24GHz Human Presence Zoning Sensor
EDQ25D Specification

Smart home

Intelligent lighting

Smart Business

Medical care and recreation

EDQ25D

📶 Product Features

- 90V~260V 50/60Hz AC power supply
- DALI-2 bus communication protocol
- Supports left and right zoned detection of human movement and presence
- Supports instructions 101, 103, 303 and 304 under IEC 62386
- Support multi level adjustment of parameters such as sensing range, detection sensitivity, and sensing delay
- Support remote control, DALI host computer to adjust parameters
- Small size, supports inline stand-alone installation (opening Φ55mm)
- Anti-interference design, can effectively shield wifi, bluetooth and other wireless interference
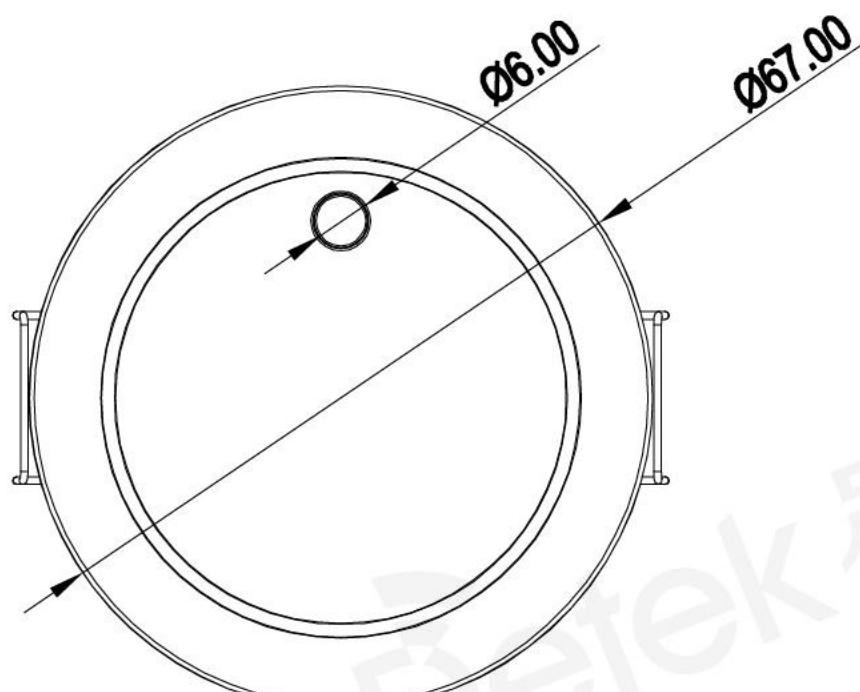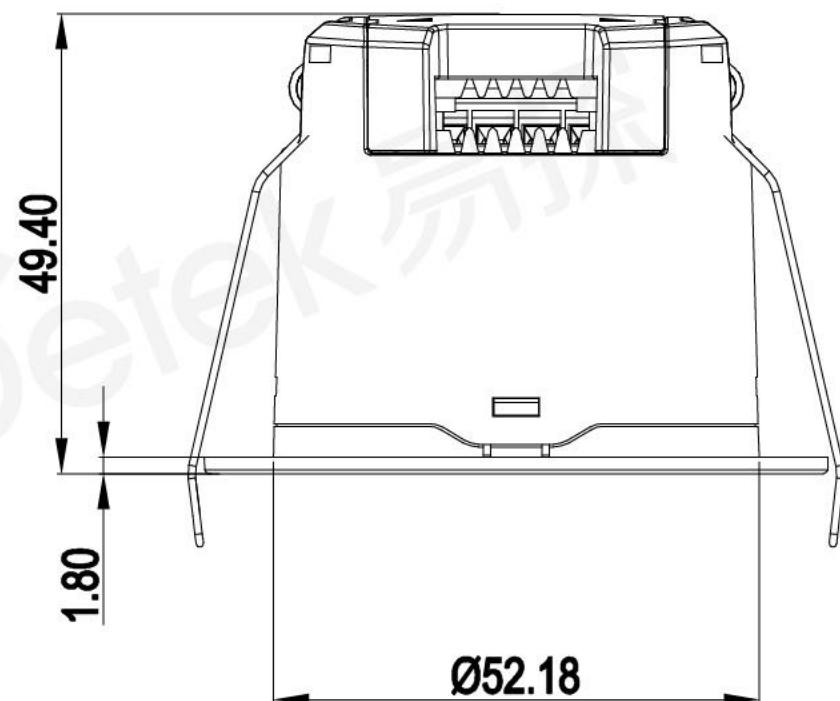
📶 Application scenario

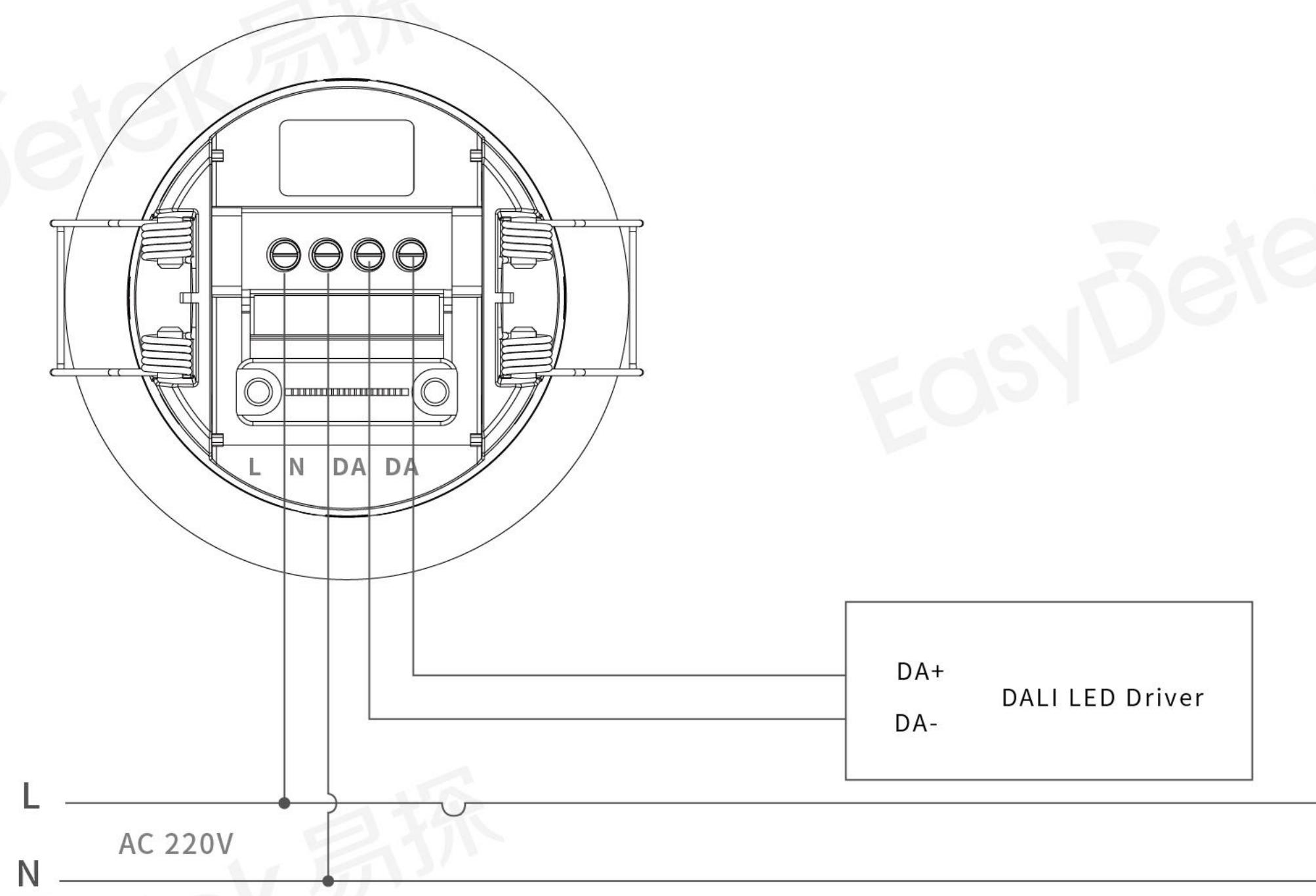smart home

smart lighting

smart business

📶 Product Dimension Drawing

unit: (mm)

49.40

1.80

Ø52.18

Ø6.00

Ø67.00

EDQ25D Dimensional tolerance: ±0.2

Pinout and Wiring Description

DA+
DA-
DALI LED Driver

L
AC 220V
N

Pinout	Description
L	Firewire
N	Zero line
DA	DALI communication cable
DA	DALI communication cable

Electrical parameters

Input Voltage	AC 90-260V 50/60Hz
Operating Current	＜15mA @220V AC
Communication method	DALI-2 protocol
Standby power consumption	＜1W
Center frequency	24GHz
Transmission power	5dBm Max

Functional parameters

Motion sensing radius [1]	6m Max
Presence sensing radius [1]	5m Max
Delay Time	1s-4h (adjustable by DALI uplink)
	10-1800s (remote control adjustable)
Illuminance value [2]	0-12000lux
Hanging height	Recommended height (2.5m to 4m)

Environmental temperature

Operating temperature	-20~+85℃
Storage temperature	-20~+85℃

📶 Detection Schematic

Mounting height 3m

Presence sensing radius ≈5m Max
Motion sensing radius ≈6m Max
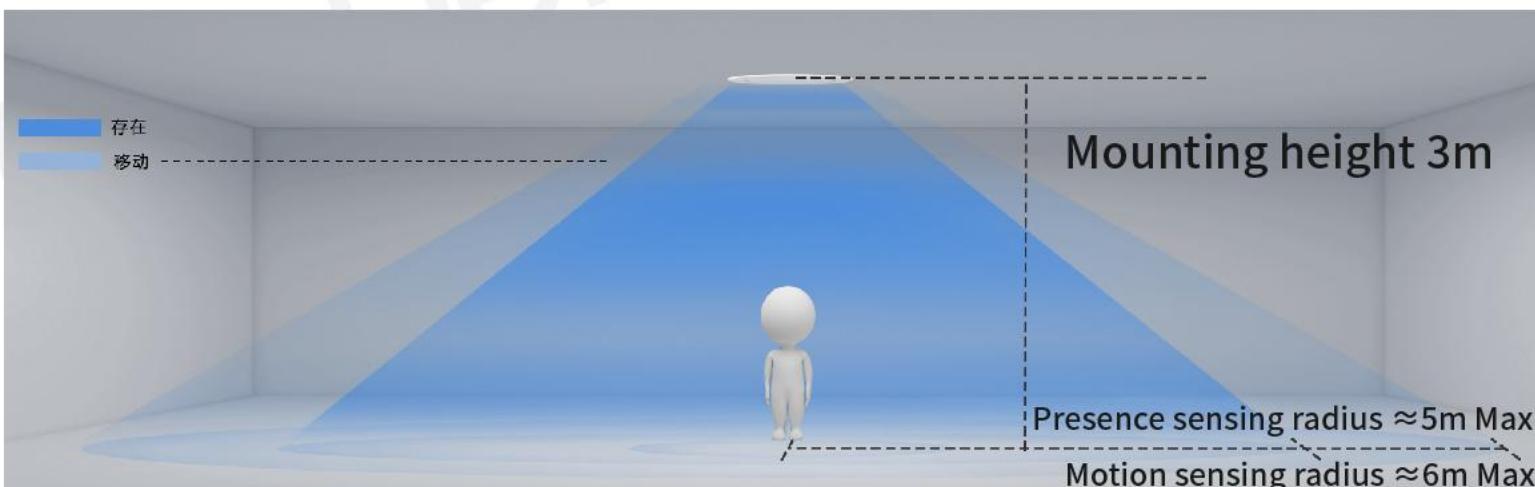
📶 Schematic of sensing range①

Hanging height 3m (measured)
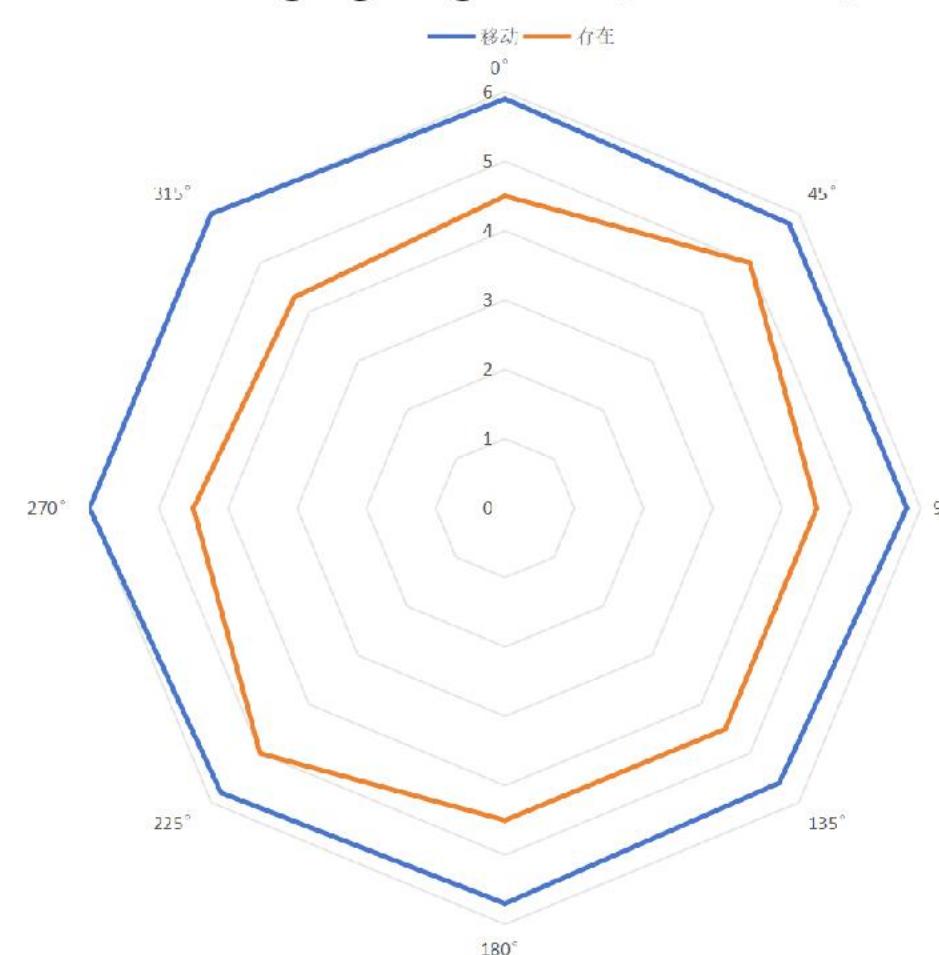
Remarks:

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 scene installation may cause the range of changes, to the actual test shall prevail.

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

📶 Partition Description

left area right area

Detection area Left Zone: When the left zone is selected, the corresponding right zone sensing range is not detected.
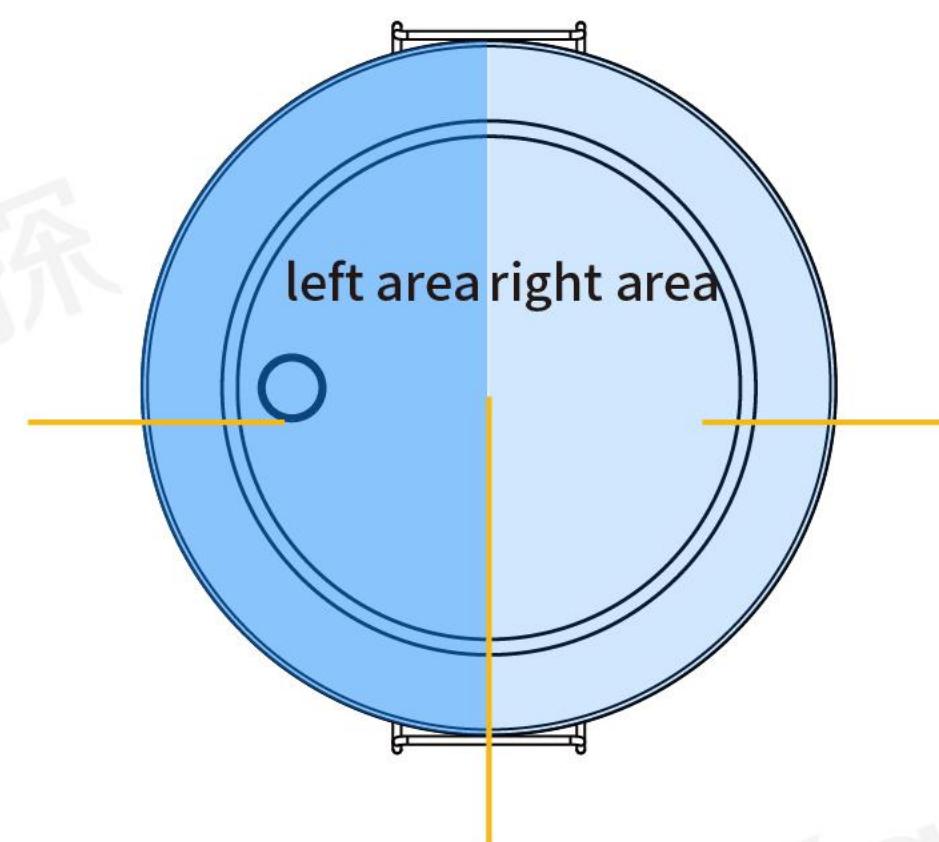
Detection area right zone: When the right zone is selected, the corresponding left zone sensing range is not detected.

Partition Description: Defaults to full zone detection.The partition is divided into two zones, left and right, with the two sides of the mounting spring clips as the centerline.The one with the light-sensitive opening is the left zone of the detection area, and the corresponding other half is the right zone of the detection area.

📶 Parameter settings

1、Remote controller adjustable parameters and range: 8 levels of detection range, detection partition (optional areas: full area, left area, right area), 3 levels of detection sensitivity, detection delay time 10-1800s adjustable.

2、DALI host computer adjustable parameters: radar detection range and detection sensitivity are both adjustable in the range of 0%-100%, and detection delay time is adjustable from 1s to 4h.

Note: DALI host computer parameter adjustment must be performed according to the DALI standard protocol.

📶 Indicator status description

1、Initialization of power-on: the LED indicator light is always on for 5s, after the initial end of the initialization, the LED indicator light is off and the sensor enters the sensing state.

2、equipment positioning: LED flash 10s

3、working mode: the sensor from no one into the occupied, LED indicator light slow flash once, continue to be occupied, then 5 seconds flashes once.

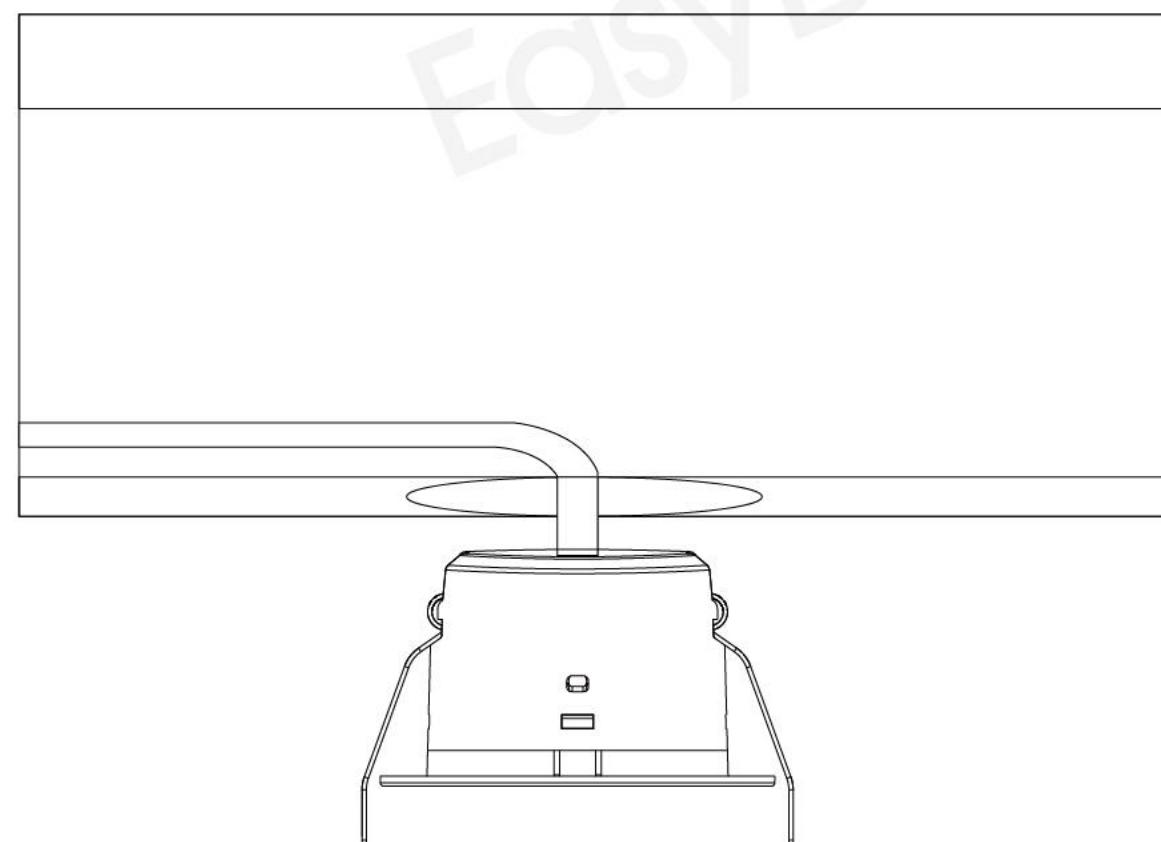4、Setting parameters: set up successfully LED flash 2 times.

Note: When the movement is triggered several times within 5 seconds, the indicator light only flashes once.
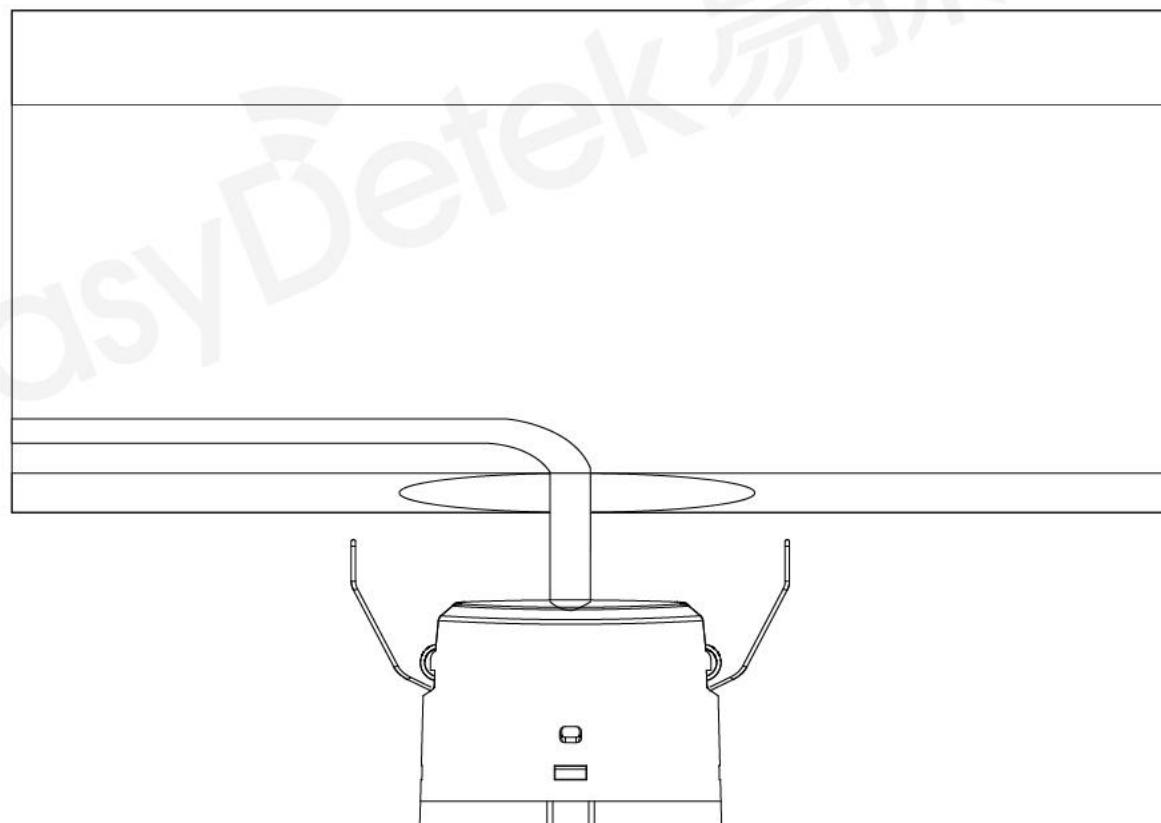
📶 Installation Diagram
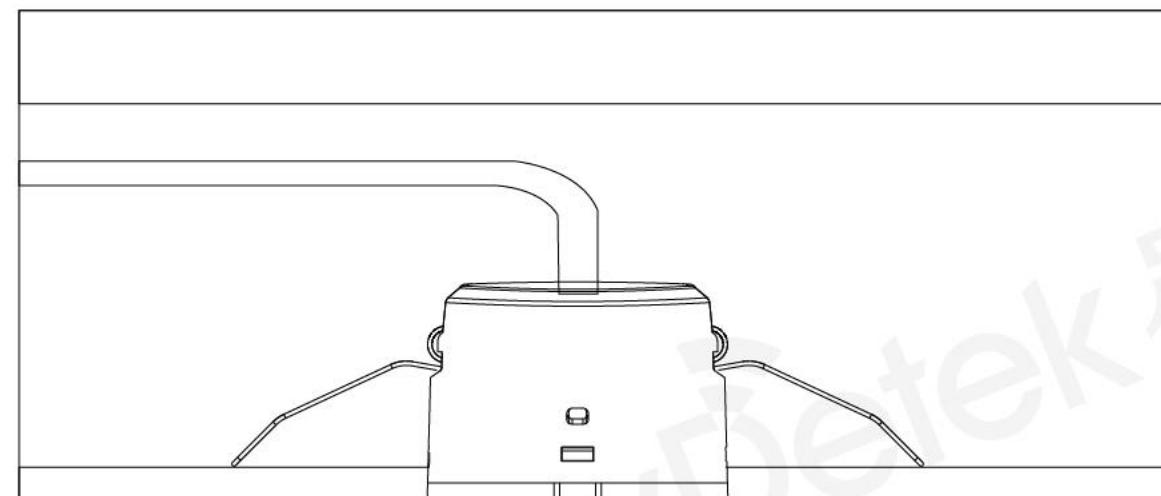
1.Punching holes in the ceiling and reserving wires

Φ55mm
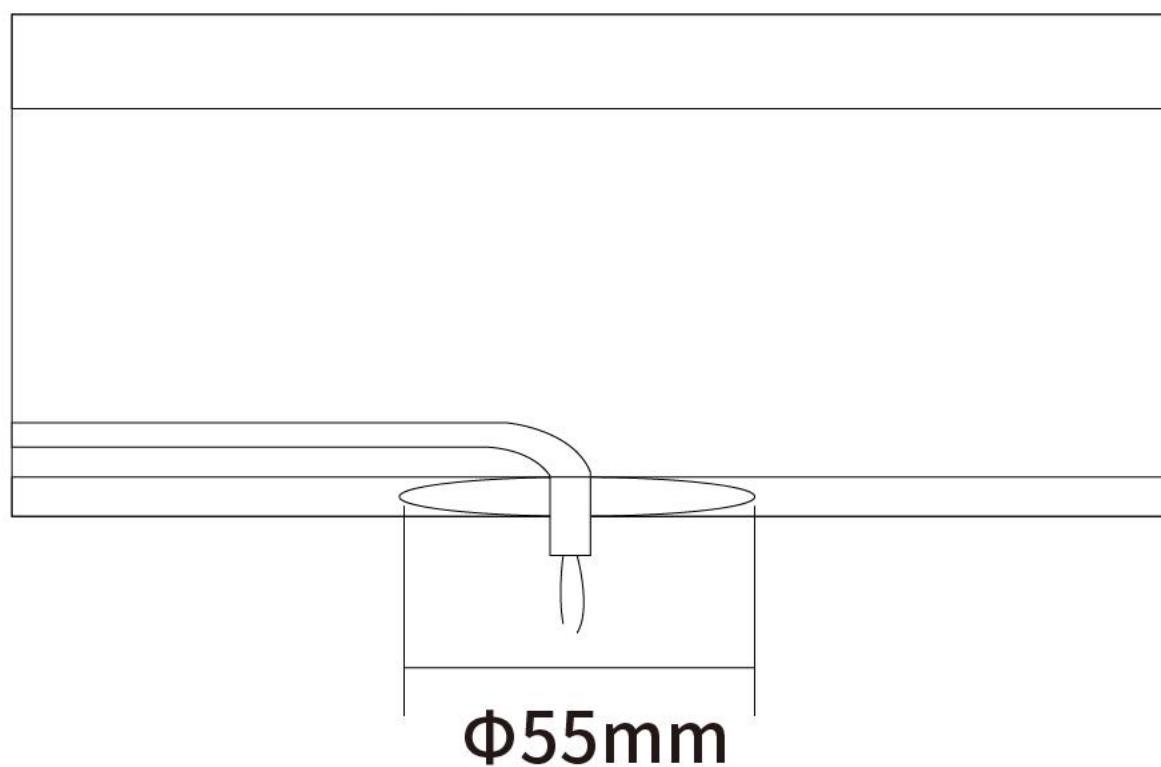
2. Equipment and wire connection

3. Adjust the mounting clips

4. Embedded fixed, installation is complete

📶 Product Naming Law

ED	Frequency Band	Product Categories	Product Subdivision	Product Number	Delay Time	Serial number
ED	Q	2	5	D		
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			

📶 Historical Revision Record

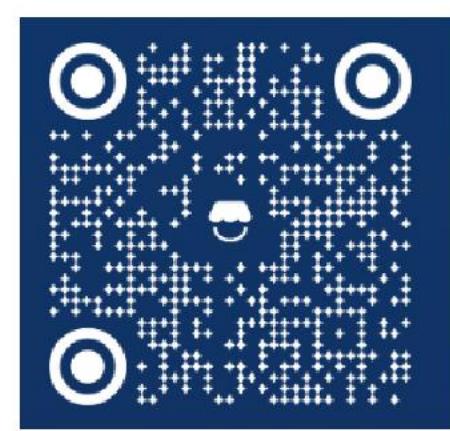| Version	Time	Description	Note
V1.0	2025-05-27	First edition	-

☎ Precautions

1. The sensor is powered by the mains. Installation and removal should be performed by professionals. Make sure to cut off the power supply before installation and removal.

2. The sensor should not be installed in a space covered by a large area of metal.

3. When multiple radar sensors are used in the same venue, the installation distance is too close, which may cause individual radar sensors to generate false alarms. The recommended installation distance of the product is greater than 2m.

4. When the sensor is used together with a wireless communication module (NB, Bluetooth, WIFI module), the distance should be increased. It is recommended to keep a distance of more than 1m from high-power wireless communication devices such as routers and wireless hotspots during installation.

5. The sensor light threshold is the test value under sunny environment, no shadow, and diffuse reflection of ambient light.

6. When installing the sensor, it should be as far away from metal, air conditioner outdoor unit, exhaust fan and other vibration scenes as possible to avoid sensor misjudgment.

7. Easydetek Technology is committed to providing customers with high-quality and better experience radar sensors. When the product version is updated and iterated, no further notice will be given. If necessary, please contact our sales staff to obtain the latest product information.

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