深圳市易探科技有限公司
Shenzhen EasyDetek Technology Co.,Ltd

EasyDetek易探

24GHz Human Motion Sensor

EDQ25L Specfication

EasyDetek - Focus on Radar Sensors

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Product Features

- Dual millimeter wave radar induction
- Can cover a corridor of 4 * 40m in length
- AC 220V power supply
- Rich configuration, adjustable remote control
- Bilateral distance can be adjusted separately
- Flexible installation, supporting perforation, 86 bottom box, and magnetic suction installation

Electrical Parameters

Input voltage	AC 90-260V 50/60Hz
Operating current	ON/OFF
Output voltage	＜1.5W @220V
Load Characteristics	2000W@incandescent lamp 500W@energy-saving lamp 400W @LED lamp

Functional Parameters

Motion Sensing Radius ①	Long side: 18-20m Short side: 2-4m
Hanging height	Regular 3m
Delay time	5-1800s
Illumination value ②	0-150lux adjustable

Output Parameters

Transmission frequency	24-24.25GHz
3dB beam angle	42° (xz plane) 66°(yz plane)

Environment&Lifespan

Operating temperature	-20~+60°C
Storage temperature	-20~+80°C

Remarks:
1.The testing distance range is based on a sensor hanging at a height of 3m and indoor installation environment testing. The tester is 170cm tall, weighs 65-75kg, and walks at a speed of 1m/s.Installation in different scenarios may cause range changes, subject to actual testing.
2.Due to the spectral characteristics of photosensitive devices, the illuminance value is uniformly tested under natural light conditions.

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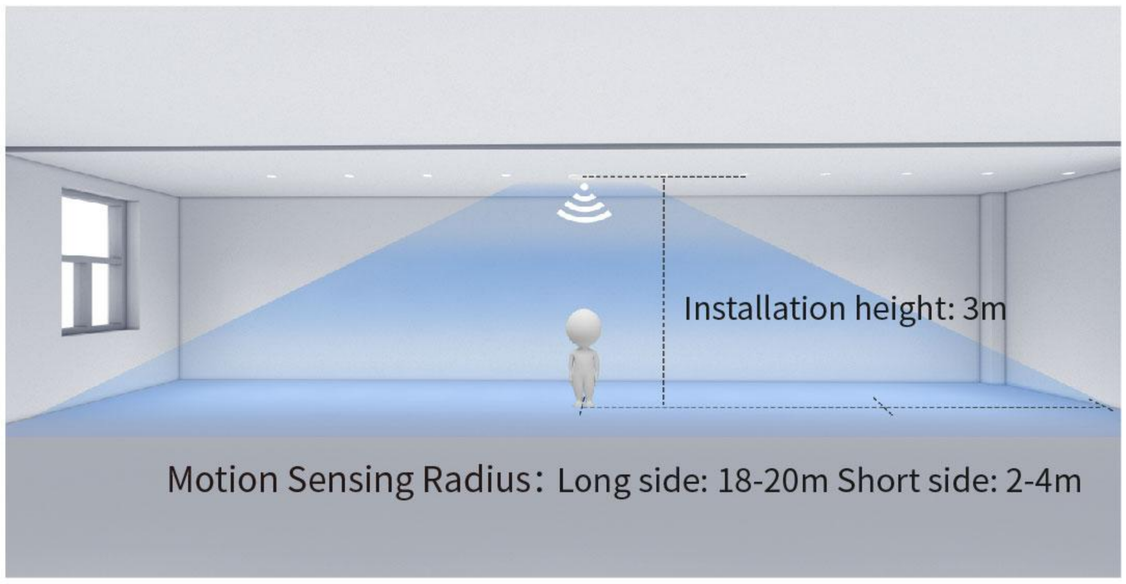
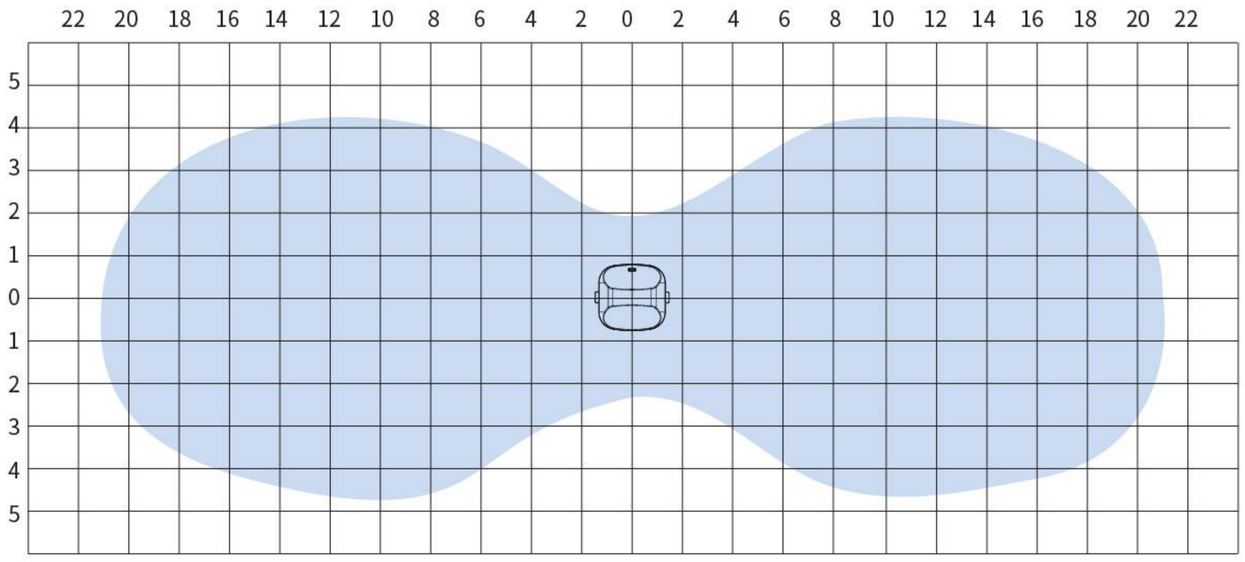
Detection Schematic



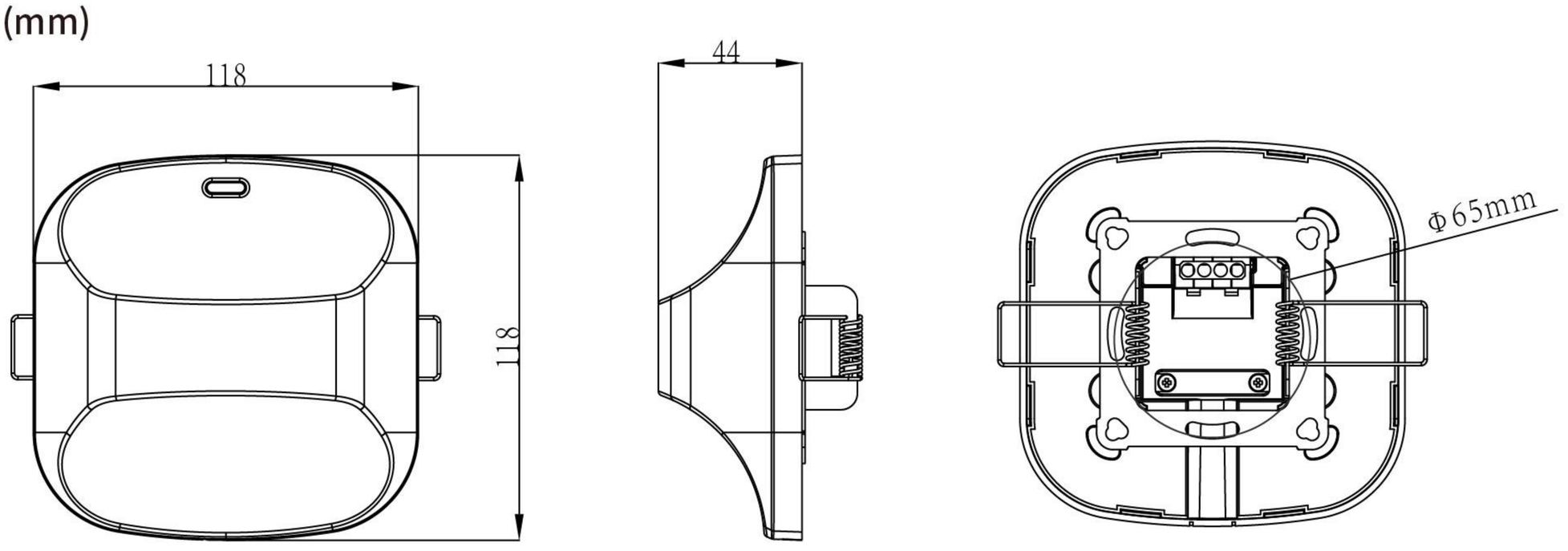
Radar induction schematic diagram



Motion Sensing Radius: Long side: 18-20m Short side: 2-4m

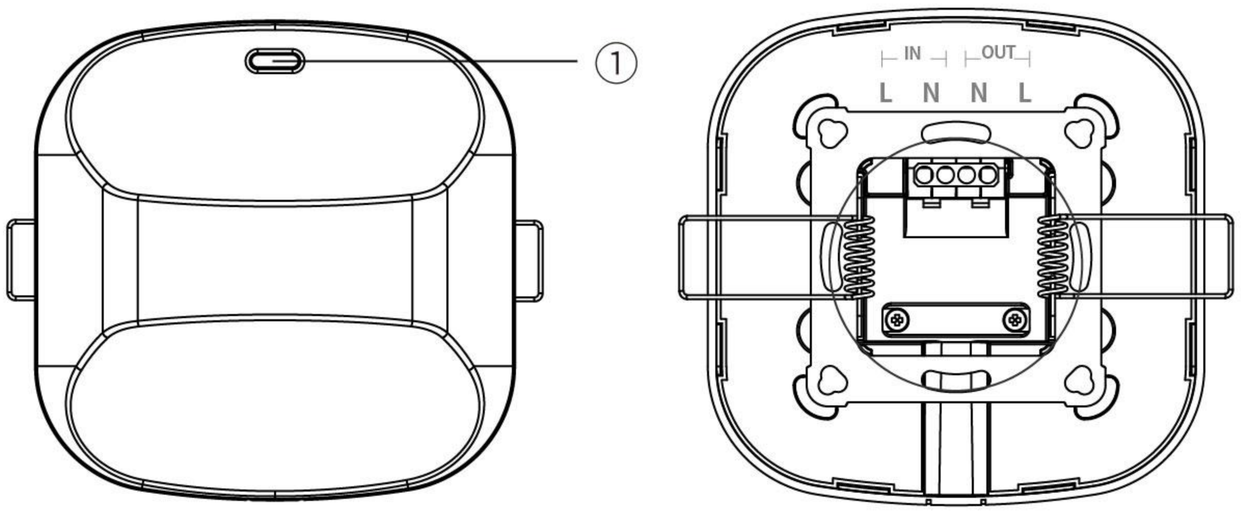
Product Dimension Diagram

Unit: (mm)



EDQ25L Dimensional tolerance: ±0.2

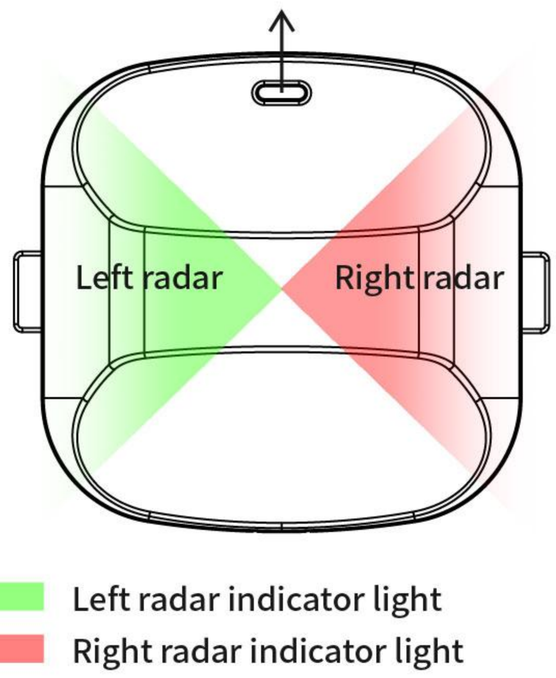
Pin and Button Description



Pin	Description
L	L Line INPUT
N	N Line INPUT
N	N Line OUTPUT
L	L Line OUTPUT
①	Press and hold for more than 3s, the green indicator light is always on. Parameters restore the default value

Left and right radar recognition

The left and right radar positions have been differentiated with the photosensitive aperture facing upwards.



The positions of the left and right radars have been differentiated with photosensitive openings facing upwards.

At present, with the photosensitive and indicator lights facing upwards as the reference, the left side of the photosensitive opening is the left radar, and the right side of the opening is the right radar.

Partial parameters of the two radars can be configured separately, such as sensing distance and sensitivity.

Indication Status

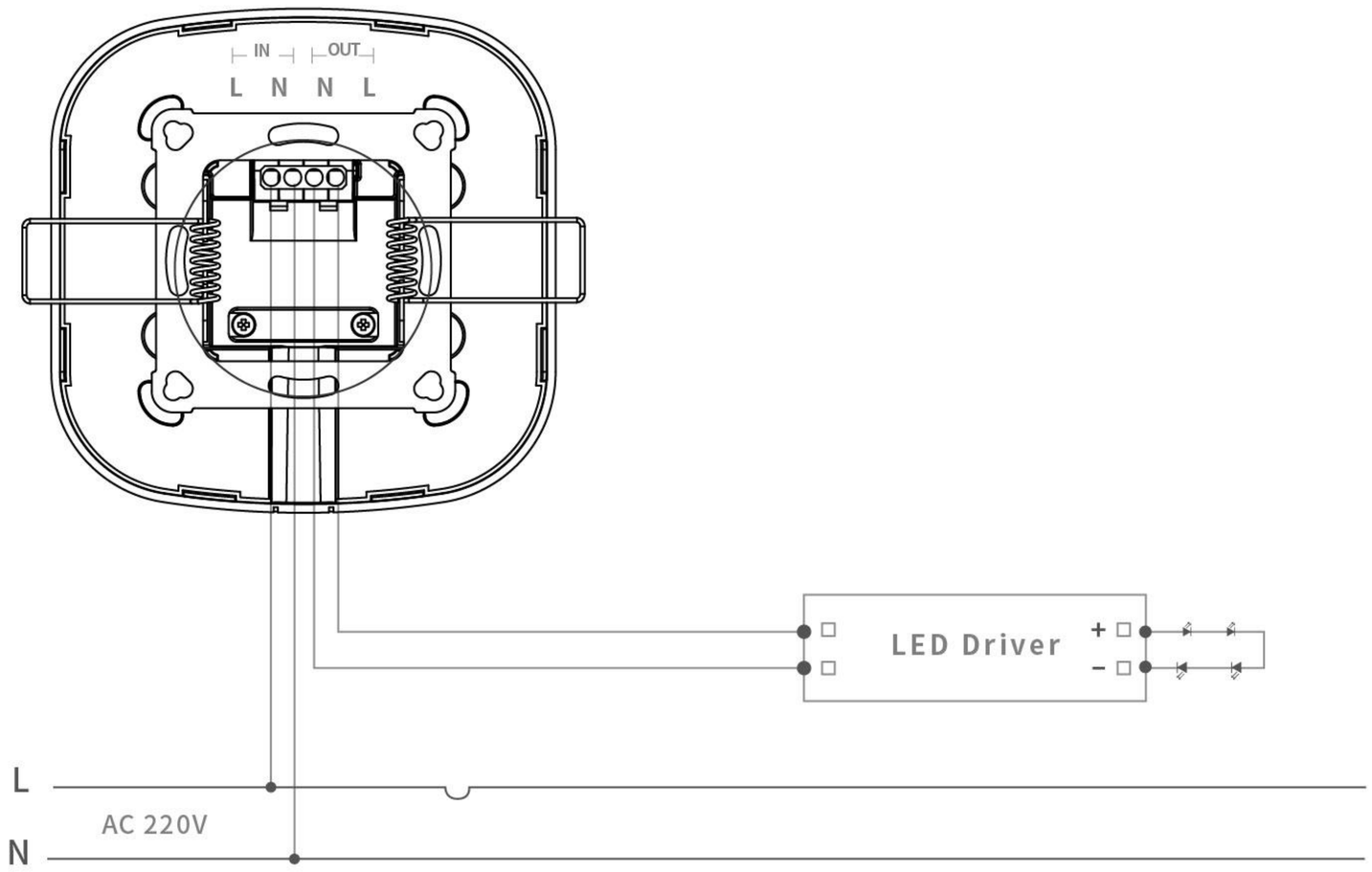
1.The indicator light supports dual color, red and green.

2.The green indicator light for power on initialization status remains on for 5 seconds, then turns off after initialization is complete. After 2 seconds of locking, it enters the normal sensing status.

3.The flashing status when the left and right radars detect someone:
When the left radar detects someone, the green indicator light flashes once and continues to detect someone flashing every 5 seconds; When the right radar detects someone, the red indicator light flashes once and continues to detect someone flashing every 5 seconds; When both sides detect someone, the red and green indicator lights will flash alternately.

4.The flashing status when selecting single-sided radar for parameter setting:
When selecting the left radar for parameter settings, the green indicator light will flash 5 times and the parameter settings are valid within 10 seconds. When selecting the right radar for parameter settings, the red indicator light will flash 5 times and the parameter settings are valid within 10 seconds.

Wiring Diagram



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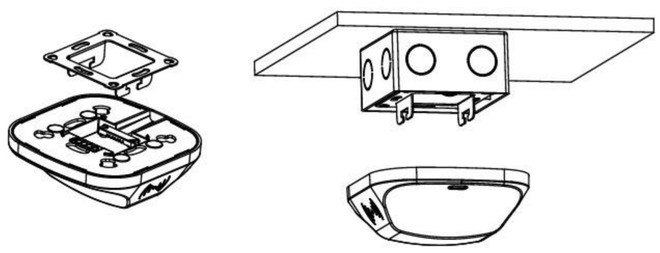
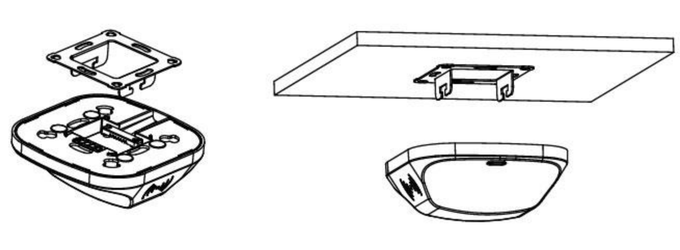
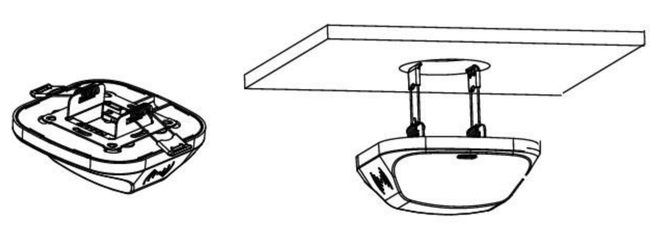
Installation Diagram



86 bottom box installation



Ceiling installation



Embedded installation

Application Scenarios

Office long corridor

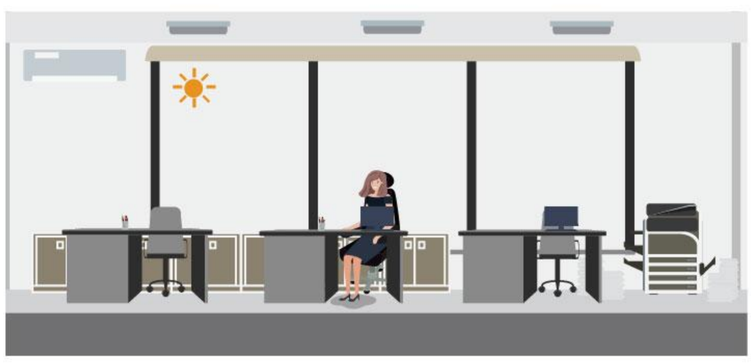
Hotel long corridor

Garage Lane

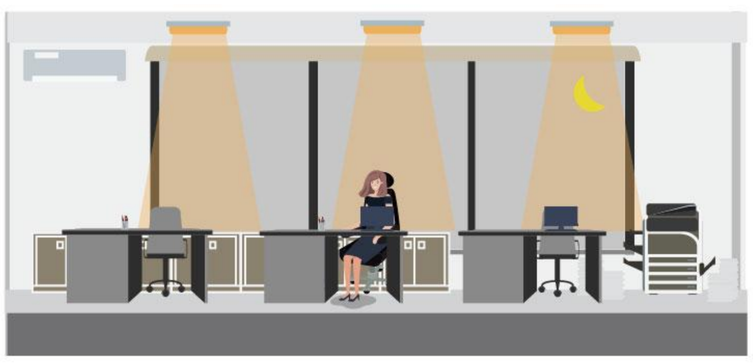
Terminal

Function Description

Illumination function on



When there is sufficient ambient light and 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 light goes out automatically after the preset delay time has elapsed when the moving object leaves.

Illumination function off

When the sensor detects a moving object, the light automatically turns on and enters the set delay time.

After the delay time has elapsed When the sensor does not detect a moving object, the luminaire goes out.

Product Naming Rules

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

Configuration Version Description

【Hardware】:

【Software】:

Historical Revision Records

Versions	Time	Description	Note
V1.0	2024-8-26	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, avoiding 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 Co., Ltd is committed to providing customers with high-quality and better experience radar sensors. Product version updates and iterations will not be notified separately.