5.8GHz Human Motion Sensor

EDC255 Specification

Medical and Health Care

Smart Business

Smart Lighting

Smart Home

EDC255

🕮 Product Features

- **5.8GHz Human Motion Detection**
- **Illumination detection function**
- **4-position sensing range for adjustment**
- **KNX communication protocol**

🕮 Electrical Parameters

Input Voltage	12-30V DC
Operating Current	＜100mA
Communication Method	KNX
Standby Power Consumption	≤1W

🕮 Functional Parameters

Motion Sensing ① Radius	6m max
Hanging height	＜4m
Delay time	tunable
illuminance value ②	0-65535lux

🕮 Output Parameter

Transmission Frequency	5730-5830MHz
Transmission Power	1dBm

🕮 Environment & Lifespan

|	
Operating Temperature	-5~+45℃
Storage temperature	-25~+55℃

Remarks:

① The test distance range is based on the sensor hanging height of 3m, indoor installation environment test, the test person is

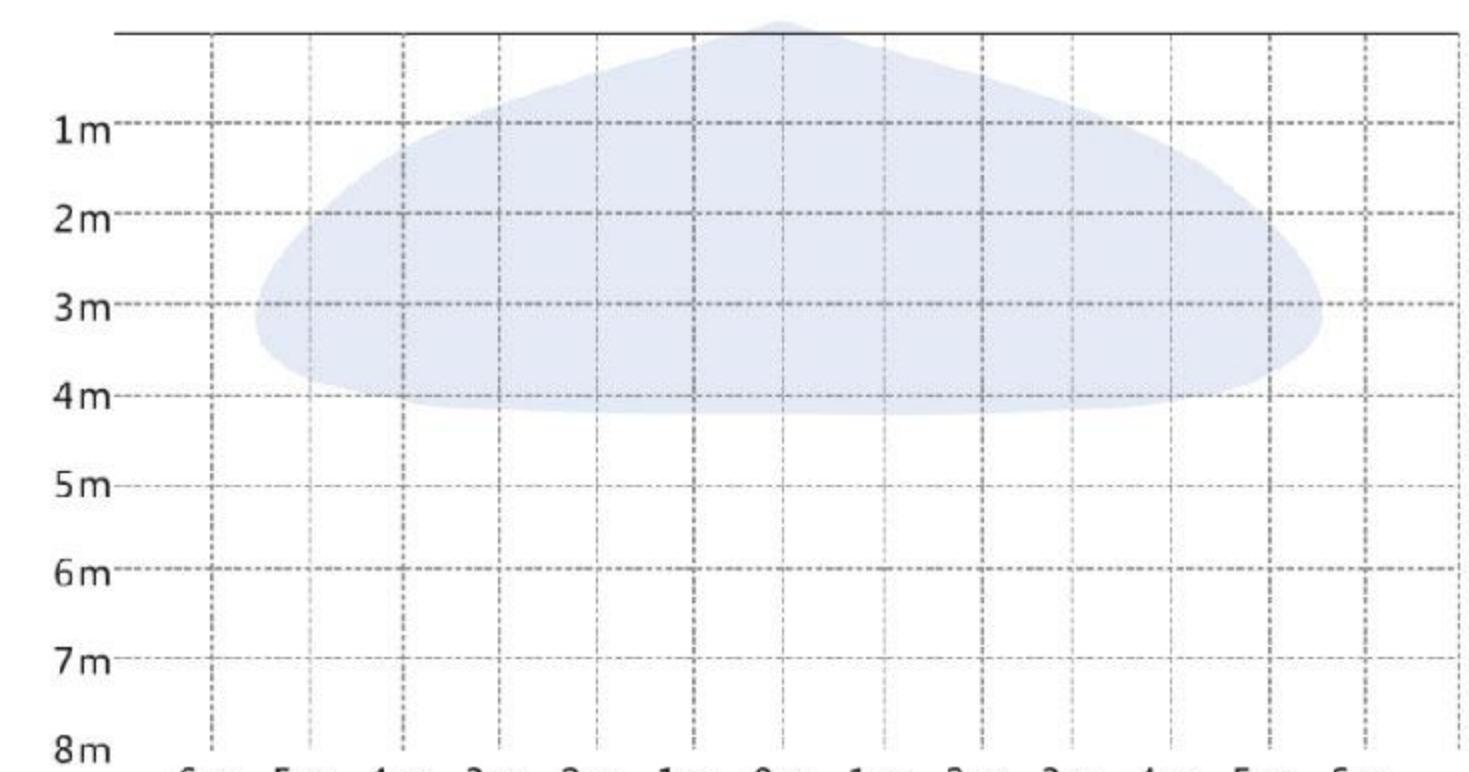170cm tall, weight 65-75kg, walking speed 1m/s.

Different scenarios may cause changes in the range of installation, subject to the actual test.

② Due to the spectral characteristics of the photosensitive device, the illumination value is uniformly tested under natural light conditions.
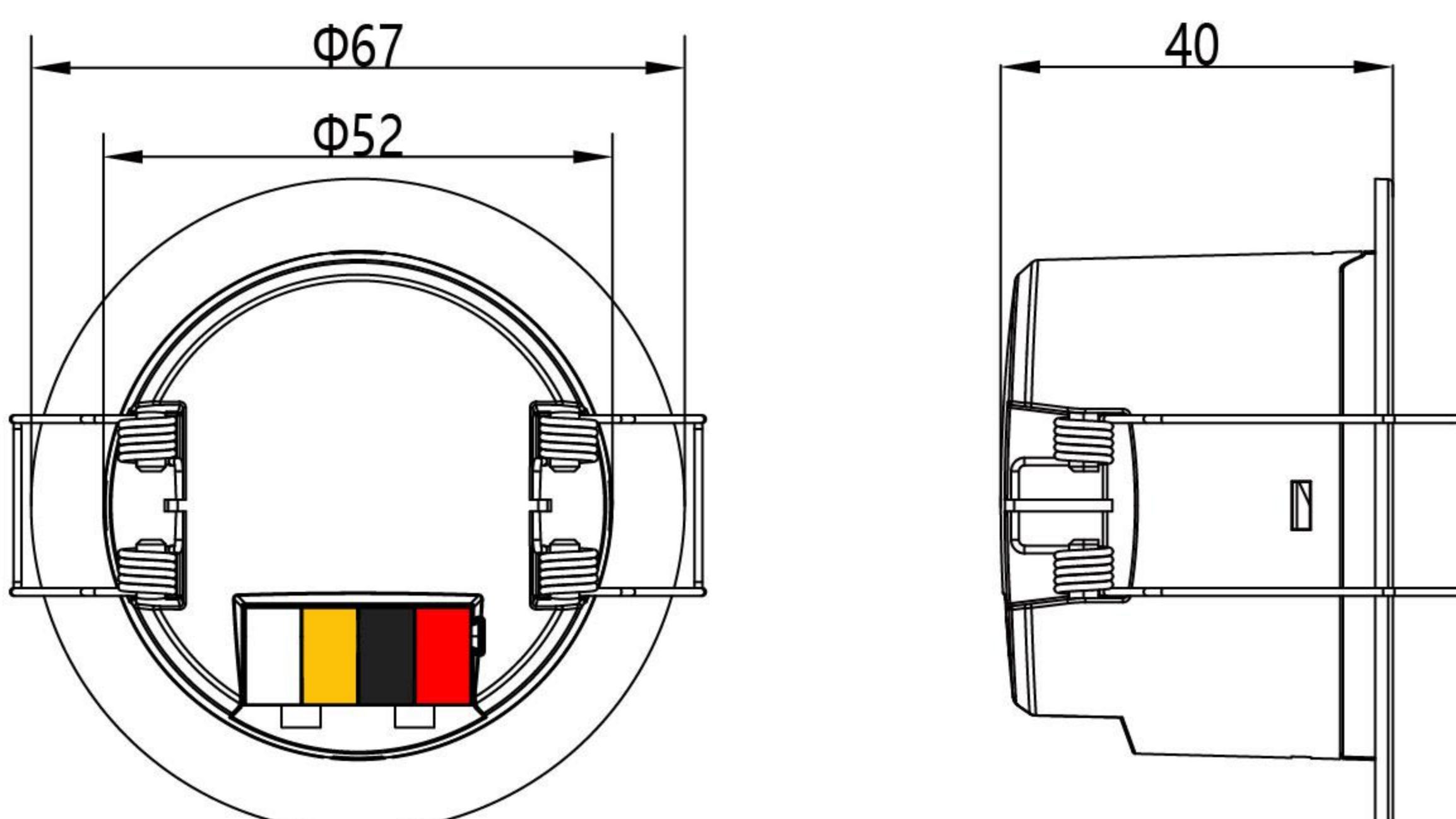
Detection Schematic

mobility

Installation height < 4m

Motion sensing radius 6m max
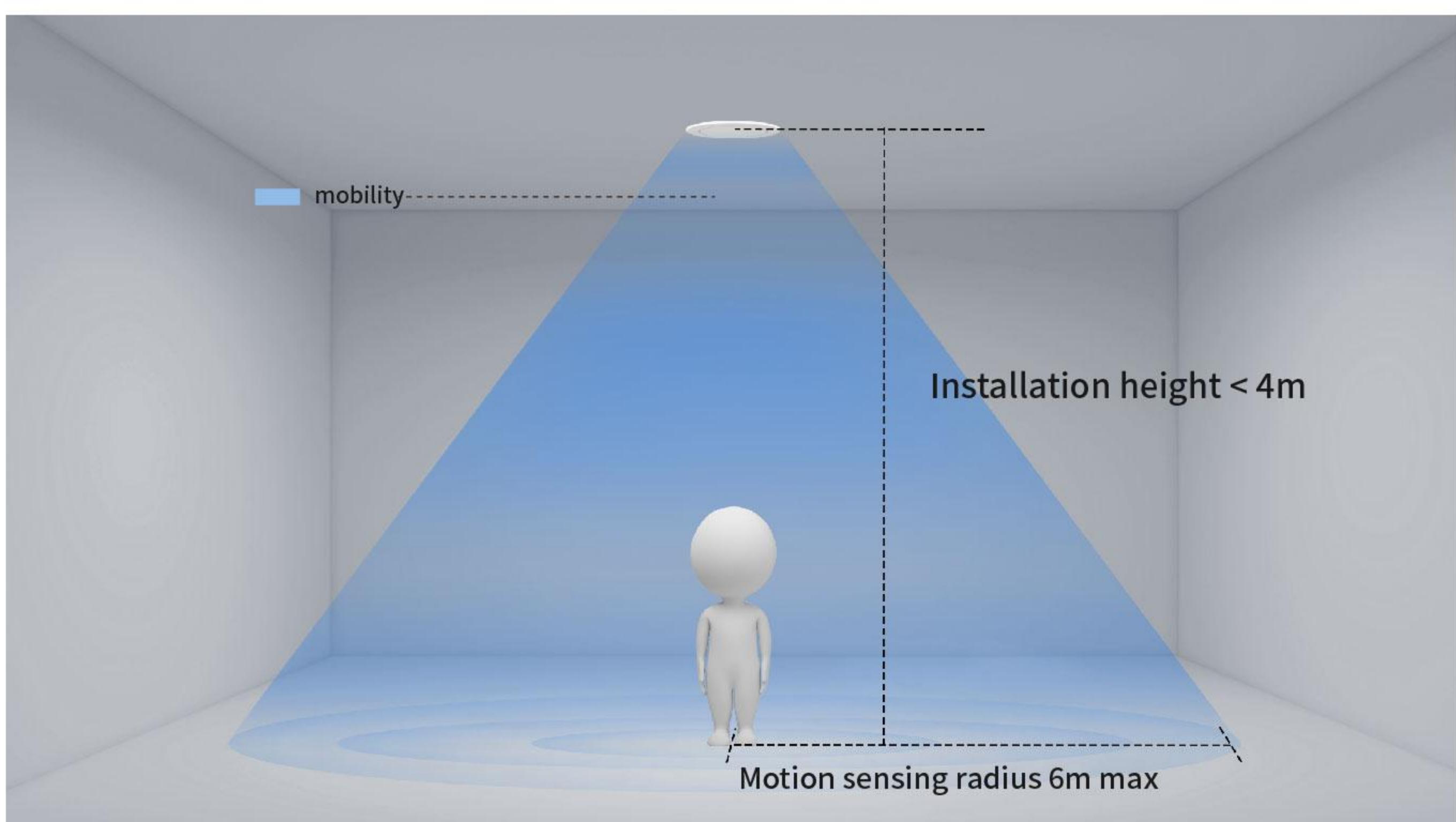
Radar Sensing Schematic

1m
2m
3m
4m
5m
6m
7m
8m

6m 5m 4m 3m 2m 1m 0m 1m 2m 3m 4m 5m 6m

Motion sensing radius 6m max

## Product Dimension Drawing

unit : (mm)

Φ67
Φ52

40

EDC255 Dimensional tolerances : ±0.2

Indicate status

1、Initialization of power-on: the green indicator light is always on for 5s, after initialization, the green indicator light goes out, the sensor enters the unoccupied state, and KNX enters the setting mode.

2、Working mode: If the sensor detects human movement, the green indicator light flashes once and sends occupied signal to the bus, when the person leaves, the delay ends and sends unoccupied signal to the bus.

Note: When the movement is triggered several times within 5 seconds, the green indicator light will flash only once.
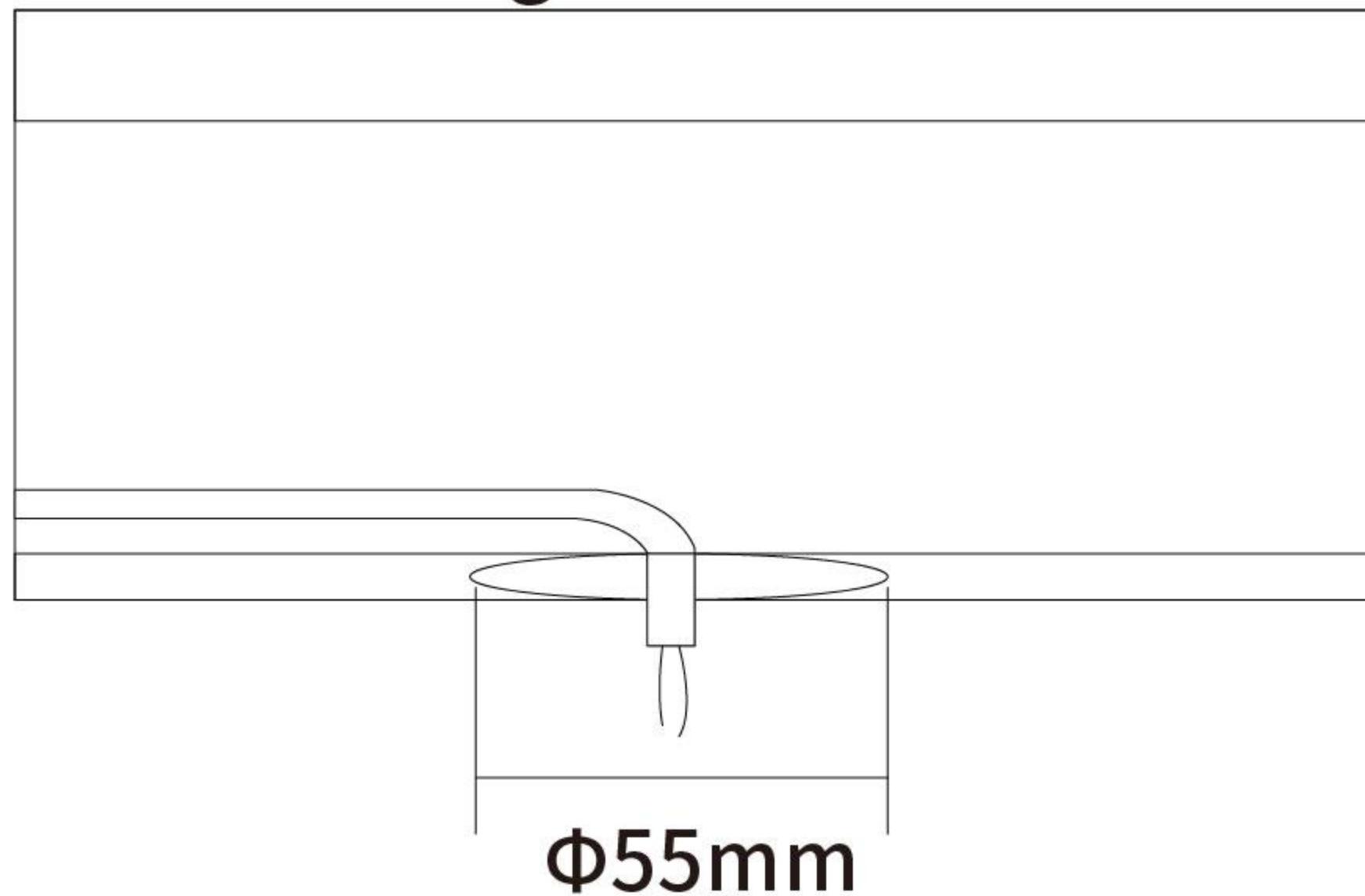
📶 Pin And Button Description
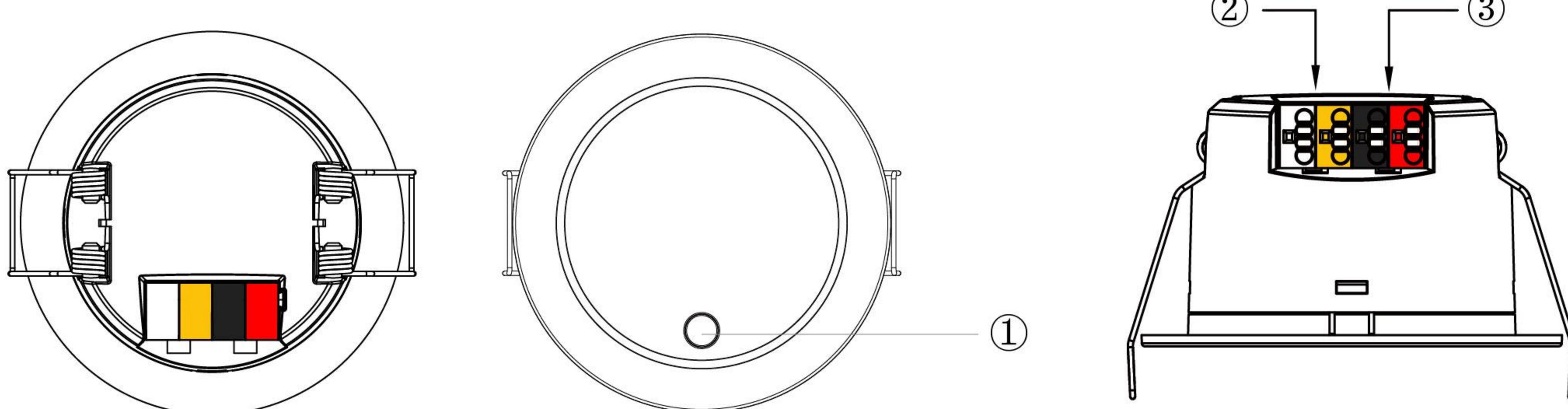
Pinout	Description
Red	KNX+
Black	KNX-
Yellow	Auxiliary power supply +
White	Auxiliary power supply -
按键①	Short press programming mode

📶 Wiring Diagram

DC
12-30V   KNX BUS
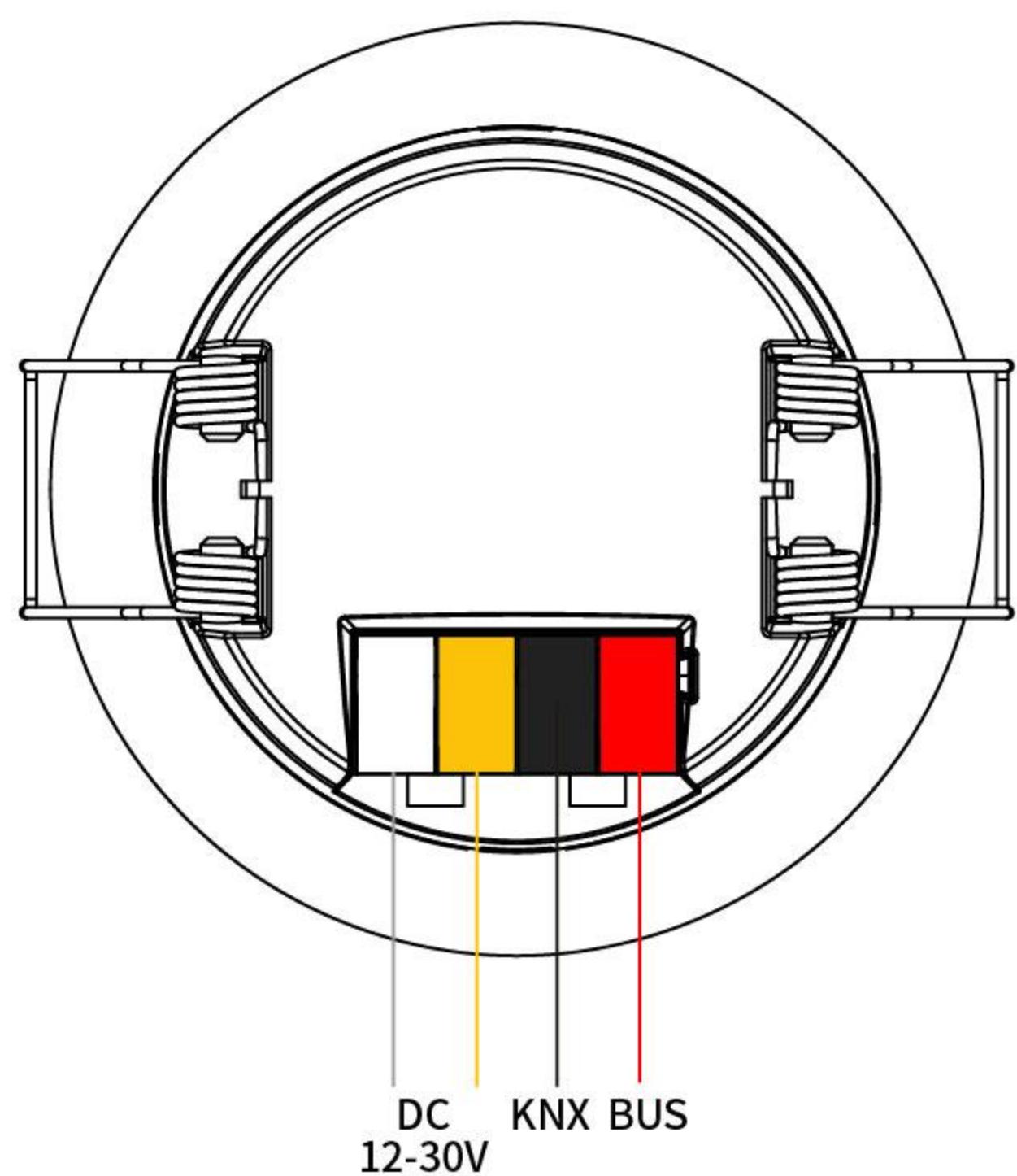
🕸 Installation Diagram

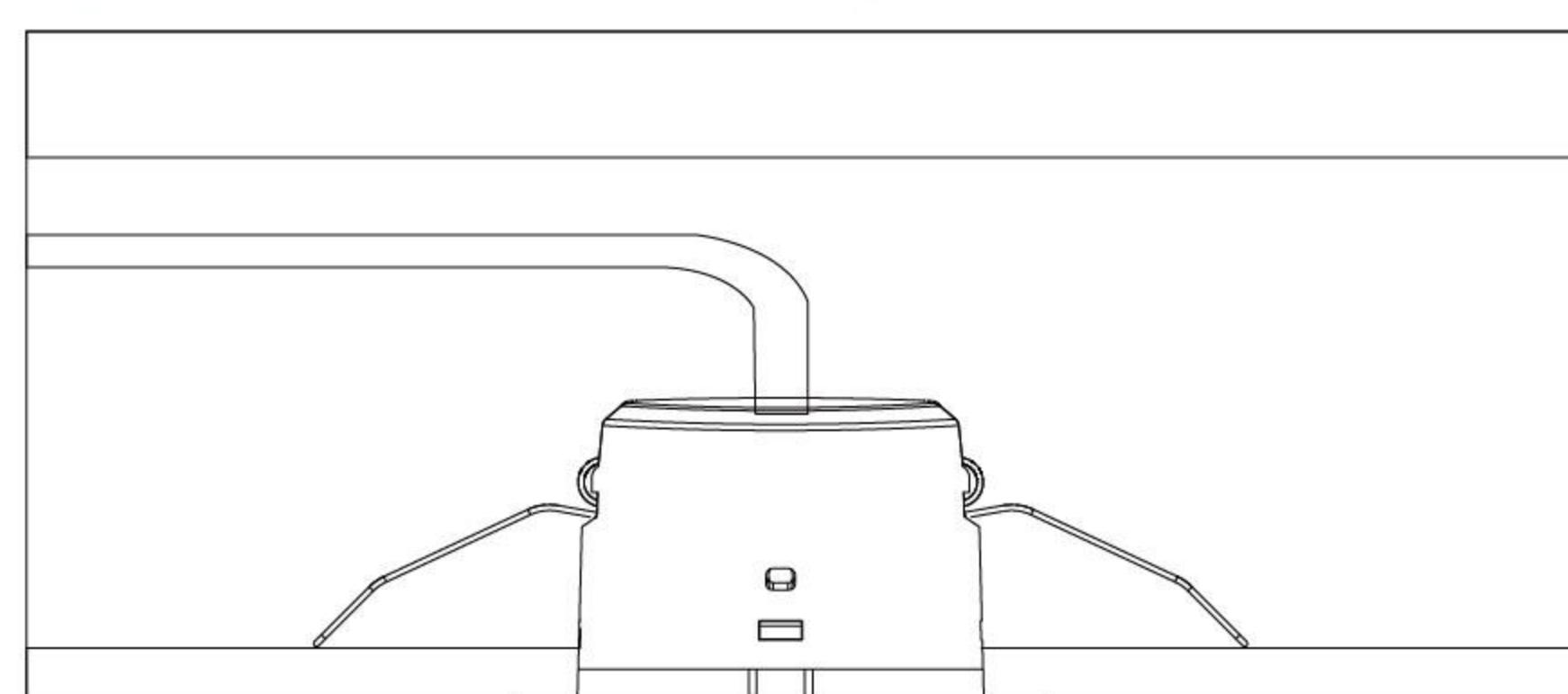### 1、Punching holes in the ceiling and reserving wires
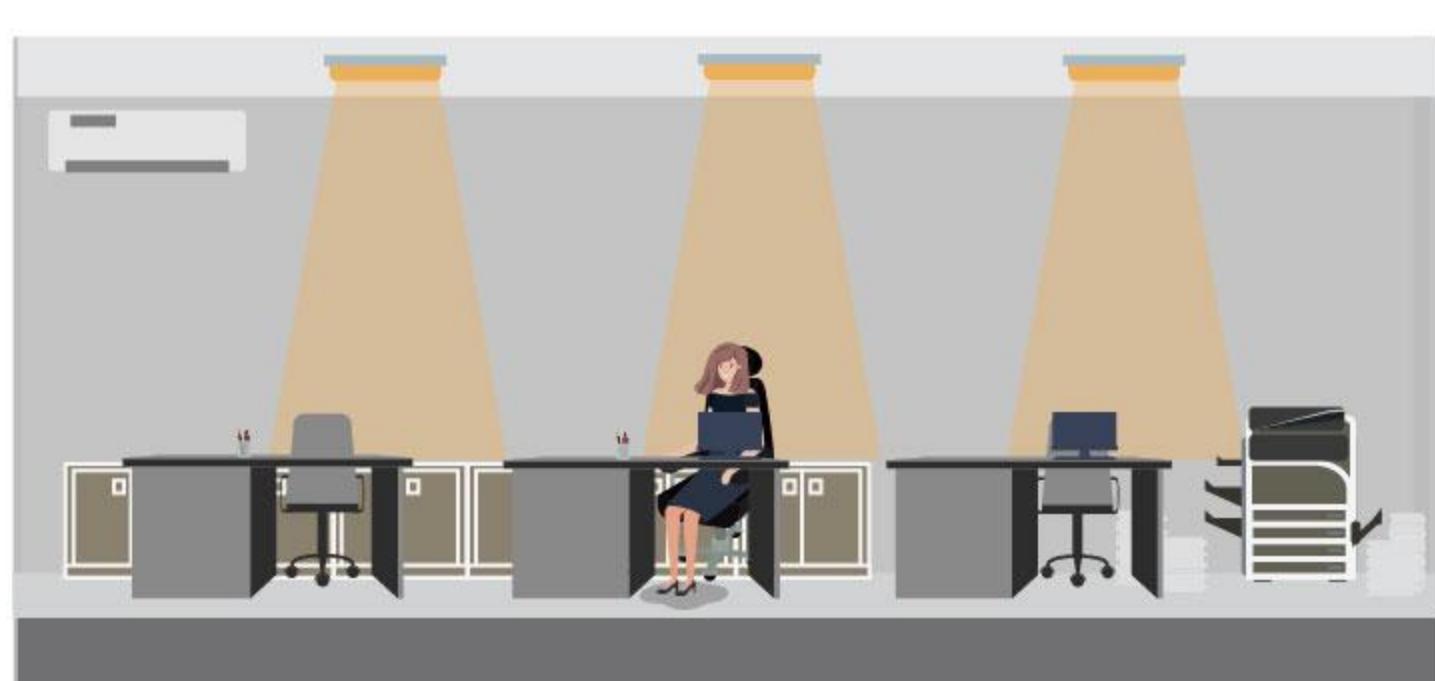
Φ55mm

2. Equipment and wire connection

3. Adjust the mounting clips
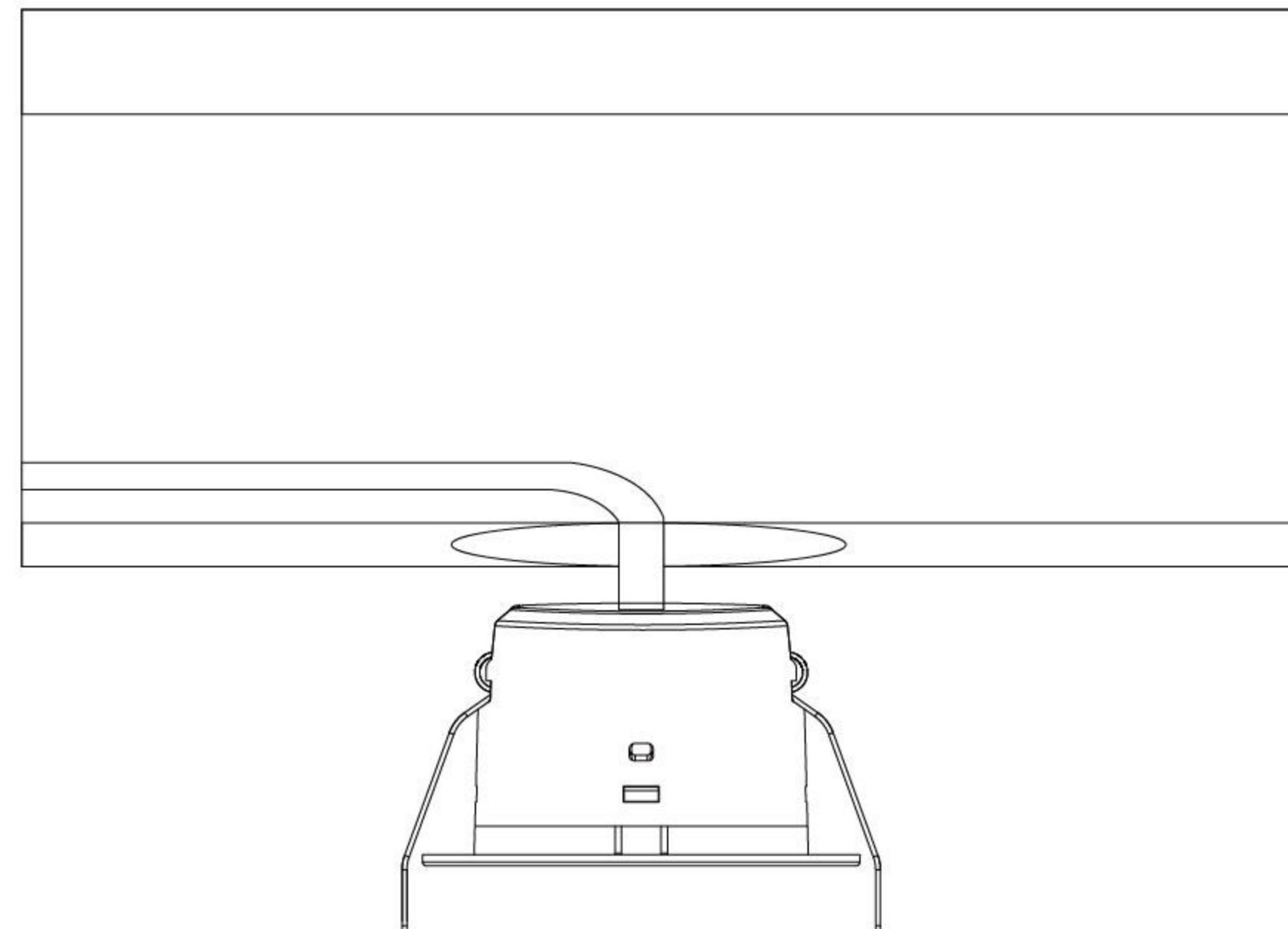
4, Embedded fixed, installation is complete

🕸 Functional Description

When the sensor detects a moving object, the light automatically lights up and enters the set delay time
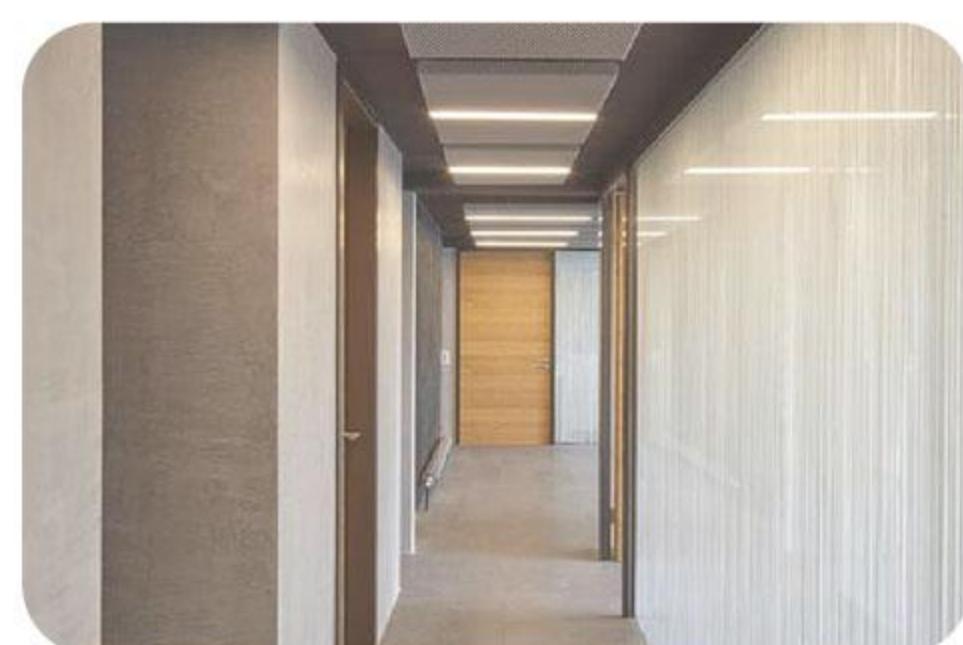
After the delay time, if the sensor cannot detect the moving object, the light fixture will turn off
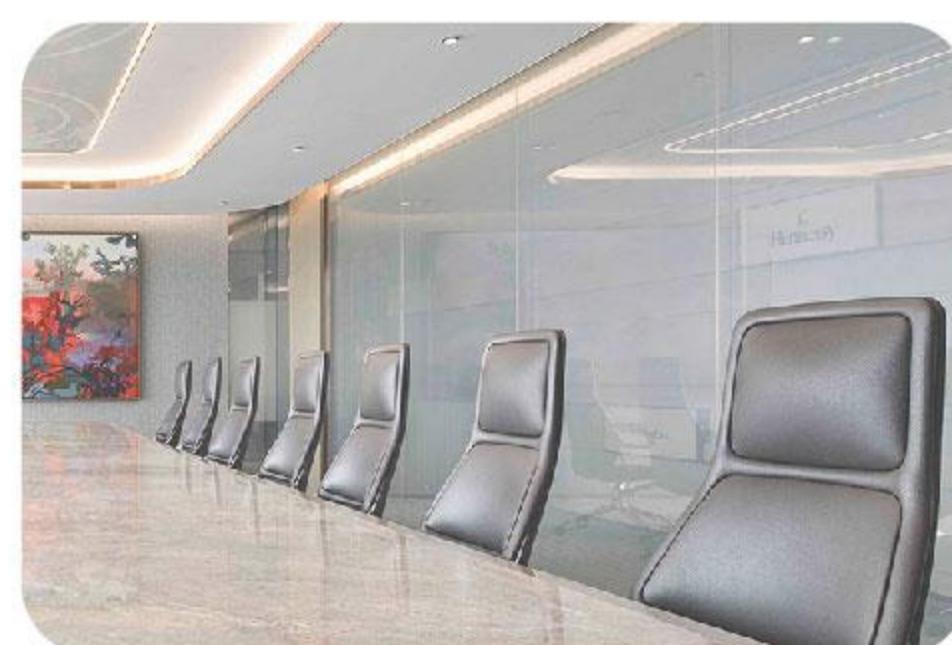
🔊 Application Scenario

smart home

intelligent lighting

smart business

🔊 Product Naming Law

ED	Frequency Band	Product Categories	Product Subdivision	Product Number	Delay Time	Serial number
ED	C	2	5	5	Y	
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			

🔊 History Revision Record

Versions	Time	Description	Note
V1.0	2025-03-07	First Edition	-

☏ Precautions

1. When installing the product, it should be kept at a distance of more than 50cm from the exhaust fan and air conditioning outlet. The vibration generated by the exhaust fan and air conditioning outlet during operation can cause false triggering of sensor detection. During installation, it is also necessary to avoid areas where external people or objects can cause vibrations.

2. The product has certain penetrability to thinner wooden boards and glass materials, and these two factors should be considered when installing the fabric points. At the same time, avoid large areas of metal in front of the sensor to prevent accidental triggering.

3. When there is a large area of glass and smooth tiles on the decorative surface within the detection range of the sensor, electromagnetic wave reflection will be strengthened. It is recommended to adjust the sensing range appropriately according to the size of the space.

4. When multiple sensors are applied in the same site, it is recommended that the installation distance of the product be greater than 2.5 meters. Installing too close may cause periodic false alarms for individual sensors.

5. The electromagnetic waves emitted by sensors have different reflectivity of obstacles in practical application environments, resulting in different sensing ranges. This is a normal phenomenon, for example, in corridors and wide rooms, the sensing distance may vary slightly.

6. EasyDetek Technology is committed to providing customers with high-quality and better experience radar sensors. Product version updates and iterations will not be notified separately.