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 demand**
- **Comply with the new ERP standard, the whole machine power consumption 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
Standby power consumption	⩽0.3W@220V AC
Application load	maximum load: 400W

Functional Parameters

Motion Sensing Radius ①	4-7.5m
Hanging height	conventional 3-6m
Delay Time ②	5S/60S/180S/300S
photosensitivity threshold	25LUX/Disable

Output Parameters

Operating frequency	5.8GHz±75MHz
3dB Beam Angle	91° (XZ plane) 93° (YZ plane)

Environment & Lifespan

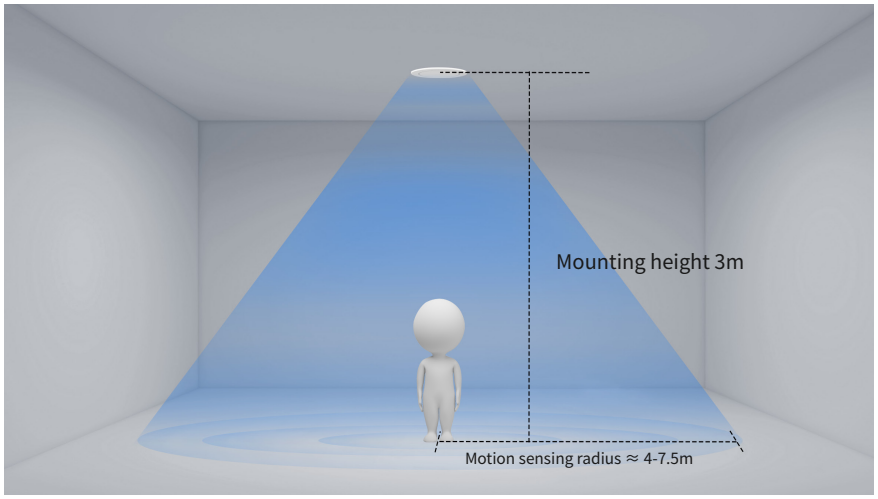
Operating Temperature	-20~+70°C
Storage Temperature	-20~+105°C

Remarks:

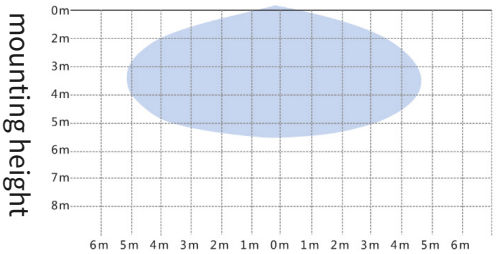
① The test distance range is based on the sensor hanging height 3m indoor installation environment test, the tester height 170cm, weight 65-75kg, walking speed 1m/s.
Different scenes may cause changes in the range of installation, subject to actual testing.

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

Detection Schematic



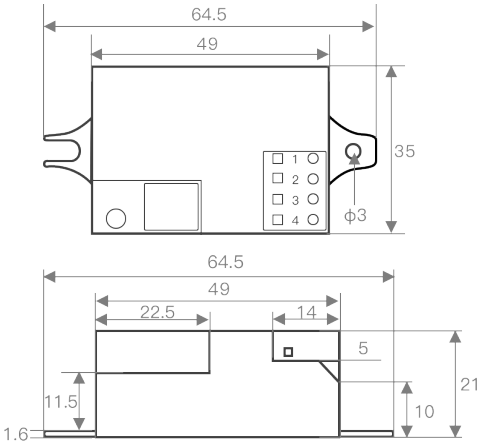
Radar Sensing Schematic



motion sensing radius ≈4-7.5m

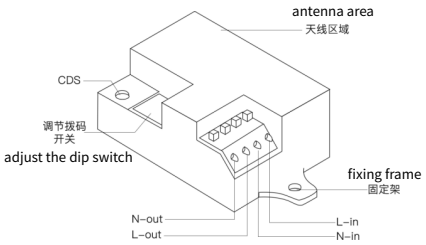
Dimension Drawing / Pinout

unit：mm



EDC211D Dimension tolerance: ±0.2
Welding hole of the row of pins：ϕ0.9

Pin Description



Pin	Description
L-out	fire line out
N-out	zero line out
L-in	fire line in
N-in	zero line in

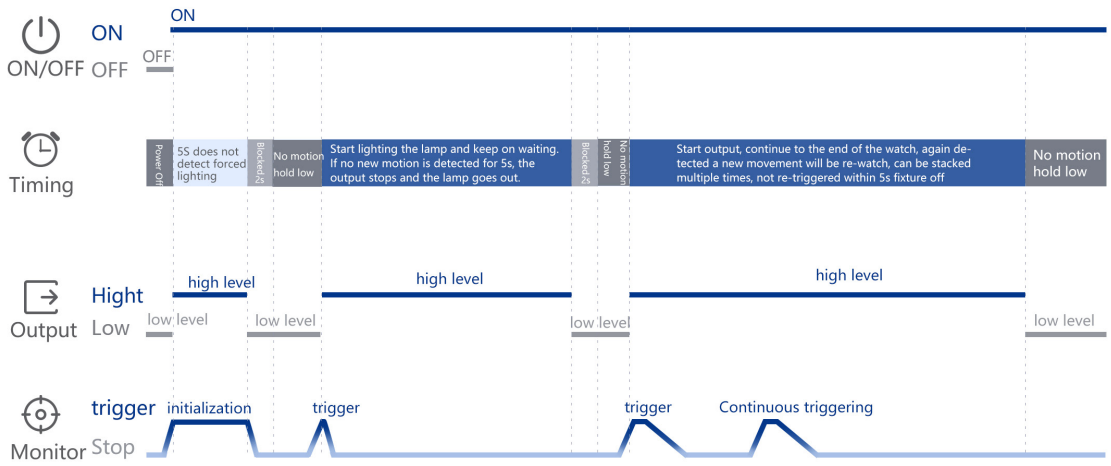
Product Dialing Chart



four-digit dial code

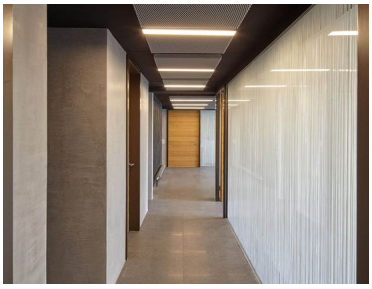
distance setting		delay time			photosensitive	
1		2	3		4	
ON	100%	ON	ON	5s	ON	25Lux
OFF	50%	ON	OFF	1min	OFF	Disable
		OFF	ON	3min		
		OFF	OFF	5min		

Timing Diagram



This is an example of the product dialing code table: 1-ON 2-ON 3-ON 4-ON 5-ON 6-OFF.

Application Scenarios/Products



corridors



elevator shaft



flight of stairs



hanging light



panel light

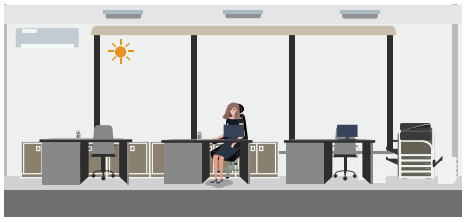


ceiling light



T-tube lamp

Functional Description



After initialization is completed, when the ambient light is sufficient, the sensor detects a moving object and the light will not automatically turn on.



When the ambient light is insufficient, the sensor detects a moving object and the light automatically turns on.



When the moving object leaves, the light will automatically turn off after the preset delay.

Precautions

1. When installing the product, it is recommended to maintain a distance of 5-12mm between the antenna board and the metal plane, and not to tightly adhere or touch the metal plane.
2. The product has good penetration effect on plastic and wood materials. It is recommended not to install metal, glass, or ceramic in front of the antenna to avoid affecting the actual sensing effect.
3. Please use a power supply with low ripple to avoid sensor interference and false alarms. It is recommended to ensure that the power supply ripple is within 50mV-100V.
4. When multiple radar sensors are applied in the same site, it is recommended that the installation distance of the product be greater than 2m. Installing too close may result in occasional false alarms from individual sensors.
5. The radiation surface of the antenna should avoid being covered by high current circuits to prevent interference with the normal radiation of the antenna, leading to false alarms or changes in the sensing range.
6. When microwave sensors are used in conjunction with wireless communication modules (NB, Bluetooth, WIFI, 2.4G modules), they should be spaced apart. It is recommended to maintain a distance of at least 1m from high-power wireless communication devices such as routers and wireless hotspots during installation.
7. The light sensitivity threshold is the test value under clear weather conditions, no shadows, and diffuse reflection of ambient light.
8. The antenna surface of microwave sensors should avoid facing directly towards the driving power supply, and should also be kept as far away as possible from high-power components such as rectifier bridges, transformers, and switching tubes of the driving power supply to avoid false alarms.
9. Committed to providing customers with high-quality and better experience radar sensors. Product version updates and iterations will not be notified separately.