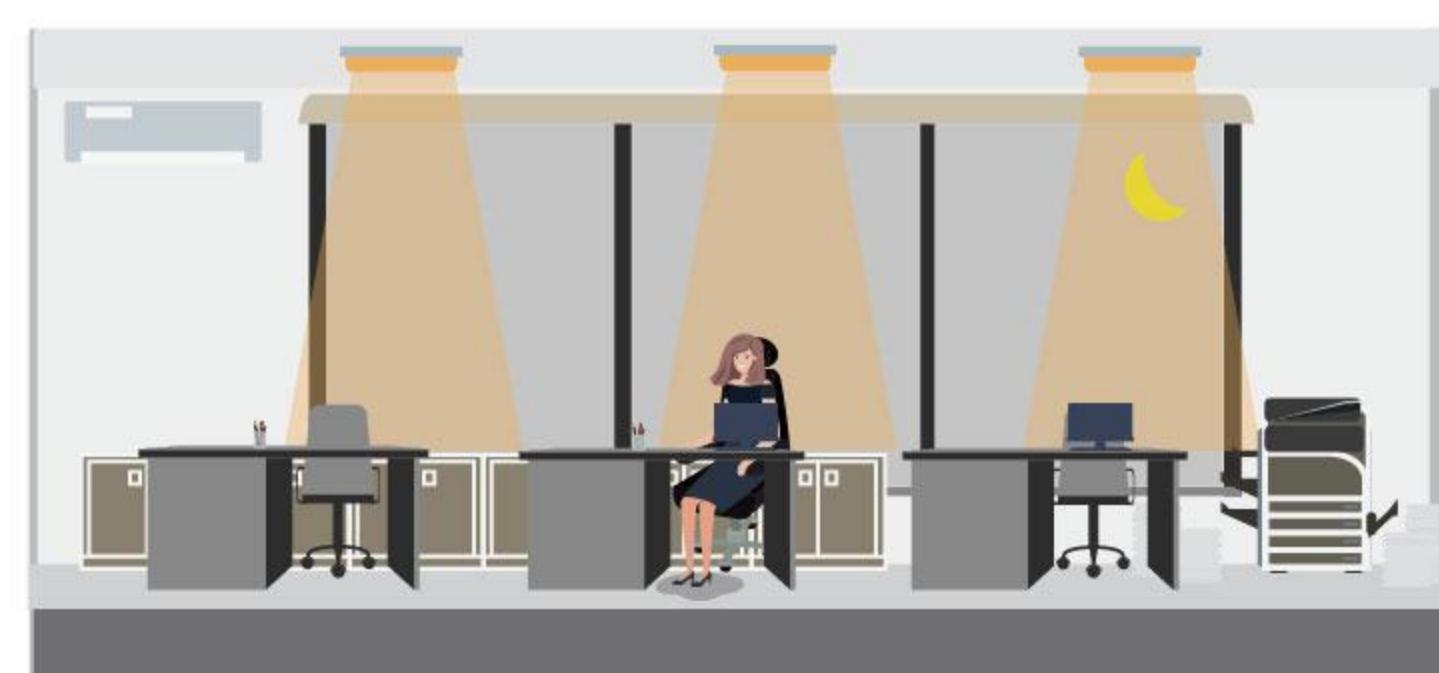


triproof light

⌚ Functional Description



After initialization is complete, when the ambient light is sufficient, the sensor detects a moving object, the light will not come on automatically.



When the ambient light is not sufficient, the sensor detects a moving object and the light comes on automatically.



The moving object leaves. After the preset delay time has elapsed, the light goes out automatically.

Product Naming Law

ED	Frequency Band	Product Categories	Product Subdivision	Product Number	Delay Time	Serial number
ED	C	2	1	1D		
EasyDetek	C 5.8GHz	1 Microwave sensor module	0 Ultra-low-power series	0-9, A-Z	Y Has light sensor	
	X 10.5GHz	2. Microwave radar switch	1 Flagship series		N no light sensor	
	Q 24GHz	3 Radar antenna	2 Short-distance series		P programmable	
	V 60GHz	4 MCU	3 Adjustable series			
	W 77GHz	5 Microwave power supply	4 External antenna series			
		6 IC	5 General Series			
		7 Other	6 To be defined			
		8 Networking	7 To be defined			
			8 Basic series			
			9 High altitude series			

Configuration Version Description

【Hardware】:

【Software】:

History Revision Record

Versions	Time	Description	Note
V1.0	2024-04-13	First Edition	-
V1.1	2024-06-26	Update dialling code content, electrical parameters and application products	-

Precautions

1. When the product is installed, it is recommended that the antenna plate keep a distance of 5-12mm from the metal plane, and can not be close to or touch the metal plane.
2. Products on plastic, wood material penetration effect is better. It is recommended not to install metal, glass, ceramic in front of the antenna, so as not to affect the actual induction effect.
3. power supply, please use a small ripple power supply, to avoid interference with the sensor and false alarms, it is recommended that the power supply ripple is guaranteed to be within 50mV-100mV.
4. more than one radar sensor in the same site application, recommended product installation distance greater than 2m, the installation distance is too close to individual sensors may occasionally false alarms.
5. the antenna radiation surface to avoid high current circuit coverage, so as not to interfere with the normal radiation antenna, resulting in false alarms or change the induction range.
6. such as microwave sensors and wireless communication modules (NB, Bluetooth, WIFI, 2.4G module) coexisting applications, should be spaced apart. Recommended installation and routers, wireless hotspots and other high-power wireless communication equipment to maintain a distance of 1m or more.
7. the light-sensitive threshold is in a sunny environment, no shadows, ambient light diffuse reflection conditions of the test value.
8. microwave sensor antenna surface should avoid facing the drive power supply, while trying to drive away from the power supply rectifier bridge, transformer, switching tubes and other high-power devices, so as not to trigger false alarms.
9. Eprobe is committed to providing customers with high quality and better experience of radar sensors. Product version updates and iterations without notice.